Lenzing
Innovative by nature

Ready to join?

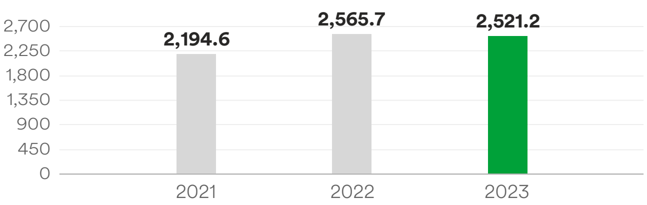
An invitation to positively change
the textile and nonwovens industry

Annual and Sustainability Report 2023
of the Lenzing Group

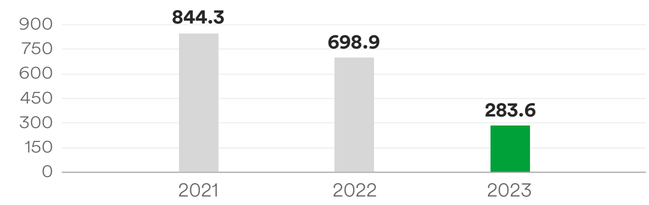
Overview of the Lenzing Group

Selected indicators of the Lenzing Group

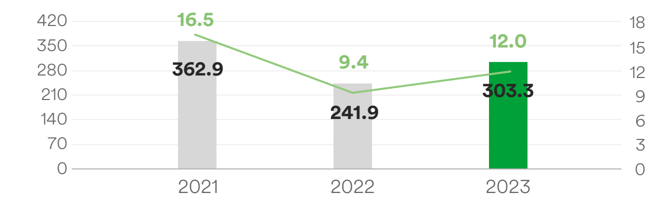
Revenue in EUR mn



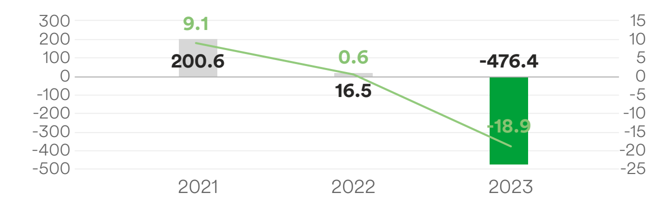
Investments (CAPEX) in EUR mn



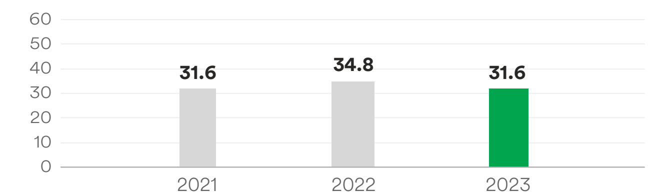
EBITDA in EUR mn **EBITDA margin** in %



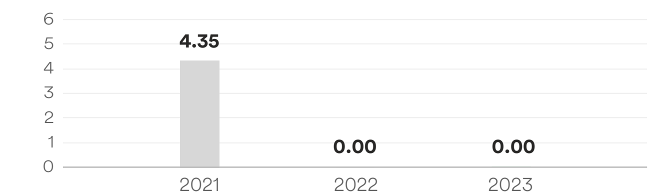
EBIT in EUR mn **EBIT margin** in %



R&D expenditure (after Frascati) in EUR mn



Dividend per share in EUR



The Lenzing Group stands for the ecologically responsible production of specialty fibers based on cellulose and recycled materials. As an innovation leader, Lenzing is a partner of global textile and nonwoven manufacturers and drives many new technological developments. The Lenzing Group's high-quality fibers are the raw material for a wide range of textile applications – ranging from functional, comfortable and fashionable clothing through to durable and sustainable home textiles. Thanks to their special properties and botanical origin, TÜV-certified biodegradable and compostable Lenzing fibers are also ideal for demanding use in everyday hygiene applications.

The Lenzing Group's business model extends far beyond that of a traditional fiber producer. Together with its customers and partners, Lenzing develops innovative products along the value chain, adding value for consumers. The Lenzing Group strives for efficient utilization and processing of all raw materials and offers solutions for the transition of the textile industry from the current linear economic system to a circular economy. In order to reduce the rate of global warming and Thereby also support the goals of the Paris Agreement and the EU Commission's Green Deal, Lenzing has a clear, science-based climate action plan that provides for a significant reduction in greenhouse gas emissions (Scopes 1, 2 and 3) by 2030 and a target of net zero by 2050.

Selected indicators of the Lenzing Group

Key earnings and profitability figures

EUR mn	2023	2022	Change
Revenue	2,521.2	2,565.7	(1.7)%
EBITDA (earnings before interest, tax, depreciation and amortization)	303.3	241.9	25.4%
EBITDA margin	12.0%	9.4%	
EBIT (earnings before interest and tax)	(476.4)	16.5	n/a
EBIT margin	(18.9)%	0.6%	
EBT (earnings before tax)	(585.6)	(10.1)	5,722.0%
Net profit/loss after tax	(593.0)	(37.2)	1,492.2%
Earnings per share in EUR	(20.02)	(2.75)	627.4%
ROCE (return on capital employed)	(14.2)%	2.0%	
ROE (return on equity)	(30.1)%	(0.5)%	
ROI (return on investment)	(8.9)%	0.3%	

Key cash flow figures

EUR mn	2023	2022	Change
Gross cash flow	88.5	244.8	(63.9)%
Cash flow from operating activities	160.3	(43.2)	n/a
Free cash flow	(122.8)	(740.7)	(83.4)%
CAPEX	283.6	698.9	(59.4)%
Liquid assets as at 31/12	731.0	453.3	61.3%
Unused credit facilities as at 31/12	203.0	232.3	(12.6)%

Key balance sheet figures

EUR mn as at 31/12	2023	2022	Change
Total assets	5,214.6	5,525.0	(5.6)%
Adjusted equity	1,809.1	2,088.6	(13.4)%
Adjusted equity ratio	34.7%	37.8%	
Net financial debt	1,562.6	1,799.4[1]	(13.2)%
Net financial debt / EBITDA	5.2	7.4[1]	(30.7)%
Net financial debt incl. lease liabilities	1,704.7	1,869.0	(8.8)%
Net debt	1,779.5	1,946.6	(8.6)%
Net gearing	86.4%	86.2%[1]	
Trading working capital	551.1	570.7	(3.4)%
Trading working capital to annualized group revenue	21.0%	24.0%	

Key stock market figures

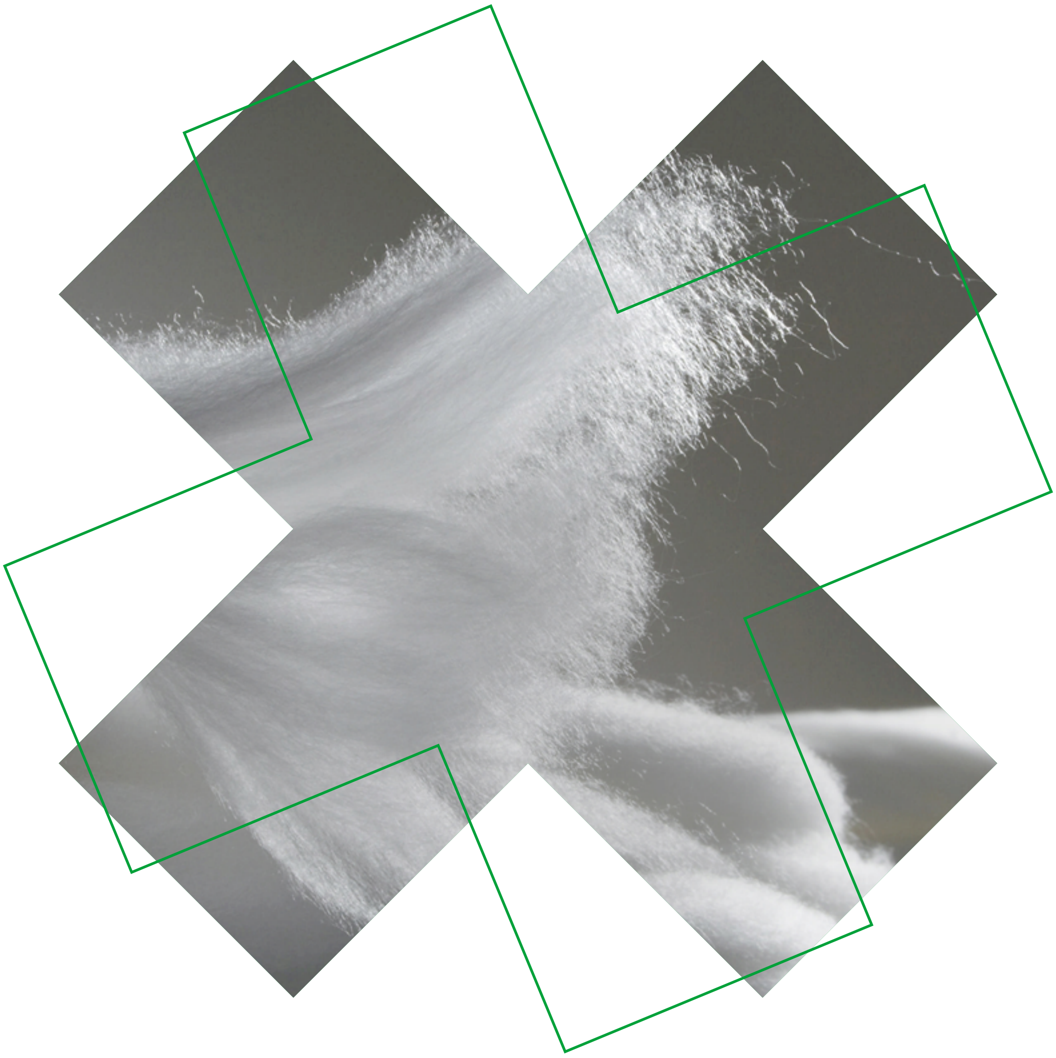
EUR	2023	2022	Change
Market capitalization in mn as at 31/12	1,372.9	1,454.9	(5.6)%
Share price as at 31/12	35.55	54.80	(35.1)%
Dividend per share	0.00	0.00	n/a

Employees

	2023	2022	Change
Full-time equivalents (FTE) as at 31/12[2]	7,917	7,931	(0.2)%

1) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities (see the supplement to the management report “Notes on the Financial Performance Indicators of the Lenzing Group”).
2) The number of employees has been reported on a full-time equivalent basis since the third quarter of the 2023 financial year. Until the third quarter of the 2023 financial year, the figure was based on the number of individuals.

The above financial indicators are derived primarily from the IFRS consolidated financial statements of the Lenzing Group. Additional details are provided in the section "Notes on the financial performance indicators of the Lenzing Group", in the glossary to the Annual Report and in the consolidated financial statements of the Lenzing Group. Rounding differences can occur in the presentation of rounded amounts and percentage rates.



Ready to join?

Rethink, Redesign, and Rebuild: Only through this trifold approach can we achieve innovative solutions on the scale the world needs. Our corporate strategy of "Better Growth" means we aim to generate as much benefit for the economy, environment, and society as possible. That's why we invite you to think, shape, and participate in driving the transition towards a circular economy together.

New actions start with new thinking

Before anything can be made new, it must first be thought anew: Our culture of innovation serves as the foundation for ideas and projects that propel the circular economy forward.

Rethink with us

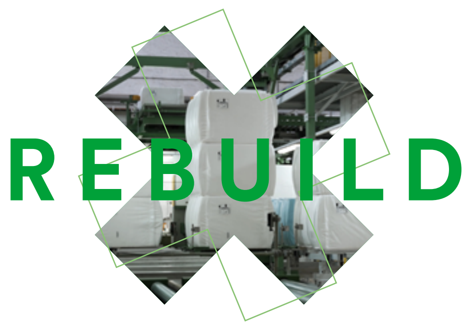
The path brings us closer to the goal

Every innovative solution paves new paths. In line with the principles of the circular economy, we optimize processes at every stage of the value chain.

Redesign with us

Sustainability on a new scale

Striving for as much positive change as possible: In addition to expertise, we bring capacities that enable the sustainable transformation of large business sectors. Ready to join? Learn more!



Rebuild with us

Content

“We would like to invite all our partners to join us in renewing the textile and nonwovens industries and in bringing about positive change.”

Letter from the CEO
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Revenue 2023

2,521,167
EUR '000

Management Report 2023
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Highlights 2023

Since 2021, Lenzing has invested more than EUR 100 mn in the conversion and modernization of its site in Indonesia. With the successful completion of this investment in 2023, Lenzing is now even better positioned to meet the growing demand for eco-friendly specialty fibers.

February

- Lenzing and NFW (Natural Fiber Welding Inc.) jointly offer sustainable leather alternatives for fashion

March

- Lyocell Shortcut fibers optimized for the growing market for flushable products
- "Advancing Circularity": Lenzing presents online Sustainability Report 2022

April

- Lenzing launches carbon neutral viscose fibers in Europe and the USA
- New "Fiber Recycling Initiative" highlights circular economy with mechanical recycling
- Production site in China successfully converted and modernized

May

- Lenzing celebrates forty years of LENZING™ bio-based acetic acid
- Austria's largest textile recycling project launched
- Lenzing and KARL MAYER GROUP join forces to drive sustainable innovations in flat knitting and warp knitting
- Internationally renowned marine research institute re-certifies biodegradability of cellulose-based fibers

June

- Lenzing receives the Vienna Stock Exchange Sustainability Award
- Presentation of new innovation that reduces the discoloration of cellulose-based garments
- World premiere for the circular economy: Södra and Lenzing receive largest EU LIFE grant for recycling project

July

- Capital increase with subscription rights amounting to around EUR 400 million successfully implemented
- Presentation of new cotton-free special denim collection
- Presentation of new resource-efficient dyeing approach for TENCEL™ lyocell fibers

August

- Lenzing receives third consecutive Platinum award from EcoVadis
- REFIBRA™ technology extended to LENZING™ ECOVERO™ fibers
- Modernization and conversion of the site in Indonesia successfully completed

September

- Setting new standards in supply chain transparency by combining real-time delivery tracking and carbon visibility
- EU Ecolabel awarded for environmentally responsible fiber production at Indonesian plant
- Cellulosic LENZING™ fibers ensure sustainable preservation of glacier mass

October

- Lenzing and Kentaur develop circular workwear for the hospitality sector
- Lenzing and Kaihara further expand partnership with premium denim capsule collection
- Fiber identification system from Lenzing ensures traceability of LENZING™ FR fibers in protective clothing

November

- ITMF Award won for pioneering partnership in the text cycling area
- Lenzing makes recourse to wind power to expand green energy mix in fiber and pulp production

December

- Acquisition of biomass power plant to supply lyocell plant in Burgenland

Letter from the CEO

Dear Reader,

Behind us lies a challenging year with escalating geopolitical tensions and devastating natural disasters. The Israel-Gaza war, the ongoing war against Ukraine and the crisis in the Red Sea, as well as high inflation and the economic downturn, are having an impact on economic activity and have posed major challenges for the sector. The expected recovery in markets relevant for the Lenzing Group has failed to materialize to date. The continued sharp increase in raw material and energy costs on the one hand and very subdued demand on the other had a negative impact on Lenzing's business trends in the reporting year, as well as on the entire sector. A full return to pre-pandemic growth rates appears increasingly out of reach over the coming quarters, according to the IMF.

All of these factors ultimately led to an unsatisfactory result in the 2023 financial year. This makes the measures we took decisively and at an early stage all the more appropriate. We launched an ambitious cost-cutting program back in 2022, which delivered the expected results earlier than planned. Building on this, we are currently implementing a comprehensive performance program with a focus on positive free cash flow, stronger revenue and margin growth, and sustainable cost excellence. The overarching goal is to position Lenzing on an even stronger foundation and to further enhance its crisis resilience.

The consequences of the ongoing political crises are increasing the urgency to make our business as independent as possible from global upheavals. The best contribution we can make to a liveable present and future is to lead the way with our innovative strengths and to operate successfully and sustainably. Profitable and affordable sustainability on a large scale is the challenge facing our industry. In this context, Lenzing took a big step forward during the past financial year. With the completion of the conversion of the production line for modal fibers in Nanjing (China), we are now able to offer our Chinese customers locally produced TENCEL™ brand fibers for the first time. In Purwakarta (Indonesia), we successfully completed the conversion to a state-of-the-art production facility. The investment significantly reduces emissions and transforms the site into a specialty viscose supplier of the brands LENZING™ ECOVERO™, including the innovative LENZING™ ECOVERO™ Black fibers, and VEOCEL™, which meet the high environmental standards of the internationally recognized EU Ecolabel. Both projects help us to meet the structurally growing demand for our specialty fibers even better.

Is it possible to produce sustainably for the whole world or is there a new limit to growth that is slowing down this development? This is the question that arises for us, for you, and for policymakers who are pushing for economic and ecological change. Lenzing is working tirelessly to make the industries where it is active even more sustainable, and to advance the transition of the textile business model from a linear to a circular economy model. For this transition to be successful, further efforts by the entire sector and a policy designed to ensure a level playing field for sustainability pioneers are required.

As a consequence, this Annual and Sustainability Report is also an invitation to find answers together. We would like to invite all our partners to join us in renewing the textile and nonwovens industries and in bringing about positive change. To achieve this, we need changes in behavior and a proactive, dynamic process at all levels: new approaches in research and development, technologically brilliant solution concepts, and concentrated implementation power paired with operational excellence in order to scale sustainability to previously unattainable dimensions. Let's rethink structures and shape a positive future together!

The capital increase we implemented will help us to achieve this. It affords us the latitude to enhance efficiency and resilience, as well as the financial flexibility that forms the foundation for future growth. In addition to expertise, Lenzing also has capacities on a scale that enables the sustainable transformation of large business areas. As a pioneer in the optimized utilization and recovery of all raw materials, we have extended REFIBRA™ technology to the range of LENZING™ ECOVERO™ fibers with recycled content. This gives our partners in the value chain the opportunity to work together to advance the transition to a circular economy in the textile sector.

We have also made progress in decarbonizing our company. At the Heiligenkreuz site, we acquired a biomass power plant to supply the lyocell plant in Burgenland. This strategic investment ensures greater energy independence and a further reduction in carbon dioxide and strengthens not only our environmentally responsible specialty fiber range but also site security. In Purwakarta, Indonesia, we recently started to source electricity from renewable energy sources and are driving the transition to biomass in line with Lenzing's targets to reduce carbon emissions per tonne of product by 50 percent by 2030 and to achieve carbon neutrality by 2050.

We have also made progress in the transparency of our production and management: certifications from the Higg Facility Environmental Module (FEM), the Higg Facility Social Labor Module (FSLM), and the ZDHC Foundation also reflect our leading position in this area. Diversity, inclusion, and employee engagement are key topics for us to continue to improve and promote talent. We consistently include the achievement of sustainability targets in the performance and remuneration of senior managers.

Our many discussions with our investors and shareholders have not only shown that the challenging fiber market has been recognized, but we have also received a lot of encouragement for our strategic and operational steps. As a consequence, the capital increase was perceived and supported as a forward-looking measure to strengthen our equity position. A total of 99.5 percent of our shareholders exercised their subscription rights. This is a clear signal that we are focusing on the right measures with our strategy.

In the medium and long term, we expect continued strong demand growth for Lenzing's sustainable products. We are convinced that the two investment projects in China and Indonesia will further reinforce our positioning in this context and that we will pursue a profitable growth track with the key projects in Thailand and Brazil that have been implemented successfully.

We would also like to thank our customers and partners, who value our sustainable products and services, and not least the approximately Lenzing Group 8,000 employees, who have done a fantastic job and continue to give of their best every day, including during challenging times such as these, to strengthen our leading innovation and market position and bring about a turnaround.

Sincerely,

Stephan Sielaff
Chief Executive Officer

Report of the Supervisory Board

To the 80th Annual General Meeting

Dear shareholders,

The 2023 year was characterized by a number of challenges for Lenzing Aktiengesellschaft. The ongoing war in Ukraine, the flare-up of the Israel-Gaza conflict, continued high inflation, and a simultaneously weak economy are having a significant negative impact on our sector's performance. The past financial year was characterized by continued low demand for cellulosic fibers, with correspondingly lower prices. As a consequence, the recovery in the market that was originally expected failed to materialize, or is unfolding at a much slower rate than originally anticipated.

At the same time, and despite the unfavorable market trend, Lenzing was able to achieve groundbreaking successes for the coming years. The modernization and conversion of the site in Indonesia was successfully completed in the third quarter. This has led to a significant reduction in carbon emissions at the site and certification of the fibers produced there in accordance with the EU Ecolabel. The conversion of a production line to modal fiber production at the Nanjing (China) site was also successfully completed. As a consequence, we are now able to offer our Chinese customers locally produced TENCEL™ brand fibers for the first time. The investments that we have realized over recent years position Lenzing very well to meet growing demand for sustainable specialty fibers in the future.

Building on the successful implementation of the cost reduction and reorganization program launched in the third quarter of 2022, a comprehensive performance program focusing on free cash flow, revenue growth, and margin growth, as well as on a sustainable improvement in the cost structure was launched in 2023. This should further strengthen Lenzing's crisis resilience in the future. The capital increase implemented in the middle of the year with gross proceeds of EUR 400 million supports this objective. The cash and cash equivalents raised were deployed to strengthen the company's financial position and to advance the "Better Growth" corporate strategy, including in a challenging environment.

Significant successes were also achieved in 2023 as part of the sustainability strategy that is firmly anchored within the company. The acquisition of the biomass power plant at the lyocell site in Heiligenkreuz represents a milestone in this context. The transaction will enhance energy independence and site security, as well as significantly reduce carbon emissions. Thanks to its comprehensive sustainability efforts, Lenzing was one of only ten companies worldwide to be awarded a triple "A" rating by CDP. This confirms Lenzing's leading role in transparency and performance in the areas of climate change, forests, and water security. The certifications we have received fill us with pride and confirm the positioning of resource conservation, the circular economy, and innovation as essential cornerstones of our targeted carbon neutrality.

The Supervisory Board fulfilled the monitoring obligations defined by law, the articles of association, and the rules of procedure in connection with these varied activities. The Supervisory Board was involved in fundamental decisions on a timely basis and provided professional advice for the Managing Board. The Managing Board, in turn, submitted regular detailed reports to the Supervisory Board on the financial position and performance of Lenzing AG and of the Lenzing Group. In addition, the Managing Board also reported to the Chairman of the Supervisory Board outside the context of scheduled meetings concerning business performance, the company's position, as well as major transactions. Individual issues were handled in depth by the committees established by the Supervisory Board, which then reported on their activities to the plenary Supervisory Board.

Supervisory Board meetings

The Supervisory Board of Lenzing AG met six times during the reporting year. At these meetings, the Managing Board reported on business performance as well as on major transactions and measures. The Managing Board's work was also monitored, and the Supervisory Board offered its professional advice on major strategic issues. Given the lack of a market recovery, collaboration with the Managing Board was further intensified. In close coordination between the Supervisory Board and the Managing Board, measures were developed to mitigate the negative effects on business performance, and to improve Lenzing's business position. The capital increase was closely monitored by the Supervisory Board. A special committee was also set up for this purpose. A detailed analysis and discussion of the market trend for fibers and pulp, and thereby trends in the business, price and cost situation, formed a further focus of Supervisory Board meetings. The strategic development of the Group, the sustainability strategy and ESG issues, research and development priorities, digitalization, personnel measures, financing measures, and the budget for the 2024 financial year and its approval were also discussed in detail. Meetings were also used to discuss the progress of the performance program initiated in 2023 and to define related measures in collaboration with the Managing Board. The Supervisory Board also addressed the efficiency of its own working procedures, and discussed and initiated measures.

At the Annual General Meeting on April 19, 2023, Gerhard Schwartz and Nicole van der Elst Desai were newly elected to the Supervisory Board of Lenzing AG. Helmut Bernkopf, Dr. Christian Bruch and Dr. Franz Gasselsberger were re-elected to the Supervisory Board. Patrick Prügger stepped down from the Supervisory Board at the end of the Annual General Meeting on April 19, 2023, due to the expiry of his term of office. After twelve years on the Supervisory Board of Lenzing, Mr. Prügger decided not to stand for a further term of office. We would like to thank him for his many years of trusting, constructive support, and guidance, and wish him all the best for the future.

Robert van de Kerkhof stepped down from the Managing Board of Lenzing AG as of December 31, 2023, due to the expiry of his term of office. Mr. Kerkhof had been a member of the Lenzing Management Board since 2014 and decided not to stand for a further extension of his contract. We would like to thank him for his extraordinary achievements for Lenzing over the past nine years and wish him every success in his future endeavors. The Lenzing Managing Board was thereby reduced from four to three members. CEO Stephan Sielaff will essentially take over the sales agendas in the Fiber Division.

Committee meetings

The Remuneration Committee established by the Supervisory Board met four times during the reporting year and dealt primarily with performance evaluation and goal setting for the Managing Board members as well as further remuneration topics relating to the Managing Board. The Nomination Committee convened for three meetings in the reporting year. The meetings primarily dealt with personnel development measures and succession planning issues, as well as the departure of Robert van de Kerkhof from the Managing Board and the future allocation of the responsibilities concerned. The committee discussed nominations to the Supervisory Board and submitted corresponding nominations for approval. The Audit Committee convened for three meetings in the reporting year. Some of these meetings were also attended by representatives of the auditors who reported on their auditing activities, and coordinated them with the Audit Committee. Specific accounting topics were also discussed in the presence of the auditor. In addition to reviewing and preparing the separate and consolidated financial statements, the committee also addressed the additional tasks in accordance with Section 92 Para. 4a of the Austrian Stock Corporation Act (AktG), focusing particularly on critically examining and monitoring the functioning and effectiveness of the internal control, audit, and risk management systems. The results were subsequently discussed with the plenary Supervisory Board. At the constituent meeting of the Supervisory Board on April 19, 2023, a decision was taken to establish a Strategy, Growth and Innovation Committee, as well as an ESG Committee. The Strategy, Growth and Innovation Committee is responsible for reviewing the company's strategic positioning, the monitoring of strategy implementation, and for growth and innovation projects. The Strategy, Growth and Innovation Committee met once in the reporting year. At this meeting, the committee primarily dealt with issues relating to strategic positioning within the competitive environment and the innovation roadmap. The newly established ESG Committee also met once in the reporting year. This is intended to support the Managing Board, the plenary Supervisory Board, the Audit Committee, and the Strategy, Growth and Innovation Committee in matters relating to non-financial reporting and strategic ESG issues. The Supervisory Board set up a separate committee to oversee the capital increase, which met twice in the reporting year. This was dissolved following the successful completion of the capital increase. A committee was also formed to monitor the structure and implementation of the performance enhancement program, which held two meetings in the 2023 financial year.

Additional information about the composition and working procedures of the Supervisory Board and its remuneration is provided in the Corporate Governance Report and the remuneration report of Lenzing AG.

Audit of the separate annual financial statements and management report as well as the consolidated financial statements and Group management report

The separate annual financial statements of Lenzing AG together with the related management report, and the consolidated financial statements of the Lenzing Group together with the Group management report, including the non-financial statement in accordance with Section 245a of the Austrian Commercial Code (UGB) as of December 31, 2023, were audited by KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, Linz, and awarded an unqualified opinion. The Corporate Governance Report was evaluated by PwC Oberösterreich Wirtschaftsprüfung und Steuerberatung GmbH, Linz. It was found that the declaration of compliance with the Corporate Governance Code issued by Lenzing AG (January 2021) corresponds to the actual circumstances. The Supervisory Board's Audit Committee reviewed the separate annual financial statements and the consolidated financial statements as well as the separate management report and Group management report and the Corporate Governance Report. The results of this review were subsequently discussed with the auditor in detail. The Audit Committee concurred with the results of the auditor's report based on its review, and reported to the Supervisory Board on this matter as required. The committee also recommended that the Supervisory Board submit a proposal to the Annual General Meeting to appoint KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft as the auditor for the 2024 financial year. The Supervisory Board formally approved the management report and the Corporate Governance Report after its review, and adopted the separate annual financial statements for 2023 in accordance with Section 96 Para. 4 of the Austrian Stock Corporation Act (AktG). Furthermore, the Supervisory Board declared its approval of the consolidated financial statements and the Group management report, as well as the non-financial statement, pursuant to Sections 244 and 245a UGB. The Supervisory Board concurs with the recommendation by the Audit Committee and will consequently submit a proposal to the 80th Annual General Meeting for the appointment of KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft as the auditor of the annual financial statements for the 2024 financial year. Furthermore, the Supervisory Board will propose to the 80th Annual General Meeting that KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft be appointed as the auditor of the sustainability report for the 2024 financial year if statutory provisions require the appointment by the Annual General Meeting of an external auditor of the sustainability report. The Supervisory Board was not informed of any conflicts of interest on the part of Managing Board or Supervisory Board members during the reporting year that would require disclosure to the Annual General Meeting.

The Supervisory Board would like to extend its thanks and acknowledgment to the Managing Board and all employees of Lenzing AG for their outstanding commitment. Thanks to their personal commitment, Lenzing Aktiengesellschaft was able to overcome the special challenges posed by the lack of a market recovery, and to continue to implement the Group strategy with undiminished vigor. We also wish to extend our special thanks to the customers, shareholders, suppliers, and business partners of Lenzing for their trust and solidarity.

Thank you!

Vienna, March 14, 2024

Cord Prinzhorn,
Chairman of the Supervisory Board

CHAPTER

1/4

The Company 2023

Content

Lenzing Group locations

Numbers = Nominal capacities as at December 31, 2023

* Airdry

The Lenzing Group strategy

The Lenzing Group's orientation, which we have essentially been pursuing since 2015, is focused on sustainable cellulose specialty fibers and has proved to be very successful. This focus on specialty fibers has enabled us to overcome the sometimes difficult market conditions of recent years. Our new "Better Growth" strategy was already defined on this basis in 2022. This strategy focuses on ensuring that we continue to play a leading role in sustainable specialty fibers within a volatile economic environment. As a company, we aim both to be successful in business, and to make a positive contribution to our world. This approach is reflected in our "Better Growth" corporate strategy.

Lenzing anticipates consistent growth in demand for fibers that are produced in an environmentally responsible manner from the textile and clothing industries as well as from the hygiene and medical sectors. Our strategy aims to better serve growing demand for our fibers marketed under the TENCEL™, LENZING™ ECOVERO™ and VEOCEL™ brands.

We have identified four strategic driving factors that set a clear path to the future. These strategic drivers strengthen Lenzing's differentiation and competitiveness and help us achieve better growth in all market segments. In light of market trends in 2023, a review of the strategy led to the focus for 2024 being placed on the drivers of excellence and premiumization.

Excellence

We are getting a little better every day. Excellence in everything we do not only adds value but also creates the resilience that enables our business to thrive in a volatile market. Our relentless pursuit of excellence extends to all operational, commercial, and global functional units and works to create value across all activities, projects, and products. A vigorous drive for continuous improvement – through greater efficiency, quality, and safety – also gives us the flexibility to face challenging times with confidence.

Premiumization

We develop premium products and premium services with customer needs at the center, in order to meet market requirements at the highest level. As an industry leader in the production of innovative, carbon-neutral fibers, we will continue to invest in our market share with differentiated premium brands and to work on greater transparency and traceability along the value chain, thereby making Lenzing a sought-after partner.

Sustainability

We aim for more sustainable systems and processes in everything we do. We will focus our efforts on increasing our recycling capacity and on reducing our carbon footprint where we can have the greatest impact and stand out the most. We will reduce emissions at our production sites by switching to cleaner energy sources and by installing more energy-efficient equipment. We will also link linear supply chains that end in textile waste in order to create a cycle.

Innovation

We are leading industry change by continuing to bring innovations to the market and by managing innovation as a key value driver. Our long-standing culture of innovation underpins our profitable growth and sustainability agenda by advancing the development of new products, applications, processes, and techniques. These smart solutions are playing a part in the industry's shift towards a more sustainable future for our planet – a future that brings us closer to our corporate mission.

Our four strategic drivers will accelerate our profitable growth and enable us to move with greater certainty towards the targets we have set for 2027. In financial terms, we are aiming for substantially higher EBITDA and an improvement in our return on capital employed. In operational terms, we will continue to significantly reduce greenhouse gas emissions on our path to net zero and increase our share of sustainable premium fibers to over 60 percent.

Further information about the "Better Growth" corporate strategy can be found on the Lenzing website at https://www.lenzing.com/de/lenzing-gruppe/strategie.

Sustainability in the Lenzing Group

The climate crisis is one of the world's most urgent challenges and requires global solutions. Its impact can be felt all over the world, and affects people, nature, and business. The EU Commission intends to confront this challenge with a "Green Deal" for Europe. This comprises an ambitious package of measures that aim to make Europe the first climate-neutral continent by 2050. As one of the sustainability pioneers in its sector, the Lenzing Group is making a significant contribution to achieving this goal.

As part of our "Naturally Positive" sustainability strategy, we follow three strategic principles: driving systemic change, the circular economy, and greening the value chain. The focus is on those sustainability areas where Lenzing can have the greatest impact in creating a more sustainable world.

In order to review which topics are material from the perspective of the Lenzing Group's experts and stakeholders, the materiality analysis was revised in 2021. In a multi-stage process, the following topics were defined as essential together with stakeholders:

- Circular economy & resources
- Climate & energy
- Responsible wood procurement
- Biodiversity & ecosystems
- Sustainable innovations & products
- Health & safety
- Human rights & fair labor practices
- Business ethics
- Digitalization & cyber security

Lenzing has set ambitious, Group-wide sustainability targets for the most important challenges in each of its strategic focus areas. In order to enhance transparency, the corresponding implementation measures are described in the non-financial statement. The goals that have been set also relate to the Sustainable Development Goals (SDGs).

You can read more about the goals and implementation of the **"Naturally positive"** sustainability strategy in the non-financial statement of the Lenzing Group's Annual and Sustainability Report.

The Lenzing Group brand world

With its focus on specialty fibers and with a view to the needs of customers and partners, Lenzing is very well positioned on the textile and nonwoven markets. "Maintaining our sustainable technological leadership, while at the same time emphasizing partnerships and openness towards our stakeholders, plus a stronger focus on the connection between our fibers and the people for whose benefit we develop them." This is the message behind the brands that have been visible on the market since 2018, and which we connected even more strongly with the underlying brand promise – "We look beyond fiber to the life it unlocks" – in the reporting year.

Lenzing Group fibers are "innovative by nature" in two ways. Wood-based cellulosic fibers are a natural product that Lenzing has used for more than 80 years in innovative solutions for the production of textiles and nonwovens. The benefits of Lenzing's cellulosic fibers are easy to see, touch and feel: soft and smooth, breathable, absorbent, gentle on the skin. All of this is reflected by the slogan "Innovative by Nature".

The brands and their promise

The Lenzing Group's brand promise ("We look beyond fiber to the life it unlocks") requires a positioning based on strength and clarity. The historically grown approach to presenting brands, products, and offerings has outlived its time. The focus of the Lenzing brand architecture is on a simple, clear presentation featuring plausible brand promises targeted at customers' immediate needs. The Lenzing Group's brand world tells a uniform, consistent and globally communicated story which, for customers, conveys a visible and perceptible message of the "Better Growth" strategy. The focus on specialization, while at the same time strengthening Lenzing's core competency, requires that the registered trademarks be promoted with conviction, and vouched for worldwide.

The architecture for the product brands is based on a simple system. With TENCEL™ and VEOCEL™, consumers find clearly distinct product brands for the applications of specialty fibers in textiles and nonwovens. The master brand overarches these product brands. Below this top level, the previous product specifications for B2B customers are logically structured by category, such as technology, product type, and process.

Lenzing

Innovative by nature

A human, personal B2Me brand: Being closer to what life is all about, being well-known and attractive even on the consumer level and emerging stronger with regards to the competition.

Tencel™ Feels so right | Lenzing EcoVero™ | Veocel™ Purely for you | LENZING™

TENCEL™ – the flagship brand for textiles

TENCEL™ is the Lenzing Group's premium textile brand and is suitable for a wide range of special applications. The claim "Feel good with a natural touch" conveys the value of the TENCEL™ brand offering. All specialties in the textile segment (e.g. TENCEL™ Active, Denim, Footwear, Home, Intimate, Luxe) are marketed under the TENCEL™ brand. TENCEL™ stands for the sustainability related benefits and comfort characteristics of our branded lyocell and modal fibers. Derived from the natural raw material wood and certified with the EU Ecolabel for environmental excellence, the fibers support a natural dry feeling through moisture control.

LENZING™ ECOVERO™ – the brand that sets the new standard in eco-responsible viscose

LENZING™ ECOVERO™ fibers are derived from certified renewable wood sources using an eco-responsible production process that meets high environmental standards. They are tailored to a sustainable lifestyle and contribute to a cleaner environment. As the leading sustainable viscose brand, LENZING™ ECOVERO™ continues to drive the development of Viscose Black fibers. These enable the production of fabrics that consume less energy and water than fabrics dyed using conventional dyeing methods. LENZING™ ECOVERO™ brings a new circular economy offering to the market with viscose made by REFIBRA™ technology, which applies at least 20 percent of recycled cotton scraps. The LENZING™ ECOVERO™ fibers with recycled content contribute to a conscious lifestyle with less wastage while bringing more circular fiber choices to support the supply chain.

VEOCEL™ – the brand for nonwovens

The VEOCEL™ fiber brand is Lenzing's sustainable solution for health and environmentally compatible hygiene products. The applications made of wood-based and biodegradable VEOCEL™ fibers range from baby wipes and diapers to facial sheet masks and surface cleaning cloths. It is a leading and innovative brand helping brands and customers to transition to 100 percent cellulosic. Fibers under VEOCEL™ brand are certified as compostable and biodegradable and can thereby fully revert to nature. The brand stands for key characteristics such as ensuring "responsible production", being "gentle on skin", and "clean and safe".

LENZING™ – the brand for B2B applications

Lenzing fibers are also ideally suited for technical applications such as tea bags, coffee pads, and filter fibers, or as substitutes for synthetic fibers in agriculture. For these B2B applications, which stand for a smarter solution from natural origins, fibers are marketed under the LENZING™ brand. Specialty fibers that offer protection from heat are marketed under the LENZING™ for Protective Wear brand. The LENZING™ FR fibers used for this purpose provide protection from the following heat sources: fire, radiant heat, electric arcs, liquid metals, and flammable liquids.

The Lenzing product portfolio

Lenzing fibers are used primarily for clothing, home textiles, and hygiene products. Biological degradability is inherent to Lenzing fibers. This feature closes the cycle, with nature returning to nature. Lenzing fibers combine the biological properties of natural fibers with the processing advantages of mechanically produced fibers.

Lenzing lyocell fibers

The Lenzing Group is a leading global producer of lyocell fibers. The origin of all Lenzing fibers is cellulose, a component of the renewable natural raw material wood. Fiber production itself is particularly environmentally compatible thanks to closed loop recycling. More than 99 percent of the solvent used is recovered and recycled, making the Lenzing Group's lyocell fibers the fibers of the future. This closed loop production process was recognized by the European Union with its "European Award for the Environment". Products made of Lenzing lyocell fibers are more absorbent than cotton, softer than silk, and cooler than linen. They are deployed in a wide range of applications that include sportswear, home textiles, and mattresses as well as hygiene articles such as wet wipes and baby wipes. Lenzing lyocell fibers are marketed primarily under the TENCEL™ and VEOCEL™ brands.

Lenzing modal fibers

Since 1965, the Lenzing Group at its headquarters in Lenzing has been producing modal fibers from beech wood sourced from Austria and surrounding countries. Since 2023, Lenzing has been able to offer its Chinese customers locally produced modal fibers for the first time following the successful modernization of its plant in Nanjing. Low fiber rigidity and the cross-section of modal fibers make this product a natural softening agent. The softer the fiber, the finer the resultant textiles. Lenzing modal fibers can be blended with all types of fibers and processed using conventional machinery. Advantages such as mercerizability and uncomplicated processing make modal fibers an all-round genius among cellulosic fibers. These fibers are marketed primarily under the TENCEL™ brand.

Lenzing viscose fibers

Lenzing has been producing classic viscose fiber for more than 80 years. Lenzing Group viscose fibers are made from the renewable raw material wood. They absorb moisture well and are pleasant to wear. Lenzing viscose fibers are premium products on the global market, and are used in clothing and hygiene articles. Lenzing viscose is a preferred fiber brand for fashion clothing fabrics. In the hygiene sector, where purity and absorbency are ascribed top priority, they are utilized in products such as wipes, tampons and wound dressings.

[1] LENZING™ fibers certified by TÜV as biodegradable (soil, freshwater & marine) and compostable (household & industrial) include the following products: LENZING™ Viscose Standard Textiles/Nonwovens, LENZING™ Lyocell Standard Textiles/Nonwovens, LENZING™ Modal Standard Textiles, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. Exceptions to the certification exist in relation to the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests to confirm biodegradability in the marine environment have not yet been conducted or completed.

Innovations and new products

Lenzing sets standards in the area of regenerated cellulosic fibers with its quality and innovative capabilities, and is advancing new developments in this area worldwide (read more about the sustainable innovations of the Lenzing Group in the non-financial statement of the Annual and Sustainability Report of the Lenzing Group).

LENZING™ ECOVERO™ fibers with REFIBRA™ technology

Thanks to the successful development and scaling of production, LENZING™ ECOVERO™ fibers with REFIBRA™ technology are now available to customers worldwide. In addition to the environmentally responsible benefits of the LENZING™ ECOVERO™ brand, the new viscose fibers with REFIBRA™ technology contain up to 20 percent post-consumer textile waste, which is obtained from cellulose-rich materials or polyester-cotton blends. The waste is collected and sorted in collaboration with key sector leaders and innovation pioneers in the post-consumer recycling area.

New resource-efficient dyeing approach for TENCEL™ lyocell fibers

The Lenzing Group, a leading global producer of wood-based specialty fibers, has introduced a new approach that harnesses yarn pretreatment and a knitting technique to achieve an aesthetic that resembles the washed-out look of conventional dyeing processes in ready-to-wear and knitwear. To counteract the environmental pollution caused by dyeing and finishing in the textile industry, this new approach exhibits a significantly lower environmental impact, and is ideal for pre-treated fabrics and yarns made from TENCEL™ lyocell fibers. It also complements the wet processing and production facilities of fabric mills and thereby offers further advantages to our partners along the value chain.

New industry-wide innovation that reduces discoloration of cellulose-based garments during thermoplastic molding processes

Lenzing introduced a new processing solution that reduces the yellowing of garments and fabrics made from wood-based cellulosic fibers during high-temperature manufacturing processes. This new solution will initially be introduced for underwear and subsequently also for outerwear and ready-to-wear goods, making Lenzing the first company in the sector to tackle this technical challenge during the molding process. Lenzing is already examining further potential applications, such as welded seams on garments and seamless manufacturing, where hot melt tapes and bonding machines are replacing traditional sewing methods.

Hydrophobic cellulosic fibers for sustainable nonwovens

Thanks to their innovative ability to pass liquids over their surface, hydrophobic lyocell fibers (LENZING™ Lyocell Dry) offer completely new product solutions for hygiene products that could previously only be achieved by using synthetic fibers. The new Lenzing fiber is not classified as “plastic” under the EU Single-Use Plastics Directive and offers a very soft and environmentally responsible cellulose-based alternative for brands and manufacturers looking to develop plastic-free feminine and personal care products.

Sustainable protection of glaciers

An innovative and sustainable solution to protect snow and ice is now possible with the help of nonwovens made from LENZING™ brand fibers. The nonwovens used were previously made from petroleum-based fibers. The problem here is that microplastics remain after the summer and then flow downstream into valleys where they can enter the food chain via small organisms and animals. The solution is nonwovens made from LENZING™ cellulosic fibers. The covering of a small area with the new material made of LENZING™ fibers was tested for the first time during a field test on the Stubai Glacier. The result was convincing: four meters of ice were saved from melting. This success has led the project to now be expanded. Field trials on all Austrian glaciers used for tourism started as early as 2023. The sustainable concept should continue even after the nonwovens have been used: the geotextiles could be recycled after use and ultimately utilized to produce yarn for textile products.

Lenzing fiber applications

Whether in the fashion sector, for outdoor and sportswear, or for highly absorbent hygiene products – there are virtually no limits to the variety of our fibers and their application areas. They are seductively soft when it comes to comfort. We let them shine with color, or enable the creation of a beautiful drape if the texture of silk is to be evoked.

Tencel™ Feels so right

EcoVero™

"Fibers for all-round well-being"

LENZING™

Veocel™ Purely for you

Lenzing fibers make it possible to create wonderfully washed-out jeans with a vintage look that feel soft, smooth, and supple on the skin. They enable sustainable footwear solutions, from sole to shoelace.

Many different applications exist for our fibers in sports activities: in quick-drying, breathable, odorless T-shirts, in fleece jackets, in trousers for climbing, running, walking, and yoga as well as in corresponding sports shoes.

In the bathroom, our fibers can be found in both hand and bath towels. These are soft and, at the same time, absorbent and easy-care. Hygienic and wet wipes for skin cleansing as well as baby diapers and tampons also contain Lenzing fibers.

The many different household applications include wipes made of Lenzing fibers, and nets made of sustainable, biodegradable Lenzing fibers for fruits and vegetables.

In addition to the fibers themselves, acetic acid and soda as byproducts of fiber production are also found in food retailing and, as a consequence, in the consumer area.

Applications for Lenzing fibers in the medical sector include hygiene and wound care. The fibers also form an essential component in protective clothing guarding against heat and fire.

When people go to bed at night, they can relax in pajamas and on mattresses made with Lenzing fibers. They also cover up with bed linens containing Lenzing products.

Lenzing fibers are found in many areas of life. In the future, Lenzing will continue to make great efforts to inform consumers that they can also make a personal contribution to environmental protection and a more sustainable world through their daily shopping decisions.

CHAPTER

2/4

Management Report

2023

Content

General Market Environment

Global economy[1]

The global economy grew by 3.1 percent in 2023, according to the latest calculations by the International Monetary Fund. With the exception of the pandemic, this represents the lowest annual growth rate since the global financial crisis. While the direct effects of the pandemic receded into the background, the past year was characterized by many other challenges: the war in Ukraine and the escalation in the Gaza Strip determined the geopolitical environment. Tensions over Taiwan intensified and supply chains were disrupted by rebel attacks in the Red Sea. Economic growth was slowed by high inflation and a rise in key interest rates, and many consumers found it difficult to cover the higher costs with their income. Consumer confidence recovered slightly compared to the previous year, but remained below the long-term average. China, in particular, one of the largest textile markets, was expected to experience a more pronounced recovery following the end of the Covid restrictions. However, the economic situation in Europe also proved to be challenging and some countries slipped into recession. For 2024, as well, the IMF is forecasting growth of 3.1 percent.

The long-awaited recovery in demand and prices in the textile and clothing industry also largely failed to materialize. According to a global survey conducted by the International Textile Manufacturers Federation,[2] satisfaction with the business situation continued to decrease in the second half of 2023, contrary to expectations, and touched a new low in November 2023. A slight improvement in the business situation was evident in January 2024.

Global fiber market[3]

Fiber production up slightly

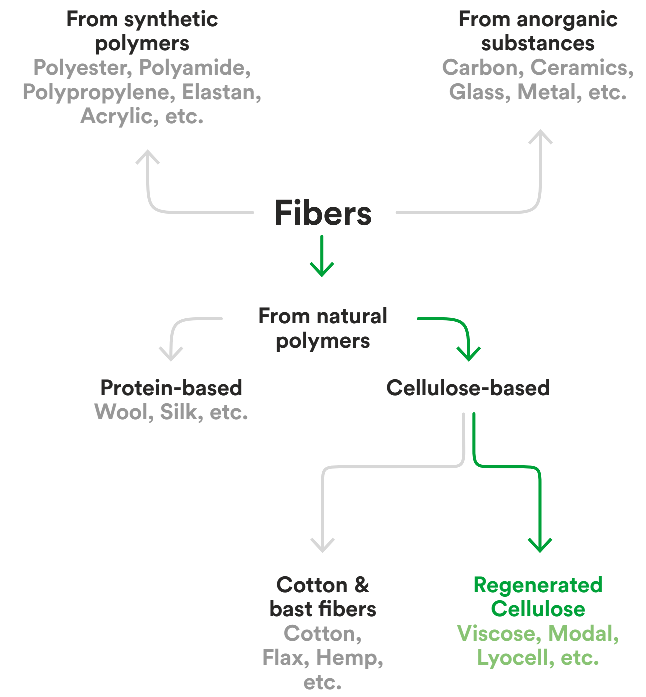
Global retail sales of clothing in 2023 – adjusted for price effects – were up to 5 percent higher than in the previous year, according to preliminary calculations. While sales in the USA and Europe largely stagnated, China made a strong contribution to global sales growth with an increase of 12 percent, driven by domestic demand (and due to the very low prior-year figure reflecting strict Covid measures).

Stock levels at clothing retailers were reduced in part by sales promotion measures, particularly over the Christmas period, but still remained at a high level compared to many years ago. Retailers were reluctant to place orders despite lower stock levels. Stocks at upstream production stages also decreased for the most part.

Demand for home textiles continued to suffer in 2023 due to investments that had been brought forward during the Covid pandemic; private households had invested heavily in furnishing their own living areas during the lockdowns.

Retail sales of hygiene products in the nonwovens industry, which usually prove more resistant to crises, were also under pressure. Volume sales of major brands decreased in some cases, while demand for lower-priced private labels increased.

Fibers on the world market



Global fiber production rose slightly by 1 percent to 120 mn tonnes in 2023, according to initial estimates. Cotton production decreased by 2 percent to 24.8 mn tonnes in 2022/2023, according to preliminary estimates. This is mainly due to a reduction in acreage at the expense of food crops. Demand was down by 8 percent to 23.7 mn tonnes. As a consequence, cotton stocks rose to 21.2 mn tonnes, their highest absolute level since the 2014/2015 season and also above the long-term average in comparison to consumption (stocks-to-use ratio).

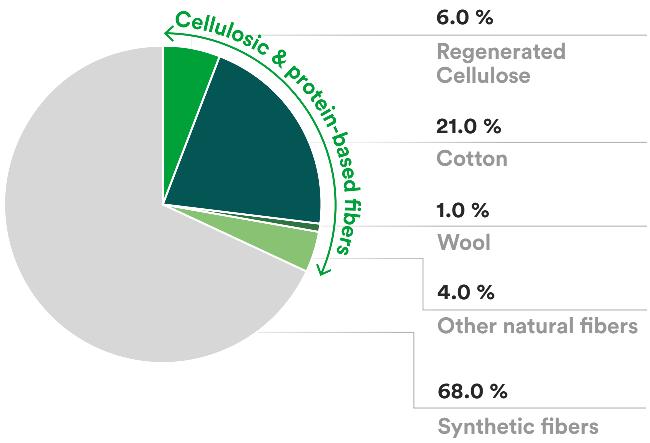
The production of regenerated cellulosic fibers such as lyocell, modal, and viscose fibers rose by 3 percent to 7.5 mn tonnes, according to initial estimates. This growth was almost exclusively attributable to the sharp rise in global production of lyocell fibers.

The production volume of synthetic polymer fibers amounted to around 81 mn tonnes, up 1 percent on the previous year, according to initial estimates.

[1] Source: IMF, World Economic Outlook, January 2024
[2] Source: ITMF, 24th Global Textile Industry Survey, January 2024

[3] All production-related figures in this section were updated from the initial estimates published in the Annual Report 2022.
Sources: The Fiber Year, ICAC, Cotton Outlook, CCFG, FAO

Global fiber production 2023[1]
by type of fiber in percent (basis = 120 mn tons)



Staple fiber prices remain under pressure

Price trends on staple fiber markets proved to be far less volatile in 2023 than in the previous year. Prices ranged within a much narrower band overall, but remained under pressure.

Cotton prices were far less volatile over the course of the year than in 2022. The Cotlook A index reached its high for the year of 102 US cents per pound at the end of January, driven by high market expectations following the reopening in China. The 2022/2023 cotton season ended with stocks slightly higher, which had a negative impact on price trends. For the year, cotton prices slipped 8 percent to 91 US cents per pound.

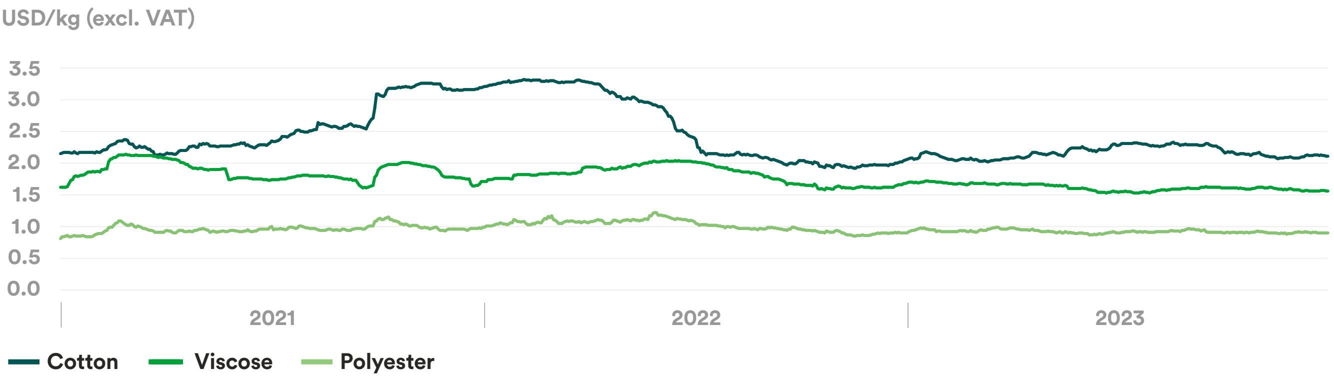
The price of polyester staple fibers in China rose by 2 percent to RMB 7,325 per tonne over the course of the year. During the year, it reached a high of RMB 7,970 per tonne in mid-September. The price increase was primarily driven by higher costs for the intermediate products PTA (terephthalic acid) and MEG (monoethylene glycol).

Viscose prices in China also remained within a comparatively narrow range in 2023. Over the course of the year, prices were down by 2 percent to RMB 12,600 per tonne. They peaked at RMB 13,400 at the end of September due to higher chemical costs and seasonally slightly higher demand.

Prices for wood-based specialty fibers decreased slightly due to weaker demand, particularly from brands and retailers, and additional capacity on the market. The price premium commanded by the TENCEL™, LENZING™ ECOVERO™, and VEOCEL™ brands proved to be comparatively resilient.

The Chinese import price for dissolving wood pulp, the key raw material for the production of regenerated cellulosic fibers, was 2 percent below the previous year's level at USD 880 per tonne as of the end of December. Chinese prices for paper pulp decreased sharply from USD 810 per tonne at the beginning of the year to USD 475 per tonne in mid-May. However, dissolving wood pulp was hardly affected by this decrease, as limited supply due to production downtime encountered slightly higher demand. As the year progressed, however, prices converged again and paper pulp closed the year at USD 653 per tonne.

Staple fiber prices – Development in China[2]



[1] Sources: ICAC, TFY, Lenzing estimates

[2] Sources: CCFG, CCA

The Development of Business in the Lenzing Group

The expected recovery in markets relevant for Lenzing has failed to materialize to date. The continued increase in raw material and energy costs on the one hand and very subdued demand on the other had a negative impact on the Lenzing Group's business trends in 2023, as well as on the overall sector.

As early as the end of 2022, Lenzing successfully implemented a reorganization and cost reduction program with a volume in excess of EUR 70 mn. At the same time, the balance sheet and liquidity positions were significantly strengthened through the successful capital increase in a volume of around EUR 400 mn and the extension of debt terms in a volume of around EUR 250 mn in the reporting year.

Building on this, the Managing Board is currently implementing a comprehensive performance program with the overriding objective of achieving significantly enhanced long-term resilience to crises and greater agility in the face of market changes. The program initiatives are aimed primarily at an improvement in EBITDA and free cash flow generation through stronger revenue and margin growth, and sustainable cost excellence. In addition to the significantly positive revenue effects, the Managing Board expects annual cost savings of more than EUR 100 mn, of which around 50 percent will be effective from the current financial year onwards.

Revenue in 2023 decreased by 1.7 percent year-on-year to EUR 2.52 bn. This reduction was primarily due to lower fiber revenues, while pulp revenues were up.

The operating earnings trend was mainly influenced by the market environment. Earnings before interest, tax, depreciation and amortization (EBITDA) rose by 25.4 percent year-on-year to EUR 303.3 mn in the reporting year. The EBITDA margin increased from 9.4 percent to 12 percent.

The operating result (EBIT) amounted to minus EUR 476.4 mn (compared with EUR 16.5 mn in 2022) due to EUR 464.9 mn of impairment losses, and the EBIT margin stood at minus 18.9 percent (compared with 0.6 percent in 2022). Accordingly, the result before tax (EBT) amounted to minus EUR 585.6 mn (compared with minus EUR 10.1 mn in 2022).

The recognition of impairment losses arises from the ongoing uncertainties in the economic environment, continued higher raw material and energy costs, as well as higher discount rates due to the change in the interest rate environment. The impairment losses were not cash-effective, but had an impact on EBIT and EBT in 2023.

The income tax expense of EUR 7.3 mn (compared to EUR 27.2 mn in 2022) mainly reflects the impairment of tax assets of individual Group companies and currency effects due to the translation of tax items from local to functional currency.

Cash flow from operating activities amounted to EUR 160.3 mn in 2023 (compared with minus EUR 43.2 mn in 2022). Free cash flow amounted to minus EUR 122.8 mn, primarily due to the trend in results as well as the completion of strategic investment projects. However, this level of free cash flow was already significantly higher than the previous year's level of minus EUR 740.7 mn, largely due to the implementation on schedule of the performance program.

In the third and fourth quarters of 2023, Lenzing generated positive free cash flow of EUR 27.3 mn and EUR 15.4 mn respectively (compared with minus EUR 132.3 mn in the first quarter and minus EUR 33.1 mn in the second quarter of 2023), thereby confirming that the measures to strengthen free cash flow are working.

Capital expenditures for intangible assets, property, plant and equipment, and biological assets (CAPEX) amounted to EUR 283.6 mn in the reporting year (down from EUR 698.9 mn in 2022) including due to the investment projects in China and Indonesia. Compared to December 31, 2022, the liquidity position increased by 61.3 percent to EUR 731 mn as of December 31, 2023, due to the capital increase.

Total assets decreased by 5.6 percent compared with December 31, 2022, to EUR 5.21 bn as of December 31, 2023. Adjusted equity decreased by 13.4 percent to EUR 1.81 bn. The adjusted equity ratio stood at 34.7 percent as at December 31, 2023 (compared with 37.8 percent as at December 31, 2022). Net financial debt amounted to EUR 1.56 bn as of the balance sheet date (compared with EUR 1.8 bn as of December 31, 2022).[1] Net gearing increased to 86.4 percent (compared with 86.2 percent as of December 31, 2022).[1] Trading working capital reduced by 3.4 percent to EUR 551.1 mn, mainly reflecting a decrease in inventories of EUR 159.6 mn as a result of accelerated inventory reduction and an offsetting negative effect from the significantly lower level of trade payables compared to December 31, 2022.

The details of the revenue and earnings trends in the year under review are as follows:

[1] Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities (see the supplement to the management report "Notes on the Financial Performance Indicators of the Lenzing Group").

Condensed consolidated income statement[1] EUR mn

	2023	2022	Change Absolute	Change Relative
Revenue	**2,521.2**	**2,565.7**	**(44.5)**	**(1.7)%**
Cost of sales	(2,597.6)	(2,162.6)	(435.1)	20.1%
Gross profit	**(76.5)**	**403.1**	**(479.6)**	**n/a**
Other operating income	108.7	73.1	35.6	48.6%
Selling expenses	(274.9)	(286.7)	11.9	(4.1)%
Administrative expenses	(144.7)	(137.2)	(7.5)	5.5%
Research and development expenses	(69.1)	(29.2)	(39.9)	136.4%
Other operating expenses	(20.0)	(6.6)	(13.3)	200.5%
EBIT	**(476.4)**	**16.5**	**(492.9)**	**n/a**
Financial result	(109.2)	(26.5)	(82.7)	311.9%
EBT	**(585.6)**	**(10.1)**	**(575.6)**	**5,722.0%**
Income tax expense	(7.3)	(27.2)	19.9	(73.1)%
Net profit/loss after tax	**(593.0)**	**(37.2)**	**(555.7)**	**1,492.2%**

1) The complete consolidated income statement is presented in the consolidated financial statements.

The Development of Business in the Divisions

The management of the Lenzing Group's business is divided into the two divisions "Fiber" and "Pulp".

In 2023, the implementation of the "Better Growth" corporate strategy was driven forward. The strategy is aimed at better serving structural demand growth for environmentally responsible and high-quality specialty fibers of the TENCEL™, LENZING™ ECOVERO™, and VEOCEL™ brands, among other objectives. In line with its strategy, Lenzing will pursue a profitable growth path following the successful implementation of its key projects, sharpen its focus on sustainable and high-quality premium fibers for textiles and nonwovens and, in parallel, continue to push ahead with the transition to a circular economy model.

Lenzing also announced personnel changes on its Managing Board in 2023. Robert van de Kerkhof, Chief Commercial Officer Fiber and a Managing Board member since 2014, informed the Supervisory Board that he would not be available for a further extension of his contract, which runs until December 31, 2023. The Lenzing Managing Board was thereby reduced from four to three members as of January 1, 2024.

Fiber Division

The Fiber Division comprises all Lenzing Group business activities with cellulosic fibers, especially those in the textiles and nonwovens areas.

Lenzing stands worldwide for the ecologically responsible production of specialty fibers based on cellulose and recycled materials. With the lyocell plant opened in Thailand in 2022 and the successful investments in existing production sites in Asia, Lenzing is able to generate 100 percent of fiber revenues from the specialty fiber business under the TENCEL™, LENZING™ ECOVERO™, and VEOCEL™ brands.

Since 2021, Lenzing has invested more than EUR 200 mn in production sites in China and Indonesia to convert existing capacity for generic viscose into capacity for specialty fibers in order to better serve structurally growing demand for environmentally responsible cellulosic fibers.

At Purwakarta (Indonesia), Lenzing successfully completed reconstruction and modernization measures to convert to specialty viscose and significantly reduce specific emissions. Viscose fibers produced at the site under the LENZING™ ECOVERO™ and VEOCEL™ brands are marked with the EU Ecolabel,[1] an internationally recognized eco label for environmentally responsible products and services.

In Nanjing (China), the conversion of a production line to TENCEL™ modal fibers for textiles and apparel was successfully completed in the first quarter of 2023. For the first time, Lenzing can now also offer its Chinese customers the highly sought-after TENCEL™ fibers that are now produced locally. As a consequence of the conversion, the production site's fiber portfolio now consists exclusively of specialty fibers.

The investment projects at the existing sites are in line with the Lenzing Group's scientifically recognized and confirmed net zero target (see also the "Climate change" section in the non-financial statement).

A study published in May 2023 by the Scripps Institution of Oceanography (SIO) at the University of California, San Diego,[2] confirmed that cellulosic-based fibers such as LENZING™ lyocell fibers, LENZING™ viscose fibers, and LENZING™ modal fibers are also biodegradable on the seabed. As early as 2021, studies by the renowned, academic research institute showed that LENZING™ lyocell fibers can be completely degraded at the ocean surface within a very short time.[3]

With its biodegradable LENZING™ fibers in geotextiles, Lenzing is also able to make a significant contribution to the sustainable protection of glaciers, which are severely threatened by global earth warming. This has been confirmed by the Institute of Ecology at the University of Innsbruck in cooperation with Austrian glacier railway operators. The promising project was ranked first in the prestigious Swiss BIO TOP Awards for wood and material innovations.

Lenzing also took further steps to enhance transparency and efficiency along the global supply chain during the reporting period: together with a digital supply chain solutions provider, Lenzing introduced a pioneering process for real-time delivery tracking of containers. Combined with advanced artificial intelligence, GPS sensors, and machine learning technologies, Lenzing can provide accurate, real-time information on fiber orders – from delivery status and container location through to tracking ship routes and estimated arrival times. In line with the sustainability targets, the tracking system also gives supply chain partners a better overview of carbon emissions. Lenzing is thereby setting new standards in the area of supply chain transparency, which will subsequently also help brands and retailers to achieve their sustainability objectives.

[1] The EU Ecolabel is recognized by all member states of the European Union as well as Norway, Liechtenstein and Iceland. Introduced in 1992 by an EU regulation (Regulation (EEC) No. 880/92), the voluntary label has gradually become a reference for consumers who wish to contribute to a lower environmental impact by purchasing more environmentally responsible products and services.

[2] https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0284681

[3] LENZING™ fibers that are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification exists in relation to the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests to confirm biodegradability within a marine environment have not yet been conducted or finalized.

Lenzing was also awarded Platinum status in the EcoVadis CSR rating for the third consecutive time. This award once again positions Lenzing in the top one percent of companies evaluated by EcoVadis worldwide. The assessment comprehensively covers the four main Corporate Social Responsibility practices: the environment, fair working conditions and human rights, as well as ethics and sustainable procurement.

Lenzing was also once again recognized by the global non-profit environmental organization CDP for its transparent reporting and performance in the areas of climate change, forests, and water security. Lenzing was ranked in all categories in the annual "A list" for the third consecutive year. Based on data from the CDP 2023 questionnaires on climate change, forests, and water security, Lenzing is one of only ten companies to receive a triple "A" – out of over 21,000 companies assessed.

With the positioning of its product brands, the Lenzing Group has been sending a strong message to consumers since 2018. With TENCEL™ and LENZING™ ECOVERO™ as overarching brands for all specialty products in the textile segment, VEOCEL™ as the overarching brand for all specialty nonwoven products, and LENZING™ for all industrial applications, the company showcases its strengths in a targeted manner. Lenzing also enhanced its brands' visibility in 2023 through targeted communication measures. The TENCEL™ brand again achieved a strong leadership position among the ingredient brands of the textile and apparel industry in the global awareness ranking.

The Fiber Division's external revenue reached a level of EUR 1.84 bn in 2023, 65.1 percent of which was attributable to textile fibers and 34.9 percent to nonwoven fibers. Fiber sales volumes grew to approximately 840,000 tonnes (from approximately 810,000 tonnes in 2022). The share of specialty fibers in fiber revenue increased to 78.9 percent (compared to 73.7 percent in 2022). The division's earnings (EBITDA) amounted to minus EUR 98.7 mn, while the operating result (EBIT) amounted to minus EUR 683.8 mn.

Textile fibers

A difficult market environment for textile fibers characterized 2023. Following the deterioration in the market environment in the second half of 2022, demand remained subdued throughout last year.

A high level of general uncertainty and low consumer confidence led to orders along the value chain standing for the larger part at a very low level. At the same time, inventories were significantly reduced in order to sufficiently optimize net working capital in the light of high interest rates. The trend towards short-term orders also made it more difficult for many customers and partners to plan their requirements.

Although the recovery is proving to be slower than expected, the TENCEL™, TENCEL™ LUXE, and LENZING™ ECOVERO™ textile fiber brands continued to perform well. Lenzing again succeeded in differentiating itself from its competitors in the reporting year thanks to continuous innovation in the areas of sustainability and the circular economy as well as targeted measures in the area of ingredient branding.

Lenzing and Södra received the ITMF Award for their pioneering partnership in textile recycling. The two companies have been partnered since 2021, making a crucial contribution to promoting the circular economy in the fashion industry.

To further expand awareness of the benefits of regenerated cellulosic fibers such as those from the Lenzing Group, the TENCEL™ 2023 brand collaborated with value chain partners. This includes the flagship partnership with Natural Fiber Welding Inc. to provide sustainable leather alternatives for the fashion industry that are completely plastic-free. The partnership of TENCEL™ with fabric and denim manufacturer Kaihara Denim demonstrated the versatile application of TENCEL™ fibers, pushing innovation boundaries in the premium denim sector.

As part of the successful modernization of the production site in Indonesia, Lenzing expanded its range of responsibly produced specialty viscose under the LENZING™ ECOVERO™ and LENZING™ ECOVERO™ Black brands. Lenzing also launched LENZING™ ECOVERO™ fibers with REFIBRA™ technology in the reporting year, thereby boosting the post-consumer recycling share of its production. The proportion of waste was rapidly raised from 10 percent to 20 percent by the time of launch. The addition of the digital hangtag offering to the LENZING™ ECOVERO™ brand supports customers seeking responsibly produced fashion, and contributes to creating a more sustainable industry.

In a further step to enhance traceability and transparency along the textile value chain, Lenzing has introduced the Lenzing Fiber Identification System for LENZING™ FR fibers. The system, with which LENZING™ FR fibers can be identified at every production stage, ensures unparalleled traceability and quality assurance.

Business with TENCEL™ LUXE filaments performed well in 2023. Market interest has continued to grow in all application areas and segments (athleisure, women's clothing, traditional clothing, etc.). This led to rising revenue throughout the reporting year and to higher production levels in order to meet additional demand. Clothes made from TENCEL™ LUXE filaments were once again in the spotlight in 2023. Highlights include the bespoke dresses designed by Zac Posen and Monique Lhuillier in collaboration with RCGD Global for actresses Bailey Bass and Chloe East for the 95th Academy Awards, the dress by Wiederhoeft worn by actress Nicola Coughlan at the premiere of the film "Barbie" in London, and the bespoke dress by Patrick McDowell worn by Nicole Scherzinger at the British Fashion Awards.

Lenzing also enhanced the visibility and awareness of its TENCEL™ and LENZING™ ECOVERO™ brands with a series of global campaigns and initiatives that generated more than 23.6 bn impressions in online media and 35.7 mn interactions, including video views, on social media.

The success of the TENCEL™ and LENZING™ ECOVERO™ brands in the 2023 financial year is also reflected in the collaboration with around 560 brand partners worldwide, including international and up-and-coming brands such as Aimer, ANTA, Camper, Country Road, Cotton On, FILA, Fruit of the Loom, Jockey, Kraus Jeans, Marco O'Polo, Mother of Pearl, MPG Sports, Reformation, TwoThirds, The Paradise, Pepe Jeans, Patrick McDowell, Peacebird, VOGUE, and Wacoal.

During the reporting year, Lenzing also launched targeted programs to further strengthen the protection of intellectual property and trademarks. The global initiative, which was first launched in China, involved cooperation with trade fair organizers, partners along the value chain, and government authorities. The TENCEL™ brand achieved more than 3.76 mn views on LinkedIn with its awareness campaign within the first activation period.

Nonwoven fibers

Nonwoven fibers are an important strategic pillar of the Lenzing Group. Lenzing sells the majority of its products in this area under the VEOCEL™ brand, serving the wipes and hygiene segments in particular. Despite the general market dynamics, these areas were relatively stable in the reporting year and recorded growing consumer interest in wood-based and biodegradable solutions.

With the nonwovens strategy developed in 2023, which builds on the Better Growth corporate strategy, Lenzing aims to strengthen its market position and create the conditions for sustainable and profitable growth through targeted product and application solutions with a view to market requirements. The transformation of the nonwovens industry towards the use of sustainable cellulosic fibers remains a key component of this strategy. The Nonwoven Fibers area is aiming to further diversify its sales markets by focusing specifically on the absorbent hygiene products (AHP) segment as a further strategic growth pillar alongside wet wipes, and by forming a new business development team that is geared towards developing new and existing premium technical segments such as battery, filtration, carbonization, and healthcare applications. In order to improve the offering for customers and partners along the value chain and accelerate time to market, innovation activities were also linked more closely with sales. Examples include the development and introduction of hydrophobic lyocell fibers (LENZING™ Lyocell Dry) at the Hygienix trade fair. Thanks to their innovative ability to pass liquids over their surface, the fibers offer completely new product solutions for hygiene products that could previously only be achieved by using plastic fibers. The new Lenzing fiber is not classified as "plastic" under the EU Single-Use Plastics Directive and offers a very soft and environmentally responsible cellulose-based alternative for brands and manufacturers looking to develop plastic-free feminine and personal care products.

Lenzing continued to work closely with its customers and partners in the nonwoven fibers area in 2023 to develop sustainable solutions for the market, including a fully compostable diaper. Launched in early 2023, the optimized LENZING™ Lyocell Shortcut fiber enables rolled goods manufacturers using wet laid nonwoven technology to achieve better and more uniform processability of the fibers in combination with pulp, enabling the production of high-quality nonwovens, such as for use in flushable moist toilet tissues.

The number of VEOCEL™ co-branding programs was also further increased in the 2023 reporting year, as exemplified by the successful partnership with Neutrogena.

Following the successful conversion and modernization of the Indonesian site in the second half of 2023, Lenzing will be able to offer its customers EU Ecolabel certified fibers as a new standard. The launch of the first completely chlorine-free VEOCEL™ lyocell fibers on the market, which address the growing sustainability and health awareness of consumers worldwide, represents a further world first.

Furthermore, the LENZING™ Nonwoven Technology (LNT) was presented at the INDEX trade fair in Geneva and at the Go Wipes trade fair in Berlin. This technology has the potential to become a key strategic platform for the cellulosic nonwovens sector by opening up new opportunities for differentiation and diversification. This area is turning its attention from technology development to product development and to preparation for commercialization.

Co-products of fiber production

At all locations where the Lenzing Group produces viscose or modal fibers, manufactured co-products include LENZING™ sodium sulfate. This is used in the detergent and glass industries and for the production of food and animal feed. In the 2023 reporting year, sales volumes decreased in line with fiber production, while revenue grew in line with the market situation.

Pulp Division

The Pulp Division comprises all Lenzing Group business activities from wood procurement through to the production and sale of dissolving wood pulp and biorefinery products. The new pulp mill in Indianópolis (Brazil) is already successfully producing excellent quality pulp at a nameplate capacity of around 500,000 tonnes per year, making it one of the largest and most productive mills in the world. Surplus electricity is fed into the public grid as renewable energy. These new production volumes contribute significantly to strengthening Lenzing's self-sufficiency in dissolving wood pulp and support premiumization in line with the corporate strategy. Lenzing holds a 51 percent interest in the joint venture LD Celulose, which was established for the construction of the plant.

The new pulp plant enables Lenzing to strengthen its own supply of dissolving wood pulp and thereby largely reduce its dependence on external pulp suppliers. To provide the biomass, LD Celulose secured over 44,000 hectares of FSC®-certified commercial forest, and leased additional land, in order to have approximately 70,000 hectares of FSC®-certified forest area when completed.[1] These plantations operate in full accordance with the Lenzing's guidelines and high standards for wood and pulp sourcing.

In line with its "Better Growth" strategy, Lenzing is stepping up its recycling activities in order to accelerate the transformation of the textile and nonwovens industries from a linear to a circular economy model. Lenzing has been proactively developing and promoting innovations in the area for years in order to provide economically viable and scalable solutions to the global textile waste problem. Since 2021, Lenzing has been working with Swedish pulp producer Södra to jointly develop new processes for recycling used textiles on an industrial scale. In the reporting period, the project[2] was supported by an EU grant of EUR 10 mn under the LIFE 2022 program.[3]

The Pulp Division's external revenue reached a level of EUR 676.1 mn in 2023. Divisional earnings (EBITDA) amounted to

[1] FSC license code: FSC-C175509, FSC-C165948
[2] Project 101113614 — LIFE22-ENV-SE-TREATS
[3] https://cinea.ec.europa.eu/programmes/life_en

EUR 462.1 mn, and operating earnings (EBIT) stood at EUR 284.6 mn.

Wood
The situation on the timber markets has largely stabilized after the dislocations in the previous year, and the extreme price fluctuations have in part receded.

The Lenzing Group's procurement strategy entailing long-term master agreements achieved a good stabilizing effect on volumes and prices. As a consequence, Lenzing was able to supply its pulp sites in Lenzing (Austria) and Paskov (Czech Republic) with sufficient wood during the reporting year.

In 2023, audits in accordance with the Forest Stewardship Council® (FSC®) and Programme for the Endorsement of Forest Certification (PEFC) forest certification systems confirmed again for both sites that, in addition to stringent forestry laws in the supplier countries, all wood used derives from PEFC and FSC® certified or controlled sources.[1]

Biorefinery

Pulp
The Pulp Division supplies the Lenzing Group's fiber production sites with high-quality dissolving wood pulp and operates its own fiber pulp plants at the Lenzing, Paskov, and Indianópolis (Brazil) sites. This increased the level of self-sufficiency to significantly more than 75 percent targeted by the corporate strategy. Lenzing also established itself as a structural supplier in the global pulp market. Most of the dissolving wood pulp sourced externally is purchased on the basis of long-term contracts. A total of approximately 1,068,000 tonnes of dissolving wood pulp was produced at Lenzing's pulp plants in 2023.

Biorefinery products
In addition to dissolving wood pulp, the Lenzing Group's biorefineries also produce and market biorefinery products so that further components of the valuable raw material wood are utilized. Renowned customers from the food, animal feed, pharmaceutical and chemical industries rely on biobased products from Lenzing.

Lenzing continued to benefit from the trend towards greater sustainability and regional supply chains in 2023. A lifecycle analysis performed by the research institute Quantis confirmed that the carbon footprint of LENZING™ Acetic Acid Biobased is more than 85 percent smaller than that of comparable products based on fossil resources.

Following strong revenue growth in the previous year and a further increase in revenue in the first half of 2023, the biorefinery products LENZING™ Acetic Acid Biobased and LENZING™ Furfural Biobased posted lower revenue in the second half of the year, in line with the general price trend in the chemicals market. In May of the reporting year, Lenzing celebrated the 40th anniversary of its biorefinery concept and looked back on a long and successful development of this business sector.

Divisional supplies of energy and other raw materials

In the Fiber and Pulp divisions, energy and other raw materials are significant factors influencing the Lenzing Group's financial position and performance.

Energy
With its biorefinery concept at its Lenzing, Paskov and Indianópolis sites, Lenzing is one of the pioneers of fiber and pulp production that is as self-sufficient in energy as possible, and is continuously working to enhance energy efficiency at its other production sites.

The energy reserves at the Lenzing Group's European sites remain very well filled in light of the geopolitical situation and associated uncertainties.

Energy prices were down significantly again in 2023 following the record rise in the previous year. The marked reduction in gas consumption in Europe due to warm temperatures and continuous substitution, and, as a consequence, a lower level of industrial demand, played a major role in this context. Spot market prices were down by 66 percent in the reporting year. The price of electricity decreased by 61 percent. Coal prices also posted a similarly negative trend, reducing by 55 percent. The oil price decreased by 17 percent in the reporting year. Only the carbon dioxide price recorded an average increase of 3 percent, although the price was down significantly towards the end of the year.

The Lenzing Group partially restructured its energy price hedging in the first quarter of 2023 in the wake of the supply crisis and thereby reduced its exposure to the risk of price changes. Natural gas and electricity are now procured in accordance with a defined purchasing strategy, under which part of the energy required is procured via fixed supply contracts with fixed prices on the forward market. For this reason, spot market trends have only a weakened impact on the company's energy costs.

In November, Lenzing signed a supply contract with Austrian electricity producer WLK energy for the purchase of around 13 megawatts of wind power. Lenzing is thereby not only underlining its commitment to climate protection and the energy transition, but is also investing in long-term electricity supplies that are diversified and offer stable prices. The contract has a term of fifteen years and provides for supplies from the new wind farm in Engelhartstetten from the first quarter of 2025 onwards. All of this electricity is utilized at the production site in Lenzing.

Moreover, since November 2023, the Lenzing production site has been supplied exclusively with green electrical energy from a 5.5 MWpeak PV system constructed in the district of Deutschlandsberg (Styria). Several photovoltaic systems were already installed at the Lenzing site in 2022. These include the largest open-space system in the state of Upper Austria, which was fully commissioned in the first quarter of 2023.

The energy plants at the Lenzing site operated mainly in normal mode during the reporting period with very low downtimes. A

[1] License code: FSC-C041246 and PEFC/06-33-92

number of energy efficiency projects were launched in the reporting year and will be implemented continuously over the coming months.

In April, Lenzing signed a contract for the acquisition of the 43 MW biomass power plant of ENERGIE 42 Beteiligungs GmbH located in the Heiligenkreuz Business Park in Austria's Burgenland region. This strategic investment enables Lenzing to secure long-term energy supplies for the Heiligenkreuz site and increased its competitiveness significantly.

With the continuous expansion of renewable energies, Lenzing is making itself less dependent on global energy markets and is continuing to reduce its carbon emissions in line with its strategic targets.

The power plants in Paskov operated normally during the reporting period. Surplus energy was fed into the public power grid.

Natural gas prices in North America recovered in line with the international trend. Prices at the Mobile site (USA) dropped sharply. By contrast, the electricity price was higher year-on-year.

The plants in Purwakarta (Indonesia) were operated with a high level of availability and were further optimized. Prices for coal and electricity decreased compared to the previous year. Lenzing has been sourcing green electricity from renewable sources at its Indonesian site since the third quarter of last year.

Steam prices at the Nanjing site in China are recovering at a slower pace compared to coal prices and in 2023 were slightly lower year-on-year. The grid electricity price was also down. The changeover in energy production from coal to natural gas, which is intended to reduce carbon emissions, was continued in the reporting year.

In the first half of 2022, the lyocell plant at the Prachinburi site (Thailand) was commissioned. The price of steam decreased slightly in 2023 compared to 2022, while the price of electricity rose.

Other raw materials

The sharp rise in energy prices due the pandemic and the Ukraine war also led to supply shortages and significant price increases on global commodity markets. In the 2023 reporting year, most commodities recorded a significant recovery, although prices remained at elevated levels.

Caustic soda

Caustic soda is used in the production of dissolving wood pulp and is also an important primary product for the production of viscose and modal fibers. It arises as a byproduct from chlorine production. Prices for caustic soda fell significantly at the beginning of the year but remained at an elevated level over the rest of the year. This is due to relatively stable demand coupled with a shortage of supply due to diminishing demand for chlorine.

Sulfur

Sulfur is an important starting material for the production of carbon disulfide and sulfuric acid. In turn, both raw materials are used in the viscose process. Sulfur prices remained stable in the reporting year, at a slightly higher, pre-crisis level.

Others

The "Others" area mainly comprises central headquarters functions and overarching activities as well as R&D activities and the activities of BZL-Bildungszentrum Lenzing GmbH (training and personnel development). The allocation of costs to the "Fiber" and "Pulp" divisions in accordance with the principle of causation led to a reduction in costs for Others in 2023, among other effects. Revenue in the "Others" area reached EUR 4 mn in 2023. The result (EBITDA) amounted to minus EUR 65.7 mn, while the operating result (EBIT) stood at minus EUR 82.9 mn.

The Lenzing share

In the reporting year, the Managing Board of Lenzing Aktiengesellschaft decided, with the approval of the Supervisory Board, to carry out a fully guaranteed cash capital increase with subscription rights for existing shareholders. As of July 10, 2023, this led to the issuance of 12,068,180 new no-par-value bearer shares with dividend entitlement from January 1, 2023 onwards. The related issuance of subscription rights has led to a technical adjustment of the share price of Lenzing AG, as the shares were traded "ex subscription right" as of June 19, 2023.

The Lenzing share started the 2023 trading year at a price of EUR 48.38 (opening price on January 2, 2023, taking into account the technical adjustment in connection with the capital increase) and reached its high for the year of EUR 67.37 on March 8, 2023. The low for the year of EUR 33.10 was recorded on December 11. At the end of the reporting year, the Lenzing share was trading at a level of EUR 35.55. This corresponds to a decrease in the share price of 26.5 percent compared with the start of the year. Vienna's benchmark ATX index ended the year 9.9 percent up compared with the start of the year. No dividend was distributed in the reporting year for the 2022 financial year.

Research and Development

The Lenzing Group reorganized its innovation activities in 2023. The product development and product applications area has been divided into the areas of textile fibers and nonwoven fibers, while basic research activities and process developments are combined within a central area. This enables the company to respond to different market requirements to an even greater degree.

For this reason, key innovation indicators can only be compared with previous years to a limited extent. A total of 222 people were employed in the Group's various research and development areas as of the end of 2023 (compared to 218 employees as of the end of 2022). Research and development expenditures calculated according to the Frascati method (after the deduction of grants) amounted to EUR 31.6 mn (compared with EUR 34.8 mn in 2022). The Lenzing Group's products and technologies were protected by 1,351 patents and patent applications (from 163 patent families) in 50 countries as of the end of 2023.

Focus areas in 2023

In addition to the clear focus on customers and consumers, sustainability is a key guiding principle for all of the Lenzing Group's innovation activities, including process and product development, with a particular focus on recycling and the circular economy. Almost all of the development projects reflect key aspects of environmental sustainability and support the ambitious target of net zero by 2050. These especially include projects to close production cycles and reduce wastewater emissions, as well as to enhance energy efficiency and reduce carbon emissions.

Textile recycling formed a further focus of the Lenzing Group's research and development activities in 2023. The transformation of the textile business model from a linear to a circular economy model requires cooperative approaches along the entire value chain. Lenzing also works with partners outside the traditional textile value chain, such as sorting and recycling companies. The partnership with Swedish pulp producer Södra, which is focusing intensively on developing the recycling of used textile and the construction of a pilot plant, features as a flagship project in the textile recycling area. The European Union is supporting the project with funding of EUR 10 mn as part of its LIFE program.[1] Lenzing and Södra were awarded this funding in 2023 for the LIFE TREATS project.[2]

Lenzing was also increasingly active at the European level in the reporting year in fostering further cooperation in the context of funded projects. For example, Lenzing is a partner in the Horizon Europe CISUTAC (Circular and Sustainable Textiles and Clothing) project, which was launched last year, and in the ESCIB project, which was approved in 2023 and launched in January 2024. This entails the development of methods to assess the ecological sustainability and recyclability of industrial biobased systems, to which Lenzing is contributing a case study.

Lenzing was also involved as a leading partner in a submission for the further development and application development of TENCEL™ LUXE filaments in 2023.

With the expansion of its REFIBRA™ technology to include LENZING™ ECOVERO™ fibers, Lenzing also set new standards in the textile industry in terms of product development during the reporting year. The new viscose fibers embodying REFIBRA™ technology contain up to 20 percent post-consumer textile waste, which derives from cellulose-rich materials or polyester-cotton blends. With the successful development and scaling of production, LENZING™ ECOVERO™ fibers with REFIBRA™ technology are now available to customers worldwide.

Moreover, Lenzing presented a new product solution for hygiene products with its LENZING™ Lyocell Dry fibers, which until now could only be achieved by using synthetic fibers. The hydrophobic cellulose fibers feature the innovative property of conducting liquids on their surface. They are not classified as "plastic" under the EU Single-Use Plastics Directive and offer a very soft and environmentally responsible cellulose-based alternative for brands and manufacturers looking to develop plastic-free feminine and personal care products.

Further highlights from Lenzing's product development in the reporting year include the new resource-efficient dyeing approach for TENCEL™ lyocell fibers and an industry-first innovation that reduces the discoloration of cellulose-based garments during thermoplastic molding processes. Further information and key figures about "Sustainable innovations" can be found in the non-financial statement of the Annual and Sustainability Report.

[1] https://cinea.ec.europa.eu/programmes/life_en

[2] Project 101113614 — LIFE22-ENV-SE-TREATS

Investments

Capital expenditures for intangible assets, property, plant and equipment, and biological assets (CAPEX) amounted to EUR 283.6 mn in the reporting year (down from EUR 698.9 mn in 2022) including due to the investment projects in China and Indonesia.

Since 2021, Lenzing has invested more than EUR 200 mn in production sites in China and Indonesia to convert existing capacity for generic viscose into capacity for specialty fibers in order to better serve structurally growing demand for environmentally responsible cellulosic fibers.

At Purwakarta (Indonesia), Lenzing successfully implemented reconstruction and modernization measures to convert to specialty viscose and significantly reduce specific emissions. Viscose fibers produced at the site under the LENZING™ ECOVERO™ and VEOCEL™ brands are marked with the EU Ecolabel,[1] an internationally recognized eco label for environmentally responsible products and services.

In Nanjing (China), the conversion of a production line to TENCEL™ modal fibers for textiles and apparel was successfully completed in the first quarter of 2023. Lenzing is thereby able to offer locally produced TENCEL™ fibers to its Chinese customers for the first time. As a consequence of the conversion, the production site's fiber portfolio now consists exclusively of specialty fibers. Moreover, Lenzing is working consistently on the gradual conversion of the Chinese site to green energy in order to further reduce carbon emissions.

The investment projects at the existing sites are in line with the Lenzing Group's scientifically recognized and confirmed net zero target (see also the "Climate change" section in the non-financial statement).

In order to further reduce greenhouse gas emissions and at the same time become less dependent on external fossil fuels, Lenzing concluded a contract in 2023 to purchase a biomass power plant to supply the Heiligenkreuz site, as well as a supply contract for the purchase of wind energy for power supplies to the Lenzing site that are diversified and that offer stable prices.

[1] The EU Ecolabel is recognized by all member states of the European Union as well as Norway, Liechtenstein and Iceland. Introduced in 1992 by an EU regulation (Regulation (EEC) No. 880/92), the voluntary label has gradually become a reference for consumers who wish to contribute to a lower environmental impact by purchasing more environmentally responsible products and services.

Risk Report

Current risk environment

Climate change, digitalization, and geopolitical tensions are shaping social and economic reality more than ever. Extreme weather conditions, ransomware attacks, and regional conflicts are putting the resilience of supply chains and business models to the test.

The ongoing war in Ukraine, the Israel-Gaza war, and military conflict in the Red Sea are influencing the risk environment, particularly in Europe.

The uncertain global economic outlook, an increase in insolvency rates, and persistently high interest rates contrast with a potential recovery of the global economy following the Covid shock and subsequent energy crisis in Europe.

Demographic change poses the risk of a shortage of qualified workers in many economic sectors worldwide. The extent of the expected transformative impact of artificial intelligence on individual economic sectors is also unclear at present.

Events along the supply chain, which can lead to effects in other areas as well as greater regulatory requirements from legislators, complete the risk environment.

The International Monetary Fund forecasts growth in global gross domestic product of 3.1 percent for 2023.

A detailed analysis of the trends in the global fiber market during the reporting year and the related risks for the Lenzing Group is presented in the "General Market Environment" section.

Lenzing risk outlook for 2024

The volatility prevailing in many areas manifests the risk of polycrises worldwide and continues to affect the Lenzing Group to varying degrees.

For 2024, the IMF forecasts global economic growth of 3.1 percent. Global inflation is expected to decrease to 5.8 percent in 2024, and to 4.4 percent in 2025, according to the IMF.

The high number of elections in different countries around the world in 2024, especially in the USA, EU, India, and Indonesia, harbors the risk of further turbulence for both politics and the economy, and the associated risk of a greater level of protectionism.

Risks to the operating result arise in particular from a potential continuation of weak demand on the world fiber market and associated low fiber prices, as well as from price fluctuations for important raw materials and energy.

The liquidity risk for 2024 is classified as moderate thanks to the cash position and undrawn credit lines with banks. Lenzing has significantly strengthened its balance sheet and liquidity position with the approximately EUR 400 mn capital increase and the extension of credit terms during the reporting period. A persistently elevated interest rate level or even rising interest rates would have a negative impact on earnings.

With its Better Growth strategy and focus on sustainable growth with premium fibers, the company believes it remains very well positioned.

The Group's own supplies of dissolving wood pulp are secured in the long term thanks to the successful commissioning of the pulp mill in Brazil in 2022, and sufficient market supply.

Markets for energy, raw materials, and logistics must continue to be assessed as highly volatile.

As far as currencies are concerned, the US dollar fluctuated against the euro within a range of around 8 percent, while the Chinese yuan fluctuated against the euro in a range of around 12 percent. A depreciation of the two currencies would have a negative impact on Lenzing's open currency volumes.

No significant loss events arising from operational, environmental or product liability risks occurred in the reporting year.

Non-operational risks such as cyber and compliance risks and the associated potential reputational damage are of increasing relevance for Lenzing. Risks due to "green claims" as well as challenges in sustainable recruitment, not least due to demographic change, are also playing an increasingly important role in this context. Lenzing continuously counteracts these risks with Group-wide standards and training as well as its global organizational structure.

Risk management

The main purpose of risk management in the Lenzing Group is to safeguard and strengthen the company through an adequate, objective and transparent assessment of financial, operational and strategic risks, including those related to ESG issues. The Lenzing Group's Managing Board, together with the heads of the reporting departments, conducts extensive coordinating and controlling operations as part of a comprehensive integrated internal control system that covers all locations. The timely identification, evaluation and response to strategic and operational risks form essential components of these management activities and make a significant contribution to the company's value. This approach is based on a standardized, Group-wide monthly reporting system and the ongoing monitoring of strategic and operational plans.

Lenzing uses an established, company-wide risk management process that ensures the central coordination of risks and their monitoring in a comprehensive risk management system for the entire Group. Together with the operating units, significant risks are identified and assessed and then communicated and transparently presented to the Managing Board and to other managers. Proactive analysis of potential risks is just as much the aim of risk management as the task of actively controlling risks and evaluating appropriate measures with the business units concerned. In connection with climate change, climate-related risks and opportunities and their short-, medium- and long-term effects on the Lenzing Group are identified and evaluated as part of risk management, and appropriate risk mitigation measures are derived. This takes into account the requirements of the TCFD (Task Force on Climate-Related Financial Disclosures) as well as the EU Taxonomy and associated future obligations to report climate-related opportunities and risks.

Risk management strategy

The Lenzing Group pursues a multi-step approach to risk management:

Risk appetite

The general stance in relation to taking risks and realizing opportunities within the Lenzing Group is defined by risk appetite at various levels.

Risk analysis (based on the COSO®[1] Framework)

The Central Risk Management Department conducts semiannual risk discussions with a five-year time horizon with all production locations and functional units. Long-term opportunities and risks are also analyzed in connection with ESG issues. The main risks, as well as an increasing number of opportunities, are recorded and quantitatively assessed in accordance with international COSO® standards. All risks are presented outside the consolidated statement of financial position and the consolidated income statement. The financial impact of a potential loss on Group EBITDA or on cash and cash equivalents is taken into consideration. The risks are simulated against planned EBITDA, and the range of potential deviations from the respective budget is determined. Lenzing uses simulation software for this purpose, which also calculates other KPIs such as Value at Risk and a risk-adjusted ROCE. Risks that cannot be measured in monetary terms are recorded qualitatively.

Risk reduction

Depending on the impact on the company, efforts are made to avoid, minimize or transfer risks through appropriate measures or, in certain cases and if necessary and reasonable, to intentionally assume them.

Responsibility

Risks are allocated in accordance with the existing company organization, with each risk being assigned a so-called "risk owner".

Risk monitoring/control

The effectiveness of the risk management system used by the Lenzing Group was evaluated and confirmed by KPMG Austria GmbH pursuant to Rule 83 of the Austrian Corporate Governance Code (ACGC) as part of a special audit with limited assurance in the reporting year.

Reporting

The main risks are presented in detail in a report and discussed with the Managing Board and the Audit Committee. The risk report is also submitted to the Supervisory Board.

Market environment risks

Market risk

As an international corporation, the Lenzing Group is exposed to a variety of risks. The trend in prices and volumes for textile fibers and, to a lesser extent, also for nonwoven fibers, is cyclical as it is dependent on global and regional economic conditions. Lenzing fibers compete with cotton and synthetic fibers in many submarkets. Consequently, price trends for these products also have an influence on Lenzing fibers' revenue and sales volumes trends.

The Lenzing Group counteracts this risk through the continuous premiumization of its global product portfolio, and a consistent sustainability and innovation strategy. In addition to developing premium products and services, the aim is to further expand the company's role as a leader in terms of sustainability and the circular economy in the fiber sector.

The Lenzing Group relies on a strong international market presence, especially in Asia, combined with a first-class regional support network for customers, as well as a high level of customer-oriented product diversification.

Sales risk

The Lenzing Group generates around 40 percent of its fiber revenues with a mid-double-digit number of customers. Customer concentration in the pulp sector is comparatively higher than in the fiber sector. A decrease in sales to these major customers, or the loss of one or more major customers without an immediate replacement, poses a certain risk. The company counteracts such risk with its global presence and the continuous broadening of its client base and sales segments. Potential default on trade receivables is covered by clear receivables management and global credit insurance.

Competitive and innovation risks

The Lenzing Group is exposed to the risk of losing its position on the fiber market due to greater competition or new technologies developed by competitors. In particular, the Lenzing Group could relinquish its market position if it were no longer able to offer its products at competitive prices, if its products were to fail to comply with customer specifications and quality standards, or if its customer service were to fail to meet customer expectations. Lenzing counteracts this risk with research and development activities that exceed the average for the sector, and by a high level of product innovation and steady cost optimization. The Lenzing Group – similar to other producers – is exposed to the risk that acceptable or superior alternative products may become available and at more favorable prices than reclaimed cellulose fibers.

Laws and regulations

The Lenzing Group is confronted with different legal systems and regulations in its global markets. A change in laws or other regula-

[1] Committee of Sponsoring Organizations of the Treadway Commission

tions (e.g. import duties, product classifications, environmental requirements etc.), as well as a more stringent interpretation of existing regulations and laws, could lead to significant additional costs or competitive disadvantages. The Lenzing Group maintains certified management systems for quality management according to ISO 9001, for environmental management according to ISO 14001, and for safety management according to ISO 45001. Legal compliance in connection with these management systems is regularly audited both internally and externally.

With its own, in-house legal and compliance experts, the Lenzing Group has a corporate area that performs corresponding consulting services and risk assessments.

Due to the progressive effects of global warming on society and ecosystems, more stringent legislation and regulations on the part of governments and other stakeholders are to be expected in the medium term/future. For example, in addition to reducing carbon credits issued in the EU, new taxes on carbon dioxide emissions could be introduced, among other measures. Other regions and countries are currently also planning to implement similar steps. The implementation of regionally differing measures could have a negative impact on the Lenzing Group's performance and success. The Lenzing Group is implementing a number of measures to reduce climate-related transition risks, and to further enhance resilience in this area.

Intellectual property risks

A risk exists that Lenzing's intellectual property may be infringed or incompletely protected. The Lenzing Group counters such risks by means of a dedicated intellectual property protection department.

Climate change and marine pollution

Increasing awareness of problems caused by climate change, such as rising sea levels, the frequency and severity of natural disasters, and a growing risk from pollution of the world's oceans by plastic waste and microplastics, are creating major risks for the entire fiber industry. By producing biodegradable fibers, Lenzing regards this development as an opportunity for its business model.[1]

The Lenzing Group has recognized the far-reaching effects of climate change on society and ecosystems and offers a sustainable alternative with its innovative and biodegradable products. Lenzing is constantly working to set clear sustainability targets and is continuously seeking ways to enhance its energy efficiency as well as opportunities to utilize renewable energy sources or those with lower carbon dioxide emissions. As early as 2019, Lenzing became the first fiber manufacturer to commit to carbon neutrality by 2050.

Opportunities and risks relating to ESG (Environment, Social and Governance)

As part of a materiality analysis, Lenzing surveyed material issues in relation to its sustainably oriented business model in 2021 using a multi-stage and holistic approach. Relevant opportunities and risks are assigned to each ESG topic area, which are integrated in the Enterprise Risk Management System and successively taken into account in Lenzing's long-term strategic business planning.

In the environmental responsibility area (Environment), the main focus topics in the risk matrix comprise climate-related issues in connection with global warming (carbon dioxide reduction) as well as sustainable raw material procurement (wood, chemicals) and the growing water shortage in certain regions. Increasing regulation, particularly in relation to the taxation of greenhouse gases and the pricing of carbon, represents a significant risk for Lenzing. Regulations concerning greenhouse gas emissions have already been introduced in countries where Lenzing operates carbon-intensive processes. Lenzing is consistently working on the implementation of energy efficiency measures and the reduction of carbon emissions in order to take account of environmental protection and reduce exposure through eco taxes.

For Lenzing, wood is the most important natural resource for the production of its biodegradable cellulose fibers. Despite sustainable sourcing policies and backward-integrated production, a risk exists that wood prices will rise further due to climate change, increasing global demand for biomass, and alternative land use.

The global textile industry, especially the fashion industry in which Lenzing's products are frequently deployed, is regarded in a critical light due to its sometimes resource-intensive consumption of raw materials and its production processes. Lenzing identifies significant business opportunities through access to new and emerging markets with innovative new products and technologies. Innovation, sustainability and the circular economy lie at the core of Lenzing's corporate strategy.

The production of pulp and fibers is associated with high levels of water consumption and emissions. Lenzing operates a careful global water management system that ensures compliance with both local laws and global standards. Lenzing is counteracting the increasing scarcity of water by continuously improving resource utilization and by optimizing the selection of sites for the expansion of production capacities.

In the area of social responsibility, the main risks in the area of both physical and mental long-term health and safety of employees at our own sites and along the value chain as well as in society should be highlighted, which Lenzing is increasingly countering with targeted surveys and focus programs.

In the area of corporate governance (Governance), risks such as cyberattacks (see "IT risks") as well as poor compliance with corporate governance and resulting risks are material. Lenzing is continuously tightening its internal rules and expanding its compliance organization accordingly.

[1] LENZING™ fibers that are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification exists in relation to the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests to confirm biodegradability within a marine environment have not yet been conducted or finalized.

Operational risks

Procurement risk (including pulp supplies)
The Lenzing Group purchases large volumes of raw materials (wood, pulp, chemicals) and energy for the manufacture of its cellulosic fibers. Fiber production and related margins are exposed to risks arising from the availability and prices of these raw materials, which can fluctuate to the Lenzing Group's disadvantage and may increase as a consequence of climate change. Such risks are countered through the careful selection of suppliers based on price, reliability and quality criteria, EcoVadis-based sustainability assessments, as well as the establishment of long-standing, stable supplier-customer partnerships, in some cases with multi-year or long-term supply agreements. In addition, all suppliers must comply with Lenzing's Global Code of Conduct for Suppliers. Nevertheless, a risk exists of violations of this code, which may have a negative impact on the Lenzing Group and its stakeholders along the value chain. Supply chain risks may also result from disruptions caused by natural disasters.

Lenzing has also entered into long-term contractual relationships with selected raw material suppliers and service partners. These agreements require Lenzing to purchase specified quantities of raw materials on standardized terms and conditions, which may also include price adjustment clauses. Lenzing may consequently not be able to adjust prices, purchase volumes or other contract conditions over the short term in order to respond to market changes.

Operating risks, environmental risks and risks relating to climate change
The production of regenerated cellulosic fibers involves complex chemical and physical processes that cause certain environmental risks. These risks are very well controlled thanks to proactive and sustainable environmental management, closed production cycles, ongoing emissions monitoring, state-of-the-art production techniques, and the monitoring of production processes by qualified personnel. Lenzing continuously works on increasing safety and environmental standards through voluntary references such as the EU Ecolabel. As the Lenzing Group has operated production facilities at several locations for several decades, risks arising from environmental damage in earlier periods cannot be ruled out entirely.

Although the Lenzing Group has set very high technological and safety standards for the construction, operation and maintenance of its production sites, the risk of breakdowns, disruptions and accidents cannot be completely excluded. These types of disruptions can also be caused by external factors over which Lenzing has no control. It is impossible to provide direct protection against certain natural hazards, such as cyclones, earthquakes, and floods. Moreover, a risk exists that personal injury, material and environmental damage, both within and outside the production facilities, could result in substantial claims for damages and even criminal liability.

The Lenzing Group's production activities are concentrated at a small number of locations. Any disruption at one of these facilities has a negative impact on the Group's business operations and its goals.

Plant risk
Lenzing is a capital-intensive company that is exposed to the risk of obsolescence of plants or plant components. Ongoing investments are required to keep these plants or plant components at the leading edge of technology. Lenzing continuously takes measures to counter such risk by investing in plant renewals and by improving productivity.

Product liability risk
The Lenzing Group markets and sells its products and services to customers worldwide. These business activities can lead to damage to customers, or along the value chain, through the delivery of a defective product by Lenzing or one of its subsidiaries. Moreover, product safety can be jeopardized by pollution, which may cause problems in the value chain, such as potential health implications for employees and customers. Lenzing is also subject to local laws in the countries where its products are delivered. Especially in the USA, the potential implications are considered to be severe. Such risk is countered by a special department that focuses exclusively on customers' potential problems in processing Lenzing products and on handling complaints. Appropriate precautions in the production process and regular quality inspections have been implemented. Third party damages caused by Lenzing are covered by a global liability insurance program.

Financial risks

For a detailed description of financial risks refer to notes 34 to 37 to the consolidated financial statements.

Tax risk
The Lenzing Group's production sites are subject to local tax regulations in their respective countries and are required to pay corporation tax as well as other taxes. Changes in tax legislation or different interpretations of prevailing regulations could lead to subsequent tax liabilities.

Compliance
Increasingly stringent international codes of conduct and legal regulations are placing additional demands on Lenzing in terms of compliance and monitoring. Inadequate controls in business processes or a lack of documentation can lead to the violation of applicable laws or regulations, and significantly jeopardize reputation and commercial success. Lenzing addresses this risk by, among other measures, continuously developing its Group-wide compliance organization, the corporate code of conduct that is valid throughout the Group, as well as directives addressing the areas of bribery and corruption, money laundering and antitrust practices. Further information on compliance is provided in the Corporate Governance Report.

IT risks
Lenzing depends on highly developed information technology (IT) systems for its daily operations. IT systems are vulnerable to a range of problems, including software and hardware malfunctions, malicious hacking and cyberattacks, physical damage to key IT centers, and computer virus infections. Consequently, any major damage, disruption and/or circumvention of its existing IT systems may hamper business operations. These risks are addressed through comprehensive technical and organizational measures as well as additional cyber insurance.

Personnel risks

Personnel risks may arise through the turnover of key staff as well as the recruiting of new staff at all global sites. The Lenzing Group has established a Human Resources Department which operates internationally and coordinates personnel planning with the respective sites, and centrally manages and controls all personnel issues. These include global management and training programs for potential managers, which are organized by the Human Resources Department.

At the production facilities, Lenzing Group employees as well as external contractors' workers and employees are potentially exposed to a risk of injury. Lenzing's "Heartbeat for Health & Safety" program takes such risk into consideration and includes a strategic approach to risk reduction, precautionary measures, and extensive training. For more information, see the non-financial statement of the Lenzing Group's Annual and Sustainability Report.

Risks relating to major projects

The Lenzing Group is continuously expanding its capacities in numerous projects. Major projects entail the inherent risk of cost and time overruns, which Lenzing counters with a standardized planning process, consistent project management, ongoing cost controls as well as insurance solutions and risk transfer. In addition to the ongoing risk management process, Monte Carlo simulations are used for projects of this size to model the sensitivity of the key financial indicators.

Risks from an external perspective and for other stakeholders

As a globally operating company, the Lenzing Group is aware of its social responsibility. The risks described in the risk report refer primarily to the effect on the Lenzing Group's assets and earnings. As one of the sustainability leaders in its sector, the Lenzing Group seeks a balance between the needs of society, the environment and the economy. The company assumes such responsibility, particularly also with respect to potential effects of its operations on neighbors of the production sites as well as in relation to society as a whole. Active stakeholder work to mitigate risks (partnerships for systemic change) and to create additional benefits for people and the environment is a clear goal of the Lenzing Group's innovation and operating activities. The Lenzing Group was once again awarded platinum status in EcoVadis's CSR rating in the reporting year. This evaluation covers the most important practices in the Corporate Social Responsibility (CSR) area. In cooperation with its partners, the Lenzing Group is working on understanding the risks for stakeholders and on finding solutions to mitigate such risks. This work is based on open communication and transparency as well as continuous improvement of technologies and sustainable practices.

Report on the Key Elements of the Internal Control System (Section 243a Para. 2 of the Austrian Commercial Code)

The Lenzing Group's internal control system is designed to safeguard the reliability of financial reporting, ensure compliance with legal regulations and corporate guidelines, and present the risks not reported on the consolidated statement of financial position or in the consolidated income statement. The Managing Board is responsible for establishing and implementing the Lenzing Group's internal control system.

The Lenzing Group's organizational structure and processes form the main basis for the control environment and the internal control system within the company. In the area of organizational structure, competencies and responsibilities are clearly assigned at the Group's various management and hierarchical levels. In addition to the Austrian sites, this includes all international subsidiaries. The Lenzing Group's global presence and as a consequence its decentralized corporate and site structures are taken into consideration by centralizing key corporate functions within corporate centers. The respective management teams are responsible for coordinating and monitoring business operations at national level.

The company's process organization is characterized by a highly developed and extensive set of rules. This creates an adequate basis for a strong control environment and control system. The main areas in terms of approvals and competencies for the Group as a whole are regulated by the "Lenzing Group Mandates". The respective management teams are responsible for monitoring compliance with regulations and controls.

Financial reporting

The Corporate Accounting & Tax Department has central responsibility for financial reporting, the accounting-related internal control system, and tax issues within the Group.

The goal of the accounting-related internal control system is to uniformly implement the legal standards, the generally accepted accounting principles, and the accounting regulations of the Austrian Commercial Code (UGB) and, for the purposes of Group accounting, the accounting regulations of the International Financial Reporting Standards (IFRS) as well as the internal accounting guidelines, in particular the Group-wide accounting manual and schedules. The accounting-related internal control system is designed to safeguard the timely, uniform and accurate recording of all business processes and transactions. It thereby supports the preparation of reliable data and reports on the Lenzing Group's financial position and financial performance. The subsidiaries included in the consolidated financial statements prepare financial statements at company level in accordance with local law and IFRS in a timely manner and are responsible for ensuring that the central rules are implemented at individual company level. They are supported and monitored in these activities by the Corporate Accounting & Tax function. The Supervisory Board's Audit Committee is integrated in the accounting-related control system. In addition, the annual financial statements are audited by external certified public accountants and the half-year financial statements are reviewed on a voluntary basis.

The Corporate Treasury Department, and above all the payments unit, is classified as a highly sensitive area due to its direct access to the company's assets. The accompanying increased need for security is reflected in comprehensive regulations and instructions for all relevant processes. The entire process, from procurement through to payment, is subject to stringent corporate guidelines. These guidelines are largely supported by a Group-wide IT system and require stringent functional separation, a clear authorization concept to prevent authorization conflicts as well as a stringent dual control principle for transaction settlement, in particular for payments, as well as regular reporting, among other measures.

The Internal Audit Department is responsible for monitoring the application of, and compliance with, controls in business operations.

Compliance with legal regulations and internal guidelines

The Lenzing Group's Legal, Intellectual Property & Compliance Department is responsible for legal management. This centralized function handles certain legal matters within the Lenzing Group and is also responsible for the Compliance Management System (CMS). Together with the Managing Board, it oversees Group-wide compliance with certain legal regulations and internal guidelines as well as the prevention of related violations. The Legal, Intellectual Property & Compliance Department reports directly to the Lenzing Group CEO. The CMS evaluates compliance-relevant risks in the narrower sense, analyzes deviations from standards and, if necessary, takes measures to reduce them ("prevent, detect, respond"). In addition, the Compliance Department draws up guidelines relevant to compliance (such as anti-bribery and anti-corruption directives as well as antitrust directives) and organizes worldwide training for employees on these matters. The department also supports specialist departments responsible for compliance with other legal and internal company regulations. The Managing Board and the Supervisory Board (or the Audit Committee) receive regular reports on compliance measures.

The Lenzing Group complies with the rules defined by the Austrian Corporate Governance Code (ACGC) and prepares a Corporate Governance Report which is published as part of the Annual Report. The Corporate Governance Report requires the participation of the Supervisory Board, which delegates the responsibility for monitoring compliance with the related obligations to the Audit Committee.

Shareholder structure and information on capital

Share capital and shareholder structure

The share capital of Lenzing AG amounted to a total of EUR 40,107,738.37 as at the balance sheet date and is divided into 38,618,180 no-par-value shares. B&C Group is the majority shareholder with an interest in the voting rights of 52.25 percent. Goldman Sachs Group, Inc. holds 6.97 percent of the shares. The free float amounts to approximately 41 percent. This is divided between Austrian and international investors. The Lenzing Group holds no treasury shares.

Position of shareholders

Each no-par-value share grants the shareholder one vote at the Shareholders' General Meeting of Lenzing AG. Unless provided otherwise by mandatory provisions of the Austrian Stock Corporation Act (AktG), the Shareholders' General Meeting passes resolutions by a simple majority of the votes cast and – if a majority of the share capital is required – by a simple majority of the share capital represented at the Shareholders' General Meeting.

Lenzing AG has no shares with special control rights. A resolution passed by the Annual General Meeting on April 26, 2022 authorized the Managing Board, subject to the consent of the Supervisory Board, to purchase treasury shares in the company for a period of 30 months starting on the date of the resolution pursuant to Section 65 Paras. 1 nos. 4 and 8 and Paras. 1a and 1b AktG. The treasury shares acquired by the company may not exceed 10 percent of the company's share capital. The consideration to be paid for the repurchase must lie within a range of plus/minus 25 percent of the weighted average closing price on the last 20 stock exchange days preceding the start of the corresponding repurchasing program of the Lenzing share.

The Managing Board was also authorized, subject to the consent of the Supervisory Board, to withdraw repurchased treasury shares without any further resolution by the Shareholders' General Meeting (including the authorization of the Supervisory Board to adopt changes to the articles of association resulting from withdrawing the shares), or to resell them and to determine the conditions of sale. This authorization can be exercised in full, in several parts and in pursuit of one or several objectives by the company, by a subsidiary (Section 189a no. 7 of the Austrian Commercial Code [UGB]) or by third parties for the company's account.

In addition, the Managing Board was authorized for a period of five years from the date of the resolution to approve the sale of treasury shares, subject to the consent of the Supervisory Board, in any manner permitted by law other than through the stock exchange or public offer, and also to exclude shareholders' repurchasing rights (subscription rights), and to determine the conditions of sale.

A resolution passed by the Annual General Meeting on April 19, 2023 authorized the Managing Board, subject to the consent of the Supervisory Board, to increase the share capital by up to EUR 13,787,034.68 through the issue of up to 13,274,999 no-par-value bearer shares – including in tranches – in exchange for cash and/or non-cash capital contributions, within five years from the entry of the changes in the articles of association in the commercial register and to determine the issue price and the further issue conditions ("authorized capital"). This authorized capital was recorded in the commercial register on May 26, 2023. The statutory subscription right may be granted to shareholders in such a manner that the convertible bonds be assumed by a bank or a syndicate of banks with the obligation to offer them to the shareholders in accordance with their subscription right (indirect subscription right).

The Managing Board was also authorized, subject to the consent of the Supervisory Board, to exclude shareholders' subscription rights in the event of a capital increase from the authorized capital in whole or in part (i) if the capital increase in exchange for non-cash capital contributions is realized for the purpose of acquiring companies, parts of companies, operations, parts of operations, participating interests in companies or other assets connected with an acquisition project, (ii) to satisfy an over-allotment option (greenshoe) or (iii) to compensate for fractional amounts.

With the implementation of the cash capital increase with subscription rights for existing shareholders in the reporting year, 12,068,180 new no-par-value bearer shares were issued.

In addition, the Managing Board was authorized by a resolution of the Annual General Meeting on April 19, 2023 to issue, subject to the consent of the Supervisory Board, convertible bonds in one or several tranches that grant or provide for the subscription or conversion right or a subscription or conversion obligation for up to 13,274,999 shares in the company. These can be serviced through conditional capital to be approved and/or treasury shares. The issue price and issue conditions are to be determined by the Managing Board, subject to the consent of the Supervisory Board; the issue amount and the exchange ratio are to be determined in accordance with recognized methods of financial mathematics and the price of the company's shares in a recognized pricing procedure. This authorization is valid until April 19, 2028.

The statutory subscription right may be granted to shareholders in such a manner that the convertible bonds be assumed by a bank or a syndicate of banks with the obligation to offer them to the shareholders in accordance with their subscription right (indirect subscription right).

Outlook

Although the IMF has upgraded its growth forecast for 2024 from 2.9 percent to 3.1 percent, a number of risks for the global economy continue to exist: potential geopolitical shocks, persistently higher inflation and higher key interest rates, as well as market risks emanating from the Chinese real estate market are currently considered to be the most relevant.

Many consumers are continuing to suffer from general inflation and diminishing incomes in real terms, which is having a negative impact on consumer sentiment. A recovery in the consumer clothing market, which is important for Lenzing, will also depend on a further normalization of stock levels.

The currency environment is expected to remain volatile in the regions relevant to Lenzing.

In the trend-setting market for cotton, the current 2023/2024 crop season is signaling a further 0.8 mn tonnes of stock build-up, according to preliminary estimates, following 1.3 mn tonnes of stock build-up in the previous season.

Earnings visibility remains limited overall.

Lenzing is currently ahead of schedule with the implementation of its performance program focused on positive free cash flow, strengthened revenue and margin growth, as well as sustainable cost excellence. The overarching goal is to position Lenzing on an even stronger foundation, and to further enhance its crisis resilience.

Structurally, Lenzing continues to anticipate growth in demand for environmentally responsible fibers for the textile and clothing industry as well as for the hygiene and medical sectors. As a consequence, Lenzing is very well positioned with its "Better Growth" strategy and plans to continue driving growth with specialty fibers as well as its sustainability goals, including the transformation from a linear to a circular economy model.

Taking the aforementioned factors into account, the Lenzing Group expects EBITDA for the 2024 financial year to be higher than in the previous year.

Appendix: Notes on the Financial Performance Indicators of the Lenzing Group

The key financial indicators for the Lenzing Group are described in detail in the following section. These indicators are derived primarily from the IFRS consolidated financial statements of the Lenzing Group and are found in this annual report, above all, in the sections “Selected indicators of the Lenzing Group” and “Lenzing Group Five-Year Overview”. The definitions of the indicators are summarized in the glossary to the annual report. The Managing Board believes these financial indicators provide useful information on the financial position of the Lenzing Group because they are used internally and are also considered important by external stakeholders (in particular investors, banks and analysts).

EBITDA, EBITDA margin, EBIT and EBIT margin

EBITDA and EBIT are viewed by the Lenzing Group as the benchmarks for the strength of operating earnings and profitability (performance) before and after depreciation and amortization. Due to their significance – also for external stakeholders – the EBIT is presented on the consolidated income statement and EBITDA is presented in the Financial Performance Indicators and, in order to provide a comparison of margins, in relation to group revenue (as the EBITDA margin and EBIT margin).

EUR mn	2023	2022	2021	2020	2019
Earnings before interest and tax (EBIT)	(476.4)	16.5	200.6	33.9[1]	165.3[1]
+ Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets	781.8	227.6	164.3	160.4	167.0
- Income from the release of investment grants	(2.0)	(2.1)	(1.9)	(2.0)	(2.4)
Earnings before interest, tax, depreciation and amortization (EBITDA)	**303.3**	**241.9**	**362.9**	**192.3[1]**	**329.9[1]**

EUR mn	2023	2022	2021	2020	2019
Earnings before interest, tax, depreciation and amortization (EBITDA)	303.3	241.9	362.9	192.3[1]	329.9[1]
/ Revenue	2,521.2	2,565.7	2,194.6	1,632.6	2,105.2
EBITDA margin	**12.0%**	**9.4%**	**16.5%**	**11.8%[1]**	**15.7%[1]**

EUR mn	2023	2022	2021	2020	2019
Earnings before interest and tax (EBIT)	(476.4)	16.5	200.6	33.9[1]	165.3[1]
/ Revenue	2,521.2	2,565.7	2,194.6	1,632.6	2,105.2
EBIT margin	**(18.9)%**	**0.6%**	**9.1%**	**2.1%[1]**	**7.9%[1]**

1) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the consolidated financial statements as at December 31, 2022).

EBT

EBT measures the pre-tax earnings strength of the Lenzing Group and is shown on the consolidated income statement.

Gross cash flow

In the Lenzing Group, gross cash flow serves as the benchmark for the company's ability to convert gains/losses from operating activities (before changes in working capital) into cash and cash equivalents. This indicator is presented in the consolidated statement of cash flows.

Free cash flow

The free cash flow generated by the Lenzing Group shows the cash flow generated by operating activities – after the deduction of investments – which is available to service the providers of debt and equity. This indicator is also important for external stakeholders.

EUR mn	2023	2022	2021	2020	2019
Cash flow from operating activities	160.3	(43.2)	394.0	48.9	244.6
- Cash flow from investing activities	(291.5)	(687.4)	(841.3)	(666.2)	(254.7)
+ Acquisition/Disbursement of financial assets and investments accounted for using the equity method	14.2	0.3	7.3	4.1	15.6
- Proceeds from the sale/repayment of financial assets	(5.8)	(10.4)	(5.6)	(1.5)	(4.7)
Free cash flow	**(122.8)**	**(740.7)**	**(445.5)**	**(614.8)**	**0.8**

CAPEX

CAPEX is used in the Lenzing Group as a measure for the volume of investments in intangible assets, property, plant and equipment, and biological assets. This indicator is presented in the consolidated statement of cash flows. In the 2023 financial year, as part of a corporate acquisition, mainly property, plant and equipment were acquired and consequently allocated to CAPEX (see note 3 in the consolidated financial statements as of December 31, 2023).

EUR mn	2023	2022	2021	2020	2019
Acquisition of intangible assets, property, plant and equipment and biological assets	267.8	698.9	844.3	668.8	244.0
+ Acquisition of corporate units	15.7	0.0	0.0	0.0	0.0
CAPEX	**283.6**	**698.9**	**844.3**	**668.8**	**244.0**

Liquid assets

Liquid assets show the Lenzing Group's ability to meet due payment obligations immediately with available funds. This indicator is also used to calculate other financial ratios (e.g. net financial debt; see below).

EUR mn as at 31/12	2023	2022	2021	2020	2019
Cash and cash equivalents	725.6	446.9	1,113.3	1,070.0	571.5
+ Liquid bills of exchange (in trade receivables)	5.4	6.4	10.8	11.1	9.5
Liquid assets	**731.0**	**453.3**	**1,124.1**	**1,081.1**	**581.0**

Trading working capital and trading working capital to annualized group revenue

Trading working capital in the Lenzing Group is a measure for potential liquidity and capital efficiency. It is used to compare capital turnover by relating it to group revenue.

EUR mn as at 31/12	2023	2022	2021	2020	2019
Inventories	552.9	712.5	477.0	329.4	395.7
+ Trade receivables	294.5	293.6	325.2	249.7	251.4
- Trade payables	(296.3)	(435.4)	(414.8)	(195.2)	(243.6)
Trading working capital	**551.1**	**570.7**	**387.4**	**383.8**	**403.5**

EUR mn	2023	2022	2021	2020	2019
Latest reported quarterly group revenue (= 4th quarter respectively)	655.4	595.5	606.1	437.7	487.3
x 4 (= annualized group revenue)	2,621.6	2,382.2	2,424.5	1,750.9	1,949.3
Trading working capital to annualized group revenue	**21.0%**	**24.0%**	**16.0%**	**21.9%**	**20.7%**

Adjusted equity and adjusted equity ratio

Adjusted equity shows the Lenzing Group's independence from the providers of debt and its ability to raise new capital (financial strength). This figure includes equity as defined by IFRS as well as government grants less the proportional share of deferred taxes. Adjusted equity is used to compare equity and debt with total assets. This (and/or a similar indicator) is occasionally used as a financial covenant by lenders.

EUR mn as at 31/12	2023	2022	2021	2020	2019
Equity	1,742.2	2,025.9	2,072.1	1,881.4	1,537.9
+ Non-current government grants	14.1	15.0	13.7	14.2	15.4
+ Current government grants	72.1	67.7	44.2	19.9	13.1
- Proportional share of deferred taxes on government grants	(19.3)	(20.0)	(14.2)	(8.5)	(7.1)
Adjusted equity	**1,809.1**	**2,088.6**	**2,115.7**	**1,907.0**	**1,559.3**
/ Total assets	5,214.6	5,525.0	5,322.8	4,163.0	3,121.1
Adjusted equity ratio	**34.7%**	**37.8%**	**39.7%**	**45.8%**	**50.0%**

Net financial debt, net financial debt/EBITDA, net gearing and net debt

Net financial debt is used by the Lenzing Group as the benchmark for its financial indebtedness and capital structure. It is also an important indicator for external stakeholders. The ratio of net financial debt to adjusted equity (net gearing) illustrates the relation of net debt to adjusted equity. This (and/or a similar indicator) is occasionally used as a financial covenant by lenders. Net debt in the Lenzing Group measures the level of financial indebtedness, including the provisions for severance payments and pensions. Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities (see note 35, table "Carrying amounts, category, fair value and fair value hierarchy of financial instruments"). In previous financial years, lease liabilities were included in net financial debt. The change in the calculation was made because the key stakeholders of the Lenzing Group also monitor net financial debt excluding lease liabilities.

EUR mn as at 31/12	2023	2022	2021	2020	2019
Current financial liabilities	529.0	250.3	120.1	105.6	129.6
+ Non-current financial liabilities	1,906.7	2,071.9	1,981.0	1,446.9	852.0
- Liquid assets	(731.0)	(453.3)	(1,124.1)	(1,081.1)	(581.0)
Net financial debt incl. lease liabilities	**1,704.7**	**1,869.0**	**977.0**	**471.4**	**400.6**
- Current lease liabilities	(9.8)	(6.2)	(6.2)	(7.9)	(8.1)
- Non-current lease liabilities	(132.3)	(63.3)	(57.3)	(53.0)	(28.3)
Net financial debt	**1,562.6**	**1,799.4**[1]	**913.6**[1]	**410.5**[1]	**364.3**[1]
/ Earnings before interest, tax, depreciation and amortization (EBITDA)	303.3	241.9	362.9[1]	192.3[2]	329.9[2]
Net financial debt / EBITDA	**5.2**	**7.4**[1]	**2.5**[1]	**2.1**[1, 2]	**1.1**[1, 2]

1) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities.
1) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the consolidated financial statements as at December 31, 2022).

EUR mn as at 31/12	2023	2022	2021	2020	2019
Net financial debt	1,562.6	1,799.4[1]	913.6[1]	410.5[1]	364.3[1]
/ Adjusted equity	1,809.1	2,088.6	2,115.7	1,907.0	1,559.3
Net gearing	**86.4%**	**86.2%[1]**	**43.2%[1]**	**21.5%[1]**	**23.4%[1]**

EUR mn as at 31/12	2023	2022	2021	2020	2019
Net financial debt	1,562.6	1,799.4[1]	913.6[1]	410.5[1]	364.3[1]
+ Current lease liabilities	9.8	6.2	6.2	7.9	8.1
+ Non-current lease liabilities	132.3	63.3	57.3	53.0	28.3
+ Provisions for severance payments and pensions	74.8	77.6	102.2	103.7	110.8
Net debt	**1,779.5**	**1,946.6**	**1,079.3**	**575.0**	**511.4**

1) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities.

Return on capital (ROE, ROI and ROCE)

Return on capital employed (ROCE) is the Lenzing Group's benchmark for the yield (return) on the capital employed in the operating business. It is also an important indicator for external stakeholders.

Return on capital (ROE) and return on investment (ROI) are profitability indicators which measure the earnings strength of the Lenzing Group.

EUR mn	2023	2022	2021	2020	2019
Earnings before interest and tax (EBIT)	(476.4)	16.5	200.6	33.9[1]	165.3[1]
- Proportional share of current income tax expense (on EBIT)	(56.5)	54.8	(52.0)	(45.1)[1]	(60.7)
Earnings before interest and tax (EBIT) less proportional share of current income tax expense (NOPAT)	(532.9)	71.2	148.6	(11.2)[1]	104.7[1]
/ Average capital employed	3,748.5	3,541.8	2,766.5	2,216.2	1,922.7
ROCE (return on capital employed)	(14.2)%	2.0%	5.4%	(0.5) %[1]	5.4%[1]
Proportional share of current income tax expense (on EBIT)	(56.5)	54.8	(52.0)	(45.1)[1]	(60.7)
Proportional share of other current tax expense	(13.7)	(87.6)	3.7	23.0[1]	0.0
Current income tax expense	**(70.2)**	**(32.8)**	**(48.4)**	**(22.1)**	**(60.7)**

EUR mn as at 31/12	2023	2022	2021	2020	2019
Total assets	5,214.6	5,525.0	5,322.8	4,163.0	3,121.1
- Trade payables	(296.3)	(435.4)	(414.8)	(195.2)	(243.6)
- Non-current puttable non-controlling interests	(249.4)	(266.1)	(234.4)	(140.3)	0.0
- Other non-current liabilities	(13.6)	(3.6)	(6.7)	(26.9)	(5.5)
- Other current liabilities	(129.2)	(133.0)	(180.4)	(141.8)	(118.8)
- Non-current tax liabilities	(48.0)	0.0	0.0	0.0	0.0
- Current tax liabilities	(32.1)	(27.9)	(38.3)	(2.4)	(20.7)
- Deferred tax liabilities	(40.1)	(70.2)	(59.8)	(42.4)	(41.9)
- Proportional share of deferred taxes on government grants	(19.3)	(20.0)	(14.2)	(8.5)	(7.1)
- Current provisions	(52.6)	(66.3)	(39.1)	(25.7)	(14.4)
- Non-current provisions	(89.1)	(91.5)	(118.2)	(120.4)	(128.3)
+ Provisions for severance payments and pensions	74.8	77.6	102.2	103.7	110.8
- Cash and cash equivalents	(725.6)	(446.9)	(1,113.3)	(1,070.0)	(571.5)
- Investments accounted for using the equity method	(31.0)	(26.5)	(24.8)	(29.1)	(29.2)
- Financial assets	(39.8)	(41.4)	(71.1)	(40.9)	(41.8)
As at 31/12	3,523.2	3,973.8	3,109.9	2,423.2	2,009.1
As at 01/01	3,973.8	3,109.9	2,423.2	2,009.1	1,836.3
Average capital employed	**3,748.5**	**3,541.8**	**2,766.5**	**2,216.2**	**1,922.7**

1) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the consolidated financial statements as at December 31, 2022).

EUR mn as at 31/12	2023	2022	2021	2020	2019
Adjusted equity 31/12	1,809.1	2,088.6	2,115.7	1,907.0	1,559.3
Adjusted equity 01/01	2,088.6	2,115.7	1,907.0	1,559.3	1,553.0
Average adjusted equity	**1,948.8**	**2,102.2**	**2,011.4**	**1,733.2**	**1,556.1**

EUR mn	2023	2022	2021	2020	2019
Earnings before tax (EBT)	(585.6)	(10.1)	182.9	22.3	163.8
/ Average adjusted equity	1,948.8	2,102.2	2,011.4	1,733.2	1,556.1
ROE (return on equity)	**(30.1)%**	**(0.5)%**	**9.1%**	**1.3%**	**10.5%**

EUR mn as at 31/12	2023	2022	2021	2020	2019
Total assets 31/12	5,214.6	5,525.0	5,322.8	4,163.0	3,121.1
Total assets 01/01	5,525.0	5,322.8	4,163.0	3,121.1	2,630.9
Average total assets	**5,369.8**	**5,423.9**	**4,742.9**	**3,642.0**	**2,876.0**

EUR mn	2023	2022	2021	2020	2019
Earnings before interest and tax (EBIT)	(476.4)	16.5	200.6	33.9[1]	165.3[1]
/ Average total assets	5,369.8	5,423.9	4,742.9	3,642.0	2,876.0
ROI (return on investment)	**(8.9)%**	**0.3%**	**4.2%**	**0.9%[1]**	**5.7%[1]**

1) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the consolidated financial statements as at December 31, 2022).

SUB-
CHAPTER

Management Report

Consolidated non-financial statement/ Sustainability report

Content

Sustainability key performance indicators

Lenzing Group: Sustainability key performance indicators Table 01

	2021	2022	2023
Raw material security			
Proportion of wood source certified or controlled by forest certification	>99 %	>99 %	100 %
Sustainable innovations			
R&D expenditure, calculated according to the Frascati method (EUR)	EUR 31.6 mn	EUR 34.8 mn	EUR 31.6 mn
Specialities share based on fiber revenue[a]	72.3%	70.9%	79.0%
Specific[b] sulfur emissions to air (kg/t, 2014 = 100 %)	74 %	67 %	42 %
Specific[b] water intake (index in percentage based on m^3/t, 2014 = 100 %)	90 %	94 %	79 %
Specific[b] water emissions after wastewater treatment COD (Index in percentage based on kg/t, 2014 = 100 %)	92 %	90 %	79 %
Decarbonization			
Specific[b] primary energy consumption (GJ/t, 2014 = 100 %)	97 %	98 %	110 %
Specific[b] GHG emissions index scope 1, 2 & 3[c] (index in percentage based on t CO_2 eq./t, 2017 = 100 %)	91 %	82 %	55 %
Employees			
Number of employees[d]	7,958	8,301	8,340
Health & safety			
Rate of recordable work-related injuries (TRIFR)[d]	0.76	0.6	0.7
Partnering for systemic change			
Suppliers representing 80 percent spend with audit/internal assessment[e] (% spend)			40 %

a) Lenzing's specialty fibers are net-benefit products that offer positive impacts and benefits to society, the environment, and value chain partners.

b) Specific indicators are reported per unit of production by the Lenzing Group (i.e. pulp and fiber production volumes). This applies to all specific indicators in this report, except for specific GHG emissions (reported per ton of pulp and fiber sold).

c) Recalculation of scope 3 emissions from 2017 to 2021 based on updated data from market pulp suppliers. 2022 exclusion of scope 1, 2 & 3 CO_2 numbers for Thailand and Brazil as these plants are in the start-up phase.

d) Employees (incl. apprentices, excluding supervised workers) in Austria, the Czech Republic, United Kingdom, USA, China, Indonesia, India, Taiwan, Thailand, Türkiye, Korea, Singapore, Brazil, Germany and Italy.

e) 95 percent of its top suppliers representing 80 percent of spend via EcoVadis, the Together for Sustainability Audit or an internal assessment/audit by 2025.

Highlights of the year

Strategic milestones

- Lenzing successfully converted a production line in Nanjing (China) to TENCEL™ branded modal fibers, with an annual capacity of up to 35,000 tonnes, marking the first production of TENCEL™ fibers for textiles and clothing in China
- Lenzing has successfully converted its site Purwakarta (Indonesia) through significant technical improvements, the site is now producing LENZING™ ECOVERO™ branded viscose fibers and VEOCEL™ branded viscose fibers
- The Indonesian site Purwakarta also received the EU Ecolabel for its fibers
- LENZING™ ECOVERO™ with REFIBRA™ technology was launched to customers worldwide
- Lenzing's joint venture LD Celulose successfully shipped 500,000 tons of pulp efficiently by rail wagon and break bulk vessel, further reducing GHG emissions compared to classical truck and container ship mode
- Lenzing, ARA, Salesianer Miettex, Caritas and Södra join forces to launch Austria's largest textile pilot project for recycling post-consumer textile waste
- Lenzing expands responsible viscose fiber portfolio with the new global offering of its newest product low-carbon VEOCEL™ branded viscose fibers

Achievements

- Seven Lenzing production sites assessed by third party Higg Facility Environmental Module (FEM), scoring exceptional results
- Five Lenzing productions sites successfully assessed by third party Social Labor Convergence Program (SLCP)

Ratings and Awards

- CDP: Lenzing is one of only 10 companies worldwide to be recognized with an outstanding triple "A" for environmental leadership and disclosure in climate change, water security and forests
- MSCI ESG: Lenzing receives rating of "AA" again
- Canopy: ranked 2nd place in the Hot Button Ranking, earning a "Dark Green" shirt
- EcoVadis CSR rating: "Platinum" status for the third time in succession
- Lenzing and Södra receive ITMF Award 2023 in "International Cooperation", for joint achievements in textile recycling and circular economy
- Lenzing receives Swiss BIO TOP award (recognizing wood and material innovations) for field tests: the use of geotextiles made of cellulosic LENZING™ fibers to protect glacier masses
- Austrian Sustainability Reporting Award (ASRA) in "prime market": Lenzing won first place for the last year's report, a second time in a row
- Lenzing receives first place at Vienna Stock Exchange VÖNIX Sustainability Award in "Industrials" category

About the sustainability statement

[ESRS 2 BP-1; GRI 2-1, 2-2, 2-3][1]

This report is the combined, consolidated, non-financial report for the Lenzing Group[2] (in accordance with Section 267a of the Austrian Business Code (UGB)) and for Lenzing Aktiengesellschaft (in accordance with Section to 243b UGB).

As a pioneer, Lenzing AG already started implementing core elements of the new European Sustainability Reporting Standards (ESRS) into the Sustainability Reports of 2022 and of 2023 in a progressive manner. Lenzing is continuously working on optimizing the inclusion of ESRS in the report. ESRS references in the text do not imply that the entire ESRS is fully adopted, but are intended to reflect the structure of ESRS wherever possible, as well as the associated GRIs.

Since Lenzing operates at a global level with Group-wide approaches in various operating areas, all descriptions of management approaches and concepts concerning the material topics identified apply to both the Lenzing Group and Lenzing Aktiengesellschaft. For indicators for which meaningful figures can be provided, separate data for Lenzing Aktiengesellschaft can be found in the annex. This report covers all the fully consolidated legal entities of the Lenzing Group, detailed information can be found in the Lenzing Group's Annual Report (note 3 and note 41). In accordance with the legal requirements, the reporting cycle for Lenzing's sustainability performance is annual.

Lenzing has omitted information regarding precise figures about material inflow, corresponding to GRI 303-1 and 301-2.

[ESRS 2 BP-2; GRI 2-3, 2-4]

Value chain estimations
When metrics include upstream and/or downstream value chain data, these values are estimated using indirect sources, then information about the assumptions are provided at the bottom of the corresponding table in the sustainability statement.

Changes in preparation or presentation of sustainability information
The explanation about revised comparative figures are provided at the bottom of affected tables in the sustainability statement.

The materiality analysis of the Lenzing Group was conducted in 2021. This resulted in changes to the material topics. Detailed information, as the allocation of material topics to chapters, can be found in the section "Double Materiality Analysis" and in the "Materiality Analysis" focus paper. This report does not claim to be compliant with ESRS. Due to further adaption of the ESRS structure this year, Lenzing`s chapters were, where applicable, renamed according to ESRS, e.g. "Climate & energy" was renamed to "Climate change".

Reporting errors in prior periods
A recalculation of scope 3 emissions from 2017 to 2021 was necessary due to updated market pulp supplier data (tables 01 and 16).

Disclosures stemming from other legislation or generally accepted sustainability reporting pronouncements
This report has been prepared in accordance with the Global Reporting Initiative (GRI) standards for the period 01.01.2023–31.12.2023. A detailed GRI content index can be found on the website of the Annual and Sustainability Report 2023 of the Lenzing Group.

For indicators for which meaningful figures can be provided, separate data for Lenzing Aktiengesellschaft can be found in the annex (in accordance with the legal requirements stipulated by the Austrian Sustainability and Diversity Improvement Act (NaDiVeG[3]) and the AFRAC recommendation.)

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All focus papers mentioned in this report can be found here: https://www.lenzing.com/investors/publications

Incorporation by reference
The following table 02 shows which disclosure requirements of the sustainability statement are incorporated by reference.

[1] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.
[2] "The Group" (for better readability occasionally referred to as "Lenzing") comprises Lenzing Aktiengesellschaft and its subsidiaries.
[3] Nachhaltigkeits- und Diversitätsverbesserungsgesetz (Section 243b, Section 267a UGB)

Incorporation by reference | **Table 02**

ESRS 2 GOV-1 paragraphs 20, 21, 22 The role of the administrative, management and supervisory bodies (GRI 2-9, 2-12)	Annual report: Group Corporate Governance Report
ESRS 2 GOV-1 paragraph 22c (GRI 2-18)	Annual report: Group Corporate Governance Report
ESRS 2 GOV-5 Risk management and internal controls over sustainability reporting (GRI 2-12, 2-18)	Annual report: Group Corporate Governance Report; Annual report: Risk report
ESRS 2 SBM 3 paragraph 46, 47, 48, 49 (GRI 2-22)	Annual report: Letter from the CEO
GRI 2-1	Annual report: Lenzing Group locations; Share capital and shareholder structure
GRI 2-9, 2-10, 2-11, 2-15	Annual report: Group Corporate Governance Report
GRI 2-19	Remuneration report (available from 21.03.2024)
GRI 2-20	Remuneration Policy

Governance structure for sustainability

[ESRS 2 GOV-1; GRI 2-12, 2-13, 2-17]

Corporate Sustainability reports directly to the Managing Board. In addition, an internal management board level ESG committee has been established to accelerate the sustainability agenda in the company, with meetings held on a quarterly basis. Regular alignments on various topics take place with different functions to drive the integration of environmental, social and governance concerns into the company's business strategy and operations. General information on corporate Governance can be found in the Lenzing Group's Annual Report 2023 (Corporate Governance Report).

Sustainability organization Figure 01

* ESG Committee is an internal committee to accelerate sustainability agenda. Members are Managing Board, Global Strategy and M&A, Corporate Sustainability, Global Wood & Pulp, Corporate Audit & Risk, Investor Relations, Global QESH, Corporate HR, Corporate Controlling, Global Procurement, Global Textile Business, Global Nonwoven Business, Corporate Communications, Research & Development, Wood/Pulp commercial, Operations (representative), Works council (representative).

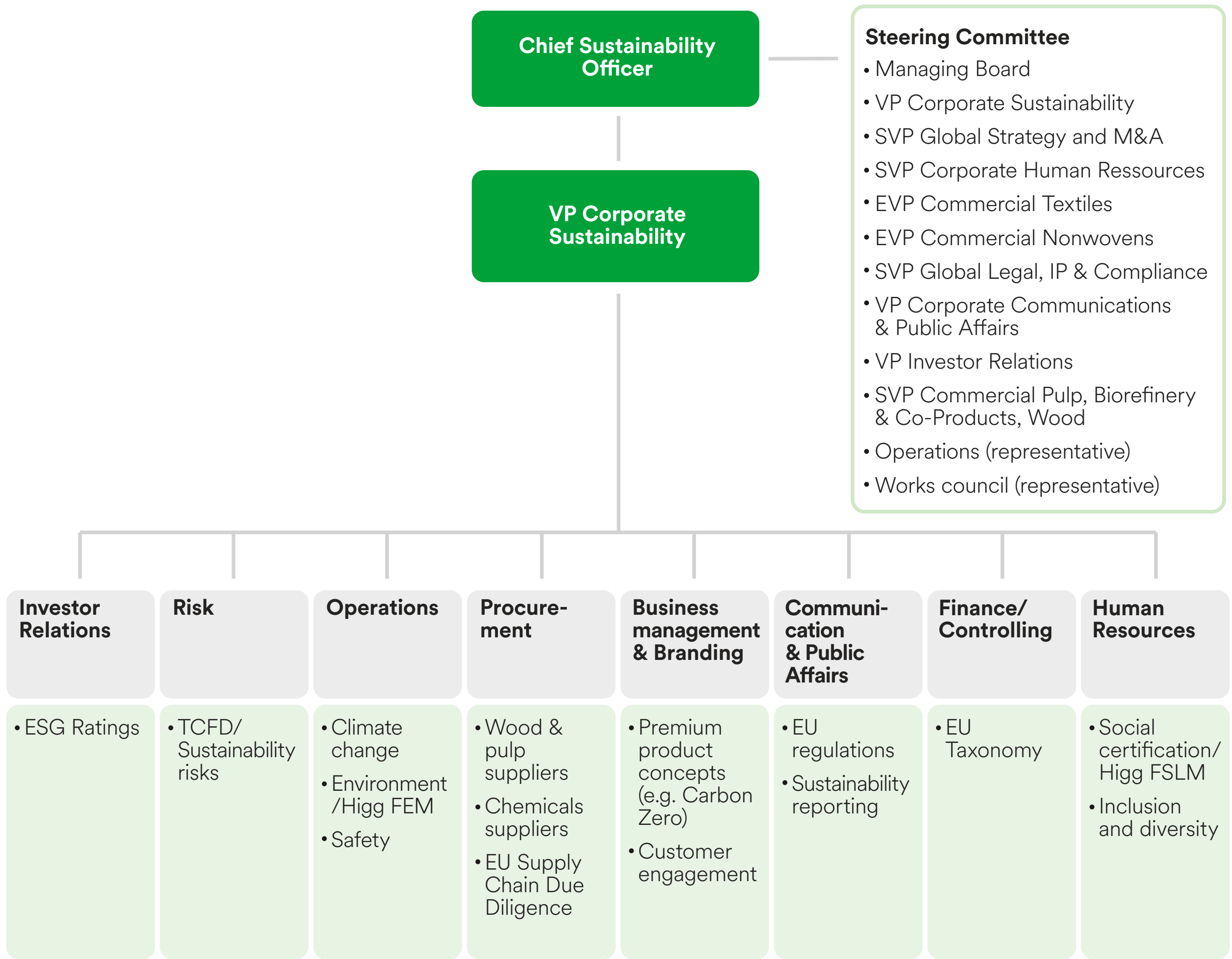
ESG committees

[ESRS 2 GOV-2; GRI 2-12, 2-14, 2-16, 2-18]

Sustainability is a value, business and innovation driver in the Lenzing Group. The company is increasingly leveraging its sustainability work by positioning itself using net-benefit products (e.g. LENZING™ ECOVERO™), key ratings (for investors) and benchmarking tools at the wider industry level. To support these efforts, a management board level ESG committee has been installed to accelerate the sustainability agenda implementation by aligning across functions. This committee meets once a quarter. The key objectives are to formulate and execute the company's sustainability vision, strategy and ESG benchmarks and tools. The ESG committee (figure 02) consists of the Managing Board and heads of different functions, who review the progress of the sustainability targets, evaluate the effectiveness of Lenzing's approach to managing all aspects of sustainability, including risks and opportunities, and make long-term strategic decisions. The corporate sustainability department is an integral part of the committee and works closely with several functions to ensure the integration of sustainability aspects in various business processes and to respond to stakeholder needs and expectations and prepares the organization to be future-fit. In addition, ESG meetings are seen as a way of advancing the collective knowledge, skills, and experience of its Managing Board on sustainable development.

In 2023, the Supervisory Board established an ESG Committee in order to be able to meet the increasing relevance that ESG topics have in terms of strategy, sustainable business success and transformation. This committee is intended to support the Executive Board, the full Supervisory Board, the Audit Committee and the Strategy, Growth and Innovation Committee on issues relating to non-financial reporting and strategic ESG topics. The first committee meeting took place in November of the reporting year and is intended to take place a minimum of two times a year.

ESG Committee structure Figure 02



For information on the Lenzing Group's governance structure, please refer to the Lenzing Group's Annual Report (Corporate Governance Report).

Board remuneration linked to sustainability performance

[ESRS 2 GOV-3]

The Remuneration Policy of Lenzing AG for the performance-based remuneration of the Managing Board is linked to both financial performance and non-financial sustainability criteria (ESG), which further promote the sustainability integration in the business strategy. Therefore, in addition to the existing criteria, the long-term incentive (LTI), which is a variable performance bonus, has been expanded to include sustainability targets for Managing Board members. Further information can be found in the remuneration report (available from 21.03.2024).

Specific targets which are connected with the board's remuneration are the following:

- Sub-target of "Textile recycling" target: "The Lenzing and Södra collaboration will recycle 25,000 t of textile waste per year at Södra's Mörrum site."
- "ZDHC lyocell" target: "To achieve 'aspirational' MMCF level for ZDHC wastewater and responsible production guidelines at Lenzing lyocell facilities by 2028"
- "Waste water" target: "To improve Lenzing Group's specific wastewater emissions (COD) by 20 percent by 2024 (baseline 2014)"
- Sub-target of the "near-term SBT target": "Lenzing reduces 40 percent of specific GHG emissions per ton of pulp and fiber sold by 2030."
- Sub target of "Equity, Diversity and Inclusion" target: "Lenzing increases its proportion of women to 22.5 percent in all positions graded 5a and above by 2025"

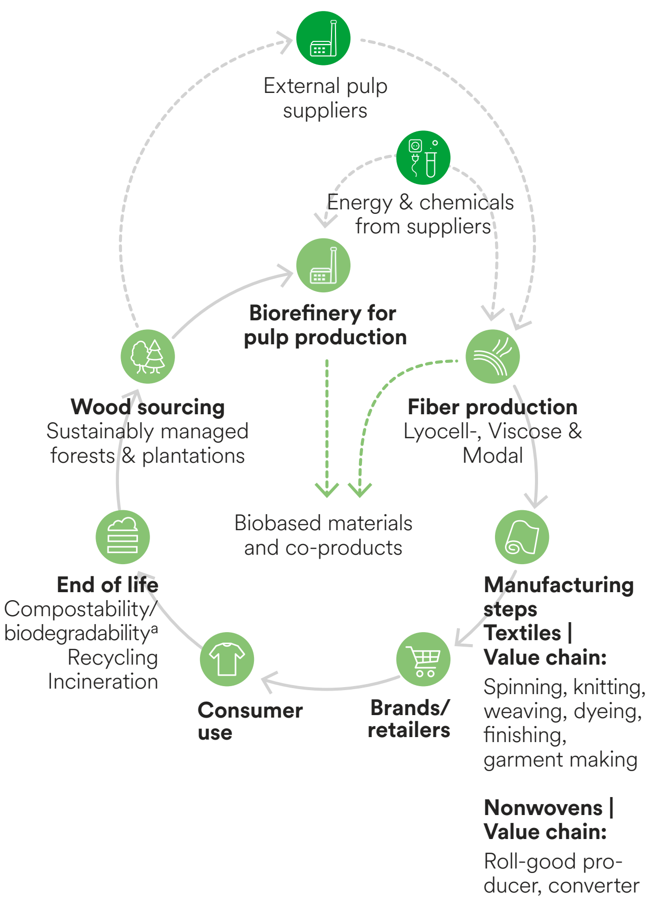
Strategy

[ESRS 2 SBM-1; GRI 2-6, 2-22, 201-1]

Value creation at the Lenzing Group

The Lenzing Group is committed to the ecologically responsible production of fibers made from the renewable raw material of wood grown in sustainably managed forests and plantations. As an innovation leader, Lenzing partners with global textile and nonwoven manufacturers and drives many new technological developments.

Value chain Figure 03



a) Applies to TÜV certified biodegradable and compostable LENZING™ fibers. The compostability and biodegradability of final consumer textile and nonwoven products depend on the material composition (fiber blend) and processing in the value chain steps.

The Lenzing Group is part of the chemical industry and its fibers are mostly used in the textile and apparel industry. Lenzing's product portfolio ranges from dissolving wood pulp as the basic raw material to generic fibers and innovative specialty fibers as well as energy, biobased biorefinery products, and co-products. Lenzing's own pulp production at its sites in Lenzing (Austria), Paskov (Czech Republic) and Indianópolis (Brazil) is based on a biorefinery concept, completely utilizing the raw material wood.

Lenzing combines comprehensive expertise in operating pulp and biorefinery processes with decades of experience in three major fiber process technologies:

- Viscose (rayon)
- Modal
- Lyocell

Further developments and technologies have resulted from the above-mentioned processes. For more information, please see the "Net-benefit concept" section or the Lenzing website.

The Lenzing Group's high-quality fibers form the basis for a variety of nonwoven and textile applications ranging from elegant clothing and versatile denims to high-performance sports apparel, luxurious bed linen, and sustainable footwear. Due to their consistently high quality Lenzing fibers are also highly suitable for hygiene and personal care products as well as technical applications.

Supply and sourcing

The principal raw materials for producing Lenzing's fibers are wood and process chemicals. The company uses dissolving wood pulp from its own production operations and from external suppliers.

Dissolving wood pulp and cellulosic fiber production

Production takes place in two stages: first, the production of dissolving wood pulp, and second, the production of fibers based on dissolving wood pulp. Lenzing's own dissolving wood pulp is produced in three biorefineries at sites in Lenzing (Austria), Paskov (Czech Republic) and Indianópolis (Brazil). Lenzing aims to use state-of-the-art sustainable production technology.

This entails high resource efficiency, high chemical recovery rates and, where possible, closed loops for process chemicals and water.

Bioenergy and biorefinery products are generated as well. Lenzing combines its comprehensive expertise in pulp and biorefinery technologies with decades of experience in cellulosic fiber production.

Down-stream manufacturing

As shown in figure 03 under "Manufacturing steps", the customers in Lenzing's downstream value chain use the fibers to manufacture textile, nonwoven, or industrial products.

Lenzing works closely with value chain partners from direct customers to the retail level in the textile and nonwovens sector and for industrial applications - to provide expertise in processing as well as in developing innovative applications.

Distribution and use phase

Finished products are distributed after manufacturing and enter the consumer use phase.

End of life

TÜV certified biodegradable and compostable LENZING™[4] fibers are as the name suggests compostable and biodegradable. However, the compostability and biodegradability of final consumer textile and nonwoven products depend on the material composition (e.g. fiber blend) of the product and processing in the value chain.

Lenzing Group: Distribution of value creation — Table 03

	2021	2022	2023
Value creation	**EUR 685.4 mn**	**EUR 527.6 mn**	**EUR 26.3 mn**
Economic value creation[a]			
Employees[b,c]	EUR 446.4 mn	EUR 449.5 mn	EUR 464.4 mn
Retained earnings	EUR 12.2 mn	EUR –37.2 mn	EUR –593.0 mn
Public sector[d]	EUR 67.6 mn	EUR 42.6 mn	EUR 23.0 mn
Shareholders (dividends)[e]	EUR 115.5 mn	EUR 0.0 mn	EUR 0.0 mn
Lenders[b,f]	EUR 43.6 mn	EUR 72.7 mn	EUR 131.9 mn
ROCE (return on capital employed)[b,g]	5.4%	2.0%	–14.2%
Adjusted equity ratio[g]	39.7%	37.8%	34.7%
Revenue	EUR 2,194.6 mn	EUR 2,565.7 mn	EUR 2,521.2 mn
EBITDA (earnings before interest, tax, depreciation and amortization)[b]	EUR 362.9 mn	EUR 241.9 mn	EUR 303.3 mn
Sales volume fibers	909,000 t	814,430 t	841,000 t

a) Value creation within the Lenzing Group is calculated as the company's business performance minus the cost of materials, other expenses, depreciation and amortization. The distribution of value creation shows the extent to which it is distributed among stakeholders such as employees, the public sector, and lenders.
b) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the Lenzing Group consolidated financial statements 2023).
c) Personnel expenses less municipal taxes.
d) Income tax expenses plus asset taxes and similar taxes plus municipal taxes.
e) Based on the proposed distribution of profits.
f) Financing costs less net foreign currency gain/losses from financial liabilities.
g) The above mentioned financial indicators are derived primarily from the IFRS consolidated financial statements of the Lenzing Group. Additional details are provided in the section "Notes on the financial performance indicators of the Lenzing Group", in the glossary to the Annual Report and in the consolidated financial statements of the Lenzing Group.

[4] LENZING™ fibers which are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/ nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. There is an exception for the TÜV certified biodegradable & compostable fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, they fulfil the above mentioned conditions except biodegradability in marine environments.

“Naturally Positive” sustainability strategy

OUR SUSTAINABILITY VISION

Our passion is to provide truly sustainable solutions for a growing world. We create a positive impact for the people we work with, the consumers we serve, and the society and environment in which we operate. In doing so, we are commercially successful.

OUR SUSTAINABILITY MISSION

We are change agents and collaborate with our suppliers and value chain partners to catalyze change for the better. We actively contribute towards improving environmental performance throughout the value chain and, consequently, in final products. We promote social wellbeing. Creation of more positive impacts and benefits is the guiding light for our innovation and business practices.

Lenzing’s defined sustainability mission and vision act as guide to making better choices in everything it does – from the small decisions of everyday business to strategic and long-term decisions.

“Naturally Positive”, the Lenzing Group’s sustainability strategy, was created from the results of the materiality analysis and is firmly rooted in the Lenzing Group’s new “Better Growth” strategy which was developed in 2022. Within the four strategic drivers (sustainability, innovation, premiumization and excellence), the corporate strategy defines the sustainability areas in which Lenzing can do most to create a more sustainable world. At the same time, this approach enables Lenzing to adequately consider and contribute to those United Nations’ Sustainable Development Goals (SDGs) on which the company's activities have the greatest impact.

For further information, please see the “Sustainability Strategy” focus paper and the “SDG” focus paper.

Strategic focus areas of sustainability and the corresponding SDGs Figure 04

Three strategic principles

Lenzing's sustainability strategy builds on three strategic principles. Within those principles, seven focus areas were identified in which the Lenzing Group substantially contributes to creating positive impacts and benefits.

1. Driving systemic change
Complex global challenges call for a collaborative approach to designing systemic solutions that involve many stakeholder groups. As a leader in regenerated cellulosic fibers, Lenzing has a particular responsibility and an ambition to help raise the bar for sustainability in the textile and nonwovens industries. Transparency and traceability are a prerequisite for fostering trust and building long-term relationships. With its contributions to developing industry-wide methods, tools, and approaches, Lenzing is helping the industry to progress on its sustainability roadmap by overcoming critical challenges. Industry benchmarking tools such as ZDHC (Zero Discharge of Hazardous Chemicals) and FSLM (Facility Social Labor Module), concrete sustainability targets, supplier engagement, and physical and digital traceability tools contribute to this change.

2. Advancing circularity
According to Lenzing's circular economy vision, "We give waste a new life. Every day", Lenzing drives the industry towards a fully-fledged circular economy by striving to give waste a new life in all aspects of its core business and by co-developing circular solutions with potential partners in and outside the current value chain to close loops wherever possible. This vision is based on Lenzing's determination to create value using as few virgin resources as possible and reduce the use of fossil carbon in the company and the value chain while improving sustainability performance.

The company unites the cellulosic fiber cycle of its wood-based products (biological cycle) with its innovative technologies that focus on closing loops in the production and recovery of raw materials and chemicals (technical cycle).

Dedicated targets for the development of recycled content-based fibers and circular business models with value chain partners contribute to this principle. For more information please see the "Resource use and circular economy" chapter.

3. Greening the value chain
Lenzing's responsible practices and innovative products enable its customers and value chain partners to improve their environmental and social performance and achieve their sustainability targets and commitments. Responsible sourcing practices, water stewardship, decarbonization, and sustainable innovations form the basis of Lenzing's efforts in greening the value chain. The sustainability targets for air emissions, water emissions, pollution, and climate protection are the cornerstones of Lenzing's responsible entrepreneurship and act as innovation drivers.

For further information on Lenzing's sustainability strategy, strategic principles, and focus areas, please see the "Sustainability strategy" focus paper.

Sustainability policy

Lenzing aims to embody best sustainability practices, lifecycle and long-term thinking, transparent and respectful collaboration and partnerships with its stakeholders in all activities and business decisions to meet society's long-term goals. Lenzing's approach is creating more positive impacts and benefits thanks to its business practices and products to make the world a better place. This covers the three dimensions of PEOPLE, PLANET and PROFIT, balancing the needs of society, the environment and shareholders and partners.

Sustainability targets, measures and progress

[GRI 3-3f]

Lenzing has set Group sustainability targets for the most important challenges in each of its strategic focus areas. To increase transparency, the corresponding implementation measures and target progress made during the reporting year are described below. There could be potential conflicts that can arise between different material topics and their respective targets in a company. For example, raw material security and biodiversity and ecosystems can be competing as the sourcing of wood from critical (ancient and endangered) forests could lead to potential loss in biodiversity. As a responsible company, Lenzing is committed to procuring wood and dissolving wood pulp exclusively from sustainably managed forests and plantations. Furthermore, Lenzing strives to create positive impact on biodiversity in different regions of the world through conservation projects. Another example is the conflicting targets of water stewardship and climate, as the recycling of water is energy intensive. To counteract this conflict Lenzing is currently working on setting a water target in regions where water is scarce. This means, the company takes a context-based approach to target setting in order to address and prioritize most relevant topics for a specific region.

Color code status	
	On track
	Achieved
	Delayed
	New target
	Measures implemented

Sustainability targets, measures and progress — Table 04

		Target year	SDG
Sustainable innovations			
Air emissions	**To improve the Lenzing Group's specific sulfur emissions by 50 percent by 2023 (baseline 2014)[a]**	Measures implemented	12
Measure(s)	Lenzing implements a carbon disulfide adsorption plant (CAP) upgrade at the Purwakarta plant (Indonesia)	2023	
Progress made in 2023	The carbon disulfide adsorption plant (CAP) in the Purwakarta plant (Indonesia) was succesfully implemented and started operating in July 2023. Viscose fibers from this plant are now EU Ecolabel certified. All measures have been impleamented for this target, however to achieve the target, the measures need to operate for a whole year.		
Textile recycling	**To offer viscose, modal and lyocell staple fibers with up to 50 percent post-consumer recycled content on a commercial scale by 2025**	2025	9, 12, 17
Measure(s)	All fibers with recycled content offered by Lenzing contain a share of post-consumer waste	2022	
	Lenzing increases the recycled content from 30 to 40 percent for fibers produced with REFIBRA™ technology for textiles	2023	
	Lenzing introduces its viscose and modal fibers with REFIBRA™ with a minimum of 30 percent recycled content	2023	
	Lenzing and Södra collaboration will recycle 25,000 t of textile waste per year at Södra's Mörrum site[b]	2025	
Progress made in 2023	The joint efforts with Södra to develop a recycled pulp with a share of post-consumer waste on an industrial scale were again successfully continued and also honored by the ITMF-Award. Project plans have been updated to increase the intended volume of the new production line from 25 kt/a to 50 kt/a feedstock and start-up of this plant is forecasted for 2027. Overall, Lenzing continued with product and process development towards reaching the key target for 2025. One key milestone was the introduction of a viscose fiber with REFIBRA™ technology with 20 percent recycled pulp from post-consumer cotton textile waste, with the goal of further increasing this percentage in the near future. The biggest challenges remain to adapt the characteristic of recycled pulp for industrial fiber production and also to seek solutions to make recycled pulp processable on industrial scale.		
Circular Business Model	**To innovate a new circular business model by closing the loops for post-consumer materials and partner with 25 key supply chain companies by 2025**	2025	9, 12, 17
Progress made in 2023	Some highlights in 2023 were: the launch of a recycling project with ARA and other partners, participation in international projects to improve sorting and traceability of fibers and the cooperation with Södra has been granted a LIFE funding and has been awarded with the ITMF award for International Cooperations. For more information please see the "Resource use and circular economy" chapter.		

ZDHC viscose	**To achieve 'aspirational' MMCF level for ZDHC wastewater and air emission guidelines at Lenzing viscose facilities by 2024**	**2026**	**6, 12**
Progress made in 2023	Lenzing viscose sites have continuously implemented the ZDHC MMCF guideline in its revised version 2.2. The implementation of the waste water guideline continued in 2023. The implementation of the air emission guideline progressed according to planning, however, due to the delay of the official launch of the ZDHC Supplier Platform for man-made cellulosic fibers (MMCF), the reporting on the Platform will start in the first half of 2024. The target to achieve 'aspirational' level is now reassessed to 2026 due to supply chain disruptions stemmed from global issues and technical challenges.		
ZDHC lyocell	**To achieve 'aspirational' MMCF level for ZDHC wastewater and responsible production guidelines at Lenzing lyocell facilities by 2028[b]**	**2028**	**6, 12**
Measure(s)	First ZDHC Gateway reporting of MMCF waste water guideline v2 at all lyocell sites[c] in 2023	**2023**	
	First supplier platform implementation and reporting of MMCF Guideline v2 - Responsible fiber production at all lyocell sites[c] in 2023	**2023**	
	Lenzing lyocell sites[c] achieves 'aspirational' level for wastewater and responsible production	**2025**	
	Lenzing site in Grimsby (UK) achieves 'foundational' level for wastewater and responsible production	**2025**	
	Lenzing site in Grimsby (UK) achieves 'aspirational' level for wastewater and responsible production	**2028**	
Progress made in 2023	The implementation is on track with all lyocell sites registered for reporting in 2023. However, due to the absence of ZDHC certified lab in USA and UK, the waste water testing at these two sites could not be completed. The sites completed the reporting on the ZDHC gateway have all achieved aspirational level. Requirements according to the responsible fiber production guideline will be reported from 2024 onwards after the publication of the ZDHC supplier platform for MMCF in beginning of November 2023.		

Water stewardship

Waste water	**To improve Lenzing Group's specific wastewater emissions (chemical oxygen demand (COD)) by 20 percent by 2024 (baseline 2014)[a,b]**	**2024**	**6, 12**
Measure(s)	Lenzing implements a wastewater treatment plant upgrade at Purwakarta site (Indonesia)	**2023**	
	Lenzing implements a new wastewater treatment plant at Grimsby (UK) site	**2024**	
Progress made in 2023	The building of the wastewater treatment in Purwakarta (Indonesia) took place in 2023, the start-up is planned for the beginning of 2024. The wasterwater treatment plant project in Grimsby (United Kingdom) is on track and will come into operation in 2024.		

Raw material security and biodiversity

Conservation project Albania	**To implement a conservation solution of 20 ha in Albania in combination with a social impact project by 2024**	**2024**	**1, 15**
Measure(s)	Lenzing reforests 20 ha of degraded land in Albania	**2024**	
	Lenzing establishes a training center for local communities in Albania	**2024**	
	Lenzing supports interdisciplinary vocational trainings and school partnerships in Albania	**Yearly**	
Progress made in 2023	The scope of the project has been significantly expanded to other countries in Western Balcan to include the Kosovo, North Macedonia and Montenegro. This expansion was funded by Austrian Developmet Agency (ADA) and Lenzing, and is coordinated by Inspiring Cooperation Empowering People (ICEP). In 2023 10,778 trees were planted, which culminates in additional 5 ha of afforested area. For more information on this project please see the chapter "Biodiversity and ecosystems".		
Conservation area Brazil	**To implement conservation solutions on 15,000 ha at the new pulp mill in Indianópolis (Brazil) by 2030**	**2030**	**15**
Measure(s)	Lenzing increases the protected area at the site in Indianópolis (Brazil) from 13,000 ha to 15,000 ha	**2030**	
Progress made in 2023	Lenzing achieved this goal in 2022 and increased the total conservation area in Brazil even further than the target, to more than 19,000 ha in 2023.		
Conservation projects	**To engage in further conservation, biodiversity protection and restoration activities in regions where forests are at risk or should be improved by 2025**	**2025**	**15**
Progress made in 2023	Lenzing supported several projects outside of its value chain in 2023 for example a project in Austria for protection of wild bees, for a detailled description of all projects please see "Biodiversity and ecosystems" chapter.		

Partnering for systemic change

Supplier engagement	**To engage suppliers, covering more than 80 percent of spend, to improve sustainability performance**	**Continuous**	**12, 17**
Measure(s)	Lenzing assesses 95 percent of its top suppliers representing 80 percent of spend via EcoVadis, the Together for Sustainability Audit or an internal assessment/audit by 2025.	**2025**	
	Lenzing considers climate, water and chemical aspects in the procurement contractual process of its top chemicals suppliers	**Continuous**	
Progress made in 2023	Around 600 of Lenzing's key suppliers were assessed by EcoVadis. Eight suppliers were audited by Lenzing through the Together for Sustainability audit program. 40 percent spend was covered by these assessments. Supply agreements signed with the top chemical suppliers include sustainability clauses.		
FEM	**To implement and annually update the Facility Environmental Module (FEM) in all pulp and fiber production facilities and share verified modules with customers from 2024[d]**	**2024**	**12, 17**
Measure(s)	Lenzing conducts self-assessments in existing sites in 2022 and first external verification by 2023	**2023**	

	Lenzing conducts self-assessments and trainings for new legal entities (Prachinburi (Thailand) and Indianópolis (Brazil)) in 2023 and first external verification by 2024	2024	
Progress made in 2023	Seven sites have implemented FEM, verification finished for four sites with excellent scores of 90 to 95, and scores of 3 sites between 70 to 89. Self-assessments and training have been conducted for the sites in Indianópolis (Brazil) and Prachinburi (Thailand). Both sites are in preparation for verification in 2024.		
Decarbonization			
Near-term science-based target	**New target: To reduce scope 1 and 2 absolute greenhouse gas (GHG) emissions by 42 percent and scope 3 absolute GHG emissions by 25 percent until 2030 (baseline 2021)[f,g]**	2030	7, 13
	Previous target: To reduce scope 1, 2 and 3 (purchased goods and services, upstream and downstream transport, and fuel and energy-related activities) GHG emissions by 50 percent per ton of fiber and pulp sold by 2030 (baseline 2017)	2030	
Measure(s)	Lenzing reduces 40 percent of specific GHG emissions per ton of pulp and fiber sold (baseline 2017)[b,e]	2024	
	Lenzing reduces 50 percent of specific GHG emissions per ton of pulp and fiber produced (baseline 2017)[e]	2027	
Progress made in 2023	Lenzing maintained its approach towards mitigating climate change by reducing its GHG emissions compared to baseline 2017. In 2023 Lenzing set up a new science-based target, which aligns with a 1.5°C scenario. This target has been approved by the Science Based Target initiative. The measure referring to a 40 percent reduction of specific emissions was successfully achieved in 2023. For more information on this and detailed information on achievements please see the “Climate change” chapter.		
Long-term science-based net-zero target	**To achieve at least a 90 percent reduction in absolute GHG emissions (scopes 1,2 and 3) (baseline 2021)[f,g]**	2050	7, 13
Measure(s)	Lenzing achieves 100 percent green electricity for four sites	2024	
	Lenzing phases out coal in its Nanjing (China) operations	2022	
	Lenzing installs on-site photovoltaic power generation at the Lenzing plant	2022	
	Lenzing increases the share of renewable energy consumed by the Lenzing Group and supplies excess bioenergy from the pulp production facility in Indianópolis (Brazil)	2023	
	Lenzing achieves scope 1 and 2 carbon neutrality at its new lyocell fiber production site in Prachinburi (Thailand) by using 100 percent bioenergy[h]	2023	
	Lenzing engages 20 key suppliers, by spend and CO_2 impact, in order to reduce Lenzing's scope 3 emissions and incentivize the suppliers that help Lenzing offer more low carbon footprint fibers	Continuous	
	Lenzing engages and enables 50 percent of ‘customers with approved SBT and commitment’ (textile and nonwoven brands/retailers as well as manufacturers working with LENZING™ fibers) to fulfill their ambition by providing information on low carbon footprint specialty products such as TENCEL™, LENZING™ ECOVERO™ and VEOCEL™ branded fibers	Continuous	
	Lenzing runs a campaign to reach 50 percent of TENCEL™ and VEOCEL™ customers (textile and nonwoven brands/retailers as well as manufacturers using the TENCEL™ and VEOCEL™brands) to promote the use of innovative lenzing fibers with environmental benefits such as low carbon intensity and to reduce reliance on fossil based materials wherever possible.	Continuous	
Progress made in 2023	Six production facilities procured 100% renewable electricity. Gas pipe connections and constructions in Nanjing (China) are ongoing. The product carbon footprint platform of TfS was adopted internally as well as external trainings are taking place. Lenzing is in continous discussions with top suppliers and also shares its expertise for obtaining low-impact chemicals (e.g. green electricity and LCA). The site in Prachinburi (Thailand) has been facing some challenges to consistently receive 100 percent biomass energy due to the reliability of biomass co-generation plant of supply partner, however the site has achieved 100 percent of biomass energy for October and November. Therefore both parties have agreed to work out short term and long term technical solutions. The discussion and negotiation on securing biogenic energy to reach 100 percent consistently in the future is ongoing. Additionally, given current global economic situation, many businesses and end customers have been deprioritizing sustainability in favor of low cost sourcing and therefore have less willingness to pay for low-carbon products. Customer engagement has been taking place to position fiber products with low carbon footprint for supporting scope 3 emissions reduction of customers.		
Empowering people			
Social standard	**To have a continuously valid third-party audited accredited social certificate for every Lenzing Group production (fiber or dissolving wood pulp) site by 2024[d]**	2024	8, 12
Measure(s)	Lenzing implements and annually updates the Facility Social Labor Module (FSLM) at all pulp and fiber production facilities and shares verified modules with customers from 2024 onwards	2024	
Progress made in 2023	For FSLM, on-site audits for the facilities in Mobile (United Stated), Grimsby (United Kingdom), Nanjing (China), Purwakarta (Indonesia) and Paskov (Czech Republic) were completed succesfully. Currently it is not possible to receive a third-party FSLM verification in Austria, due to lack of authorized auditors.		
Equity, Diversity and Inclusion	**To create an empowering work environment by respecting human rights, employee wellbeing and diversity**	Continuous	3, 5, 10
Measure(s)	Lenzing implements training courses for 75 percent of the workforce on diversity, discrimination, the non-discrimination policy, and human rights	2025	
	Lenzing increases its proportion of women to 22.5 percent in all positions graded 5a and above by 2025[b]	2025	
	Lenzing achieves an inclusion Index score of 75 percent in the global Health Climate Survey by 2026	2026	
	Lenzing establishes a working condition policy	2021	

Progress made in 2023	A Global Equity, Diversity and Inclusion (EDI) policy was published with a training video for all employees in multiple languages. A child labor remediation procedure was also established. Two employee resource groups (ERGs) were initiated. The first to further improve gender equality within Lenzing, and the second to promote multiculturalism. Team Leader Academy containing Inclusive Leadership modules was piloted in Grimsby (United Kingdom). Lenzing published one summary document containing all global policies influencing working conditions of its employees.		
Community engagement	**To continuously support the development of local communities near Lenzing production sites and support social welfare programs to 2025 and beyond**	**Continuous**	**1, 3, 11**
Progress made in 2023	Lenzing supported numerous social projects for local communities near Lenzing sites. For more information please see the chapter "Affected communties" and the "Community engagement" focus paper.		

a) The target has the same production volumes and scope of facilities as the 2014 baseline (i.e. excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil)).
b) Relevant for the Managing Board long-term incentive (LTI) bonus targets
c) Lenzing (Austria), Heiligenkreuz (Austria), Mobile (USA), Prachinburi (Thailand)
d) The scope includes all Lenzing facilities, also the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).
e) These intermediate targets are part of the Lenzing corporate strategy on the way to reach science-based target by 2030.
f) Scope 3 emissions include those from the harvesting of raw material wood, the production of purchased materials (chemicals & pulp), the production of fuels, the transportation of purchased raw materials & fuels, and the transportation of fibers to customers
g) The target has been updated and approved by SBTi at the end of 2023. According to SBTi for net-zero target the remaining 10 percent of emissions can be carbon removals.
h) This measure was marked as achieved in the report of 2022, however due to reliability issues of the supplier biomass boiler, this measure could not be achieved consistently throughout the year 2023.
A slight change has been implemented by substituting the numbers for sustainability targets with specific target names.

Achieved Targets			**SDG**
Target 10	**To improve transparency by implementing the Higg Facility Environmental Module (FEM 3.0) at all sites by 2019**	**Achieved**	**12, 17**
Target 12	**To achieve digital fiber traceability by having 500 value chain partners with blockchain technology by 2021**	**Achieved**	**9, 12, 17**
Target 13	**To increase physical traceability from TENCEL™ x REFIBRA™ and LENZING™ ECOVERO™ to 100 percent of Lenzing's textile special fibers by 2021**	**Achieved**	**12**

Targets that have been achieved before the reporting year

Partnering for systemic change

[ESRS 2 SBM-2; GRI 2-16, 2-29]

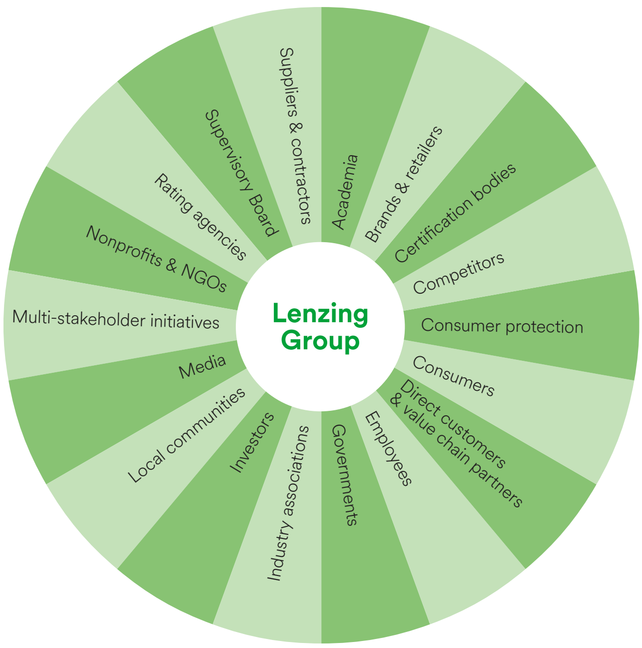
The world is more interconnected today than ever before. Improving access to technology and knowledge is an important way to share ideas and foster innovation. The complex global sustainability challenges society is facing, call for a collaborative approach to designing systemic solutions.

Engaging in a dialog means respecting stakeholders, contributing Lenzing's expertise and knowledge, and taking the opportunity to learn from partners' perspectives. Transparency is a prerequisite for fostering trust and long-term relationships. Each dialog starts with providing transparent information, supporting stakeholders to form an educated opinion and assess risks, and avoiding misunderstandings by building trust. Furthermore, stakeholder relationships built on mutual respect and openness help solve existing tensions and avoid potential conflicts.

For more information on our main stakeholder, please see the "Stakeholder engagement" focus paper.

Various business functions are involved in reaching out to individual stakeholders. In addition to the Lenzing Sustainability team, the Managing Board and managers of the different business functions are all important players who drive the company's proactive approach towards an ongoing stakeholder dialog.

Key stakeholder groups Figure 05



Key stakeholders in 2023

The Lenzing Group's key stakeholders are the people and entities who are potentially affected by its operations, business conduct, and strategic targets or who could enable Lenzing in reaching these targets. Lenzing regards them as strategic partners who have a significant interest in and impact on areas that matter the most to Lenzing. The most important stakeholder group is Lenzing's staff. Their achievements and transparency and collaboration make them a clear testimony to the Lenzing Group's credible sustainability performance. The main topics discussed in 2023:

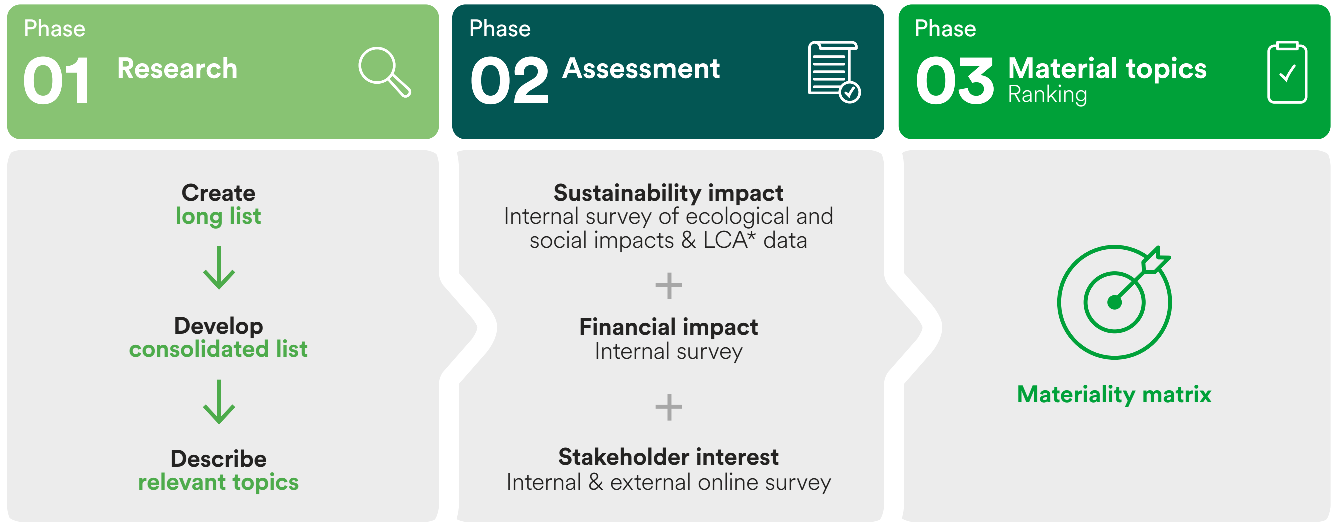
- Energy security and reducing reliance on fossil fuels
- Climate change, GHG (greenhouse gas) emission targets, science-based target (SBT)
- Equity, Diversity and inclusion
- Responsible sourcing, in particular Supply Chain Due Diligence and (verification of) scope 3 emissions
- EU policies (e.g. EU Taxonomy, Empowering Consumers Directive, Corporate Sustainability Reporting Directive (CSRD))
- ESG risks
- Governance and business conduct
- Net-benefit concept
- Biogenic emissions, land use change
- Circular economy, recycling technologies and innovative business models
- Waste, emissions and water management
- Transparency and traceability of supply chains
- Environmental assessment and communication of products
- Biodiversity and conservation of ecosystems
- Benchmarking tools (Textile Exchange Preferred Fiber and Material Matrix)

For more information on the stakeholder dialog in 2023, please see the "Stakeholder engagement" in each topical standard.

Double materiality analysis

[ESRS 2 IRO-1; GRI 3-1]

Materiality analysis Figure 06



* LCA = Life cycle assessment

In 2021, a so-called double materiality analysis was carried out. This means that both the influence of the environment on the company and the influence of the company on the environment were examined and supplemented by the financial consideration of these influences. Lenzing is continuously engaging with stakeholders to understand the relevance and update the materiality analysis if required. In the reporting year, Lenzing had conversations with several stakeholders (e.g. Canopy) and no new topics were identified. For further information on the updated materiality analysis, please see the "Materiality analysis" focus paper.

[ESRS 2 IRO-2; GRI 3-2]

Materiality analysis – allocation of topics Table 05

Material aspects and chapter	Strategic focus area	NaDiVeG	ESRS	SDG
Circularity & resources	Partnering for systemic change, Sustainable innovations	Environmental matters	E5 Resource use and circular economy	9, 11, 12, 17
Climate & energy	Decarbonization	Environmental matters	E1 Climate change	7, 13, 17
Responsible wood sourcing	Raw material security	Environmental matters	E5 Resource use and circular economy, G1 Business conduct	15
Biodiversity & ecosystems	Raw material security	Environmental matters	E4 Biodiversity and ecosystems	15
Sustainable innovation & products	Sustainable innovations	Environmental matters	E2 Pollution, E3 Water and marine ressources, S4 Consumers and end-users	9, 12, 17
Health & safety	Empowering people	Employee-related matters	S1 Own workforce	3
Human rights & fair labor practices	Empowering people	Employee-related matters, Respect for human rights	S1 Own workforce, S2 Workers in the value chain, S3 Affected communities	5, 8, 10
Business ethics	Empowering people	All non-financial matters	G1 Business conduct	16
Digitalization & cyber security	Sustainable innovations	All non-financial matters	–	9, 8, 16

Further sustainability aspects

Supply chain sustainability	Raw material security, Partnering for systemic change	Environmental matters, Respect for human rights	–	8, 12, 17
Water stewardship	Sustainable innovations	Environmental matters	E3 Water and marine ressources	6
Community wellbeing	Enhancing community wellbeing	Social matters	S3 Affected communities	1, 3, 11
Diversity, inclusion & equal opportunity	Empowering people	Employee-related matters, Respect for human rights	S1 Own workforce	5, 10
Employee empowerment & development	Empowering people	Employee-related matters, Respect for human rights	S1 Own workforce	5, 10

Information on environmentally sustainable economic activities according to the EU-Taxonomy Regulation

According to the Regulations (EU) 2020/852 of the European Commission as of June 18, 2020, (EU) 2021/2139 of the European Commission as of June 4, 2021, (EU) 2021/2178 of the European Commission as of July 6, 2021, (EU) 2022/1214 of the European Commission as of March 9, 2022 and the adaption of the Environmental Delegated Act (EU) 2023/2485 and 2023/2486 as of June 27, 2023, the Lenzing Group is required to disclose three key performance indicators, turnover, CapEx and OpEx. For the 2023 financial year, the taxonomy-eligibility and taxonomy-alignment of the Lenzing Group's economic activities must be disclosed for the environmental objectives 1-2. For the environmental objectives 3-6, only taxonomy compliance. The Lenzing Group designed an EU-Taxonomy accounting guideline for describing the methodology for reporting the three KPIs by following the time sequence and requirements as outlined in the Delegated Act dated January 1, 2023.

To determine the Taxonomy-eligible activities, the Lenzing Group assessed all economic activities listed in the EU-Taxonomy for all consolidated group companies. The taxonomy-eligibility was determined on the basis of the description of the economic activities. Due to the current state of EU legislation, not all economic activities and industries are covered by the six currently applicable environmental objectives. In 2022, the first two environmental targets were reported, which did not include Lenzing Group's core business activities (wood-based fiber production, dissolving wood pulp production and supporting activities). The publication of the four additional environmental objectives and the adaptation of the existing goals has not changed this situation. Thus, the information on Taxonomy-eligible economic activities for 2023 covers only a very small portion of activities within the Lenzing Group.

The following activities are identified as Taxonomy-eligible: Manufacture of soda ash (CCM 3.12.), Transmission and distribution of electricity (CCM 4.9.), Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels (CCM 4.19.), cogeneration of heat/cool and power from bioenergy (CCM 4.20.). Future developments in legislation may change the scope of the Taxonomy-eligible activities.

Forest management (CCM 1.3.)
The forest industry is not at the core of the current EU Taxonomy legislation. Tree plantations in South America are not included in the activity Forest management (CCM 1.3.). The output of the activity, the grown wood, is used mostly internally in Lenzing's own operations. In this report, the term 'forests' has been used in a general sense and the definition changes from country to country based on domestic laws. For example, some countries do not consider 'tree plantations' as forests whereas some do consider them as forests.

Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels (CCM 4.19.)
The operation of the Cogeneration of heat/cool and power is conducted for the most part from renewable non-fossil gaseous and liquid fuels, e.g. (e.g. thick liquor, beech bark). Due to lack of relatability of the respective fuel to the sold Energy, the calculation of eligibility is conducted based on key for mostly used fuels.

Following economic activities supporting the Core Business are physically tightly integrated and therefore cannot be assessed separately with reasonable efforts and are as such considered not eligible: High-efficiency co-generation of heat/cool and power from fossil gaseous fuels (CCM 4.30.), Freight rail transport (CCM 6.2.), Construction, extension and operation of waste water collection and treatment (CCM 5.3.) and Data processing, hosting and related activities (CCM 8.1.)

Capital expenditure from the taxonomy-eligible output in category "C" was measured and reported accordingly (e.g. Acquisition and ownership of buildings CCM 7.7.).

Taxonomy-conformity refers to economic activities that are defined as such in the Taxonomy Regulation. Taxonomy-alignment goes beyond eligibility and implies a positive assessment of the applicable technical screening criteria. This includes a substantial contribution to at least one of the 6 Taxonomy's environmental objectives, no significant harm to any other objectives and compliance with the minimum safeguards.

For the identified eligible economic activities, an assessment for Taxonomy-alignment was performed. The Lenzing Group began the alignment assessment by screening the technical critieria, including the substantial contribution, the Minimum Safeguards and DNSH (Does Not Significantly Harm) criteria. During the screening, the Lenzing Group came to the conclusion that the requirements of Annex A (climate risk and vulnerability assessment) as well as other elements cannot yet be fullfilled. As a consequence of this assessment, further in-depth DNSH assessment was deemed unnecessary for the reporting year. All identified economic activities are reported as Taxonomy-eligible, but not Taxonomy-aligned.

The Lenzing Group avoids any double counting by evaluating the data for each key performance indicator independently. All identified economic activities only count once for the environmental objective of "Climate Change Mitigation". The Lenzing Group calculates the 3 KPIs (turnover, CapEx and OpEx) according to the definition of the Delegated Regulation (EU) 2021/2178.

Proportion of turnover from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Table 06

Financial year 2023	Year			Substantial contribution criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code (2)	Turnover (3) EUR mn	Proportion of Turnover, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy aligned (A.1.) or -eligible (A.2.) turnover, year 2022 (18) EUR mn	Category enabling activity (19)	Category transitional activity (20)
Text		Currency	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%																
Of which enabling		0	0%																
Of which transitional		0	0%																
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of soda ash	CCM 3.12.	4.8	0.2%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Transmission and distribution of electricity	CCM 4.9.	1.3	0.1%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels	CCM 4.19.	18.6	0.7%	N	N/EL	N/EL	N/EL	N/EL	N/EL								1.2%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20.	14.9	0.6%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.6%		
Turnover of Taxonomyeligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		39,5	1.6%																
A. Turnover of Taxonomy-eligible activities (A.1+A.2)		39,5	1.6%																

B. TAXONOMY-NON-ELIGIBLE ACTIVITIES

Turnover of Taxonomy-non-eligible activities	2481.6	98.4%
Total	**2521.2**	**100%**

	Proportion of turnover / Total turnover	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	0%	1.6%
CCA	0%	0%
WTR	0%	0%
CE	0%	0%
PPC	0%	0%
BIO	0%	0%

Compared to 2022 the revenue for cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels (CCM 4.19.) decreased due to changed energy prices.

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Table 07

Financial year 2023	Year			Substantial contribution criteria						DNSH criteria (“Does Not Significantly Harm”)									
Economic Activities (1)	Code (2)	CapEx (3) EUR mn	Proportion of CapEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) CapEx, year 2022 (18) EUR mn	Category enabling activity (19)	Category transitional activity (20)
Text		Currency	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%																
Of which enabling		0	0%																
Of which transitional		0	0%																
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of soda ash	CCM 3.12.	0	0.0%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Transmission and distribution of electricity	CCM 4.9.	0.6	0.2%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels	CCM 4.19.	1.5	0.4%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.5%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20.	18.3	5.6%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Transport by motorbikes, passenger cars and light commercial vehicles	CCM 6.5.	3.0	0.9%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4.	0.0	0.0%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Installation, maintenance and repair of renewable energy technologies	CCM 7.6.	0.2	0.1%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Acquisition and ownership of buildings	CCM 7.7.	26.5	8.1%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		50.1	15.3%																
A. CapEx of Taxonomy-eligible activities (A.1+A.2)		50.1	15.3%																

B. TAXONOMY-NON-ELIGIBLE ACTIVITIES

CapEx of Taxonomy-non-eligible activities	277.6	84.7%
Total	**326.3**	**100%**

	Proportion of CapEx / Total CapEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	0%	15.3%
CCA	0%	0%
WTR	0%	0%
CE	0%	0%
PPC	0%	0%
BIO	0%	0%

In 2023 a new biomass power plant was acquired at site Heiligenkreuz with CapEx investments under cogeneration of heat/cool and power from bioenergy (CCM 4.20.). Capital expenditure from taxonomy-eligible output in category "C" was measured and reported accordingly (e.g. Acquisition and ownership of buildings CCM 7.7.).

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities – disclosure covering year 2023

Table 08

Financial year 2023	Year			Substantial contribution criteria						DNSH criteria ("Does Not Significantly Harm")									
Economic Activities (1)	Code (2)	OpEx (3) EUR mn	Proportion of OpEx, year 2023 (4)	Climate Change Mitigation (5)	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Proportion of Taxonomy-aligned (A.1.) or -eligible (A.2.) OpEx, year 2022 (18) EUR mn	Category enabling activity (19)	Category transitional activity (20)
Text		Currency	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		0	0%																
Of which enabling		0	0%																
Of which transitional		0	0%																
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Manufacture of soda ash	CCM 3.12.	0.5	0.2%	N	N/EL	N/EL	N/EL	N/EL	N/EL								N/A		
Transmission and distribution of electricity	CCM 4.9.	0.4	0.2%	N	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
Cogeneration of heat/cool and power from renewable non-fossil gaseous and liquid fuels	CCM 4.19.	5.4	2.7%	N	N/EL	N/EL	N/EL	N/EL	N/EL								2.8%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20.	2.8	1.4%	N	N/EL	N/EL	N/EL	N/EL	N/EL								2.7%		
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		9.1	4.5%																
A. OpEx of Taxonomy-eligible activities (A.1+A.2)		9.1	4.5%																
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		192.8	95.5%																
Total		**201.9**	**100%**																

	Proportion of OpEx / Total OpEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	0%	4.5%
CCA	0%	0%
WTR	0%	0%
CE	0%	0%
PPC	0%	0%
BIO	0%	0%

No major changes in the OpEx for 2023 in comparison to 2022.

The total turnover covers the revenue recognized pursuant to International Accounting Standard (IAS) 1.82 (a), as adopted by Commission Regulation (EC) 1126/2008 and is reported in the consolidated financial statements 2023 (see consolidated income statement position "revenue"). The turnover derived from products or services, including intangibles, associated with Taxonomy-eligible and -aligned economic activities, is presented in relation to the total turnover.

The total CapEx covers book (not cash-effective) additions to property, plant and equipment, intangible assets, biological assets and right of use assets. The CapEx related to assets or processes associated with Taxonomy-eligible and -aligned economic activities, is presented in relation to the total CapEx. In the 2023 reporting year, the only capital expenditure related to acquisitions through business combinations was made for the biomass power plant at the Heiligenkreuz site amounting to EUR 18.3 million (%).

EU Taxonomy CapEx Table 09

	EUR mn 1–12/2022	EUR mn 1-12/2023
Additions to intangible assets (see note 17 of consolidated financial statements 2023)	10.9	8.7
Additions to property, plant and equipment excluding down payments	778.6	239.1
Additions to land and buildings (see note 18 of consolidated financial statements 2023)	131.5	27.4
Additions to technical equipment and machinery, factory and office equipment (see note 18 of consolidated financial statements 2023)	455.4	106.5
Additions to down payments and assets under constructions (see note 18 of consolidated financial statements 2023)	46.3	97.4
Reclassification of down payments (see note 18 of consolidated financial statements 2023)	145.5[a]	7.8[a]
Additions to biological assets (see note 19 of consolidated financial statements 2023)	4.6	0.0
Additions to right of use assets (see note 20 of consolidated financial statements 2023)	14.2	78.5
Total	**808.2**	**326.3**

a) Additions include prepayments amounting to EUR 6.5 mn (2022: EUR 141 mn), which were capitalized in the financial year. The decrease in advance payments made compared to the previous period amounts to EUR 1.3 mn (2022: EUR 4.3 mn).

The total OpEx covers direct non-capitalized operating expenses that relate to research and development, building renovation measures, short-term leasing, maintenance and repair. Maintenance and repair expenses relate to the day-to-day servicing of property, plant and equipment assets (including maintenance material). Operating expenses associated with taxonomy-eligible economic activities are presented in relation to total operating expenses.

EU Taxonomy OpEx Table 10

	EUR mn 1–12/2022	EUR mn 1-12/2023
Maintenance and repairs including maintenance material (see note 6 of consolidated financial statements 2023)	158.7	177.1
Rental and leasing expenses (see note 20 of consolidated financial statements 2023)	10.9	9.2
Research and development expenses (see consolidated financial income statement 2023)	29.2	69.1
Less amortization and depreciation included in research and development expenses (see note 6 of consolidated financial statements 2023)	–4.0	–53.5
Total	**194.8**	**201.9**

Nuclear and fossil gas related activities Table 11

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available techniques.	NO
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	NO
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	NO
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	NO
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

Climate change

MANAGEMENT APPROACH

Material topic: Climate change

[GRI 3-3]

Dissolving wood pulp and fiber production are energy-intensive processes that present a challenge for Lenzing. Where possible, the company has eliminated fossil-based energy or replaced it with renewable sources. Investments in state-of-the-art technologies and low-carbon production processes at all Lenzing sites have helped to increase energy efficiency and positively influence the company's carbon emissions. Climate risks present opportunities for innovation and investment that make Lenzing more resilient to the changing regulatory landscape. The company demonstrates industry leadership as recognized in 2023 by the environmental non-profit organization CDP, which awarded Lenzing a triple "A" rating for Climate Change, Water Security and Forests for the third time. Lenzing is one of only 10 companies worldwide to achieve this rating. This sustained environmental effort has kept the company on track to meet its GHG emissions reduction targets of 42 percent in scopes 1 and 2 by 2030 and 25 percent in scope 3 (baseline 2021), which also support the bigger goal of achieving a net-zero future by 2050 in line with the Paris Agreement.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Driving the transition to fossil-free production through a circular business model and innovation along the whole value chain
- Offering end consumers a truly sustainable option: textiles and nonwovens made from regenerated cellulosic fibers
- Future-proofing Lenzing's growth with the implementation of carbon-neutral technologies and low-carbon products
- Becoming more resilient to the changing regulatory (e.g. tax) and business environment
- Strengthening credible sustainability leadership among all stakeholders, securing product differentiation and price premiums
- Collaborating with stakeholders and supply chain partners
- Attracting new and long-term impact investors

Negative

Own activities:

- Lenzing cannot contribute to its customers' GHG targets if products no longer meet customers' definition of sustainable raw materials
- Any climate-related disruption in one of the production sites (e.g. severe weather events, supply chain disruptions)
- Not meeting new regulations, technological problems with regard to transition to renewable energy sources (e.g. green hydrogen)
- Fossil-based energy and energy-intensive technologies carry potential regulatory, technology, market and corporate reputation risks
- Inefficient energy conversion technologies have a potential impact on CO_2 emissions

Business relationships:

- Risks of wood unavailability due to forest degradation (diseases, pests, etc.) as a direct consequence of higher average temperatures
- Potential regulatory, technology, market and corporate reputational risks
- Any climate-related disruption at one of the production sites would impact the business model and its success
- Implementation of regional and national emissions trading schemes
- Energy shortage could compromise Lenzing's operations
- Financial impacts of potential cost increases in energy prices

- Group Environmental Standard
- Bioenergy Policy
- Policy for Safety, Health and Environment (SHE) Policy

Actions taken

- Update and validation of science-based targets (SBTs)
- Update of roadmaps for group-level and site-level targets
- Governance and steering committee in place
- Inclusion of products made at Lenzing's Prachinburi (Thailand) site in low-carbon portfolio
- Two additional production sites in the Lenzing Group use 100 percent renewable electricity from the grid, upping the number of sites relying solely on renewable electricity to six
- Purchase of a biomass power plant
- Power purchase agreements (PPA) with providers of renewable energy
- Continuous improvement of energy consumption
- CDP Climate Change "A" rating
- Environmental management system in accordance with ISO 14001:2015 (including risk assessment and internal audits to ensure the effectiveness of the measures implemented)

Sustainability targets, measures and progress

- "Near-term science-based target"
- "Long-term science-based net-zero target"

Stakeholders

- UN Fashion Charter
- Roadmap to Zero
- Renewable Carbon Initiative (RCI)
- GHG Protocol and CEPI
- Customers
- Suppliers

Responsible

- Board member: CPO/CTO
- VP Corporate Sustainability
- Senior Manager Carbon Strategy

Supporting

- Corporate Communications & Public Affairs

Policies and commitments

- “Naturally Positive” sustainability strategy with “Decarbonization” and “Partnering for systemic change” as focus areas
- Implementation of science-based targets (SBTs)
- Commitment to UN Fashion Industry Charter for Climate Action
- ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 system certifications for the Lenzing Group

- Global Controlling
- Global Supply Chain/Purchasing
- Corporate Audit & Risk
- Global QESH
- Global Strategy and M&A
- Performance.Improvement.Technology
- Site managers

HIGHLIGHTS IN 2023

1. Update of the near-term science-based target (SBT) for scope 1, 2 & 3 GHG emissions reductions until 2030 (1.5°C target ambition in scope 1 & 2).
2. Validation of 2050 net-zero scope 1, 2 & 3 GHG emissions target by SBTi and setting of a long-term SBT for 2050 (at least 90 percent emission reduction)
3. Purchase of a 43 megawatt biomass power plant at Heiligenkreuz (Austria) site.
4. Supplier engagement continued with key chemicals suppliers – Initiated process to purchase low-carbon caustic soda
5. Lyocell fiber produced at Prachinburi (Thailand) integrated within the low-carbon portfolio
6. In 2023, 100 percent renewable grid electricity purchase for Nanjing (China) and Purwakarta (Indonesia) sites
7. Starting Q4/2023, renewable power supply to Lenzing site from 5.5 megawatt PV-plant in Styria (power purchase agreement between Lenzing, Energie Steiermark and Enery)
8. Sign off of a 12.6 megawatt wind power purchase agreement with WindLandKraft. The wind park is located in Engelhartstetten (Austria) and will supply power to Lenzing from Q1/2025.
9. CDP Climate Change “A” rating
10. Lenzing has updated its Climate Action Plan according to the updated SBTs

Governance

[ESRS E1 ESRS 2 GOV-3][5]

The Remuneration Policy of Lenzing AG for the performance-based remuneration of the Managing Board is linked not only to financial performance criteria but also to non-financial sustainability (ESG) criteria. For more details, please see “General information” chapter.

Strategy

[ESRS E1-1; GRI 3-3e]

Transition plan for climate change mitigation

In line with the Paris Agreement (1.5°C target) and the UN SDG 13, the Lenzing Group set ambitious science-based targets (SBTs) for reducing absolute GHG emissions in scope 1 and 2 by 42 percent and in scope 3 by 25 percent until 2030 (baseline 2021) and aims to achieve net-zero GHG emissions by 2050.

A cross-functional project team was set up under the leadership of the CPO/CTO. The project management team includes a steering committee to enable alignment across all decision-makers and functions, expedite decisions and ensure the involvement of different owners of capital projects, sites and functions.

A dedicated global project manager is operationally responsible for facilitating the roadmap preparation and bringing best practice examples to implement climate targets at facility and group level. Additionally, the manager is supporting the functions in integrating climate in business decisions.

To ensure engagement and empowerment, production sites and functions are responsible for developing and implementing roadmaps, so that they can effectively manage their portfolios and specific agendas in the medium- and long-term.

Strategy, targets and roadmaps

Lenzing’s corporate strategy, “Better Growth”, includes the climate change targets, which ensures that climate change is incorporated into the business strategy and decision-making.

To effectively achieve the SBTs, the global project manager has developed a high-level SBT roadmap for the Lenzing Group with potential site-level targets. These scenarios and site targets were aligned with the CPO, steering committee and other decision-makers of key functions and regions. This has provided guidance and direction and facilitated the development of roadmaps by each production site and function.

[5] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

Integration in functions and projects

Operations: Each one of the nine sites is engaged to develop their targets and roadmaps. Some emission reduction projects implemented globally during the reporting period include:

- Since Q4/2022, the site in Nanjing (China) has purchased 100 percent renewable grid electricity.
- Renewable power supply to the Lenzing site from a 5.5 megawatt photovoltaic power station in Styria (Austria) started in Q4/2023 (PPA between Lenzing, Energie Steiermark and Enery)
- Purchase of a 43 megawatt biomass powerplant in Heiligenkreuz (Austria) in Q2/2023.

Business management and sales: Lenzing places great importance in communicating the climate impacts of its products to customers and business partners. Results from product life cycle assessments are useful in conveying the climate benefits of Lenzing's low-carbon fiber portfolio during sales processes (see "Sustainable innovations" chapter).

Procurement and supplier engagement: Lenzing engages and partners with key chemicals and pulp suppliers to reduce its scope 3 emissions. The intention is to develop raw materials with lower GHG emissions and other impacts. Lenzing focuses on maintaining long-term relationships, helping suppliers achieve improvements and being part of their transitional journey by using their green products.

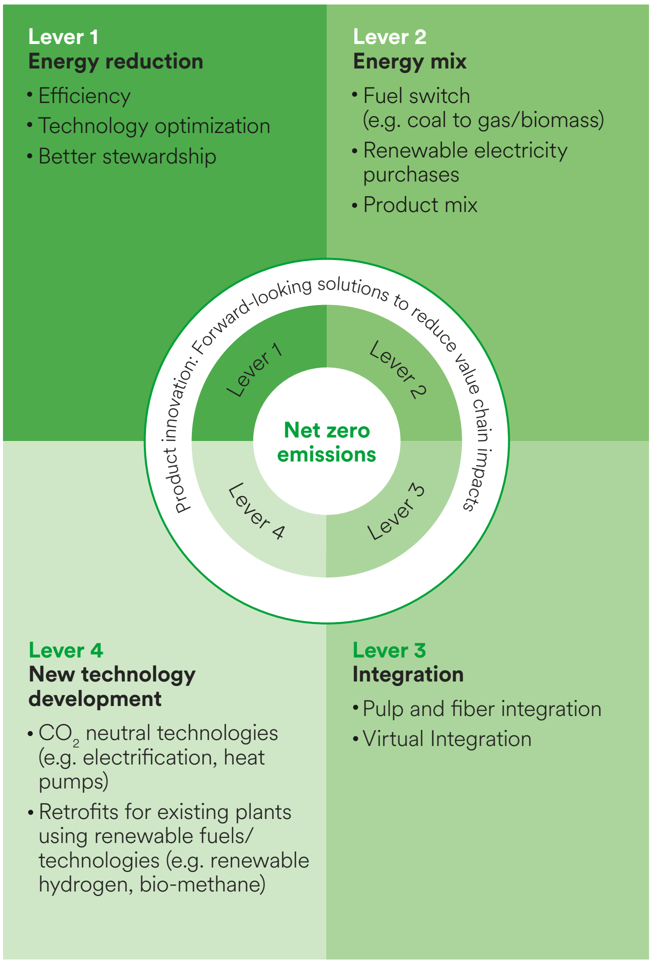
Strategy, mergers and acquisitions: Every capital project, whether brownfield or greenfield, has to align with the climate change strategy and targets. In this regard, some projects have been assessed for their benefits and contribution to climate change impact as part of the Managing Board's decision-making process. Internal carbon pricing for key projects is used to support this process.

Finance and controlling: In the yearly medium-term plan (MTP) budgeting process, projects were assessed for their relevance to the climate transition plan as well as their GHG impacts. The results were implemented as additional decision criteria.

Levers to meet science-based targets

Based on technical feasibility, Lenzing deploys different levers to reduce scope 1 and 2 emissions. They can be broadly grouped in four categories as seen in figure 07.

Levers to meet science-based targets Figure 07



Impact, risk and opportunity management

[ESRS E1 ESRS 2 SBM-3; GRI 3-3ab, 201-1, 201-2]

Relevant risks and opportunities for Lenzing were qualitatively evaluated by using scenario analyses for short-term (1–2 years), mid-term (2–5 years) and long-term (5–30 years) consequences in order to estimate their potential financial impact and probability of occurrence. Lenzing then derived a KPI scorecard with indicators and targets on the key climate-related risks and opportunities based on the TCFD recommendation for metrics and targets.

The following table describes key climate risks and opportunities and provides details of Lenzing's response and mitigation measures. A TCFD index in the Annex of this report shows the link between the TCFD recommendations, the contents of this report and other external publications such as the CDP Climate Change.

Transition risks, physical risks, transition opportunities Table 12

Characterization	Risk/opportunity description	Lenzing's response
Transition risks	**Emerging regulations on carbon pricing**	
	Increasing regulation, especially on green taxation and carbon pricing, constitutes a relevant risk for Lenzing. In the countries where Lenzing has carbon intensive processes, regulations on greenhouse gas (GHG) emissions have already been implemented (energy efficiency improvements, regulated emission allowances) and stricter regulations that could increase the costs of GHG emissions are under development.	Lenzing is implementing stringent energy efficiency measures in order to reduce its potential exposure to green taxation. In 2023, Lenzing updated its science-based targets to 1.5°C aligned to reduce its total GHG emissions in scope 1 & 2 by 42 percent and in scope 3 by 25 percent by 2030 (compared to a 2021 baseline). Lenzing is therefore mitigating the risks from emerging carbon pricing regulations. Lenzing also set a SBTi validated 2050 long-term net-zero target with 90 percent absolute reduction of scope 1, 2 & 3 emissions until 2050 (baseline 2021).
	Increased biomass costs	
	Wood is the Group's most important natural resource for manufacturing regenerated cellulosic fibers. Despite its sustainable sourcing policy and backward-integrated production, wood prices are at risk of increasing due to climate change, growing global biomass demand and alternative land use. Growing competition for land use and natural resources is affecting long-term structural biomass prices.	In order to mitigate the risk of increasing biomass costs and improve supply chain security, Lenzing started-up a modern dissolving wood pulp plant in 2022 with integrated plantation and forest operations in Brazil. The new pulp mill improves Lenzing's cost position, as it secures the Group's own supply of dissolving wood pulp and represents a milestone in Lenzing's strategy to achieve carbon neutrality.
	Reputational risk in the textile sector	
	The textile industry, where Lenzing's products are commonly used, is being scrutinized for its sometimes unsustainable and resource-intensive raw material consumption and production processes. This could lead to negative media coverage and further stigmatize the sector, which could, in turn, influence the Group's revenue.	Lenzing responds to potential negative media coverage of the fashion and textile industry by proactively disclosing information on its business practices and environmental footprint. Through its communication channels, Lenzing underlines its contributions to a low-carbon economy and the net benefits created by its speciality products compared to generic products in the market.
Physical risks	**Chronic physical climate risks**	
	Climate models indicate that rising global mean temperatures will lead to an increase in chronic physical climate hazards. The Lenzing Group's operations and supply chain could be increasingly affected by extreme weather events, water scarcity and other physical hazards of varying severity. For example, climate change related impacts such as heavy rainfall or forest fires could affect Lenzing's key pulp supplies from South Africa and the new pulp plant in Brazil, resulting in a shortage of high-quality pulp and bottlenecks in fiber production. In addition, climate change-induced disruptions such as heat stress could lead to more frequent pest outbreaks, droughts and rising winter temperatures, which could disrupt wood suppliers' planned harvest schedules and thus pose a risk to Lenzing's wood supply, especially in the European pulp mills. Water scarcity could also mean, for example, that less water can be drawn from the Ager river at the Lenzing site during longer dry periods, especially in the summer months, which in turn would lead to a reduced production.	All identified risks arising from a disruption in the supply chain for the various raw materials, chemicals and energy required for pulp and fiber production are managed by Lenzing through comprehensive supplier diversification and holistic inventory and resource management. In addition, Lenzing has initiated the "Safe Supply" project, comprising around 300 initiatives for alternative suppliers and supply routes for important raw materials and chemicals. The effects of climate change-related heavy rainfalls and the associated potential flooding at affected locations are mitigated by appropriate flood protection and evacuation plans based on flood risk assessments. Possible water shortages due to prolonged dry periods at affected production sites are counteracted by targeted measures in the areas of water efficiency, water reuse, water recycling and water conservation.
Transition opportunities	**Increased demand for low-emission products and product innovation**	
	As consumer needs and preferences shift toward low-emission products, the development and expansion of low-emission goods and services is expected to have substantial growth potential. Lenzing applies life-cycle thinking, sustainable sourcing, efficient use of biomass and partnerships with stakeholders along the value chain in order to contribute to more sustainable consumption and production patterns. All these factors mean that Lenzing's products offer net benefits.	Lenzing has embarked on an ambitious growth strategy to benefit from expected higher demand for responsibly resourced and low-emission products. Lenzing invested more than EUR 1 billion in a new lyocell fiber production facility in Prachinburi (Thailand) and a new wood pulp facilitiy in Indianópolis (Brazil) that started operating in 2022. Major achievements in 2023 were the implementation of the technical concept and the production startup of LENZING™ ECOVERO™ branded viscose fibers at Lenzing's site in Purwakarta (Indonesia) and switching one line from viscose to modal fiber production at the Nanjing (China) site. These investments significantly contribute to reducing Lenzing's GHG emissions and strengthen the security of the Group's raw material supply.
	Decarbonization strategy de-risks operations	
	The Lenzing Group considers rapid decarbonization to be a major business opportunity to de-risk its operations, build resilience, launch products with less climate impact and harvest energy efficiency gains. Lenzing will substantially reduce its GHG emissions in the coming years through a number of corresponding measures (decarbonization strategy) and science-based targets. Furthermore, Lenzing aims to reach net-zero greenhouse gas emissions by 2050.	Lenzing's science-based targets are approved by the Science Based Target initiative, making Lenzing the first regenerated cellulosic fiber producer to have approved science-based targets. Lenzing's decarbonization strategy is based on reducing its emissions, not offsetting them. To reach the targets, Lenzing set up a cross-functional steering committee to make necessary decisions under the leadership of the managing board. Lenzing's GHG abatement activities will involve a series of measures to reduce carbon emissions both within its operational boundaries and along its supply chain.

[ESRS E1 ESRS 2 IRO-1]

The group-wide TCFD assessment process implemented in 2020 was further developed with the goal of identifying, prioritizing, quantifying and mitigating climate change risks and seizing opportunities in Lenzing's operations and in its supply chain.

Policies

[ESRS E1-2; GRI 3-3c]

Lenzing's policies address climate change mitigation and adaptation. They act as a set or framework of general objectives and management principles that are used for decision-making. In Lenzing's 2019 Sustainability Policy, the Executive Committee promoted the line to continuously improve the sustainability performance and resource efficiency and decarbonisation along the entire value chain. In the Policy for Safety, Health and Environment (SHE, see "Pollution" chapter), Lenzing commits to protecting the environment it operates in by minimizing emissions and waste and reiterates the need for improved resource efficiency. The policies are implemented through Lenzing's transition plan for climate change mitigation and the actions detailed below.

Switching to renewable energy is a crucial step for Lenzing and the Group already relies on a mix of renewables including hydro, solar and wind energy. In the reporting year, bioenergy was an additional focus of policymaking because of the recent start-up of Lenzing's biorefinery in Brazil and investments in biomass utilization (see "Actions" below).

Bioenergy Policy
In 2023, the Bioenergy Policy was approved by the Chief Pulp Officer and the Chief Sustainability Officer (CSO). It gives guidance for sourcing biomass for Lenzing's energy production as well as for biomass sourcing of third parties delivering bioenergy to the members of the Lenzing Group. Lenzing strives to source biomass for energy exclusively from non-controversial sources as laid out in the Wood and Pulp Policy (see "Resource use and circular economy" chapter). For woody by-products and agricultural residues Lenzing requires transparency about the sourcing region and demands that the biomass is at least legally harvested and connected to a low risk of deforestation. Lenzing generally avoids biomass from agricultural commodities with a high risk of deforestation (defined by Annex 1 of the EU Deforestation Regulation), in particular, residues from palm oil production. If such products are considered for a supply, the compliance with Lenzing`s policy has to be assured by credible third-party certification, regular risk-assessments specific for the sourcing regions, audits and on-site visits as well as independent third-party certification of the biomass for energy programs (like the ones endorsed by the EU Renewable Energy Directive RED II). These help to ensure compliance to this policy and Lenzing's commitment to no deforestation. Lenzing's production sites are responsible for the assessment of the biomass being used. If it is discovered that Lenzing sources biomass from controversial sources, suppliers are engaged to encourage consistent practices with our policy. If the response is unsatisfactory, the supplier is eliminated from Lenzing's supply chain with a reasonable lead time.

Actions

[ESRS E1-3; GRI 3-3d]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Lenzing is committed to reducing emissions in its own operation and along the entire value chain. Table 13 gives an overview of how Lenzing's forests and wood products are contributing to climate change mitigation.

The most important actions Lenzing took during the reporting year are linked to the beforementioned levers and detailed below.

Energy reduction
Lenzing's Innovation Platform is frequently used by employees from various departments to propose energy reduction measures or other innovative ideas. In the reporting year such proposals included a range of topics, from reminding colleagues to put computing hardware to sleep during longer breaks to installing a larger heat exchanger in a refining process at one of the production sites.

Significant projects to increase energy efficiency were recently completed in viscose/modal production at the Lenzing site. With their ideas and expertise, production employees played a key role in this. The projects improve the ventilation systems of the fiber production lines, the waste gas treatment and the regulation of steam for high-vacuum systems. The ingenuity of employees and the professional handling of the three projects helped to make viscose/modal production at the Lenzing site even more efficient. Overall, this will result in total energy savings of around 26,500 GJ per year. This is equivalent to the annual energy consumption of roughly 1,470 single-family homes.

Energy mix
In the reporting year Lenzing took a range of actions to further improve its energy mix and to facilitate the switch to renewables.

A 43 megawatt biomass power plant in Heiligenkreuz (Austria) was purchased. After obtaining the official approvals and fulfilling the other closing conditions, the biomass power plant was taken over by the Heiligenkreuz site in Q2/2023. This strategic investment significantly reduces the dependence on fossil fuels at the site. Around 50 percent of the natural gas previously used can be replaced by the bioenergy.

Two additional production sites in the Lenzing Group (Purwakarta, Indonesia and Nanjing, China) use 100 percent renewable electricity from the grid, upping the number of sites relying solely on renewable electricity to six.

Since November 2023, the green energy producers Enery and Energie Steiermark supply the fiber and pulp plant at the Lenzing site with photovoltaic energy from a power station with a peak output of 5,500 kW located in Styria (Austria).

The Lenzing site will be supplied with green energy from the Engelhartstetten wind farm in Marchfeld (Lower Austria) from Q1/2025. The Engelhartstetten wind farm is a joint project involving several partners including WindLandKraft which acts as the operator and supplier of the wind power. The Lenzing Group has signed a long-term supply contract with a term of 15 years.

Integration

Pulp mills can generate bioenergy which can be used for fiber production. This is the advantage of facilities that integrate pulp and fiber production at the same site over stand-alone fiber production units. In some cases, a pulp producer in close proximity to a fiber producer can also provide bioenergy. In both cases, procurement of wood or biomass from sustainable sources is a pre-requisite.

New technology development

In 2023, Linde Green air gases were integrated in production processes to reduce GHG emissions in relation to conventional production processes. By sourcing renewable industrial gases from Linde, which are produced from 100 percent renewable energy, Lenzing contributes to significantly reduced emissions by saving more than 1,700 tons of GHG emissions annually.

How forests and wood products work for climate change mitigation Table 13

Topic relevant to climate change	Details	Lenzing Group contribution
CO_2 sequestration in sustainably managed forests	Sustainably managed semi-natural forests and forest plantations absorb more carbon in trees and harvested wood products, therefore acting as a net sink over the long term. Forest areas and carbon stocks are increasing in Europe	Wood sourcing from sustainably managed forests, managing own forest plantations, active engagement with pulp suppliers for improvements and other stakeholder activities (e.g. research at WOOD K plus)
Substitution of raw materials that have large climate impacts	Fibers with lower carbon footprints in their manufacturing process and life cycle	Offering choices for fibers with lower carbon footprints
Adaptation of forests to climate change	Share of beech in Europe is increasing, but its uses are limited. Active forest management achieves faster increases in species diversity (and therefore climate resilience) compared to the natural development of forests	Economic valorization of beech wood for dissolving wood pulp production at Lenzing (higher value added than fuel wood use) thereby providing forest owners with the income they need for climate adaptation actions.
CO_2 emissions from deforestation of forests	Ensure that no deforestation occurs in the supply chain	Lenzing's wood and pulp policy, forest certificates (FSC®, PEFC), transparency through CDP Forests and implementing the Canopy pathway are ranked top with dark green shirt in the CanopyStyle initiative

Metrics and targets

[ESRS E1-4; GRI 3-3e, 302-4]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Near-term science-based target	**New target: To reduce scope 1 and 2 absolute greenhouse gas (GHG) emissions by 42 percent and scope 3 absolute GHG emissions by 25 percent until 2030 (baseline 2021)[f,g]**	**2030** **New**
	Previous target: To reduce scope 1, 2 and 3 (purchased goods and services, upstream and downstream transport, and fuel and energy-related activities) GHG emissions by 50 percent per ton of fiber and pulp sold by 2030 (baseline 2017)	**2030** **On track**
Measure(s)	Lenzing reduces 40 percent of specific GHG emissions per ton of pulp and fiber sold (baseline 2017)[b,e]	**2024** **On track**
	Lenzing reduces 50 percent of specific GHG emissions per ton of pulp and fiber produced (baseline 2017)[e]	**2027** **On track**
Progress made in 2023	Lenzing maintained its approach towards mitigating climate change by reducing its GHG emissions compared to baseline 2017. In 2023 Lenzing set up a new science-based target, which aligns with a 1.5°C scenario. This target has been approved by the Science Based Target initiative. The measure referring to a 40 percent reduction of specific emissions was successfully achieved in 2023.	

b) Relevant for the Managing Board long-term incentive (LTI) bonus target

e) These intermediate targets are part of the Lenzing corporate strategy on the way to reach science-based target by 2030.

f) Scope 3 emissions include those from the harvesting of raw material wood, the production of purchased materials (chemicals & pulp), the production of fuels, the transportation of purchased raw materials & fuels, and the transportation of fibers to customers

g) The target has been updated and approved by SBTi at the end of 2023. According to SBTi for net-zero target the remaining 10 percent of emissions can be carbon removals.

Long-term science-based net-zero target	To achieve at least a 90 percent reduction in absolute GHG emissions (scopes 1, 2 and 3) (baseline 2021)[f,g]	2050 New
Measure(s)	Lenzing achieves 100 percent green electricity for four sites	2024 Achieved
	Lenzing phases out coal in its Nanjing (China) operations	2022 Delayed
	Lenzing installs on-site photovoltaic power generation at the Lenzing plant	2022 Achieved
	Lenzing increases the share of renewable energy consumed by the Lenzing Group and supplies excess bioenergy from the pulp production facility in Indianópolis (Brazil)	2023 Achieved
	Lenzing achieves scope 1 and 2 carbon neutrality at its new lyocell fiber production site in Prachinburi (Thailand) by using 100 percent bioenergy[h]	2023 Delayed
	Lenzing engages 20 key suppliers, by spend and CO_2 impact, in order to reduce Lenzing's scope 3 emissions and incentivize the suppliers that help Lenzing offer more low carbon footprint fibers	Continuous On track
	Lenzing engages and enables 50 percent of 'customers with approved SBT and commitment' (textile and nonwoven brands/retailers as well as manufacturers working with LENZING™ fibers) to fulfill their ambition by providing information on low GHG-footprint specialty products such as TENCEL™, LENZING™ ECOVERO™ and VEOCEL™branded fibers	Continuous On track
	Lenzing runs a campaign to reach 50 percent of TENCEL™and VEOCEL™ customers (textile and nonwoven brands/retailers as well as manufacturers using the TENCEL™ and VEOCEL™brands) to promote the use of innovative lenzing fibers with environmental benefits such as low carbon intensity and to reduce reliance on fossil based materials wherever possible.	Continuous On track
Progress made in 2023	Six production facilities procured 100% renewable electricity. Gas pipe connections and constructions in Nanjing (China) are ongoing. The product carbon footprint platform of TfS was adopted internally as well as external trainings are taking place. Lenzing is in continous discussions with top suppliers and also shares its expertise for obtaining low-impact chemicals (e.g. green electricity and LCA). The site in Prachinburi (Thailand) has been facing some challenges to consistently receive 100 percent biomass energy due to the reliability of biomass co-generation plant of supply partner, however the site has achieved 100 percent of biomass energy for October and November. Therefore both parties have agreed to work out short term and long term technical solutions. The discussion and negotiation on securing biogenic energy to reach 100 percent consistently in the future is ongoing. Additionally, given current global economic situation, many businesses and end customers have been deprioritizing sustainability in favor of low cost sourcing and therefore have less willingness to pay for low-carbon products. Customer engagement has been taking place to position fiber products with low carbon footprint for supporting scope 3 emissions reduction of customers.	

f) Scope 3 emissions include those from the harvesting of raw material wood, the production of purchased materials (chemicals & pulp), the production of fuels, the transportation of purchased raw materials & fuels, and the transportation of fibers to customers

g) The target has been updated and approved by SBTi at the end of 2023. According to SBTi for net-zero target the remaining 10 percent of emissions can be carbon removals.

h) This measure was marked as achieved in the report of 2022, however due to reliability issues of the supplier biomass boiler, this measure could not be achieved consistently throughout the year 2023.

Lenzing's responsibility and science-based targets

Lenzing first set science-based targets (SBTs) in 2019. In 2023, Lenzing's SBTs were updated to align with the most recent climate science. The previous targets were 2°C aligned and expressed as GHG intensity reductions (GHG emissions reductions per ton of pulp and fiber sold). The new targets are expressed as absolute GHG reductions aligned with the 1.5°C scenario, making them even more ambitious.

SCIENCE BASED TARGET INITIATIVE (SBTI)

The Paris Agreement was adopted by consensus at the 21st United Nations Climate Change Conference (COP21) in 2015. The agreement's aim is to combat climate change by keeping the increase in global temperatures compared to pre-industrial levels well below 1.5 degrees Celsius this century.

The Intergovernmental Panel on Climate Change (IPCC) published its Report in 2022 giving more clarity on the carbon reductions required to keep the increase to 1.5 degrees Celsius. According to this report, global net-zero CO_2 emissions will be reached in the early 2050s in pathways that limit warming to 1.5 degrees Celsius and in the early 2070s in pathways that limit warming to 2 degrees Celsius.

The Science Based Target initiative (SBTi) is a collaboration between the Carbon Disclosure Project (CDP), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). The initiative defines and promotes best practices in science-based target setting. It independently assesses companies' targets for consistency with the level of decarbonization required according to the latest science, in order to keep global temperatures from increasing more than 2 degrees Celsius above pre-industrial temperatures.

See the "Strategy" section for the levers to meet the science-based targets.

Energy and fuels

[ESRS E1-5; GRI 302-1, 302-2, 302-3]

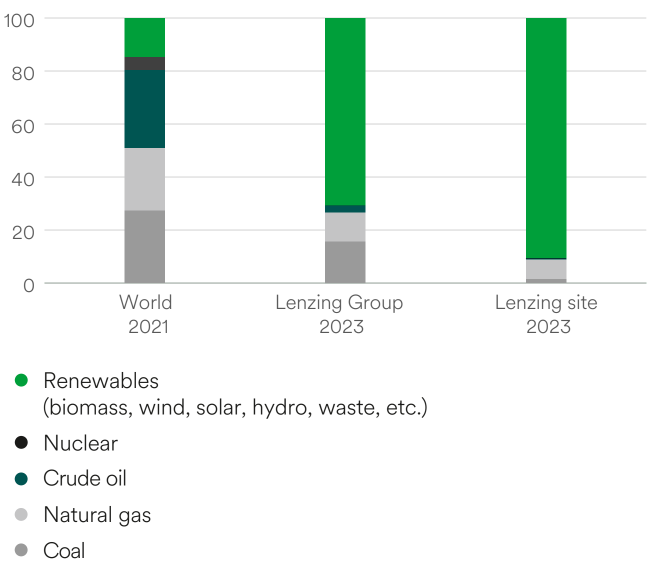
The production volume of pulp and cellulosic fibers is directly linked to the amount of consumed energy and, hence, emissions related to energy use. In 2023, absolute primary energy consumption has significantly increased due to the inclusion Lenzing's two new production sites in Indianópolis (Brazil) and Prachinburi (Thailand). Nevertheless, absolute fossil primary energy consumption did only increase slightly because of the high share of renewable energy (see table 15 and figure 08).

The specific primary energy consumption has increased compared to previous years (see table 15). This is mainly because of the higher specific primary energy consumption for pulp production in Indianópolis (Brazil) which is conditioned by the pulp production technology.

Fuel sources used in the Lenzing Group Table 14

Lenzing, Austria	Biomass, waste, natural gas and coal
Heiligenkreuz, Austria	Biomass, biogas and natural gas
Paskov, Czech Republic	Biomass, biogas and natural gas
Grimsby, UK	Natural gas
Mobile, USA	Natural gas
Nanjing, China	Coal and natural gas
Purwakarta, Indonesia	Coal and natural gas
Prachinburi, Thailand	Biomass and coal
Indianópolis, Brazil	Biomass and oil

Energy sources Figure 08



Sources: IEA Energy Statistics Data Browser "World 2021", Lenzing AG. Includes own energy consumption and energy from providers, excluding grid power, which is a minor fraction of total scope 1 and 2 energy consumption in the Lenzing Group. The production sites in Paskov, Grimsby, Mobile, and Heiligenkreuz do not use coal as a fuel source in their own operations, whereas the Asian sites, i.e. Nanjing and Purwakarta, predominantly use coal.

Primary energy consumption of the Lenzing Group Table 15

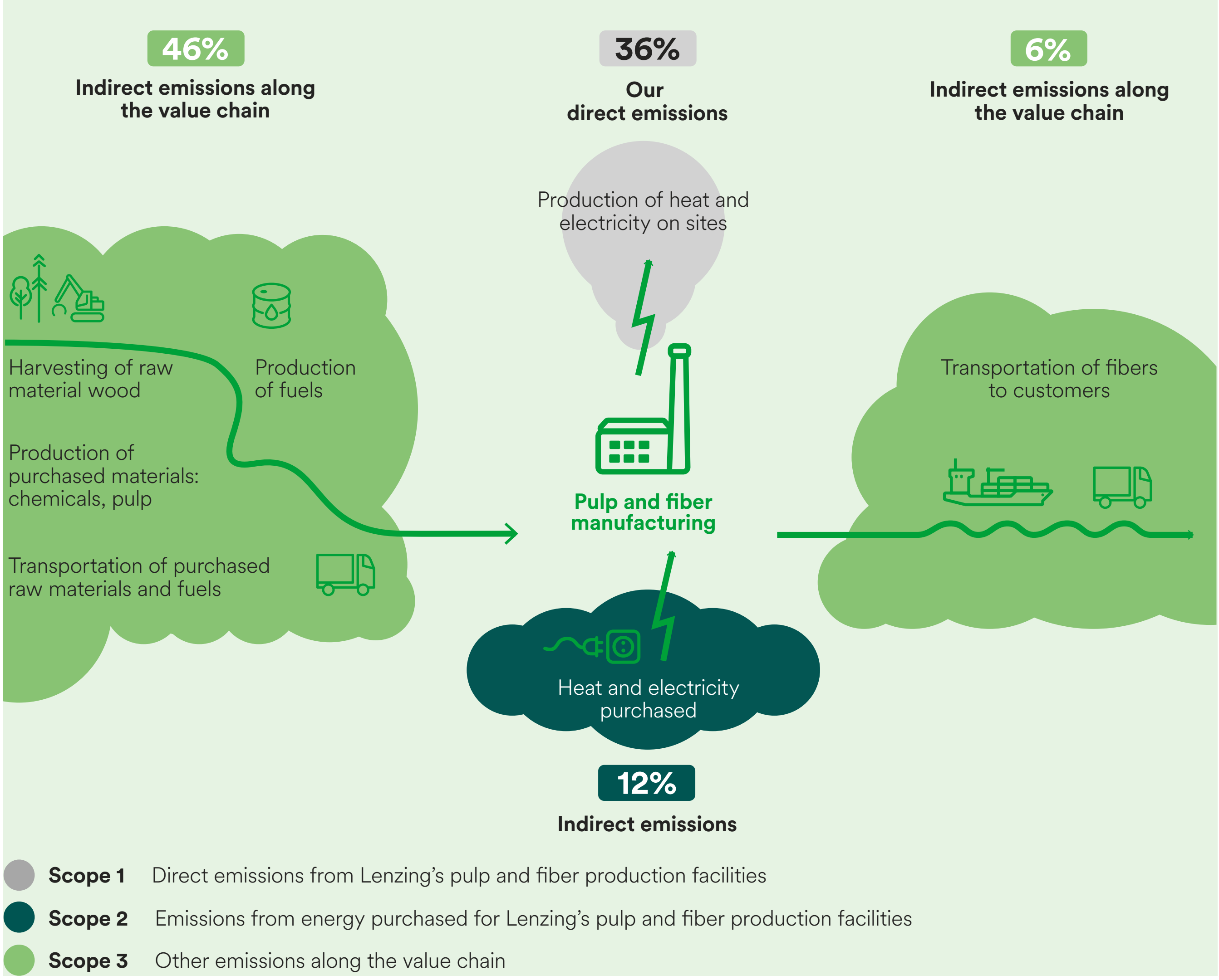
Million GJ	2014	2021	2022	2023
Primary energy consumption[a]	43.10	42.45	38.62	60.89
Fossil primary energy	23.39	21.78	18.51	19.64
Renewable primary energy	19.71	20.67	20.11	41.26
Specific primary energy consumption[b] (index in percentage based on GJ/t, 2014 = 100 %)	100 %	97.40 %	97.60 %	110.16 %

a) Lenzing discloses both direct and indirect energy consumption. According to the Greenhouse Gas Protocol, scope 1 relates to energy consumed directly by the Lenzing Group and scope 2 concerns energy purchased from energy suppliers and from the public grid. Primary energy here includes all forms of energy such as electricity and steam. All energy sources such as fossil (coal, oil, natural gas) and renewable (biomass, waste fuels, hydro, wind, etc.) were included.
b) Specific indicators are reported per unit of production. This applies to all specific indicators in this report, except for GHG emissions.

Lenzing's greenhouse gas emissions

[ESRS E1-6; GRI 305-1, 305-2, 305-3, 305-4]

Lenzing's carbon footprint Figure 09



Despite the significantly higher production volumes, absolute scope 1 GHG emissions in 2023 increased only slightly compared to 2022 and absolute scope 2 GHG emissions stayed on the same level. This is because of the high share of renewable energy and the implementation of various improvements (see the "Highlights in 2023" section in this chapter). Combined absolute scope 1 and 2 GHG emissions increased slightly compared to 2022 but decreased significantly compared to 2021.

Absolute scope 3 GHG emissions remained on the 2022 level but decreased strongly compared to 2021. The main reason for that is a higher share of low-carbon pulp input in the fiber production.

Likewise, absolute scope 1, 2 and 3 GHG emissions are nearly unchanged compared to 2022 but strongly decreased compared to 2021.

Biogenic CO_2 emissions in scope 1 increased significantly because the new production site in Indianópolis (Brazil) has a high share of renewable bio-based energy.

Scope 1, 2 and 3 GHG emissions intensity (per ton of fiber and pulp sold) decreased significantly, nearly reaching the previous near-term science-based target for 2023.

Absolute greenhouse gas emissions of the Lenzing Group[a] Table 16

Absolute emissions (million tons CO_2 eq.)	2017	2021 (base year)	2022	2023		
Direct emissions, scope 1	1.16	1.08	0.92	1.00		
Indirect emissions, scope 2	0.63	0.53	0.35	0.34		
Total scope 1 & 2 GHG emissions[b]	**1.78**	**1.61**	**1.27**	**1.34**		
Indirect emissions, scope 3[c]	1.89	1.82	1.45	1.43		
Total scope 1, 2 & 3 GHG emissions	**3.67**	**3.43**	**2.72**	**2.77**		
Total biogenic CO_2, scope 1		1.90	1.83	3.28		
Absolut emissions index (new SBT, 2021=100 %)	**2017**	**2021 (base year)**	**2022**	**2023**	**Near-term SBT 2030 index[d]**	**Long-term SBT 2050 index[d]**
Scope 1 & 2	111 %	100 %	79 %	83 %	58 %	
Scope 3	104 %	100 %	80 %	78 %	75 %	
Scope 1, 2 & 3	107 %	100 %	79 %	81 %		10 %

a) GHG accounting regarding GHG protocol using GWP potential for greenhouse-gases from IPCC Fifth Assessment Report (AR5 – 100 year). Scope 1 emissions factor source: measurements and Ecoinvent values. Scope 2 emissions factor source: suppliers. Scope 3 emission factor source: Ecoinvent, Ecotransit and supplier data.
b) Includes both scope 1 and 2 emissions of all greenhouse gases (CO2, CH4, N2O, HFCs, PFCs, SF6, NF3), expressed as CO2 equivalents. Scope 1 emissions are calculated based on emission factors from the EU Emission Trading System and scope 2 emissions are calculated according to a market-based method. Scope 2 emissions according to the location-based approach are 0.64 mn tons CO2 equivalents in 2023.
c) Includes categories 1, 3, 4 & 9 and covers 96.2 percent of emissions in Lenzing's relevant scope 3 categories.
d) SBT target values according to required reduction of absolute GHG emissions, i.e. 42 percent in scope 1 & 2, 25 percent in scope 3 for the near-term SBT as well as 90 percent in scope 1, 2 & 3 for the long-term SBT.

Specific greenhouse gas emissions[a] Table 17

Specific emissions (tons CO_2 eq. per ton fiber & pulp sold) and index[b]	2017[c] (base year)	2021	2022	2023
Specific scope 1, 2 & 3 emissions	3.45	3.14	2.84	1.88
Specific scope 1, 2 & 3 emissions index (2017 = 100 %)	100 %	91 %	82 %	55 %
Specific emissions (tons CO_2 eq. per ton fiber & pulp produced) and index	**2017[c] (base year)**	**2021**	**2022**	**2023**
Specific scope 1, 2 & 3 emissions	2.47	2.28	1.99	1.45
Specific scope 1, 2 & 3 emissions index (2017 = 100 %)	100 %	92 %	81 %	59 %

a) The GHG accounting methodology is equivalent to table 16.
b) This KPI is relevant to the Managing Board long-term incentive (LTI) bonus targets.
c) The previous SBT was developed in 2018, hence 2017 has been chosen as baseline year.

[ESRS E1-7; GRI 305-5]
The implementation of various GHG emissions reduction projects helped to mitigate emissions, please see "Highlights of the year" for the 2023 projects and their reductions.

Internal carbon price
[ESRS E1-8]

In 2021, an internal carbon price (ICP) of EUR 75 per ton of CO_2 eq. was implemented. The ICP comes on top of regulatory carbon pricing at different Lenzing locations (e.g. EU ETS). It was applied in the 2023 strategic investment planning process for CAPEX projects of over EUR 2 million. The purpose of the ICP is to mitigate future carbon risks, to encourage a preference of renewable fuels over fossils and to induce energy efficiency projects.

Climate change stakeholder engagement

[GRI 3-3f]

Stakeholder engagement and policy interventions
Lenzing strongly believes that its own efforts should be complemented by engaging with industry stakeholders and civil society, as collaboration is required to bring about systemic change in addressing the climate crisis. Lenzing signed the UN Fashion Charter for Climate Action in 2018 and is an active member of its working groups to develop solutions to industry challenges. Lenzing has also supported World Resource Institute (WRI) and Apparel Impact Institute (AII) efforts to develop a high-level roadmap for the apparel and footwear industry.

A supportive policy framework and incentives are needed to realize measures such as fuel switching to low-carbon sources. Natural gas is currently more expensive than coal in many parts of the world. Sustainable biomass fuels are not sufficiently available in the required amounts. Similarly, renewable grid-based electricity is not widely and economically available in many parts of Asia. To advance low-carbon solutions, a level playing field is required, such as global carbon pricing and the elimination of fossil fuel subsidies. Industry and local governments should ramp up efforts to generate more renewable electricity in order to supply current facilities and cater for future growth.

UN Fashion Charter

The Fashion Industry Charter for Climate Action under the auspices of UN Framework Convention on Climate Change (UNFCCC) is a broad stakeholder movement in the textiles, clothing and fashion industry aimed at achieving a holistic commitment to climate action. Signatories commit to climate targets and ultimately to fully decarbonizing the fashion industry value chain in alignment with the Science-Based Targets initiative.

The original targets of the UN Fashion Industry Charter were to achieve net-zero greenhouse gas emissions no later than 2050 and reduce emissions by 30 percent by 2030. The Fashion Charter signatories updated these targets in November 2021 to limit the increase in the global average temperature to 1.5 degrees Celsius above pre-industrial levels, as recommended by the Intergovernmental Panel on Climate Change (IPCC) and in line with the Science Based Targets initiative. An initial report, the "Climate Action Playbook" published in 2020, highlights major greenhouse gas reduction opportunities in fiber production, which is the fashion industry's main raw material.

Lenzing is a founding member of the initiative and actively contributes to the working group on raw materials, sharing its longstanding experience in the production of sustainable cellulose-based fibers and assessment of environmental impacts through life-cycle analyses (LCA). In 2021, the working group published a report entitled "Identifying Low-Carbon Sources of Cotton and Polyester". The report contains an overview of existing LCA studies and identifies opportunities for improvement, by switching energy sources, changing technology and innovating. Since 2021, Lenzing contributed to the associated report on "Man-Made Cellulosic Fibers". It was published in 2023 and is based on contributions from a range of stakeholders including other producers of regenerated cellulosic fibers, brands, NGOs and sustainability service providers.

Lenzing also contributed to the report "Aggregate report of the transition plans" with its Climate Transition Plan. In it, 42 signatories report their plans with 80 percent having approved SBTs.

Taking stock of Roadmap to Zero

Lenzing contributed to the development of the "Roadmap to Zero" publication in 2021, which aims to catalyze industry action against climate change with proven approaches and measures. This document was prepared by the World Resources Institute (WRI) together with the Apparel Impact Institute (AII), a spin-off Cascale (formerly SAC), which identifies, funds, scales and measures the apparel and footwear industry's proven environmental impact solutions. In 2023, AII has published a sequel to this report to take stock and progress made by industry towards net-zero goal. Lenzing has contributed to this report with best practice examples in different areas such as innovative materials, eliminating coal, switching to 100 percent renewable grid electricity.

Renewable Carbon Initiative (RCI)

Lenzing was one of the eleven leading companies from six countries that founded the Renewable Carbon Initiative (RCI) in September 2020 under the leadership of nova-Institute (Germany). The aim of the initiative is to support and speed up the transition from fossil carbon to renewable carbon for all organic chemicals and materials. The number of members increased to over 65 and now includes companies such as Beiersdorf (Germany), BASF (Germany), Cosun Beet Company (The Netherlands), Givaudan (Switzerland), Henkel (Germany), IFF (USA), LanzaTech (USA), NESTE (Finland), Unilever (UK), Uniper (Germany) and UPM (Finland). The Renewable Carbon Initiative aims to herald the end of the fossil age for all organic chemicals and materials by 2050. The concept of renewable carbon, which is essential for materials, is gaining more attention and traction – including on the political side (e.g. the Sustainable Carbon Cycles communication paper from the European Commission). In 2023, the RCI published several reports including a comprehensive understanding of today's carbon flows or the contribution of renewable-carbon-based materials to lower carbon footprints. The second report also contains a case study of Lenzing fibers. Lenzing will continue to be an active member of the RCI, with a particular focus on further greening up the textile and nonwoven businesses.

GHG Protocol and CEPI contributions

Lenzing's GHG emissions are calculated according to the GHG Protocol. Lenzing also participates in the further development of associated standards and guidance through the industry association CEPI (please see the "Raw material security" chapter for more information).

Pollution

MANAGEMENT APPROACH

Material topic: Pollution

[GRI 3-3]

Lenzing acknowledges the critical importance of pollution prevention. The company actively monitors and manages the environmental impact of its operations, focusing on mitigating pollution risks throughout pulp and fiber production. Efforts extend beyond compliance, with Lenzing adopting stringent measures to minimize emissions, effluents, and waste generation. The implementation of advanced technologies ensures that pollution prevention is integrated into every step of the manufacturing processes. By proactively addressing pollution challenges, Lenzing aims to contribute to a cleaner and healthier environment, aligning with its broader commitment to sustainable development and responsible corporate citizenship.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Further improvement and development of closed-loop processes and recovery technologies
- Development of industry benchmarks and contribution to multi-stakeholder initiatives such as Zero Discharge of Hazardous Chemicals (ZDHC)
- Showing leadership in pulp and fiber production with low environmental and social impacts

Negative

Own activities:

- Pollution carries potential regulatory, technology, market and corporate reputational risks
- Pollution can affect the health of employees and community residents as well as the surrounding environment

Business relationships:

- Pollution can affect the health of employees and community residents as well as the surrounding environment

Policies and commitments

- Sustainability targets for the Lenzing Group
- “Naturally Positive” sustainability strategy
- Lenzing Group ISO 14001:2015 certification
- Group Policy for Safety, Health and Environment (SHE)
- Water Policy
- Group Environmental Standard
- Global Code of Business Conduct
- Global Supplier Code of Conduct
- Higg FEM

Actions taken

- Integration of pollution-related assessment tools into risk management
- Further development of Environmental Key Data (EKD) reporting to comply with updated GRI indicator and ESRS disclosure requirements
- Prachinburi (Thailand) and Heiligenkreuz (Austria) sites meet 'aspirational' level for MMCF ZDHC wastewater parameters
- Internal preparation started for implementing MMCF supplier reporting under the newly launched ZDHC Supplier to Zero Platform
- First ZDHC Gateway reporting of MMCF wastewater guideline v2 at all lyocell sites
- Environmental management system based on ISO 14001:2015 (including risk assessment and internal audits to ensure effectiveness of the measures implemented)
- Continuous development of Group Environmental Standard
- EUR 100 million site modernization in Purwakarta (Indonesia)
    - New carbon disulfide adsorption plant (CAP) operational - significantly reduced sulfur emissions to air
    - Completed construction of wastewater treatment plant upgrade
- Received EU Ecolabel for highest environmental standards at the Purwakarta (Indonesia) site
- Started construction of a new wastewater treatment plant at Grimsby (UK) site
- Completed construction of wastewater treatment plant upgrade at Mobile (USA) site
- Regular Global Quality, Environment, Safety & Health (QESH) meetings with management review

Sustainability targets, measures and progress

- “Air emissions” target
- “ZDHC viscose” target
- “ZDHC lyocell” target
- “Waste water” target
- “FEM” target

Stakeholders

- Zero Discharge of Hazardous Chemicals (ZDHC)
- Local communities
- Enforcing authorities
- Certification bodies
- Customers

Responsible

- CEO
- Site managers

Supporting

- Global QESH
- Performance.Improvement.Technology

MANAGEMENT APPROACH

Material topic: Chemicals & toxicity

[GRI 3-3]

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Compliance with stakeholder expectations
- Helping to reduce downstream chemicals consumption through innovative technologies

Negative

Own activities:

- Potential negative health and environmental impacts in case of accidents or leakages
- Negative environmental and social impacts can lead to reputational damage

Business relationships:

- Regulatory changes and changing classification of chemicals
- Potential negative health and environmental impacts due to mismanagement of the supply chain

Policies and commitments

- Heartbeat for Safety and Health initiative
- SHE Policy
- Higg FEM 3.0
- Group Environmental Standard
- Chemical Management Group Standard
- Water Policy

Actions taken

- Safety & Health KPIs
- Emission KPIs
- Lenzing contributing to leading multi-stakeholder initiatives (ZDHC, Cascale (formerly SAC), EU-BAT)
- EcoVadis supplier assessment
- Overall EcoVadis score of Lenzing Group suppliers higher than the average EcoVadis score
- Supplier engagement to purchase caustic soda produced with renewable energy
- Environmental management system in accordance with ISO 14001:2015 (including risk assessment and internal audits to ensure the effectiveness of the measures implemented)
- Regular Global SHE meetings with management review
- Integral part of internal communication (SHE-topics prioritized)
- Group wide implementation of chemical management standard and roadmap

Sustainability targets, measures and progress

- "Air emissions" target
- "ZDHC viscose" target
- "ZDHC lyocell" target
- "Waste water" target
- "FEM" target

Stakeholders

- Zero Discharge of Hazardous Chemicals (ZDHC)
- Local communities
- Enforcing authorities
- Certification bodies
- Customers

Responsible

- Global Supply Chain/Purchasing
- Global QESH
- Site managers

Impact, risk and opportunity management

Lenzing successfully manages its pollution related impacts and risks. No major reportable infringements of permit regulation occurred during the reporting year.

Policies

[ESRS E2-1; GRI 3-3c][6]

Group Environmental Standard

This internal standard is designed to reflect the benchmarks and emission thresholds of the best available techniques for industrial pulp and fiber production (see EU BAT below). In addition, Lenzing adopted the Zero Discharge of Hazardous Chemicals (ZDHC) Guidelines dedicated to enabling safer choices of fiber products. The ambitious framework aims for continuous improvement of pollution parameters.

Policy for Safety, Health and Environment (SHE)

The SHE policy applies to the whole Lenzing Group and was approved by the Executive Committee in 2022. It anchors safety, health and environment as corporate core values for the Lenzing Group.

- Protect the environment operated in by minimizing emissions, waste and pollution and by improving resource efficiency. For this, objectives and targets are set and controlled.
- Develop and maintain safety culture, standards and systems in order to continuously improve SHE performance.
- Comply with all applicable legislation and regulations in the countries operated in and go beyond compliance to relevant industry standards.
- Train and involve all employees in hazard identification, risk assessment and control.

[6] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

- Consult employees' representatives and encourage them to participate in the decision-making processes for occupational health and safety management.
- Empower all employees to stop any task or activity if it cannot be carried out in a safe manner.

EU Best Available Techniques (BAT)

All Lenzing sites in the EU, including one viscose plant, two lyocell plants, and two pulp plants, continuously met the applicable EU BAT performance in 2023, which is set out in several EU Best Available Techniques Reference Documents (BREFs). Compliance with EU BATs is the basis for the issuance and review of environmental and operating permits for the plants in EU and is continuously monitored by the competent authorities of Member States. Compliance monitoring, as well as requirements relating to management, monitoring program, reporting, etc. are also carried out in accordance with the EU BATs.

The EU BAT are applicable exclusively within the EU and do not have jurisdiction outside the EU. All fiber products manufactured at Lenzing sites outside the EU, therefore, carry the EU Ecolabel for best-in-class performance. In 2023, the Lenzing production site in Purwakarta (Indonesia) was successfully awarded the EU Ecolabel and became the latest facility in the Group to produce fibers with the label.

Chemical management

A group-wide chemical management standard was rolled out in 2023. It features comprehensive chemical inventories, approval processes, etc. with customization provided by an external IT consultant. It includes a hazard and exposure assessment for each chemical in order to demonstrate its safe use for workers, the environment, and the use of the products. The chemical management transition process was established in 2020 and has been rolled out to all the sites in stages to ensure all Group sites follow the same approach.

Actions

[ESRS E2-2; GRI 3-3d, 303-2, 306-2]

A summary of the “Actions taken” can be found in the management approach at the beginning of this chapter.

Lenzing is fully committed to the Supplier to Zero roadmap of the multi-stakeholder Zero Discharge of Hazardous Chemicals (ZDHC) initiative. In 2023 wastewater tests, both the Prachinburi (Thailand) and the Heiligenkreuz (Austria) site met the 'aspirational' level for MMCF ZDHC wastewater parameters.

Effluents are discharged in a controlled manner, therefore avoiding groundwater contamination. Process water is treated by biological wastewater treatment plants (WWTPs). The Lenzing Group has wastewater treatment plants at all its sites except Grimsby (United Kingdom). While Grimsby complies with all local laws and regulations on wastewater as well as the EU Water Framework Directive, in order to meet the even more ambitious Lenzing Environmental Group Standards Lenzing is investing in a new WWTP. Site preparation has finished and as of 2023, construction is underway. The construction also entails a cooperation with the local government to apply new technology from an ongoing R&D project.

Organic chemicals from pulp production waste streams are extracted early on in the biorefinery process at the Lenzing (Austria), Paskov (Czech Republic) and Indianópolis (Brazil) sites which significantly reduces the chemical oxygen demand (COD) of effluent water. This is one example of best practices where potential waste streams are converted into useful products, thereby avoiding pollution and reducing the amount of wastewater to be treated at WWTPs.

Lenzing’s plant in Purwakarta (Indonesia) has made great progress in improving its environmental performance. The completed EUR 100 million plant upgrade includes two major components. The first, a new carbon disulfide adsorption plant (CAP), was successfully commissioned and is fully operational. The second component is an upgraded WWTP. Its construction concluded in 2023 and once it is fully operational, it will reduce wastewater emissions significantly.

In 2021, another WWTP upgrade project was approved for the site at Mobile, USA. The lyocell plant was one of the first of its kind and will undergo a modernization of the existing WWTP in order to meet the Group’s sustainability strategy and target for COD emissions. This investment will not only help to fulfill future ZDHC requirements for lyocell production but will also allow potential enlargement of fiber production capacity. The project includes the refurbishment of existing structures and new modular elements for the most up-to-date waste water treatment. The investment thereby extends the life cycle of the WWTP. Construction was completed in December 2023. Commissioning of the new systems has started and the operational transition is expected to take place during Q1/2024.

Metrics and targets

[ESRS E2-3; GRI 3-3e]

See “targets” in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the “General information” chapter.

Air emissions	To improve the Lenzing Group’s specific sulfur emissions by 50 percent by 2023 (baseline 2014)[a]	Measures implemented
Measure(s)	Lenzing implements a carbon disulfide adsorption plant (CAP) upgrade at the Purwakarta plant (Indonesia)	2023
Progress made in 2023	The carbon disulfide adsorption plant (CAP) in the Purwakarta plant (Indonesia) was succesfully implemented and started operating in July 2023. Viscose fibers from this plant are now EU Ecolabel certified. All measures have been implemented for this target, however to achieve the target, the measures need to operate for a whole year.	

a) The target has the same production volumes and scope of facilities as the 2014 baseline (i.e. excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil)).

ZDHC viscose	To achieve 'aspirational' MMCF level for ZDHC wastewater and air emission guidelines at Lenzing viscose facilities by 2024	2026 On track
Progress made in 2023	Lenzing viscose sites have continuously implemented the ZDHC MMCF guideline in its revised version 2.2. The implementation of the waste water guideline continued in 2023. The implementation of the air emission guideline progressed according to planning, however, due to the delay of the official launch of the ZDHC Supplier Platform for man-made cellulosic fibers (MMCF), the reporting on the Platform will start in the first half of 2024. The target to achieve ‘aspirational’ level is now reassessed to 2026 due to supply chain disruptions stemmed from global issues and technical challenges.	

ZDHC lyocell	To achieve 'aspirational' MMCF level for ZDHC wastewater and responsible production guidelines at Lenzing lyocell facilities by 2028[b]	2028 On track
Measure(s)	First ZDHC Gateway reporting of MMCF waste water guideline v2 at all lyocell sites[c] in 2023	2023 On track
	First supplier platform implementation and reporting of MMCF Guideline v2 - Responsible fiber production at all lyocell sites[c] in 2023	2023 Delayed
	Lenzing lyocell sites[c] achieves 'aspirational' level for wastewater and responsible production	2025 On track
	Lenzing site in Grimsby (UK) achieves 'foundational' level for wastewater and responsible production	2025 On track
	Lenzing site in Grimsby (UK) achieves 'aspirational' level for wastewater and responsible production	2028 On track
Progress made in 2023	The implementation is on track with all lyocell sites registered for reporting in 2023. However, due to the absence of ZDHC certified lab in USA and UK, the waste water testing at these two sites could not be completed. The sites completed the reporting on the ZDHC gateway have all achieved aspirational level. Requirements according to the responsible fiber production guideline will be reported from 2024 onwards after the publication of the ZDHC supplier platform for MMCF in beginning of November 2023.	

b) Relevant for the Managing Board long-term incentive (LTI) bonus targets
c) Lenzing (Austria), Heiligenkreuz (Austria), Mobile (USA), Prachinburi (Thailand)

Waste water	To improve Lenzing Group's specific wastewater emissions (chemical oxygen demand (COD)) by 20 percent by 2024 (baseline 2014)[a,b]	2024 On track
Measure(s)	Lenzing implements a wastewater treatment plant upgrade at Purwakarta site (Indonesia)	2023 Achieved
	Lenzing implements a new wastewater treatment plant at Grimsby (UK) site	2024 On track
Progress made in 2023	The building of the wastewater treatment in Purwakarta (Indonesia) took place in 2023, the start-up is planned for the beginning of 2024. The wasterwater treatment plant project in Grimsby (United Kingdom) is on track and will come into operation in 2024.	

a) The target has the same production volumes and scope of facilities as the 2014 baseline (i.e. excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil)).
b) Relevant for the Managing Board long-term incentive (LTI) bonus targets

FEM	To implement and annually update the Facility Environmental Module (FEM) in all pulp and fiber production facilities and share verified modules with customers from 2024[d]	2024 On track
Measure(s)	Lenzing conducts self-assessments in existing sites in 2022 and first external verification by 2023	2023 Achieved
	Lenzing conducts self-assessments and trainings for new legal entities (Prachinburi (Thailand) and Indianópolis (Brazil)) in 2023 and first external verification by 2024	2024 On track
Progress made in 2023	Seven sites have implemented FEM, verification finished for four sites with excellent scores of 90 to 95, and scores of 3 sites between 70 to 89. Self-assessments and training have been conducted for the sites in Indianópolis (Brazil) and Prachinburi (Thailand). Both sites are in preparation for verification in 2024.	

d) The scope includes all Lenzing facilities, also the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

Sustainable pulp and fiber production comes with strict criteria (such as emissions thresholds) not only for air emissions but also for water effluents and wastewater treatment. National or regional legislation as well as several industry standards and certification schemes – such as EU BAT, EU Ecolabel, and ZDHC – identify priority substances of concern and give guidance for reducing emissions, therefore avoiding harmful impacts on water bodies. Lenzing has decades of experience in the safe handling and treatment of process chemicals used during manufacturing, including water-related issues. Lenzing has been leveraging this extensive knowledge to develop and shape today's industry standards through multistakeholder initiatives such as ZDHC. Discharge limits are included in the environmental permits issued for all sites by relevant authorities based on national legislation. Additional intragroup discharge limits that reflect best practices may apply under internal environment standards.

Pollution of air, water and soil

[ESRS E2-4; GRI 305-7]

Sulfate emissions mainly originate from the viscose process. COD emissions originate from pulp and all fiber production processes and their reduction is part of the Lenzing Group's "Waste water" target. Total emissions of COD and sulfate have increased due to two additional production sites in Indianópolis (Brazil) and Prachinburi (Thailand) compared to last year. COD emissions without the two new production plants are still relevant for the "Waste water" target and hence additionally reported (see tables 18 and 19). The pulp facility in Paskov (Czech Republic) had significantly higher COD emissions in 2023. On the group-level, this resulted in specific COD emissions in the range of the baseline year. With the new scope including two new production facilities, specific emissions to water generally decreased compared to 2022. Lower production at the Grimsby (UK) site resulted in less total amine emissions to water compared to the previous year (tables 18 and 19). This site is expected to remain the main contributor of amine emissions in the Group until the new wastewater treatment plant is operational.

Absolute emissions to water after wastewater treatment plant Table 18

(Tons)	2014	2021	2022	2023
COD[a]	6,110	5,666	5,056	5,527
COD[b]				6,165
SO_4[b]	173,648	182,576	143,528	169,661
Amines[b]	198	247	250	206

a) Excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil). This KPI corresponds to the scope of the "Waste water" target, which was formulated before these new legal entities were conceptualized.
b) Including the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

Specific emissions to water after wastewater treatment plant — Table 19

(Index based on kg/t, 2014 = 100 %)

	2014	2021	2022	2023
COD[a]	100%	91.7%	90.1%	101.0%
COD[b]				78.7%
SO_4[b]	100%	104.0%	90.0%	76.2%
Amines[b]	100%	123.3%	137.7%	81.3%

a) Excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil). This KPI corresponds to the scope of the "Waste water" target, which was formulated before these new legal entities were conceptualized.
b) Including the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

Reduction of sulfur emissions

Sulfur and sulfur compounds are indispensable for the standard viscose fiber manufacturing process. Lenzing has dramatically reduced sulfur emissions over the decades by increasing recycle and recovery systems. Although all of the Lenzing Group's viscose fiber production sites (Lenzing, Austria; Nanjing, China and Purwakarta, Indonesia) are equipped with waste gas purification and recovery technologies, some carbon disulfide (CS_2), hydrogen sulfide (H_2S), and sulfur dioxide (SO_2) is emitted from the waste gas recovery systems and from on-site energy production. The finalization of the second CAP at the Purwakarta (Indonesia) site has advanced the further reduction of absolute and specific sulfur to air emissions. As the project was finished only during the reporting year, the impact of the additional recovery plant still needs to fully unfold in order to achieve 50 percent reduction ("Air emissions" target). Sulfur emissions without the two new production plants are still relevant for the target and hence additionally reported (see table 21).

On a group-wide level, including two new production facilities, absolute emissions of nitrogen oxides increased from additional operations in pulp production and energy generation, while specific emissions decreased significantly compared to 2022 (tables 20 and 21).

Lyocell fiber production generates only trace emissions as NMMO, an organic solvent, remains in the water/solvent cycle throughout the entire process and is recovered at a rate of more than 99.8 percent.

Absolute emissions to air[a] — Table 20

(Tons)	2014	2021	2022	2023
Sulfur (CS_2 and H_2S emissions expressed as sulfur)	34,787	25,969	21,449	18,798
SO_2	3,908	2,603	2,419	2,220
NO_x[b]		1,321	946	2,707

a) Includes all legal entities. Sulfur emissions were calculated using mass balance, and SO_2 emissions are based on measurements.
b) NO_x data is only available on Group level from 2019 onwards respectively for the Indonesian production facility since 2021.

Specific emissions to air — Table 21

(Index based on kg/t, 2014 = 100 %)

	2014	2021	2022	2023
Sulfur (CS_2 and H_2S emissions expressed as sulfur)[a]	100.0%	73.8%	67.1%	60.3%
Sulfur (CS2 and H2S emissions expressed as sulfur)[b]				42.1%
SO_2[b]	100.0%	65.9%	67.4%	44.3%

a) Excluding the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil). This KPI corresponds to the scope of the "Air emissions" target, which was formulated before these new legal entities were conceptualized.
b) Including the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

For more information about other waste streams besides waste water and air emissions, please see the "Resource use and circular economy" chapter.

Pollution stakeholder engagement

[GRI 3-3f]

Zero Discharge of Hazardous Chemicals (ZDHC)

The Zero Discharge of Hazardous Chemicals (ZDHC) multi-stakeholder collaboration initiated a special focus and task teams for wastewater, sludge, solid waste and air emissions in the textile industry. Lenzing has been part of the Man-Made Cellulosic Fibers (MMCF) task team on wastewater, sludge, solid waste and air emissions since 2018. In 2020, Lenzing adopted the published ZDHC guidelines on wastewater, air emissions and responsible fiber production for MMCF manufacturers. In 2021, Lenzing started the ZDHC Gateway reporting in accordance with the wastewater guideline in its viscose operations in Purwakarta (Indonesia), Nanjing (China) and Lenzing (Austria). In 2023 the revised and extended MMCF guideline which includes other fibers such as lyocell was published. Lenzing is implementing that guideline and the first reporting for the lyocell sites started in October 2023.

Water and marine resources

MANAGEMENT APPROACH

Material topic: Water and marine resources

[GRI 3-3]

Lenzing aims to improve its product water footprint by increasing the proportion of Lenzing pulp and expanding specialty product manufacturing. The company bases its communication strategy on results from Life Cycle Assessment (LCA), providing partners with information on water footprints to assist them in achieving their water targets. Lenzing's dedication to sustainable water management fosters its position as a global leader in environmentally responsible fiber production. For disclosures concerning emissions to water see "Pollution" chapter.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Better product water footprint through higher proportion of Lenzing pulp and expansion of specialty product manufacturing
- LCA-based communication of Lenzing's products with improved water footprint helps value chain partners fulfill their water targets

Negative

Own activities:

- Physical risk of water scarcity could affect operations
- Water withdrawal can have negative impacts on local communities or ecosystems

Policies and commitments

- Water Policy
- "Naturally Positive" sustainability strategy with "Water stewardship" focus area
- Lenzing Group sustainability targets
- Lenzing Group ISO 14001:2015 certification
- Group Policy for Safety, Health and Environment
- Group Environmental Standard
- Global Code of Business Conduct
- Global Supplier Code of Conduct
- Wood and Pulp Policy
- Higg FEM

Actions taken

- Further development of Environmental Key Data (EKD) reporting to comply with updated GRI indicator and ESRS disclosure requirements
- CDP Water Security reporting
- Environmental management system based on ISO 14001:2015 (including risk assessment and internal audits to ensure effectiveness of the measures implemented)
- Continuous development of Lenzing the Group Environmental Standard
- Regular Global QESH meetings with management review
- Integration of global water-related assessment tools into risk management

Sustainability targets, measures and progress

- "FEM" target

Stakeholders

- Local communities
- Enforcing authorities
- Customers

Responsible

- CEO
- Site managers

Supporting

- Global QESH
- Performance.Improvement.Technology

Impact, risk and opportunity management

Water stewardship

[GRI 303-2]

The Lenzing Group considers water-related issues in the upstream and downstream value chain of its products. The Life Cycle Assessment (LCA) methodology is useful for identifying hot spots and supports strategic decision-making. Lenzing aims to contribute to the sustainable use of water wherever it can exert a direct or indirect influence. This includes the withdrawal and consumption of fresh water, which are the subject of Lenzing's Group Environmental Standard and the Water Policy. These presuppose continuous monitoring and reporting according to the Environmental Management System, GRI, ESRS, CDP and other water-related standards and guidelines. Figure 10 illustrates Lenzing's contribution in this context at different stages of the value chain.

Policies

[ESRS E3-1; GRI 3-3c][7]

Water Policy

The latest Water Policy was approved by the managing board in 2022. In it, five key commitments are made:

- Lenzing recognizes and aligns its efforts to leading practices such as ensuring availability and sustainable water management of water and sanitation for all (SDG 6) as well as the conservation and sustainable utilization of the world's oceans, seas and marine resources for sustainable development (SDG 14).
- Lenzing engages value chain partners and other key stakeholders by fostering wider water stewardship and programmes based on sustainability principles in order to reduce water-related impacts and to benefit all members of communities.
- Lenzing commits itself to comprehensively monitor, control and report direct and indirect interactions with water resources. Lenzing continuously assesses the risks and opportunities due to climate change and other global environmental issues and addresses them in its business strategy.
- Lenzing optimizes and improves its performance in water use and product water footprint through alignment with industry best practice and continuous efforts in terms of technology and management innovations.
- Lenzing aims to continuously reduce water consumption and water related emissions above and beyond legal requirements in order to ensure water quality and availability where Lenzing operates, and thereby to meet its stakeholders' expectations.

Water stewardship Figure 10

a) Based on Higg MSI database v3.5 (Dec 2022)

[7] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

Actions

[ESRS E3-2; GRI 3-3d, 303-1]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Integration of global water-related assessment tools into risk management

Especially at the product level, LCA is the primary tool being used for assessing cradle-to-gate impacts and identifying areas for improvement within direct and indirect operations, e.g. pulp and fiber production or upstream supply chain. The procedure is supported by the environmental data collection process from in-house operations, including water use, effluents, and discharge of priority substances of concern, as well as gathering a growing volume of primary data on water use from suppliers. This approach is complemented by corporate water risk assessment, contextualizing qualitative and quantitative information of the supply chain and own production with WRI Aqueduct Water Risk Atlas and WWF Water Risk Filter. They not only support the evaluation of current water situation at specific locations but also provide insight into future scenarios based on the effects of climate change on water availability and quality.

Water stewardship actions

Lenzing considers water to be an extremely valuable resource, enabling the production of dissolving wood pulp and cellulosic fiber products. Water stewardship is therefore key to carefully interacting with this natural resource. Since water is a precious resource, the increasing water scarcity in many parts of the world poses a threat to people, the environment, and sustainable economic development. For example, poorly managed wood plantations can put pressure on the regional water balance. Lenzing procures certified wood from sustainably managed forests and therefore mitigates the potential impacts of water stress. On the other hand, some materials used in textile supply chains create high water impacts through water consumption and water pollution. Key issues in water stewardship are the efficient use of water in production and the use of state-of-the-art wastewater treatment technologies.

Lenzing provides fibers with a lower water impact than other cellulosic fibers in order to satisfy the growing future demand for sustainable fibers and innovates products that omit downstream value chain steps. This substantially reduces water use and impacts.

The spinning bath in the lyocell process contains water and the solvent NMMO to dissolve the cellulose polymer prior to spinning. The viscose process uses a mix of process chemicals and water. In both production technologies water is recycled by separating it from process chemicals and/or solvents with very high efficiency. This is the state-of-the-art technology at all Lenzing facilities. It enables water to be saved, provides optimal pre-treatment for water discharge, and optimizes fiber properties and quality. With the help of the recovery systems, Lenzing gains marketable co-products and reusable process chemicals. A final wastewater treatment stage reduces effluent charge, aiming to avoid potential harms to receiving water bodies by exceeding local quality requirements.

Metrics and targets

[ESRS E3-3; GRI 3-3e, 303-1]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

FEM	To implement and annually update the Facility Environmental Module (FEM) in all pulp and fiber production facilities and share verified modules with customers from 2024[d]	2024 On track
Measure(s)	Lenzing conducts self-assessments in existing sites in 2022 and first external verification by 2023	2023 Achieved
	Lenzing conducts self-assessments and trainings for new legal entities (Prachinburi (Thailand) and Indianópolis (Brazil)) in 2023 and first external verification by 2024	2024 On track
Progress made in 2023	Seven sites have implemented FEM, verification finished for four sites with excellent scores of 90 to 95, and scores of 3 sites between 70 to 89. Self-assessments and training have been conducted for the sites in Indianópolis (Brazil) and Prachinburi (Thailand). Both sites are in preparation for verification in 2024.	

d) The scope includes all Lenzing facilities, also the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

In order to ensure water quality and availability at Lenzing's sites, Lenzing aims to continuously reduce water consumption and water-related emissions. Various elements are considered within the target-setting process, which acknowledges that the water scarcity situation is changing in many regions due to climate change. In this respect, target setting will therefore also consider the future situation of water resource aspects.

Water consumption

[ESRS E3-4; GRI 303-3, 303-4, 303-5]

The objective of water management at Lenzing is to recycle and reuse as much water as possible. The pulp mill at Paskov (Czech Republic) has a closed-loop cooling water system and therefore requires little make-up water to compensate for losses. Furthermore, integrated pulp and fiber production at the Lenzing site (Austria) saves water by skipping the process of drying and re-moistening market pulp. Pulp and fiber production facilities obtain water from adjacent water bodies (mainly rivers and groundwater) and municipal local suppliers. Substantial amounts of water are consumed by the inherent moisture uptake of cellulosic fibers and evaporization in the cooling process, as water serves as a cooling and process agent during manufacturing.

Water withdrawal[a]

Table 22

(Megaliters)	2014	2021	2022	2023
		All areas		
Surface water	103,000	87,029	80,851	97,085
freshwater	0	87,029	80,851	97,085
Groundwater	14,000	12,980	14,335	12,747
freshwater	0	12,980	14,335	12,747
Seawater	0	0	0	0
Produced water	0	0	0	0
Third-party water	0	6,726	5,701	8,961
freshwater	0	6,726	5,701	8,961
of which in areas of water stress	0	0	0	1,837
Total water withdrawal	**117,000**	**106,735**	**100,887**	**118,793**
of which in areas of water stress	**0**	**0**	**0**	**1,837**

a) From freshwater (≤ 1,000 mg/L Total Dissolved Solids), no withdrawal from other water (>1,000 mg/L Total Dissolved Solids)

Specific[a] water use

Table 23

(Index based on m³/t, 2014 = 100 %)	2014	2021	2022	2023
Specific water intake/extracted	100.0%	90.2%	93.9%	79.2%

a) Specific indicators are reported per unit of production by the Lenzing Group (i.e. pulp and fiber production volumes).

The extended reporting scope including two new production facilities in Indianópolis (Brazil) and Prachinburi (Thailand) expectedly resulted in higher total water withdrawal and discharge (see tables 22 and 25). The start-up of the additional sites as well as switching one line from viscose to modal fiber production at the Nanjing (China) site negatively influenced total water consumption in the Group (see table 24). Still, the effects of Lenzing's realized expansion in water-efficient pulp and lyocell fiber production makes for a significant reduction of specific water use (see table 23).

Water consumption

Table 24

(Megaliters)	2014	2021	2022	2023
Total water consumption	**9,000**	**8,741**	**8,087**	**12,173**
of which in areas of water stress	**0**	**0**	**0**	**867**

Water discharge

Table 25

(Megaliters)	2014	2021	2022	2023
Water discharged by destination				
Surface water		40,860	35,166	50,293
Groundwater		0	0	0
Seawater		0	0	0
Third-party water		57,133	57,633	56,326
of which in areas of water stress		0	0	970
of this amount third-party water sent for use to other organizations		0	0	0
Water discharged by water quality				
Freshwater (≤ 1,000 mg/L Total Dissolved Solids)		69,772	66,496	65,957
of which in areas of water stress		0	0	970
Other water (>1,000 mg/L Total Dissolved Solids)		28,222	26,304	40,662
Total water discharged	**108,000**	**97,993**	**92,799**	**106,619**
of which in areas of water stress	**0**	**0**	**0**	**970**

Lenzing addresses water related challenges with a focus on its new facility in Prachinburi (Thailand), the Group's only site located in an area of high-water stress. The choice was made to completely rely on the lyocell technology in Thailand, which consumes only about one-third of the process water required in viscose technology. This completely aligns with Lenzing`s commitment to water stewardship and results in the low share of water withdrawal, consumption and discharge in areas of water stress (see tables above).

Water and marine resources stakeholder engagement

[GRI 3-3f]

For more information see the "Stakeholder Engagement" focus paper.

Biodiversity and ecosystems

MANAGEMENT APPROACH

Material topic: Biodiversity and ecosystems

[GRI 3-3]

The World Economic Forum[8] identifies the loss of biodiversity and ecosystem collapse as one of the top three global risks to people and the planet, alongside climate change. Investment in the protection of biodiversity is also critical to the success of Lenzing's business, as wood is the most important raw material for Lenzing. The main source of potential impact from the Lenzing Group's operations and supply chain is therefore connected to land use by forestry. Negative effects on biodiversity can arise from intensified utilization of forests. On the other hand, the positive effects of sustainable forest management on biodiversity and ecosystems are well known[9] and can be further explored and implemented. The company therefore continues to innovate in the fields of responsible systems, processes and products that mitigate risks to the natural environment. Lenzing's innovation in fiber production also provides end-of-life solutions for textile and nonwoven products. In 2023, the company received reconfirmation from Scripps Institution of Oceanography at the University of California, San Diego that LENZING™ generic fibers (LENZING™ Viscose Standard, LENZING™ Lyocell Standard and LENZING™ Modal Standard) are biodegradable in marine environments[10]. Lenzing is part of the Textile Exchange's Advisory Group for the Biodiversity Benchmark, which supports companies in understanding and mitigating their impact on nature.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- The protection of biodiversity and ecosystems plays a crucial role in climate change mitigation
- Maintaining and improving the function of forests in their ecosystems while ensuring the long-term availability of wood as a raw material
- Cellulosic materials offer a biodegradable alternative to plastics, helping to reduce the impact of lost materials on ecosystems, water and soil compared to plastics, which have not been disposed correctly

Negative

Business relationships:

- Loss of biodiversity in poorly managed forest ecosystems
- The loss of biodiversity could also lead to a significant change in available wood species for fiber production
- Worst case scenarios consider potential breakdowns of entire forest ecosystems at the regional level and correspondingly high volatility in wood prices

Policies and commitments

- Strict Wood and Pulp Policy
- Bioenergy Policy
- Centrally managed wood and pulp procurement
- CanopyStyle Initiative
- Global Lenzing Supplier Code of Conduct
- Global Code of Business Conduct
- Group Environmental Standard
- Sustainability strategy "Naturally Positive"
- Lenzing Group Sustainability targets

Actions taken

- The Lenzing Group is part of the Advisory Group of Textile Exchange Biodiversity Benchmark
- Lenzing proactively participates in conservation projects to protect the world's ecosystems
- Lenzing addresses biodiversity preservation through one of two approaches, depending on the global region:
  - Sustainably managed forests in the Northern hemisphere by Lenzing's wood and pulp suppliers in Europe and North America
  - Plantation forestry is conducted mainly in the Southern hemisphere by Lenzing's pulp supplier in South Africa and by the new pulp plant in Brazil
  - Using wood from sustainably managed semi-natural forests supports biodiversity
  - When sourcing from plantations, considerable efforts are made to set aside conservation areas to protect and maintain biodiversity
- By implementing circular thinking (e.g. closedloop, recovery) and high environmental standards (Group Environmental standards based on EU BAT and EU ecolabel certifications) in Lenzing's operations, procurement and innovations, the company minimizes the impact on ecosystems
- Lenzing has been working for many years with NGOs, customers and partners along the downstream value chain to raise public awareness of biodiversity and take conservation measures to preserve it

Sustainability targets, measures and progress

- "Conservation project Albania" target
- "Conservation area Brazil" target
- "Conservation projects" target

Stakeholders

- Wood suppliers
- NGOs
- Textile Exchange (TE) Biodiversity Benchmark
- Forest certificate holders
- Policymakers
- CDP Forests
- Wood K plus
- Brand and retailers
- Investors
- Insurances
- Austrian Federal Forests (Österreichische Bundesforste, Öbf)
- Inspiring Cooperation Empowering People (ICEP)

[8] WEF Global Risk Report 2024, long-term risks (10 years)
[9] Kunz 2007: Artenschutz durch Habitatmanagement. Chapter 6.2 Wiley-VCH
[10] Royer S-J, Greco F, Kogler M, Deheyn DD (2023) Not so biodegradable: Polylactic acid and cellulose/plastic blend textiles lack fast biodegradation in marine waters. PLoS ONE 18(5): e0284681. https://doi.org/10.1371/journal.pone.0284681

- Lenzing signed up to the Science Based Targets for Nature (SBTN) Corporate Engagement Group, and European Business Nature commitment
- CDP Forests, Climate Change, and Water Security: triple "A" rating, which is the best achievable outcome
- Lenzing achieves the highest Hot Button category by the Canopy Style initiative, the dark green shirt, for the fourth time
- Lenzing participates in the Circular Fashion Partnership
- Biodegradability of LENZING™ generic fibers (LENZING™ Viscose Standard, LENZING™ Lyocell Standard and LENZING™ Modal Standard) reconfirmed in 2023 by renowned marine research institute at the University of California, San Diego – effective alternative against environmental pollution from plastic waste

Responsible

- Member of the Managing Board (Pulp)
- Senior Director Purchasing Wood
- SVP Commercial Affairs Pulp

Supporting

- Pulp Trading (PTG)
- Corporate Sustainability

Strategy

[ESRS E4 ESRS 2 SBM-3; GRI 3-3ab][11]

See "Actual and potential negative and positive impacts, risks and opportunities" in the management approach at the beginning of the chapter.

According to the IPBES, pressures on nature leading to loss of biodiversity and ecosystem functions are categorized into five groups (IPBES 2019[12] as cited by Science Based Targets for Nature (SBTN)[13]):

1. Land/ water/ sea use change
2. Resource exploitation
3. Climate change
4. Pollution
5. Invasive species

In the context of global biodiversity loss, the textile and apparel industry has recently become more aware of its contribution to this problem[14] [15]. The focus is currently on the agricultural production of natural fibers (mainly cotton, and animal fibers like wool)[16], as agricultural land use is seen a main driver of biodiversity loss, although wood sourcing from forests is also seen as a potential cause. Pollution issues related to fiber production and textile processing, potentially occurring from all materials including synthetics, are currently considered up to a lesser extent in a biodiversity context[16]. Textile and nonwovens products have potential negative impacts at the end of their life due to littering in land and water ecosystems, especially via non-biodegradable materials that are leaked into the environment. Lenzing as a leading cellulose fiber manufacturer is focusing on three areas: its wood and pulp sourcing, its fiber production processes and products' end of use, in order to address biodiversity loss by minimizing the impact of biodiversity drivers.

To pursue the development of its biodiversity strategy, Lenzing has joined the European Business Nature Commitment (EBNC), and the Science Based Targets for Nature (SBTN) Corporate Engagement Program in 2023. Both organizations are focusing on business action to halt and reverse nature loss by 2030. They provide guidance for high level action, in steps like "assess – commit-transform- disclose" of EBNC, collaboration in developing and selecting suitable frameworks and tools for assessing impacts and dependencies, and guidance for setting targets.

Impact, risk and opportunity management

[ESRS E4 ESRS 2 IRO-1; GRI 304-1, 304-2, 304-3]

Assessment: State of Lenzing's influence and dependencies on biodiversity and ecosystems

The Lenzing Group uses two different types of forestry for its wood sourcing, depending on the global region: sustainable and multifunctional forest management is applied in the Northern hemisphere by Lenzing's wood and pulp suppliers in Europe and North America. Plantation forestry with high sustainability standards is conducted mainly in the Southern hemisphere by Lenzing's pulp supplier in South Africa and by the new pulp plant in Brazil. In Lenzing's joint venture project, LD Celulose, with Dexco (formerly Duratex) in Brazil, wood is sourced from FSC®-certified plantations of currently more than 90,000 hectares. Plantation forestry can reduce deforestation pressure on natural (primary) forest areas by providing wood at very high yields per unit area as an alternative to sourcing it from natural forests. FSC® certification entails management criteria to protect biodiversity[17], as determined in detail in the national standards.

Lenzing's impacts and dependencies

Wood is the most important raw material for Lenzing. The main source of potential impact from the Lenzing Group's operations and supply chain is therefore connected to land use by forestry. Lenzing also mainly depends on biodiversity and the proper functioning of healthy forest ecosystems that provide the raw material of wood. Negative effects on biodiversity can arise from over-in-

[11] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.
[12] IPBES 2019: Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. E. S. Brondizio, J. Settele, S. Díaz, and H. T. Ngo (editors). IPBES secretariat, Bonn, Germany. https://ipbes.net/global-assessment
[13] Science-based targets for nature. Initial guidance for businesses. 2020.
[14] Textile Exchange, Biodiversity Insights Report 2021. https://mci.textileexchange.org/biodiversity/insights/
[15] Global Fashion Pact, https://www.thefashionpact.org/our-work/#Tools-and-ressources
[16] Textile Exchange (2023), Biodiversity Landscape Analysis for the Fashion, Apparel, Textile, and Footwear Industry. https://textileexchange.org/knowledge-center/reports/biodiversity-landscape-analysis/
[17] FSC Global Development GmbH (2014). FSC® and Plantations. FSC's position on plantations. Available at: https://ic.fsc.org/download.fscs-engagement-with-plantations.a-1296.pdf [Accessed 6 February 2024]

tensified utilization of forests. On the other hand, the positive effects of sustainable forest management on biodiversity and ecosystems are well known[18] and can be further explored and implemented.

Semi-natural forests do not require irrigation. Plantations of LD Celulose and those of Lenzing's suppliers are situated in areas with sufficient rainfall, this is a legal requirement for establishing plantations in the respective countries. Therefore, it can be assumed that groundwater levels are not significantly affected and salinity levels in soils are not increased due to wood sourcing in Lenzing's sphere of influence.

In the case of semi-natural forests, it can be assumed that impacts on native species and on biodiversity will be long lasting, since many areas have been managed in this way for several forest generations. An internal case study from 2022 commissioned by Lenzing on Austrian forests in conjunction with the Austrian environmental NGOs umbrella organization Umweltdachverband has pointed out that there are numerous species living in managed beech forests in Austria, among them also red-list species, which have adapted to the management practices. The study concluded that reversing these semi-natural forests to completely natural forests (stopping all management) could potentially harm these species. For a summary of the findings, see the "Biodiversity and ecosystems" focus paper.

Additional potential impacts on water, soil, and air can arise from production facility emissions or from transportation. For more information, please see the chapters "Pollution", "Water and marine resources" and "Raw material security".

At the end of the value chain of textile and nonwoven products, biodiversity impacts can arise from non-degradable materials entering the environment, if those products are not correctly disposed of. For more information on biodegradability of Lenzing's fibers, please see the "Resource use and circular economy" chapter.

Monitoring

Biodiversity and ecosystem status monitoring in the Lenzing Group is performed in the global regions via two different approaches. These approaches are explained below. Pulp suppliers apply their own monitoring schemes.

In Europe, biodiversity is monitored at a national level according to the Forest Europe Criteria. Results are published regularly in the European overview[19][20].

The pulp mill in Brazil is supplied with wood from plantations owned and maintained by LD Celulose, which is also responsible for monitoring. To ensure that the plantation management maintains compliance with the requirements of the Brazilian Forest Code, LD Celulose has a framework of internal and external processes. There are ongoing biodiversity monitoring projects in which data on local biodiversity and the potential expansion of invasive species is monitored. The internal GIS (Geographic Information System) team collects satellite imagery on an annual basis and evaluates the location, size and status of the Legal Reserve areas (LRs) and Permanent Preservation Areas (APPs) on the managed land. The data is also provided to the field teams in the form of maps. Furthermore, periodic field audits by internal environmental specialists ensure that the quality of LRs and APPs is maintained.

Dexco started its biodiversity research projects in its managed areas in the 1970s. LD Celulose has continued to monitor flora and fauna in the areas that have remained under its management and those directly influenced by the mill site through partnerships with universities[21], in addition to internal programs. These programs are carried out annually in the dry and rainy seasons and aim to monitor possible impacts on local biodiversity. The programs are also required by the Brazilian environmental agency.

Attempts to quantify impacts from land use on biodiversity usually consist of two components: the quantity of land (forest) area used and the intensity of use. The land area of plantations managed by LD Celulose in Brazil is known exactly (table 29). The estimation of the other lands' area used for Lenzing's wood sourcing is part of the initiated "Biodiversity concept" project. Variations in data availability and data quality can arise depending on the forest type, the land ownership, the sourcing area and the supply chain position (wood or pulp sourcing to Lenzing) (table 26). In 2023, first attempts to estimate forest area use in the direct wood supply to Lenzing's European pulp mills were started. The work is still ongoing so no results can currently be shared.

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[18] Kunz 2007: Artenschutz durch Habitatmanagement. chapter 6.2 Wiley-VCH

[19] Forest Europe 2015, and 2020: State of Europe's Forest 2015. Ministerial Conference on the Protection of Forests in Europe, June 2016., and 2020, State of Europe´s Forest 2020. https://foresteurope.org/publications/

[20] Indicators of sustainable forest management in Austria reports from 2017 and 2020. https://info.bmlrt.gv.at/themen/wald/walddialog/dokumente.html, Czech Republic and Slovakia forest reports: Ministry of Agriculture of the Czech Republic, Information on Forests and Forestry in the Czech Republic by 2017 (English), Zpráva o stavu lesa a lesního hospodářství České republiky v roce 2020 (Czech). Ministry of Agriculture and Rural Development of the Slovak Republic, Report on the Forest Sector of the Slovak Republic 2020.

[21] Duratex Annual Report 2018. Available at: https://www.dex.co/noticias/duratex-divulga-relatorio-anual-2018/ [Accessed 15 February 2021]

Quantity of forest area used for Lenzing's wood and pulp sourcing: Data availability and quality

Table 26

Lenzing sources	Forest type	Land use intensity	Data/estimates	(Expected) data quality
Wood	Plantation	High	Known (see "Quantitative description of area managed and influenced by LD Celulose")	high
Wood	Semi-natural	Low to medium	Estimates needed based on regional statistical data	medium
Pulp (pulp supplier sources wood)	Plantation	High	Estimates possible	medium
Pulp (pulp supplier sources wood)	Semi-natural	Low to medium	Rough estimates	low

Conservation within LD Celulose's plantations

The plantation managed by LD Celulose contains a proportion of conservation area dedicated to biodiversity protection in accordance with legal requirements and FSC® standards, known as a High Conservation Value Area (HCVA). LD Celulose's forestry unit is supervised by ecology and environmental specialists who were also responsible for identifying the HCVA. The area contains *Pseudopaludicola facureae*, a species of frog found only in this region of Minas Gerais. This means that a higher level of monitoring is necessary as well as extra precautions for fire protection. It is a KPI (key performance indicator) for LD Celulose to protect endemic species and their habitat. The forestry unit constantly works to identify any areas that need to be classified as HCVA to ensure the protection of animal and plant species. For more information, please see the "Biodiversity and ecosystems" focus paper.

Brazilian environmental law determines the maintenance of Permanent Preservation Areas (APPs) and Legal Reserve (LR) areas. APPs are specific areas of vegetation, such as ciliary forests, areas of vegetation adjacent to water courses and areas of vegetation on slopes. Legal Reserve areas meet the obligation to preserve at least 20 percent of a property in a rural area. At the moment, 19,884 hectares of LD Celulose are protected areas (table 29).

In terms of conservation units that are outside the managed areas but close to the LD Celulose planting area, Parque Estadual do Páu Furado is located some 30 kilometers from the plantation. At this distance, the conservation unit is not impacted by LD Celulose's activities. The plantation is roughly 800 kilometers away from the Amazonas.

The main direct land use areas of the Lenzing Group are the plantations in Brazil, currently covering a total of 90,200 hectares (902 km^2). These areas were converted to agricultural land several decades ago. Large areas nearby are generally used for planting soy and coffee or grazing livestock. The trees within the plantation are eucalyptus species. A breeding and cloning selections program is continuing to improve the yield and robustness of the trees. LD Celulose does not use genetically modified organisms (GMOs).

Approximately 200 species of flora and 450 species of fauna were identified in the forest management units of LD Celulose. Among these species, the presence of animals such as the maned wolf and the giant anteater, which are characteristic of the region, is particularly noteworthy. No significant reduction in species has been registered in LD Celulose's plantation since the beginning of monitoring efforts.

Policies

[ESRS E4-2; GRI 3-3c]

Lenzing Group's Wood and Pulp Policy

In its Wood and Pulp Policy, Lenzing is committed to procuring wood and dissolving wood pulp exclusively from non-controversial sources.

In order to protect the world's remaining ancient and endangered forests as well as the biodiversity and ecosystems' integrity within these forests, Lenzing is committed to avoiding the use of wood and pulp containing wood sourced from regions such as the Canadian and Russian Boreal Forests, Coastal Temperate Rainforests, tropical forests and peatlands of Indonesia, the Amazon and West Africa. Lenzing states in its Wood and Pulp Policy that it is not procuring wood from plantations established after 1994 through the significant conversion of natural forests.

Regular risk assessments, audits, on-site visits, and independent third-party certification of sustainable forest management programs ensure compliance with the policy and Lenzing's commitment to no-deforestation. For more information, please see the "Wood and pulp" focus paper.

Additionally, Lenzing implemented a bioenergy policy in 2023 as an extension to its wood and pulp policy. This policy further ensures that no biomass connected to deforestation is used for energy use in the Lenzing Group.

Lenzing's actions

[ESRS E4-3; GRI 3-3d]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

In the presentation of Lenzing's biodiversity and ecosystem related actions, the AR³T framework (Avoid, Reduce, Restore, Regenerate, Transform) is considered a useful sorting scheme. In the following it can be seen how Lenzing implements this framework within its own sphere of influence. While Lenzing supports several restoration and regeneration projects across the world, within and outside of its value chain, it does not make use of biodiversity offsetting.

Avoid: Biodiversity due diligence via sustainable sourcing

Wood and dissolving wood pulp are Lenzing's most important raw materials. The Lenzing Group assumes responsibility by focusing on sustainable sourcing. Lenzing only sources wood and dissolving wood pulp from semi-natural forests and plantations (as defined by the Food and Agriculture Organization of the United Nations[22]). Moreover, it does not source materials from natural or ancient and endangered forests.

Forest certificates

Lenzing's wood procurement management system ensures that all wood is sourced from legal and sustainably managed sources. Lenzing demonstrates that wood sourcing complies with its high standards through verification based on FSC® and PEFC certification systems. All wood and dissolving wood pulp used by the Lenzing Group is either certified by FSC® and PEFC or controlled in line with these standards (see figures 19, 20 and 21 in the "Business conduct" chapter).

The forest certificates held by the Lenzing Group cover general criteria for biodiversity and forest ecosystem protection according to international standards. Additional criteria can be found in the national standards, which vary between countries. For example, the percentage of area set aside for conservation varies between countries and even regions within countries. For details on wood and pulp certification, see the "Business conduct" chapter.

Reduce: Via circular economy approaches and climate targets

The aim is to use fewer inputs from natural resources, and to minimize the impact of greenhouse gas (GHG) emissions and pollution.

Pollution prevention

In accordance with the strategic focus area of "Greening the value chain", the Lenzing Group has targets and programs in place to reduce emissions (including GHG emissions) affecting water and air. This is achieved by investing in cleaner energy or creating closed loop cycles e.g. for chemicals. For more information please see the "Climate change" and the "Pollution" chapter.

Resource use

Lenzing is committed to the cascading use of wood. This means that different qualities of wood are utilized for different applications in a hierarchy of their value. Lenzing uses timber generated from small trees through thinning, and from parts of large trees, that are unsuitable for high-grade products, such as furniture or construction. Furthermore, wood chips that are a by-product of saw mills are also used.

Lenzing's biorefineries produce dissolving pulp as the main product, as well as several biorefinery products and renewable energy. This results in 100 percent utilization of the wood. For details, please see the "Responsible production" focus paper and the "Resource use and circular economy" chapter.

Metrics and targets

[ESRS E4-4; GRI 3-3e]

AR³T Framework of actions for nature, from SBTN (2020)[a] Table 27

Avoid
Prevent impact from happening in the first place: prevent the impact entirely
Reduce
Minimize impacts, but without necessarily eliminating them
Restore
Initiate or accelerate the recovery of an ecosystem with respect to its health, integrity, and sustainability, with a focus on permanent changes in its state
Regenerate
Take measures designed to increase the biophysical function and/or ecological productivity of an ecosystem or its components within existing land uses, often with a focus on a few of nature's specific contributions to people (e.g. regenerative agriculture often focuses on carbon sequestration, food production, and nitrogen and phosphorus retention)
Transform
Take measures contributing to system-wide change, notably to alter the drivers of nature loss, e.g. through technological, economic, institutional, and social factors and changes in underlying values and behaviors

a) Science-based targets for nature. Initial guidance for businesses. 2020

Lenzing's biodiversity targets

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Conservation project Albania	**To implement a conservation solution of 20 ha in Albania in combination with a social impact project by 2024**	**2024 On track**
Measure(s)	Lenzing reforests 20 ha of degraded land in Albania	**2024 On track**
	Lenzing establishes a training center for local communities in Albania	**2024 On track**
	Lenzing supports interdisciplinary vocational trainings and school partnerships in Albania	**Yearly On track**
Progress made in 2023	The scope of the project has been significantly expanded to other countries in Western Balcan to include the Kosovo, North Macedonia and Montenegro. This expansion was funded by Austrian Developmet Agency (ADA) and Lenzing, and is coordinated by Inspiring Cooperation Empowering People (ICEP). In 2023 10,778 trees were planted, which culminates in additional 5 ha of afforested area.	

[22] Carle, J., and Holmgren, P. (2003). Working paper 79. Definitions Related to Planted Forests. In: Food and Agriculture Organization of the United Nations (2003). Forest Resources Assessment Program Working paper series. Available at: http://www.fao.org/forestry/25853-0d4f50dd8626f4bd6248009fc68f892fb.pdf [Accessed February 15, 2021]

Conservation area Brazil	To implement conservation solutions on 15,000 ha at the new pulp mill in Indianópolis (Brazil) by 2030	2030 Achieved
Measure(s)	Lenzing increases the protected area at the site in Indianópolis (Brazil) from 13,000 ha to 15,000 ha	2030 Achieved
Progress made in 2023	Lenzing achieved this goal in 2022 and increased the total conservation area in Brazil even further than the target, to more than 19,000 ha in 2023.	

Conservation projects	To engage in further conservation, biodiversity protection and restoration activities in regions where forests are at risk or should be improved by 2025	2025 On track
Progress made in 2023	Lenzing supported several projects outside of its value chain in 2023 for example a project in Austria for protection of wild bees, for a detailled description of all projects please see the “Restoration and reforestation” of this chapter.	

As described, Lenzing uses the AR³T framework as a reference for its approach. That said, the development of a comprehensive and systematic approach to biodiversity and ecosystems is planned for the Lenzing Group, also in line with the “Conservations projects” sustainability target (table 28).

Several targets have been derived from the Lenzing sustainability strategy and the corporate “Better Growth” strategy, containing elements that positively influence biodiversity and ecosystem services or nature’s contributions to people.

SBTN’s framework for action and Lenzing’s approach Table 28

Category of action	Reference	Lenzing’s approach
Avoid	Wood and Pulp Policy	Lenzing explicitly commits to avoiding deforestation in the procurement criteria of the Wood and Pulp Policy
Reduce	“Textile recycling“ target	To offer viscose, modal and lyocell staple fibers with up to 50 percent post-consumer recycled content on a commercial scale by 2025
Restore	“Conservation project Albania“ target	To implement a conservation solution of 20 ha in Albania in combination with a social impact project by 2024
	“Conservation area Brazil“ target	To implement conservation solutions on 15,000 ha at the new pulp mill in Indianópolis (Brazil) by 2030
Regenerate & Transform	“Conservation projects“ target	To engage in further conservation, biodiversity protection and restoration activities in regions where forests are at risk or should be improved by 2025

Measures for biodiversity and ecosystem enhancement within LD Celulose’s plantations

[ESRS E4-5; GRI 304-1, 304-2, 304-3]

Quantitative description of areas managed and influenced by LD Celulose Table 29

	2021		2022		2023	
	ha	%	ha	%	ha	%
Total area	71,631	100	78,640	100	90,200	100
Forest/plantation area	54,081	75	58,194	74	63,757	71
Owned	–		–		-	
Leased/managed	54,081	75	58,194	74	63,757	71
Protected	14,623	20	17,065	22	19,884	22
FSC® area	43,835	61	47,608	60	47,608	53
Infrastructure	2,927		3,380	4	6,559	7

The plantations managed by LD Celulose operate fully in accordance with the guidelines and high standards of Lenzing for sourcing wood and pulp. During the planning, the intense utilization of wood resources and the potential negative effects on biodiversity were part of the risk analysis. In order to avoid these potential risks, LD Celulose works with conservation programs and also follows the FSC® standards.

In the responsible management practiced by LD Celulose, techniques are employed that aim to protect biodiversity as well as soil and water quality. Examples of these measures are:

- **Minimum cultivation**: For soil conservation, LD Celulose uses the minimum cultivation technique, which consists of keeping the remaining plant material at the harvest site to form layers of soil protection and ensure the cycling of nutrients.
- **Nutritional recommendation:** LD Celulose performs soil analyses to determine the requisite fertilizer recommendation for maintaining soil fertility.
- **Habitat connectivity:** To improve the connectivity of the Permanent Preservation Areas and Legal Reserves, LD Celulose carries out mosaic planting, establishing ecological corridors that aim to connect fragments of native forest. This connectivity allows animals and plants to migrate between different conservation areas, so that different populations can mate and preserve the genetic diversity. This measure is a voluntary activity beyond the legal and certification-related requirements.
- **Preservation and monitoring of riparian forests**: These forest areas along waterways contribute to the maintenance of water quality and the quantity of water available. They retain sediments and nutrients carried by the rain, preventing water pollution and silting in bodies of water. In the Brazilian legislation, riparian forests are protected as they are considered Permanent Preservation Areas. LD Celulose defines all Permanent Preservation Areas in its forest management units and monitors these riparian forests.

Restoration and reforestation

[GRI 304-3]

Lenzing supports conservation solutions in other regions not related to its own supply chain, such as afforestation in Albania, DR Congo and the USA. Additionally, Lenzing is committed to addressing the protection of ancient and endangered forests in Canada (Broadback Forest Quebec, Vancouver Island) and Indonesia (Leuser Ecosystem) at the political level. In 2023, Lenzing signed the letter "World's MMCF Producers Call on the Convention of Biological Diversity to support conserving at least 30 percent of the world's forests by 2030" prepared for the COP 15 conference in the Convention of Biological Diversity (Montreal).

Lenzing has set itself the target of engaging in further conservation, biodiversity and restoration activities in regions where forests are at risk ("Conservation projects" target). To make further progress in meeting this target Lenzing in 2022 defined ways of identifying projects, to which it aims to contribute.

- Identify requirements to follow from CDP and Canopy
- Identify potential partners in the market with experience and a broad network for a successful partnership
- Identify how other players in the market are tackling the biodiversity issue

In 2023, Lenzing aligned the projects, identified, with CDP (Carbon Disclosure Project), Canopy and ÖBf (Österreichische Bundesforste/Austrian federal forests).

Innovation for people: Reducing the carbon footprint, protecting forests and improving lives of rural communities vulnerable to the effects of the climate crisis
This pilot project in the Democratic Republic of Congo, Luozi Region, combines both social and environmental components in a holistic approach to sustainably protect the environment, reduce CO_2 emissions and sustainably improve the lives of vulnerable children and families in one of the poorest countries in the world. In this research project, CO_2 is to be reduced by means of innovative products, such as agricultural waste-based charcoal and energy-saving stoves. Using this alternative charcoal reduces the need for wood harvest in the forests. In addition, income-generating activities will provide alternatives for small-scale farmers so that they no longer must produce and sell wooden charcoal. Ecological and smart integrated agricultural activities, such as combining agroforestry with beekeeping, will increase the income of smallholders, improve soil fertility and reduce deforestation. Accompanying advocacy and education measures are carried out to minimize slash-and-burn agriculture and improve forest protection.

Maintenance and support of ecosystem services in Austria
In 2023, Lenzing actively engaged in the maintenance and support of ecosystem services that are provided by forests of its wood suppliers. This was achieved through a collaboration with Österreichische Bundesforste AG (ÖBf, Austrian Federal Forests). The primary aim of the collaboration is to support the protection of moorland and peat bogs in the state of Upper Austria. Besides the peat bog restoration, the project also supports additional activities, which improve or maintain the ecosystem services provided by forests. For example, in 2023 Lenzing supported the planting of 200 bee and pollinator friendly shrubs along an approximately one kilometer long forest trail. This activity counteracts the decline of pollinators by restoring their habitats which are increasingly affected by intensive agriculture and pesticide use.

During 2023, Lenzing and ÖBf jointly outlined and prepared an action plan for the engagement on peat bog protection in the coming year.

Biodiversity around the production site in Lenzing (Austria)
Lenzing has built a photovoltaic plant on a former landfill site in the immediate vicinity of the Lenzing (Austria) site, which was finished in 2022. Currently, Lenzing is creating a biodiversity island at this site by planting a lean meadow between the photovoltaic modules. This will ensure that the area can become a habitat for local insects, birds and other animals, while at the same time delivering renewable energy to the site. Seeds for local plants were carefully selected to ensure a high diversity of wild plants for the local animal population. At the edges of the rough pastures, maintenance measures are deliberately avoided in order to create natural habitats for microorganisms and insects through dead wood, stone accumulations and foliage.

Lenzing manages a forest association of around 40 hectares around the main plant in Lenzing. The forest serves as a "green belt", a natural barrier for site specific emissions around the Lenzing site, and offers several ecosystem services, including recreational ones for the local community. The forest area, especially in the 80-year-old stand, is a habitat for wildlife and insects. Lenzing follows a sustainable management concept that avoids clear-cutting. It favors the selective removal of individual trees and uses this local wood for its fiber production. It also disposes of the rootstocks and other waste parts through the local district heating generator. This way, Lenzing reduces emissions and keeps the raw material in the region. When reforesting, emphasis is also placed on native and diverse tree species to mitigate future challenges of climate change. Lenzing works with local partners to keep the added value in the region.

Bee protection project in Brazil

For many years, LD Celulose has been involved in an initiative to support beekeepers. The company maintains a partnership with associations of honey producers in the Triangulo Mineiro region and in rural São Paulo. LD Celulose makes part of its forests available so that beekeepers can set up their bee boxes there. The 4,000 boxes currently installed produce about 50 tons of honey per year. This partnership benefits both the environment and the local communities, as it leads to increased protection and monitoring of the forests, an increase in bee populations and higher income for the beekeepers. A new phase of the project is the implementation of a training programme for young people on how to produce honey, together with the partner associations of honey producers.

Albania

The Lenzing Group started a forest conservation project in Albania in 2019. The project will continue until the end of 2024 as planned. Additionally, the scope of the project has been significantly expanded to include neighboring countries, this expanded project will continue after 2024. It is managed by the Austrian Development NGO ICEP and is funded by ADA (Austrian Development Agency) and the Lenzing Group. The original aim was to support the development of rural areas in Albania in the broader region of Shkoder (Ana e Malit) and Diber (Peshkopi) by using natural resources sustainably and fostering alternative income sources for communities. The goal of the original scope was to implement conservation solutions covering 20 hectares in this area. The extended scope now aims to afforest 45 ha of degraded land and restore additional 75 ha in the area. To achieve this 110,000 trees will be planted.

The transboundary catchment area, which is an area of land where water collects when it rains, of the Drin River includes the countries of Albania, Kosovo, North Macedonia and Montenegro. This area consists of large forest and pasture areas, rich biodiversity ecosystems and is one of the most water-rich areas in Europe in terms of freshwater ecosystems. Over the last three decades, the forest area in the four target countries along the river basin has been heavily exploited and is under threat due to increased illegal logging activities and consequences of climate change like drought and forest fires.

The long-term impact of the project is to contribute to climate change mitigation and sustainable development along the Drin River through strengthened integrated forest management (IFM). Through the set measures, the living conditions of rural communities in the target areas will be improved. The overall outcome of the project is to increase socio-economic and environmental benefits for local communities through ecosystem services. The project applies a multi-stakeholder approach, integrating national and international experts as well as local communities, central and local authorities, and on-going initiatives.

Achievements in 2023

- 5 ha afforested
- 10,778 trees planted
- 63 local forest workers have been employed and educated in reforestation and the use of machinery
- Kick-off conference on Integrated Forest Management with 60 participants from public administration, ministries, universities, public and private forestry companies, etc.

Fiber brand-related climate protection, forest protection and afforestation projects 2023

Lenzing launched additional low-carbon TENCEL™ and VEOCEL™ branded lyocell and TENCEL™ branded modal fibers for applications in the textile and nonwoven industry. Based on the concept of reduce-engage-offset, Lenzing has focused on low carbon emissions through various reduction actions and has balanced the yet remaining carbon emissions of these fibers through carbon compensation projects. The new fibers are certified by ClimatePartner in accordance with the Greenhouse Gas Protocol, the leading global framework for measuring carbon emissions. All selected and supported climate and forest protection and afforestation projects are certified according to Gold Standard VER or Verified Carbon Standard.

For projects supported by Lenzing in 2022 - 2024 and their details see the following ClimatePartner ID Tracking pages:

- ClimatePartner projects/TENCEL™ branded fibers
- ClimatePartner projects/VEOCEL™ branded fibers

For 2023/24, Lenzing will continue to support and use Offset credits from a broad mix of projects such as:

1. Wind energy in Thailand/West Huaybong
2. Geothermal energy in China/Changdao
3. Solar energy in India/UP, Karnataka & Maharashtra
4. Bio gas in India/Punjab
5. Afforestation in China/Anlong
6. Forest protection in Brazil/Labrea

The acquired credits will be retired according to the consumptions in each year.

Biodiversity and ecosystems stakeholder engagement

[GRI 3-3f]

Austrian Federal Forests (Österreichische Bundesforste, ÖBf)

One important wood supplier to the Lenzing site (Austria) is the state company Österreichische Bundesforste (ÖBf AG, Austrian Federal Forests). Managing 10 percent of the national territory and 15 percent of Austria's woodland, ÖBf is the largest ecosystem manager, forest managing company and owner of hunting and fishing licenses. Sustainability forms the guiding principle for all ÖBf activities. The Lenzing site pulp mill obtains more than 35 percent of its wood from Austrian forests and the state of these forests is especially important for its sourcing. In Austria, forest biodiversity is monitored regularly according to a Biodiversity Index[23]. Recent outcomes are reported in the "Indicators of sustainable forest management 2020" [24] from the multi-stakeholder organization "Walddialog", as a contribution to the Forest Europe indicators and targets process. The ÖBf team for ecological landscape management is developing individual nature conservation plans for each of the 120 ÖBf-forest units, in addition to the existing forest management plans[25].

BIMUWA

A publicly funded research project "Biodiversity and multifunctional forest management" (BIMUWA [26]) developed specific measures to protect endangered species (red-list species) and increase biodiversity under local conditions of the PEFC region 6 (located in Austrian provinces Styria and Carinthia), which are integrated into daily forest management work. ÖBf is cooperating with the NGO umbrella organization Umweltdachverband on this. As the measures are very concrete and easy to implement, positive effects can be scaled to large forest areas. In 2023, Lenzing supported the roll-out of the results to the interested private forest owners by presenting its view during the information events in the region.

Textile Exchange (TE) Biodiversity Benchmark

The Textile Exchange Biodiversity Benchmark was launched on December 2, 2020. The benchmark is part of the TE Corporate Fiber and Materials Benchmark (CFMB) Program and is connected to TE's "Climate+" strategy. The role of the benchmark is to address biodiversity loss and support improvements in the industry's sphere of influence through knowledge-sharing. The methodology for companies to set targets for nature is being developed through the Science Based Targets Network (SBTN).

In 2021, Lenzing contributed as a member of the advisory group, providing input to the tool development and its own input to the benchmark. The "Biodiversity Insights Report 2021" provides "a first global baseline for the apparel and textile industry" regarding the awareness of its impacts on biodiversity. It describes approaches to actions in business integration, transparency, materiality, implementation, monitoring and evaluation, as well as corporate reporting. In 2022, the findings of the Insights Report were integrated as a new chapter of questions into the CFMB program. In 2023, the "Biodiversity Landscape Analysis" report was published, with a focus on natural fibers from plants (cotton) and animal hair (wool), and not much on regenerated cellulosic fibers.

Inspiring Cooperation Empowering People (ICEP)

Inspiring Cooperation Empowering People (ICEP) is an independent Austrian non-governmental organization (NGO) with a business-oriented focus. ICEP works with partner organizations in emerging markets and with Austrian companies and implements projects worldwide with the aim of getting more people actively involved in economic life. ICEP supports Lenzing since 2018 in the implementation of an ADA co-financed afforestation and conservation project in Albania. In 2023, a feasibility study for engagement in biodiversity improvement and social impact actions around the LD Celulose site in Indianópolis (Brazil) has been agreed, which will start in 2024.

Wood K plus

Many Austrian companies, including Lenzing, and scientific bodies have joined forces in the "Kompetenzzentrum Holz". It is a leading research institute in wood and wood-related renewable resources in Europe. Recent topics addressed by the competence center include advanced biomass utilization (e.g. via closing loops in pulp production), lignin and hemicellulose utilization, or the use of enzymes in the production process. One work stream of Wood K plus for Lenzing is sustainability in wood sourcing. In 2021, the focus shifted to biodiversity, including support for the work for the Textile Exchange Biodiversity Benchmark. In 2023 a doctoral study has been started on the topic of biodiversity metrics for the assessment of corporate impacts and dependencies. This work is supporting the development of Lenzing's biodiversity strategy.

WWF Austria

Lenzing has been invited to present at an event of the WWF Climate Group Talks[27] on "How to integrate biodiversity in your core business." Additionally, Lenzing contributed to a study by WWF and Ernst & Young "Management in the biodiversity crisis – How Austrian companies minimize risks and seize opportunities" [28] (translated title, study is in German language) with general insights and a case study.

[23] Geburek, T., Büchsenmeister, R., Englisch, M., Frank, G., Hauk, E., Konrad, H., Liebmann, S., Neumann, M., Starlinger, F. and Steiner, H. (2015). Biodiversitätsindex Wald – Einer für alle! In: Biodiversität im Wald. BFW Praxisinformation 37, pp. 6-8

[24] https://info.bmlrt.gv.at/themen/wald/walddialog/dokumente/indikatorenbericht-2020.html

[25] https://www.bundesforste.at/leistungen/naturraum-management.html

[26] BIMUWA website: https://www.bundesforste.at/leistungen/naturraum-management/foerderprojekte/biodiversitaet-und-multifunktionale-bewirtschaftung-im-wald.html

[27] https://www.wwf.at/artikel/einladung-climate-group-talks/

[28] https://www.wwf.at/wp-content/uploads/2024/01/WWF_Studie_Biodiversitaets-Management-Unternehmen_2024.pdf

Resource use and circular economy

MANAGEMENT APPROACH

Material topic: Resource use and circular economy

[GRI 3-3]

Lenzing already has successfully implemented circular economy practices as central parts of its business model for a long time by achieving greater efficiency in the use and reuse of resources. Such practices comprise closing loops in production processes and producing fibers that are biodegradable (applying to TÜV certified biodegrable and compostable LENZING™ fibers[29]) at the end of their life. Such measures also ensure that Lenzing remains financially competitive and compliant with environmental legislation. As Lenzing continues to drive circular solutions across both the business and the industry, the complex transition from a linear to a circular system requires a collaborative approach. For instance, the company has partnered with Swedish pulp producer Södra to generate more opportunities for recycling textile waste, creating circularity practices and promoting systematic change. The company strives to create as much value as possible through improved sustainability performance that impacts the entire value chain.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Creating new product offerings and business models to help the industry to change
- Optimizing the eco-footprint of Lenzing products
- Optimizing the value Lenzing generates via the environmentally responsible products it supplies
- Lowering emissions by closing energy and material loops
- Replacing products that cause end-of-life pollution (e.g. microplastics contamination) with biodegradable alternatives
- Valorizing biorefinery products
- Cutting the use of virgin raw materials
- Driving innovation on recycling and optimizing closed loop processes
- Joining forces and sharing know-how within partnerships for systemic change

Negative

Own activities:

- Potentially Lenzing products may have higher carbon footprint and emissions due to inefficient recycling systems and processes of the industry
- Falling behind competition in terms of offering products with recycled content

Business relationships:

- Transitional risks due to changing legislation and stakeholder expectations (NGOs, customers)

Policies and commitments

- “Better Growth” strategy
- “Naturally Positive” sustainability strategy
- Group Environmental Standard
- Group Waste Management Guideline
- Wood and Pulp Policy
- Bioenergy Policy
- Targets for textile recycling on track
- Lenzing intensified its collaboration with leading stakeholders and initiatives
- Lenzing launched a pilot project together with Södra with ARA and Salesianer on recycling their post-consumer textile waste
- Partner in Christian Doppler Laboratory for a recycling-based circular economy
- Contribution to supply chain transparency to facilitate circular economy projects
- Environmental management system based on ISO14001:2015 (including risk assessment and internal audits to ensure the effectiveness of the measures implemented)
- Member of the Circular and Sustainable Textile Clothing project (CISUTAC)
- Co-founded the Alliance of Chemical Textiles Recyclers (ACTR)

Sustainability targets, measures and progress

- “Textile recycling” target
- “Circular business model” target

Stakeholders

- ACTR
- Policy Hub
- CISUTAC
- European Apparel and Textile Confederation (EURATEX)
- Accelerating Circularity Project (ACP)
- Textiles 2030
- Södra
- Renewcell
- Forum for the Future

Responsible

- Members of the Managing Board (Pulp and commercial)
- VP Recycling Pulp

Supporting

- Corporate Sustainability
- Division Textile

[29] LENZING™ fibers which are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/ nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification applies for the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests for confirming biodegradability in marine environment were not yet done or finalized.

Actions taken

- Collaboration signed with Södra to jointly install a process for post-consumer cellulosic recycling in 2022
- Lenzing signed a five-year agreement for the sale of Renewcell's recycled dissolving pulp at the end of 2022

- Division Nonwoven
- Division Pulp
- Global Quality, Environment, Safety & Health (QESH)
- Research
- Site managers

Lenzing's circular economy vision

We give waste a new life. Every day

Lenzing strives to drive the industry towards a fully-fledged circular economy by giving waste a new life across all aspects of Lenzing's core business and by co-developing circular solutions with potential partners within and outside the current value chain to close loops wherever possible. Lenzing's vision is built on the following three pillars.

We use regenerative and recycled raw materials to help to protect the planet

Wood, a renewable raw material, is a key element of Lenzing's circular economy vision, being entirely converted into high-value products and bioenergy. Furthermore, an increasing amount of alternative cellulose feedstock is used from textile waste, as a raw material, and advanced by Lenzing's innovative technologies.

We think circular to design out waste and innovate processes

Lenzing develops and advances its sustainable practices continuously. This strategy minimizes environmental and social impacts not only within the company but across the entire value chain. Lenzing strives to lead in closing technological loops and optimizing the use of every resource with maximum economic value. Digital processes enhance transparency and support the shift from a linear to a circular supply chain.

We are not alone in this – Partnering for systemic change

To achieve a global shift towards a circular economy, collaboration is essential. Lenzing, as a fiber producer, is just one part of the textile and nonwoven value chain. Recycling textiles efficiently requires cooperation among designers, manufactures, consumers, recyclers and policy makers. Establishing effective post-consumer textile sorting and collection infrastructure is vital for expanding textile recycling. Lenzing is actively engaging in partnerships both within and outside the value chain. For more information, please see the "Stakeholder engagement" section in this chapter.

Impact, risk and opportunity management

[ESRS E5 ESRS 2 IRO-1; GRI 306-2][30]

See "Actual and potential negative and positive impacts, risks and opportunities" in the management approach at the beginning of the chapter.

Similar to other environmental issues, Lenzing identifies the generation of waste from a life cycle perspective and extends the assessment of impacts up and down the value chain. In 2021, Lenzing standardized its approach to environmental aspects and impact assessment in accordance with ISO 14001. This standardized approach was aligned across all sites in 2022 and has been fully implemented by 2023.

Policies

[ESRS E5-1; GRI 2-24, 3-3c, 306-2]

Lenzing Group's Wood and Pulp Policy
In its Wood and Pulp Policy, Lenzing is committed to procuring wood and dissolving wood pulp exclusively from non-controversial sources. Suppliers participate in credible forest certification programs, in particular the Forest Stewardship Council® (FSC®) and Programme for the Endorsement of Forest Certification (PEFC). The supply of wood and pulp of a specified quality and quantity to all of the Group's pulp and fiber production sites is an important part of the Lenzing Group's core business. For more information, please see the "Raw material security" chapter.

As an extension to its Wood and Pulp policy, Lenzing established a Bioenergy Policy in 2023. This policy ensures that biomass for energy use is not sourced from controversial sources, such as deforestation. For more information on this policy, please see the "Climate change" chapter.

Group Waste Management Guideline
Within Lenzing, waste management is set out in its internal Waste Management Guideline, which was launched in 2018. The guideline was further developed in 2021 and updated in 2022, which resulted in a full consolidation of Group waste data. It is an integral part of Lenzing's environmental management system. Activities relating to waste management – e.g. the collection, separation, storage, transportation, and treatment of waste – are planned and implemented based on possible utilization as well as understanding of associated environmental impact and risks. Further details on

[30] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

waste management are set out in each sites' waste management systems, which also concern external service providers.

Group Environmental Standard

All Lenzing production sites fulfil the national legislative requirements and are ISO 14001 certified. The Environmental Standard is an important component of the Group's Environmental Management System. It is the basis for developing Lenzing's environmental program and the medium- and long-term environmental targets.

Lenzing's Environmental Standard has been developed with the consideration of industry and market standards as well as the expectations of relevant stakeholders. The Standard and the key environmental limit values in the Standard are based on the relevant Best Available Techniques (BATs) under the EU Industrial Emission Directive (IED) as well as the better market performances defined by the EU Ecolabel.

Lenzing's circular economy practices

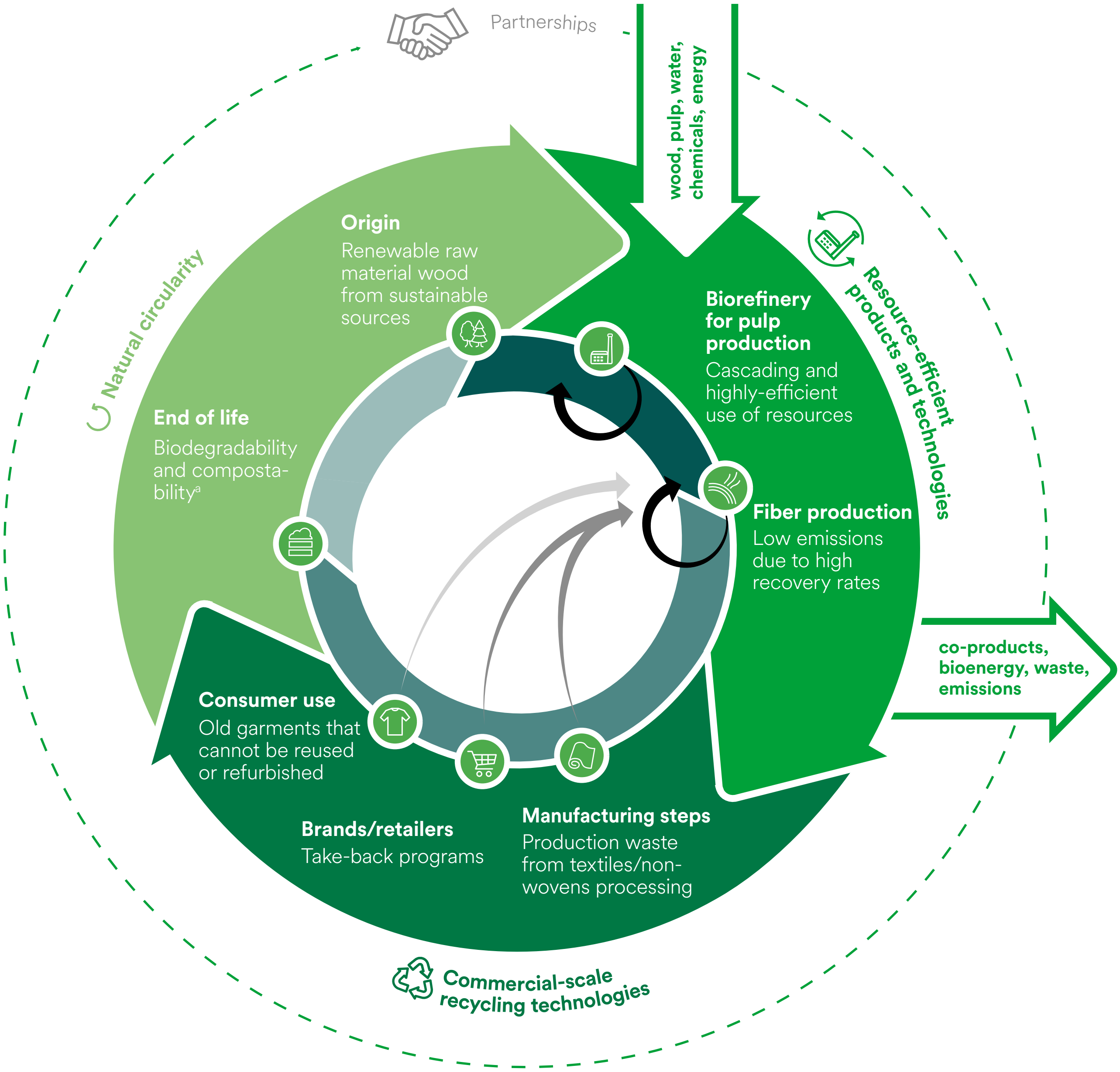
[ESRS E5-2; GRI 3-3d, 306-2]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Lenzing pursues its vision by following three key practices that incorporate various elements of the circular economy into its circular business model. These practices are outlined in figure 11 and described below:

- Natural circularity
- Resource-efficient products and technologies
- Developing commercial-scale recycling technologies

Circular economy model Figure 11



Technical Cycle
- Recovery & reuse of process chemicals
- Recycling of pre-consumer waste
- Recycling of post-consumer waste

Natural Cycle
- Natural resources
- Fiber use phase
- Closing the natural cycle

a) Applies to TÜV certified biodegradable and compostable LENZING™ fibers

Natural circularity

Origin

Lenzing's fibers consist of cellulose, a naturally renewable polymer that is biodegradable and obtained from the renewable raw material wood. The wood is sourced from sustainably managed forests and plantations (as described in the "Raw material security" chapter).

LENZING™ Lyocell, Modal and Viscose Standard fibers are certified by TÜV Austria as biodegradable and compostable[31]. The safe disposal of those fibers into the natural environment enables the cellulose material loop to close in alignment with the biological cycle. Natural circularity covers this biological cycle and also focuses on different end-of-life solutions.

When referring to a "circular product" of nonwovens, Lenzing is focusing less on just a "fiber solution", but more on a circular value chain model, as requirements and usage of the end products differ between the various nonwoven end products. This means that the impact of Lenzing's fibers needs to be considered with regard to raw material, performance, waste and end-of-life, delivering the highest value and causing the least impact on the environment. Lenzing is therefore following a structured approach for its new products to answer the market needs for most sustainable solutions.

GLACIER PROTECTION FLEECE

The melting of glaciers is symbolic of the repercussions of global warming. As a company committed to science-based targets to limit the rise of the global temperature, Lenzing also seeks new product solutions that can contribute to this topic. One key example and highlight in 2023 has been the development of a glacier protection fleece made 100 % from Lenzing's cellulosic fibers.

Traditional glacier protection fleeces use synthetic fiber-based geotextiles, which can contribute to micro plastic pollution. If the fibers are degrading through the impact of sun, water and wind, small particles of plastic are released in the sensitive alpine environment.

Lenzing, in collaboration with the University of Innsbruck's Institute of Ecology, Austrian glacier tourism, and the Chamber of Commerce (WKO Tirol), used a new approach, utilizing cellulosic LENZING™ fiber-based geotextiles. This award winning innovation (winner of the Swiss BIO TOP Award 2023) helps to protect glaciers without contributing to the microplastic pollution.

End of life

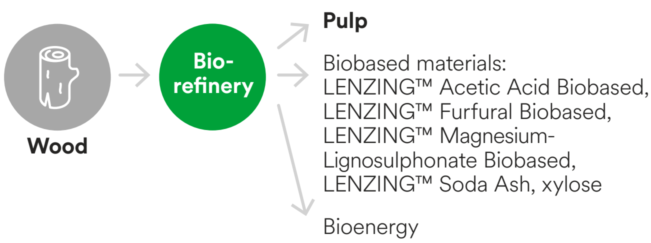
By applying a more application-specific approach, Lenzing drives to look at various end-of-life solutions, such as biodegradability, recycling, or reuse, depending on the fiber, end-product and markets. Lenzing is therefore strategically involved in policy discussions as well as engaged in circular initiatives to further develop and advance the world's change to a more holistic economy.

Resource-efficient products and technologies

Biorefinery for pulp production

In pulp production wood is turned into dissolving wood pulp for further fiber production. At Lenzing's pulp sites, this is an energy self-sufficient process. Lenzing uses all raw materials efficiently, has high recovery rates for solvents and chemicals, and minimizes waste production. The Lenzing Group operates three biorefineries, in Lenzing (Austria), Paskov (Czech Republic) and Indianópolis (Brazil). As depicted in figure 12, Lenzing's biorefinery technology converts wood into pulp, co-products and bioenergy. Lenzing sells the valuable biorefinery products to other industries, thereby making a major contribution to the maximum utilization of wood and process chemicals. For more detailed information, please see the "Resource outflows" section below.

Highly efficient use of the raw material wood — Figure 12



Surplus energy from pulp production is supplied as renewable energy in the form of steam and electricity. At the Lenzing (Austria) site surplus energy is directly powering fiber production lines. In Paskov (Czech Republic) and Indianópolis (Brazil) surplus energy is exported to the electricity grid and thereby supports the shift to renewable energy in these regions. This is a prime example of the cascading use of biomass and 100 percent utilization of wood without generating any waste.

Fiber production

Lenzing produces specialty fibers and innovates cellulosic fiber technologies. The high-quality fibers, viscose (rayon), modal, and lyocell, are supplied to the textile and nonwoven industry, as well as being used in industrial applications, and are valued for their special properties.

Furthermore, Lenzing's lyocell process is a closed-loop solvent-based technology that allows the manufacturing of cellulosic fibers without chemical modification of the cellulose. The process follows a basic dissolution concept and allows 99.8 percent of the solvent to be recovered and fed back into the loop. This avoids waste and ensures high resource utilization, while reducing water

[31] LENZING™ fibers which are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/ nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification applies for the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests for confirming biodegradability in marine environment were not yet done or finalized.

consumption and emissions. Compared to conventional production, recovering solvents and chemicals avoids or reduces environmental impacts, such as GHG emissions – thereby supporting the mitigation of climate change. For additional information, please see the "Responsible production" focus paper.

Manufacturing steps in the textile industry

To address textile industry waste challenges, Lenzing has developed an innovative recycling technology, REFIBRA™. This technology utilizes pre- and post-consumer textile waste and turns them, together with virgin pulp, into new fibers.

WE GIVE WASTE A NEW LIFE. EVERY DAY

In line with its vision, "We give waste a new life. Every day", Lenzing is striving to make textile waste recycling a common standard process similar to paper recycling. Lenzing has set a target and taken measures to make this vision a reality: it plans to offer viscose, modal and lyocell staple fibers with post-consumer recycled content on a commercial scale. For more information, please see the "Sustainability targets, measures and progress" section of "General information" chapter.

Management of production waste

There are several contexts in which waste is generated in Lenzing's facilities, such as within production processes, the packaging of procured goods and of sole fiber bales. Lenzing follows a waste hierarchy and avoids waste wherever possible. For more information, please see the "Waste management" section in this chapter.

To advance its circular economy, Lenzing uses recycled or reused materials whenever possible, instead of extracting virgin resources from nature. However, it should be considered that recycling processes can require a high amount of energy due to fiber blends and chemicals used in the value chain and therefore a holistic approach is needed (e.g. design for circularity, use of renewable energy and "low-impact" chemicals in the value chain) to truly mitigate climate change.

Commercial-scale recycling technologies

Lenzing is using two types of recycling, chemical and mechanical. Firstly, pulp from chemically recycled cotton textile waste is used to produce new fibers together with virgin wood pulp. Lenzing's fiber technology REFIBRA™ utilizes a proportion of cotton waste as well as dissolving wood pulp as raw materials.

Lenzing continued to offer TENCEL™ x REFIBRA™ branded lyocell fibers with a minimum of 30 percent recycled content in 2023. While this creates a significant environmental improvement, it creates high-quality fibers with the same properties as fibers from virgin dissolving wood pulp. The fiber is available under the Recycled Claim Standard (RCS), certifying that all production processes in the entire supply chain have undergone the relevant steps to ensure the integrity of the final product.

EXPANSION TO LENZING™ ECOVERO™

In 2023, the eco-efficient REFIBRA™ technology was expanded from TENCEL™ branded lyocell to LENZING™ ECOVERO™ branded viscose fibers. Now available worldwide, LENZING™ ECOVERO™ with REFIBRA™ technology features a minimum of 20 percent of this recycled content from cotton textile waste.

Secondly, textile materials (pre-consumer/post-industrial, post-consumer) are also recycled mechanically by Lenzing. These textile fabrics are shredded down to the individual fiber level as far as possible. Because of the necessary and severe shortening of the fiber length in the recycling process the fibers lose some of their performance (e.g. strength), these mechanically recycled fibers therefore require carrier fibers to become spinnable. For more information, please see "Sustainable innovations" chapter.

Brands/retailers

Brands and retailers have the influence to offer products with recycled content to costumers, but also to make sure that their products are designed in a way that facilitate circularity in terms of durability, recycability and biodegradability. Lenzing runs an active research and development project to further improve the utilization of pre-consumer textile waste for the production of fully biobased and biodegradable fibers.

Consumer use

Lenzing strives to offer the best possible materials for products used by consumers and end-users, so that they can purchase products that satisfy their needs for performance and sustainability.

So, one of Lenzing's goals is to recycle post-consumer textile waste more efficiently. Given the complexity of global value chains, Lenzing collaborates with various stakeholders with the clear goal to drive systemic change in the textile and nonwovens industry.

Partnerships

Transparency makes partnerships easier and provides a foundation for credible sustainability performance, especially the circular economy that will be part of the upcoming EU legislations. Gaining a deeper understanding of Lenzing's suppliers and downstream customers is critical to minimizing the Lenzing Group's overall environmental as well as social impact and putting it on the right track to achieve circular and net-zero GHG emissions by 2050 ("Long-term science-based net-zero target"). More information on transparency through digitalization is provided in the "Digitalization & cyber security" chapter.

Partnering for systemic change is one of the basic principles of Lenzing's "Naturally Positive" sustainability strategy for jointly achieving targets with Lenzing's major stakeholders. For example, to make it possible to acquire low carbon footprint chemicals such as "low-impact" caustic soda produced (by using renewable energy sources), Lenzing is actively engaging with its suppliers. Only with this supply chain wide engagement it is possible to lower the carbon footprint of Lenzing's products.

Collaboration is therefore essential. Lenzing is part of several initiatives that strive to foster the circular economy in the fashion industry. More information can be found in the “Stakeholder engagement” section of this chapter.

Lenzing and partners launch Austria’s largest textile recycling project

In a collaborative effort to advance the transition to a circular economy, Lenzing partnered up in 2023: with logistics and sorting partner ARA (Altstoff Recycling Austria AG), the textile service provider Salesianer Miettex, the NGO Caritas, and the Swedish pulp producer Södra. Together, they are working to collect used household and clothing textiles for producing recycled pulp, ultimately leading to the production of new lyocell and viscose fibers.

MUNDAO

In 2023, Lenzing intensified its cooperation and development with Mundao, a French eco-conscious start-up company, which has developed an industrial compostable diaper. Lenzing has supported the French company with its expertise in biodegradable materials and use of cellulosic fibers. As a result, the revolutionary diapers, marketed under the brand Popotine, include a range of VEOCEL™ fibers in different components of the diapers.

“Popotine” compostable diapers, the first of its kind in the European diaper market, are currently commercialized to child daycare facilities, collected after use by city-bike associations, and repurposed in industrial composting. This end-of life concept offers a sustainable solution for disposable diapers as feedstock for agricultural compost and for biomass industrial plants.

Metrics and targets

[ESRS E5-3; GRI 3-3e]

See “targets” in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the “General information” chapter.

Textile recycling	To offer viscose, modal and lyocell staple fibers with up to 50 percent post-consumer recycled content on a commercial scale by 2025	2025 On track
Measure(s)	All fibers with recycled content offered by Lenzing contain a share of post-consumer waste	2022 Delayed
	Lenzing increases the recycled content from 30 to 40 percent for fibers produced with REFIBRA™ technology for textiles	2023 Delayed
	Lenzing introduces its viscose and modal fibers with REFIBRA™ with a minimum of 30 percent recycled content	2023 Delayed
	Lenzing and Södra collaboration will recycle 25,000 t of textile waste per year at Södra's Mörrum site[b]	2025 Delayed
Progress made in 2023	The joint efforts with Södra to develop a recycled pulp with a share of post-consumer waste on an industrial scale were again successfully continued and also honored by the ITMF-Award. Project plans have been updated to increase the intended volume of the new production line from 25 kt/a to 50 kt/a feedstock and start-up of this plant is forecasted for 2027. Overall, Lenzing continued with product and process development towards reaching the key target for 2025. One key milestone was the introduction of a viscose fiber with REFIBRA™ technology with 20 percent recycled pulp from post-consumer cotton textile waste, with the goal of further increasing this percentage in the near future. The biggest challenges remain to adapt the characteristic of recycled pulp for industrial fiber production and also to seek solutions to make recycled pulp processable on industrial scale.	

b) Relevant for the Managing Board long-term incentive (LTI) bonus targets

Circular Business Model	To innovate a new circular business model by closing the loops for post-consumer materials and partner with 25 key supply chain companies by 2025	2025 On track
Progress made in 2023	Some highlights in 2023 were: the launch of a recycling project with ARA and other partners, participation in international projects to improve sorting and traceability of fibers and the cooperation with Södra has been granted a LIFE funding and has been awarded with the ITMF award for International Cooperations. For more information please see the “Resource use and circular economy” chapter.	

Resource inflows

[ESRS E5-4; GRI 301-1, 301-2]

Lenzing’s main resource inflows are wood, dissolving wood pulp, chemicals, fuels and water. Please note that precise figures on the absolute weight or volumes of materials used by the Lenzing Group are omitted due to confidentiality reasons.

Wood and dissolving wood pulp

100 percent of Lenzing`s wood and pulp suppliers are regularly assessed and certificated according to FSC® and PEFC standards. For additional information on this topic, please refer to “Raw material security” and “Business conduct” chapters.

As Lenzing further advances its commitment to circularity in its core business, Lenzing targets to produce fibers, including lyocell, viscose and modal, which contain up to 50 percent of recycled fibers ("Textile recycling" target).

Lenzing's most important chemicals that account for about 85 percent of the total volume purchased include caustic soda (NaOH), carbon disulfide (CS_2), sulfuric acid (H_2SO_4), sulfur (S), sulfur dioxide (SO_2), softening agents, flame retardants, N-methylmorpholine N-oxide (NMMO), titanium dioxide (TiO_2), and zinc sulfate ($ZnSO_4$). Lenzing tries to source as many of its chemicals as possible regionally. For Lenzing regionally sourced means from the same or the neighbouring country as the production facility. For more information, please see "Business conduct" chapter.

Lenzing engaged in comprehensive dialogues with its suppliers to explore the possibilities of procuring caustic soda with reduced GHG emissions.

In Lenzing's lyocell manufacturing process, it is possible to recover 99.8 percent of NMMO, enabling the reduction of resources. The recovery of carbon disulfide and hydrogen sulfide from the production process of viscose and modal fibers enhances circularity standards, as both are converted and returned to the process as raw materials. For more detailed information, refer to the "Pollution" chapter.

Fuels

Fiber production is an energy intensive process and Lenzing is trying to use renewable fuels wherever possible. For more information on this topic, please see the "Climate change" chapter. Upholding its objectives, Lenzing was the first cellulosic fiber producer to set concrete science-based target approved by the Science Based Targets initiative aiming for a reduction of GHG emissions.

Water

Water is a valuable limited resource, which is necessary for Lenzing's manufacturing processes, further details on water and its recycling are provided in the "Water and marine resources" chapter.

Packaging

Chemicals are delivered in different forms of packaging such as containers and big bags. Lenzing has implemented take-back systems with its suppliers in order to reduce packaging waste. These systems not only ensure proper disposal but also facilitate the reuse of packaging material.

The dissolving wood pulp is transported in freight cars and trucks while fiber bales are shipped in plastic films. This is necessary for product protection and transportation. The recycling of packaging for fiber bales lies outside of Lenzing's operational system boundary due to lack of control and influence at the downstream customer. Nonetheless, the company is currently evaluating potential for reducing packaging waste from sold goods.

Management of packaging waste is a shared responsibility of Lenzing and its business partners. Proper disposal and participation in recycling programs as well as take-back systems can significantly contribute to reducing packaging waste.

Resource outflows

[ESRS E5-5; GRI 306-1, 306-2, 306-3, 306-4, 306-5]

Products

Lenzing's main products are its fibers. Co-products from the biorefineries are sold to other industries. LENZING™ fibers are primarily used for clothing, home textiles, hygiene and other products. Its fiber portfolio includes three types of fibers: lyocell, modal, and viscose (rayon).

Products with a benefit

Lenzing offers net-benefit products which deliver environmental and societal advantages as well as benefits for value chain partners, surpassing many competing alternatives. These products take into account the entire life cycle, encompassing both upstream and downstream value chain processes.

INDIGO COLOR TECHNOLOGY

Requiring multiple dye baths, conventional dyeing is a water- and energy-intensive process. With Indigo Color technology, Indigo pigment is incorporated (dope-dyed) into TENCEL™ Modal fibers during their production. This saves an additional dyeing process and brings significant reductions in water (>99 percent), chemicals (>80 percent) and electricity usage (>99 percent) compared to three conventional denim dyeing methods.

Moreover, TENCEL™ Lyocell and Modal and LENZING™ ECOVERO™ fibers are certified with the widely recognized EU Ecolabel[32]. This label is awarded to products meeting high environmental standards throughout their entire life cycle.

In 2023, the product portfolio expanded further with LENZING™ ECOVERO™ branded fibers (textiles) and VEOCEL™ branded fibers (nonwovens) being certified with the EU Ecolabel at the site in Purwakarta (Indonesia). For more information on products and technologies, please refer to the Lenzing website or the "Sustainable innovations" chapter.

BIODEGRADABILITY STUDY BY SCRIPPS

A study conducted by Scripps Institution of Oceanography (SIO) offers scientific evidence that LENZING™ Lyocell Standard fibers, LENZING™ Viscose Standard fibers, and LENZING™ Modal Standard fibers biodegrade in both sea-surface and deep-sea conditions.[33] This research confirms that these fibers can return to the ecosystem at the end of their life cycle.[34] Scientists at SIO at the University of California, San Diego had previously established in 2021 that LENZING™ Lyocell Standard fibers completely and rapidly biodegrade in sea-surface conditions.

[32] The EU Ecolabel is recognized in all member states of the European Union, as well as Norway, Liechtenstein and Iceland. The voluntary label, introduced by an EU regulation (Regulation EEC 880/92) in 1992, has gradually become a reference point for consumers who want to help reduce pollution by purchasing more environmentally-friendly products and services.
EU Ecolabel for textile products (license no. AT/016/001)

[33] S.-J. Royer et al , Not so biodegradable: Polylactic acid and cellulose/plastic blend textiles lack fast biodegradation in marine waters | PLOS ONE, 2023

[34] LENZING™ fibers which are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/ nonwovens, LENZING™ Lyocell Standard

Co-Products

Lenzing puts its biorefinery and co-products to new uses in other industries, such as LENZING™ Acetic Acid Biobased, LENZING™ Furfural Biobased, xylose (wood sugar)[35], LENZING™ Soda Ash or LENZING™ Magnesium-Lignosulfonate Biobased.

LENZING™ ACETIC ACID BIOBASED

LENZING™ Acetic Acid Biobased, derived from sustainably sourced beech wood pulp, is purified in several steps, processed into a high-quality product and used in various industries such as food, pharmaceutical and cosmetics, chemical, and textile. To further advance circularity and the visibility of LENZING™ Acetic Acid, a notable partnership has been formed with the Italian company C.P.L. Prodotti Chimici srl, which became the first licensing partner of LENZING™ Acetic Acid Biobased in August this year.

Waste management

Lenzing uses licensed contractors to dispose of waste. Audits of these service providers are conducted in periodic intervals. Any contractor found to be non-compliant has its contract terminated. There were no such cases in 2023.

Waste is categorized in line with national legislation. There may also be long delays in obtaining the related data and information when an external party, such as an authorized waste management company, determines the management option of a waste stream. All these factors may result in significant fluctuations in waste reporting from year to year. The company's approach to waste management uses a management hierarchy as its guiding principle. This means that Lenzing plans and prioritizes waste management as follows:

1. Prevention and reduction
2. Reuse and recycling
3. Energy recovery
4. Landfill

Wherever possible, waste is avoided or reduced, e.g. by modifying processes to increase material efficiency or by adopting good housekeeping and operational practices. Recyclable components of waste are separated. Unrecyclable components are disposed of in accordance with local legislation. Wherever possible Lenzing recovers energy from unrecyclable components in facilities such as incinerators. Landfilling of waste is subject to strict national regulations. Hazardous waste is either treated or disposed of in accordance with the applicable regulations.

The total amount of waste has increased due to the addition of two production sites in comparison to the previous years. There is a significant shift in the proportion of hazardous and non-hazardous waste due to the changes in waste classification under the Indonesian regulation, e.g. boiler ash is reclassified as non-hazardous waste. Furthermore, cooperation with waste management company at the site in Purwakarta (Indonesia) resulted in substantial reduction of waste to landfill and increase in material recycling.

Waste by type and disposal method — Table 30

(Tons)	2021	2022	2023	2021	2022	2023
	Hazardous waste			Non-hazardous waste		
Preparation for reuse						
Recycling (offsite)	450.14	123.23	33,822.40	50,829.81	48,349.42	118,256.15
Other recovery operations						
Incineration with energy recovery (onsite)[a]						
Incineration with energy recovery (offsite)	36,132.26	46,048.20	2,430.67	35,126.01	21,545.81	23,723.56
Incineration without energy recovery						
Landfill (offsite)	36,678.98	21,375.78	110.08	13,535.16	11,182.99	6,057.61
Other (to be specified by Lenzing) (offsite)	0.22	1,153.44	951.70	828.13	923.63	2,419.73
Total waste generated	**73,261.60**	**68,700.64**	**37,314.85**	**100,319.11**	**82,001.85**	**150,457.06**
landfill (onsite)[b]				490.9	1139.6	1112.2

a) The data for Incineration with energy recovery onsite cannot be reported as the data is not available.
b) In Lenzing's waste reporting Lenzing does not report on site treatment measures therefore onsite landfill is not included in the total amount of waste

Total of non-recycled waste — Table 31

	2021	2022	2023
Total amount of non-recycled waste (tons)	**122,300.76**	**103,369.45**	**35,693.36**
Total percentage of non-recycled waste	**70.5%**	**68.1%**	**19.0%**

textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification applies for the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests for confirming biodegradability in marine environment were not yet done or finalized.

35 Purified/marketed by partner company

Total waste generated Table 32

(Total weight of waste generated in tons, and a breakdown of this total by composition of the waste)	2021	2022	2023
Hazardous waste	73,261.60	68,700.64	37,314.85
Non-hazardous waste	100,319.11	82,001.85	150,457.06
Total waste	**173,580.71**	**150,702.49**	**187,771.91**

Resource use and circular economy stakeholder engagement

[GRI 3-3f]

Lenzing's most important stakeholders in circularity are described below.

Policy Hub

In 2019, Lenzing became a member of the Policy Hub in the circular economy for the apparel and footwear industry, which it has also co-chaired since May 2020. In 2022, the company actively contributed to the industry's understanding of barriers and challenges facing the circular economy in areas such as waste and recycling technologies, transparency, and sustainable product initiatives. Lenzing has also actively engaged with the public and EU policy makers in exchanging information on barriers and possible solutions for advancing circularity.

Circular and Sustainable Textile Clothing (CISUTAC)

Since October 2022, Lenzing became a partner in the CISUTAC project that is co-funded by the EU. The consortium was established to support the transition to a circular and sustainable textile sector. Besides Lenzing, the 24 partners of the consortium include the industry association EURATEX, Södra, Decathlon and the NGO Oxfam. The aim of this initiative is to prevent, identify and eliminate barriers to the circularity of the clothing chain. For its part, Lenzing is focusing on the development of recycling processes for cellulose fibers in line with its own corporate strategy.

European Apparel and Textile Confederation (EURATEX)

EURATEX is the European Apparel and Textile Confederation, representing the interests of the European textile and clothing industry at the EU institutional level. Lenzing has contributed to EURATEX, and its latest project ReHubs to further promote circularity in the textile industry.

The goal of ReHubs is to set up an integrated system based on recycling hubs in Europe to recycle textile waste and industrially scale up the collection, sorting, processing and recycling of pre- and post-consumer materials. Lenzing plays an active role in the "Transform textile waste into feedstock" project within the EURATEX ReHubs initiative led by Texaid.

By the end of 2024, Europe will face the challenge of organizing a separate collection of textile waste and ensuring proposal disposal option of the collected waste. At present, there is no large-scale plan across Europe to reuse and recycle the current 7.5 million tons of textile waste.

Accelerating Circularity Project (ACP)

ACP's mission is to design and implement systems in which textile waste is repurposed as a raw material and is no longer incinerated or sent to landfill. With this model, materials will be constantly re-used or recycled, and textile waste will itself become a valuable resource. With collaborative work along the entire supply chain, the organization managed to run trials that have been successful in creating fabrics with recycled content. Lenzing has contributed to the trials with its TENCEL™ REFIBRA™ technology. The collected information is designed to help the entire industry to learn from this approach and identifies the potential for commercial products based on a cost-effective circular textile supply chain. Lenzing welcomed the opportunity to be a Board representative of this organization that envisions a textile world that is restorative and regenerative by design. As well as being a founding partner of the project in the US in 2019, Lenzing became a project partner in Europe in 2021. It was still a project partner in 2023.

Accelerating Circularity's Alliance of Chemical Textiles Recyclers (ACTR)

Lenzing is a founding member of ACTR alongside industry players like Eastman or Lycra. The working group began in 2023 in response to requests from Lenzing's partners to help educate the industry about chemical recycling. As a first step, ACTR is introducing a dictionary of basic terms developed to provide the industry with a better understanding of chemical textile recycling. Through ACTR, it will also be possible to meet and address the textile industry with a common voice.

Textiles 2030

In August 2021, Lenzing was one of the pioneering signatories of the voluntary Textiles 2030 agreement. Textiles 2030 is Waste & Resources Action Programme (WRAP)'s expert-led initiative in the UK designed to limit the impact of clothes and home textiles on climate change. It represents a voluntary agreement that is funded by its signatories and the government. Signatories will collaborate on carbon, water and circular textile targets, as well as contribute to national policy discussions. With its manufacturing facilities in Grimsby in the United Kingdom, Lenzing is honored to take part in this initiative for proactively fostering circularity and systemic change in the textiles industry.

Renewcell

In December 2022, Lenzing and Renewcell, a Swedish textile-to-textile recycling pioneer, signed a multi-year supply agreement to accelerate the transition of the textile industry from a linear to a circular business model. The agreement contains the sale of up to 100,000 tons of Renewcell's 100 percent recycled textile Circulose® dissolving pulp to Lenzing over a five-year period, for use in the production of cellulosic fibers for fashion and other textile applications.

Södra

To further speed up the technological development of textile recycling followed by an expansion of capacity for generating pulp from post-consumer waste, Lenzing began collaborating with Södra, another leading global pulp producer, in 2021. The goal is to recycle and process 50,000 tons of textile waste per year at Södra's Mörrum site by 2027. This project, named "Textile Recycling in Europe AT Scale"[36] (LIFE TREATS), is supported by an EU subsidy of EUR 10 million as part of the LIFE 2022 program[37], to further develop the innovative OnceMore® recycling process. Starting in the second quarter of 2023 and over the next four and a half years, the next step will involve the construction and management of a facility for joint process development and the extension of the OnceMore® process.

In November 2023, their long-lasting and effective partnership was awarded the ITMF Award 2023 in the "International Cooperation" category for their collaborative efforts in textile recycling and circular economy.

Forum for the Future

Lenzing is a participating member of the project Enabling Systemic Circularity in Fashion (ESCF) by Forum for the Future. It is an action inquiry that investigates the enabling conditions for innovations to achieve their potential in supporting the vision of a circular, regenerative, responsible and resilient fashion value chain, as well as the systemic barriers that are currently preventing this. The project's approach is to take a systemic lens to the enabling conditions and barriers encountered. This is explored through the participation of a mix of unique suppliers and brands which cover different perspectives, helps to learn best practices from each other and understand current status of industry to envision a circular future for the industry. There are several working groups such as business models, innovative materials and waste processing. In 2023, Lenzing was involved in the project and participating in workshops and working groups to contribute with its know-how as well as make progress for its circularity strategy and ambitions.

[36] Disclaimer LIFE22-ENV-SE-TREATS – 101113614 is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

[37] LIFE (europa.eu)

Raw material security

MANAGEMENT APPROACH

Material topic: Raw material security

[GRI 3-3]

Wood and dissolving wood pulp are the most important raw materials for Lenzing. There are potential risks associated with their sourcing, such as deforestation, climate changes and biodiversity loss. This is why Lenzing minimizes the environmental risk of procuring wood through responsible sourcing from sustainably managed forests. 100 percent of the company's wood and pulp sourcing is certified or controlled by globally recognized standards, such as the Forest Stewardship Council (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC). Lenzing is constantly engaging with different stakeholders (NGOs, customers, investors etc.) in order to meet their expectations and meet upcoming regulation requirements (e.g. EU Green Deal, EU Timber Regulation, supply chain due diligence).

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Wood as a natural and renewable raw material offers expanded business perspectives
- Replacement for fossil-based products
- Due to its contribution to climate change mitigation through carbon sinks in forests and wood products, and substitution of fossil-based product
- Wood is an alternative to agricultural products (e.g. cotton)
- Using wood from sustainably managed forests supports biodiversity

Negative

Own activities:

- Potential reputation loss due to link to deforestation or contribution to biodiversity loss

Business relatioships:

- Sourcing of environmentally and socially controversial wood and pulp
- Loss of biodiversity in poorly managed forest ecosystems
- Sourcing can be impacted by climate change
- Climate and market impact on wood and pulp availability, price and quality

Policies and commitments

- Centrally managed wood and pulp procurement
- Wood and Pulp Policy
- Bioenergy Policy
- CanopyStyle Initiative
- Global Supplier Code of Conduct
- Preference for long-term contracts and direct contacts

Actions taken

- 100 percent of wood-for-pulp-production suppliers assessed according to the FSC® Controlled Wood criteria
- New bioenergy policy
- Preparations for upcoming EU Deforestation Regulation
- Ramp up of pulp mill in Brazil and site in Thailand after start up in 2022
- PEFC Chain of Custody certificate for fiber production sites in Purwakarta (Indonesia), Nanjing (China) and Mobile (USA)
- Sustainability performance of pulp suppliers was surveyed in a comprehensive questionnaire
- Integration of plantations managed by LD Celulose (Brazil) into the Lenzing Group
- Transportation of some inbound materials changed from road to rail to improve carbon footprint
- Regular audits on forest certification standards (FSC®, PEFC)[38]
- Internal audit management system
- Wood and Pulp certification according to FSC® and PEFC standards
- Additional third-party verification of Lenzing's wood and pulp supply as part of the CanopyStyle Initiative and through internal supplier audits
- Lenzing was awarded with a "dark green shirt" in Canopy's Hot Button Ranking
- CDP Forests "A" rating

Sustainability targets, measures and progress

All of Lenzing's sustainability targets can be found in the "General information" chapter.

Stakeholders

- Suppliers
- CDP
- Canopy
- Forest Europe, European and national forest strategies
- The Austrian Bioeconomy Strategy
- EU Deforestation Regulation (EUDR)

Responsible

- Member of the Managing Board (Pulp)
- Senior Director Purchasing Wood
- SVP Comm. Affairs Pulp
- SVP Global Purchasing

Supporting

- Corporate Sustainability
- Global QESH

[38] FSC® (FSC-C041246), PEFC (PEFC/06-33-92)

Sustainable sourcing of wood and dissolving wood pulp

[GRI 308-2]

Wood and dissolving wood pulp are Lenzing's most important raw materials. The Lenzing Group takes responsibility by focusing on sustainable sourcing covered by certifications, responsible consumption, and the highly efficient use of these valuable resources. Lenzing sources wood and dissolving wood pulp from semi-natural forests (as defined by the Food and Agriculture Organization of the United Nations[39] (FAO), which include naturally regenerating and planted forests of similar species composition as the natural forests in the area) and plantations, as all defined by FAO[40], which are not from primary, natural or ancient and endangered forests.

Assuming a dissolving wood pulp yield from wood of 40 percent, a rough estimate for the total yearly wood input of Lenzing would be 2.5 million tons (dry matter), spread between Lenzing's own production and the dissolving wood pulp purchased.

For more information on chemical supplier management please see the "Business conduct" chapter.

HOT BUTTON REPORT 2023

In 2023 Lenzing was awarded 32 points and a dark green shirt in the "Hot Button Ranking" from CanopyStyle, a ranking of the world's 35 largest producers of cellulosic fibers in terms of sustainable wood and pulp sourcing. This report confirmed a low risk of sourcing from ancient and endangered forests for Lenzing, which is the best possible category. However, Lenzing has added new suppliers, which might increase the potential risk. Lenzing is in constant communication with suppliers to keep this risk as minimal as possible. Since Lenzing's woods sourcing in Brazil exclusively originates from plantations owned and managed by LD Celulose, there is no risk of illegal logging. Prior to the establishment of the pulp mill in Brazil an environmental impact assessment confirmed that no indigenous settlements are in the vicinity of the plant.

Dissolving wood pulp in the Lenzing Group

Processing wood into fibers requires a special quality of pulp called dissolving wood pulp. The Lenzing Group's current dissolving wood pulp nominal capacities are 320,000 tons at the Lenzing site (Austria), 285,000 tons at the Paskov site (Czech Republic) and 500,000 tons at the Indianópolis site (Brazil). For the locations of Lenzing's own pulp supplying factories, please see the "Lenzing Group locations" chapter.

In addition to its own dissolving wood pulp production, Lenzing maintains procurement of dissolving wood pulp in the global market, mostly under long-term supply contracts. On the other hand, a share of the own pulp production is traded on the global dissolving pulp market. In 2023, the Lenzing Group procured pulp from the following suppliers (in alphabetical order):

Countries of Lenzing Group's pulp suppliers (in 2023) Table 33

Supplier	Country
AustroCel Hallein GmbH	Austria
Georgia-Pacific LLC	USA
International Paper	USA
Lenzing AG	Austria
Lenzing Biocel Paskov a.s.	Czech Republic
LD Celulose (Lenzing Group)	Brazil
Rayonier Advanced Materials	USA, Canada
Sappi Ltd.	South Africa, USA
Södra Skogsägarna ekonomisk förening	Sweden
ReNewCel AB	Sweden

Eucalyptus, pine and spruce represent the predominant wood species used by Lenzing's partners. However, beech, birch, ash, maple as well as other hardwoods and softwoods are also processed. The actual tree species vary depending on the region and quality conditions. Regardless of the species, all of the wood originates from sustainably managed forest operations that are certified or controlled according to the leading forest certification schemes. An overview of the most important tree species per region can be found in the Annex. Lenzing ensures that the bleaching process of all purchased pulp is totally chlorine-free (TCF) or elemental chlorine-free (ECF).

Lenzing Group's Wood and Pulp Policy

In its Wood and Pulp Policy, Lenzing is committed to procuring wood and dissolving wood pulp exclusively from non-controversial sources. The supply of wood and pulp of a specified quality and quantity to all of the Group's pulp and fiber production sites is an important part of the Lenzing Group's core business. Lenzing strives to source wood and pulp exclusively from non-controversial sources, preferring suppliers participating in credible forest certification programs, in particular the Forest Stewardship Council® (FSC®) and Programme for the Endorsement of Forest Certification (PEFC).

Controversial sources include wood derived from:

- illegal logging or the trade in illegal wood or forest products
- the destruction of high conservation values in forestry operations, including ancient and endangered forests, and endangered species habitats
- plantations established after 1994 through significant conversion of natural forests or conversions to non- forest use
- the introduction of genetically modified organisms in forestry operations
- the violation of traditional, community and/or human rights
- any violation of the ILO Core Conventions as defined in the ILO Declaration on Fundamental Principles and Rights at Work

[39] Carle, J., and Holmgren, P. (2003). Working paper 79. Definitions Related to Planted Forests. In: Food and Agriculture Organization of the United Nations (2003). Forest Resources Assessment Program Working paper series. Available at:http://www.fao.org/forestry/25853-0d4f50dd8626f4bd6248009fc68f892fb.pdf [Accessed 15 February 2021]

[40] https://www.fao.org/forestry/10051/en/

Regular risk assessments, audits, on-site visits, and independent third-party certification of sustainable forest management programs ensure compliance with the policy and Lenzing's commitment to no deforestation.

If Lenzing discovers that it has sourced wood or dissolving wood pulp from controversial sources, it will first engage with the supplier to encourage practices consistent with Lenzing's Wood and Pulp Policy. If the response is unsatisfactory, the supplier will be delisted with a reasonable lead time. Very few such cases have occurred in recent years. There were three in 2020, one in 2021 and none in 2022 and 2023.

For more information on responsible wood and pulp sourcing, please see the "Wood and dissolving wood pulp certifications" subchapter in the chapter "Business conduct", and the "Wood and Pulp" focus paper.

As an extension to its Wood and Pulp policy Lenzing established a Bioenergy Policy in 2023. This policy ensures that biomass for energy use is not sourced from controversial sources, such as deforestation. For more information on this policy, please see the "Climate change" chapter.

Societal aspects

Lenzing's Wood and Pulp Policy also refers to societal aspects, especially human rights, in wood sourcing covered by the wood certification systems used by Lenzing, FSC® and PEFC. Together with national laws and the Lenzing Code of Business Conduct, they ensure that traditional, community, and civil rights are observed, and that labor conditions meet ILO Core Convention[41].

Transport and logistics

As Lenzing implemented its decarbonization strategy, the company shifted the transportation of some inbound materials from road to rail transport and shipping to improve its CO_2 footprint. This means, for example, that the transportation of sulfur purchased from one supplier was switched from road to rail.

Reducing GHG emissions in shipping

In 2022, Lenzing established a sustainable logistics transportation system involving break bulk mode transportation, thereby reducing GHG emissions by at least 15 percent versus container mode of transport, making the transport of dissolving wood pulp from Brazil to China more efficient. By the end of the third quarter 2023 around 90 percent of pulp was transported by break bulk and around 10 percent by container (data for the fourth quarter is not yet available).

Pentatrains

For the efficient transport of wood from the plantation to the pulp mill, the use of pentatrains, which have five cargo boxes instead of the conventional three, represents a productivity increase of more than 50 percent compared to tritrains. This can potentially lead to a reduction of 5,600 trips on highways and savings of up to 220,000 liters of diesel annually. This has already been implemented in the plantation in Brazil and LD Celulose has a fleet of 15 pentatrains to transport wood from its plantations. However, since the use of these trains is not allowed on public roads, conventional trucks are still partly used.

New software for wood purchasing ensures greater transparency and facilitates the logistics process

The Lenzing site (Austria) has a complex wood supply process involving numerous steps from tree felling to wood delivery, requiring precise logistics. To simplify operations, a specialized software has been adopted, achieving key milestones in 2019 with electronic billing and with contract management in 2022, and necessary updates in 2023 for the daily use of the software. In the third quarter of 2024 a Supplier and Client Portal is planned to be launched to facilitate data transferring for electronic transport documents, delivery notes and invoices and certification related information. These improvements enhance transparency, reduce the workload and will move the wood purchasing department closer to a paperless office along the way.

Procurement management

Wood, pulp and chemicals purchasing are handled by three different teams within the Lenzing Group. Lenzing aims to minimize purchasing risks, such as major price fluctuations and supply bottlenecks through reliable, long-term supply relationships and active supplier management.

Supplier selection and evaluation are based on economic, quality as well as environmental, social and governance (ESG) criteria. For its suppliers (outside of wood and pulp suppliers) Lenzing has a Supplier Code of Conduct to ensure that these criteria are adhered to by the suppliers. For more information, please see the "Business conduct" chapter.

The most important materials procured are (in order of annual procurement volume): wood, dissolving wood pulp, caustic soda, sulfuric acid, sulfur, carbon disulfide, sulfur dioxide and magnesium oxide.

TRAINING OF BUYERS

In order to fulfil Lenzing's ambitions for supply chain due diligence and to increase supplier engagement, the global purchasing team is being continuously trained for EcoVadis either by EcoVadis platform training sessions or internally (using EcoVadis website information source). Purchasers affected have access to the EcoVadis platform and an internal library, so that they can further develop their knowledge in sustainability areas via the EcoVadis academy.

A webinar for the procurement team was held in October with the focus on corrective action plans for suppliers and how to incorporate sustainability topics into the daily business.

[41] https://www.ilo.org/asia/decentwork/dwcp/WCMS_143046/lang--en/index.htm [Accessed 15 February 2021]

Raw material security stakeholder engagement

[GRI 3-3f]

Canopy

Lenzing cooperates with the NGO Canopy and maintains a continuous dialog with members of the CanopyStyle initiative to ensure responsible wood sourcing and protect the world's ancient and endangered forests from ending up in textiles and fibers.

Canopy publishes the Hot Button Report[42], an annual ranking of all derived raw material wood cellulosic fiber manufacturers based on their wood and pulp sourcing performance, transparency and innovation. Today, more than 550 global brands with combined annual revenues of over USD 1 trillion are looking to source from "green shirt" producers. In recent years, Lenzing has shown continuous improvement in all of these criteria: Lenzing's Wood and Pulp Policy has been aligned with the CanopyStyle initiative for years. Furthermore, since 2020, the geographical locations of pulp suppliers have been publicly disclosed in more detail. In Canopy's latest Hot Button Report, published in November 2023 Lenzing received a dark green shirt for the fourth time.

Greenhouse Gas Protocol Land Sector and Removals Guidance

The Greenhouse Gas Protocol has launched a process to develop new standards or guidance on how companies should account for the following activities in their greenhouse gas inventories: carbon removal and sequestration, land use, land use change and bioenergy. One starting point for the initiative is the criticism of carbon neutrality for bioenergy and emissions from biogenic sources.

The outcome of these ongoing considerations, expected during 2024, will have a decisive impact not only on the cellulose-based fiber industry, but on the entire cellulose-based bioeconomy.

In Lenzing's view, sustainably managed forests and plantations are key elements for climate change mitigation through carbon sequestration in the forest, harvested wood products, and the replacement of fossil-based materials that have high carbon footprints. Moreover, sustainably managed semi-natural forests constitute the most successful way of protecting biodiversity and enabling people to enjoy the benefits of forests in the form of recreation or micro-climate benefits (ecosystem services), for example.

Therefore, Lenzing gave inputs to the process through its industry association CEPI[43], participated in the review group to comment on the draft guidance in 2022, and pilot tested the draft guidance until March 2023. In the course of the revision after the pilot test, Lenzing joined the extended Technical Working Group ("TWG+").

Forest Europe, European and national forest strategies

The Forest Europe political process was initiated in 1990 by the Ministerial Conference on the Protection of Forests in Europe, which comprises 46 states, to promote sustainable forest management in Europe. A set of indicators grouped into six different criteria was developed to measure the sustainability performance of European forests and set targets for improvement[44]. Current efforts focus on climate change adaption[45], water protection, and biodiversity[46]. As a major buyer of wood in Europe, the Lenzing Group supports these targets, which aim to ensure the continued and improved function of forests in their ecosystems while maintaining the long-term availability of wood as a raw material.

The Austrian Bioeconomy Strategy

The Austrian Bioeconomy Strategy was published in 2019[47]. The current phase calls for the development of an action plan. Lenzing is represented in the bioeconomy platform and provided input on the strategy and the development of the action plan from 2019 to 2021 through workshops and an online consultation. The action plan aims to balance the need for mobilizing timber as a raw material for the bioeconomy with assuring and improving the vitality and resilience of forests through adequate forest management. The strategy is prominently placed in the government working program and its implementation is assured.

The underlying studies have shown a gap between increasing demand for renewable resources for materials and energy on the one hand, and the possible supply on the other, which is mainly limited by the available land area. Therefore, one area of the action plan that is particularly relevant to Lenzing, is the continued development of the biobased circular economy involving the recycling of biobased materials, to which Lenzing will contribute accordingly.

Lenzing activities in 2023 focused on networking activities, such as participation in workshops or discussions with other stakeholders. One important network in this context is Bioeconomy Austria as it has a strong focus on wood usage (in various areas) and links existing activities.

EU Deforestation Regulation (EUDR)

All relevant EU institutions adopted the EU Deforestation Regulation (EUDR 2023/1115) which was published in June 2023. The requirements of the regulation will be binding from December 30, 2024 onwards. Lenzing is already preparing for the implementation of this regulation. Internal processes were started and Lenzing is in continuous exchange with supply chain partners and relevant stakeholders, such as industry associations and certification schemes to fulfil the requirements. The current focus is on the interpretation of text and operational implementation. EUDR will increase the administrative workload which require additional resources to ensure full compliance by the end of 2024.

[42] Lenzing - Hot Button Report (canopyplanet.org)
[43] European Pulp and Paper Industry Association
[44] Madrid Ministerial Declaration. 25 years together promoting Sustainable Forest Management in Europe, 7th Forest Europe Ministerial Conference, Madrid 2015. Available at: https://foresteurope.org/wp-content/uploads/2016/11/III.-ELM_7MC_2_2015_MinisterialDeclaration_adopted-2.pdf [Accessed February 15, 2021]
[45] FOREST EUROPE 2020. Adaptation to Climate Change in Sustainable Forest Management in Europe, Liaison Unit Bratislava, Zvolen, 2020
[46] https://forestbiodiversity.eu/ [Accessed February 15, 2021]
[47] https://www.bmk.gv.at/themen/klima_umwelt/klimaschutz/biooekonomie/strategie.html [Accessed 15 February 2021]

Sustainable innovations

MANAGEMENT APPROACH

Material topic: Sustainable innovations & products

[GRI 3-3]

Sustainability acts as a guiding principle for Lenzing's innovation and product development, which is driving systematic change across the textile and nonwoven industries. The continual improvement of existing products and production technologies builds business resilience and reputation, as well as facilitating the supply of products to value chain partners that contribute to the eco-credentials of their own portfolios. Moving from linear to circular ways of working presents many opportunities for Lenzing to provide customers with a variety of environmental-friendlier solutions, such as biodegradable fibers for the manufacturing of agricultural and hygiene products.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Meeting market and stakeholder expectations
- Differentiating factor
- Being prepared for new challenges
- Being a pioneering company
- Building new cooperation and networks
- Challenging the status quo

Negative

Own activities:

- Loss of leadership in innovation carries potential regulatory, financial, market and corporate reputational risks

Policies and commitments

- "Better Growth" strategy
- "Naturally Positive" sustainability strategy with the "Sustainable innovations" strategic focus area
- Life cycle thinking
- Net-benefit concept
- Zero Discharge of Hazardous Chemicals (ZDHC)
- PRO² project management system (product & application innovation and process & technology innovation) as part of Lenzing's business processes
- Management review (ISO 9001:2015)

Actions taken

- Every idea is evaluated regarding its sustainability impact such as GHG emissions – R&D projects will proceed only if predefined sustainability criteria are met
- Adaption of processes and interfaces between innovation teams and other departments according to the new organizational structure, to ensure continuation of close and efficient cooperation
- Numerous R&D partnerships with customers, companies, universities, and institutes (national and international)
- Development of a digital global production overview system to optimize resources and energy use for the production of pulp and fibers
- Cooperation between Södra and Lenzing in the field of textile recycling
- Lenzing and Renewcell signed a large-scale supply agreement further closing the loop in fashion (chemical textile recycling)
- Through CISUTAC, Lenzing participates in ECOSYSTEX, a community of 26 EU-funded projects focusing on textile sustainability that aims at ensuring collaboration across project consortia
- FFG-funded Reducing Energy and Waste using AI (REWAI) project together with Pro²Future, University of Linz and Graz University of Technology
- Advancing the renewable carbon concept as a member of the Renewable Carbon Initiative (RCI)
- 1,351 patents and patent applications filed across 163 patent families and in 50 countries

Sustainability targets, measures and progress

All of Lenzing's sustainability targets can be found in the "General information" chapter.

Stakeholders

- Customers
- Regulatory bodies (national, European, international)
- NGOs, active in the field of (textile) sustainability, such as Canopy
- Associations and networks such as RCI, European Polysaccharide Network of Excellence (EPNOE) and the European Platform for the Future of Textiles and Clothing (Textile ETP)
- Technical and standardization committees
- Funding authorities (e.g. annual talk with FFG)
- Framework of the PRO² process for project management system
- Södra
- Wood K Plus
- Christian Doppler Laboratory
- Reducing Energy and Waste using AI (REWAI)
- Circular and Sustainable Textiles and Clothing (CISUTAC)
- Bilateral research
- Industry associations and initiatives

Responsible

- CPO/CTO
- VP Innovation & Excellence

Supporting

- Commercial Nonwovens and Textiles
- Global Strategy and M&A
- Global Engineering
- Operations
- Corporate Sustainability

- Lenzing is a partner in the Horizon Europe Circular and Sustainable Textiles and Clothing (CISUTAC) project

Sustainable innovations represent one of the strategic focus areas of Lenzing's "Naturally Positive" sustainability strategy. Lenzing is committed to bringing cellulose based solutions to the market that offer consumers more sustainable alternatives without compromising on quality and performance. Sustainable innovations include substantial efficiency improvements in existing technologies and technological breakthroughs that lead to net-benefit products. Lenzing innovation also includes driving systemic change through forward-looking solutions, future-proof business models and a multitude of collaborative activities. Another growth activity is the implementation of digital tools and solutions to achieve even more transparent processes and products. For more information, please see the "Digitalization & cyber security" chapter.

The Lenzing Group introduced a new organizational structure in innovations in 2023. Application and product development is now part of the business units Textile and Nonwovens, both with dedicated innovations groups. This brings new developments and innovations closer to the customers. Technology development and more basic research (Global Research) is part of the Innovation and Excellence department – together with Global Technology. There is strong interaction and exchange between all innovation-related groups as well as with other departments.
Due to the reorganization, a straight comparison of the R&D expenditure with former years is not completely feasible. In 2023, R&D expenditure, calculated according to the Frascati method (minus funding received), accounted for EUR 31.6 mn (2022: EUR 34.8 mn, 2021: EUR 31.6 mn). The 1,351 patents and patent applications (in 163 patent families) that Lenzing holds in 50 countries worldwide are another indication of the Lenzing Group's innovativeness.

Funding for sustainable developments

Sustainability criteria are becoming more and more important as guidelines and requirements for R&D funding, both on a national and European level. Lenzing, which has been active in this field for a long time, uses this opportunity to boost in-house developments. It is also active in cooperative research projects.

Lenzing was one of the few companies to receive the highly coveted "Green Frontrunner" funding for a project in the first call in 2021. In 2023, Lenzing intensified its activities in the field of EU-funded projects, which are also useful for networking and building new cooperations. Lenzing now is a partner in CISUTAC, LIFE-TREATS (Textile Recycling in Europe at Scale) and ESCIB (Developing environmental sustainability & circularity assessment methodologies for industrial bio-based systems). Several other proposals are pending. For more information, please see the "Research collaborations" section below.

Resource- and energy-efficient production processes (and the R&D infrastructure) are the foundation for the development of new fibers that offer both sustainability and performance. These fibers serve as raw materials for the textile and nonwoven industries, and are often developed together with value chain partners or other stakeholders. As new fibers are mainly tailored to special application fields, this goes hand in hand with the development of the respective applications.

MANAGEMENT APPROACH

Material topic: Sustainable materials & life cycle assessment (LCA)

[GRI 3-3]

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Strengthening market position in sustainable net-benefit products and specialty fibers
- Communicating sustainability benefits of Lenzing's products
- Involvement in creating future standards for environmental communication (product environmental footprint, product category rules, etc.)
- Gaining expertise in life-cycle thinking to proactively demonstrate sustainable development
- Supporting current and future customers in achieving their sustainability targets

Negative

Own activities:

Actions taken

- Further extension of LCA studies for standard and specialty fiber portfolio
- Further extension of low-carbon fiber products with corresponding offsets of remaining emissions
- Start-up of strategic growth projects in Brazil and Thailand
- Lenzing's fibers listed as "preferred fibers" in Textile Exchange's Preferred Fiber Report
- Lenzing contributed to the Textile Exchange's Corporate Fibers and Materials Benchmark Program (CFMB) including the Biodiversity Benchmark
- Yearly update of Textile Exchange's MMCF Producer Transparency Questionnaire to provide information about the sustainability performance at the group and production site levels
- Lenzing contributing to leading multi-stakeholder initiatives
- Broad range of third-party certifications
- LCA updates involving independent third-party
- Continuation of cooperation with Cascale (formerly SAC) and its' Material Sustainability Index (MSI)

- “Greenhushing” – producing sustainable materials/products but not being able to communicate
- Loss of reputation from not being transparent
- Potential regulatory, technology and market risks

Policies and commitments

- “Better Growth“ strategy
- Partnering for systemic change as part of the “Naturally Positive” sustainability strategy
- Sustainability Policy
- Group Policy for Safety, Health and Environment
- Group Environmental Standard
- Wood and Pulp Policy
- Branding Strategy
- Higg MSI

Sustainability targets, measures and progress

All of Lenzing's sustainability targets can be found in the “General information” chapter.

Responsible

- VP Corporate Sustainability
- EVP Commercial Nonwoven
- EVP Commercial Textile
- SVP Global Supply Chain/Purchasing

Supporting

- Global QESH
- Research & Development

Sustainability drives innovation

Sustainability acts as a guiding principle for innovation and product development. Every process, product or application innovation is evaluated for sustainability from the very beginning. Key considerations include the life cycle perspective and the net-benefit principle over the entire value chain, which are implemented in the project management processes used by the company.

Lenzing’s innovation portfolio addresses key topics for the future. Sustainable innovations and proactive partnerships form the basis for Lenzing’s strategic efforts to green the value chain. Sustainability targets for air emissions, water emissions, pollution, climate protection and the circular economy are the cornerstones of Lenzing’s responsible entrepreneurship, and act as innovation drivers.

LENZING™ ECOVERO™ with REFIBRA™ technology

Through Lenzing’s successful development and scaled production, LENZING™ ECOVERO™ with REFIBRA™ technology is now available to customers worldwide. Maintaining the eco-responsible benefits of the original LENZING™ ECOVERO™, the new viscose fiber with REFIBRA™ technology comprises a minimum of 20 percent of post-consumer textile waste, which is sourced from cellulose-rich materials or polyester-cotton blends. The waste is collected and sorted in collaboration with key industry and innovation leaders who champion post-consumer textile recycling programs.

The expansion of the REFIBRA™ technology to LENZING™ ECOVERO™ will help Lenzing to increase the overall post-consumer content in its products. This expansion further highlights Lenzing’s ongoing stride towards the transition to a circular economy in textile and fashion with its innovative, future-proof solutions.

New resource-efficient dyeing approach for TENCEL™ Lyocell fibers

A new approach has been introduced that covers yarn pre-treatment and knitting technique to achieve aesthetics that resemble the wash-down effects of traditional dyeing in ready-to-wear and knit garments. To address the pollution caused by dyeing and finishing in the textile industry, the new approach will significantly reduce environmental impact and is ideal for use on pre-treated fabrics and yarns made with TENCEL™ Lyocell fibers. It also complements the wet-processing and production facilities of fabric mills, bringing added benefits for value chain partners.

The new approach reduces water and energy usage, by creating similar wash-down aesthetics, previously only achievable through a resource-intensive denim dyeing and bleaching process.

Ideal for use in yarns and fabrics made of TENCEL™ Lyocell fiber or TENCEL™ Lyocell fiber with REFIBRA™ technology, the approach helps elevate the versatility of fabrics and unleashes design possibilities in ready-to-wear and knit apparel, and it is easily compatible with existing machinery in fabric mills.

Industry’s first innovation to mitigate discoloration of cellulosic-based garments during heat molding

Lenzing has introduced a new processing solution that mitigates the yellowing of garments and fabrics made with regenerated cellulosic fibers during high-temperature production processes. With an initial rollout that targets innerwear and subsequently outerwear and ready-to-wear garments, the solution is the first in the industry to address the technical challenge during the garment molding process.

Discoloring and yellowing issues caused by high-temperature molding have traditionally been inevitable during the garment production process. While chemicals could be used to minimize discoloring issues in synthetic fibers, this method does not work as effectively as it does in regenerated cellulosic fibers. With Lenzing’s proprietary solution, this challenge is mitigated, eliminating the bottleneck fabric mills experienced during the production and dyeing of light-colored garments made of regenerated cellulosic fibers.

It also speaks to Lenzing’s efforts to improve and widen the application of cellulosic fibers, such as TENCEL™ Lyocell and Modal fibers, which are derived from sustainable wood sources and produced using environmentally responsible processes.

Hydrophobic cellulose fibers for sustainable nonwovens

The development of a hydrophobic lyocell fiber widens Lenzing’s fiber portfolio and allows the replacement of synthetic fibers with a cellulosic fiber, which is compostable under home and industrial conditions and biodegradable in soil, therefore offering an alternative to conventional synthetic fibers. In addition, the cellulosic fibers show increased softness and therefore are beneficial for future product developments in applications touching the skin, such as hygiene products or wipes. Furthermore, the hydrophobic behavior of the cellulosic fibers leads to a different behavior towards lotions, allowing lotion amounts and formulations to be adjusted, therefore widening the options of nonwovens producers, especially when looking into 100 percent cellulosic options.

100 percent cellulosics
The development approach to offer alternatives to synthetic fibers or products offering similar performance as existing products has been pursued further and the range of applications extended further. Firstly, the lyocell fiber portfolio was expanded to include a coarse titer (6.3 dtex), as internal developments and customer feedback show that the bulk of wipes, especially in the wet state, can be increased by blending this new fiber type with already existing fiber types.

In many hygiene applications, hydrophobicity is required to move the liquid to the specified areas. The hydrophobic fiber Lyocell Dry is a perfect fit for a wide range of applications, and more and more customers have started product development using this fiber for topsheets, leg cuffs and also (wet) wipes. This highlights the clear need for replacing fossil-based fibers with sustainable alternatives in the nonwovens industry. The biodegradable diaper jointly developed by Mundao and Lenzing exemplifies the potential for substituting oil-based fibers with sustainable alternatives.

Sustainable protection for glaciers
An innovative and sustainable solution for the protection of snow and ice is now possible with the help of nonwovens made of cellulosic LENZING™ fibers. So far, the nonwovens used to protect glaciers are usually made from fossil-based synthetic fibers and might have negative environmental consequences, such as microplastics on glaciers. In contrast, nonwovens made from LENZING™ fibers are biodegradable and the small fragments released into the environment break down, returning to nature. In a field trial on the Stubai Glacier in Austria, the covering of a small area with the new material containing cellulosic LENZING™ fibers was tested for the first time. The result was convincing, with four meters of ice mass saved from melting. Due to this success, the project is now being expanded. In 2023, field tests started on all Austrian glaciers that are used for tourism. These geotextiles can be recycled and ultimately used to make yarn for textile products.

Total chlorine free fiber production
Viscose has been produced for years now at the Lenzing site (Austria) using totally chlorine free (TCF) bleached pulp and a production process without the use of chlorine chemistry, therefore qualifying the viscose fibers as TCF fibers. The required TCF pulp is produced at the Lenzing site. Pulp production at Indianópolis (Brazil) plays a pivotal role in extending the TCF fiber production to other plants/production sites. Successful TCF lyocell fiber trials have been performed in the viscose plant in Purwakarta (Indonesia) to produce TCF fibers and TCF viscose fibers will subsequently be available at this site. The TCF fiber portfolio was further expanded by offering the first TCF lyocell fiber worldwide.

This allows Lenzing to offer more TCF fibers, therefore supporting customers to offer more totally chlorine free products to the market and reducing the usage of an aggressive chemical even further.

[48] Based on Higg MSI database v3.5 (Dec 2022).

Net-benefit concept

Lenzing's net-benefit products offer positive impacts and benefits to the environment, society and value chain partners to a greater extent than most competing alternatives in the market. Net-benefit products take a life cycle perspective and therefore include both upstream and downstream value chain processes. Customers can replace resource-intensive products with Lenzing's alternatives, thereby improving their product footprint and reducing supply chain risks.

The three strategic principles of the "Naturally Positive" sustainability strategy and the underlying focus areas are combined in the net-benefit concept.

Products and technologies with a net-benefit

LENZING™ ECOVERO™ viscose fibers and VEOCEL™ viscose fiber
LENZING™ ECOVERO™ branded viscose (for textiles) and VEOCEL™ viscose fiber (for nonwovens) show a 50 percent reduction in greenhouse gas emissions and water impact compared to generic viscose (according to Higg-MSI[48]).

TENCEL™ Modal with Eco Color technology and TENCEL™ Modal with Indigo Color technology
Fibers with these technologies incorporate pigments during fiber production and therefore help avoid downstream and energy-intensive conventional dyeing processes. A fabric made from these fibers causes 60 percent lower greenhouse gas emissions than conventionally dyed fabrics[49].

First launched in 2021, TENCEL™ Modal with Eco Color technology has been established as the solution to address the demand for eco-responsible fiber alternatives among denim brands and retailers. In 2022, TENCEL™ Modal fiber with Indigo Color technology won the International Textile Manufacturers Federation (ITMF) Award for Sustainability and Innovation.

Enhancing mechanical textile recycling
Besides having a strong focus on chemical recycling, Lenzing together with partners is also active in mechanical recycling. In this process, textiles are broken down to the individual fibers as far as possible. However, the fiber quality usually suffers, the fibers are severely shortened and also lose performance, e.g. strength, depending on the waste stream (pre-consumer, post-consumer, post-industrial). These are reasons why, according to the current state of the art, mechanically recycled fibers require carrier fibers to become spinnable.

In one project, mechanically recycled cotton from post-consumer denim products was blended, spun and knitted with LENZING™ Modal Indigo, a spun-dyed LENZING™ Modal fiber. Several benefits were found, like no perceptible yellowing of the indigo dyed cotton or very good abrasion resistance, an indication of durability.

[49] Terinte, N., Manda, B.M.K., Taylor, J., Schuster, K.C. and Patel, M. (2014). Environmental assessment of coloured fabrics and opportunities for value creation: spin-dyeing versus conventional dyeing. In: Journal of Cleaner Production 72, pp. 127–138

Lenzing fibers with recycled content – REFIBRA™
In line with Lenzing's circular economy vision, "We give waste a new life. Every day", the current generation of innovative fibers that are manufactured on a large commercial scale use pre-consumer cotton scraps, post-consumer garments and wood from sustainably managed forests as a raw material. The cotton material is recycled into pulp, which is blended with dissolving wood pulp at a ratio of a minimum of 30:70 percent to produce high-quality lyocell fibers for textile and nonwovens applications. This technology diverts tons of cotton scraps and post-consumer garments from entering landfills or incineration. The fibers are subsequently produced with high levels of resource efficiency in a closed-loop production process.

TENCEL™ Luxe filaments
The TENCEL™ Luxe branded lyocell filament aims to become a key milestone for eco-couture fabrics in the premium and luxury markets. The closed-loop lyocell production process ensures a low environmental impact compared to the viscose and modal processes. This is due to low process water and energy use and raw materials consumption, and state of the art recovery systems. TENCEL™ Luxe branded filaments produced with the Eco Filament technology avoid conventional yarn spinning, which is energy-intensive and predominantly based in regions that rely heavily on fossil-based electricity. For example, at the industry level, yarn spinning processes contribute to about 30 percent of total GHG emissions of the textile value chain (excluding use phase).

LENZING™ Web Technology
The LENZING™ Web Technology is an innovative R&D development technology platform that allows a wide range of novel sustainable nonwoven materials to be produced from the raw material wood. The patented nonwoven web formation process – Lenzing holds more than 25 patent applications – starts by dissolving wood pulp and subsequently produces a directly formed cellulosic nonwoven fabric made of 100 percent continuous lyocell filament. This technology enables one-step fiber and nonwoven production and sets new standards for the efficiency, circularity and ecological sustainability of cellulose nonwoven fabrics. The flexibility of this technology and possible integration with other nonwoven technologies will enable the development of a wider range of new cellulosic materials and composite structures for highly engineered end use applications.

Pulp
Dissolving wood pulp is the raw material for Lenzing's fibers and is predominantly produced in the company's own biorefineries[50]. Lenzing's biorefinery processes ensure that 100 percent of the wood is used to produce dissolving wood pulp for fiber production, biorefinery products and bioenergy. All the pulp produced at Lenzing pulp production sites is totally chlorine free. For more information, please see the "Raw material security" chapter.

Lyocell
Lyocell fibers from Lenzing are derived from the renewable raw material wood and produced in a closed-loop process, which transforms wood pulp into cellulosic fibers with high resource efficiency and low ecological impact. This solvent-spinning process recycles process water and reuses the solvent at a recovery rate of more than 99.8 percent. Lenzing's lyocell fibers show around 50 percent lower greenhouse gas emissions than generic lyocell (according to Higg-MSI[51]).

ISPO AWARD WINNER 2023

The Merino 200 Realfleece™ Descender LS Zip Hoodie from icebreaker is an ultra-light hoodie made from 40 percent fine Merino wool and 60 percent TENCEL™ Lyocell. At 156 g/m² (wool micron 18.9), it is extremely light and, despite the hood, long sleeves and zipper, no heavier than a short-sleeved T-shirt. The brushed, airy striped construction provides warmth and protection, while air channels allow the knit to release excess heat and moisture. This construction, along with the blend of TENCEL™ Lyocell cellulosic fiber, makes the hoodie highly breathable.

"This thin, lightweight material is fascinating and feels extremely good against the skin. The special knitted construction retains heat without weighing you down. So it fits under any jacket without getting in the way." ISPO Award Jury

Modal
At the Lenzing (Austria) site, modal fibers are produced using an integrated production process in which the raw material pulp is manufactured at the same site as the fiber itself. Pulp production is energetically self-sufficient while supplying a significant amount of bioenergy for the entire fiber production process at the production site. Lenzing's modal fibers therefore cause around 80 percent less GHG emissions in production than generic modal fibers (according to Higg-MSI[52]).

LENZING™ Acetic Acid Biobased
Lenzing's biorefinery technology converts wood into pulp, energy, and biobased biorefinery products. One of the biobased biorefinery products is LENZING™ Acetic Acid Biobased, which is also available as low-carbon alternative to conventional fossil-based acetic acid, substantiated by a study conducted by an independent LCA consultant.

Process innovations drive efficiency and sustainability

Process innovations focus on improvements to pulp and fiber production processes. Lenzing is constantly working on resource efficiency, occupational safety, process stability and quality. Ongoing developments in pulp production aim to enhance the biorefinery concept, thereby optimizing wood consumption. Another issue is the reduction of sulfur emissions through technological improvements and aftertreatment systems. These measures allow effective cleaning of the exhaust gases and compliance with (and surpassing) the emission regulations.

The foundation for sustainable innovations is the use of highly sophisticated production processes for pulp (including biorefinery products) and fibers (viscose, modal and lyocell). The lyocell technology platform has already been expanded to include the production of additional materials, namely filament and direct-spun web. A number of new innovations have been developed in recent years that have not only significantly improved the lyocell process in terms of efficiency and quality but also reduce energy and process chemical consumption, thereby improving the already sustainable lyocell process overall.

[50] In addition to its own dissolving wood pulp production, Lenzing procures dissolving wood pulp in the global market.

[51] Based on Higg MSI database v3.5 (Dec. 2022)
[52] Based on Higg MSI database v3.5 (Dec. 2022)

CLEAN TECHNOLOGY INVESTMENTS IN THE LENZING GROUP

EUR 100 million plant modernization in Indonesia

Lenzing products made in Purwakarta were awarded the EU Ecolabel for the first time in 2023. The site has been the focus of a major modernization campaign. During the reporting year, construction was finished on two important upgrades at the site.

A new carbon disulfide adsorption plant is a big step towards reaching the Group's "Air emissions" target. The plant is fully operational and successfully lowered sulfur emissions to air. Data of the first months of operation even show a strong positive impact on the wider specific air emissions parameter on a Group level.

The upgraded wastewater treatment plant is commissioning at the end of this reporting year and is expected to reduce site COD emissions substantially and to be an important lever to improve the overall performance of the Lenzing Group once operational in early 2024.

Although Lenzing's headquarter is situated in Central Europe, the group operates multiple production sites all over the world. Driven by European legislation on one hand and by customer demand for higher standards related to environmental impact and product sustainability on the other, Lenzing continued its efforts in 2023 to meet European standards, not only at its European production sites but also at overseas locations.

Indeed, a major achievement in 2023 was the implementation of the technical concept and the production startup of LENZING™ ECOVERO™ branded viscose fibers at Lenzing's site in Purwakarta (Indonesia). While the site previously complied with local Indonesian regulations, it now additionally applies the state-of-the-art European environmental standards for waste gas treatment technology and the release of sulfur emissions into the air. Referencing to the EU BAT document, the LENZING™ ECOVERO™ fibers produced at the site received the EU Ecolabel certification. Instead of producing standard viscose fibers only, the site is now capable of producing specialty LENZING™ ECOVERO™ branded viscose fibers, which is Lenzing's promise to the customers for a strongly reduced environmental product footprint and improved product properties.

At the core of the project on site was the combination of a waste gas system improvement program, which lead to optimized utilization of the existing waste gas treatment facilities as well as the installation of a new carbon disulfide adsorption plant for sulfur recovery, in order to dramatically increase the on-site waste gas treatment capacities. Using state of the art technology, the on-site recovery concept is now capable of treating all the waste gases emerging from the fiber production plant, before releasing them into the environment.

Other technological developments and improvements include a smell testing procedure (incl. new testing methods), which was developed based on root cause analysis, was implemented to support the product development initiative "No smell fiber".

On the more basic development side, Lenzing is currently focused on technologies to remove water from different process streams more efficiently that the standard evaporation technologies, which are very energy-intensive. These technologies may again significantly help to further reduce energy consumption and therefore the carbon footprint of fibers.

In addition, projects are ongoing to further reduce water and process chemical consumption. These activities are accompanied and supported by simulation and modeling. In the near future, Lenzing will significantly enhance its textile recycling activities - a very challenging task that not only includes the production of recycling pulp but also has to deal with the processability of recycling pulp in different fiber production processes. Success requires a holistic approach from pulp to fiber production to final applications in the textile and nonwovens.

A current focus is boosting biorefinery integration at Lenzing's pulp sites and therefore on increasing the usage of the raw material wood. Several projects related to pulp production deal with the closure of loops (e.g. selective sulfur dioxide adsorption, increased caustic soda recovery) and the reduction of wastewater (e.g. sulfate in pulp and viscose fiber production). Increasing energy efficiency and reducing carbon emissions are other topics of growing importance.

Alternative sources of raw materials for fiber production

Any plant-based material can potentially serve as a source of cellulose and hence as dissolving pulp for fiber production. Lenzing has undertaken extensive research into many different alternative non-wood cellulose sources. In its research, Lenzing identifies promising new cellulose sources and carefully considers their availability, technical feasibility and economic scalability, as well as the overall ecological impact with respect to Lenzing's climate targets and circularity approach.

Studies have been conducted on sources, such as annual plants like hemp, straw and bamboo. In general, annual plants have a higher growth rate per hectare than trees. Additionally, certain species have a higher cellulose content. Some of them are already available in large quantities, especially in the form of agricultural waste. This allows an attractive cellulose yield per hectare to be achieved; however, the feasibility of any alternative raw material needs to be assessed on a case-by-case basis.

Based on current data, large-scale and sustainable production of cellulose is still best conducted using wood from well-managed forests instead of the alternatives mentioned above. The process for isolating cellulose from wood is well implemented and optimized regarding energy, chemicals and process steps. By-products can be extracted during pulp production and excess material is burned for heat and energy production. At the moment, the most promising alternative raw materials to wood are residuals from textile production and used clothing. For more information about the activities of Lenzing in this field, please see the "Resource use and circular economy" chapter.

At the same time, Lenzing as an innovation company aspires to find new solutions, looking beyond the horizon. Limited edition fibers with alternative pulp like orange residues or hemp have been successfully produced in the past. Within the framework of the INGRAIN innovation alliance, the first development project was started together with RWTH Aachen and other partners. Furthermore, Lenzing is in exchange with manufacturers of pulp form alternative cellulose sources (like straw) and is evaluating the suitability of these pulps.

The development of further new sources of non-wood-based cellulose in the future will require targeted research into the ecological and economic aspects of industrial production as well as increased cooperation. A number of challenges need to be addressed and are described in more detail below.

Availability
Alternatives such as bamboo, straw, and various annual plants do not yet meet large-scale industry needs in terms of availability in the required quality and quantity. Many sources from annual plants are only available in the harvesting season and are difficult to store for year-round use. Despite specific benefits and high annual growth per hectare, the material is very bulky and more costly to transport.

Environmental sustainability
The conversion of forest to agricultural land for annual plants is a worldwide phenomenon that increases pressure on all kinds of forests.

Another important factor in the performance of annual plants is the management of the agricultural areas. Highly productive sites need far more fertilizers and pesticides than forests, causing other environmental issues. For example, the overall environmental profile of large-scale bamboo plantations is known to be unsatisfactory.

When considering processing, important factors that affect the environmental impact include energy consumption and the use of process chemicals in pulp production. They depend heavily on the actual process and vary significantly from one annual plant to the next.

Technical feasibility
The biorefinery process is optimized for certain wood species as raw material. This keeps quality and efficiency high and yields bioenergy as a co-product. With non-wood feedstocks, less bioenergy may be generated as a co-product, requiring additional energy sources for processing the feedstock into dissolving pulp, resulting in a potentially negative environmental impact.

Annual plants contain more mineral components and organic substances that have to be removed to produce high-quality dissolving pulp. This purification process typically requires the use of aggressive chemicals and causes waste issues. It is a big challenge to develop new sustainable technologies for these materials while maintaining product quality and ecological safety. On the other hand, in woody plants like trees, these components are mainly concentrated in the bark, which is easily removed in the first stage of the process. For more information, please see the "Wood & pulp" focus paper.

Research collaborations

[GRI 3-3f]

Wood K Plus
For more information about Wood K Plus, please see the "Biodiversity and ecosystems" chapter above.

Christian Doppler Laboratory
Lenzing is also a partner in two Christian Doppler Laboratories. One, led by the Vienna University of Technology, investigates efficient, recycling-based circular economy and aims to provide the scientific knowledge base for efficiently recovering secondary raw materials from different municipal solid waste streams. A second Christian Doppler Laboratory, which was launched just in 2023, is situated at the University of Natural Resources and Life Sciences (BOKU) at Tulln (Austria). It deals with the sustainable production of high-tech materials from cellulose.

Reducing Energy and Waste using AI (REWAI)
This national funded project (within the program AI4Green) aims to reduce the carbon and material footprint of the textile industry by reducing energy and material consumption. Together with partners Pro²Future, University of Linz and Graz University of Technology reliable, trustworthy and energy-efficient AI solutions for industrial processes analysis are developed. These will be capable of forecasting and anomaly-spotting, and will empower human operators to make informed and more timely decision on near real-time data from continuous processes.

Circular and Sustainable Textiles and Clothing (CISUTAC)
For more information about CISUTAC, please see the "Resource use and circular economy" chapter.

Bilateral research
Bilateral research is also important to Lenzing's approach to scientific collaboration. Noteworthy examples include its collaboration with the Scripps Institution of Oceanography, University of California San Diego (USA) on the biodegradability of cellulose-based materials in the maritime environment (for more information, please see the "End of product use" focus paper).

European Polysaccharide Network of Excellence (EPNOE)
Lenzing is also active in scientific networks such as the EPNOE and in supporting research projects, by providing input and engaging in discussions. Lenzing's R&D experts also participate in relevant conferences and have given several talks or have been part of panel discussions with a focus on sustainability, biodiversity and recycling.

Industry associations and initiatives
Industry associations and initiatives are also an important cornerstone to deepen cooperations and develop new networks – again with a very strong focus on sustainability. The European Technology Platform for the Future of Textiles and Clothing (Textile ETP), of which Lenzing is a member, is a very active player in this field.

Own workforce

MANAGEMENT APPROACH

Material topic: Human rights & fair labor practices

[GRI 3-3]

Diversity, inclusion and respect are core pillars of a talent strategy designed to attract and develop people from all backgrounds. A committed and empowered workforce is critical to business success, and Lenzing acts to provide equal opportunities for employment, learning and development. The company seeks to create an open-minded and inclusive environment by proactively fostering ethical ways of working in compliance with high internal standards, as well as principles outlined by international regulatory bodies. Lenzing continues to adhere to and uphold human rights and fair labor practices in all aspects of the global working environment.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Good labor practices promote staff safety and wellbeing and ensure healthy and satisfied employees
- Launch of a clear and appealing purpose with people focus at its core to deliver the "Better Growth" strategy
- Enabling personal success and contributing to the growth and success of the company
- Diversity promotes the quality of business decisions and contributes to the company's resilience
- Competitive advantage through a committed workforce
- Development of a corporate culture that is characterized by openness and mindful interactions
- Definition of related targets of social sustainability
- Global goal and talent management processes in place
- Global Skill Matrix and Functional Competency Frameworks in order to offer the right learning and development opportunities to employees
- Comprehensive set of business policies that set clear standards and processes regarding the behavior of leaders and employees

Negative

Own activities:

- Risk of losing employees with high potential
- Risk of reducing the engagement and productivity of employees
- Risk of negatively impacting on the mental health of leaders and employees
- Risk of not being able to hire and train a successor in time

Business relationships:

- Risk of discrimination and other possible negative impacts on human rights
- Potential regulatory and corporate reputational risks
- Risk of failing to attract future talent or losing employees due to a lack of initiatives on diversity, equity and inclusion
- Risk of not meeting regulatory requirements with regard to the share of different genders in executive management
- Risk of losing know-how through demographic change

Policies and commitments

- Local Labor laws
- Global Job Evaluation Guideline
- Lenzing Group Short Term Incentive Plan
- Global Salary Administration Guidelines
- Global Learning & Development Guideline
- Global Performance Management Guideline
- Global Guideline for Creating a Job Description
- Modern Slavery Act Transparency Statement (UK only)

Actions taken

- Launch of the Equity, Diversity and Inclusion (EDI) Policy supported by explainer videos in all languages
- 3rd party audits on social sustainability topics conducted for several sites
- Launch of Employee Resource Groups (ERGs) Women@Lenzing and Multicultural@Lenzing
- Provide insightful talent data to support employee development and build effective career paths
- Roll-out of skill matrix concept and IT tool at Lenzing site started; development of skills on multiple sites globally ongoing
- Eye-to-eye partner for local unions, works councils, and other workforce representatives
- Consolidation of the performance and talent management processes for all white-collar employees
- Establish structured performance management processes with regular employee feedback
- Focus on digital learning through a globally available catalog of over 165 optional eLearning courses in German, English, Portuguese and Chinese over 60 optional classroom training courses (virtual and face-to-face) covering a range of topics from business to personal development and wellbeing
- Regional social projects
- Compensation & benefit benchmarks and grading systems
- Application of 4-eye principle
- Whistleblower system and investigation directive

Sustainability targets, measures and progress

- No cases of discrimination or human right abuses, based on Discrimination ILO 111 Article 1, were reported.
- No strikes at any Lenzing production facility
- "Social standard" target
- "Equity, Diversity and Inclusion" target

Stakeholders

- Employees
- Customers

- Local Employee Terms and Conditions
- 17 UN Sustainable Development Goals
- 10 principles of the UN Global Compact
- Women's Empowerment Principles
- Lenzing's Purpose, Culture & Strategy
- Policy on Human Rights and Labor Standards
- Policy on Equity, Diversity & Inclusion
- Lenzing Group Reward Guideline
- Global Code of Business Conduct
- Policy for Safety, Health and Environment
- Sustainability Policy
- Lenzing Sustainability Targets
- HR Strategy
- Global Anti-Bribery and Corruption Directive
- Global Whistleblower Directive
- Global Compliance Investigation Directive
- Anti Money Laundering Group Directive
- Global Recruitment Guideline

- Local communities
- Rating agencies
- Brands & retailers
- Certification bodies
- Suppliers

Responsible
- CEO
- SVP Corporate Human Resources

Supporting
- Corporate Communications & Public Affairs
- Social Sustainability

MANAGEMENT APPROACH

Material topic: Health & safety

[GRI 3-3]

A safe working environment with supportive health systems for Lenzing's employees are as critical to business success as eco-responsible products and production processes. The Lenzing Group strives to ensure that no direct or indirect employees, contractors or visitors come to harm at Lenzing's sites or while working at external locations. This ethos extends to the impact on the communities in which Lenzing operates. In keeping with the principle that all injuries and occupational illnesses can be avoided, workplace programs have been implemented that promote health-conscious behaviour.

Actual and potential negative and positive impacts, risks and opportunities

Positive
- A safe work environment, and supportive health measures for employees fosters an engaged and productive workforce
- Upcoming generations of talent are likely to value purpose, fulfilment and social responsibility more highly than ever before
- Educating, training and motivating employees to behave safely and to care for each other
- Providing occupational medical services to ensure that employees are fit and well, offering health surveillance to support workplace risk management and employee health screening to support health and wellbeing
- Protecting people based on the belief that every adverse event, injury and occupational illness is preventable

Negative
Own activities:
- The nature of Lenzing's business is such that Lenzing's workforce can be exposed to risks that impact their safety and wellbeing
- Recognising that Lenzing's working environments can impact and potentially expose its workforce at operated assets to potential health and wellbeing impacts

Policies and commitments
- "Better Growth" strategy
- HR Strategy
- "ZUKUNFT SICHERn" (Safe Future) safety project at the Lenzing site
- COVID-19 care measures: offering vaccinations, tests
- Regularly held safety webinars
- Safety, Health & Environment Action Reporting System
- Management of risk processes
- Regular Global QESH meetings with management review
- Regular meetings of health and safety committees at every production site
- Heartbeat for Safety Program
- Safety Walks and Talks
- Provision of health services
- eMotion program with "Moveeffect" app

Sustainability targets, measures and progress
Lenzing Group target: To reduce the Total Recordable Injury Frequency Rate (TRIFR[53]) to 0.3 by 2025.

Stakeholders
- Customers
- Employees
- Contractors
- Local communities
- Enforcing authorities
- Certification bodies

Responsible
- Managing Board

[53] TRIFR refers to the number of total recordable injuries occurring in a workplace per 200,000 working hours.

- Policy for Safety, Health and Environment (SHE)
- ISO 45001:2018 certification
- Global Code of Business Conduct
- Global Supplier Code of Conduct
- Health guiding principle ("House of Health")
- Life-Saving Rules Group Guideline
- Clean & Hygiene Guideline

Actions taken

- Health Climate Index survey for employees to develop a work climate where everybody feels comfortable

- VP Global QESH
- SVP Corporate Human Resources
- Senior leadership roles
- Health & safety is a shared responsibility through all layers of the organization

Supporting

- Corporate Communications & Public Affairs

Strategy

[ESRS S1 ESRS 2 SBM-2][54]

Managing social sustainability

In its "Better Choices" corporate culture, the Lenzing Group places a high priority on people as a strategic focus, as an integral part of its holistic sustainability approach. It is increasingly being seen as a compliance topic within the industry, which led to the establishment of the Social Sustainability department (within Human Resources – Corporate People Development) in 2022 to manage these objectives effectively.

Labor rights are subject to national laws. Employees at all Lenzing sites receive fair wages thanks to a highly regarded internal global grading system, collective bargaining, the activities of union representatives, and national protections for human rights. The Lenzing Group's own labor practices are also evaluated through the yearly assessment which is conducted by EcoVadis.

The Lenzing Group's corporate culture is characterized by long-term partnerships, close collaboration, and mutual respect based on open dialog and transparency. Social sustainability is regarded as a corporate value and has consequently been integrated into Lenzing's global human resources (HR) strategy, HR policy, and HR processes.

Impacts, risks and opportunities management

[ESRS S1 ESRS 2 SBM-3]

A company directly or indirectly impacts its employees, but also the workers in the value chain, its customers, and the local communities around its sites. Social sustainability is about identifying and managing the positive and negative impacts of the company on people. Social sustainability is therefore one of the three pillars of the holistic sustainability approach (Environment-Social-Governance). The Lenzing Group is committed to conducting business in a manner that respects the rights and dignity of all people. Lenzing respects internationally recognized human and labor rights for all employees and business partners.

Policies

[ESRS S1-1; GRI 2-23, 2-25, 3-3c]

The policies and guidelines listed in the Management Approach "Human rights and fair labor practices" apply to the entire Lenzing Group. The policies and guidelines are accessible to all employees via the intranet and are also sent by e-mail.

The policies that explicitly come from Human Resources are described in more detail below.

The others are described in different chapters: For more information on the Policy for Safety, Health and Environment, please see the "Pollution" chapter. For the Global Code of Business Conduct and for the Global Supplier Code of Conduct, please refer to the "Business conduct" chapter. The Clean & Hygiene Guideline can be found in the "Consumers and end-users" chapter.

Policy on Human Rights and Labor Standards
This policy confirms the company's commitment towards fulfilling, and wherever possible, exceeding all applicable social and ethical obligations. Lenzing fully supports all internationally recognized human rights and the principles proclaimed in the Universal Declaration of Human Rights (UDHR), United Nations Global Compact (UNGC), OECD Guidelines, and the Rights at Work of the International Labour Organization (ILO). Lenzing believes in employee satisfaction and wellbeing as well as fostering compliance with standards. The Vice President Corporate Human Resources is responsible for the implementation of this policy.

Global Recruitment Guideline
This guideline clarifies the position approval process as well as key rules and roles for the collaboration required to recruit or transfer talent using sound hiring decisions through a fair and unbiased process including for full-time, part-time and temporary roles as well as apprentices and for special projects. The guideline covers approval to recruit, sourcing, selection, decision, documentation standards, offer and onboarding stages and clarifies the responsibilities of local HR, the Line Manager, Corporate HR, HR Directors and HR Business Partners. The Director Corporate Recruitment/HR Employee Branding is responsible for the implementation of this guideline.

Lenzing Group Reward Guideline
This guideline sets out the guiding principles and reward philosophies of the Lenzing Group with the aim of attracting and retaining

[54] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

staff, be the employer of choice, while also maintaining internal and external equity for its employees. This is based on a Hay job evaluation approach. The guideline covers base salary, local elements, short term variable pay, benefits, annual salary reviews, off-cycle increases and short term variable pay. All Group business units and legal entities are required to structure reward in accordance with this guideline. The Lenzing Group Reward Guideline has been designed to:

- Support and drive the business strategy
- Attract, retain and motivate the best people by providing competitive pay within local markets
- Recognize and reward individual performance
- Link variable pay to business performance
- Link shareholder, management and employee interests

The Senior Director Corporate Compensation & Benefits is responsible for the implementation of this guideline.

Global Guideline for Creating a Job Description
This guideline provides a global process for creating a job description to ensure standardization and comparability of jobs and is intended to prevent duplication of responsibilities and competencies as well as ensuring that the job and its functionality are described and not the job holder. The Senior Director Corporate Compensation & Benefits is responsible for the implementation of this guideline.

Global Job Evaluation Guideline
This guideline has been created to ensure a globally consistent approach is taken towards job evaluation using the Korn Ferry Hay grading methodology. It covers those involved, the approval levels, a summary of the process as well as an appeal stage.
The Senior Director Corporate Compensation & Benefits is responsible for the implementation of this guideline.

Lenzing Group Short-Term Incentive Plan
This plan confirms the structure and targets of the annual bonus set by the Board. It covers eligibility, the short term incentive plan, the targets, the payment levels, the payment date, eligibility for payment and exceptions.
The Vice President Corporate Human Resources is responsible for the implementation of this plan.

Global Salary Administration Guidelines
These guidelines have been compiled to define the administrative standards required to ensure that an individual employee's base salary is set at a level that is market-competitive, internally equitable, and performance driven. These procedures apply to all graded jobs globally for as far as this is compliant with local labor laws and regulations. The guideline includes aspects such as equity analysis, compensation administration principles, salary increase types, a decision tree, promotion, transfer and demotion.
The Senior Director Corporate Compensation & Benefits is responsible for the implementation of this guideline.

Global Learning & Development Guideline
This guideline provides an overview of learning and development processes to ensure the Lenzing Group is prepared for further growth by having key employee competencies and skills developed. The guideline describes Lenzing's People Development Approach as being the way it identifies the knowledge that is core to the business's sustainable competitiveness and defines how competencies are built and developed in defined areas of strategic relevance. This approach is targeted towards all Lenzing employees. The guideline includes topics such as performance and development talks, competency framework, competency assessment, individual development plan and the training budget process.
The Senior Director Corporate People Development is responsible for the implementation of this guideline.

Global Performance Management Guideline
This guideline is part of the People Development Approach and provides an overview of how talent management processes operate to enable its employees to support the growth plans of Lenzing. It includes the definition of performance, the performance management process, Lenzing's corporate values and behaviors, how goals are defined and describes how to conduct performance and development talks.
The Senior Director Corporate People Development is responsible for the implementation of this guideline.

Modern Slavery Act Transparency Statement (UK only)
This statement is made in accordance with section 54 of the Modern Slavery Act 2025 and provides an annual update on the actions taken by the business in combating modern slavery. It refers to a number of internal Lenzing documents, including the Policy on Human Rights and Labor Standards, the Global Supplier Code of Conduct and the Global Code of Business Conduct. The statement confirms support for the principles proclaimed in the Universal Declaration of Human Rights (UDHR), the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the fundamental labor principles that protect workers' rights as defined by the Declaration on Fundamental Principles and Rights at Work of the International Labor Organization (ILO) including:

- The prohibition of child labor
- The prohibition of forced labor
- Freedom of association and the right to collective bargaining
- Fair compensation and working hours
- Safe and healthy workplaces
- Protection from discrimination, harassment and inhumane treatment

The statement describes both risk assessment and due diligence processes and confirms the use of the EcoVadis methodology that uses a CSR analysis criteria for assessing its suppliers and which has the following themes:

- Environment
- Labor & Human Rights
- Ethics
- Sustainable Procurement

The UK Human Resources Manager is responsible for updating this statement.

Global Equity, Diversity and Inclusion Policy
This policy confirms Lenzing's desire to strive to inspire, empower, engage and develop its employees to enable them to participate in maintaining Lenzing's competitive advantage. Lenzing aims to provide equal opportunities for all, regardless of gender, marital status, ethnicity, skin color, nationality, national origin, disability, sexual orientation, religion or belief, age or other characteristics. Lenzing

strives to build a diverse and inclusive work environment where differences are respected and valued. So everyone feels appreciated, included and so they can be their true self and feel able to give their best contribution. The Lenzing Group aims to:

- Facilitate equity, fairness and respect for all existing employees and those applying to join the business
- Ensure an environment free from unlawful discrimination
- Oppose and prevent all forms of unlawful discrimination

Lenzing supports the UN Global Compact, endorses its principles and is committed to advancing a number of the UN Sustainable Development Goals by encouraging equity, diversity and inclusion among its workforce. Employees are encouraged to report breaches of this policy and a variety of options for doing so are provided, including the use of a confidential whistleblowing system. The Vice President Corporate Human Resources is responsible for the implementation of this policy.

Global Child Labor Remediation Procedure
This procedure provides guidance for any instance of child labor found within Lenzing and includes remediation steps that can be followed by managers to ensure that child safety and rights are upheld, and the best interests of children are always served. Lenzing's expectation is that child labor is not to be used in the production of its products. This procedures aims to ensure compliance with the United Nations International Labor Organization's (ILO's) Conventions on child labor. The procedure relates to permanent, temporary, informal and contract labor, whether directly, or indirectly employed by Lenzing as well as children who have been trafficked or sold into work. Lenzing requires all internal recruitment procedures to ensure that child labor is not used. Lenzing is also committed to protecting the rights of young workers. Lenzing facilities are expected to have effective procedures in place for age verification purposes and retain related records for all employees. This global procedure applies to all applicants, employees and interns associated with any Lenzing facilities worldwide. The application of this procedure will take into consideration relevant local and national laws. The procedure includes:

- Removing the child from the workplace
- Confirming the identity of the child's parent(s)/guardian(s)
- Consulting the parent(s)/guardian(s)
- Advising relevant child-focused organizations/authorities
- Making a record of the incident
- Communication with relevant people
- Determining a resolution proposal
- Conducting a root cause analysis to ensure future avoidance
- Reporting the incident

Human rights

The Lenzing Group fosters a safety culture and a sustainable working environment for the benefit of all employees, all local communities in which the company operates and all business partners. It is imperative that the entire global network of the Lenzing Group fulfills, and wherever possible, exceeds all applicable social and ethical obligations. Suppliers are held to the same high standards.

The United Nations Global Compact (UNGC) is one of the world's most important initiatives for responsible corporate governance. As a member, Lenzing is committed to upholding human rights, respecting the rights of employees and their representatives, protecting the environment, enabling fair competition and combating corruption. As part of the six-month UN Global Compact Business & Human Rights Accelerator Program, the company took a closer look at the topic of human rights in the reporting year and defined the human rights relevant to the company by means of an internal survey with around 30 people. The resulting heat map forms the basis for developing plans and actions for salient human rights in a next step. To fulfill the requirements of corporate due diligence, Lenzing monitors adherence to laws, human rights principles and applicable environmental standards not only internally, but also at its suppliers and within its supply chains. Compliance with human rights is essential and non-negotiable for the Lenzing Group. The company follows internationally accepted foundational principles and rights when it comes to work as per the International Labor Organization (ILO).

Communication

[ESRS S1-2; GRI 2-29, 403-4]

Works council
The Lenzing Group's management is committed to a transparent information policy with the employees' official representatives. Local works councils exist at both sites in Austria. Those at the Lenzing site have a seat and vote on the Supervisory Board of Lenzing AG in accordance with the Austrian Labor Constitution Act. They represent the interests of the employees in Lenzing and Heiligenkreuz (Austria). With the exception of the site Prachinburi (Thailand), trade union representatives from various fractions and/or employee interest groups represent the interests of the employees at all other sites.

Regular and varied communication with employees and their representatives ensures a clear understanding of the business strategy, goals, market conditions, financial situation and policies, including contractual terms, conditions, and benefits. Information is disseminated through channels like onboarding events, notice boards, internal mail, and internal news, etc.

Health and safety committees
Where occupational health and safety committees are a regulatory requirement, formal agreements with worker representatives are in place and all employees of Lenzing are represented by such committees, which operate at a site level. Each individual site is responsible for arranging and maintaining such committees. Specific details on how often the committees meet, agenda items and the make-up of representatives are in the responsibility of the site SHE managers and subject to agreement with union representatives.

Channels to raise concerns
[ESRS S1-3; GRI 2-16, 2-25]

The following processes are in place for addressing and remediating negative impacts on Lenzing's workforce.

- Whistleblower system (described in the "Business conduct" chapter)
- Work council at the Lenzing and Heiligenkreuz sites, both situated in Austria
- Trade unions/employee interest groups (except Prachinburi (Thailand) site)

- Global child labor remediation procedure (described in the section "Policies")

Lenzing's actions

[ESRS S1-4; GRI 3-3d, 403-2, 403-8, 404-2]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Actions learning and development

The learning and development offer was expanded and refined in 2023. The Global Performance and Talent Management continued. For more details, please see the section "Learning and development" in this chapter.

Actions Equity, Diversity & Inclusion

Lenzing launched two Employee Resource Groups (ERGs), one focusing on women and one on different nationalities. The Women`s Empowerment Principles were signed by Lenzing's CEO. For more details, please see the section "Equity, Diversity & Inclusion" in this chapter.

Social audits

In the reporting year, Lenzing continued to work on implementing the standardized Social Labor Convergence Program (SLCP). A comprehensive self-assessment and an on-site audit based on this help the company to identify potential opportunities for improvement. The results can be shared with partners along the value chain via the Higg FSLM assessment tool, for example. In addition, customer audits were conducted at various Lenzing sites, focusing on labor standards and fair labor practices. Customer questionnaires on relevant topics were also completed during the year.

Health and safety management

All manufacturing sites are certified to ISO 45001. This Occupational Health and Safety Management Certification, covering employees and contractors, provides the framework to identify, control and decrease risks associated with workplace health and safety. This system prioritizes health and safety and is based on the plan-do-check-act continuous improvement model. Furthermore, it helps to identify and assess hazards and risks in product development, manufacturing, distribution, and other operations. Lenzing then establishes goals and objectives to address significant hazards and risks, taking into account feedback from employees, contractors, communities, customers, suppliers, and other stakeholders.

Risk assessment at Lenzing's production sites involves reviewing site specific activities in teams. This includes identifying potential harm, assessing the likelihood and severity of hazards, determining preventive measures, and seeking improvement opportunities. Regular reviews and monitoring ensure control effectiveness. Assessments are updated after workplace changes, e.g. changes to staff or a process, or after adverse events.

All employees and contractors must adhere to Lenzing's Life Saving Rules and are empowered to stop work if they think it is unsafe. The relevant information is provided during induction processes in all group languages and in pictorial display.

Lenzing maintains a process for reporting and investigation adverse events. Employees, contractors, and visitors are required to report work-related symptoms, injuries, or illnesses to enable a timely response. The group-wide reporting database facilitates communication on adverse events, enhancing risk management. The Lenzing incident investigation (also called accident investigation) is structured and systematic, allowing for reporting, tracking, and root cause analysis to prevent the recurrence of incidents. This proactive, approach equips Lenzing to effectively manage and respond to future incidents.

To learn more about Lenzing's actions for its own workforce regarding health and safety, more specific, about internal and external audits, health care, safety training and health promotion in 2023, please have a look at the "Health and safety in Lenzing" section of this chapter.

Metrics and targets

[ESRS S1-5; GRI 3-3e]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Social standard	**To have a continuously valid third-party audited accredited social certificate for every Lenzing Group production (fiber or dissolving wood pulp) site by 2024[d]**	**2024** **On track**
Measure(s)	Lenzing implements and annually updates the Facility Social Labor Module (FSLM) at all pulp and fiber production facilities and shares verified modules with customers from 2024 onwards	**2024** **On track**
Progress made in 2023	For FSLM, on-site audits for the facilities in Mobile (United Stated), Grimsby (United Kingdom), Nanjing (China), Purwakarta (Indonesia) and Paskov (Czech Republic) were completed succesfully. Currently it is not possible to receive a third-party FSLM verification in Austria, due to lack of authorized auditors.	

d) The scope includes all Lenzing facilities, also the new legal entities in Prachinburi (Thailand) and Indianópolis (Brazil).

Equity, Diversity and Inclusion	To create an empowering work environment by respecting human rights, employee wellbeing and diversity	Continuous On track
Measure(s)	Lenzing implements training courses for 75 percent of the workforce on diversity, discrimination, the non-discrimination policy, and human rights	2025 On track
	Lenzing increases its proportion of women to 22.5 percent in all positions graded 5a and above by 2025[b]	2025 On track
	Lenzing achieves an inclusion Index score of 75 percent in the global Health Climate Survey by 2026	2026 New
	Lenzing establishes a working condition policy	2021 Achieved
Progress made in 2023	A Global Equity, Diversity and Inclusion (EDI) policy was published with a training video for all employees in multiple languages. A child labor remediation procedure was also established. Two employee resource groups (ERGs) were initiated. The first to further improve gender equality within Lenzing, and the second to promote multiculturalism. Team Leader Academy containing Inclusive Leadership modules was piloted in Grimsby (United Kingdom). Lenzing published one summary document containing all global policies influencing working conditions of its employees.	

b) Relevant for the Managing Board long-term incentive (LTI) bonus targets

Health targets

Lenzing has set a target at Group level to reduce the Total Recordable Injury Frequency Rate (TRIFR) to 0.3 by 2025. Additionally, site targets were developed based on the Group target and actual performance, taking into consideration the size of a site. Building on the TRIFR targets, sites set goals for leading indicators, breaking them down to the departmental level and develop site-specific safety programs that they coordinate with Global Occupational Health and Safety (OHS).

Employment contracts

Most Lenzing Group employees are employed in a permanent employment/service relationship. It is currently customary to work the first six months under a fixed-term contract followed by an automatic transition to a permanent employment/service relationship. Only around 2.8 percent of the workforce (including external personnel) have a genuine fixed-term employment/service contract that goes beyond the usual six-month fixed-term period. For this reason, there is no further separate breakdown into permanent/fixed-term employment contracts.

Employees in numbers

[ESRS S1-6; GRI 2-7, 401-1]

The main reasons for employees leaving in 2023 were mutual/voluntary contract terminations, contract terminations by employer and retirements. This is reflected in all figures in the following tables.

The numbers reported are in head count and as of December 31, 2023.

Employees 2023 Table 34

General information required	2021	2022	2023
Total number of employees	**7,958**	**8,301**	**8,340**
Female	1,244	1,394	1,408
Male	6,714	6,907	6,932
thereof in Austria	3,575	3,675	3,541
thereof in Indonesia	1,633	1,523	1,474
thereof in Czech Republic	451	491	525
thereof in China	873	867	818
thereof in USA	221	222	217
thereof in UK	218	225	234
Others (India, Thailand, Türkiye, Korea, Singapore, Taiwan, Brazil, Germany and Italy)	987	1,298	1,531
Total number of employees – full time	**7,500**	**7,823**	**7,748**
Female	933	1,075	1,087
Male	6,567	6,748	6,661
Total number of employees – part time	**458**	**478**	**592**
Female	311	319	321
Male	147	159	271
Number of apprentices	**184**	**188**	**236**
Female	20	31	48
Male	164	157	188

Employees 2023

Table 35

Employee turnover	2021	2022	2023
Number of employees that left the company, total	**598**	**898**	**932**
Female	125	153	222
Male	473	745	710
Up to 29	135	184	205
Between 30 and 50	262	448	446
Over 50	201	266	281
Austria	222	278	347
Indonesia	86	206	78
China	98	99	74
Czech Republic	22	27	47
USA	20	41	45
United Kingdom	17	24	24
Others (India, Thailand, Türkiye, Korea, Singapore, Taiwan, Brazil, Germany and Italy)	133	223	317
Percentage of employees that left the company (turnover rate), total	**7.5%**	**10.8%**	**11.2%**
Female	21%	17%	24%
Male	79%	83%	76%
Up to 29	23%	20%	22%
Between 30 and 50	44%	50%	48%
Over 50	34%	30%	30%
Austria	37%	31%	37%
Indonesia	14%	23%	8%
China	16%	11%	8%
Czech Republic	4%	3%	5%
USA	3%	5%	5%
United Kingdom	3%	3%	3%
Others (India, Thailand, Türkiye, Korea, Singapore, Taiwan, Brazil, Germany and Italy)	22%	25%	34%

Employees 2023

Table 36

Newly hired employees	2021	2022	2023
Number of newly hired employees, total	**1,198**	**1,241**	**971**
Female	279	303	236
Male	919	938	735
Up to 29	285	275	195
Between 30 and 50	644	705	523
Over 50	269	261	253
Austria	315	378	213
Indonesia	105	96	29
China	132	93	25
Czech Republic	63	67	81
USA	31	42	40
United Kingdom	32	31	33
Others (India, Thailand, Türkiye, Korea, Singapore, Taiwan, Brazil, Germany and Italy)	520	534	550
Percentage of newly hired employees, total	**15.1%**	**15.0%**	**12%**
Female	23%	24%	24%
Male	77%	76%	76%
Up to 29	24%	22%	20%
Between 30 and 50	54%	57%	54%
Over 50	22%	21%	26%
Austria	26%	30%	22%
Indonesia	9%	8%	3%
China	11%	8%	3%
Czech Republic	5%	5%	8%
USA	3%	3%	4%
United Kingdom	3%	2%	3%
Others (India, Thailand, Türkiye, Korea, Singapore, Taiwan, Brazil, Germany and Italy)	43%	43%	57%

[ESRS S1-7; GRI 2-8]

Employees 2023 Table 37

General information required	2021	2022	2023
Total number of supervised workers	**444**	**261**	**156**

The numbers reported are in head count and as of December 31, 2023. The largest group of workers other than Lenzing`s employees are supervised workers which are engaged indirectly via an employment agency. They are treated the same way as Lenzing`s employees. The majority of supervised workers are employed in the production area (shift work, etc.).

Collective bargaining agreements

[ESRS S1-8; GRI 2-30]

Lenzing complies with the local labor standards in all countries where it operates. Collective agreements cover 83.0 percent (2022: 82.4 percent, 2021: 80.2 percent) of the Lenzing Group's global workforce. 99.6 percent (2022: 99.5 percent, 2021: 95.0 percent) of employees are subject to notice periods governed by labor law or collective agreements.

Diversity metrics

[ESRS S1-9, GRI 405-1]

Employees 2023 Table 38

Individuals within the organization's governance body (Managing and Supervisory Board)[a]	2021	2022	2023
Number of individuals, total	**14**	**12**	**14**
Up to 29	0	0	0
Between 30 and 50	4	4	4
Over 50	10	8	10
Female	2	2	3
Male	12	10	11
Percentage of individuals			
Up to 29	0%	0%	0%
Between 30 and 50	29%	33%	29%
Over 50	71%	67%	71%
Female	14%	17%	21%
Male	86%	83%	79%

a) Excluding Supervisory Board members appointed by works council, members of Supervisory Board are not included in any other headcount figure/table, apart from this one.
b) The three managing board members in 2022 were erroneously not included.

Employees 2023 Table 39

Individuals outside the organization's governance body[a]	2021	2022	2023
Number of individuals, total	**7,953**	**8,298**	**8,336**
Up to 29	1,487	1,578	1,568
Between 30 and 50	4,722	4,980	5,057
Over 50	1,744	1,740	1,711
Female	1,244	1,394	1,408
Male	6,709	6,904	6,928
Percentage of individuals			
Up to 29	19%	19%	19%
Between 30 and 50	59%	60%	61%
Over 50	22%	21%	21%
Female	16%	17%	17%
Male	84%	83%	83%

a) Including Supervisory Board members appointed by works council

Category 1	white collar manager
Category 2	blue collar manager
Category 3	supervised worker - manager

Employees 2023 Table 40

Individuals within managing role – overall (at least one direct)	2021	2022	2023
Number of individuals, total	**941**	**932**	**915**
Up to 30	34	40	40
Between 31 and 50	586	587	577
Over 50	321	305	298
Female	155	171	160
Male	786	761	755
Percentage of individuals			
Up to 30	4%	4%	4%
Between 31 and 50	62%	63%	63%
Over 50	34%	33%	33%
Female	16%	18%	17%
Male	84%	82%	83%
Number of employee category 1, total	**748**	**738**	**730**
Up to 30	17	21	17
Between 31 and 50	466	460	459
Over 50	265	257	254
Female	138	153	144
Male	610	585	586
Percentage of employee category 1			
Up to 30	2%	3%	2%
Between 31 and 50	62%	62%	63%
Over 50	35%	35%	35%
Female	18%	21%	20%
Male	82%	79%	80%
Number of employee category 2, total	**171**	**185**	**180**
Up to 30	16	19	23
Between 31 and 50	109	122	116
Over 50	46	44	41
Female	13	14	13
Male	158	171	167
Percentage of employee category 2			
Up to 30	9%	10%	13%
Between 31 and 50	64%	66%	64%
Over 50	27%	24%	23%
Female	8%	8%	7%
Male	92%	92%	93%
Number of employee category 3, total	**22**	**9**	**5**
Up to 30	1	0	0
Between 31 and 50	11	5	2
Over 50	10	4	3
Female	4	4	3
Male	18	5	2
Percentage of employee category 3			
Up to 30	5%	0%	0%
Between 31 and 50	50%	56%	40%
Over 50	45%	44%	60%
Female	18%	44%	60%
Male	82%	56%	40%

Equity, Diversity & Inclusion

A collective responsibility

Lenzing is committed to creating a diverse and inclusive environment where everyone can thrive, regardless of characteristics such as gender, age, ethnicity, cultural background, or language.

Promoting equity, diversity and inclusion (EDI) is a collective responsibility of all employees. In the reporting year, a new EDI policy was therefore introduced to foster a common understanding and provide guidance. It contributes to creating a working environment in which every employee feels accepted and supported as a person and can develop successfully, and as a consequence so does Lenzing. This policy is available in all seven languages of the sites, along with a corresponding explanatory video for employee training.

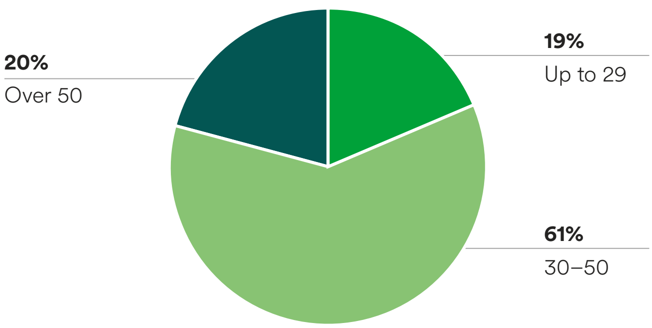
The Women's Empowerment Principles, which emerged from the UN Global Compact, were officially signed by Lenzing's CEO on behalf of the Board of Management in March 2023.

The company also launched its first global Employee Resource Group (ERG) "Women@Lenzing" to promote a respectful, appreciative work environment and strengthen Lenzing's culture. As an internationally active company, a wide variety of cultures come together in day-to-day working life. In order to address this issue more closely and identify potential areas for improvement, another ERG ("Multicultural@Lenzing") was established in the fourth quarter of the reporting year.

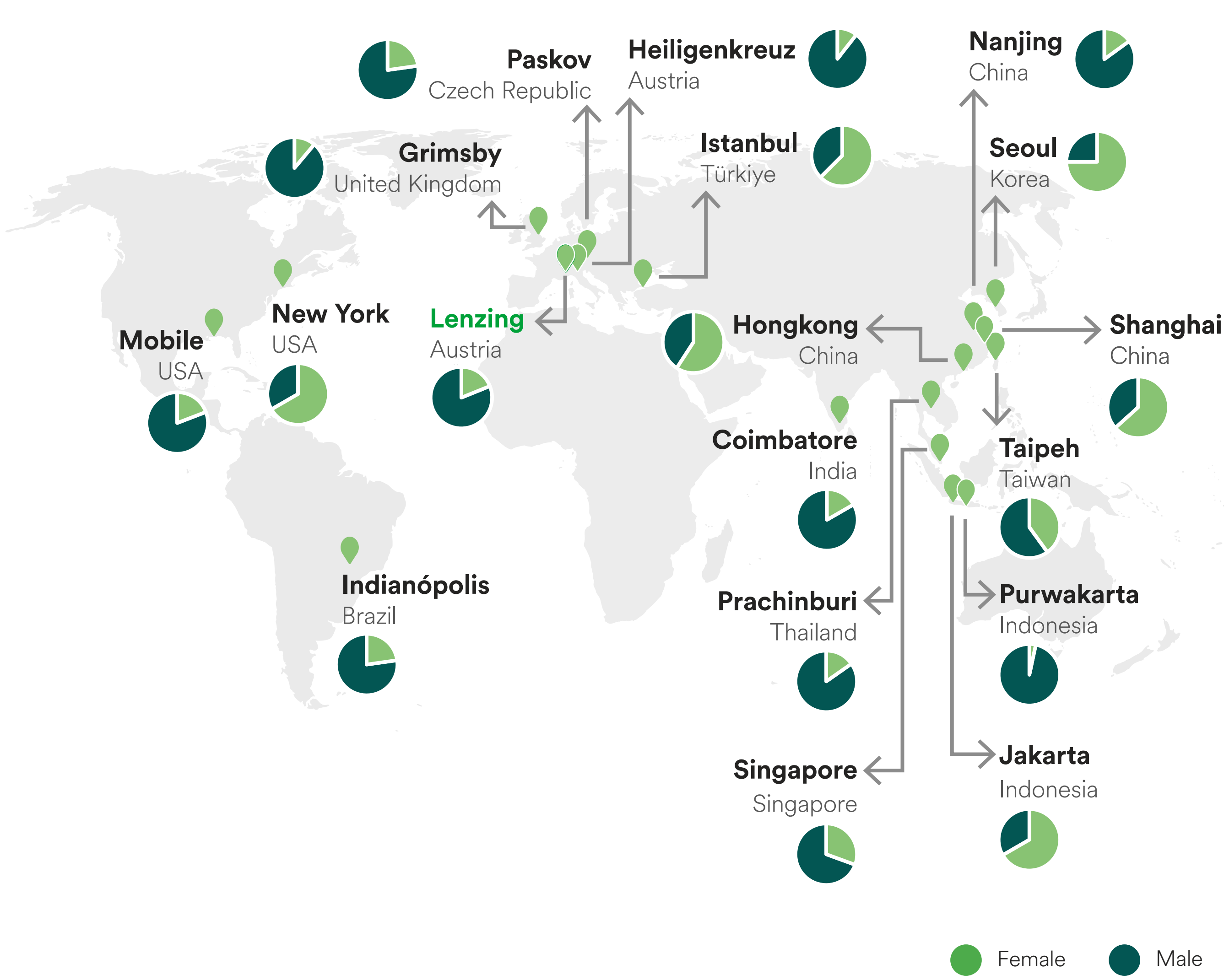
International workforce

Despite the company's firm roots in Europe, an international corporate culture has evolved based on strong collaboration among its Asian, European, and American sites. The management team actively supports the internationalization of the workforce at all levels. For details on the different nationalities working in the Lenzing Group, please see the table in the annex.

Diversity per age (all employees) Figure 13



Diversity per Site Figure 14



In the Lenzing Group's Policy on Human Rights and Labor Standards, Lenzing commits to upholding fundamental labor rights and principles such as protection from discrimination, harassment, and inhumane treatment. This encompasses protection against employment decisions based on personal characteristics or beliefs that are not related to one's job performance, including gender, age, color, national origin, ethnicity, social background, sexual orientation, family responsibility (including pregnancy), disabilities, political opinion, sensitive medical conditions, marital status, and any other discrimination in working conditions. These topics are also reflected in the Lenzing Global Code of Business Conduct, which all employees are required to follow.

[ESRS S1-12; GRI 405-1]

Employees 2023 — Table 41

Employees with disabilities[a]	2021	2022	2023
Lenzing Group	90	82	83
Austria	69	61	51
Czech Republic	8	8	9
USA	2	4	2
Indonesia	2	2	2
China	–	–	–
Brazil	9	7	19

a) No formal recording of numbers of employees with disabilities is conducted at the site in Grimsby (United Kingdom) since there is no definition provided by local legislation.

Learning and development

[ESRS S1-13; GRI 404-1, 404-3]

Around 67,168 times courses from Learn@Lenzing were completed in the reporting year. This results in a total training time of 45,707 hours and therefore an average training time of 5.5 hours per employee. Total expenditure on lifelong learning and personnel development decreased to EUR 5.76 million in 2023, after increases from EUR 6.19 million in 2021 to EUR 6.75 million in 2022. The numbers include group-wide expenses by Bildungszentrum Lenzing (BZL). Therefore, the group-wide consolidated expenses for training courses in 2023 were EUR 2.25 million (2022: EUR 2.48 million, 2021: EUR 2.46 million).

Individual learning path offerings

To enable the continuous and individual development of its employees, Lenzing has developed a global Learning & Development (L&D) catalog. The catalog is part of the Lenzing internal learning management system Learn@Lenzing and allows employees to individually browse through development opportunities.

It includes eLearning, blended learning as well as face-to-face training opportunities.

- In Lenzing's global L&D catalog, more than 200 training courses (face-to-face, eLearning and blended learning) are available. Over 120 eLearning courses are available worldwide and cover a range of topics from business to personal development and wellbeing. Employees can book courses based on their individual needs. A total of 3,942 courses were completed. Employees spent 2,054 hours using the content.
- A digital train-the-trainer program has been launched 2022 globally to promote internal knowledge transfer and ensure that employees who already have advanced functional competencies are equipped with the necessary skills to train their colleagues.
- In 2023, digital blended learning paths have been developed for blue-collar workers, which are linked to a skills matrix and are intended to standardize technical onboarding.
- In 2023, a global automated reminder process has been implemented in the Learning Management System (LMS), reminding both employees and managers to complete their mandatory training.
- In 2023, the most recent location to be integrated into the global LMS was Heiligenkreuz (Austria). More than 100 training courses were updated and transferred and all employees at the site were trained.
- In 2023, the roll out of the global skill matrix concept and IT tool has been started in Austria, Thailand, UK, US, Brazil and Indonesia, to document the required and current qualification level of blue collar workers.
- 1,416 external training and safety instruction training completions have been documented in the skill matrix IT tool during 2023.

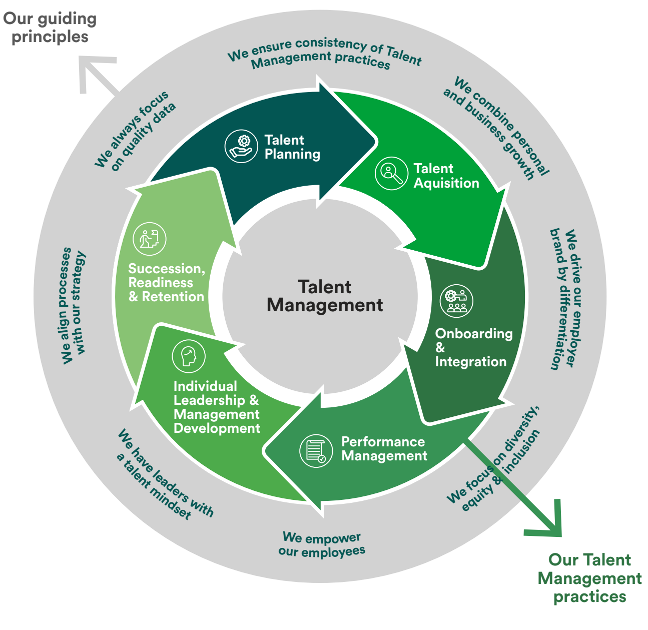
Global Performance and Talent Management

Effective Talent and Performance management are pivotal to Lenzing's overall success and the growth of its workforce. These processes are essential in shaping employee development by clearly determinating and tracking performance goals according to role and functions and identifying Lenzing's talent mix. Therefore, Lenzing has continued its effort in 2023 to consolidate these important people processes.

The processes have been rolled out in 2023 as strongly recommended, but not mandatory, to support the business. 79.8 percent of the white-collar employees have defined their goals and 352 of all managers have evaluated their team members in the talent grid. This shows that the processes are already well rooted in the organization. The insights will support in leading the professional development of Lenzing's employees.

The results of 2023 include talent data for 61.1 percent of the white-collar workforce and 1,077 out of 2,544 (42.3 percent) positions having at least one successor in place.

Talent Management — Figure 15



Milestones 2023

- **2,030** white-collar employees have set their performance goals in SuccessFactors in 2023.

- **1,736** employees successfully completed a performance review of their performance goals for 2022.
- **1,835** employees have filled in their talent cards and shared their backgrounds and ambitions.
- **1,554** employees have data on potential, performance, retention risk, and recommended development approach.
- **1,077** succession plans for key positions are in place that provide the next possible career step for employees.

Health and Safety at Lenzing

[ESRS S1-14; GRI 403-1, 403-8, 403-9, 403-10]

Employee wellbeing is crucial for Lenzing's long-term business success and growth. Lenzing is ethically, legally, and morally responsible for occupational health and safety to ensure the wellbeing of its employees, contractors, and visitors, including customers.

The Lenzing Group's health management system ("House of Health") is based on the salutogenesis concept, which is tailored to the individual social and health care systems of the countries where Lenzing operates. It provides a conceptual framework for targeted investments in the health of Lenzing's employees. Global Health Care Management works closely with the regional employees responsible for health issues as well as the department of Quality, Environment, Safety and Health (QESH).

The Safety Management System, founded on standards by the international Organization for Standardization (ISO), guides the company in mitigating health, safety and environmental risks. The company remains strongly focused on enhancing occupational health and safety performance as well as monitoring leading and lagging indicators. Safety dashboards provide to the teams daily access to essential safety metrics as part of their management dashboards.

100 percent of Lenzing's employees and contracted staff working on company property are protected by the Occupational Health and Safety (OHS) Management system. All manufacturing sites are certified to ISO 45001. Lenzing conducts regular internal and external audits on many key activities, including safety, health, environmental performance and compliance with the Lenzing Code of Business Conduct. External audits are also conducted to review this data as part of the process to certify that Lenzing's OHS management systems operate in conformance with ISO 45001.

The internal management system audits assess Lenzing's OHS program for compliance with ISO 45001, company policies, contracts, and regulatory requirements on site level. Another internal audit process is led by Lenzing's corporate QESH organization. Audits are scheduled on different sites on a rotating basis according to their relative risk. All sites are obligated to conduct periodic internal audits in accordance with corporate policy. Additionally, each site or business is subject to formal external OHS management system audits linked to OHS-related commitments or certifications, such as ISO 45001 and ISO 14001. Regular documented OHS management review meetings at all sites inform decisions and actions related to possible management system changes, which are recorded on the appropriate database system and communicated to employees.

Key figures: occupational accidents and work-related injuries

Current performance compared to previous years

Lenzing continues to perform well from a safety perspective as it continues to adapt to a changing workplace and business environment. Numbers of incidents decrease and Lenzing continues to add new commitments to improve its performances. In 2023, zero fatal accidents were recorded and Lenzing's Total Recordable Injury Frequency Rate (TRIFR)[55] for employees rose slightly from 0.6 (2022) to 0.7. In addition, the TRIFR for contractors increased slightly in 2023 to 0.5 from 0.4 in 2022. The employee rate for all work-related injuries rose from 3.3 in 2022 to 3.6 in 2023, while the rate for contractors increased from 1.1 in 2022 to 2.1 in 2023. (Note: In 2023, the Lenzing Group saw a reduction in worked contractor hours of 37 percent, while at the same time the number of work-related injuries reported increased, leading to a higher rate).

High-consequence work-related injury

In terms of broader personnel safety performance, high-consequence work-related injury events have remained at zero since 2019. A high-consequence injury is either a fatality/injury from which the worker cannot recover (e.g. amputation of a limb) or is not expected to recover fully to pre-injury health status within six months (e.g. fracture with complications).

Work-related hazards are identified and assessed at a site-specific level and fall into six core hazard types - safety, biological, physical, ergonomic, chemical and workload (psychosocial). The hazards are determined through various channels, including:

- Carrying out an internal risk assessment
- Analysis of adverse events to discover frequency, severity, and type of incidents or accidents.
- Analyzing data for causal relationships, such as the correlation between human factors, environmental conditions, equipment performance, and incident or accident outcomes.
- Reviewing safety information about products at workplaces
- Information from inspection and injury reports
- Setting up formal processes for employees to report hazards they see
- Conducting regular inspections of the workplace
- Collecting information published by relevant government agencies
- Consulting other outside groups that might have relevant information

Work-related injuries for all employees Table 42

[55] TRIFR refers to the number of total recordable cases occuring in a workplace per 200,000 working hours.

	2021	2022	2023
Total hours worked (productive working hours)	**13,661,177 [15,440,743]**	**16,510,667**	**15,968,871**
i) Number of fatal injuries	0 [0]	0	0
i) Rate of fatal injuries	0 [0]	0	0
ii) Number of high-consequence work-related injuries	0 [0]	0	0
ii) Rate of high-consequence work-related injuries	0 [0]	0	0
iii) Number of recordable work-related injuries	55 [59]	52	59
iii) Rate of recordable work-related injuries	0.81 [0.76]	0.6	0.7
iv) Number of work-related injuries or ill health	205 [220]	272	291
iv) Rate of work-related injuries	3.01 [2.85]	3.3	3.6

Bracketed data includes major projects in 2021

Work-related injuries for other workers

Table 43

	2021	2022	2023
Total hours worked (productive working hours)	**5,917,437 [30,706,268]**	**16,500,795**	**10,446,125**
i) Number of fatal injuries	0 [0]	0	0
i) Rate of fatal injuries	0 [0]	0	0
ii) Number of high-consequence work-related injuries	0 [0]	0	0
ii) Rate of high-consequence work-related injuries	0 [0]	0	0
iii) Number of recordable work-related injuries	23 [42]	30	25
iii) Rate of recordable work-related injuries	0.78 [0.27]	0.4	0.5
iv) Number of work-related injuries or ill health	47 [232]	92	109
iv) Rate of work-related injuries	1.59 [1.51]	1.1	2.1

Bracketed data includes major projects in 2021

Top five work-related injuries

Table 44

	2021[a]		2022		2023	
For employees	Cuts & lacerations	19	Cuts & lacerations	64	Cuts & lacerations	69
	Fractures	11	Bruises	33	Bruises	48
	Strains	6	Abrasions	32	Abrasions	39
	Hot burns	5	Chemical burns	32	Hot burns	20
	Sprains	5	Strains	23	Strains	19
For contractors	Cuts & lacerations	11	Cuts & lacerations	20	Bruises	18
	Fractures	5	Foreign bodies	13	Cuts & lacerations	17
	Bruises	5	Chemical burns	10	Abrasions	14
	Sprains	5	Abrasions	8	Sprains	9
	Condition due to substances	4	Fractures	8	Puncture wounds	9

a) 2021 data analysis is for total recordable injuries only

Within Lenzing, work related hazards that pose a risk to ill health generally include chemical hazards (solvents, adhesives, dusts, etc.), physical hazards (noise, radiation, heat, etc.), biological hazards (infectious diseases), and ergonomic risk factors (heavy lifting, repetitive motions, vibration).

Work-related ill health for all employees

Table 45

	2023
The number of fatalities as a result of work-related ill health	0
The number of cases of recordable work-related ill health	0
The main types of work-related ill health	-

Work-related ill health for other workers

Table 46

	2023
The number of fatalities as a result of work-related ill health	0
The number of cases of recordable work-related ill health	0
The main types of work-related ill health	-

Health care at Lenzing's production facilities

[GRI 403-3]

At all production sites, Lenzing gives employees access to an in-house primary care system, complementing the existing health systems of the individual countries. This also applies to Lenzing's new plants in Brazil and Thailand. The sites and their health care facilities are visited by an occupational physician from the Lenzing Health Care & Wellbeing department periodically to ensure the quality of those services.

Lenzing draws on the services of medical partners in the regions around the sites to offer its employees a diagnosis and therapy service tailored to local needs. The range of medical services extends from several medical examinations and therapy sessions per week at the sites in Mobile (USA) and Grimsby (United Kingdom) through to health care services for family members at a clinic in the vicinity of the production site in Purwakarta (Indonesia).

The large production plants in Lenzing (Austria) and Purwakarta (Indonesia) also have their own outpatient clinics with qualified medical staff for quick, competent outpatient treatment of acute conditions and injuries as well as their own ambulances to ensure prompt follow-up treatment at special medical facilities. Lenzing facilities have first aiders trained in certified basic and regular first aid refresher courses.

Occupational medical care

In 2023, Lenzing Corporate Health Care & Wellbeing together with Global QESH continued to coordinate and give guidance on general company issues regarding occupational medical care at the different locations in order to exceed the minimum standards required by the individual countries. By enhancing competence in the occupational medical care of Lenzing's regional partners, Lenzing will ensure that employees and managers have the best resources available to protect themselves from and deal with risks in the workplace.

Safety training

[GRI 403-5]

The vision of Lenzing is to "leave home healthy, come home healthy". The aim is to provide a working environment and culture where people actively engage and drive health and safety excellence. It is recognized that all employees can influence health and safety performance and, through individual ownership and engagement, employees can contribute to a safer workplace.

Leadership is critical to behavior, and this is the central theme of Lenzing's safety webinars, which were developed specifically for the company's leaders. Six webinars outlining the human factors known as the "dirty dozen" took place in 2023. These will continue in 2024. The aim is to understand how human factors play a role in adverse events, raise awareness and in the long-term, develop controls and procedures.

Lenzing also ensures that all employees receive adequate training on occupational health & safety topics, which is determined in line with the specific hazards to which employees are exposed while carrying out their tasks. Training schedules are prepared annually alongside refresher schedules in accordance with regulatory and compliance requirements. Additionally, induction training is given to both contractors and visitors to the various sites.

Health promotion

[GRI 403-6]

At the end of 2022, Lenzing started a formal corporate health improvement program, which continued in 2023. It provides a clear framework showing how local health promotion activities can be sponsored by a dedicated corporate health improvement budget. Sites can choose all local available health promotion activities, which are aligned with health topics chosen by Corporate Health Care. After approval by the Corporate Health Care & Wellbeing Manager they can perform the activity and have the related expenses reimbursed afterwards. A limit is imposed on the maximum expenses per head covered by this program.

Since 2019, the Lenzing Group has been focusing on promoting employee fitness as part of their regular activities. These programs aim to encourage and support employees in adopting a healthy lifestyle both at work and during their leisure time. To aid this effort, a healthy living app (Moveeffect®) designed for corporate use to accommodate the needs of Lenzing's employees at the various sites was adopted and distributed to all employees for voluntary use. The app's purpose is to motivate employees to become more active. 2,800 employees are currently registered in the app.

HEALTH CLIMATE INDEX (HCI) EVOLVED TO LENZING CLIMATE SURVEY

Since 2021, all employees have been surveyed twice a year about their psychosocial working conditions. The new Lenzing Climate survey now provides a comprehensive overview of the general working climate at Lenzing. It includes new KPI`s on employees engagement, performance enablement and inclusion. In addition to topics that have already been evaluated in HCI. The first round in 2023 took place in September, with a participation rate of more than 76 percent (more than 6,300 employees). Survey results are anonymous because of evaluation and reporting purposes. A summary of the results and the trends at the individual sites are discussed at Group management level. Based on these discussions and the local/department results the site management teams determine actions to improve the internal working climate. The aim is to create the most positive and attractive working environment possible for all employees in the Lenzing Group.

Workers who are not employees

[GRI 403-7]

A large number of workers who are not directly employed by the Lenzing Group work at Lenzing operating sites and premises. As a result, contractors are carefully selected, with due consideration given to the strict occupational safety criteria Lenzing sets for its own employees.

Most have certified management systems for occupational health & safety. Where this is not possible, the company expects its contractors to be part of the regional contractor competency schemes or to implement additional controls to monitor occupational health and safety when this is not possible. Lenzing also has a nominated person as a direct contact for these contractors working under its control. When it comes to landlord and tenant health & safety, responsibility is shared and managed appropriately.

Work life-balance and compensation

Parental leave

[ESRS S1-15; GRI 401-3]

The length of parental leave depends on the country-specific definitions in the respective labor laws and can range from a few days to several months. In the reporting year, precise data on parental leave was collected for the first time. According to this, 130 men and 43 women were on parental leave, of which 124 men and 37 women returned in 2023. 121 men and 39 women are still employed by the company 12 months after their return.

Benefits provided

[GRI 401-2]

Employees at all Lenzing sites have the option of parental leave. Depending on national regulations, the company offers its employees life insurance, health care, retirement provision, disability and invalidity coverage as well as group bonuses at almost all production sites. Flexible working hours, part-time work and working from home are also offered at the majority of sites. Offers that apply to full-time employees also apply in most cases to part-time employees and in many cases also to temporary employees.

Annual total compensation ratio

[ESRS S1-16, GRI 2-21]

The annual total compensation ratio can be found in table 47. For further information regarding remuneration, please see the Remuneration Report (available from 21.03.2024).

Annual total compensation ratio 2023 Table 47

Employee category	Compensation category	Compensation[a]	Ratio	Percentage
Highest paid individual	Annual compensation (rounded to thousands)	€638,000	22.00	2,200%
All employees (excluding highest paid individual)	Median annual total compensation (rounded to thousands)	€29,000	1.00	100%

a) Before taxes and with bonus payments

Human rights impacts

[ESRS S1-17; GRI 406-1]

No cases of discrimination or human right abuses, based on Discrimination ILO 111 Article 1, within Lenzing's own workforce were reported.

Own workforce stakeholder engagement

[GRI 3-3f]

Employees
One very special stakeholder group is Lenzing's staff. Communication with employees and employee representatives is regular and varied to ensure a good understanding of the business strategy, goals, performance, market conditions, financial situation and policies as well as any matters relating to contractual terms, conditions and benefits. Information is shared through different channels such as onboarding events, notice boards, internal mail and internal news, etc.

Health & safety

To achieve Lenzing's vision - "LEAVE HOME HEALTHY, COME HOME HEALTHY" - different activities and initiatives are conducted for Lenzing`s employees, such as specific training sessions and monthly safety webinars. Safety dashboards ensure employees have access to daily reports on key safety performance metrics in order to take appropriate measures when needed.

Customers
Lenzing was in exchange with customers. Customer audits were conducted at various Lenzing sites, focusing on labor standards and fair labor practices. Customer questionnaires on relevant topics were also completed during the year.

Workers in the value chain

MANAGEMENT APPROACH

Material topic: Workers in the value chain

[GRI 3-3]

Lenzing's business activities are linked to the textile and nonwovens industry as well as the chemical and forestry industry. The company understands the importance of an empowered workforce in the value chain and recognizes its responsibility to contribute to a positive impact wherever possible. Lenzing is dedicated to lead by example and tries to ensure compliance with laws, human right principles, and environmental standards not only within its own operations, but also among its suppliers and supply chains. Through regular audits regarding these topics and corrective actions taken by Lenzing in case of non-compliance, Lenzing continually strives to only engage with suppliers who adhere to international and national human and labor rights.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Opportunity as a role model for industry regarding human and labor rights

Negative

Own activities:

- Risk of sourcing from suppliers who violate human and labor rights

Business relationships:

- The textile industry, which is part of Lenzing's value chain, is widely known to have ongoing issues with human and labor rights such as: adequate wages, health & safety, collective bargaining and child labor

Policies and commitments

- 17 Sustainable Development Goals of UN
- 10 principles of the UN Global Compact
- "Better Growth" strategy
- Policy on Human Rights and Labor Standards
- Global Supplier Code of Conduct
- Wood and Pulp Policy
- Sustainability Policy
- Global Whistleblower Directive
- Modern Slavery Act Transparency Statement (UK only)

Actions taken

- Supplier screening and engagement (EcoVadis) to avoid cases of human and labor rights violations in upstream value chain
- Wood & Pulp Policy, FSC® and PEFC certification also include labor rights
- Suppliers are required to sign the Lenzing Supplier Code of Conduct
- Lenzing conducted 8 audits through the Together for Sustainability (TfS) network in 2023
- Lenzing has implemented a minimum acceptable score for the EcoVadis sustainability ratings of its suppliers; a corrective action plan is automatically demanded if a supplier drops below a minimum score in EcoVadis
- Quarterly Supply Chain Sustainability Risk Management was established

Sustainability targets, measures and progress

- "Supplier engagement" target: To engage suppliers, covering more than 80 percent of spend, to improve sustainability performance
- Progress: Around 600 of Lenzing's key suppliers are rated by EcoVadis
- The increasing importance of social topics led to the implementation of a dedicated Social Sustainability unit within the Corporate People Development department

Stakeholders

- Suppliers
- EcoVadis
- Together for Sustainability (TfS)
- Direct customers

Responsible

- CEO
- SVP Corporate Human Resources (Social Sustainability Team)
- SVP Global Supply Chain/Purchasing
- SVP Commercial Pulp, Biorefinery & Co-Products, Wood

Supporting

- Corporate Communications & Public Affairs
- Corporate Sustainability

Strategy

[ESRS S2 ESRS 2 SBM-2][56]

Lenzing's direct impact on the interests, views and rights of workers in the value chain is mainly limited to its suppliers and partially to its direct costumers. Lenzing's impact consists of checking the working conditions by conducting audits and relying on rating and standards, for example the EcoVadis rating.

[ESRS S2 ESRS 2 SBM-3]

The Lenzing Group strongly supports globally recognized human rights, and vehemently opposes any form of violations. The commitment extends to safeguarding the rights of all workers within its sphere of influence, aligning with the Universal Declaration of Human Rights, UN Global Compact, OECD Guidelines for Multinational Enterprises and International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. These principles, which protect employees and workers as far as possible throughout the value chain, are fully respected and followed by the Lenzing Group. Success within the organization is considered to depend on the satisfaction and well-being of its employees and workers of the value chain. Lenzing actively promotes compliance with high internal standards and ongoing adherence to external requirements through comprehensive training programs and risk-based auditing procedures for suppliers.

Lenzing's Global Code of Conduct serves as a guideline for its own business activities. Suppliers must agree to and confirm compliance with the Supplier Code of Conduct. Both guidelines were created according to the recommendations of the UN Global Compact, of which Lenzing is a member. The FSC® certificates provide the assurance that the forest management work takes into account aspects such as respect for the rights of indigenous people, the wellbeing of the professionals who work in the forest and local communities, the reduction of environmental impact, and the promotion of native forest conservation and restoration efforts.

Besides FSC® and PEFC for Lenzing`s wood and dissolving wood pulp supply, Lenzing also relies on EcoVadis addressing and assessing topics in the supply chain regarding sustainability issues which are based on international sustainability standards, such as the Ten Principles of the UN Global Compact, the ILO convention, the Global Reporting Initiative's (GRI) standards, the ISO 26000 standard, the CERES Roadmap and the UN Guiding Principles on Business and Human Rights. For more information, please see "Business conduct" chapter.

[56] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

Impact, risk and opportunity management

Policies

[ESRS S2-1; GRI 2-23, 2-25, 3-3c, 414-2]

Lenzing has a strict Wood and Pulp Policy, in which it commits not to source from controversial sources. If it is discovered that a supplier has sourced wood or pulp from controversial sources or has violated human or labor rights, the company will first engage with this particular suppliers to encourage consistent practices with Lenzing's Wood and Pulp Policy. If the response is unsatisfactory, Lenzing will no longer engage with the supplier if the violations are not addressed in a timely manner. For more information on its Wood and Pulp Policy, please see the "Raw material security" chapter.

For further information on Lenzing's Global Supplier Code of Conduct and the Global Whistleblower Directive, please see the "Business conduct" chapter. For detailed information on Lenzing's Sustainability Policy, see the "Climate change" chapter. For more information about Modern Slavery Act Transparency Statement (UK only), please see the "Own workforce" chapter.

Channels to raise concerns

[ESRS S2-3; GRI 2-25]

In 2017, Lenzing introduced an online-based whistleblower system designed to empower not only its employees but also customers, suppliers, and other third parties around the world to voice their concerns. This platform allows individuals to report issues such as corruption, bribery, conflicts of interests, antitrust violations, and breaches of capital market law. The BKMS® whistleblower system, or "Tell us", is accessible on the Lenzing's website, ensuring that anyone can express their concerns anonymously. Upon receiving reports, a team of legal experts evaluates the incidents and forwards them to the Group Compliance Officer or the Local Compliance Officer if necessary. The anonymous reporting feature ensures that individuals worldwide can share their concerns without the fear of retaliation. For further details, please refer to the "Business conduct" chapter.

Actions

[ESRS S2-4; GRI 3-3d]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Lenzing's suppliers have to declare that they have read and understood the Lenzing's Suppliers Code of Conduct and that they will comply with it. Lenzing has begun to include sustainability clauses in the contractual conditions for its key chemical suppliers in 2022. These conditions include setting greenhouse gas (GHG) reduction targets approved by the Science Based Target initiative, to provide information about the product carbon footprint and water scarcity at facilities where Lenzing sources products.

EcoVadis is a provider of business sustainability ratings that has rated more than 100,000 companies in more than 175 countries worldwide. The topics cover environment, human & labor rights, business ethics and sustainable procurement, depending on the industry and the size of the rated company. Within the human & labor rights section of the question, the company is rated with regard to social aspect in following areas: employee health & safety, working conditions, social dialogue, career management, child labor incidents and more. In the overall ranking, companies can achieve a score between 0 to 100.

Lenzing aims to encourage more and more of its suppliers to be rated by EcoVadis. The average score of all of Lenzing's in 2023 suppliers was 54.2 (8.2 points higher in comparison to the average EcoVadis score of 46). The overall performance also increased by 1.9 points compared to 2022 (52.3). This clearly shows that suppliers in Lenzing's supply chain perform continuously and significantly above the average of suppliers assessed by EcoVadis.

Supplier performance is monitored in the EcoVadis dashboard, which uses various sources to monitor suppliers in its 360° watch. An AI (artificial intelligence) is used to find news across the world about a company, these findings are then evaluated as positive, neutral or negative. Major negative findings can impact the overall score of a company. .The dialogue on findings of the supplier monitoring and the corresponding actions are part of the regular review by Lenzing's buyers and the request for corrective actions as well as part of the management discussion.

In 2023, it was decided to only engage with suppliers that have a minimum score of 45 points in EcoVadis. If a supplier falls below this score, Lenzing will engage with this supplier to start a corrective action plan in order to be able to maintain the relationship. These measures will be reviewed after giving an adequate amount of time. If no corrective action plan has been started Lenzing feels compelled to end the relationship with that supplier. No such cases occurred in 2023.

Furthermore, Lenzing established a quarterly Supply Chain Sustainability Risk Management. These meetings consist of purchasing managers and supply chain and sustainability experts, who discuss and manage risks and opportunities, both internally and externally. Risk assessment on Lenzing's lowest performing suppliers is also part of these meetings, also including considerations related to human rights. Another aim is to raise awareness of the need for sustainability risk management in Lenzing's purchasing community and on the supplier side.

Audits conducted through the TfS network also assess some of Lenzing's suppliers' performance regarding human rights, ensuring compliance with all applicable laws, such as UN Convention on the Rights of Child, ILO convention and more. For additional information on TfS, please refer to the "Stakeholder engagement" section of this chapter. Lenzing conducted eight audits through this network in 2023, and additionally is able to use the results of audits done by other members of TfS.

Metrics and targets

[ESRS S2-5; GRI 3-3e, GRI 407-1, 408-1, 409-1]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Supplier engagement	**To engage suppliers, covering more than 80 percent of spend, to improve sustainability performance**	**Continuous** **On track**
Measure(s)	Lenzing assesses 95 percent of its top suppliers representing 80 percent of spend via EcoVadis, the Together for Sustainability Audit or an internal assessment/audit by 2025.	**2025** **On track**
	Lenzing considers climate, water and chemical aspects in the procurement contractual process of its top chemicals suppliers	**Continuous** **On track**
Progress made in 2023	Around 600 of Lenzing's key suppliers were assessed by EcoVadis. Eight suppliers were audited by Lenzing through the Together for Sustainability audit program. 40 percent spend was covered by these assessments. Supply agreements signed with the top chemical suppliers include sustainability clauses.	

Lenzing ensures social aspects of its pulp supply through FSC® certification, aligning with ILO requirements. Its chemical supply chain is monitored via EcoVadis assessments, occasionally added by TfS audits and Lenzing's own visits. In 2023, no significant risks for incidents of child labor, forced or compulsory labor, and potential threats to the right of freedom of association and collective bargaining among suppliers were currently known. For more information, please refer to the "Business conduct" chapter.

Workers in the value chain stakeholder engagement

[GRI 3-3f]

Suppliers

The Lenzing Group maintains continuous engagement and dialogue with its suppliers and strives for establishing and maintaining long-term partnerships. All Lenzing Group suppliers must adhere to the Lenzing Global Supplier Code of Conduct. Wood and pulp suppliers also have to follow the Wood and Pulp Policy which prioritizes purchasing from wood and pulp suppliers compliant with FSC® or PEFC standards. Suppliers are required to allow Lenzing or its representatives access to their facilities and relevant records upon advance notice. Lenzing is allowed to carry out assessments to ensure compliance.

EcoVadis

To align with Lenzing's commitment to supply chain due diligence and enhance supplier engagement, the global purchasing team undergoes ongoing training facilitated by EcoVadis. This training occurs through EcoVadis platform sessions or internal training sessions utilizing information from the EcoVadis website. Purchasers who participate in these initiatives gain access to the EcoVadis platform, empowering them to deepen their understanding of sustainability through the available EcoVadis academy.

Together for Sustainability (TfS)

Lenzing joined the Together for Sustainability (TfS) initiative in 2022, led by chemical procurement specialists. TfS members, including Lenzing, gain access to a global network of assessed and audited suppliers, fostering sustainable procurement efficiencies. Sharing performance progress based on common principles within the TfS community enhances transparency and unity, benefiting both chemical companies and their suppliers.

Direct customers

Lenzing collaborates closely with partners that utilize Lenzing's fibers to produce textiles, nonwovens, and industrial products, extending from direct customers to the retail level in the textile and nonwovens sectors.

Meeting the growing demands for transparency and sustainability, Lenzing has also introduced TextileGenesis™, a blockchain-enabled supply chain traceability platform. Different textile value chain companies have joined the platform since 2022. For more detailed information, please see the "Digitalization & cyber security" chapter.

Affected communities

MANAGEMENT APPROACH

Material topic: Affected communities

[GRI 3-3]

Dedicated to maintaining technological and safety standards, Lenzing prioritizes the safety and quality at its production sites to protect its employees and communities affected. Through its "Naturally Positive" sustainability strategy and engaging in social and environmental initiatives, Lenzing tries to enhance the well-being of the regions where it operates. Social sustainability issues are being recognized as increasingly important and efforts are being made to pursue a more structured approach in this area.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- (Stable) job opportunities for communities around production sites

Negative

Own activities:

- Communities around production sites could be disturbed by pollution, noise and odor
- Potential impacts on water scarcity affecting communities around production sites in water scarce areas
- Potential impacts on living conditions such as food resources and water and sanitation of communities around production sites
- Risk of sourcing from suppliers which are involved in displacement or suppression of freedom of speech of affected communities or in the violations of rights of indigenous people

Business relationships:

- Potential impacts on living conditions such as food resources and water and sanitation of communities around production sites

Policies and commitments

- Global Whistleblower Directive
- Lenzing's sustainability targets

Actions taken

- Wood & Pulp Policy, FSC® and PEFC certification to avoid sourcing of wood and pulp which stems from violations of indigenous economic, social and cultural rights or displacement
- Constant communication with communities around production sites
- Whistleblower/complaint system
- Environmental assessment before new production site is planned/built
- Definition of dedicated employees to support topic at each site
- Social and environmental activities at sites

Sustainability targets, measures and progress

- Complaints of community members around sites: 49
- "Community engagement" target: To continuously support the development of local communities near Lenzing production sites and support social welfare programs to 2025 and beyond

Stakeholders

- Local communities

Responsible

- Site managers

Supporting

- Global QESH
- Social Sustainability

Strategy

[ESRS S3 ESRS 2 SBM-2][57]

Lenzing is dedicated to upholding high technological and safety standards at its production facilities. However, Lenzing acknowledges that its operations and the following risks of incidents can potentially affect surrounding communities.

Therefore, Lenzing takes its role as a responsible corporate citizen seriously. Lenzing tries to maintain an ongoing and open communication with local communities to inform them and listen to their concerns and ideas, aiming at cultivating constructive relationships with the communities in which the company operates.

Various production sites function within distinct ecological, social and economic regional and global contexts and share with its regional partners interdependencies, encompassing opportunities and challenges. Fostering further societal wellbeing stands as a

[57] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

fundamental element of Lenzing's "Naturally Positive" sustainability strategy. For more information on this strategy, please see the "General information" chapter.

Communities affected by Lenzing's value chain
The Lenzing Group takes its responsibility as a large industrial company and reliable corporate citizen seriously, even outside its direct business operations. Wood is Lenzing's main input material. The FSC® certificates provide the assurance that the forest management work takes into account aspects, such as respect for the rights of indigenous people, the wellbeing of the professionals who work in the forest and local communities, the reduction of environmental impact, and the promotion of native forest conservation and restoration efforts.

Impact, risk and opportunity management

Policies

[ESRS S3-1; GRI 2-23, 2-25, 3-3c]

For a more detailed information on Lenzing's Global Whistleblower Directive, please see the "Business conduct" chapter.

Although the Lenzing Group has set very high technological and safety standards for the construction, operation and maintenance of its production facilities, the risk of malfunctions, disruptions and accidents with the potential to also affect surrounding communities cannot be entirely dismissed.

Channels for raising concerns
[ESRS S3-3; GRI 2-25]

An online-based whistleblower system was introduced in 2017 and is designed so that employees, customers, suppliers, communities and other third parties can voice their concerns. This platform allows individuals to report issues such as corruption, bribery, conflicts of interests, antitrust violations, and breaches of capital market law. Known as the BKMS® whistleblower system, or "Tell us", it is accessible on Lenzing's website, ensuring anonymity. Upon receiving reports, a team of legal experts evaluates the incidents and forwards them to the Group Compliance Officer or the Local Compliance Officer if necessary. The anonymous reporting feature ensures that individuals can share their concerns without the fear of retaliation. For further details, please refer to the "Business conduct" chapter.

Actions

[ESRS S3-4; GRI 3-3d, 413-1, 413-2]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Enhancing community wellbeing
A map of the Lenzing Group showing its locations can be found in the "Lenzing Group locations" chapter. Promoting societal wellbeing is a key cornerstone of Lenzing's "Naturally Positive" sustainability strategy and more than just a question of ensuring society's acceptance of Lenzing's activities. The sites have established structures with regard to corporate citizenship to provide support to social and environmental protection projects as well as local activities with regards to education and health care.

In the year under review, the Lenzing employees responsible for community relations were defined for the individual sites in order to subsequently be able to establish better Group-wide networking and a corresponding exchange. This more structured approach is planned for the coming years. It is also planned to prepare an impact assessment and an implementation plan.

For more information, please see the "Community engagement" focus paper. Details on Lenzing's handling of complaints can be found in the "Business conduct" chapter.

Corporate citizenship
Lenzing contributes to strengthen the economy in the regions where it operates. This is confirmed yet again by a study of the socio-economic and regional economic importance of the Lenzing Group, conducted by the Gesellschaft für Angewandte Wirtschaftsforschung KG (Innsbruck, Austria) for the year 2023. The study will be available from the beginning of April in the "Community engagement" focus paper.

Conservation and reforestation of forests
The wellbeing of community members is also influenced by their environmental surroundings.

For example, Lenzing manages a 40-hectare forest around its main plant in Lenzing (Austria). The forest is managed to meet various social and natural requirements. It serves as a "green belt", acting as a natural barrier for site-specific emissions and contributing to a livable environment in the vicinity of the main Lenzing plant. It is a recreational area for the public and therefore of great importance for the company. The forest area, especially in its 80-year-old stand, is a habitat for wildlife and insects. Lenzing follows a sustainable management concept that uses this local wood for its fiber production. This way, Lenzing reduces emissions and keeps the raw material in the region. When reforesting, emphasis is also placed on native and diverse tree species to mitigate future challenges of climate change. Lenzing works with local partners to keep the added value in the region.

Lenzing supports biodiversity projects. To find out more about the current projects please have a look at the "Community engagement" focus paper. For more information about biodiversity, please refer to the "Biodiversity and ecosystems" chapter.

Metrics and targets

[ESRS S3-5; GRI 3-3e, GRI 2-25, GRI 2-27]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Community engagement	**To continuously support the development of local communities near Lenzing production sites and support social welfare programs to 2025 and beyond**	**Continuous On track**
Progress made in 2023	Lenzing supported numerous social projects for local communities near Lenzing sites. For more information please see the chapter "Affected communties" and the "Community engagement" focus paper.	

Social and environmental compliance

Conflicts of interest and production-related circumstances, such as noise, unpleasant odors, and environmental pollution, can result in disputes with local residents. Procedures are in place at all sites to ensure that complaints are handled fairly and impartially. All complaints are reviewed monthly and reported directly to the Lenzing Group's senior management teams. In 2023, 49 of such complaints were registered at various sites, and appropriate remedial measures were taken following the investigation and review process. In Nanjing (China), a NaHS leak into the ground was observed during an environmental inspection and resulted in a fine of 52,500 yuan (approximately EUR 6,733). Due to a violation of the dangerous goods transportation act from an incident that happened in September 2020, Lenzing (Austria) was fined EUR 3,000 in the final jurisdiction 2023.

Affected communities stakeholder engagement

[GRI 2-29, 3-3f]

Local communities

The Lenzing Group takes its social responsibility as a corporate citizen seriously both locally and internationally. The company therefore maintains continuous and consistent communication to inform local communities and listen to their concerns and ideas, with the goal of creating healthy community relationships. Community activities can be found in the "Community engagement" focus paper.

Consumers and end-users

MANAGEMENT APPROACH

Material topic: Consumers and end-users

[GRI 3-3]

Environmental concerns are becoming more important for consumers and end-users in their choices to purchase garments and nonwoven products. The Lenzing Group's “Better Growth” strategy emphasizes its eco-friendly fibers (TENCEL™, LENZING™ ECOVERO™, and VEOCEL™) to meet this growing demand. The strategy is guided by sustainability, innovation, excellence, and premiumisation, driven by the climate crisis and sustainable living awareness. Developing premium products and services enables Lenzing to effectively meet both customer needs and market requirements at the highest level.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Leading the market in terms of product safety, product consistency, application performance, and service
- Achieving business and sustainability targets by monitoring and improving manufacturing processes

Negative

Own activities:

- Non-compliance can impact the health and safety of users and lead to law suit, monetary loss and reputation loss

Business relationships:

- Losing market position due to increasing competition or new product (regulatory) requirements

Policies and commitments

- “Better Growth“ strategy
- Quality Policy
- Policy for Safety, Health and Environment
- Product Safety Policy
- Lenzing Group’s ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 certifications
- Global Code of Business Conduct
- Global Supplier Code of Conduct
- Clean & Hygiene Guideline
- Wood and Pulp Policy

Actions taken

- Collaboration across the entire value chain to support customers and brands
- Continued roll-out of automated quality performance reports and visualizations providing real-time information to the Lenzing community
- Optimization of customer service processes to improve the customer experience
- QESH process management including risk assessments and internal audits to ensure the effectiveness of the measures and standards implemented
- Continuation of Chemical Management Group Standard roll-out
- Overview and monitoring of product safety & regulatory relevant legislation and regulations
- Evaluate new legislations or changes in directives, regulations and standards according their impact on Lenzing products and their intended uses
- Uphold an extensive third-party certification portfolio to demonstrate the safety of the products in the appropriate area of use
- Regular tests of products against stringent external third-party standards, norms and regulations for product safety and compliance in the respective areas of use
- Maintain a database of intentional product ingredients and perform risk assessments
- Implementation of a holistic Management of Change (MoC) process

Sustainability targets, measures and progress

- Establish the Chemical Management Standard at all sites
- Risk assessments carried out for new intentional ingredients
- Maintain and achieve third-party certifications according to the existing fiber portfolio and assess new certifications requests from various stakeholders based on the new certification request (NCR) process

Stakeholders

- Consumers and end-users
- (Direct) customers

Responsible

- Global QESH

Supporting

- Global Business Management (Textiles and Nonwovens)
- Global Business Management (Pulp and Wood)
- Performance.Improvement.Technology
- Global Technical Marketing Development
- Research
- Customer Service

Strategy

[ESRS S4 ESRS 2 SBM-2][58]

Consumers are becoming increasingly more conscious when making purchase decisions, requiring more transparency on products' environmental and social impact, functional performance, safety classification and production traceability throughout the value chain. This trend is supported by governmental authorities, non-governmental organizations (NGOs) and industry/consumer associations via regulations, and mandatory and/or voluntary certification schemes.

Lenzing has an extensive product and services portfolio and operates in several market segments. Its products can be a supportive component in industrial applications (e.g. filtration systems, insulation material and food packaging applications), and (key) component in consumer goods (e.g. textiles, wipes, and hygienic products). This results in a complex landscape of functional and regulatory requirements, requiring a holistic approach.

This holistic approach is based on Lenzing's "Better Growth" strategy of focusing on sustainability, innovation, excellence, and premiumisation. More specifically, Lenzing holistically addresses consumers', authorities' and associations' expectations by providing public commitments (e.g., policies, white papers, Lenzing's Global Code of Business Conduct and Lenzing's Global Supplier Code of Conduct) in its efforts to continuously improve its offering, proactively complying with the latest and forthcoming requirements, and providing adequate transparency on its activities.

For further information on how Lenzing interacts with its customers, and therefore indirectly with consumers and end-users, please see the "Stakeholder engagement" section in this chapter.

Product assurance for (in)direct customers

[ESRS S4 ESRS 2 SBM-3]

Lenzing's strategy is actively described in its Quality Policy. To uphold the quality standards and fulfill Lenzing's commitment, Lenzing invests in people and innovation and engages actively with raw material suppliers to establish long-lasting relationships. Constant customer feedback and competitor benchmarking ensures continuous improvement in Lenzing's operations, services and products and delivers added value to Lenzing and its customers. For more information, see the "Actions" section of this chapter.

Product safety for consumers and end-users

It is imperative that Lenzing's products meet and, whenever possible, exceed applicable safety standards and legislation. In the Lenzing Product Safety Policy, Lenzing pledges to drive compliance with this policy and high internal standards on a continuing basis through appropriate reviews and evaluations.

The purpose of the Product Safety & Regulatory Affairs (PSRA) department is to take all the necessary steps and measures that the cellulosic products sold by the Lenzing Group (regenerated cellulosic fibers and webs, filaments and cellulosic powders) comply with the laws, regulations and standards pertaining the nonwoven and textile fiber businesses and are safe for the intended uses.

Although LENZING™ fiber products undergo product safety testing, ultimate responsibility for consumer health is borne by the companies that manufacture finished products from Lenzing fibers.

Impact, risk and opportunity management

[ESRS S4-1; GRI 2-23, 2-25, 3-3c, 416-1, 416-2, 417-2]

Policies

For further information on the Lenzing Global Code of Business Conduct and Lenzing Global Supplier Code of Conduct, please see the "Business conduct" chapter. For a more detailed information on the Group Policy for Safety, Health and Environment (SHE), see the "Pollution" chapter.

Established policies at Lenzing not only form part of its strategy for product assurance and safety, but also structure the effort to produce high-quality products.

Quality Policy
Lenzing emphasizes innovation and technology for high-quality products, collaborating closely with its key suppliers for consistency. The company adopts a customer-centric approach, involving all employees in standards enhancement. To provide immediate technical support, global centers of excellence are established. Continuous improvement is driven by customer feedback and benchmarking against competitors. Lenzing sets challenging annual targets, monitors compliance with regulations, and employs third-party certifications for standards and products.

Product Safety Policy
With this policy, Lenzing is committed to high quality, environmental and working safety standards that are followed in the product manufacturing process. In addition, Lenzing is committed to the maintenance of the internal database of intentional product ingredients, with safety, health and environmental data. Also, a rigorous product testing and labeling plan according to the applicable international standards, certifications, norms and legislation that ensure product safety. Furthermore, Lenzing avoids animal tests[59] of the products or ingredients, unless they are required by law or there is no alternative. If testing on animals is unavoidable, it is kept to a minimum following the principles of animal welfare as defined by the 3Rs (Replacement, Reduction and Refinement).

Clean & Hygiene Guideline
Lenzing's Clean & Hygiene guideline establishes rules for the manufacturing sites with the purpose of prevention and avoidance of any kind of contamination of the products created, as well as definition of design and maintenance principles for a clean working environment.

[58] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

[59] "as per definition of directive 2010/63/EU"

Channels to raise concerns
[ESRS S4-3; GRI 2-25]

An online-based whistleblower system was introduced in 2017 and is designed so that employees, customers, suppliers, and other third parties can voice their concerns. This platform allows individuals to report issues such as corruption, bribery, conflicts of interests, antitrust violations, and breaches of capital market law. Known as the BKMS® whistleblower system, or "Tell us", it is accessible on Lenzing's website, ensuring anonymity. Upon receiving reports, a team of legal experts evaluates the incidents, and forwards them to the Group Compliance Officer or the Local Compliance Officer if necessary. The anonymous reporting feature ensures that individuals can share their concerns without the fear of retaliation. For further details, please refer to the "Business conduct" chapter.

Actions

[ESRS S4-4; GRI 2-25, 3-3d]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Product assurance for (in)direct customers
Independent third-party certifications are in place to certify standards, products, and management systems to ensure compliance with customer and regulatory requirements and to assess strategic fit with Lenzing's corporate strategy.

In this respect, Lenzing operates a quality management system based on ISO 9001:2015. Additional quality management systems such as FAMI-QS and Hazard Analysis Critical Control Points (HACCP), are in place for specific business segments. All form the basis for the relevant work processes and reinforce efforts to achieve complete customer satisfaction.

The PSRA department manages a variety of external third-party certifications on a global level in relation to product safety for different applications (e.g., food contact, skin contact compliance) and sustainability (e.g. biodegradability) and assesses new certification requests. These certificates serve to ensure transparency and demonstrate the safety and compliance of Lenzing fibers as well as their compatibility in their application fields. The information on all the Lenzing Group's product certifications is available on this website.

Product safety for consumers and end-users
As mentioned above, the PSRA department is globally responsible for the safety of Lenzing fibers in their intended uses and for compliance with the laws, regulations, and standards that apply to the fiber businesses.

Therefore, in addition to the external third-party certifications, risk assessments for intentional ingredients are carried out and the impact of business-specific regulations, standards, and requirements is continuously monitored and assessed. PSRA prepares appropriate declarations/confirmations for customer enquiries on relevant topics and is either personally in contact with industrial associations or informed by Lenzing representatives on new topics and developments having an impact on business and product safety.

Impact and risk assessment on product quality and safety
Lenzing's strategic direction for product quality and safety demonstrates its commitment to sustain a leading position in the market by providing a positive impact in the terms of product consistency, functional performance, customer centric service, product transparency and product safety confidence. In addition, Lenzing supports the fulfillment of its business and sustainability targets by continuously improving manufacturing processes and proactively monitoring future regulatory requirements. This focus allows Lenzing to sustain a premium product portfolio in a competitive landscape where several fiber producers launch alternative offerings. These activities have resulted in an additional positive impact in brand reputation and general acknowledgment by major customers of Lenzing's high standards. In addition, Lenzing's product portfolio due to its environmentally friendly production processes ensures to be well positioned against future legislations related to the plastic usage reduction, product circularity and the increasing use of recyclable raw materials.

The versatility of Lenzing's product portfolio application enables its entry as an alternative component in fields predominantly covered by natural and/or synthetic fibers. Although, Lenzing's share in such applications is constantly growing, the regulatory and performance requirements landscape is mostly directed by the traditional components and their characteristics. Stricter regulations considering the traditional components may have a negative impact by creating unnecessary challenges to the respective applications in the usage of Lenzing's products. This risk is managed by Lenzing's proactive participation in the relevant associations.

Opportunity management: Product quality and safety activities
The new production sites in Prachinburi (Thailand) and Indianópolis (Brazil) have demonstrated a steady improvement of their quality metrics in line with their ramp-up plans. Fiber production sites in Nanjing (China) and Purwakarta (Indonesia) successfully commissioned modal fibers and viscose fibers line products to satisfy regional customer needs as well offering more environmentally friendly products. The global quality continuous improvement program, which consists of site-relevant quality improvement projects, continued throughout the year, delivering additional benefits for Lenzing products at all manufacturing sites.

In 2023, several of the remaining Fiber Quality strategic initiative projects were completed (e.g. customer segmentation) while new strategic initiatives have started rolling out existing processes to pulp and biorefinery and co-product sites (e.g. non-conformity management, complaint management). This year was marked by changes in Lenzing's Integrated Management system with the transition under a new ISO certification body, and introduction of new management systems to obtain the SURE and Bureau of Indian standards certifications.

Risk analyses and assessments for new intentional and non-intentional ingredients are carried out by performing formal compliance reviews. In addition, a broader and systematic testing for the confirmation of low concentration or absence of substances, as defined by external associations has been introduced and is an ongoing measure. Business-specific regulations, standards and requirements are continuously monitored, assessed and documented. In the reporting year, these assessments did not trigger any additional measures in order to be compliant with the high internal standards. As a consequence Lenzing's products did not require any improvement in relation to health and safety impact.

To support Lenzing's commitment to transparency and customer/consumer communication, an improvement of the internal processes related to value chain security and due diligence in raw material sourcing was established to improve communication speed and clarity towards customers.

Metrics and targets

[ESRS S4-5; GRI 3-3e, 416-1, 416-2, 417-2]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Despite energy prices, global political developments and volatile market demands, which influence operational activities impacting product quality, deviations in quality were further reduced. Improvement in key defect categories continued in most of Lenzing's lyocell and viscose factories. Performance is further improved versus 2022, which is reflected in the quality-related KPIs for the entire Group (e.g. reduction of poor-quality share, increase first-time-right share). In 2023, the number of justified product and logistics complaints for the fiber business were further reduced versus 2022. The current performance indicates the effectiveness of the quality improvements implemented in both product and service quality areas. Lenzing is confident that all of its products perform well in their respective applications.

As in previous years, there were no complaints or incidents of regulatory non-compliance raised by (in)direct customers or authorities concerning product and service information, labeling and the health and safety impact of Lenzing's products. A single customer complaint related to product certification compliance was received (e.g. FSC® customer complaint regarding a Certificate of Analysis stating the wrong certificate code) which was addressed and closed in collaboration with the certification body.

In 2023, the PSRA department executed nine risk assessments for new production chemicals according to plan, which did not result in additional health and safety impact improvement activities. In addition, no changes in relevant regulations have been identified triggering any additional risk assessment exercises.

The complexity of customer inquiries related to the company's compliance status regarding its management systems, operational practices, product certificates, regulatory compliance, and raw material traceability has increased. All requests received were reviewed, categorized based on their topic, assigned to the appropriate team or individual for handling and answered according to internally defined KPIs.

Consumers and end-users stakeholder engagement

[GRI 2-29, 3-3f]

Consumers and end-users

Lenzing interacts directly with its customer base through its customer facing organization and indirectly with consumers and end-users by participating in international associations, conferences, forums, discussion groups and industry interest groups that focus on product safety and regulatory aspects and voice customer expectations.

(Direct) customers

Spinners, weavers, mills, dye workers and converters, as well as fashion brands and retailers, are all part of Lenzing's business partners. The Lenzing PSRA department engages with its customers by answering customer requests and working on new customer certification requests and requirements.

Business conduct

MANAGEMENT APPROACH

Material topic: Business conduct

[GRI 3-3]

Lenzing and its people are expected to act with honesty and transparency in line with the Group's Global Code of Business Conduct and corporate governance policies. These expectations of compliance reach beyond legal requirements and regulatory standards, as the company strives for exemplary quality in all products, processes and dealings with customers, partners and shareholders. It is the responsibility of all employees and contractors to uphold these standards and to help create a culture of tolerance and integrity. Lenzing continues to develop its Compliance Management System to ensure the company acts to prevent misconduct, mitigate compliance risks and effectively safeguard its people. Training in business conduct ensures that all employees understand the behavior expected of them and contributes to an environment where the people feel comfortable raising concerns or reporting misconduct. Suppliers are also expected to adhere to the highest professional and ethical standards in the industry, as business conduct does not only apply to Lenzing's own operations but also to responsible sourcing and supplier relationships.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Compliance through a shared culture of values
- Preventive measures via whistleblowing
- Prevent retaliation against those who raise a concern
- Promote trust and confidence in business dealings
- Maintain corporate reputation
- Avoid conflicts of interest, misrepresentation, bias and negligence
- Prevent and report bribery and other forms of corruption

Negative

Own activities:

- Violation of fair and compliant business practices leading to reputational damage and resultant loss of public trust
- Loss of clients and business partners
- Value depreciation in the capital market

Business relationships:

- Non-compliance with laws, regulations and obligations due to constantly changing internal and external business environment

Policies and commitments

- Lenzing Global Code of Business Conduct
- Lenzing Global Supplier Code of Conduct
- Policy on Human Rights and Labor Standards
- Modern Slavery Act Transparency Statement
- Sustainability Policy
- Quality Policy
- Product Safety Policy
- Policy for Wood and Pulp
- Policy for Safety, Health and Environment (SHE)
- Bioenergy policy
- Equity, Diversity and Inclusion (EDI) Policy
- Anti-Bribery and Corruption Directive (ABC Directive)
- Austrian Local Guidance Document for the ABC Directive (e.g. registration system for gifts/hospitality, local limits for gifts and hospitalities)
- Antitrust Directive
- Nomination of two Co-Heads of Compliance - one for Asia and one for Europe and Americas
- Implementation of local standards/limits for gifts and hospitality in addition to global ABC directive
- Anonymous management survey on compliance risks at Lenzing
- Groupwide anonymous survey to all employees (Integrity Scan)
- Awareness campaign on whistleblowing
- Implementation of a Group-wide compliance eLearning for Code of Conduct
- Working on concept of ongoing Compliance Risk Assessment
- Reporting incidents via BKMS® (Business Keeper Monitoring System) whistleblower system ("Tell us")
- Following up procedure for reported incidents
- Transparent reporting within Lenzing's Corporate Governance Report
- Compliance training for employees
- Compliance Register Tool (e.g. gifts and hospitality)
- Development of Conflicts of Interest Directive and self-registration tool

Sustainability targets, measures and progress

- "Supplier engagement" target
- No corruption incidents

Stakeholders

- Employees
- Suppliers
- Governments
- Customers
- Membership associations
- Austrian Code of Corporate Governance
- Together for Sustainability (TfS)
- EcoVadis

Responsible

- Managing Board
- SVP Global Legal, IP & Compliance
- Local Compliance Manager
- SVP Global Supply Chain/Purchasing
- VP Wood & Pulp Procurement
- SVP Corporate HR

- Whistleblower Directive
- Investigation Directive
- Issuer Compliance Directive
- Anti Money Laundering Directive (AML Directive)
- Know-How Protection Directive

Actions taken
- Update of Global Code of Business Conduct and roll out of corresponding training
- Update of the Anti Money Laundering Directive

- VP Global QESH
- VP Corporate Sustainability

Supporting
- Corporate Communications & Public Affairs
- Corporate HR
- Corporate Audit & Risk
- Corporate Sustainability
- Global Process Information Technology
- Site managers

Governance

[ESRS G1 ESRS 2 GOV-1; GRI 2-25][60]

To Lenzing, compliance is teamwork

Lenzing's mission of compliance
Lenzing is a global company and naturally acts in a compliant manner. The Compliance Management System is an integral part of the Lenzing Group's reporting system. The compliance function aims to advise and support all Lenzing employees, executives and managers through preventive risk-oriented measures and consistent detection and response processes, ultimately protecting them from the negative consequences of violations of laws and values.

Compliance goes beyond adhering to legal requirements
Lenzing strives to achieve exemplary quality in products and processes, as well as integrity and honesty in dealing with business partners and shareholders. Compliance at the Lenzing Group not only stands for compliance with legal regulations and regulatory standards. Compliance for Lenzing is a question of attitude that also reflects a culture of tolerance and integrity when dealing with one another. The subject of compliance is therefore firmly anchored within the entire Group, via the active responsibility of all employees and executives, as well as a shared culture of values. Lenzing ensures that any reported cases of suspected non-compliance are investigated thoroughly and does not tolerate any form of compliance breaches if any are discovered.

Lenzing's compliance organization is transnational and composed of international experts led by the Group Compliance Officer, who reports directly to the Managing Board and the Supervisory Board. The executives of the Lenzing Group have the task of ensuring that the rules are known, understood and adhered to by all employees. For more information on the role of the highest governance body in overseeing the management of impacts, please see the Corporate Governance Report. Lenzing expects its employees to comply with its rules of conduct. They are also asked to be alert, examine carefully and report anything that can be improved or any violation of rules and values that is detected.

Impact, risk and opportunity management

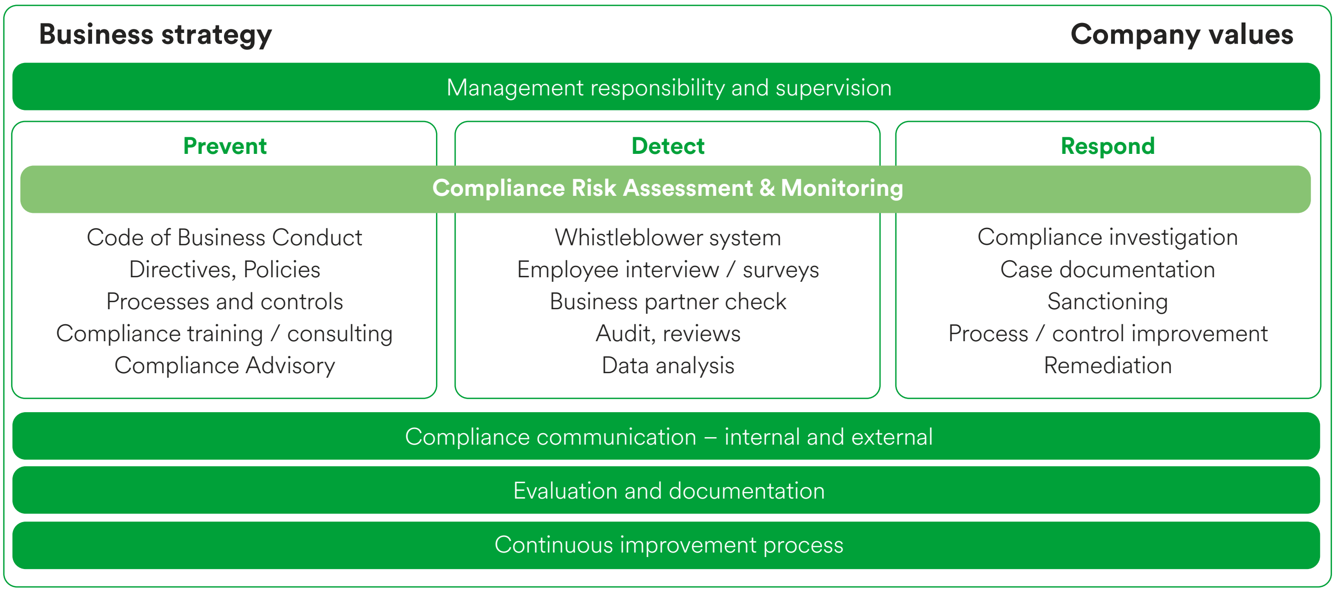
[ESRS G1 ESRS 2 IRO-1]

Compliance Management System

The objective in setting up and continuously developing the Compliance Management System is to prevent, detect and respond to compliance violations against the interests of the company, to avoid liability risks and damage to the company's reputation. Furthermore, to advise and safeguard the company's management, executives and employees, and to increase efficiency by coordinating existing compliance activities. The Compliance Management System corresponds to the following structure (figure 16):

[60] In addition to the GRI disclosure, the corresponding ESRS section is noted. There is no claim to fulfilment of the ESRS in this and the following chapters.

Elements of the Lenzing Compliance Management System Figure 16



Compliance is based on the corporate values of the Lenzing Group and the measures it takes to promote integrity within the company. Formal structures, such as the assignment of responsibilities, ongoing monitoring and structures for communication, evaluation and documentation are essential components of the Compliance Management System.

The ongoing compliance program is based on the following pillars:

- Measures to prevent misconduct
- Measures to detect compliance risks and weaknesses
- Measures to respond to misconduct and identified weaknesses in order to avoid them in future.

At the meetings of the Supervisory Board's Audit Committee on March 1, 2023, September 6, 2023, and November 14, 2023, the Compliance Officer reported on the content, objectives and status of the compliance organization, the structure of the Compliance Management System, training, internal and external investigations and various compliance measures (communication, surveys) in a separate agenda item.

Lenzing Global Code of Business Conduct

[ESRS G1-1; GRI 3-3c, 2-23, 2-24]

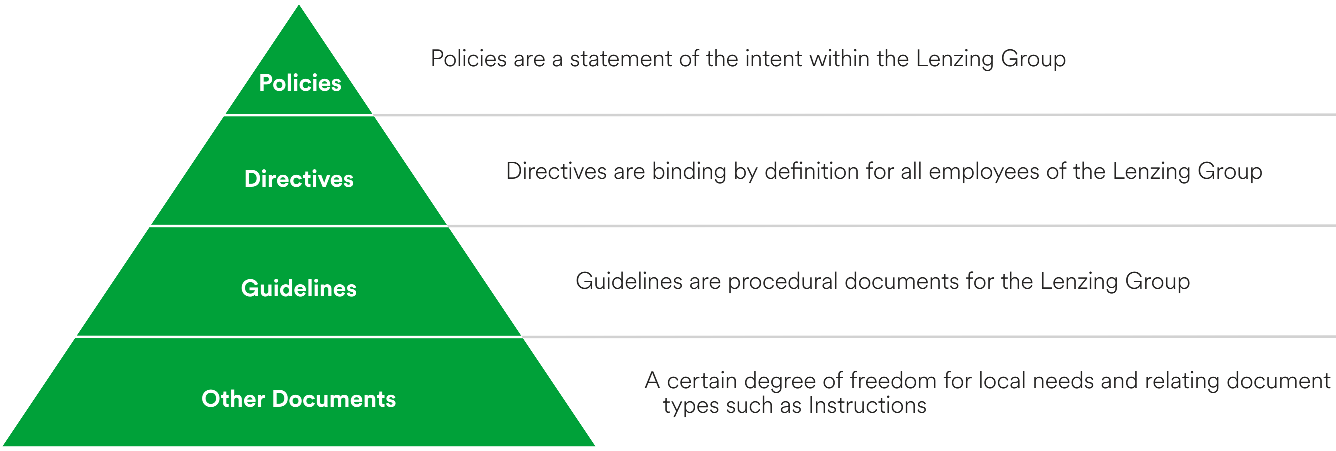
Compliance measures and business ethics are crucial for Lenzing to comply with a multitude of legal regulations and standards at various sites and countries around the world. Lenzing attaches great value to the integrity and legally compliant behavior of all employees and business partners. Therefore, Lenzing has anchored its principles for compliant behavior in the Lenzing Global Code of Business Conduct, which was updated in 2023. It serves as a guideline, orientation aid and advisor at the same time, so that all employees know how to react appropriately and in compliance with the rules in every situation. At the same time, it points out to Lenzing employees that violations of the Global Code of Business Conduct have serious consequences (civil, criminal, administrative criminal and/or disciplinary consequences, up to and including termination of employment). The Lenzing Global Code of Business Conduct is available to all employees in the Group languages in the intranet ("Lenzing Connect") and is also accessible to external stakeholders on the company website. It is supplemented by the Global Supplier Code of Conduct, which outlines Lenzing's expectations for supplier conduct with respect to safety and health at work, labor and human rights, environmental protection, ethics and management practices. An overview of other publicly available policies to which Lenzing has committed can be found here.

Policies

All publicly available policies of the Lenzing Group are available under the following link: Compliance – Lenzing – innovative by nature. For international regulatory references in the Group's policies, please see the "Intergovernmental regulation references in policies" table in the annex. To ensure that no human rights violations occur within the sphere of Lenzing's influence, Lenzing has a Policy on Human Rights and Labor Standards, which refers to the Organisation for Economic Co-operation and Development (OECD), International Labour Organization (ILO) and the Universal Declaration of Human rights (UDHR). For more information on policies stipulating respecting human rights, please see the "Own workforce" chapter. Each of the policy commitments was approved by the Managing Board of the Lenzing Group, the former Executive Committee or the Management Directors of Lenzing Fibers Grimsby Ltd. (Modern Slavery Act of Lenzing Fibers Grimsby Ltd.). Policies and Directives are available to all employees in Lenzing's intranet. They exist in the following languages: German, English, Czech, Chinese, Bahasa, Portuguese and Thai.

The document manager ("caretaker") in Compliance is the Group Compliance Officer, who therefore has the responsibility to disseminate a document to relevant business units. Compliance guides and materials are stored in Lenzing's intranet and made available to compliance stakeholders. The resources are managed, updated and supplemented by Lenzing Global Compliance.

Hierarchy of compliance guidelines and directives Figure 17



Lenzing's internal rules and principles

Besides the Lenzing Global Code of Business Conduct, there are additional internal rules and principles of conduct (known as directives) that help to ensure that daily actions are in line with the applicable legal frameworks and Lenzing's demand for integrity from each individual employee. Directives define rules of conduct that are binding for all employees of the Lenzing Group. Classifying a document as a directive always implicates the decision that nonconformance with the content of the directive may incur penalties and, in the worst case, termination of employment. Important directives include, amongst others, the Anti-Bribery and Corruption Directive, the Antitrust Directive, the Whistleblower Directive, the Issuer Compliance Directive, the Anti Money Laundering Directive and the Know-How Protection Directive.

Lenzing Global Supplier Code of Conduct

All of the Lenzing Group's suppliers must comply with the Lenzing Global Supplier Code of Conduct. Wood and pulp suppliers additionally comply with its Wood and Pulp Policy. In this policy Lenzing gives preference to suppliers compliant with FSC® or PEFC standards. Lenzing expects its suppliers to conduct all operations with respect to health and safety at work, labor and human rights, environmental protection, ethics and management practices. To ensure compliance with this Code, suppliers are required to allow Lenzing and/or any of its representatives to have access to all their facilities and to all relevant records upon advance notice, and to carry out assessments through supplier assessment tools.

Directives

Anti Money Laundering Directive (AML Directive)

The Lenzing Group is committed to the highest standards of ethical business principles and commits to fight money laundering and terrorist financing (ML&TF). Money launderers aim to introduce money from illegal transactions into legal circulation. Terrorists aim to obtain money from illegal and also legal transactions for terrorist activities. Lenzing avoids business with criminals and uses a series of preventative measures to ensure that money laundering and terrorist financing are not unwittingly aided and abetted. The AML Directive describes the processes and control mechanisms implemented at Lenzing. The directive was introduced in 2020. In 2022 tools for the KYC (Know Your Counterpart) process were introduced to identify Lenzing counterparties and verify their identities. Furthermore, counterparties can be checked for adverse media, politically exposed persons (PEP) and sanctions to mitigate the risk of business relationships with illegitimate business activities.

Antitrust Directive

Lenzing does not tolerate or participate in any business conduct, transaction or activity that violate the antitrust and competition laws applicable to it. The company respects applicable trade laws and restrictions as imposed by the United Nations or other national or supranational bodies or governments. To ensure that all relevant antitrust regulations are known and adhered to within the Lenzing Group, Lenzing's internal Antitrust Directive serves as a supplement to the Lenzing Global Code of Business Conduct. It applies to all business activities and operations in accordance with applicable competition law. It informs all employees how to behave correctly when dealing with business partners and shows which activities may pose an increased risk of antitrust violations. Furthermore, this directive helps to promote trust in business dealings, preserve Lenzing's reputation and avoid or reduce costs, risks and damages resulting from a violation of antitrust law.

Anti-Bribery and Corruption Directive (ABC Directive)

The Anti-Bribery and Corruption Directive (ABC Directive) supplements Lenzing's Global Code of Business Conduct by providing global minimum standards to ensure that Lenzing's activities are conducted ethically and with integrity. The goal of this Directive is to ensure that all relevant anti-bribery and corruption regulations are known and observed across the Lenzing Group. The Directive applies to all operations and activities in compliance with all applicable anti-corruption laws, including the Austrian Criminal Code, the United Kingdom Bribery Act 2010 and the US Foreign Corrupt Practices Act. The directive clearly defines what bribery, corruption and acceleration payments mean, and provides guidelines on what is considered acceptable behavior. Receiving and giving gifts, as well as accepting and giving hospitality or invitations, require – depending on the monetary value – specific approval within the Registration Tool for Gifts and Hospitalities. Country-specific limits have been defined for all legal entities.

Know-How Protection Directive

Specialization and innovative strength are key factors for the worldwide success of Lenzing. In today's economy, information and know-how as a result of R&D investments, creativity and business initiatives have become the most important factors for developing and maintaining competitive advantages. Lenzing's know-how is a central asset that must be preserved and protected using all the protective measures at Lenzing's disposal. The protection of know-how relates not only to Lenzing's leadership in technology, but also extends to its many different activities worldwide, including business secrets. Every employee is a key factor in Lenzing's future know-how protection program and is directly affected by the know-how protection process described in this directive.

Investigation Directive

The purpose of this Compliance Investigation Directive is to set out a framework for the investigation of material and substantiated violations of laws, Lenzing's Code of Business Conduct or internal Policies and Directives as set forth in the intranet.

Sourcing

[ESRS G1-2; GRI 2-16, 204-1, 308-1, 414-1]

All of the directives and polices come into action in the daily contact with suppliers. In this Lenzing can lead as a role model in business conduct within the industry, but also expects the same standards for its business partners.

Sustainable chemicals sourcing

The most important chemicals used in the Lenzing Group – amounting to approximately 85 percent of the overall purchase volume – are caustic soda (NaOH), carbon disulfide (CS_2), sulfuric acid (H_2SO_4), sulfur (S), sulfur dioxide (SO_2), softening agents, flame retardants, modifiers, N-methylmorpholine N-oxide (NMMO), titanium dioxide (TiO_2), and zinc sulfate ($ZnSO_4$). Figures for chemical sourcing are not provided for confidentiality reasons.

The target of assessing 80 percent of the most important suppliers (by purchasing value) was reached in 2019. Additional suppliers continue to be assessed (table 49). Due to changing market environment, the supplier base can change. Hence, the new goal set in 2022 was to continuously engage suppliers, which cover more than 80 percent of budget spend on procurement, to improve their sustainability performance ("Supplier engagement" target). This target has also expanded to include assessment possibilities other than EcoVadis. As a measure for this target, Lenzing has begun to include sustainability clauses in the contractual conditions for its key chemical suppliers from 2022. Some of these conditions include setting GHG reduction targets approved by the Science Based Target initiative, to provide information about the product carbon footprint and water scarcity at facilities where Lenzing sources products.

EcoVadis Score of Lenzing's suppliers

The overall EcoVadis Score achieved by the Lenzing Group's suppliers in 2023 (54.2) is 8.2 points higher in comparison to the average EcoVadis Score (46). The overall performance of Lenzing`s suppliers is also 1.9 points better compared to year 2022 with the overall score (52.3). This clearly indicates that suppliers belonging to Lenzing's supply chain continuously perform an above the average score of suppliers assessed by EcoVadis. The improvement of the overall score from last year until now shows how important sustainability is becoming in organizations as well as the effort of the purchasing community to strive for sustainable supply partners.

Supplier management

Active negotiations with suppliers regarding their engagement for sustainability assessment are in progress. Currently more than 600 suppliers were assessed on the basis of social and environmental criteria through the EcoVadis tool.

Number of suppliers responding to EcoVadis questionnaire since the introduction of the assessment in 2017 Table 49

2017	82
2018	93
2019	102
2020	152
2021	163
2022	387
2023	608

Regionality[a] of purchased chemicals Table 50

	Regionally purchased	Not regionally purchased
2021	94%	6%
2022	73%	27%
2023	88%	12%

a) Regionally is defined as the same country and neigboring countries as significant sites of operation. Significant sites of operation include all production sites of the Lenzing Group.

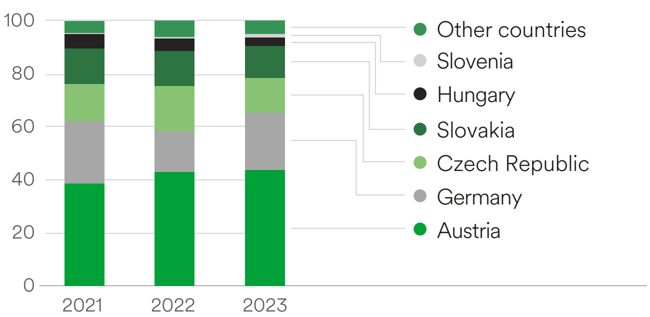
80 percent of all purchased liquid metric tons of chemicals were delivered by 30 suppliers in 2023. Relationships with these suppliers are highly stable. In 2022 due to non-availability of caustic soda in European market a higher volume of such was imported from other regions. During 2023 availability of caustic soda continuously stabilized, which led to a higher proportion of regionally purchased chemicals compared to 2022 (table 50). Regional in this case refers to all deliveries from the same country or a neighboring country as the destination site.

Regional wood supply in Europe

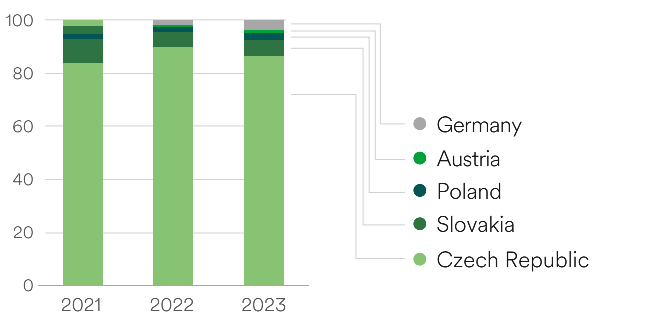
Regional wood supply is important to Lenzing, as this is one measure to reduce GHG emissions stemming from transport. Lenzing operates three pulp mills in which wood is turned into dissolving wood pulp. The Lenzing site (Austria) mainly uses beech wood plus small amounts of other hardwoods and spruce, whereas the Paskov plant (Czech Republic) mainly uses spruce. The plant in Indianópolis (Brazil) exclusively uses eucalyptus from a plantation under own operation. Lenzing is committed to source the wood for its pulp mills in Europe as locally as possible.

Wood sourcing for the Lenzing Group's own pulp mills in Lenzing (Austria) and Paskov (Czech Republic)
Beech and spruce by country, 2021–2023.
"Other countries" for Lenzing sites are France, Switzerland, and Poland.
Figure 18

Lenzing Pulp Mill



Paskov Pulp Mill



Regional wood supply originates from the country where the pulp mill is situated and from neighboring countries from which wood can be transported directly without crossing a third country.

In order to ensure short transportation distances and short delivery times, almost all the wood required originates regionally. For the Lenzing site (Austria) regional[61] wood accounted for 95.2 percent in 2021, 93.8 percent in 2022 and 96.5 percent in 2023. For the Paskov site (Czech Republic), the regional supply rate has been constant at 100 percent since 2019. For the underlying figures, please see the Annex.

Local wood supply in Brazil

Lenzing constructed a new pulp mill in Brazil in a joined venture called LD Celulose together with Decxo. It started operation in 2022. Currently around 90,200 hectares of plantation are managed, including around 19,884 hectares (table 29 in the "Biodiversity and ecosystems" chapter) of protected area which are not used for wood sourcing but ensure the protection of flora and fauna. These plantations operate completely in accordance with the guidelines and high standards of the Lenzing Group for sourcing wood and pulp as well as the requirements of the leading certification schemes.

The forest unit responsible for supplying LD Celulose's wood is in Triângulo Mineiro in the State of Minas Gerais. The area that was transformed into the LD Celulose plantation unit has been used for cattle raising, intensive agricultural activities and eucalyptus forestry since the 1970s. No native (primary) forest was converted for establishing the LD Celulose plantation. The plantations are more than 800 kilometers from the region that comprises the Amazon rainforest.

Supplier evaluation

All suppliers are evaluated for sustainability in the production chain. Lenzing conducts regular audits, as well as specific evaluations of both new and established suppliers for sustainability, including compliance with environmental and safety standards. Suppliers are interviewed regularly and evaluated under environmental and safety aspects with the support of external experts. A final assessment is then conducted. It affects the overall supplier assessment and constitutes a major criterion for long-term cooperation with suppliers. In 2023, when screening for risk suppliers, no Lenzing suppliers were identified as having significant actual and potential negative environmental impacts.

Lenzing's most relevant suppliers are those that have an increased risk due to their size and volume. The EcoVadis online tool is used to evaluate these non-wood suppliers. Evaluations of the non-wood suppliers found no violations of environmental, social or ethical standards that could have led to the termination of existing supply contracts in the reporting year. Pulpwood suppliers are evaluated using a due diligence system based on FSC® Controlled Wood criteria.

The sustainability performance of pulp suppliers is annually investigated using a comprehensive questionnaire covering aspects such as procurement standards, supply areas, supply chain traceability, and GHG emissions. The results of the survey are used to identify the key sustainability issues and guide Lenzing's future supplier engagement activities.

All wood suppliers – totaling more than 600 in 2023, half of which are private owners – in all sourcing countries are assessed once a year against FSC® Controlled Wood and PEFC Controlled Sources criteria. All of the pulp suppliers are certified by the leading forest certification schemes and supply Lenzing with certified or controlled pulp.

Pulpwood and dissolving wood pulp certifications

Lenzing's wood procurement management system ensures that all wood destined for the production of pulp is sourced from legal and sustainably managed sources. Lenzing demonstrates that the wood sourcing complies with its high standards through verification based on FSC® and PEFC certification systems (figure 19). 100 percent of wood and dissolving wood pulp used by the Lenzing Group is either certified by FSC® and PEFC or controlled and inspected in line with these standards (figure 20). Wood and pulp procurement faces annual surveillance/recertification audits of the FSC® and PEFC systems.

The following figures show the certification status of all wood or pulp input into Lenzing's fiber production, whether obtained directly through its own procurement for in-house dissolving wood pulp mills or indirectly through dissolving wood pulp suppliers. All Lenzing Group production sites are FSC® CoC (Chain of Custody)

[61] Regional wood supply originates from the country where the pulp mill is situated and from neighboring countries from which wood can be transported directly without crossing a third country.

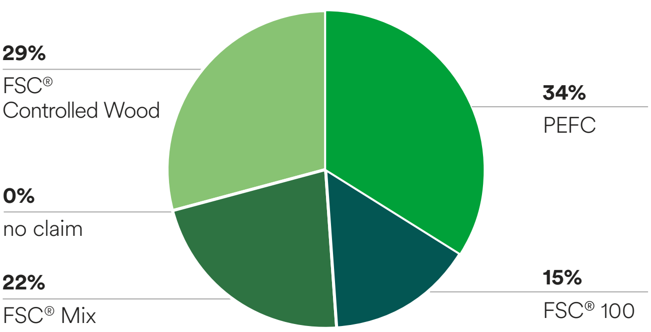
certified. The group certification for PEFC CoC currently covers five sites (table 51).

Certification status of Lenzing operations – Chain of Custody Table 51

Site	Country	Main products	FSC® CoC	PEFC CoC
Lenzing	Austria	Viscose, modal, lyocell, dissolving pulp	•	•
Paskov	Czech Republic	Dissolving pulp	•	•
Purwakarta	Indonesia	Viscose	•	•
Nanjing	China	Viscose, modal	•	•
Heiligenkreuz	Austria	Lyocell	•	n. a.
Grimsby	United Kingdom	Lyocell	•	n. a.
Mobile	USA	Lyocell	•	•
Prachinburi	Thailand	Lyocell	•	n. a.
Indianópolis	Brazil	Dissolving pulp	•	n. a.

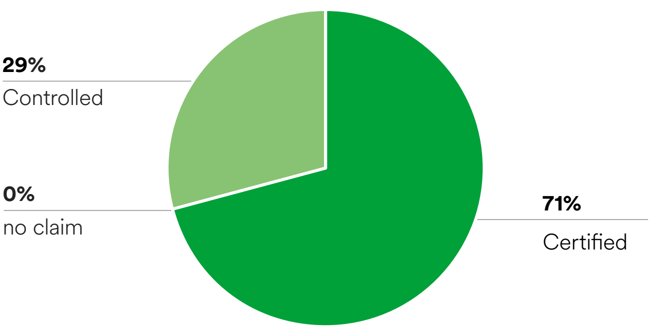
PEFC is mainly used for wood sourced from Central Europe. FSC® certification of forests is not widespread in this region. Therefore, most wood sourced is procured with a PEFC certificate and receives FSC® Controlled Wood status at Lenzing sites after a due diligence process. The Lenzing site has held the PEFC Chain of Custody certification as its main certificate for more than two decades. Since 2016, this has been complemented by a FSC® CoC (Chain of Custody) certificate that covers all Lenzing production sites. All wood input to the Lenzing Group is either certified or controlled by the FSC® certification system (figure 21).

Certification status Figure 19



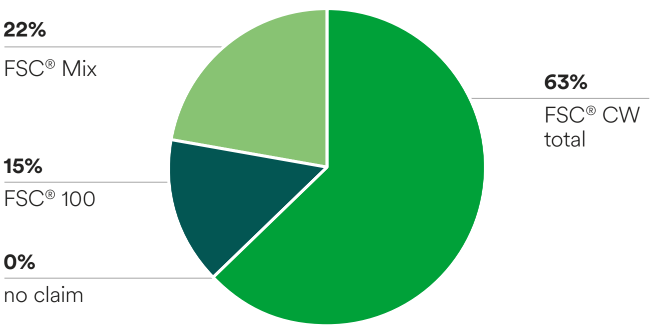
Certification status of total wood input at Lenzing fiber production sites via own and purchased dissolving wood pulp. Basis: dissolving wood pulp by weight.

Certification status – overall certified and controlled wood Figure 20



"Certified" is the sum of "FSC® Mix", "FSC® 100%" and "PEFC" and represents the amount of pulp available to make fibers with the corresponding Chain of Custody certificate.

Certification status – FSC® Mix and FSC® controlled wood Figure 21



"FSC® CW Total" is all controlled wood, FSC® Controlled Wood, plus PEFC certified wood that has been accepted as FSC® Controlled after the Lenzing due diligence process. The share of FSC® Mix represents the amount of pulp supplied with an FSC® Mix Chain of Custody certificate.

Pulp suppliers can hold more than one forest-related certificate. Most of the pulp suppliers located in North America also carry certification from the Sustainable Forest Initiative (SFI), which is also a national member of and fully endorsed by the global PEFC certification scheme.

For detailed explanations of the certificates, controlled wood, and the internal due diligence system, please see the "Wood and pulp" focus paper.

Since forestry operations in Central Europe are generally small-scale, many small forest owners harvest wood for additional income and do not participate in a certification process. Therefore, Lenzing needs to procure reliable but limited quantities of such wood other than that is FSC® or PEFC certified from time to time. This category of wood is inspected in line with these standards. Strict forestry laws and enforcement in Central Europe also require all forest owners to pursue sustainable management. The Lenzing Wood and Pulp Policy and Supplier Code of Conduct are part of all wood purchasing activities and are presented to potential suppliers before the start of a business relationship. Deliveries can only be made to Lenzing if these conditions are accepted.

The Lenzing due diligence system for wood and pulp procurement includes regular formal audits. However, ongoing, day-to-day, informal, personal contact between Lenzing's procurement team and suppliers is even more important. Supplier contracts can be terminated in response to severe sustainability findings. This has happened occasionally in the past when suppliers failed to remedy certain issues. In 2023, no such cases occurred.

Actions

[ESRS G1-3; GRI 2-26, 3-3d, 205-2]

A summary of the "Actions taken" can be found in the management approach at the beginning of this chapter.

Detective measures

Lenzing takes complaints seriously and takes immediate action once it becomes aware of potential negative impacts. Lenzing has established grievance mechanisms. There are various internal reporting channels for employees. Externally, there is the possibility to submit indications via an online tool, which is not only available to all employees of the Lenzing Group but also to customers, suppliers and other third parties throughout the world. The online tool is also accessible through the Lenzing webpage: Compliance - Lenzing - innovative by nature.

Whistleblower directive
The purpose of Lenzing's Whistleblower Directive is to encourage all employees to speak up in good faith against potential violations of laws, the Global Code of Business Conduct or Lenzing's internal rules and principles. The directive aims to provide all employees with more concrete guidance and information on how to report compliance concerns about actual or potential rule violations. It emphasizes that for reports which were made in good faith (i.e. with a reasonable suspicion that a potential violation has occurred, is occurring, or is likely to occur), the parties involved are protected from subsequent punishment, discrimination, retaliation, disadvantage, harassment or termination for making reports. Lenzing takes all concerns raised under the Whistleblower Directive serious and defines clear processes in this Directive on how reports are handled internally, who is involved in any necessary investigations, and what the consequences are for identified violations.

Whistleblower system
In order to enable all employees and other stakeholders to report concerns in connection with topics such as corruption, bribery, conflicts of interest, antitrust laws and capital market law, an online-based whistleblower system was established in 2017. Grievances can be reported in-house in person, by phone or email, e.g. to supervisors, the works council or the Group Compliance Officer. In addition, the BKMS® whistleblower system ("Tell us") is freely accessible for everyone on the Lenzing webpage to express any concerns anonymously (available in all languages relevant to production sites: English, German, Czech, Chinese, Bahasa, Thai and Portuguese). Reporting an incident not only relates to Lenzing's employees, but also to customers, suppliers, and other third parties around the world. Reported incidents are assessed by lawyers (if necessary, in cooperation with local partners) and forwarded to the Group Compliance Officer or to the Local Compliance Officer. Recommendations as to whether the investigation should be deepened or terminated are provided. Concerns can be reported anonymously and without fear of retaliation worldwide thanks to this system. The professional handling of the information protects both the whistleblower and the person affected. Reports are processed in a targeted manner in accordance with the internal Investigation Directive. The Audit Committee is informed about the reported incidents once a year.

Communication of critical concerns to the highest governance body
To remain compliant with all policies and react swiftly to any violations, the communication of critical concerns to the highest governance body are important. For more information on this, please see the Lenzing Group's Annual Report (Corporate Governance Report).

RISK ASSESSMENT

In June 2022, Group Compliance initiated a risk survey to the management of all legal entities aiming to identify possible risks and improvement options. This survey of global management is planned to be repeated in 2024.

Compliance training

Understanding rules and regulations is a fundamental requirement for "correct" behavior. Hence the eLearning was continuously expanded during the reporting year to efficiently convey the most important content of the compliance directives to the relevant target groups. New employees receive welcome folders containing the Lenzing Code of Business Conduct. In addition, employees with IT access (approx. 6,000 employees) are assigned eLearning courses on the Global Code of Business Conduct and on whistleblowing and know-how protection. While other employees might be trained in these issues face-to-face, more than 95 percent of employees assigned to these e-Learning trainings completed them in 2023 (approx. 5,500 employees). All white-collar employees (3,376 employees) were assigned the ABC Directive training. More than 97 percent (3,305 employees) of all assigned persons fulfilled the training. A specific target group (268 employees) was assigned the Antitrust training. More than 97 percent (261 employees) fulfilled the training in 2023. A specific Code of Business Conduct training has been assigned to managers (342 employees) and has been completed by 100 percent.

Metrics and targets

[ESRS G1-4; GRI 205-3, 206-1]

See "targets" in the management approach at the beginning of this chapter. All of Lenzing's sustainability targets can be found in the "General information" chapter.

Supplier engagement	To engage suppliers, covering more than 80 percent of spend, to improve sustainability performance	Continuous On track
Measure(s)	Lenzing assesses 95 percent of its top suppliers representing 80 percent of spend via EcoVadis, the Together for Sustainability Audit or an internal assessment/audit by 2025.	2025 On track
	Lenzing considers climate, water and chemical aspects in the procurement contractual process of its top chemicals suppliers	Continuous On track
Progress made in 2023	Around 600 of Lenzing's key suppliers were assessed by EcoVadis. Eight suppliers were audited by Lenzing through the Together for Sustainability audit program. 40 percent spend was covered by these assessments. Supply agreements signed with the top chemical suppliers include sustainability clauses.	

Compliance violations
Compliance violations via the whistleblower system are collected in the Legal, IP and Compliance department. There were no public complaints in connection with corruption brought against the company or its employees during the reporting period. Furthermore, there were no significant legal actions for anti-competitive behavior, anti-trust, and monopoly practices in 2023.

Business conduct stakeholder engagement

[ESRS G1-5; GRI 2-28, 3-3f]

Membership associations
For Lenzing's membership associations, please see the "Stakeholder engagement" focus paper.

Employees
Employees are expected to follow the Global Code of Business Conduct. They are also a viable asset in the timely notification of unlawful conduct within the company. Every employee is informed and trained with regards to Lenzing's policies and directives.

Suppliers
Suppliers are expected to follow the Supplier Code of Conduct as well as respect human rights and labor laws within their own operations. Lenzing is obliged by the EU Supply Chain Act to carry out a thorough audit of its suppliers.

Austrian Code of Corporate Governance
In order to meet the demands of Lenzing's shareholders and business partners, it is essential for Lenzing to comply with the Austrian Code of Corporate Governance (ÖCGK). Customers in particular demand that their service providers and service suppliers adhere to their compliance standards. The Austrian Corporate Governance Code defines specific duties for the Managing Board, Supervisory Board and auditors. The overall responsibility for compliance lies with the Managing Board – it must ensure compliance with legal provisions and work towards their observance within the company (§ 15 ÖCGK). In addition, it must inform the Supervisory Board regularly, comprehensively and promptly about all issues relevant to the company and report at least once a year on precautions taken to combat corruption (§ 18a ÖCGK).

Together for Sustainability (TfS)
Together for Sustainability (TfS) is an initiative consisting of and driven by chemical procurement specialists, which has the goal of collectively building more sustainable chemical supply chains. Lenzing has been a member of this initiative since 2022. All TfS members have full access to a global network of assessed and audited suppliers, which will result in higher efficiencies in sustainable procurement through this shared database. Performance progress based on common principles is shared throughout the TfS community and brings more transparency and unity. This will benefit chemical companies as well as their suppliers.

Digitalization & cyber security

MANAGEMENT APPROACH

Material topic: Digitalization & cyber security

[GRI 3-3]

As new digital technologies dramatically reshape industries, Lenzing pursues efforts to leverage the benefits of these technologies to optimize its operation and to enable transparency and traceability along the value chain. Lenzing promotes a risk-based approach to achieve global compliance with information security and data protection. Lenzing does this while balancing the rights and needs of the company, society and individuals. In response to risks from cybercrime, Lenzing performs periodical penetration tests to assess security measures. Regular background checks are performed to search for potential threats, disclosures in the dark web or hacked accounts. All findings revealed by such assessments, tests and by reported incidents result in a security review, risk assessment and subsequent corrective action.

Actual and potential negative and positive impacts, risks and opportunities

Positive

- Increased transparency and traceability of supply chains and therefore supply chain security
- Protection of Lenzing's business processes and data
- Increased trust of employees, customers and partners through responsible data handling
- Optimization towards "lean" and digitally supported business processes, saving time, energy and reducing raw material usage
- More flexible digital working environments to retain talent, attract future talent and allow for a new way of working
- Digitalization helps to anticipate the needs of customers and improves the customer experience

Negative

Own activities:

- Successful cyber-attacks could stall business processes or even impact operations
- Potential disclosure of information could incur high regulatory penalties or claims
- Potential compliance issues could reduce Lenzing's credibility in the values it champions

Business relationships:

- Successful cyber-attacks could stall business processes or even impact the operations of business partners

Policies and commitments

- Information Security Policy approved by the Board of Management
- Data protection & information security by design & default
- Protective measures appropriate to the related risks
- Applicable legal regulations and a set of internal policies, directives and guidelines

Actions taken

- Cyber-attacks have been averted successfully by technical means (e.g. via the rapid mitigation of several zero-day incidents and regular vulnerability management), but also because of aware and empowered employees
- Cybersecurity measures aligned to business needs
- Continuous improvement of Lenzing's cybersecurity measures
- Regular internal/external penetration testing
- Regular risk assessments with enterprise risk management and cyber insurance companies
- Close identified gaps through immediate actions and by the creation and execution of appropriate Service Improvement Plans
- Running information security due diligence programs on third parties
- Notification mailbox to report any suspicious, probably fraudulent emails and personal feedback given to the sender(s)
- Digital Innovation function is responsible for capitalizing on new digital technologies
- Up-skilling of work-force guarantees enhanced and more efficient utilization of IT applications and facilitates digital transformation
- Further digitalization with company seals used for E-Branding Service, invoice signing and approval workflows
- In 2023, Lenzing expanded its portfolio of fibers with the fiber identification technology to the spun-dyed LENZING™ ECOVERO™ branded viscose in black color and to LENZING™ ECOVERO™ x REFIBRA™, a newly produced viscose fiber with recycled content.
- As part of the Operations Digital Innovation roadmap Lenzing focussed on four major digital initiatives in 2023: data-driven quality control, digital twin technologies, mobile maintenance and augmented reality for training.

Sustainability targets, measures and progress

All of Lenzing's sustainability targets can be found in the "General information" chapter.

Stakeholders

- Customers
- Consumers
- Providers of digital solutions
- Employees
- Lenzing shareholders
- Competent authorities and auditors of various labels
- Cyber security experts

Responsible

- CFO
- VP Global IT/Digital Innovation
- Chief Information Security Officer
- Senior Director Digital Innovation

- Continuing the Lenzing Security Program, which was derived from the Cyber Security Framework Gap Analysis
- Maintaining appropriate technical and organizational measures for the processing of personal data
- Further development and management of the information security & data protection management system
- Regular information security assessments and audits by external and internal parties

Supporting

- Business Process Organization
- Global IT/Digital Innovation, IT Backoffice Team, Business Process Leaders
- Department/team leaders, local coordinators
- Digital Product Owners
- Lenzing employees during their daily work

Information Security Policy

Lenzing is fully committed to upholding the protection of human rights, including data privacy. Protecting information is an ongoing endeavor for each and every employee, contractor or business partner associated with a company within the Lenzing Group in order to proactively maintain and improve an appropriate level of security for all kinds of information processes. The Information Security Policy promotes a risk-based approach to achieve global compliance with information security and data protection. Lenzing does this while balancing the rights and needs of the company, society and individuals.

This policy and applicable legal regulations constitute a framework for multiple directives/guidelines that are regularly reviewed and reworked, including:

- Lenzing Global Code of Conduct
- IT User Directive (secure use of the IT systems and the basic principles of information security measures)
- Smartphone Directive (mobile devices)
- Terms of Use for Private Mobile Devices
- Know-How Protection Directive (including classification of data and its processing)
- Secure storage of personal identifiable information
- Cyber Defense Operation Handbook

Digitalization

Today, digital technologies are evolving at a faster pace than ever, becoming increasingly complex and affecting more and more people. As new digital technologies dramatically reshape industries, Lenzing pursues efforts to leverage their benefits to optimize its operations, enable transparency and traceability along the value chain and to provide additional value to its customers.

Digital solutions leading to a new way of work

Remote working is particularly likely to appeal to a younger generation of employees because it allows a better balance between work and private life. Besides this social aspect, moving to a more digital working environment can also help to improve the environmental footprint. For example, the digitalization of paper-based processes eliminates the need for printing and therefore conserves valuable resources. Since the start of the pandemic, significantly more meetings have also taken place online. Overall, remote working and more digital events have reduced commuting and business travel, which will likely lower related GHG emissions.

Digital collaboration as key enabler

Lenzing constantly continues its journey to improve the digital collaboration by leveraging the opportunities provided by mature products available on the market. Providing the opportunity for employees to work with a good user-experience from almost everywhere in a mobile, secure, stable and fast way is an important task for Lenzing's IT-teams.

Extend reach to empower workforce

Better information allows better collaboration and better decisions. Following Lenzing's purpose "Advancing our world with better choices", Lenzing empowers its employees across all levels by providing digital company information, e-learning and training contents wherever they are needed. They are essential tools as they promote team-member and work-related exchange among Lenzing's blue-collar workers right through management.

Digital Academy

The well-established Digital Academy provides a comprehensive training program for relevant IT applications and topics. Its medium-term focus is on SAP, digital workplace applications, IT security and data protection.

Content is provided in training formats (classroom training, virtual training, videos, printed material, etc.) that reflect the needs of the target groups. A modular structure enables training up to the level of application experts (e.g. key users or IT consultants). Based on our system landscape, an internal website has been established available to all application users, providing a clear overview and guaranteeing easy access to all contents. In 2023, there were 61 training courses on SAP and digital workplace that reached 674 participants.
New technologies and new products being used at Lenzing are constantly added to the training portfolio and to existing applications.

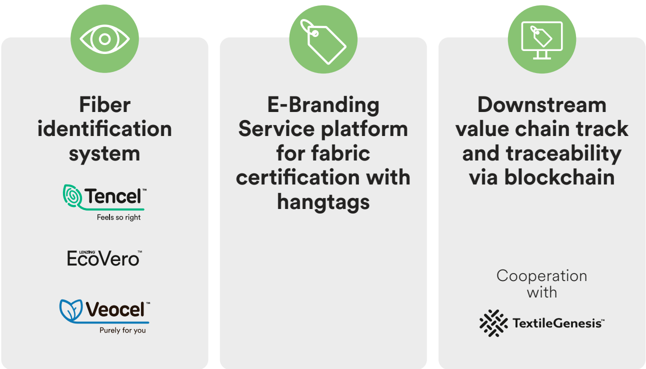
Digital solutions for transparency and traceability across entire supply chains

Beyond ongoing digitalization processes in its own operations, Lenzing is committed to driving digital solutions throughout the supply chain. Lenzing therefore aims to improve transparency and traceability in the textile and nonwovens industry. Transparency means openness towards the people who come into contact with Lenzing fibers. This is crucial as only an honest discussion with the industry can ensure traceability, verifying the origin of Lenzing fibers throughout the supply chain up to the finished garment.

Lenzing's fiber identification system and E-Branding Service form the basis of its overall approach to transparency, while the TextileGenesis™ blockchain project uses the data for further optimized traceability. Cooperation with the Global Textile Scheme contributes to efficient fiber data exchange for the Digital Product Passport in the textiles sector. Additionally, the real-time ocean shipment tracker drives digitalization and transparency in the global fiber supply chain.

Lenzing follows a three-pillar approach to a more sustainable and transparent supply chain:

Building blocks of transparency Figure 22



Fiber identification system

Lenzing uses a technology for fiber identification. The system was successfully implemented for LENZING™ ECOVERO™ branded viscose fibers, TENCEL™ branded modal and lyocell fibers, TENCEL™ x REFIBRA™ branded lyocell fibers and the LENZING™ FR portfolio. Furthermore, Lenzing has incorporated this patented technology into its range of specialty fibers LENZING™ Lyocell Skin, designed for beauty applications and marketed under the brand name VEOCEL™. To demonstrate their safety in skin-contact applications, these fibers have undergone evaluation by Asthma-Allergy Denmark, which has confirmed their low risk of causing skin allergies. In 2023, Lenzing expanded its portfolio of fibers with the fiber identification technology to the spun-dyed LENZING™ ECOVERO™ branded viscose in black color and to LENZING™ ECOVERO™ x REFIBRA™, a newly produced viscose fiber with recycled content.

E-Branding Service

The Lenzing E-Branding Service is an online platform that provides customers along the value chain with access to Lenzing's certification and licensing options. It therefore protects the brands and retailers by providing assurance that their products do not contain fibers made from wood from controversial sources. Furthermore, it guarantees that the fibers are produced in state-of-the-art-production facilities that meet high standards for resource efficiency and environmental and social responsibility.

E-BRANDING-SERVICE

Since the launch of the E-Branding Service in 2018, the number of applications for licenses and swing tickets processed by the E-Branding Service Team has grown at a compounded growth rate of more than 30 percent every year. Despite the challenging economic conditions following the peak of the pandemic in 2021, the TENCEL™ and LENZING™ ECOVERO™ brands managed to grow their licensed product base at a compounded growth rate of more than 15 percent every year.

Registered Lenzing textile partners can apply for fabric certifications, license agreements or Lenzing hangtags. Lenzing nonwoven partners can also register and apply for combined certification and license agreements. In addition to the supply chain disclosure, certification also includes fabric testing by Lenzing for fabrics that really meet the defined standards.

The fiber identification technology relies on the physical identification of fiber origin at different stages of production such as the fabric and garment stage. This enables full fiber origin traceability and counterfeiting protection. It therefore protects the brands and retailers by providing assurance that their products do not contain fibers made from wood from controversial sources. This guarantees that the fibers are produced in state-of-the-art-production facilities that meet high standards for resource efficiency and environmental and social responsibility.

Target groups for the Lenzing E-Branding Service are all partners along the value chain, starting with direct customers (e.g. those who buy Lenzing fibers) to fabric/roll-good manufacturers/converters and manufacturers of the end products all the way to retailers who ultimately position the goods at the point of sales, including online stores.

Ingredient branding to communicate raw material sustainability

Lenzing has adopted an ingredient branding approach in which it collaborates with brand partners in the value chain who convey the valuable properties of the fiber to the end consumers. Retailers, in turn, need supply chain partners who can positively support them in communicating a transparent and consistent sustainability story. Lenzing has seized this opportunity with its branding platform.

FOR ALL PARTNERS ALONG THE VALUE CHAIN

- Informed decisions for consumers
- Service for the supply chain partners
- Transparent communication in complex environments
- Minimized risk of brand counterfeiting

Downstream value chain track and traceability via blockchain technology

Building on several successful pilot projects in 2019 with the innovative start-up TextileGenesis™, Lenzing introduced a digital platform for textile supply chain traceability in 2020 – a milestone for the Lenzing Group. The digital platform was launched in November 2020 for TENCEL™ and LENZING™ ECOVERO™ branded fibers.

TEXTILE GENESIS™

TextileGenesis™ is a pioneering supply chain traceability platform for the fashion and textile industry that is enabled by blockchain technology. Fibercoin™ traceability technology creates real-time digital accounting of sustainably produced fibers along the entire supply chain from fiber to retail, creating an entirely new level of traceability for brands and retailers. The platform is custom-built for all sustainably produced fibers, such as regenerated cellulosic fibers, wool, recycled polyester and organic cotton.

The platform provides customers, partners and consumers with an overview of the entire textile supply chain. Supply chain traceability has become a top priority for apparel and home textile brands.

Lenzing's new blockchain-enabled supply chain traceability platform supports the entire supply chain in meeting increasing demands for transparency and sustainability.

More than 4530 different textile value chain companies (spinners, fabric mills, garment makers etc.) have joined the platform. Several large fashion brands such as H&M and Bestseller have started rolling out TextileGenesis™ for all regenerated cellulosic fibers. Lenzing has experienced an increasing demand for fibers with blockchain traceability. The number of Fibercoins™ issued every month is rising steadily.

TextileGenesis™ platform: Fibercoin™ technology to ensure traceability along the supply chain
By using innovative Fibercoin™ technology in the TextileGenesis™ platform, Lenzing and other brand partners can now issue digital tokens (blockchain assets) in direct proportion to the physical shipments of TENCEL™ and LENZING™ ECOVERO™ branded fibers. These digital tokens provide a unique "fingerprint" and authentication mechanism, preventing adulteration, providing a more secure and trustworthy, digital chain of custody across the entire textile supply chain, and, most importantly, ensuring the materials are sustainably produced.

Digital Product Passport
Textiles are the priority product group for regulation under the Ecodesign for Sustainable Products Regulation (ESPR), within the umbrella of the EU Green Deal. ESPR will also establish information requirements for the Digital Product Passport (DPP), enhancing transparency and data granularity to promote circularity and sustainability in textiles. The European Commission is working on standards and IT solutions for the DPP. These are expected to become mandatory for textiles around 2026, as manual data generation will not be feasible until then due to the enormous quantity of data required.

In 2023, Lenzing contributed support for the product class of regenerated cellulosic fibers to the Global Textile Scheme (GTS), which serves as a unified industry standard for all textile value chains. GTS provides a straightforward and cost-effective framework for efficient data exchange, spanning from fiber production to recycling. GTS collaborates with reputable IT providers and textile experts from companies across the textile value chain. The GTS standard facilitates the conversion of existing data into a standardized format, allowing users to customize it to their own preferences. This streamlines the process, eliminating the need for labor-intensive data harmonization and extensive bilateral translation efforts.

Combining real-time shipment and carbon visibility
A real-time ocean shipment visibility tool has been available to Lenzing customers worldwide since September 2023, driving digitalization and transparency in the global fiber supply chain.

Lenzing has launched the real-time ocean shipment visibility tool in collaboration with project44, a digital supply chain solutions company. To address supply chain complexities, Lenzing has integrated a real-time application programming interface (API) connecting its ERP (enterprise resource planning) system with project44's platform "Movement". This combines AI, GPS sensors and machine learning to provide customers with real-time data on fiber orders, including shipment status, container location, vessel route tracking and estimated arrival times.

Continuous digitalization investments in operations

As part of the Operations Digital Innovation roadmap, Lenzing focussed on four major digital initiatives in 2023:

Data-driven quality control
Lenzing uses data to strengthen production processes and workflows, in order to produce top quality and send every single fiber bale directly to the customer. Several successful Data Science pilot applications demonstrated the multidimensional value of data use in the viscose modal production environment at the Lenzing site (Austria) in 2023.

Mobile maintenance
Mobile maintenance offers a convenient and user-friendly solution for employees. It replaces the bureaucratic work and guarantees "state of the art" maintenance. The team at the Heiligenkreuz site (Austria) installed a cloud based pilot application for mobile order management and multi resource scheduling in 2023.

Augmented reality (AR) for training
For standard operating procedures, AR creates up-to-date training opportunities to assist existing and new employees in production and maintenance. In 2023, the Viscose/Modal division at the Lenzing site (Austria) tested the feasibiltiy of an AR tool to create an instruction manual for production employees. As a next step, a pilot project to cover the most important use cases is planned to be executed in 2024.

Digital twin technologies
Digital twin technologies combine several aspects throughout the lifecycle of a plant, providing the combination of data and information of existing systems with new tools. They enable the simulation of differnet scenarios independent of the physical infrastructure on a global level. The global Engineering Team evaluated tools and the implementation within the existing system landscape and will further provide valuable implementation models in 2024.

These initiatives and measures lead to OEE (Overall Equipment Efficiency), occupational safety and environmental impact improvements.

Cyber security

Information security is the practice of protecting information by mitigating information risks. Cybersecurity is the practice of protecting critical systems and sensitive information from digital attacks. Cyber resilience is the ability to anticipate, withstand, recover from and adapt to adverse conditions, stresses, attacks or compromises on systems that use or are enabled by cyber resources. These are the dimensions companies are permanently working on to reach an adequate level of protection.

Current state

As companies rely on digital technologies, the importance of protecting information systems and confidential information from cyberattacks cannot be overstated. Hence, most business organizations have incorporated information security into their daily work. Cybersecurity and cybercrime have become one of the top ten risks for businesses worldwide in recent years[62]. Attacks against companies are soaring in number, quality and scale. For Lenzing, cybersecurity is not just about risk management – it's about ensuring the long-term resilience of the company.

The tense geopolitical security situation stemming from military conflicts has had significant repercussions on economies, global trade and cybersecurity. Owing to Austria's geopolitical location and Lenzing's absence from the affected regions, there has been no discernible rise in cyberattacks or offenses.

Ransomware has long been a lucrative source of income for highly skilled hackers, whether they belong to criminal organizations or state-sponsored teams pursuing financial gain or sensitive information. These adversaries operate with exceptional organization and manpower, armed with state-of-the-art tools and an unrelenting, strategic approach. They employ various tactics, including blackmail, to compel victims to meet their ransom demands. It's no surprise that this criminal economy is believed to yield an annual revenue of approximately EUR 1.5 trillion, a sum comparable to Spain's GDP[63].

Because Lenzing, a global player in the textile business, is interconnected with numerous business partners, authorities, customers and consumers at various sites of (physical and digital) operation, it is at high risk to falling victim of one of these hackers. Last year, several companies in Lenzing's orbit were affected by cyberattacks that disrupted services and commerce, involved encrypting, stealing and leaking confidential data (data breaches) and even the closure of production sites in some cases.

The Lenzing Group has therefore invested heavily in improving cyber resilience and information security. Existing security concepts have been and are constantly challenged and adapted to the new normal. However, Lenzing not only relies on technical protection measures, but also strongly focuses on the awareness of its employees. Cybersecurity is not a project, but a permanent endeavor for the entire organization.

Activities to fight cybercrime

As a consequence of an assessment of Lenzing's capabilities along the Cyber Security Framework, several short- to medium-term activities were started in order to improve cyber resilience within Lenzing's security program.

Examples of some of the activities that can be shared publicly are listed below.

Human factor: the best firewall
As outlined above, technical measures are important but cannot provide full protection in all situations. This is why empowered and security-conscious employees are essential as the first line of defense. Lenzing carries out several activities to promote these skills, including:

- Regular awareness initiatives through news articles on the intranet
- Regular information via group mails, info-screens and departmental or town hall meetings
- Ad-hoc information in the event of relevant observations in the neighborhood
- Tailored face-to-face trainings for IT employees, HR teams, finance and accounting
- Keynotes on (virtual) corporate department summits
- Line for reporting any security concerns, questions or potential fraudulent activities (including giving feedback and advice on topics raised)
- Information security e-learning for each and every IT user
- Privacy e-learning for each and every IT user

The consciousness and awareness of Lenzing's IT users has led to more than 400 reports on potential spam, phishing/malware and fraudulent mails/calls/contacts worldwide in the reporting year.

Continuous improvement: paradigm for all activities

Targeted technical and organizational measures have been in place for several years to ensure data protection and combat data theft, the manipulation of business processes, and other forms of internet crimes. As technology evolves and the number and sophistication of attacks constantly increases, Lenzing is employing its best efforts by regularly checking and improving the appropriate measures at a similar pace.

Achievements of the year

Lenzing performs annual penetration tests to assess security measures. These tests, performed by highly skilled external partners, result in service improvement plans (SIPs). In addition, external security scorecards systems are frequently used to gain feedback from outside the company. Regular background checks are performed to search for potential threats, disclosures in the dark web or hacked accounts. All findings revealed by such assessments, tests and by reported incidents result in a security review, risk assessment and subsequent corrective action.

Lenzing has performed an assessment regarding technical and organizational cybersecurity measures. Based on the results, the Lenzing Security Program will be updated to align the cybersecurity measures with the current threat situation

Ransomware and nation-state hackers use the disclosure and exploitation of vulnerabilities in enterprise resource planning (ERP), mails, collaboration and knowledge-sharing-tools as means to harvest data and account information. To counter this, Lenzing emphasized the fast rollout of client and server patches to compete with the dramatically lowered times to exploit (and attack). Several campaigns included mobile device update cycles as well.

Since almost two thirds of ransomware attacks are orchestrated by phishing mails, Lenzing provides specific awareness information and e-learnings about phishing to its employees and subsequently tested the results in a phishing simulation. Lenzing also intensified its technical endeavors in this area. The IT infrastructure teams implemented additional security measures on Lenzing's IT assets during the year to improve security hygiene and to reduce the risk to everyday operations.

[62] World Economic Forum – The Global Risks Report 2023, https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf

[63] https://www.techrepublic.com/article/cybercriminals-raking-in-1-5-trillion-every-year/

The vulnerability management process is continuously improved, further increasing the pace with which the IT team closed open vulnerabilities as well as the visibility of the IT team. The still high number of newly revealed vulnerabilities as well as revoked or re-issued patches kept the teams incredibly busy. However, the hard work enabled Lenzing to achieve key milestones towards improved threat detection and response capabilities. This quantum leap will help to detect and respond to attacks faster.

Digitalization & cyber security stakeholder engagement

[GRI 3-3f]

Customers and consumers

Supply chain traceability has become a top priority for apparel and home textile brands. Lenzing's blockchain-enabled supply chain traceability platform TextileGenesis™ supports the entire supply chain in meeting increasing demands for transparency and sustainability. More than 4530 different textile value chain companies (spinners, fabric mills, garment makers etc.) have now joined the platform.

Employees

Technical measures are important but cannot provide protection in all situations. This is why empowered and security-conscious employees are essential in the front line of defense. To promote these skills, Lenzing carries out several activities, such as regular awareness initiatives via news articles on the intranet and other communication channels, or information security eLearning for each and every IT user.

Cyber security experts

Lenzing's cybersecurity experts regularly connect and exchange knowledge with other cybersecurity experts from various organizations and cybersecurity stakeholders. This way, Lenzing can learn from others and stay updated on the latest trends and threats in the field of cybersecurity. Lenzing believes that collaboration and communication is essential for enhancing our cybersecurity posture and resilience.

Supplementary information pursuant to § 243b UGB

The figures and information in this chapter relate to Lenzing AG pursuant to § 243b UGB and therefore only to the Lenzing site (Austria).

Lenzing Aktiengesellschaft – Safety

Work-related injuries for all employees – Lenzing AG Table 52

	2021	2022	2023
Total hours worked (productive working hours)	**4,830,780**	**5,406,705**	**6,106,706**
i) Number of fatal injuries	0	0	0
i) Rate of fatal injuries	0	0	0
ii) Number of high-consequence work-related injuries	0	0	0
ii) Rate of high-consequence work-related injuries	0	0	0
iii) Number of recordable work-related injuries	34	28	29
iii) Rate of recordable work-related injuries	1.41	1.04	0.95
iv) Total number of work-related injuries or ill health	87	107	88
iv) Rate of work-related injuries	3.6	3.96	2.9

Work-related injuries for other workers (workers who are not employees but whose work and/or workplace is controlled by the organization)

	2021	2022	2023
Total hours worked (productive working hours)	**853,099**	**846,478**	**796,771**
i) Number of fatal injuries	0	0	0
i) Rate of fatal injuries	0	0	0
ii) Number of high-consequence work-related injuries	0	0	0
ii) Rate of high-consequence work-related injuries	0	0	0
iii) Number of recordable work-related injuries	5	7	6
iii) Rate of recordable work-related injuries	1.17	1.65	1.5
iv) Total number of work-related injuries or ill health	10	13	15
iv) Rate of work-related injuries	2.34	3.07	3.8

a) With the exception of the major projects in Brazil and Thailand for data consistency reasons. The data analysis for 2021 refers only to the total number of reportable violations.

Work-related fatalities

No work-related fatalities were reported at Lenzing AG in the 2023 financial year.

Top five injury types

Top five injury types – Lenzing AG Table 53

	2021[a]		2022		2023	
For employees	Cuts & lacerations	11	Cuts & lacerations	27	Cuts & lacerations	22
	Bruises	6	Chemical burns	20	Bruises	17
	Fractures	5	Abrasions	15	Hot burns	10
	Sprains	5	Bruises	12	Chemical burns	8
	Condition due to substances	2	Not assigned	12	Abrasions	7
For contractors	Bruises	2	Abrasions	2	Cuts & lacerations	5
	Chemical burns	1	Fractures	2	Bruises	3
	Condition due to substances	1	Sprains	2	Abrasions	2
	Cuts & lacerations	1	Not assigned	2	Foreign bodies	2
	-	-	Cuts & lacerations	2	Chemical burns, Fractures, Hot burns, Strains	1

a) The list of injury types for the Lenzing site was newly introduced with 2021.

Lenzing Aktiengesellschaft – Workforce

Employees 2023

Lenzing Aktiengesellschaft: Number of employees as of December 31; employees only (including apprentices, excluding temporary workers)

Employees 2023 – Lenzing AG Table 54

Lenzing AG Lenzing Aktiengesellschaft: Number of employees as of December 31; employees only (including apprentices, excluding temporary workers)	2021	2022	2023
Total headcounts as of 31.12.	**3,201**	**3,278**	**3,158**
Proportion of women	18.60%	19.00%	18.70%
Proportion of age >50	24.90%	24.00%	23.00%
Proportion of non-Austrians	6.80%	7.90%	8.70%
Apprentices	144	144	145
Contractors	167	128	108
Proportion of employees with full-time contract	87.20%	87.00%	83.06%
Thereof female	11.60%	12.00%	11.60%
Thereof male	88.40%	88.00%	88.40%
Proportion of employees with part-time contract	12.80%	13.03%	16.94%
Thereof female	65.90%	65.80%	53.60%
Thereof male	34.10%	34.20%	46.40%
Proportion of employees for whom collective bargaining agreements exist	100%	100%	100%
Employees with disabilities	68	59	51
Turnover rate	6.10%	7.70%	9.60%

As regards potential corruption offenses or breaches of antitrust law, no official measures were undertaken or legal claims made against Lenzing Aktiengesellschaft in 2023.

Figures concerning environmental matters will not be reported separately for competitive reasons and because these matters are managed and measured on a group-wide basis. The omission of this information does not prevent a fair and balanced understanding of its development, performance, position, and impact of these activities.

Additional information on chapters

Wood and pulp procurement

Wood procurement for the company's own fiber pulp plants in Lenzing (Austria) and Paskov (Czech Republic)
Beech and spruce, by country, 2021 to 2023.

Regional – own country and neighbouring countries

Wood procurement for Lenzing (Austria) Table 55

Country	2021	2022	2023
Austria	38.60%	42.86%	43.68%
Germany	23.40%	15.41%	21.51%
Czech Republic	14.00%	17.02%	13.08%
Slovakia	13.50%	13.31%	12.25%
Hungary	5.30%	4.70%	3.04%
Slovenia	0.40%	0.46%	1.45%
Total regional	**95.20 %**	**93.76 %**	**95.00 %**
Poland	2.00%	1.86%	1.55%
France	2.10%	2.22%	1.92%
Switzerland	0.70%	2.16%	1.46%
Croatia		0.01%	0.07%
Other countries	**4.70 %**	**6.25 %**	**5.00 %**
Total	**100.0 %**	**100.0 %**	**100.0 %**

Wood procurement for Paskov (Czech Republic) Table 56

Country	2021	2022	2023
Czech Republic	84.00%	89.67%	86.35%
Slovakia	8.70%	5.80%	6.04%
Poland	2.10%	1.78%	2.73%
Austria	2.90%	0.78%	1.23%
Germany	2.30%	1.97%	3.65%
Total regional	**100.0 %**	**100.0 %**	**100.00 %**

Certification status in the Lenzing Group, 2021–2023

Certification status of total wood input at Lenzing fiber production sites of its own and purchased dissolving wood pulp. Basis: dissolving wood pulp by weight. All PEFC certified or controlled sources are also FSC® controlled.

Certification status in the Lenzing Group, 2021–2023 Table 57

	2021	2022	2023
PEFC	27.40%	24.20%	34.00%
FSC® 100 %	0.00%	3.50%	15.00%
FSC® Mix	35.90%	37.40%	22.00%
FSC® Controlled Wood	36.70%	34.10%	29.00%
No claim	0.00%	0.8%[a]	0.00%

a) Part of this is due to the formal process of certifying the new site. A small amount of non-certified wood was used for R&D purposes and was submitted to a due-diligence process according to Lenzing's Wood and Pulp Policy.

Lenzing's most important wood species in 2023

Lenzing's most important wood species Table 58

Wood sourcing Region	Europe	South Africa	North America	South America
Wood species (most important)	beech, spruce, ash, birch, poplar	eucalyptus	pine, ash, aspen, maple, fir, hemlock	eucalyptus

Own workforce

Different nationalities within the Lenzing Group 2023 Table 59

Nationality	Female	Male	Total
Afghanistan		3	3
Albania	1		1
Argentina	1		1
Australia		1	1
Austria	575	2670	3245
Belgium		3	3
Bolivia	1		1
Bosnia Herzeg.	3	31	34
Brazil	273	926	1199
Bulgaria	1		1
Canada		1	1
China	169	649	818
Columbia	1	1	2
Croatia	5	16	21
Czech Republic	118	401	519
Dutch Antilles		1	1
Egypt		1	1
France	2	2	4
Germany	28	69	97
Hong Kong	1	2	3
Hungary	1	12	13
India	4	30	34
Indonesia	63	1400	1463
Israel		1	1
Italy		8	8
Kosovo	1	8	9
Malaysia	1	5	6
Mazedonia	2	4	6
Mexico	1		1
Montenegro		1	1
Netherlands	3	7	10
Nigeria		1	1
Pakistan	1	2	3
Poland	2	4	6
Portugal		3	3
Romania	1	17	18
Russian Fed.	3	2	5
Serbia	1	3	4
Singapore	3	5	8
Slovenia	1	4	5
Slovakia	4	5	9
Somalia		1	1
South Africa		2	2
South Korea	3	1	4
Spain	1	2	3
Switzerland		2	2
Syria		5	5
Tajikistan		1	1
Taiwan	2	3	5
Thailand	41	222	263
Türkiye	13	10	23
Uganda		2	2
Ukraine	4		4
United Kingdom	27	210	237
USA	45	171	216
Vietnam	1	1	2

References in policies

Lenzing Policies and
their Intergovernmental Regulation Reference Table 60

Global Code of Business Conduct	International Labor Organization's Declaration on Fundamental Principles International Bill of Human Rights
Sustainability Policy	Paris Climate Agreement United Nations Framework Convention on Climate Change
Supplier Code of Conduct	None
Wood and Pulp Policy	Forest Stewardship Council® (FSC®) certification Programme for the Endorsement of Forest Certification (PEFC) Declaration on Fundamental Principles and Rights at Work of the International Labor Organisation (ILO) – Core conventions
Policy for Safety, Health and Environment	None
Performance Management	None
Anti-Bribery and Corruption Directive	Reference made to United Nations, WHO
Investigation Directive	None
Anti-Money Laundering Directive	Basel AML Index (published by the Basel Institute) Reference made to Financial Action Task Force (FATF), Transparency International, the World Bank, the World Economic Forum UN sanction list Debarred firms World Bank list IDB Group List of Sanctioned Firms and Individuals
Whistleblower Directive	None
Water Policy	EU Best Available Techniques Reference Documents (BREFs) EU Discharge of Hazardous Chemicals (ZDHC)
Group Financial Reporting Directive	International Financial Reporting Standards (IFRS) IFRS Group Accounting Guideline Committee of Spsonsoring Organisations of the Treadway Comission (COSO)
Modern Slavery Act Tansparency Statement (UK)	Modern Slavery Act 2015 Universal Declaration of Human Rights UN Global Compact OECD Guidelines for Multinational Enterprises Declaration on Fundamental Principles and Rights at Work of the International Labor Organisation (ILO) ISO 26000
Policy on Human Rights and Labour Standards	Universal Declaration of Human Rights UN Global Compact OECD Guidelines for Multinational Enterprises Declaration on Fundamental Principles and Rights at Work of the International Labor Organisation (ILO)
Global Equity, Diversion and Inclusion Policy	UN Global Compact UN Sustainable Development Goals
Global Recruitment Guideline	None
Global Job Evaluation Guidelines	None
Global Learning & Development Guideline	None
Group Expatriate Guideline for Long Term International Assigments	None
Group Expatriate Guideline for Short Term International Assignments	None
Group Reward Guideline	None
Group Salary Guideline	None
Group Guideline for Creating a Job Description	None
Group Short Term Incentive Plan Grade 6A and above	None
Group Short Term Incentive Plan up to Grade 6A	None
Bioenergy Policy	Forest Stewardship Council® (FSC®) certification Programme for the Endorsement of Forest Certification (PEFC) Declaration on Fundamental Principles and Rights at Work of the International Labor Organisation (ILO) – Core conventions
Global Child Labor Remediation Procedure	Declaration on Fundamental Principles and Rights at Work of the International Labor Organisation (ILO)

NaDiVeG compliance table

You can find this table here:
https://reports.lenzing.com/annual-and-sustainability-report/2023/en/sustainability/annex/nadiveg

GRI content index

You can find this table here:
https://reports.lenzing.com/annual-and-sustainability-report/2023/en/sustainability/annex/gri

TCFD index

You can find this table here:
https://reports.lenzing.com/annual-and-sustainability-report/2023/en/sustainability/annex/tcfd

Lenzing, February 28, 2024
Lenzing Aktiengesellschaft

The Managing Board

Stephan Sielaff
Chief Executive Officer

Nico Reiner
Chief Financial Officer

Christian Skilich
Chief Pulp Officer & Chief Technology Officer

CHAPTER

3/4

Corporate Governance Report

2023

Content

Consolidated Corporate Governance Report

The Austrian Code of Corporate Governance (ACCG) provides stock companies in Austria with a framework for corporate management and control. This framework includes internationally recognized standards for good corporate governance as well as the regulations of Austrian stock corporation law that are significant in this context.

The goal of the code is to ensure the responsible management and controlling of companies and corporate groups based on sustainable and long-term value creation. This is intended to create a high degree of transparency for all of the company's stakeholders.

Declaration of Commitment

Lenzing AG respects the ACCG and, for the first time in 2010, committed itself to compliance with the documented provisions. The Supervisory Board also passed a unanimous resolution to adhere to the ACCG in full. The current version of the code (January 2023) is available on the Internet at https://www.corporate-governance.at. In accordance with L-Rule 60 of the ACCG, Lenzing AG is required to prepare and publish a Group Corporate Governance Report. The Group Corporate Governance Report of Lenzing AG also represents the Corporate Governance Report for the Lenzing Group.

This Corporate Governance Report is published on the website of Lenzing AG in accordance with C-Rule 61 of the ACCG at https://www.lenzing.com/de/investors/corporate-governance.

The Corporate Bodies of Lenzing AG

The division of responsibilities among the members of Lenzing's Managing Board during the 2023 financial year was as follows:

Managing Board

Stephan Sielaff (born 1966)

- Chairman of the Managing Board, Chief Executive Officer (since April 1, 2022)
- First appointed: March 1, 2020
- Current term of office ends: March 31, 2025

Responsibilities (until March 31, 2023): Corporate Strategy and M&A, Corporate Human Resources, Corporate Communications, Global QESH, Global Legal, IP & Compliance, Investor Relations, Research & Development, Digital Innovation, Corporate Office, Performance Improvement & Technology

Responsibilities (since April 1, 2023): Commercial Textiles, Commercial Nonwovens, Corporate Strategy and M&A, Corporate Human Resources, Corporate Communications, Investor Relations, Corporate Office, Operations Textiles 1, Operations Textiles 2, Operations Nonwovens, Global Supply Chain / Purchasing

Supervisory board functions at other companies: none

Management and monitoring functions at major subsidiaries: none

Nico Reiner (1969)

- Member of the Managing Board, Chief Financial Officer
- First appointed: January 1, 2023
- Current term of office ends: December 31, 2025

Responsibilities (until March 31, 2023): Finance Fibers, Finance Pulp, Corporate Controlling, Global Information Technology, Corporate Accounting & Tax, Lenzing Business Service, Business Process Management, Corporate Treasury, Corporate Audit & Risk

Responsibilities (since April 1, 2023): Finance Textiles, Finance Nonwovens, Finance Pulp, Corporate Accounting & Tax, Corporate Treasury, Global Legal / Compliance & IP, Global IT / Digital Innovation, Corporate Controlling, Lenzing Business Service, Corporate Audit / Risk, Business Process Management

Supervisory board functions at other companies: none

Management and monitoring functions at major subsidiaries: none

Christian Skilich (1968)

- Member of the Managing Board, Chief Pulp & Wood Officer
- First appointed: June 1, 2020
- Current term of office ends: May 31, 2026

Responsibilities (until March 31, 2023): Operations & Technology Pulp, Purchasing Wood, Commercial Affairs Pulp, Commercial Affairs Bio-Refinery & Co-Products, Global Engineering, LDC, Global Purchasing, Site Lenzing, Global Energy Strategy & Supply, Pulp Expansion

Responsibilities (since April 1, 2023): Operations & Development Pulp, Commercial Pulp, Co-Products and Wood, Recycling Pulp, Innovation & Improvement, Global Engineering / CapEx Purchasing, Global QESH / Site Lenzing, Global Energy Strategy & Supply, Lenzing Technik / Maintenance Site Lenzing

Supervisory board functions at other companies: Labewood s.r.o. (since January 1, 2021), Stölzle Oberglas GmbH (since November 18, 2021)

Management and monitoring functions at major subsidiaries: Lenzing Biocel Paskov a.s., LD Celulose S.A., Pulp Trading GmbH

Robert van de Kerkhof (1964)

- Member of the Managing Board, Chief Sustainability Officer
- First appointed: May 1, 2014
- Current term of office ends: December 31, 2023

Responsibilities (until March 31, 2023): Global Textiles Business, Global Nonwovens Business, Global BU Noble Fibers, Fiber Marketing & Branding, Fiber Commercial Operations, Corporate Sustainability, Global Supply Chain (Global Supply Planning Fiber, Fiber Sales, Inventory & Operational Planning, Global Logistics), Technical Marketing & Development

Responsibilities (since April 1, 2023): Corporate Sustainability, CO2 Roadmap, Public Affairs Sustainability Fibers

Supervisory board functions at other companies: none

Management and monitoring functions at major subsidiaries: Lenzing Fibers Holding GmbH, Lenzing Holding GmbH

Mr. Robert van de Kerkhof stepped down from the Managing Board with effect as of December 31, 2023.

The Managing Board directs the business operations of Lenzing Aktiengesellschaft in accordance with the applicable legal regulations, the articles of association, and the internal rules of procedure for the Managing Board. Business is allocated among the individual members of the Managing Board in accordance with a business distribution plan which is appended to the rules of procedure. The rules of procedure also regulate collaboration within the Managing Board. Furthermore, the Managing Board is required to comply in full with the rules of the Austrian Code of Corporate Governance.

Supervisory Board

Composition

Thomas Cord Prinzhorn (1972)
- First appointed: April 14, 2021
- Since April 26, 2022, Chair
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2024 financial year

Supervisory board functions at other companies: Semperit AG (Chair), Prinzhorn Holding GmbH

Stefan Fida (1979)
- First appointed: April 17, 2019
- Since April 14, 2021, Deputy Chair
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2024 financial year

Supervisory board functions at other companies: Semperit AG Holding (Deputy Chair)

Helmut Bernkopf (1967)
- First appointed: April 23, 2009
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2025 financial year

Supervisory board functions at other companies: Oesterreichische Entwicklungsbank AG, OeKB CSD GmbH, Acredia Versicherung AG, OeKB EH Beteiligungs- und Management AG, Österreichische Hotel- und Tourismusbank GmbH

Christian Bruch (1970)
- First appointed: April 17, 2019
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2026 financial year

Supervisory board functions at other companies: Chairman of the Administrative Board of Siemens Gamesa Renewable Energy S.A.

Nicole van der Elst Desai (1976)
- First appointed: April 19, 2023
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2026 financial year

Supervisory board functions at other companies: none

Markus Fürst (1976)
- First appointed: April 14, 2021
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2024 financial year

Supervisory board functions at other companies: none

Franz Gasselsberger (1959)
- First appointed: April 24, 2013
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2027 financial year

Supervisory board functions at other companies: Bank für Tirol und Vorarlberg Aktiengesellschaft, BKS Bank AG, voestalpine AG

Melody Harris-Jensbach (1961)
- First appointed: June 18, 2020
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2023 financial year

Supervisory board functions at other companies: none

Gerhard Schwartz (1965)
- First appointed: April 19, 2023
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2027 financial year

Supervisory board functions at other companies: AMAG Austria Metall AG

Astrid Skala-Kuhmann (1953)
- First appointed: April 19, 2012
- Current term of office ends as of the date of the Annual General Meeting that passes resolutions relating to the 2025 financial year

Supervisory board functions at other companies: B&C Industrieholding GmbH, B&C KB Holding GmbH

Patrick Prügger (1975)
- First appointed: March 29, 2011
- Current term of office ends: Patrick Prügger stepped down from the Supervisory Board as of the end of the Annual General Meeting on April 19, 2023.

Supervisory board functions at other companies: none

Supervisory Board members delegated by the Works Council:

Johann Schernberger (born 1964)
- First appointed: 2001

Georg Liftinger (born 1961)
- First appointed: 2008

Daniela Födinger (born 1964)
- First appointed: 2014 (until April 19, 2023)

Helmut Kirchmair (born 1968)
- First appointed: 2015

Herbert Brauneis (born 1987)
- First appointed: 2018 (until April 19, 2023)

Bonita Haag (born 1967)
- First appointed: 2023 (from April 19, 2023)

Stefan Gruber (born 1972)
- First appointed: 2023 (from April 19, 2023)

Independence

The Supervisory Board has adopted the guidelines for the independence of its members pursuant to Appendix 1 of the ACCG.

Accordingly, all members of the Supervisory Board have declared that they are independent of the company and its subsidiaries.

In accordance with C-Rule 54 of the ACCG, Supervisory Board members Veit Sorger, Helmut Bernkopf, Christian Bruch, Franz Gasselsberger, Nicole van der Elst and Melody Harris-Jensbach declared that they were neither shareholders with an interest of more than ten percent in the company nor did they represent the interests of such shareholders during the 2023 financial year.

Working procedures of the Supervisory Board

In order to fulfill its responsibility to monitor the work of the Managing Board, the Supervisory Board of Lenzing AG holds meetings at least once every quarter. Six Supervisory Board meetings were held during the reporting year (C-Rule 36). The Supervisory Board was informed by the Managing Board about business performance as well as major transactions and measures. The Supervisory Board supervised the work of the Managing Board and provided advice regarding significant strategic decisions. The main topics discussed at the meeting included trends in the business situation, the strategic development of the Group including ESG topics, the status of investment projects that had been implemented, measures to mitigate the negative effects of the current economic environment, analysis and discussion of market trends for fibers and pulp, discussion of the KPIs relevant for Lenzing and their trend over the coming years, preparation and implementation of a capital increase, objectives and progress of the performance program that had been launched, as well as research and development.

The Supervisory Board of Lenzing AG appointed eight committees from among its members in the 2023 financial year (C-Rules 34 and 39 of the ACCG):

Audit Committee
The Audit Committee fulfills the responsibilities defined by Section 92 Para. 4a of the Austrian Stock Corporation Act (AktG). Accordingly, it is especially responsible for monitoring the financial accounting process and making recommendations or suggestions to ensure its reliability. This committee also oversees the effectiveness of the internal control system, of internal auditing, and of the risk management system. It supervises the audit of the separate and consolidated financial statements, examines and monitors the auditor's independence, and approves and controls non-audit services. The Audit Committee also examines the annual financial statements and prepares their approval by the full Supervisory Board, evaluates the Managing Board's proposal for the distribution of profits, the Management Report, and the Group Corporate Governance Report. The chair of the Audit Committee defines the reciprocal communication between the auditor and the Audit Committee (C-Rule 81a of the ACCG). The committee is required to report to the Supervisory Board on its activities. The committee is required to report to the Supervisory Board on its activities. Reports from the Managing Board, the auditor, the compliance, internal audit, and risk management departments were discussed, as well as the financial accounting processes and the internal control system. In addition, the auditor's independence was monitored.

Members: Gerhard Schwartz (Chair, financial expert; since April 19, 2023), Patrick Prügger (Chair, financial expert; until April 19, 2023), Thomas Cord Prinzhorn, Dr. Franz Gasselsberger, Dr. Markus Fürst, Johann Schernberger, Georg Liftinger (until April 30, 2023), Stephan Gruber (since May 1, 2023)

Nomination Committee
The Supervisory Board has formed a Nomination Committee. This committee makes recommendations to the Supervisory Board for appointments to fill vacant positions on the Managing Board and deals with issues related to succession planning. Recommendations are also made to the Annual General Meeting for appointments to the Supervisory Board. In the 2023 financial year, three meetings of the Nomination Committee were held. These dealt in particular with issues of succession planning for the Managing Board, succession planning for the Supervisory Board, and talent management.

Members: Thomas Cord Prinzhorn (Chair), Dr. Astrid Skala-Kuhmann, Dr. Stefan Fida, Dr. Markus Fürst, Johann Schernberger, Georg Liftinger

Remuneration Committee
The Supervisory Board has formed a Nomination Committee. It deals with the terms and conditions of the employment contracts

with the members of the Managing Board and ensures compliance with C-Rules 27, 27a and 28 of the ACCG. In addition, the Remuneration Committee is responsible for preparing and reviewing the remuneration policy for the Managing Board members and Supervisory Board members, and for controlling the implementation of the remuneration policy for Managing Board members. The Remuneration Committee held four meetings in the 2023 financial year, which dealt in particular with the Managing Board evaluation, target agreements, ensuring appropriate remuneration for Managing Board members in the challenging 2023 year, as well as the arrangement, adjustment or termination of employment contracts with Managing Board members.

Members: Thomas Cord Prinzhorn (Chair), Dr. Stefan Fida

Committee for Urgent Matters

The Supervisory Board has formed a committee to deal with urgent matters. It is authorized to make decisions in particularly urgent cases relating to transactions that require Supervisory Board approval. One meeting was held in the 2023 financial year.

Members: Thomas Cord Prinzhorn (Chair) Dr. Markus Fürst, Johann Schernberger

Strategy, Growth and Innovation Committee

The Supervisory Board of Lenzing Aktiengesellschaft established the Strategy, Growth and Innovation Committee at the Supervisory Board meeting on April 19, 2023. This committee deals with reviewing the company's strategic positioning, the monitoring of strategy implementation, and with growth and innovation projects. In 2023, the committee primarily dealt with issues relating to strategic positioning within the competitive environment and with the innovation roadmap. One meeting was held in the 2023 financial year.

Members: Thomas Cord Prinzhorn (Chair), Dr. Markus Fürst, Dr. Astrid Skala-Kuhmann, Melody Harris-Jensbach, Dr. Christian Bruch, Nicole van der Elst Desai, Johann Schernberger, Georg Liftinger, Helmut Kirchmair

ESG Committee

The Supervisory Board of Lenzing Aktiengesellschaft established the ESG Committee at the Supervisory Board meeting on April 19, 2023. This committee is intended to support the Managing Board, the full Supervisory Board, the Audit Committee and the Strategy, Growth and Innovation Committee in matters relating to non-financial reporting and strategic ESG issues. One meeting was held in the 2023 financial year.

Members: Thomas Cord Prinzhorn (Chair), Gerhard Schwartz, Dr. Astrid Skala-Kuhmann, Nicole van der Elst Desai, Johann Schernberger, Stephan Gruber

Project Green Committee

At the Supervisory Board meeting on May 30, 2023, the Supervisory Board of Lenzing Aktiengesellschaft established the Project Green Committee to support the capital increase prepared by the Managing Board and to approve corresponding resolutions for the full Supervisory Board. Two meetings were held in the 2023 financial year. The committee was dissolved as of August 15, 2023.

Members: Thomas Cord Prinzhorn (Chair), Gerhard Schwartz, Johann Schernberger

Value Creation Committee

At the Supervisory Board meeting on July 10, 2023, the Supervisory Board of Lenzing Aktiengesellschaft established the Value Creation Committee to monitor the design and implementation of the performance enhancement program initiated by the Managing Board. Two meetings were held in the 2023 financial year.

Members: Thomas Cord Prinzhorn (Chair), Gerhard Schwartz, Dr. Stefan Fida, Dr. Markus Fürst, Helmut Kirchmair, Georg Liftinger

Cooperation between the Managing and Supervisory boards

The Managing Board reports to the Supervisory Board on fundamental issues relating to future business policies and the outlook for the financial position and financial performance of both Lenzing AG and the Group companies. In addition, the Managing Board provides the Supervisory Board with regular information about the business trends and position of both the parent company and the Group in comparison to forecasts, taking future trends into account. At a separate strategy meeting, the Managing and Supervisory boards also discuss the Lenzing Group's long-term growth objectives.

Self-evaluation by the Supervisory Board

In the 2023 financial year, the Supervisory Board once again conducted a self-evaluation in accordance with C Rule 36 of the Austrian Code of Corporate Governance in the form of a questionnaire, personal interviews, and a workshop with external moderation. Key topics included the Supervisory Board's control function in relation to the Managing Board, and compliance with the Managing Board's duty to inform the Supervisory Board. The result of the self-evaluation shows that the activities of the Supervisory Board of Lenzing AG are again rated as good overall. The Supervisory Board has acted on individual suggestions from the self-evaluation process. Measures designed to ensure efficiency improvements in the activities of the Supervisory Board have been derived from the results of the self-evaluation.

Advancement of women on the Managing and Supervisory boards and in key management positions (L-Rule 60 ACCG)

Lenzing endeavors to foster a diverse and inclusive environment where people feel a sense of belonging and are able to perform successfully, regardless of characteristics such as gender, marital status, ethnicity, skin color, citizenship, national origin, disability, sexual orientation, religion or belief, age, or other characteristics. To this end, a global policy for equal opportunities, diversity and inclusion (EDI) was launched in 2023 with explanatory videos in all seven languages of our production sites. Core teams of the global Employee Resource Groups (ERGs) Women@Lenzing and Multicultural@Lenzing, consisting of committed and interested employees, are now in the process of identifying obstacles to diversity and measures to promote greater inclusivity. Further ERGs are being planned.

The company's Supervisory Board includes the following female members: Dr. Astrid Skala-Kuhmann, Ms. Melody Harris-Jensbach, Ms. Nicole van der Elst Desai and Ms. Bonita Haag. The following positions are held by women: Executive Vice President Commercial Nonwovens, Vice President Corporate Accounting & Tax, Vice President Global Technology, Senior Director Global Product & Application Management, Senior Director Global HR BP Commercial, Senior Director Corporate People Development, Senior Director Commercial Affairs Biorefinery & Co-Products, Site Director Operations Pulp Paskov, Director Global Application Center Management, Head of Textile Sourcing & Cooperations.

"Modern working conditions" are defined as a focus in the strategic HR orientation. Among other issues, work-life balance represents a key issue in this context. This is implemented according to location and country-specific needs.

Diversity concept

Respect, diversity and inclusion form integral and indispensable elements of the corporate culture of Lenzing AG and are reflected in appointments to all functions. Recommendations to the Annual General Meeting for elections to the Supervisory Board and the appointment of members to the Managing Board are designed to achieve a balance in relation to both technical and diversity factors, as this makes an important contribution to the professionalism and effectiveness of the work performed by the Supervisory and Managing boards. In addition to technical and personal qualifications, further key criteria include age structure, origin, gender, education, and experience.

External evaluation

In accordance with C-Rule 62 of the ACCG, Lenzing must arrange for an external institution to evaluate its compliance with the code's C-Rules on a regular basis, albeit at least every three years. Lenzing commissioned PwC Oberösterreich Wirtschaftsprüfung und Steuerberatung GmbH to evaluate its Group Corporate Governance Report for 2023. The evaluation did not lead to any findings. All external evaluation reports are published on the company's website at https://www.lenzing.com.

Risk management and Corporate Audit

The effectiveness of Lenzing's risk management system during the reporting year was evaluated by KPMG Austria GmbH, in accordance with C-Rule 83 of the ACCG and the Managing Board was informed of the results. No findings emerged. The Managing Board was informed of the result of the audit. In addition, the Head of Risk Management reports regularly on current risks at the Audit Committee meetings.

The Corporate Audit Department reports directly to the Managing Board. The annual audit schedule is finalized in close cooperation with the Managing Board and the Audit Committee. The Head of Corporate Audit also makes regular reports to the Audit Committee on key audit findings.

Directors' Dealings

The purchase and sale of shares by members of the Managing and Supervisory boards are disclosed in accordance with the applicable legal regulations (Art. 19 Regulation (EU) No. 596/2014). Information about these purchases and sales is provided on the company's website.

Compliance

Lenzing has a compliance management system that is applied throughout the entire Group. The compliance function aims to advise and support all Lenzing employees, executives, and managers through preventative risk-oriented measures as well as uniform detection and response processes, thereby ultimately protecting them from the negative consequences of violations of laws and values. The Head of Corporate Legal Affairs reports to the Audit Committee on compliance issues.

Lenzing, February 28, 2024
Lenzing Aktiengesellschaft

The Managing Board

Stephan Sielaff
Chief Executive Officer

Nico Reiner
Chief Financial Officer

Christian Skilich
Chief Pulp Officer & Chief Technology Officer

CHAPTER

4/4

Consolidated Financial Statements

2023

Content

Content notes

Lenzing AG

Consolidated Income Statement

for the period from January 1 to December 31, 2023

EUR '000

	Note	2023	2022
Revenue	(5)	2,521,167	2,565,692
Cost of sales	(6)	(2,597,638)	(2,162,561)
Gross profit		**(76,471)**	**403,131**
Other operating income	(7)	108,653	73,096
Selling expenses	(6)	(274,874)	(286,747)
Administrative expenses	(6)	(144,678)	(137,164)
Research and development expenses	(6)	(69,076)	(29,214)
Other operating expenses	(7)	(19,982)	(6,649)
Earnings before interest and tax (EBIT)[1]		**(476,428)**	**16,453**
Income from investments accounted for using the equity method	(12)	6,728	(222)
Income from non-current and current financial assets and liabilities	(13)	(7,498)	10,208
Financing costs	(14)	(108,432)	(36,498)
Financial result		**(109,202)**	**(26,512)**
Earnings before tax (EBT)		**(585,630)**	**(10,059)**
Income tax expense	(15)	(7,322)	(27,182)
Net profit/loss after tax		**(592,953)**	**(37,241)**
Attributable to:			
Shareholders of Lenzing AG		(649,445)	(73,086)
Non-controlling interests		27,742	7,095
Share planned for hybrid capital owners	(16)	28,750	28,750
Earnings per share		EUR	EUR
Diluted = basic	(16)	(20.02)	(2.75)

1) EBIT: Operating result, resp. earnings before interest and tax.

Consolidated Statement of Comprehensive Income

for the period from January 1 to December 31, 2023

EUR '000

	Note	2023	2022
Net profit/loss after tax		(592,953)	(37,241)
Items that will not be reclassified subsequently to profit or loss			
Remeasurement of defined benefit liability	(30)	(4,384)	11,655
Financial assets measured at fair value through other comprehensive income (equity instruments) – net fair value gain/loss on remeasurement recognized during the period	(26)	(3,412)	(16,830)
Income tax relating to these components of other comprehensive income	(26)	1,770	937
Investments accounted for using the equity method - share of other comprehensive income (net of tax)	(21)	27	641
		(6,000)	(3,597)
Items that may be reclassified to profit or loss			
Foreign operations – foreign currency translation differences arising during the period	(26)	(44,988)	62,412
Foreign operations – reclassification of foreign currency translation differences due to loss of control		154	0
Cash flow hedges – effective portion of changes in fair value recognized during the period and non-designated components	(35)	(516)	41,260
Cash flow hedges – reclassification to profit or loss	(35)	(24,142)	21,453
Income tax relating to these components of other comprehensive income	(26)	8,476	(21,535)
Investments accounted for using the equity method – share of other comprehensive income (net of tax)	(26)	488	2,064
		(60,528)	105,654
Other comprehensive income (net of tax)		(66,527)	102,057
Total comprehensive income		(659,480)	64,817
Attributable to:			
Shareholders of Lenzing AG		(704,620)	4,385
Non-controlling interests		16,389	31,682
Share planned for hybrid capital owners		28,750	28,750

Consolidated Statement of Financial Position

as at December 31, 2023

EUR '000

Assets	Note	31/12/2023	31/12/2022
Intangible assets	(17)	26,728	43,825
Property, plant and equipment	(18)	2,865,713	3,413,106
Biological assets	(19)	194,759	127,735
Right-of-use assets	(20)	134,547	72,761
Investments accounted for using the equity method	(21)	31,045	26,483
Financial assets	(22)	21,037	28,969
Deferred tax assets	(29)	48,559	1,716
Current tax assets	(29)	16,181	15,904
Other assets	(25)	75,477	123,135
Non-current assets		**3,414,046**	**3,853,634**
Inventories	(23)	552,940	712,522
Trade receivables	(24)	294,480	293,611
Current tax assets	(29)	5,668	5,210
Other assets	(25)	203,069	200,758
Financial assets	(22)	18,721	12,395
Cash and cash equivalents	(33)	725,639	446,873
Current assets		**1,800,516**	**1,671,368**
Total assets		**5,214,563**	**5,525,002**

Equity and liabilities	Note	31/12/2023	31/12/2022
Share capital		40,108	27,574
Capital reserves		513,455	133,919
Hybrid capital		496,582	496,582
Other reserves		29,961	90,161
Retained earnings		360,281	991,702
Equity attributable to shareholders of Lenzing AG		**1,440,386**	**1,739,938**
Non-controlling interests		301,779	285,957
Equity	(26)	**1,742,165**	**2,025,895**
Financial liabilities	(28)	1,906,702	2,071,948
Government grants	(27)	14,117	15,034
Current tax liabilities		48,001	0
Deferred tax liabilities	(29)	40,098	70,240
Provisions	(30)	89,091	91,547
Puttable non-controlling interests	(35)	249,418	266,085
Other liabilities	(32)	13,559	3,615
Non-current liabilities		**2,360,988**	**2,518,469**
Financial liabilities	(28)	528,992	250,282
Trade payables	(31)	296,322	435,433
Government grants	(27)	72,127	67,741
Current tax liabilities		32,125	27,883
Provisions	(30)	52,599	66,295
Other liabilities	(32)	129,244	133,005
Current liabilities		**1,111,409**	**980,638**
Total equity and liabilities		**5,214,563**	**5,525,002**

Lenzing AG

Consolidated Statement of Changes in Equity

for the period from January 1 to December 31, 2023

	Note	Share capital	Capital reserves	Hybrid capital	Foreign currency translation reserve
As at 01/01/2022		27,574	133,919	496,582	48,452
Net profit/loss after tax as per consolidated income statement		0	0	0	0
Other comprehensive income (net of tax)		0	0	0	49,064
Total comprehensive income		0	0	0	49,064
Hedging gains and losses and cost of hedging transferred to the cost of non-current assets and cost of inventory		0	0	0	0
Transfer of gain on disposal of equity investments at fair value through other comprehensive income to retained earnings	(35)	0	0	0	0
Increase in capital	(26)	0	0	0	0
Measurement of puttable non-controlling interest recognized directly in equity	(35)	0	0	0	0
Dividends paid (including hybrid coupon)	(26)	0	0	0	0
Transactions with equity holders		0	0	0	0
As at 31/12/2022 = 01/01/2023		27,574	133,919	496,582	97,517
Net profit/loss after tax as per consolidated income statement		0	0	0	0
Other comprehensive income (net of tax)		0	0	0	(31,783)
Total comprehensive income		0	0	0	(31,783)
Hedging gains and losses and cost of hedging transferred to the cost of non-current assets and cost of inventory		0	0	0	0
Transfer of gain on disposal of equity investments at fair value through other comprehensive income to retained earnings	(35)	0	0	0	0
Increase in capital	(26)	12,534	379,536	0	0
Acquisition/disposal of non-controlling interests and other changes	(3,26)	0	0	0	0
Measurement of puttable non-controlling interest recognized directly in equity	(35)	0	0	0	0
Dividends paid (including hybrid coupon)	(26)	0	0	0	0
Transactions with equity holders		12,534	379,536	0	0
As at 31/12/2023	**(26)**	**40,108**	**513,455**	**496,582**	**65,733**

EUR '000

Other reserves			Retained earnings	Equity attributable to shareholders of Lenzing AG and to hybrid capital owners	Non-controlling interests	Equity
Financial assets measured at fair value through other comprehensive income	Hedging reserve and non-designated components	Actuarial gains/losses				
33,448	**(18,794)**	**(47,973)**	**1,206,359**	**1,879,568**	**192,517**	**2,072,085**
0	0	0	(44,336)	(44,336)	7,095	(37,241)
(12,216)	32,113	8,509	0	77,471	24,587	102,057
(12,216)	32,113	8,509	(44,336)	33,135	31,682	64,817
0	3,153	0	0	3,153	4,476	7,629
(5,597)	0	0	5,597	0	0	0
0	0	0	0	0	57,432	57,432
0	0	0	(31,676)	(31,676)	0	(31,676)
0	0	0	(144,243)	(144,243)	(150)	(144,393)
0	0	0	(175,918)	(175,918)	57,282	(118,636)
15,635	16,473	(39,463)	991,702	1,739,938	285,957	2,025,895
0	0	0	(620,695)	(620,695)	27,742	(592,953)
(2,662)	(17,415)	(3,315)	0	(55,175)	(11,353)	(66,527)
(2,662)	(17,415)	(3,315)	(620,695)	(675,870)	16,389	(659,480)
0	(2,420)	0	0	(2,420)	(1,597)	(4,017)
(2,605)	0	0	2,605	0	0	0
0	0	0	0	392,069	0	392,069
0	0	0	(1,248)	(1,248)	1,280	31
0	0	0	16,667	16,667	0	16,667
0	0	0	(28,750)	(28,750)	(250)	(29,000)
0	0	0	(13,331)	378,738	1,030	379,768
10,368	**(3,362)**	**(42,779)**	**360,281**	**1,440,386**	**301,779**	**1,742,165**

Lenzing AG

Consolidated Statement of Cash Flows

for the period from January 1 to December 31, 2023

EUR '000

		Note	2023	2022
Net profit/loss after tax			**(592,953)**	**(37,241)**
+	Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets	(10)	781,771	227,589
+/–	Change in the fair value of biological assets	(19)	(80,102)	(17,009)
–	Income from the release of investment grants		(2,025)	(2,126)
+/–	Change in non-current provisions		(2,050)	(13,162)
–/+	Income / expense from deferred taxes		(62,895)	(5,579)
+/–	Change in current tax assets and liabilities		50,236	(15,495)
+/–	Income from investments accounted for using the equity method		(4,048)	1,062
–/+	Other non-cash income / expenses	(33)	553	106,743
Gross cash flow			**88,488**	**244,783**
+/–	Change in inventories		178,245	(295,952)
+/–	Change in receivables		34,751	10,581
+/–	Change in liabilities		(141,160)	(2,657)
Change in working capital			**71,836**	**(288,028)**
Cash flow from operating activities			**160,323**	**(43,246)**
–	Acquisition of intangible assets, property, plant and equipment and biological assets		(267,834)	(698,894)
–	Acquisition of corporate units	(3)	(15,731)	0
–	Acquisition/Disbursement of financial assets and investments accounted for using the equity method		(14,225)	(303)
+	Proceeds from the sale of intangible assets, property, plant and equipment and biological assets		436	1,443
+	Proceeds from the sale/repayment of financial assets and the sale of investments accounted for using the equity method		5,846	10,368
Cash flow from investing activities			**(291,509)**	**(687,387)**
+	Cash proceeds from issuing shares	(26)	392,069	0
+	Capital injections to consolidated companies by non-controlling interests		0	56,673
–	Dividends paid (including hybrid coupon)	(26)	(29,000)	(144,393)
+	Investment grants		1,616	1,469
+	Increase in other financial liabilities	(33)	226,640	258,907
–	Repayment of bonds and private placements	(33)	0	(72,000)
–	Repayment of other financial liabilities	(33)	(170,232)	(46,601)
Cash flow from financing activities			**421,094**	**54,056**
Total change in liquid funds			**289,908**	**(676,576)**
Liquid funds at the beginning of the year			446,873	1,113,279
Currency translation adjustment relating to liquid funds			(11,142)	10,170
Liquid funds at the end of the year			**725,639**	**446,873**
Additional information on payments in the cash flow from operating activities:				
Interest payments received			15,262	10,756
Interest payments made			120,409	74,631
Income taxes paid			15,770	48,474
Distributions received from investments accounted for using the equity method			2,680	840

Notes to the Consolidated Financial Statements

as at December 31, 2023

General information

Note 1. Basic information

Description of the company and its business activities

Lenzing Aktiengesellschaft (Lenzing AG), which maintains its registered headquarters in 4860 Lenzing, Werkstrasse 2, Austria, is the parent company of the Lenzing Group (the "Group"). The shares of Lenzing AG are listed in the Prime Market Segment (since April 18, 2011) and in the ATX benchmark index (since September 19, 2011) of the Vienna Stock Exchange in Vienna, Austria.

The core shareholder of Lenzing AG as at December 31, 2023 is the B&C Group, which directly and indirectly holds an investment of around 52.25 percent (December 31, 2022: around 52.25 percent) in the share capital of Lenzing AG. The direct majority shareholder of Lenzing AG is B&C KB Holding GmbH, Vienna. The indirect majority shareholder of Lenzing AG, which prepares and publishes consolidated financial statements that include the Lenzing Group, is B&C Holding Österreich GmbH, Vienna. The ultimate parent company of the B&C Group, and therefore also of Lenzing AG, is B&C Privatstiftung, Vienna.

The core business of the Lenzing Group is the production and marketing of wood-based cellulosic fibers. The pulp required for production is manufactured for the most part in the Group's own plants and is supplemented by external purchases.

Basis of Reporting

The consolidated financial statements for the period from January 1 to December 31, 2023 were prepared in accordance with the International Financial Reporting Standards (IFRSs) and interpretations which were endorsed in the EU and required mandatory application as of the reporting date. The additional requirements of Section 245a Para. 1 of the Austrian Commercial Code ("Unternehmensgesetzbuch") were also met.

The reporting currency is the euro (EUR), which is also the functional currency of Lenzing AG. The functional currency of the majority of the subsidiaries is the euro (EUR) or US-Dollar (USD). The figures shown in these consolidated financial statements and notes were rounded to the next thousand, unless indicated otherwise ("EUR '000"). The use of automatic data processing tools can lead to rounding differences in the addition of rounded amounts and percentage rates.

Measurement

Assets and liabilities are principally measured at amortized or depreciated cost. In contrast, other measurement methods are used for the following material positions:

- Biological assets are measured at their fair value.
- Provisions are measured at the present value of the expected settlement amount.
- Deferred tax assets and deferred tax liabilities are recognized at their nominal value. They are measured on the basis of the temporary differences existing as at the reporting date and the effective tax rate expected when the differences are realized.
- Derivative financial instruments and financial assets measured at fair value through profit or loss and at fair value through other comprehensive income are measured at their fair value.
- Puttable non-controlling interests are measured at fair value directly through retained earnings.

Estimation uncertainty and judgments

The Managing Board of Lenzing AG uses estimates, assumptions and judgments in preparing the IFRS consolidated financial statements. These estimates, assumptions and judgments are based on the circumstances as at the reporting date and have to some extent a significant effect on the presentation of the Group's financial position and financial performance. They involve the recognition and measurement of assets and liabilities, contingent receivables and liabilities, the reporting of cash flows and income and expenses (including other comprehensive income) as well as the presentation of disclosures in the notes.

Assumptions and estimates

The following forward-looking assumptions and other major sources of estimation uncertainty as of the reporting date have a significant effect on these consolidated financial statements of the Lenzing Group:

- Intangible assets, property, plant and equipment and right-of-use assets (see note 10): determination of the recoverable amount in connection with impairment testing as defined in IAS 36 (impairment).
- Biological assets (see note 19): determination of fair value less costs to sell.
- Financial instruments (see note 35 and note 37): determination of fair values and expected credit losses.
- Provisions (see note 30): determination of the expected settlement amount and the net liability of the defined benefit pension and severance payment plans.
- Puttable non-controlling interests (see note 35): determination of fair value less costs to sell.
- Deferred taxes and receivables from current taxes (see note 29): assessment of the extent to which deferred tax assets (in particular, from loss carryforwards) can be utilized and assessment of the recoverability of receivables from current taxes.
- Research and development expenses (see note 17): assessment of eligibility for capitalization and impairment of development expenses.

Assumptions and estimates are based on experience and other factors that are considered relevant by the Managing Board. However, the amounts actually realized can deviate from these assumptions and estimates if general conditions develop in a different way than the expectations as at the reporting date.

Judgments when applying accounting policies

The application of accounting policies by the Lenzing Group included the following major judgments that have a material effect on these consolidated financial statements:

- Receivables under factoring agreements (see note 35, section "Transfer of financial assets (sale of receivables/factoring)"): assessment of the requirements for derecognition as defined in IFRS 9.
- Liabilities under reverse factoring agreements (see note 31): assessment of the requirements for derecognition as defined in IFRS 9 (financial instruments).
- Full consolidation and equity method (see note 3, note 35 and note 41): assessment of the existence of control over subsidiaries and assessment of the existence of joint control or significant influence. Application of the present access method to puttable non-controlling interests.
- Receivables from the sale of and measurement of investments accounted for using the equity method (see note 21): Assessment of the recoverability of the receivables from the partial disposal and the interest in EQUI-Fibres Beteiligungsgesellschaft mbH (EFB), Kelheim, Germany.
- Evidence of impairment (see note 10): evaluation of indications of impairment resp. for impaired cash-generating units evaluation of the occurrence of material changes in comparison with the previous year.

Impact of climate change on estimation uncertainties and judgments

The Lenzing Group is committed to the ecologically responsible production of fibers from the renewable raw material wood. Innovation, sustainability and the circular economy lie at the core of Lenzing's corporate strategy. The implementation of climate targets in line with the corporate strategy was one of the focus areas of the Lenzing Group's investment activities in the 2023 financial year. In this context, the Lenzing Group is continuously working on utilizing raw materials more efficiently, improving production processes and making recycled used textiles usable for fiber production. Current developments and measures relating to climate change and sustainability do not lead to fundamental changes to assumptions and estimates in terms of financial accounting. The Managing Board estimates the potential impact of climate-related opportunities and risks on the IFRS consolidated financial statements as follows:

- Useful lives of assets (see note 18): The Lenzing Group has evaluated the extent to which the useful lives of property, plant and equipment could be affected by climate-related risks. In particular, an assessment was made as to whether, on the basis of existing and announced legal and regulatory requirements, the potential pollution from individual industrial plants (for example, by exceeding emission limits) poses a risk for the granting of operating permits. No influence of external or internal obligations on useful lives was derived.
- Impairment of assets (see note 10, section "Impairment tests of intangible assets, property, plant and equipment, right-of-use assets and cash-generating units (CGUs)"): The short- and medium-term financial planning and consequently the impairment tests are based on the Lenzing Group's sustainable strategy and the sustainable business model. The short- and medium-term financial plans of the individual CGUs take appropriate account of assumptions regarding climate-related factors in capital expenditure programs (CAPEX), technologies and production processes for achieving the Group's internal climate targets, and the ecologically sustainable product mix based upon these.
- Provisions and contingent liabilities (see note 30 und note 40): In the 2023 financial year, no new obligations arose in the Lenzing Group from climate protection laws and/or climate regulations that would have required the formation of a provision or the disclosure of a contingent liability. No obligations exist to recultivate existing properties.
- Biological assets (see note 19): The measurement of the biological asset requires assumptions relating to the growth rates of mature timber. The growth rates are in turn dependent on the climatic conditions in the Minas Gerais region of Brazil. Climate change may lead to changes in the growth behavior of mature timber (e.g. accelerated or slowed growth), and thereby to the adjustment of growth assumptions in the valuation of the biological asset.

Note 2. Changes in accounting policies

The accounting policies applied by the Lenzing Group in 2023 remained unchanged in comparison with the previous financial year, with the exception of the changes described in this section.

Mandatory changes in accounting policies

The following new and amended standards and interpretations were adopted into EU law and required mandatory application by the Lenzing Group beginning with the 2023 financial year:

Standards/interpretations		Publication by the IASB	Mandatory application according to IASB for financial years from	Adopted by the EU as at 31/12/2023
IFRS 17	Insurance Contracts	18/05/2017	01/01/2023	yes
IFRS 17	Initial Application of IFRS 17 and IFRS 9 – Comparative Information	09/12/2021	01/01/2023	yes
IAS 1	Disclosure of Accounting Policies	12/02/2021	01/01/2023	yes
IAS 8	Definition of Accounting Estimates	12/02/2021	01/01/2023	yes
IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	07/05/2021	01/01/2023	yes
IAS 12	International Tax Reform – Pillar Two Model Rules	23/05/2023	01/01/2023	yes

The new or amended standards and interpretations applicable as of January 1, 2023 did not result in any significant changes to the consolidated financial statements of the Lenzing Group.

The following new or amended standards and interpretations had been published by the IASB prior to the preparation of these consolidated financial statements, but did not require mandatory application by the Lenzing Group for financial years beginning on or before January 1, 2023:

Standards/interpretations		Publication by the IASB	Mandatory application according to IASB for financial years from	Adopted by the EU as at 31/12/2023
IFRS 10, IAS 28	Sale or contribution of assets between an investor and its associate or joint venture	11/09/2014	unknown[1]	no
IFRS 14	Regulatory Deferral Accounts	30/01/2014	01/01/2016	no[2]
IFRS 16	Lease Liability in a Sale and Leaseback	22/09/2022	01/01/2024	yes
IAS 1	Classification of liabilities as current or non-current	23/01/2020	01/01/2024	yes
IAS 1	Classification of debt with covenants as current or non-current	31/10/2022	01/01/2024	yes
IAS 7, IFRS 7	Disclosures on Supplier Finance Arrangements	25/05/2023	01/01/2024	no
IAS 21	The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability	15/08/2023	01/01/2025	no

1) The IASB has deferred the effective date of this standard indefinitely.
2) The European Commission does not recommend the adoption of interim standard IFRS 14 into EU law at the present time.

The other aforementioned new or amended standards and interpretations were not adopted early by the Lenzing Group. They are either not relevant for the Group or do not have a material impact on the earnings, assets, liabilities and cash flows, as well as the presentation of disclosures in the notes to the consolidated financial statements of the Lenzing Group. The amendments to IAS 7, IFRS 7 (Disclosure of Supplier Finance Arrangements) supplement the existing disclosures in the notes to the financial statements by requiring companies to provide additional qualitative and quantitative information about financing arrangements with suppliers.

The application of these standards and interpretations is generally planned following their endorsement by the EU.

Voluntary changes in accounting policies

No voluntary changes to accounting policies were applied in the 2023 and 2022 financial years.

Note 3. Consolidation

Scope of consolidation

The consolidated financial statements of the Lenzing Group include Lenzing AG, as the parent company, and its subsidiaries, all on the basis of financial statements as at December 31, 2023.

The number of companies included in the scope of consolidation developed as follows:

Development of the number of consolidated companies (incl. parent company)

	2023		2022	
	Full-	Equity	Full-	Equity
	consolidation		consolidation	
As at 01/01	**27**	**7**	**28**	**7**
Included in consolidation for the first time during the year	2	0	0	0
Merged during the year	0	0	(1)	0
Deconsolidated during the year	(1)	0	0	0
As at 31/12	**28**	**7**	**27**	**7**
Thereof in Austria	7	3	7	3
Thereof abroad	21	4	20	4

A list of the group companies as at December 31, 2023 is provided in note 41. The most important group companies produce and market wood-based cellulosic fibers (Segment Division Fiber) and, in some cases, pulp (Segment Division Pulp).

The previously fully consolidated subsidiary Lenzing E-commerce (Shanghai) Co, Ltd, Shanghai, China, was liquidated and deconsolidated in March 2023.

With effect as at June 1, 2023, the Lenzing Group acquired a biomass power plant to supply the Heiligenkreuz production site. This strategic investment reduces dependence on fossil fuels and strengthens the Heiligenkreuz site as an industrial location. With the acquisition of this biomass power plant, the Lenzing Group is accelerating its transition to renewable energies and thereby also speeds up the achievement of its climate targets in accordance with its sustainability strategy.

Fair value of the assets and liabilities at the aquisition date	**EUR '000**
Intangible assets, property, plant and equipment, right-of-use assets	18,053
Inventories	1,130
Liabilities	(1,453)
Identifiable assets less liabilities (net assets)	**17,731**

The goodwill of EUR 719 thousand arising from the transaction reflects the expected strategic benefits from energy independence at the Heiligenkreuz production site and its contribution to carbon reduction, as anchored within the corporate strategy.

The output of the biomass power plant is harnessed internally and consequently does not generate any additional revenue for the Lenzing Group. In addition, the biomass power plant is fully integrated with the operational production site in Heiligenkreuz. As a consequence, it does not generate separate earnings.

The consideration transferred comprises the purchase price of EUR 17,731 thousand and a contingent consideration whose fair value on the acquisition date amounted to EUR 934 thousand. Of the purchase price in the amount of EUR 17,731 thousand, EUR 15,731 thousand was paid in cash in 2023. The remaining amount of EUR 2,000 thousand is due in more than one year.

Under the contingent consideration agreement, the Lenzing Group is obligated to pay a capped amount to the former owner of the biomass power plant until 2026, depending on the future trend in the average gas price (TTF ICE). A minimum amount was not set, although the maximum amount was fixed at EUR 12,500 thousand. The fair value of the contingent consideration was estimated by means of option valuation using an arbitrage-free Monte Carlo model approach. The calculated fair value would increase (decrease) particularly if the gas price (TTF ICE) increases (decreases).

As of December 31, 2023, a reduction in the contingent consideration of EUR 57 thousand was recognized in profit and loss under income from non-current and current financial assets and liabilities, as the fair value of the contingent consideration decreased by this amount (see note 13). The contingent consideration is recognized on the consolidated balance sheet under other liabilities.

In June 2023, the subsidiary Lenzing Germany GmbH, Münchberg, Germany, was founded and included in the scope of consolidation.

In July 2023, the subsidiary Lenzing Italy S.r.l., Rome, Italy, was founded and included in the scope of consolidation.

In January 2022, the subsidiary Reality Paskov s.r.o., Paskov, Czech Republic, was merged with Lenzing Biocel Paskov a.s., Paskov, Czech Republic.

Basis of consolidation

Subsidiaries are companies controlled by the parent company. The Lenzing Group decides individually for each acquisition whether the non-controlling interests in the acquired subsidiary will be recognized at fair value or based on the proportional share of the acquired net assets. On acquisition, non-controlling interests are measured at fair value or the corresponding share of recognized net assets and are reported under equity and comprehensive income as "non-controlling interests".

Lenzing AG holds a majority interest of 51 percent and thereby controls LD Celulose S.A., Indianópolis, Brazil. The Dexco Group holds a 49 percent interest in LD Celulose S.A. and a put option to sell its shares (puttable non-controlling interests). Lenzing AG applies the present access method for the accounting of the liability deriving from puttable non-controlling interests. Accordingly, the Dexco Group's non-controlling interest in LD Celulose S.A. continues to be recognized in equity, and additionally a financial liability for puttable non-controlling interests is recognized (see note 35). The liability is subsequently measured at fair value directly in retained earnings.

The investments in associates and joint ventures are accounted for by applying the equity method.

The Lenzing Group wholly owns an insurance cell of White Rock Insurance (Europe) Protected Cell Company Limited, La Valletta, Malta. This company has an insurance concession and enables the Lenzing Group to administer its operationally necessary insurance policies more effectively. The insurance cell essentially holds cash and cash equivalents. It is classified as a structured entity, and fully consolidated.

Structured entities include those assets and liabilities that are held by the Lenzing Group

The reporting currency of Lenzing AG and the Lenzing Group is the euro. The subsidiaries prepare the annual financial statements in their functional currency. The functional currency is the currency of the primary economic environment in which the respective company operates. With the exception of the subsidiaries mentioned below, the functional currency is the currency of the country or region where the subsidiary is located. The US dollar is the functional currency for LD Celulose S.A., Indianópolis, Brazil, Lenzing (Thailand) Co., Ltd, Prachinburi, Thailand, Lenzing Singapore Pte. Ltd, Singapore, Republic of Singapore, and PT. South Pacific Viscose, Purwakarta, Indonesia.

The following key exchange rates were used for translation into the reporting currency euro:

Exchange rates for key currencies

			2023		2022	
Unit		Currency	End of the year	Average	End of the year	Average
1 EUR	USD	US Dollar	1.1050	1.0816	1.0666	1.0539
1 EUR	GBP	British Pound	0.8691	0.8699	0.8869	0.8526
1 EUR	CZK	Czech Koruna	24.7240	24.0006	24.1160	24.5602
1 EUR	CNY	Renminbi Yuan	7.8509	7.6591	7.3582	7.0801
1 EUR	BRL	Brazilian Real	5.3618	5.4016	5.6386	5.4432

For the sales company Lenzing Elyaf Anonim Şirketi, Istanbul, Turkey, hyperinflation accounting in accordance with IAS 29 was applied for the first time for the 2023 financial year. The first-time adjustment of the carrying amounts of non-monetary assets and liabilities based on a general price index was recognized directly in retained earnings and amounts to EUR 31 thousand. Gains and losses deriving from ongoing hyperinflation effects on non-monetary assets and liabilities as well as equity are recognized in other operating income or expenses in the income statement. The financial statements are based on the historical cost concept. The price index in Turkey as at December 31, 2023, amounted to 2,915.02 (December 31, 2022: 2,021.19).

Note 4. Segment report

The reportable segments are the "Division Fiber", "Division Pulp" and "Others". The Lenzing Group classifies its segments based on the differences between their products, which require individual technologies and market strategies.

The Division Fiber produces all three generations of wood-based cellulosic fibers and markets them under the product brands TENCEL™, VEOCEL™, LENZING™ ECOVERO™ and LENZING™. The products made from lyocell, modal and viscose fibres are used for the production of textiles as well as nonwovens and special applications.

The Division Pulp produces and procures dissolving pulp, which is the necessary primary and intermediate product for fiber production. The pulp is used for the company's own cellulosic fiber production and marketed externally. The fiber and pulp production systems are used and managed independently of each other.

"Others" mainly includes central headquarters functions, overarching activities and the business activities of BZL – Bildungszentrum Lenzing GmbH, Lenzing (training and personnel development).

Information on business segments

EUR '000

2023	Division Fiber	Division Pulp	Others	Segment total	Recon-ciliation	Group
Revenue from external customers	1,841,007	676,132	4,028	**2,521,167**	0	**2,521,167**
Inter-segment revenue	9,624	371,308	0	**380,932**	(380,932)	**0**
Total revenue	**1,850,630**	**1,047,440**	**4,028**	**2,902,099**	**(380,932)**	**2,521,167**
EBITDA (segment result)	(98,701)	462,097	(65,677)	**297,719**	5,599	**303,318**
EBIT	(683,765)	284,630	(82,894)	**(482,029)**	5,601	**(476,428)**
Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets	586,571	177,691	17,512	**781,773**	(2)	**781,771**
Thereof impairment	464,906	0	0	**464,906**	0	**464,906**
Income from investments accounted for using the equity method	(4,258)	2,803	8,183	**6,728**	0	**6,728**
Other material non-cash income and expenses	(37,742)	(72,691)	24,521	**(85,912)**	0	**(85,912)**
CAPEX	181,138	84,405	5,924	**271,466**	12,099	**283,565**
EBITDA margin[1]	(5.3)%	44.1%	n/a	**10.3%**	-	**12.0%**
EBIT margin[2]	(36.9)%	27.2%	n/a	**(16.6)%**	-	**(18.9)%**

1) EBITDA margin = EBITDA (operating result before depreciation and amortization) in relation to total revenue (here: according to segment reporting).
2) EBIT margin = EBIT (operating result) in relation to total revenue (here: according to segment reporting).

Information on business segments (previous year)

EUR '000

2022	Division Fiber	Division Pulp	Others	Segment total	Recon-ciliation	Group
Revenue from external customers	2,093,762	466,900	5,029	**2,565,692**	0	**2,565,692**
Inter-segment revenue	11,017	485,134	0	**496,151**	(496,151)	**0**
Total revenue	**2,104,779**	**952,035**	**5,029**	**3,061,843**	**(496,151)**	**2,565,692**
EBITDA (segment result)	32,923	309,968	(100,305)	**242,587**	(671)	**241,916**
EBIT	(92,752)	221,134	(111,241)	**17,142**	(689)	**16,453**
Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets	127,209	89,237	11,125	**227,571**	18	**227,589**
Income from investments accounted for using the equity method	(1,198)	(4,126)	5,102	**(222)**	0	**(222)**
Other material non-cash income and expenses	62,602	(18,605)	17,859	**61,857**	0	**61,857**
CAPEX	246,188	437,182	7,061	**690,432**	8,462	**698,894**
EBITDA margin[1]	1.6%	32.6%	n/a	**7.9%**	-	**9.4%**
EBIT margin[2]	(4.4)%	23.2%	n/a	**0.6%**	-	**0.6%**

1) EBITDA margin = EBITDA (operating result before depreciation and amortization) in relation to total revenue (here: according to segment reporting).
2) EBIT margin = EBIT (operating result) in relation to total revenue (here: according to segment reporting).

The other significant non-cash operating expenses and income relate to non-cash measurement effects from biological assets, receivables, inventories and provisions.

The performance of the segments and the Group is measured by EBITDA (earnings before interest, tax, amortization of intangible assets, depreciation on property, plant and equipment and right-of-use assets and depletion of biological assets and before income from the release of investment grants).

The following table shows the reconciliation of earnings before interest and tax (EBIT) to the earnings before interest, tax, depreciation and amortization (EBITDA) and to the earnings before tax (EBT):

Reconciliation of earnings before interest and tax (EBIT) to the earnings before interest, tax, depreciation and amortization (EBITDA) and to the earnings before tax (EBT) **EUR '000**

	2023	2022
Earnings before interest and tax (EBIT)	(476,428)	16,453
Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets	781,771	227,589
Income from the release of investment grants	(2,025)	(2,126)
Earnings before interest, tax, depreciation and amortization (EBITDA)	303,318	241,916
Segment amortization and depreciation	(781,773)	(227,571)
Consolidation	2	(18)
Income from the release of investment grants	2,025	2,126
Earnings before interest and tax (EBIT)	(476,428)	16,453
Financial result	(109,202)	(26,512)
Earnings before tax (EBT)	**(585,630)**	**(10,059)**

The carrying amounts for segment reporting are based on the same accounting policies applied to the IFRS consolidated financial statements.

Information on products and services

Revenue from external customers can be classified by products and services as follows:

Revenue from external customers by products and services **EUR '000**

	2023	2022
Wood-based cellulosic fibers	1,753,472	2,013,761
Co-products of fiber production	61,134	55,917
Mechanical and plant engineering, engineering services and others	26,401	24,084
Division Fiber	1,841,007	2,093,762
Pulp	529,458	272,065
Biorefinery-products and energy	110,209	160,323
Wood and other	36,465	34,512
Division Pulp	676,132	466,900
Others	4,028	5,029
Revenue as per consolidated income statement	**2,521,167**	**2,565,692**

No single external customer is responsible for more than 10 percent of external revenue.

Information on geographic regions

The following table provides a classification of revenue from external customers by sales market by geographic area.

Revenue from external customers by geographic regions **EUR '000**

	2023	2022
Austria	94,179	132,345
Europe (excl. Austria, incl. Turkey)	625,909	744,880
Asia	1,563,430	1,433,169
America (North, Central and South America)	223,264	239,718
Rest of the world	14,386	15,580
Revenue as per consolidated income statement	**2,521,167**	**2,565,692**

Revenue is allocated according to the geographic region of the customer.

The following table shows non-current assets (excluding financial instruments and tax assets; reconciled to the consolidated figures for total non-current assets), total assets and acquisition of intangible assets, property, plant and equipment and biological assets and acquisition of corporate units (CAPEX) by geographic region:

Information on non-current assets, total assets and CAPEX by geographic regions **EUR '000**

	Non-current assets		Total assets		CAPEX	
	31/12/2023	31/12/2022	31/12/2023	31/12/2022	31/12/2023	31/12/2022
Austria	816,178	983,437	1,347,287	1,614,939	98,821	79,625
Europe (excl. Austria, incl. Turkey)	204,431	195,879	309,833	345,322	36,151	20,415
Asia	665,551	954,894	923,699	1,244,721	97,100	195,520
America (North, Central and South America)	1,642,109	1,672,835	1,797,937	1,808,954	51,493	403,336
Subtotal	3,328,269	3,807,045	4,378,757	5,013,937	283,565	698,894
Reconciliation to consolidated figures	85,778	46,589	835,806	511,065	0	0
Consolidated total	**3,414,046**	**3,853,634**	**5,214,563**	**5,525,002**	**283,565**	**698,894**

The above amounts cover all segments of the Lenzing Group. Additional information on the segments is provided in the management report of the Lenzing Group as at December 31, 2023.

Notes on the Consolidated Income Statement

Note 5. Revenue

The breakdown of revenue is shown in the segment report (see note 4, in particular information on products and services as well as geographic regions).

Revenue results exclusively from contracts with customers in accordance with IFRS 15 (Revenue from Contracts with Customers). Revenue comprises all income generated by the typical business activities of the Lenzing Group.

Income is recognized at a point in time, and thus when ownership of the product has been transferred to the customer (i.e. with the transfer of risks), the amount of income and the related costs can be reliably determined and the economic benefits from the transaction will probably flow to the Group.

Since all performance obligations in the Lenzing Group have a term of a maximum of one year, the remaining performance obligations are not disclosed.

Contract liabilities are presented under other liabilities and consist of down payments received of EUR 12,198 thousand (December 31, 2022: EUR 12,298 thousand) and accruals for discounts and rebates of EUR 4,525 thousand (December 31, 2022: EUR 2,976 thousand) (see note 32). The amount of EUR 12,113 thousand included in contract liabilities as at December 31, 2022 has been recognized as revenue in 2023 (2022: EUR 16,330 thousand).

Note 6. Functional costs

Cost of sales

The cost of sales mainly relates to the cost of materials and other purchased manufacturing services, gains and losses from changes in the fair value of biological assets, personnel expenses, depreciation and amortization and other operating expenses, in particular expenses for maintenance and repair, other third-party services and expenses for waste disposal. The expenses for maintenance and repair amount to EUR 63,187 thousand (2022: EUR 52,894 thousand) and for maintenance material and cleaning to EUR 113,942 thousand (2022: EUR 105,855 thousand).

Selling expenses

Selling expenses mainly relate to personnel expenses and other operating expenses, particularly expenses for outbound freight as well as rental and leasing expenses.

Administrative expenses

Administrative expenses mainly relate to personnel expenses and other operating expenses, in particular legal, audit and consulting expenses.

Research and development expenses

Research and development expenses mainly relate to personnel expenses and other operating expenses, in particular filing and defense costs for patents and trademarks. Research and development expenses include amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets, and depletion of biological assets amounting to EUR 53,482 thousand (2022: EUR 4,206 thousand) and income from the release of investment grants amounting to EUR 140 thousand (2022: EUR 177 thousand). In the 2023 financial year, research and development expenses in the Lenzing Group according to the Frascati scheme of computation in the amount of EUR 31,634 thousand (2022: EUR 34,817 thousand) were incurred.

Note 7. Other operating income and expenses

Other operating income consists of the following:

Other operating income EUR '000

	2023	2022
Income from green energy bonus	919	13,623
Income from recharging of services and other products	20,448	15,042
Income from the release of deferred income for emission certificates and from subsidies and the sale of emission certificates	79,115	23,406
Rental income	5,901	5,645
Foreign currency gains	0	4,922
Sundry	2,270	10,457
Total	**108,653**	**73,096**

EU emission certificates were sold in the 2023 financial year (see note 27).

The other operating expenses amount to EUR 19,982 thousand (2022: EUR 6,649 thousand) and mainly relate to foreign currency losses of EUR 17,186 thousand (2022: EUR 0 thousand).

Note 8. Cost of material and other purchased services

The cost of material and other purchased services comprises the following:

Cost of material and other purchased services EUR '000

	2023	2022
Material	1,190,680	1,434,476
Other purchased services	225,542	305,207
Total	**1,416,222**	**1,739,683**

The cost of material comprises primarily the input factors consumed, i.e. pulp (and wood for the internal production of pulp), key chemicals (particularly caustic soda, carbon disulfide, and sulphuric acid) and merchandise. The cost of purchased services is related mainly to the consumption of energy.

The cost of the raw material and supplies consumed during the year is based on the weighted average cost method.

Note 9. Personnel expenses

The following table shows the composition of personnel expenses:

Personnel expenses EUR '000

	2023	2022
Wages and salaries	354,310	332,366
Expenses for severance payments and gratuity	7,502	21,145
Retirement benefit expenses	9,716	8,759
Statutory social security expenses	89,829	85,104
Other employee-related costs	9,891	9,700
Total	**471,248**	**457,074**

In the 2023 financial year, government grants of EUR 1,087 thousand (2022: EUR 975 thousand) in connection with short-term work assistance of Austria were offset against personnel expenses and recognized in profit or loss. The main condition for short-time working assistance is the temporary reduction of working hours of certain employees. In the 2023 financial year, the Lenzing Group utilized such grants from January to June (2022: October to December).

Severance payment expense chiefly includes expenses for the statutory obligations of Lenzing AG subsidiaries towards their employees, as well as voluntary severance payments and indemnities in the course of restructuring (see note 30).

The number of employees in the Lenzing Group is as follows:

Number of employees (Full-time equivalents)[1]

	2023	2022
Average	7,751	7,833
As at 31/12	7,917	7,931

1) The number of employees has been reported on the basis of full-time equivalents since the third quarter of the 2023 financial year. Until the third quarter of the 2023 financial year, the figures were based on the number of individuals.

The following table shows the number of employees in Lenzing AG and the Austrian subsidiaries of the Lenzing Group:

Average number of employees in Austria (Full-time equivalents)[1]

	2023	2022
Hourly workers	1,757	1,783
Salaried employees	1,411	1,456
Total	**3,168**	**3,239**

1) The number of employees has been reported on the basis of full-time equivalents since the third quarter of the 2023 financial year. Until the third quarter of the 2023 financial year, the figures were based on the number of individuals.

Note 10. Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets

Amortization of intangible assets and depreciation of property, plant and equipment, right-of-use assets and depletion of biological assets include the following:

Amortization of intangible assets, depreciation of property, plant and equipment and right-of-use assets and depletion of biological assets EUR '000

	2023	2022
Amortization and depreciation	265,589	205,882
Depletion	51,276	21,707
Impairment	464,906	0
Total	**781,771**	**227,589**

Of the impairment losses of EUR 464,906 thousand, EUR 413,583 thousand are recognized in the cost of sales, EUR 2,847 thousand in selling expenses, EUR 641 thousand in administrative expenses and EUR 47,835 thousand in research and development expenses.

Impairment tests of intangible assets, property, plant and equipment, right-of-use assets and cash-generating units (CGUs)

If there is an indication of impairment in accordance with IAS 36, intangible assets, property, plant and equipment and right-of-use assets as well as cash-generating units (CGUs) are tested for impairment. A qualitative and quantitative analysis is performed at the reporting dates for all consolidated financial statements and interim consolidated financial statements to determine whether there are any indications of impairment or any material year-on-year changes in impaired CGUs. This analysis is based on criteria defined by the management of Lenzing AG. Intangible assets, property, plant and equipment and right-of-use assets allocated to a CGU that includes goodwill are tested during the annual impairment testing of goodwill. The CGUs in the Lenzing Group represent, above all, the individual production sites.

The Lenzing Group initially determines the recoverable amount based on the applicable fair value less costs of disposal. The budget is approved by the Management Board and the Supervisory Board. The medium-term plans for the subsequent four years are approved by the Management Board and acknowledged by the Supervisory Board. These plans are the starting point for the cash flow projections on a post-tax basis to determine the fair value less costs of disposal. As a matter of principle, the management prepares planning accounts over a detailed planning period of five years. If the steady state is not already achieved at the end of the five-year detailed planning period, this period will be extended until a steady state of cash flows can be assumed. Subsequently, a perpetuity growth rate reflecting a sustainable long-term growth rate is applied after the detailed planning period. The estimate for the sustainable long-term growth rate generally equals half of the inflation rate expected in the relevant country during the next few years, as projected by an international economic research agency. This value usually tends to offset general inflation. A growth-related retention of financial surpluses in the perpetual annuity is taken into consideration in the planning calculations. The planned/projected cash flows are discounted to their present value with a discounted cash flow method. Fair value measurement is classified in full as level 3 of the fair value hierarchy because key input factors (in particular, cash flows) cannot be observed on the market. The applied discount rate is calculated on an individual basis using the capital asset pricing model (CAPM) and represents a composite figure (weighted average cost of capital – WACC) that combines the average interest rate for debt and the anticipated return on equity employed. After-tax WACCs ranging from 8.8 percent to 9.8 percent were used in 2023 (2022: 7.6 percent to 9.4 percent).

The WACCs were, for the most part, determined on the basis of externally available capital market data for comparable companies (in particular, to determine the risk premium). The planning and forecasts of free cash flows are based, above all, on internal and external assumptions for the expected development of selling prices and volumes (especially for fibers and cellulose) and the related costs (in particular, raw materials like cellulose, wood and energy plus labor and taxes), including the expected market environment and market positioning. Other input factors include anticipated investments and the changes in working capital. These internal assumptions are based on past experience, current operating results and the assessment of future developments. They are supplemented by external market assumptions such as sector-specific market studies and economic outlooks.

Due to capital markets trends, the fair value of the equity reduced to below its carrying amount in the fourth quarter of 2023 as well as in the previous year, triggering an indication of impairment for all cash-generating units.

In the financial year under review, a total of EUR 464,906 of impairment losses in accordance with IAS 36 were recognized for individual CGUs. No impairments of CGUs in accordance with IAS 36 were recognized in the 2022 financial year.

Impairment test of the CGU Fiber Site China

CGU Fiber Site China produces viscose and modal fibers in Nanjing, China. The carrying amounts of the intangible assets, property, plant and equipment and right-of-use assets of the CGU Fiber Site China impaired in previous years totaled EUR 147,691 thousand at December 31, 2023 (December 31, 2022: EUR 59,159 thousand). This amount includes accumulated impairment losses of EUR 6,212 thousand (December 31, 2022: EUR 9,386 thousand) from the previous impairment tests.

The deterioration of the market environment has led to substantial losses for the Fiber Site China CGU. The recoverable amount (EUR 129,021 thousand) resulted in an impairment requirement of EUR 22,605 thousand for the CGU. Land and buildings of EUR 8,353 thousand and technical equipment, machinery, operating and office equipment of EUR 14,252 thousand were impaired. All assets are allocated to the Fiber Division segment.

The carrying amounts would increase/decrease in particular if planned EBITDA or the weighted average cost of capital (WACC) decreases (increases). A discount rate (WACC) of 9.2 percent (2022: 8.9 percent) is applied in order to calculate fair value less costs of disposal. In the event of an increase (decrease) in planned EBITDA by 1 percent, the calculated recoverable amount would increase (decrease) by EUR 3,444 thousand. If the weighted average cost of capital (WACC) decreases (increases) by 0.25 percentage points, the recoverable amount will increase by EUR 5,481 thousand or decrease by EUR 5,190 thousand.

Impairment test of the CGU Fiber Site Indonesia

CGU Fiber Site Indonesia produces viscose fibers in Purwakarta, Indonesia. The deterioration of the market environment has led to substantial losses for the Fiber Site Indonesia CGU. The recoverable amount (EUR 149,480 thousand) resulted in an impairment requirement of EUR 209,591 thousand for the CGU. Land and buildings of EUR 64,708 thousand and technical equipment, machinery, operating and office equipment of EUR 144,885 thousand were impaired. All assets are allocated to the Fiber Division segment.

The carrying amounts would increase/decrease in particular if planned EBITDA or the weighted average cost of capital (WACC) decreases (increases). A discount rate (WACC) of 10.4 percent (2022: 10.2 percent) is applied in order to calculate fair value less costs of disposal. In the event of an increase (decrease) in planned EBITDA by 1 percent, the calculated recoverable amount would increase (decrease) by EUR 5,309 thousand. If the weighted average cost of capital (WACC) decreases (increases) by 0.25 percentage points, the recoverable amount will increase by EUR 6,768 thousand or decrease by EUR 6,422 thousand.

Impairment test of the CGU Fiber Site Lenzing

The CGU Fiber Site Lenzing produces viscose, modal, and lyocell fibers in Lenzing, Austria. The deterioration of the market environment has led to substantial losses for the Fiber Site Lenzing CGU. The recoverable amount (EUR 845,315 thousand) resulted in an impairment requirement of EUR 70,883 thousand for the CGU.

The carrying amounts would increase/decrease in particular if planned EBITDA or the weighted average cost of capital (WACC) decreases (increases). A discount rate (WACC) of 8.8 percent (2022: 8.3 percent) is applied in order to calculate fair value less costs of disposal. In the event of an increase (decrease) in planned EBITDA by 1 percent, the calculated recoverable amount would increase (decrease) by EUR 17,569 thousand. If the weighted average cost of capital (WACC) decreases (increases) by 0.25 percentage points, the recoverable amount will increase by EUR 37,164 thousand or decrease by EUR 35,045 thousand.

As the further development of additional lyocell fiber applications is no longer considered highly probable in the near future, an additional impairment requirement was identified for the internally generated intangible assets and property, plant and equipment recognized in this context. This is also the key assumption when determining the recoverable amount. As both the fair value less costs of disposal and the value in use are estimated at EUR 0 thousand for these assets, an impairment loss of EUR 95,469 thousand was recognized.

In total, at the CGU Fiber Site Lenzing, internally generated intangible assets of EUR 21,204 thousand, concessions and rights of EUR 116 thousand, land and buildings of EUR 1,578 thousand, technical equipment, machinery, operating, and office equipment of EUR 126,438 thousand, and advance payments and assets under construction of EUR 17,016 thousand, were impaired. All assets are allocated to the Fiber Division segment.

Impairment test of the CGU Fiber Site Thailand

CGU Fiber Site Thailand produces lyocell fibers in Prachinburi, Thailand. The deterioration of the market environment has led to substantial losses for the Fiber Site Thailand CGU. Furthermore, the expansion of additional lyocell fiber capacities in the near future was no longer considered highly probable. The recoverable amount (EUR 398,516 thousand) led to a shortfall of EUR 25,916 thousand in relation to carrying amounts.

The carrying amounts would increase/decrease in particular if planned EBITDA or the weighted average cost of capital (WACC) decreases (increases). A discount rate (WACC) of 9.2 percent (2022: 8.9 percent) is applied in order to calculate fair value less costs of disposal. In the event of an increase (decrease) in planned EBITDA by 1 percent, the calculated recoverable amount would increase (decrease) by EUR 5,429 thousand. If the weighted average cost of capital (WACC) decreases (increases) by 0.25 percentage points, the recoverable amount will increase by EUR 9,548 thousand or decrease by EUR 9,114 thousand.

Moreover, an impairment requirement was identified in relation to down payments rendered and assets under construction, which were intended for the expansion of additional lyocell fiber capacities, which is however no longer considered highly probable in the near future. This is also the key assumption when determining the recoverable amount. As both the fair value less costs of disposal and the value in use are estimated at EUR 0 thousand for these assets, an impairment loss of EUR 19,927 thousand was recognized.

In total, land and buildings of EUR 19,489 thousand, technical equipment, machinery, operating, and office equipment of EUR 6,426 thousand, and advance payments and assets under construction of EUR 19,927 thousand were impaired. All assets are allocated to the Fiber Division segment.

Impairment test of the CGU Fiber Site USA

Since the temporary halt to the construction of additional lyocell capacities in Mobile, Alabama, USA, in the 2018 financial year, the Managing Board has regularly evaluated whether any uncertainties exist regarding the future usability of the assets when the project is resumed. As the expansion of additional lyocell fiber capacities is no longer considered highly probable in the near future, an impairment requirement was identified in relation to the assets under construction of the CGU Fiber Site USA, which were intended for this expansion. This is also the key assumption when determining the recoverable amount. As both the fair value less costs of disposal and the value in use are estimated at EUR 0 thousand for these assets, an impairment loss of EUR 20,516 thousand was recognized. All assets are allocated to the Fiber Division segment.

Impairment test of CGUs to which goodwill is allocated

Goodwill was allocated to the following segments/cash-generating units (CGUs) as at the reporting date:

Goodwill by segment/CGU EUR '000

	31/12/2023	31/12/2022
Segment Division Pulp		
CGU Pulp Site Czech Republic	10,682	10,951
Segment Divison Fiber		
Other CGUs	4,208	3,499
Total	**14,889**	**14,450**

The recoverable amount of the largest CGU with goodwill in 2023 – the CGU Pulp Site Czech Republic – was determined on the basis of fair value less costs of disposal. The measurement of fair value is classified in full under level 3 of the fair value hierarchy. The following individual assumptions from the most recent impairment tests were used for annual testing:

Assumptions for impairment testing of the largest CGU to which goodwill was allocated

	2023	2022
CGU Pulp Site Czech Republic		
Average annual operating margin in planning period	8.6%	11.8%
Long-term growth rate of perpetual yield	1.3%	2.0%
After-tax discount rate (WACC)	9.8%	9.4%

The average revenue growth of the Pulp Site Czech Republic during the detailed planning period equals 2.3 percent per year (2022: 2.2 percent per year).

The estimated fair value less costs of disposal of the CGU Pulp Site Czech Republic exceeds the carrying amount by EUR 112,504 thousand (2022: EUR 33,504 thousand). The following table shows a sensitivity analysis with hypothetical scenarios for the key assumptions as well as the possible changes in value as at the reporting date which, if they occurred, would result in the recoverable amount equaling the carrying amount of the CGU plus goodwill.

A long-term growth rate of 1.0 percent to 1.2 percent (2022: of 1.2 percent to 1.8 percent) was taken into account as perpetual yield for the other CGUs with goodwill.

Sensitivity analysis of assumptions for impairment testing

	Values relating to key assumptions	Change in values relating to key assumptions for which the recoverable amount would equal the carrying amount
CGU Pulp Site Czech Republic		
Operating margin	8.6%	minus 4.0 percentage points
After-tax discount rate (WACC)	9.8%	plus 5.0 percentage points

Sensitivity analysis of assumptions for impairment testing (previous year)

	Values relating to key assumptions	Change in values relating to key assumptions for which the recoverable amount would equal the carrying amount
CGU Pulp Site Czech Republic		
Operating margin	11.8%	minus 0.9 percentage points
After-tax discount rate (WACC)	9.4%	plus 0.7 percentage points

Note 11. Auditors' fees

The fees expensed for services provided by KPMG Austria GmbH, Linz, comprise the following:

Auditors' fees expensed EUR '000

2023	Lenzing AG	Subsidiaries	Total
Audit of the annual financial statements (incl. consolidated financial statements)	483	209	691
Other assurance services	419	0	419
Other services	1,713	0	1,713
Total	**2,615**	**209**	**2,824**

Auditors' fees expensed (previous year) EUR '000

2022	Lenzing AG	Subsidiaries	Total
Audit of the annual financial statements (incl. consolidated financial statements)	385	140	525
Other assurance services	199	0	199
Other services	162	0	162
Total	**747**	**140**	**886**

The fees for other assurance services consist chiefly of fees for the auditor's review of the consolidated interim financial statements as at March 31, 2023, and of the consolidated half-year financial statements. The fees for other services mainly relate to fees for services in connection with the capital increase.

Note 12. Income from investments accounted for using the equity method

The result of EUR 6,728 thousand (2022: EUR minus 222 thousand) arises from the Group's share of the current result as well as the measurement of associated companies and joint ventures. In the 2023 financial year, an impairment of EQUI-Fibres Beteiligungsgesellschaft mbH (EFB) in the amount of EUR minus 2,000 (2022: EUR minus 913 thousand) and a reversal of impairment of Lenzing Papier GmbH (LPP) in the amount of EUR 4,192 (2022: EUR 0 thousand) are included (see note 21).

Note 13. Income from non-current and current financial assets and liabilities

The income from non-current and current financial assets and liabilities consists of the following items:

Income from non-current and current financial assets and liabilities EUR '000

	2023	2022
Income from non-current and current financial assets		
Interest income from bank balances, originated loans and receivables	16,334	10,907
Income from dividends for equity instruments measured at fair value through other comprehensive income	203	140
Measurement of financial assets at fair value through profit or loss	1,628	600
Net foreign currency gains from financial assets	0	3,567
	18,165	**15,215**
Expenses from non-current and current financial assets		
Measurement and loss from the disposal of financial assets at amortized cost	(8,209)	(3,605)
Measurement and loss from the disposal of financial assets at fair value through profit or loss	(4,087)	(1,401)
Net foreign currency losses from financial assets	(13,424)	0
	(25,720)	**(5,007)**
Income and expenses from non-current financial liabilities		
Change in the fair value of contingent considerations	57	0
	57	**0**
Total	**(7,498)**	**10,208**

Note 14. Financing costs

Financing costs comprise the following:

Financing costs EUR '000

	2023	2022
Net foreign currency gains/losses from financial liabilities	1,982	(3,341)
Interest expense for private placements	(18,017)	(9,189)
Interest expense for bank loans, other interest and similar expenses	(113,891)	(63,530)
Capitalized borrowing costs for property, plant and equipment and biological assets	21,494	39,562
Total	**(108,432)**	**(36,498)**

Note 15. Income tax expense

This item includes current income tax expense as well as income/expense from deferred taxes (changes in deferred tax assets and deferred tax liabilities) and comprises the following:

Income tax expense by source EUR '000

	2023	2022
Current income tax expense		
Austria	34,659	14,847
Abroad	35,558	17,914
	70,217	**32,761**
Income/expense from deferred taxes	(62,895)	(5,579)
Total	**7,322**	**27,182**

Income tax expense by cause EUR '000

	2023	2022
Current income tax expense		
Tax expense for current year	58,081	44,464
Reduction due to the use of tax losses	(3,218)	(6,647)
Reduction due to the use of tax credits	(282)	0
Adjustment for prior-period income tax	15,637	(5,056)
	70,217	**32,761**
Income/expense from deferred taxes		
Recognition and reversal of temporary differences	(77,704)	1,939
Effects of changes in tax rates	4,168	(2,598)
Change in capitalized loss carryforwards	(46,312)	(5,778)
Effects of previously unrecognized temporary differences from prior periods	(858)	102
Changes in valuation adjustment to deferred tax assets (excl. loss carryforwards)	57,811	756
	(62,895)	**(5,579)**
Total	**7,322**	**27,182**

The item "Change in capitalized loss carryforwards" relates to the utilization of loss carryforwards in the amount of EUR 2,439 thousand (2022: EUR 566 thousand) and an adjustment to deferred tax assets for loss carryforwards not yet utilized amounting to EUR minus 48,752 thousand (2022: EUR minus 6,344 thousand).

The reconciliation of calculated income tax expense based on the Austrian corporate tax rate of 24 percent (December 31, 2022: 25 percent) to effective income tax expense is shown in the following table:

Tax reconciliation EUR '000

	2023	2022
Earnings before tax (EBT)	(585,630)	(10,059)
Calculated tax expense (24 % of earnings before tax; previous year: 25 % of earnings before tax)	(140,551)	(2,515)
Deductible distribution of hybrid coupon	(6,900)	(7,188)
Tax-free income and tax allowances (particularly research allowance)	(1,710)	(2,086)
Non-deductible expenses and similar permanent differences	3,628	3,321
Non-deductible withholding taxes	8,303	5,401
Income from investments accounted for using the equity method	(1,615)	56
Effect of different tax rates	21,952	5,847
Changes in tax rates	4,121	(5,111)
Taxes from prior periods	14,779	(4,954)
Exchange rate differences resulting from the translation of tax items from local into functional currency	(15,431)	(1,282)
Change in unrecognized deferred tax assets from loss carryforwards, tax credits and other temporary differences	119,691	34,345
Other	1,055	1,347
Effective tax expense	**7,322**	**27,182**

As in the previous year, the ratio of effective income tax expense to earnings before tax is disproportionate in the 2023 financial year. The Group reports a high level of reconciliation items arising from write-downs on tax assets (in particular from non-capitalized loss carryforwards) (in particular tax group Austria, Indonesia, China, and Thailand). In addition, as in the 2022 financial year, a distribution to hybrid capital holders was realized that is tax deductible. Taxes from previous periods include a provision for uncertain tax items of EUR 13,201 thousand (December 31, 2022: EUR 0 thousand) in connection with regular tax audit procedures.

The "Changes in tax rates" item in the 2023 financial year, as in the 2022 financial year, mainly comprises the statutory tax rate reduction in Austria and the tax rate increase in the Czech Republic. The income tax rate in Austria was gradually reduced from 25 percent to 24 percent with effect from January 1, 2023 and will be reduced from 24 percent to 23 percent with effect from January 1, 2024. This resulted in tax expense of EUR 3,102 thousand in the 2023 financial year (2022: income of EUR 5,224 thousand) from the measurement of the Austrian group companies' deferred tax assets and deferred tax liabilities. The corporate income tax rate in the Czech Republic will be raised from 19 percent to 21 percent from January 1, 2024. This resulted in tax expense of EUR 1,221 thousand in the 2023 financial year from the measurement of deferred tax assets and deferred tax liabilities.

The “Taxes from prior periods” item includes an additional tax claim of EUR 4,490 (2022: tax credit of EUR 2,660 thousand) from the tax group with the B&C Group (see also note 38).

Lenzing AG and the Austrian subsidiaries of the Lenzing Group are subject to an income tax rate of 24 percent (December 31, 2022: 25 percent). The income tax rates for foreign companies range from 9.9 percent to 34 percent (December 31, 2022: from 11 percent to 34 percent).

The OECD model rules for a global minimum taxation system (Pillar 2) were published in December 2021. The minimum taxation regime is intended to ensure that corporate groups with worldwide revenue of at least EUR 750,000 thousand are subject to an effective tax burden of at least 15 percent in those countries where they operate. In December 2022, Council Directive (EU) 2022/2523 was adopted to ensure an overall minimum level of taxation for multinational enterprise groups and large domestic groups within the EU, which was transposed into national law in Austria with the Minimum Tax Reform Act of December 30, 2023 and is to be applied by taxpayers from January 1, 2024. Numerous jurisdictions relevant to the Lenzing Group are currently introducing corresponding minimum tax regulations. As the new tax laws have not entered into force as at December 31, 2023, neither in Austria nor in any other jurisdiction relevant to the Lenzing Group, no impact arises in relation to the actual tax expense for the 2023 financial year.

B&C Privatstiftung, Vienna, is the ultimate parent company of Lenzing AG and its subsidiaries for the purposes of the minimum taxation rules. In accordance with minimum taxation rules, Lenzing AG is a partially owned parent company.

An evaluation of the effects of the new minimum taxation rules for the Lenzing Group as a subgroup of the B&C Group was conducted. From today’s perspective, the temporary safe harbor regulations and the minimum tax calculation do not have a material impact on the recognition and measurement of tax assets and liabilities in a stand-alone analysis of the Lenzing Group subgroup for either 2023 or 2024.

The Lenzing Group applies the temporary, mandatory exemption with regard to the recognition of deferred taxes arising from the introduction of global minimum taxation and recognizes these as current tax expense/income when they arise. The mandatory exception must be applied retrospectively. However, as no new legislation introducing global minimum taxation was in force as at December 31, 2022, in any of the countries where the Lenzing Group is active, and no related deferred taxes were recognized as at that date, the retrospective application has no impact on the consolidated financial statements.

Note 16. Earnings per share

Earnings per share are calculated as follows:

Earnings per share — **EUR '000**

	2023	2022
Net profit/loss after tax attributable to shareholders of Lenzing AG used in the calculation of earnings per share	(649,445)	(73,086)
Weighted average number of shares	32,435,304	26,550,000
	EUR	EUR
Diluted = basic	(20.02)	(2.75)

Earnings per share are calculated by dividing the share of net (after tax) income/loss for the year attributable to shareholders of Lenzing AG, reduced by the share of hybrid capital holders amounting to EUR 28,750 thousand (2022: EUR 28,750 thousand), by the weighted average number of shares outstanding during the year.

Note 17. Intangible assets

Development

Intangible assets developed as follows:

Development of intangible assets EUR '000

2023	Goodwill	Concessions, industrial property rights, licenses and similar rights	Internally generated intangible assets	Total
Cost				
As at 01/01/2023	**98,356**	**29,959**	**36,564**	**164,879**
Currency translation adjustment	(3,196)	(242)	0	**(3,438)**
Addition	719	372	8,341	**9,433**
Disposals	0	(44)	0	**(44)**
As at 31/12/2023	**95,879**	**30,044**	**44,906**	**170,829**
Accumulated amortization				
As at 01/01/2023	**(83,906)**	**(22,203)**	**(14,945)**	**(121,054)**
Currency translation adjustment	2,916	127	0	**3,043**
Amortization	0	(2,369)	(2,446)	**(4,815)**
Impairment	0	(116)	(21,204)	**(21,320)**
Disposals	0	44	0	**44**
As at 31/12/2023	**(80,990)**	**(24,517)**	**(38,595)**	**(144,102)**
Carrying amount as at 01/01/2023	14,450	7,756	21,619	**43,825**
Carrying amount as at 31/12/2023	**14,889**	**5,528**	**6,311**	**26,728**

Development of intangible assets (previous year)

EUR '000

2022	Goodwill	Concessions, industrial property rights, licenses and similar rights	Internally generated intangible assets	Total
Cost				
As at 01/01/2022	93,085	27,215	29,310	**149,610**
Currency translation adjustment	5,271	100	0	**5,371**
Addition	0	3,506	7,351	**10,857**
Disposals	0	(863)	(97)	**(960)**
As at 31/12/2022	98,356	29,959	36,564	**164,879**
Accumulated amortization				
As at 01/01/2022	(78,960)	(20,552)	(14,049)	**(113,561)**
Currency translation adjustment	(4,945)	(39)	0	**(4,984)**
Amortization	0	(2,472)	(912)	**(3,385)**
Impairment	0	0	0	**0**
Disposals	0	860	16	**876**
As at 31/12/2022	(83,906)	(22,203)	(14,945)	**(121,054)**
Carrying amount as at 01/01/2022	14,124	6,663	15,261	**36,049**
Carrying amount as at 31/12/2022	**14,450**	**7,756**	**21,619**	**43,825**

Of the additions in the 2023 financial year, EUR 372 thousand (2022: EUR 3,506 thousand) relate to purchased intangible assets, EUR 719 thousand (2022: EUR 0 thousand) relate to goodwill (see note 3), and EUR 8,341 thousand (2022: EUR 7,351 thousand) relate to internally generated intangible assets (mainly process and product developments). Development costs are recognized as intangible assets if the specific requirements pursuant to IAS 38 are met, in particular, as to whether future economic benefits can be generated.

The revaluation option was not exercised. Amortization is calculated according to the straight-line method based on the estimated useful lives. The estimated useful lives of the major asset classes are as follows:

Useful lives for intangible assets

	Years
Software/computer programs	4 to 7
Licenses and other intangible assets	
Purchased	4 to 25
Internally generated	7 to 15

All items of intangible assets are tested for impairment in accordance with IAS 36 if there are any indications that these assets may be impaired (see note 10).

The amortization of concessions, industrial property rights, licenses, similar rights and internally generated intangible assets is presented in the cost of sales, selling expenses, administrative expenses as well as research and development expenses.

Note 18. Property, plant and equipment

Development

Property, plant and equipment developed as follows:

Development of property, plant and equipment EUR '000

2023	Land and buildings	Technical equipment and machinery, factory and office equipment	Down payments and assets under construction	Total
Cost				
As at 01/01/2023	1,147,829	4,551,155	411,633	6,110,618
Currency translation adjustment	(27,331)	(84,657)	(14,349)	(126,337)
Addition	27,438	106,473	97,392	231,302
Disposals	(18)	(10,780)	(57,595)	(68,392)
Reclassifications	47,591	195,958	(243,549)	0
As at 31/12/2023	1,195,510	4,758,149	193,533[1]	6,147,191
Accumulated depreciation				
As at 01/01/2023	(372,433)	(2,299,382)	(25,697)	(2,697,512)
Currency translation adjustment	7,280	32,506	911	40,697
Depreciation	(38,100)	(210,308)	0	(248,408)
Impairment	(94,127)	(292,000)	(57,458)	(443,586)
Disposals	0	9,871	57,458	67,329
As at 31/12/2023	(497,379)	(2,759,313)	(24,786)	(3,281,478)
Carrying amount as at 01/01/2023	775,396	2,251,773	385,936	3,413,106
Carrying amount as at 31/12/2023	**698,131**	**1,998,835**	**168,747**	**2,865,713**

1) The down payments rendered amounted to EUR 6,146 thousand as at December 31, 2023. The decrease in down payments of EUR 7,969 thousand compared to December 31, 2022, arises from reclassifications of EUR minus 6,493 thousand, currency translation differences of EUR minus 130 thousand and reductions in down payments of EUR minus 1,347 thousand.

Development of property, plant and equipment (previous year) **EUR '000**

2022	Land and buildings	Technical equipment and machinery, factory and office equipment	Down payments and assets under construction	Total
Cost				
As at 01/01/2022	721,290	3,157,287	1,520,285	**5,398,862**
Currency translation adjustment	17,246	22,553	87,255	**127,054**
Addition	131,460	455,365	46,259	**633,083**
Disposals	(1,620)	(44,317)	(2,444)	**(48,381)**
Reclassifications	279,453	960,267	(1,239,721)	**0**
As at 31/12/2022	1,147,829	4,551,155	411,633[1]	**6,110,618**
Accumulated depreciation				
As at 01/01/2022	(341,457)	(2,155,288)	(24,511)	**(2,521,255)**
Currency translation adjustment	(2,653)	(22,590)	(1,186)	**(26,429)**
Depreciation	(29,735)	(163,289)	0	**(193,024)**
Impairment	0	0	0	**0**
Disposals	1,413	41,785	0	**43,197**
As at 31/12/2022	(372,433)	(2,299,382)	(25,697)	**(2,697,512)**
Carrying amount as at 01/01/2022	379,833	1,001,999	1,495,774	**2,877,606**
Carrying amount as at 31/12/2022	**775,396**	**2,251,773**	**385,936**	**3,413,106**

1) The down payments amounted to EUR 14,115 thousand as at December 31, 2022. The decrease in down payments by EUR 125,827 thousand compared to December 31, 2021, arises from reclassifications of EUR minus 141,218 thousand, currency translation differences of EUR 19,675 thousand, and reductions in down payments rendered of EUR minus 4,283 thousand.

Property, plant and equipment are measured at cost, including capitalized borrowing costs, less accumulated depreciation and accumulated impairment losses.

Depreciation is calculated according to the straight-line method based on the estimated useful lives. The estimated useful lives of the major asset classes are as follows:

Useful lives for property, plant and equipment

	Years
Land use rights	30 to 50
Buildings	10 to 50
Fiber and pulp production lines	5 to 15
Energy production plants	4 to 25
Other machinery	4 to 20
Vehicles	4 to 20
Office equipment and other fixtures and fittings	2 to 10
IT hardware	2 to 7

All items of property, plant and equipment are tested for impairment in accordance with IAS 36 if there are any indications that these assets may be impaired (see note 10).

Operating leases as a lessor

Operating leases are in place for land and buildings with acquisition cost of EUR 37,164 thousand as at December 31, 2023 (December 31, 2022: EUR 38,350 thousand). The carrying amount of this land and buildings is EUR 7,177 thousand as at December 31, 2023 (December 31, 2022: EUR 7,819 thousand). Depreciation of EUR 686 thousand was recognized on these assets in the 2023 financial year (2022: EUR 694 thousand). For further details on rental income from operating leases see note 20.

Capitalization of borrowing costs

Borrowing costs of EUR 5,928 thousand for property, plant and equipment were capitalized in 2023 (2022: EUR 33,316 thousand). The weighted average interest rate equaled 2.97 percent (2022: 3.14 percent)

The Lenzing Group defines qualifying assets as construction projects or other assets that require at least twelve months to be ready for their intended use or sale. The capitalization entries are recorded under “financing costs” and the respective asset account. All other borrowing costs are expenses in the period incurred and reported under financial result.

Note 19. Biological assets

Biological assets comprise standing trees of a plantation in Minas Gerais, Brazil, which are used as a raw material for pulp production. In accordance with IAS 41 (Agriculture), biological assets are presented at fair value in the consolidated statement of financial position. The plantation is recognized at level 3 of the fair value less estimated costs to sell at the harvest. It is assumed that fair values can be measured. The measurement of biological assets is monitored and reviewed by the Lenzing Group. The necessary market data are validated on the basis of the dual control principle.

The measurement is based on a discounted cash flow model on the basis of sustainable forest management plans, industry benchmarks for wood prices and delivery costs and taking into account the growth potential. A wood price based on a multi-year average of industry benchmarks is used for the valuation. The annual harvest from the projected tree growth is multiplied by wood prices, and the forestry and harvesting costs are deducted. The fair value of the plantation is measured as the present value of the harvest from one growth cycle on the basis of the productive forest area, taking into account environmental restrictions and other reservations. In particular, the calculated fair value would increase (decrease) if both the timber price and the timber volume were to increase (decrease). The calculated fair value would decrease (increase) if the discount rate were to increase (decrease).

Young standing timber less than one year old is considered an immature asset and is recognized at cost. When harvested, biological assets are transferred to the item inventories of the consolidated statement of financial position. Changes in the fair value of hedging instruments in relation to the foreign exchange risk are recognized in the income statement under cost of sales.

As at December 31, 2023, the plantation comprised approximately 41,204 hectares of eucalypt wood (December 31, 2022: 40,669 hectares) and 714 hectares of pine wood (December 31, 2022: 899 hectares). The wood is up to 15 years (December 31, 2022: 14 years) old. Wood amounting to EUR 9,893 thousand (December 31, 2022: EUR 5,540 thousand) is less than one year old and therefore considered an immature asset.

Biological assets developed as follows:

Development of biological assets EUR '000

	2023	2022
As at 01/01	127,735	95,767
Acquisition	0	4,602
Capitalized production costs	38,360	21,902
Depletion	(51,276)	(21,707)
Change in the fair value	85,997	20,268
Currency translation adjustment	(6,058)	6,904
As at 31/12	**194,759**	**127,735**

The capitalized production costs include capitalized borrowing costs of EUR 15,566 thousand (2022: EUR 6,246 thousand), the financing cost rate of which is 14.1 percent (2022: 14.1 percent). The depletion-based depreciation relates to reductions in biological assets as a result of the harvest. The gains and losses from the change in the fair value of biological assets in the amount of EUR 80,102 thousand (2022: EUR 17,009 thousand) consist of the regular remeasurement of EUR 85,997 thousand (2022: EUR 20,268 thousand) and foreign currency losses of EUR minus 5,895 thousand (2022: EUR minus 3,259 thousand). These are included in the cost of sales.

The following assumptions were made:

Assumptions of level 3 input factors for biological assets

	31/12/2023	31/12/2022
Market price EUR/m³	18.84	11.94
Discount rate	7.63 %	7.96 %
Wood volume m³	10,368,336	11,821,960

A change in key input factors which cannot be observed on the market would have the following effects on the measurement of biological assets:

Sensitivity analysis of level 3 input factors for biological assets as at 31/12/2023 EUR '000

	Increase	Decrease
Change in the market price (+/- 10 %)	20,349	(20,349)
Discount rate (+/- 1 %)	(1,317)	1,404
Wood volume (+/- 5 %)	10,175	(10,175)

Sensitivity analysis of level 3 input factors for biological assets as at 31/12/2022 (previous year) EUR '000

	Increase	Decrease
Change in the market price (+/- 10 %)	13,752	(13,752)
Discount rate (+/- 1 %)	(368)	390
Wood volume (+/- 5 %)	6,880	(6,880)

Note 20. Right-of-use assets

The Lenzing Group as the lessee

The Lenzing Group has obligations from rental and lease agreements for property, plant and equipment, which are recognized as right-of-use-assets in the consolidated statement of financial position. The corresponding lease liabilities are reported as part of financial liabilities (see note 28).

The following table shows the development of right-of-use assets classified by type of asset:

Development of right-of-use assets EUR '000

2023	Land and buildings	Technical equipment and machinery, factory and office equipment	Total
Carrying amount as at 01/01	58,598	14,163	**72,761**
Addition	71,978	6,488	**78,466**
Disposals	(1,088)	(647)	**(1,735)**
Depreciation fiscal year	(6,832)	(5,536)	**(12,367)**
Currency translation adjustment	(2,640)	63	**(2,577)**
Carrying amount as at 31/12	**120,017**	**14,531**	**134,547**

Development of right-of-use assets (previous year) EUR '000

2022	Land and buildings	Technical equipment and machinery, factory and office equipment	Total
Carrying amount as at 01/01	58,568	11,562	**70,129**
Addition	5,540	8,649	**14,189**
Disposals	(3,844)	(1,343)	**(5,187)**
Depreciation fiscal year	(4,743)	(4,730)	**(9,473)**
Currency translation adjustment	3,077	25	**3,103**
Carrying amount as at 31/12	**58,598**	**14,163**	**72,761**

In the 2023 financial year, the main items included EUR 68,015 thousand of right-of-use assets recognized for the index increase for land use rights, EUR 3,051 thousand recognized for wagons, EUR 2,392 thousand for buildings, and EUR 1,941 thousand for machinery. The disposals mainly relate to right-of-use assets of EUR 1,057 thousand for office premises and EUR 644 thousand for technical equipment.

In the 2022 financial year, right-of-use assets amounting to EUR 4,861 thousand from the index increase for land use rights, EUR 4,213 thousand for machinery, EUR 3,894 thousand for forklifts, cars and other vehicles, and EUR 434 thousand for rail cars were recognized. The disposals mainly relate to right-of-use assets amounting to EUR 3,788 thousand for warehouse premises and EUR 1,269 thousand for rail cars.

The terms and conditions of the main leases can be summarized as follows:

- **Land use rights**: The biological assets (see note 19) are located on land which is not owned by the Lenzing Group. Land use rights are in place for this land. The lease has a term of 30 years, with an option to extend the lease by 19 years after 30 years. This extension option was not taken into account in estimating the expected term of the lease because the use of the biological assets in 30 years is not sufficiently certain from today's perspective. Price adjustment clauses exist.
- **Office and storage premises:** The leases have a term of up to five years and some contracts have an indefinite term. Ordinary useful lives were applied to office and storage premises with indefinite useful lives where economic exit barriers exist. These leases do not include an option to purchase the office and storage premises at the end of the contract term. Some of the leases include extension options and price adjustment clauses.
- **Wagons:** The leases have a term of up to 15 years. The option exists to terminate the contracts after a minimum term. Some of the leases have price adjustment clauses.
- **Wastewater treatment plant:** The Lenzing Group has concluded finance leases for an industrial primary clarifier and related expansion investments. The ownership of the plant, including the land, can be transferred to Lenzing AG after the agreements expire in exchange for the payment of a transfer fee. This lease has a term of up to 16 years.

Termination and extension options are taken into account when estimating the expected term of the leases if it is sufficiently certain that they will or will not be exercised. The Lenzing Group estimates that possible future cash outflows from extension options which were not taken into account in the measurement of the lease liability could result in an increase in the lease liability and the related future cash outflows by EUR 3,481 thousand (December 31, 2022: EUR 1,189 thousand).

The following expenses relating to leases were recognized in the consolidated income statement in the 2023 financial year.

Expenses from leases EUR '000

	2023	2022
Expenses relating to short-term leases	9,216	10,853
Expenses relating to variable leases	12,995	10,796
Expenses relating to leases of low-value assets	1,351	690
Non-lease components	914	793
Rental and leasing expenses	**24,476**	**23,132**
Interest on lease liabilities = Financing costs	**17,914**	**6,766**

Short-term leases are leases with a term of less than one year. Where contracts have no term, leases are considered short-term leases if both parties have a right to terminate the contract, which can be exercised without the consent of the counterparty and no termination penalties or economic barriers exist. Leases for which only variable lease payments that are not coupled to an index or (interest) rate have been agreed are not capitalized as right-of-use assets.

Expenses relating to variable leases mainly include variable rental payments for warehouses based on monthly storage quantities.

The Lenzing Group has concluded several long-term power purchase agreements for electricity generated from renewable energy sources in order to achieve its climate targets and hedge against fluctuating prices (see note 37 "Commodity risk"). Some of the electricity purchase agreements are leases where the payments are entirely variable and are therefore included in the variable lease payments.

In the 2023 financial year, cash outflows for leases total EUR 47,541 thousand (2022: EUR 36,983 thousand). They include expenses relating to short-term and variable leases and to leases of low-value assets.

The rental and leasing expenses are fully cash-effective and included in cash flow from operating activities. The cash flows incurred in connection with the repayment of lease liabilities are explained in note 33.

All right-of-use assets are tested for impairment in accordance with IAS 36 if there are any indications that these assets may be impaired (see note 10).

The Lenzing Group as the lessor

The future undiscounted minimum lease payments during the non-cancellable term of the leases relate primarily to land and buildings and are as follows, classified by year:

Undiscounted annual minimum lease payments as lessor — **EUR '000**

	31/12/2023	31/12/2022
In the following year	3,972	3,730
In the following 1 to 2 years	3,637	3,380
In the following 2 to 3 years	3,637	3,380
In the following 3 to 4 years	3,637	3,380
In the following 4 to 5 years	3,637	3,380
Thereafter	1,325	2,442
Total	**19,844**	**19,692**

The most important lease involves land on which a recycling plant is operated. The lease payments are indexed. The lease was concluded for an indefinite term and can be canceled at the earliest as at December 31, 2029, subject to a six-year notice period.

Rental income for the 2023 financial year is shown in note 7.

The Lenzing Group classifies these leases as operating leases since the main risks and opportunities associated with ownership are retained.

Note 21. Investments accounted for using the equity method

Investments accounted for using the equity method comprise the following:

Carrying amounts of investments accounted for using the equity method — **EUR '000**

	31/12/2023	31/12/2022
EQUI-Fibres Beteiligungsgesellschaft mbH (EFB)	0	4,193
Lenzing Papier GmbH (LPP)	9,651	4,270
Other associates	4,836	4,813
LD Florestal S.A. (LDF)	16,425	13,079
Other joint ventures	134	127
Total	**31,045**	**26,483**

The main investments accounted for using the equity method include, in particular, the interest in Lenzing Papier GmbH (LPP), Lenzing, which is allocated to the "Others" segment, and LD Florestal S.A. (LDF), Indianópolis, Brazil, which is allocated to the Pulp Division segment. For the strategic importance of the other investments accounted for using the equity method and their relationship with the Lenzing Group, please see note 38.

Investments accounted for using the equity method developed as follows:

Development of the carrying amounts of investments accounted for using the equity method EUR '000

2023	EFB	LPP	Other associates	LDF	Other joint ventures	Total
As at 01/01	4,193	4,270	4,813	13,079	127	26,483
Result from remeasurement of investments accounted for using the equity method	(2,000)	4,192	0	0	0	2,191
Share in profit or loss of investments accounted for using the equity method	(2,342)	3,951	124	2,796	9	4,537
Other comprehensive income – remeasurement of defined benefit liability	149	(122)	0	0	0	27
Other comprehensive income – foreign currency translation differences arising during the year and other	0	0	(61)	550	(2)	488
Distributions	0	(2,640)	(40)	0	0	(2,680)
As at 31/12	**0**	**9,651**	**4,836**	**16,425**	**134**	**31,045**

Development of the carrying amounts of investments accounted for using the equity method (previous year) EUR '000

2022	EFB	LPP	Other associates	LDF	Other joint ventures	Total
As at 01/01	4,777	0	4,853	15,092	117	24,840
Result from remeasurement of investments accounted for using the equity method	(913)	0	0	0	0	(913)
Share in profit or loss of investments accounted for using the equity method	(286)	5,062	40	(4,134)	8	691
Other comprehensive income – remeasurement of defined benefit liability	633	8	0	0	0	641
Other comprehensive income – foreign currency translation differences arising during the year and other	(18)	0	(40)	2,120	2	2,064
Distributions	0	(800)	(40)	0	0	(840)
As at 31/12	**4,193**	**4,270**	**4,813**	**13,079**	**127**	**26,483**

The Lenzing Group recognizes both, measurement effects and the results from investments accounted for using the equity method, together in income from investments accounted for using the equity method.

In the 2023 financial year, an impairment of EUR 7,564 thousand (2022: EUR 3,114 thousand)) was recognized on the outstanding purchase price receivables and non-current loans due from the buyer of EFB (and its subsidiaries) (see note 37, credit risk). The carrying amounts of the outstanding purchase price receivables and non-current loans due from the buyer of EFB (and its subsidiaries) total EUR 0 thousand as at December 31, 2023 (December 31, 2022: EUR 7,564 thousand and are reported under financial assets. They carry standard bank interest rates.

The Lenzing Group holds a lien on the remaining shares of EFB. In addition, a long-term performance-related purchase price component exists, which depends on the company's future profitability and is recognized as at December 31, 2023, in the amount of EUR 0 thousand (December 31, 2022: EUR 4,087 thousand) as a discounted present value and was reported under other non-current assets as at December 31, 2022. In addition, the buyer was granted a credit line of up to EUR 1,376 thousand (December 31, 2022: EUR 3,091 thousand), which can be utilized in the event of predefined adverse changes in EFB's general conditions on the sales market until December 31, 2025, at the latest. As of December 31, 2023, and in the previous year as at December 31, 2022 this credit line had not been utilized.

The Lenzing Group held 20 percent of capital and voting rights as at December 31, 2023 (December 31, 2022: 20 percent). The core business of EFB, which is not publicly listed, is the production and marketing of wood-based cellulosic fibers. The relations between the Lenzing Group and this company are described in note 38.

The following table provides summarized financial information on EFB in accordance with IFRS (100 percent):

Summarized financial information on EFB EUR '000

	31/12/2023	31/12/2022
Non-current assets	145,070	143,479
Current assets	58,968	88,324
Equity	52,016	62,981
Non-current liabilities	58,827	59,294
Current liabilities	93,195	109,529
	2023	**2022**
Revenue	173,633	193,240
Earnings before tax (EBT)	(15,788)	(383)
Total comprehensive income	(10,964)	1,644
Thereof net profit/loss after tax	(11,710)	(1,431)
Thereof other comprehensive income	745	3,075

The reconciliation of equity to the carrying amount of the investment in EFB is as follows:

Reconciliation of equity to carrying amount of the investment in EFB EUR '000

	31/12/2023	31/12/2022
Equity	52,016	62,981
Thereof:		
Group's interest (20 %; previous year: 20 %)	10,403	12,596
Consolidation and other effects	(63)	(63)
Impairment	(10,340)	(8,340)
Carrying amount	**0**	**4,193**

The Lenzing Group held 40 percent of capital and voting rights in LPP as at December 31, 2023 (December 31, 2022: 40 percent). The core business of LPP, which is not publicly listed, is the production of cellulose-based products, in particular paper. The relations between the Lenzing Group and this company are described in note 38.

The following table provides summarized financial information on LPP in accordance with IFRS (100 percent):

Summarized financial information on LPP EUR '000

	31/12/2023	31/12/2022
Non-current assets	10,392	10,103
Current assets	30,779	34,103
Equity	24,406	21,206
Non-current liabilities	4,361	5,601
Current liabilities	12,403	17,399
	2023	**2022**
Revenue	102,064	126,864
Earnings before tax (EBT)	12,953	16,916
Total comprehensive income	9,956	12,676
Thereof net profit/loss after tax	9,878	12,655
Thereof other comprehensive income	78	21

The reconciliation of equity to the carrying amount of the investment in LPP is as follows:

Reconciliation of equity to carrying amount of the investment in LPP EUR '000

	31/12/2023	31/12/2022
Equity	24,406	21,206
Thereof:		
Group's interest (40 %; previous year: 40 %)	9,763	8,482
Consolidation and other effects	(112)	(112)
Impairment	0	(4,100)
Carrying amount	**9,651**	**4,270**

The Lenzing Group held 50 percent of the capital and voting rights in LDF as at December 31, 2023 (December 31, 2022: 50 percent). The core business of LDF, which is not publicly listed, is granting rights of use. The relations between the Lenzing Group and this company are described in note 38.

The following table provides summarized financial information on LDF in accordance with IFRS (100 percent):

Summarized financial information on LDF EUR '000

	31/12/2023	31/12/2022
Non-current assets	207,991	92,275
Current assets	921	2,712
Thereof cash and cash equivalents	550	131
Equity	32,849	26,157
Non-current liabilities	170,298	66,999
Thereof financial liabilities (excluding trade payables, other liabilities and provisions)	170,298	66,999
Current liabilities	5,765	1,830
Thereof financial liabilities (excluding trade payables, other liabilities and provisions)	1,030	748
	2023	**2022**
Revenue[1]	16,113	6,466
Amortization and depreciation	(136)	(132)
Interest income	14,367	7,293
Interest expense	(14,917)	(6,068)
Income tax expense	(3)	(174)
Earnings before tax (EBT)	2,983	(8,126)
Total comprehensive income	6,692	(4,028)
Thereof net profit/loss after tax	5,591	(8,267)
Thereof other comprehensive income	1,101	4,240

1) LDF's revenue consists of rental income in particular.

The reconciliation of equity to the carrying amount of the investment in LDF is as follows:

Reconciliation of equity to carrying amount of the investment in LDF		EUR '000
	31/12/2023	31/12/2022
Equity	32,849	26,157
Thereof:		
Group's interest (50 %; previous year: 50 %)	16,425	13,079
Carrying amount	**16,425**	**13,079**

The investments in associates represent shares in companies in which the Lenzing Group can exert significant influence over financial and operating policies. Joint ventures are joint arrangements managed by the Lenzing Group together with one or more partners, whereby the Lenzing Group has rights to the net assets of the arrangement.

Note 22. Financial assets

Non-current financial assets comprise the following:

Non-current financial assets		EUR '000
	31/12/2023	31/12/2022
Non-current securities	6,464	20,554
Other equity investments	12	12
Originated loans	14,561	8,403
Total	**21,037**	**28,969**

The Lenzing Group has designated equity instruments of a fair value of EUR 12 thousand as measured at “fair value through other comprehensive income” as at December 31, 2023 (December 31, 2022: EUR 14,369 thousand). Non-current securities measured at fair value through other comprehensive income and other equity investments include shares in companies in which a share of less than 20 percent is held. The option to recognize these equity instruments at fair value through other comprehensive income was exercised based on the intent to hold these instruments in the long term.

As of December 31, 2022, non-current securities mainly comprised Oberbank ordinary shares of EUR 14,356 thousand, which were reclassified to current securities in the 2023 financial year. In the 2023 financial year, Oberbank ordinary shares paid dividends of EUR 203 thousand (2022: EUR 140 thousand).

Details about the loans can be found in note 37 and note 38.

Current financial assets include shares in the company Spinnova OY, Jyväskylä, Finland, in the amount of EUR 3,869 thousand (December 31, 2022: EUR 12,395 thousand) and Oberbank ordinary shares in the amount of EUR 14,852 thousand (December 31, 2022: EUR 0 thousand). In the 2022 and 2023 financial years, a partial disposal of the interest in Spinnova OY, Jyväskylä, Finland, was realized at fair value of EUR 1,615 thousand (2022: EUR 837 thousand). The realized gain of EUR 1,479 thousand (2022: EUR 812 thousand) was already included in other comprehensive income and was reclassified to retained earnings net of taxes of EUR 355 thousand (2022: EUR 203 thousand). In addition, some of the Oberbank ordinary shares were sold in the 2023 financial year at a fair value of EUR 3,000 thousand). The realized gain of EUR 1,949 thousand was already included in other comprehensive income and was reclassified to retained earnings net of taxes of EUR 468 thousand.

Note 23. Inventories

Inventories include the following components:

Inventories		EUR '000
	31/12/2023	31/12/2022
Raw materials and supplies	285,329	373,272
Work in progress	9,184	22,542
Finished goods and merchandise	254,425	312,493
Advance payments made	4,002	4,215
Total	**552,940**	**712,522**

Raw materials and supplies consist primarily of wood for pulp production, pulp and chemicals for cellulosic fiber production and various incidentals. The cost of raw materials and supplies is calculated using the weighted average cost method. Finished goods and work in progress include cellulosic fibers, co-products of fiber production, pulp and biorefinery-products.

In the financial year under review, write-downs to reflect the net realizable value of inventories decreased by EUR 36,358 thousand (2022: increased by EUR 67,081 thousand). The carrying amount of inventories measured at their net realizable value equaled EUR 271,383 thousand (December 31, 2022: EUR 320,235 thousand). Expenses for inventories, which are included in the cost of material totaled EUR 1,190,680 thousand (2022: EUR 1,434,476 thousand).

Note 24. Trade receivables

Trade receivables comprise the following:

Trade receivables		EUR '000
	31/12/2023	31/12/2022
Trade receivables (gross)	300,354	301,543
Bad debt provisions	(5,874)	(7,932)
Total	**294,480**	**293,611**

All trade receivables are classified as current assets. For further information on trade receivables, please refer to note 35 (section “Transfer of financial assets (sale of receivables/factoring)”) and note 37 (section “Credit risk”).

Note 25. Other assets

Other non-current assets comprise the following:

Other non-current assets		EUR '000
	31/12/2023	31/12/2022
Other non-current financial assets (particularly from derivatives and other financial receivables)	26,580	47,992
Other non-current non-financial assets (particularly from other taxes)	48,897	75,143
Total	**75,477**	**123,135**

Other current assets comprise the following:

Other current assets		EUR '000
	31/12/2023	31/12/2022
Other current financial assets		
Derivatives not yet settled (open positions)	12,180	14,090
Recharging of maintenance services	9,991	10,354
Unadvanced amount from factoring agreements	7,740	5,689
Receivables from grant commitments	0	673
Sundry	5,537	14,736
	35,448	**45,542**
Other current non-financial assets		
Receivables from other taxes and duties	72,428	63,091
Emission certificates	83,047	78,219
Advance payments made	3,865	4,391
Prepaid expenses	8,017	9,205
Sundry	263	311
	167,621	**155,216**
Total	**203,069**	**200,758**

Note 26. Equity

Share capital and capital reserves

The share capital of Lenzing AG totaled EUR 40,107,738.37 as at December 31, 2023 (December 31, 2022: EUR 27,574,071.43) and is divided into 38,618,180 zero par value shares (December 31, 2022: 26,550,000 shares). The proportion of share capital attributable to one share equals roughly EUR 1.04. Each ordinary share represents an equal interest in capital and conveys the same rights and obligations, above all the right to a resolved dividend and the right to vote at the Annual General Meeting. The issue price of the shares is fully paid in. No other classes of shares have been issued.

The Annual General Meeting on April 19, 2023 authorized the Managing Board – while at the same time canceling the resolutions regarding this matter of the Annual General Meeting of April 12, 2018 – subject to the approval of the Supervisory Board, to increase share capital by up to EUR 13,787,034.68 through the issue of up to 13,274,999 zero par value shares ("authorized capital") – also in tranches – in exchange for cash and/or contributions in kind, within five years from entry in the commercial register. The proportion of authorized capital attributable to one share equals roughly EUR 1.04. This authorized capital was recorded in the commercial register on May 26, 2023.

With effect from July 2023, Lenzing AG carried out a capital increase that had been approved by the Annual General Meeting on April 19, 2023. A total of 12,068,180 new shares were issued. The share capital was fully paid in. The change in share capital and capital reserves is attributable to this capital increase.

In addition, a resolution of the Annual General Meeting on April 19, 2023 authorized the Managing Board – while at the same time canceling the resolutions regarding this matter of the Annual General Meeting of April 12, 2018 – to issue, subject to the approval of the Supervisory Board, convertible bonds by April 19, 2028 in one or several tranches that grant or provide for the subscription or conversion right or a subscription or conversion obligation for up to 13,274,999 shares of the company ("contingent capital"). They can be serviced through the contingent capital and/or treasury shares.

The Annual General Meeting on April 26, 2022 authorized the Managing Board – while at the same time canceling the resolutions regarding this matter of the Annual General Meeting of June 18, 2020 and subject to the approval of the Supervisory Board – to purchase treasury shares of the company for a period of 30 months starting on the day of the resolution. The treasury shares acquired by the company may not exceed 10 percent of the company's share capital. The equivalent to be paid for the repurchase must be within a range of +/-25 percent of the weighted average closing price of the last 20 stock exchange days prior to the start of the corresponding repurchasing program of the Lenzing share. The Managing Board was also authorized to withdraw repurchased treasury shares without any further resolution by the Annual General Meeting subject to the approval of the Supervisory Board (including the authorization of the Supervisory Board to adopt changes to the articles of association resulting from withdrawing the shares), or to resell them and to determine the conditions of sale. This authorization can be exercised in full, in part and in pursuit of one or several objectives by the company, by a subsidiary (Section 189a no. 7 of the Austrian Commercial Code) or by third parties for the company's account. In addition, the Management was authorized for a period of five years from the date of the resolution to adopt the sale of treasury shares, with the consent of the Supervisory Board, in any manner permitted by law other than through the stock exchange or public offer, also excluding shareholders' repurchasing rights (subscription rights), and to determine the conditions of sale.

The Managing Board did not utilize the authorizations existing on or before December 31, 2023, to issue convertible bonds and buy back treasury shares in the reporting period.

The capital reserves represent appropriated reserves of Lenzing AG that may only be used to offset an accumulated loss by Lenzing AG. These reserves were created from the inflow of funds received by Lenzing AG from shareholders in excess of share capital.

Other reserves

Other reserves include all accumulated other comprehensive income and consist of the foreign currency translation reserve, the reserve for financial assets measured at fair value through other comprehensive income, the hedging reserve and actuarial gains/losses.

The amounts attributable to the components of other comprehensive income in 2023 and 2022 include the following:

Other comprehensive income EUR '000

	2023			2022		
	Before tax	**Tax effect**	**After tax**	**Before tax**	**Tax effect**	**After tax**
Consolidated subsidiaries	(44,834)	2,061	(42,773)	62,412	(3,423)	58,988
Investments accounted for using the equity method	488	0	488	2,082	0	2,082
Foreign currency translation reserve	**(44,346)**	**2,061**	**(42,285)**	**64,494**	**(3,423)**	**61,070**
Financial assets measured at fair value through other comprehensive income	**(3,412)**	**751**	**(2,662)**	**(16,830)**	**4,614**	**(12,216)**
Consolidated subsidiaries	(24,658)	6,415	(18,243)	62,713	(18,112)	44,602
Investments accounted for using the equity method	0	0	0	(18)	0	(18)
Hedging reserve	**(24,658)**	**6,415**	**(18,243)**	**62,696**	**(18,112)**	**44,584**
Consolidated subsidiaries	(4,384)	1,020	(3,365)	11,655	(3,677)	7,978
Investments accounted for using the equity method	27	0	27	641	0	641
Actuarial gains/losses	**(4,358)**	**1,020**	**(3,338)**	**12,296**	**(3,677)**	**8,619**
Total	**(76,774)**	**10,246**	**(66,527)**	**122,655**	**(20,598)**	**102,057**

The hedging reserve developed as follows:

Changes in the hedging reserve EUR '000

	2023	2022
Gains/losses recognized in the reporting period from the valuation of cash flow hedges		
From gas swaps	(18,268)	823
From forward foreign exchange contracts	13,911	(6,150)
From interest rate- and currency-interest rate swaps	3,841	46,569
	(516)	**41,242**
Reclassification to profit or loss of amounts relating to cash flow hedges		
From gas swaps	16,500	(6,332)
From forward foreign exchange contracts	(19,607)	27,217
From interest rate- and currency-interest rate swaps	(21,035)	568
	(24,142)	**21,453**
Total	**(24,658)**	**62,696**

The fair value changes from cash flow hedges recognized in the reporting period relate to hedging against currency risks from the operating business, hedging against interest rate/currency risks from taking out loans, and hedging against gas price risks (see note 35, section "Derivative financial instruments and hedges").

The above amounts from the reclassification to profit or loss of cash flow hedges from gas swaps and forward foreign exchange contracts are reported primarily under revenue and cost of sales as part of earnings before interest and tax (EBIT). The above amounts from the reclassification to profit or loss of cash flow hedges from interest rate- and currency-interest rate swaps are reported under financial result.

Retained earnings

Retained earnings comprise the following:

Retained earnings EUR '000

	31/12/2023	31/12/2022
Unappropriated revenue reserves of Lenzing AG under Austrian law (Austrian Commercial Code – öUGB)	284,900	845,822
Accumulated profits of Lenzing AG under Austrian law (Austrian Commercial Code – öUGB)	0	0
Earnings attributable to subsidiaries, including the effect of adjusting the financial statements of Lenzing AG and its subsidiaries from local regulations to IFRS	75,381	145,879
Total (excl. other reserves)	**360,281**	**991,702**

The unappropriated revenue reserves of Lenzing AG can be released at any time and distributed to shareholders as part of accumulated profits. Austrian law only permits the distribution of dividends from accumulated profits as stated in the approved annual financial statements of the parent company prepared in accordance with the Austrian Commercial Code.

The following dividends were approved by the Annual General Meeting and paid to the shareholders of Lenzing AG:

Dividends of Lenzing AG resolved and paid

	Total	Number of shares	Dividend per share
	EUR '000		EUR
Dividend for the financial year 2022 resolved at the Annual General Meeting on April 19, 2023	0	26,550,000	0.00
Dividend for the financial year 2021 resolved at the Annual General Meeting on April 26, 2022 (payment as of May 3, 2022)	115,493	26,550,000	4.35

The loss for the year according to the Austrian Commercial Code (UGB) for the 2023 financial year of Lenzing AG is to be appropriated as follows:

Appropriation of the 2023 net loss EUR '000

Lenzing AG closed the 2023 financial year with loss under Austrian law (öUGB) of	(560,915)
after the reversal of (distributable) revenue reserves	560,915
remains an accumulated profit of	**0**

Hybrid capital

In December 2020, a subordinated perpetual bond (hybrid capital) with a total volume of EUR 500,000 thousand and a coupon of 5.75 percent was issued. The hybrid capital has a perpetual tenor and can be called or re-deemed by Lenzing AG on December 7, 2025 at the earliest. Investors have no call rights. If the hybrid capital is not called, the hybrid capital will carry a changed interest rate from December 8, 2025 (then applicable 5-year swap rate plus a margin of 11.208 percent).

Interest will be due and payable in arrears on December 7 of each year unless Lenzing AG decides to defer such interest payment. Outstanding deferred interest must be paid under certain circumstances, in particular when the Annual General Meeting of Lenzing AG resolves to pay a dividend.

The bond meets the criteria for equity pursuant to IAS 32 (Financial Instruments: Presentation). Accordingly, coupons are presented as part of appropriation of profits in the consolidated income statement.

Non-controlling interests

Non-controlling interests represent the investments held by third parties in consolidated group companies. The Group companies with non-controlling interests are listed in note 41 under "Consolidated companies". These are companies in which the Lenzing Group holds an interest of less than 100 percent.

Of the non-controlling interests as at December 31, 2023, EUR 308,186 thousand (December 31, 2022: EUR 274,985 thousand) related to LD Celulose S.A. (LDC), Indianópolis, Brazil, which is allocated to the Pulp Division segment. As of December 31, the non-controlling shareholders held 2023 49.0 percent (December 31, 2022: 49.0 percent) of the capital and voting rights of the non-listed LDC, and have a put option to sell their shares (see note 3 and note 35). LDC's core business consists of the production and sale of pulp.

The following table provides summarized financial information on LDC in accordance with IFRS (100 percent):

Summarized financial information on LDC **EUR '000**

	31/12/2023	31/12/2022
Non-current assets	1,606,247	1,607,380
Current assets	221,524	131,267
Equity	628,951	561,194
Thereof equity attributable to shareholders of Lenzing AG	320,765	286,209
Thereof equity attributable to non-controlling interests	308,186	274,985
Non-current liabilities	929,861	1,029,994
Current liabilities	268,960	147,459
	2023	**2022**
Revenue	449,270	164,269
Earnings before tax (EBT)	117,452	39,964
Total comprehensive income	71,016	78,395
Thereof net profit/loss after tax	94,093	30,857
Net profit/loss after tax attributable to shareholders of Lenzing AG	47,987	15,737
Net profit/loss after tax attributable to non-controlling interests	46,105	15,120
Thereof other comprehensive income	(23,076)	47,538
Other comprehensive income attributable to shareholders of Lenzing AG	(11,769)	24,244
Other comprehensive income attributable to non-controlling interests	(11,307)	23,294
Cash flow from operating activities	102,438	(27,007)
Cash flow from investing activities	(57,815)	(337,928)
Cash flow from financing activities	(12,401)	324,319
Change in cash and cash equivalents	32,221	(40,616)
Dividends paid to non-controlling interests	0	0

Non-controlling interests in equity include PT. South Pacific Viscose (SPV), Purwakarta, Indonesia, which is assigned to the Segment Division Fiber. The non-controlling interests in SPV totaled EUR minus 6,987 thousand as at December 31, 2023 (December 31, 2022: EUR 10,329 thousand). As at December 31, 2023 , non-controlling shareholders held 5.78 percent (December 31, 2022: 8.13 percent) of the capital and voting rights in SPV, which is not publicly listed. The core business of SPV is the production and sale of wood-based cellulosic fibers.

The following table provides summarized financial information on SPV in accordance with IFRS (100 percent):

Summarized financial information on SPV **EUR '000**

	31/12/2023	31/12/2022
Non-current assets	126,947	312,391
Current assets	127,045	126,365
Equity	(120,876)	127,043
Thereof equity attributable to shareholders of Lenzing AG	(113,889)	116,714
Thereof equity attributable to non-controlling interests	(6,987)	10,329
Non-current liabilities	246,149	121,872
Current liabilities	128,719	189,841
	2023	**2022**
Revenue	321,973	436,995
Earnings before tax (EBT)	(302,114)	(102,121)
Total comprehensive income	(301,577)	(85,591)
Thereof net profit/loss after tax	(301,979)[1]	(101,481)
Net profit/loss after tax attributable to shareholders of Lenzing AG	(283,417)	(93,230)
Net profit/loss after tax attributable to non-controlling interests	(18,563)	(8,250)
Thereof other comprehensive income	403	15,889
Other comprehensive income attributable to shareholders of Lenzing AG	434	14,598
Other comprehensive income attributable to non-controlling interests	(31)	1,292
Cash flow from operating activities	(149,200)	(12,757)
Cash flow from investing activities	(47,376)	(98,821)
Cash flow from financing activities	186,195	123,791
Change in cash and cash equivalents	(10,382)	12,212
Dividends paid to non-controlling interests	0	0

1) SPV's after-tax result includes impairments in accordance with IAS 36 (see note 10).

The following shares of other comprehensive income are attributable to non-controlling interests in the subsidiaries of Lenzing AG:

Other comprehensive income attributable to non-controlling interests **EUR '000**

	2023	2022
Items that will not be reclassified subsequently to profit or loss		
Remeasurement of defined benefit liability	(29)	142
Income tax relating to these components of other comprehensive income	6	(32)
Items that may be reclassified to profit or loss		
Foreign operations – foreign currency translation differences arising during the year	(10,502)	12,006
Cash flow hedges – effective portion of changes in fair value recognized during the year and non-designated components	(1,620)	18,793
Income tax relating to these components of other comprehensive income	792	(6,322)
Other comprehensive income (net of tax)	**(11,353)**	**24,587**

Note 27. Government grants

The amount accrued under this item resulted primarily from grants for investments in environmental protection and for general investment support.

Investment grants are reported as liabilities and recognized in profit or loss on a straight-line basis over the useful life of the subsidized investments as "Income from the release of investment grants".

Government grants for cost reimbursements are recognized as other income in the period in which the related costs are incurred, unless the receipt of the grant is contingent on conditions that are not yet sufficiently likely to occur. Receivables from funding commitments are reported under other assets on the consolidated statement of financial position (see note 25).

Government grants of EUR 23,414 thousand were recognized in profit or loss in the reporting period (2022: EUR 16,445 thousand), resulting predominantly from promotion of research activities and energy topics. Any conditions attached to the grants were fulfilled and repayment, in full or in part, is therefore considered unlikely.

Government grants also included EUR 70,501 thousand of emission certificates as at December 31, 2023 (December 31, 2022: EUR 65,893 thousand). In accordance with Directive 2003/87/EC of the European Parliament and the European Council on a system for trading greenhouse gas emission certificates, a total of 374,539 EU-emission certificates and 23,167 UK-emission certificates were allocated free of charge to the relevant companies in the Lenzing Group for 2023 through national allocation plans (2022: 375,634 EU-emission certificates and 23,794 UK-emission certificates).

Emission certificates are capitalized at fair value at the time of allocation and reported under other current assets (see note 25). The difference between the fair value and the purchase price paid by the company for the emission certificates is recorded under government grants. At the end of each reporting period, a provision is recognized for the certificates used up to that date. The amount of the provision is based on the recognized asset value of the certificates if they are covered by certificates held by the company at this reporting date. If the certificates used exceed the certificates held, the provision is based on the fair value of the certificates (to be purchased subsequently) as at the relevant reporting date. Future laws and commitments on emissions, especially in the countries of the Lenzing Group's production sites, could lead to further precautionary measures in the future.

In the 2023 financial year, 500,000 EU emission certificates were sold (2022: 0 EU emission certificates), which had been allocated to the Lenzing Group free of charge. The income from the sale amounted to EUR 40,653 thousand (2022: EUR 0 thousand) and is included in other operating income (see note 7).

In the 2023 financial year expenses for emission certificates amounted to EUR 17,995 thousand (2022: EUR 14,999 thousand).

Note 28. Financial liabilities

The following table shows the composition of financial liabilities as at December 31:

Financial liabilities	31/12/2023				31/12/2022			EUR '000
	Currency	Nominal value	Carrying amount	Average effective interest in %	Currency	Nominal value	Carrying amount	Average effective interest in %
Private placements								
Fixed interest	EUR	290,500	290,229	1.5	EUR	290,500	290,110	1.5
Floating rate interest	EUR	219,000	218,753	4.2	EUR	219,000	218,640	1.2
Floating rate interest[1]	USD	65,000	58,824	1.9	USD	65,000	60,941	0.8
			567,805				**569,691**	
Bank loans								
Loans:								
Fixed interest	EUR	474,775	353,345	1.5	EUR	428,809	428,809	1.1
Fixed interest	USD	147,200	108,439	3.3	USD	140,602	111,972	3.0
Fixed interest	CNY	117,015	14,905	4.1	CNY	0	0	n/a
Floating rate interest	EUR	311,813	256,426	2.1	EUR	140,412	139,586	0.8
Floating rate interest[1]	USD	1,000,000	816,483	6.9	USD	1,000,000	911,729	4.1
Operating loans[2]:								
Floating rate interest	IDR	0	0	n/a	IDR	156,333,686	9,463	9.8
Floating rate interest	CNY	390,000	49,676	3.4	CNY	250,000	33,976	3.7
Floating rate interest	USD	98,254	88,619	8.1	USD	4,876	4,572	7.2
			1,687,892				**1,640,106**	
Lease liabilities								
Fixed interest	EUR	142,107	142,107	16.9	EUR	69,590	69,590	10.2
			142,107				**69,590**	
Loans from other lenders								
Fixed interest	EUR	9,926	9,790	0.7	EUR	10,603	10,603	0.7
Fixed and floating rate interest	EUR	28,100	28,100	0.6	EUR	30,005	30,005	0.6
Floating rate interest	BRL	0	0	n/a	BRL	12,445	2,236	10.4
			37,890				**42,843**	
Total			**2,435,694**				**2,322,230**	
Thereof current			528,992				250,282	
Thereof non-current			1,906,702				2,071,948	

1) As of December 31, 2022, the underlying contracts were linked to the USD LIBOR reference interest rate, and were switched to the alternative Secured Overnight Financing Rate (SOFR) reference interest rate in the 2023 financial year.
2) Revolving credit agreements and overdrafts

In the 2015 financial year, the Lenzing Group issued fixed and variable rate private placements of EUR 150,000 thousand, which have an average term of seven years, as part of the refinancing and volume expansion. In the 2022 financial year, an amount of EUR 72,000 thousand was repaid.

In the 2019 financial year, the Lenzing Group issued further private placements with an issue volume of EUR 375.000 thousand and USD 45.000 thousand. A term of 5 to 15 years with fixed and floating interest rates was agreed.

In the 2020 financial year, the Lenzing Group issued further private placements with an issue volume of EUR 114,000 thousand and USD 20,000 thousand. Terms of 5 to 7 years with fixed and floating interest rates were agreed.

In 2023, a loan of EUR 100,000 thousand was arranged with the participation of Oesterreichische Kontrollbank. A term of six years with fixed and floating interest rates was agreed.

In the 2018, 2019, 2020 and 2021 financial years, financing totaling EUR 501,500 thousand was raised from Oesterreichische Kontrollbank AG. A term of two to seven years with fixed and floating interest rates was agreed. In the 2023 financial year, this financing was extended by two years.

As of December 31, 2023, liabilities to banks for the financing of the pulp mill in Brazil amounted to EUR 924,922 thousand (December 31, 2022: EUR 1,023,700 thousand). Of these, EUR 758,869 thousand (December 31, 2022: EUR 34,922 thousand) are collateralized by pledged property, plant and equipment and EUR 204,856 thousand (December 31, 2022: EUR 127,735 thousand) are collateralized by biological assets. In addition, the shares in LD Celulose S.A., Indianópolis, Brazil, were pledged for the financing of the pulp mill. Details of this financing can be found in note 35.

Furthermore, of the reported financial liabilities, EUR 53,259 thousand (December 31, 2022: EUR 37,853 thousand) are secured by receivables.

The next interest rate adjustment for the floating rate loans and partially fixed rate loans will take place within the next six months, depending on the loan agreement. The conditions for loans that can be utilized multiple times (revolving loans) are fixed for a certain period and generally carry floating interest rates.

Other loans primarily involve obligations to the Austrian fund for the promotion of research in industry ("Forschungsförderungsfonds der gewerblichen Wirtschaft") and the ERP fund as well as loans from non-controlling shareholders.

Note 29. Deferred taxes (deferred tax assets and liabilities) and current taxes

Deferred tax assets and liabilities relate to the following items on the statement of financial position:

Deferred tax assets EUR '000

	31/12/2023	31/12/2022
Intangible assets and property, plant and equipment	74,628	1,936
Financial assets	965	2,664
Inventories	12,149	17,010
Other assets	1,943	1,254
Provisions	17,217	13,331
Investment grants	121	135
Lease liabilities	45,030	20,007
Other liabilities	10,526	14,835
Loss carryforwards	180,427	73,941
Gross deferred tax assets – before valuation adjustment	**343,005**	**145,114**
Valuation adjustment to deferred tax assets	(197,441)	(78,512)
Thereof relating to tax loss carryforwards	(125,418)	(62,989)
Gross deferred tax assets	**145,564**	**66,602**
Offsettable against deferred tax liabilities	(97,005)	(64,887)
Net deferred tax assets	**48,559**	**1,716**

Deferred tax liabilities EUR '000

	31/12/2023	31/12/2022
Intangible assets and property, plant and equipment	25,799	76,354
Right-of-use assets	42,834	21,407
Biological assets	23,324	6,229
Financial assets	9,579	12,278
Inventories	603	109
Other assets	8,700	16,144
Investment grants	253	265
Other liabilities	26,011	2,340
Gross deferred tax liabilities	**137,103**	**135,127**
Offsettable against deferred tax assets	(97,005)	(64,887)
Net deferred tax liabilities	**40,098**	**70,240**

Of the total gross deferred tax assets, EUR 25,202 thousand (December 31, 2022: EUR 34,254 thousand) are due within one year. Of the total gross deferred tax liabilities, EUR 4,229 thousand (December 31, 2022: EUR 4,937 thousand) are due within one year. The remaining amounts are due in more than one year.

Deferred taxes developed as follows:

Development of deferred taxes EUR '000

	2023	2022
As at 01/01	(68,525)	(56,226)
Recognized in profit or loss	62,895	5,579
Recognized in other comprehensive income	12,748	(18,347)
Acquisition of business units	215	0
Currency translation adjustment	1,129	469
As at 31/12	**8,461**	**(68,525)**

The Group held tax loss carryforwards of EUR 808,080 thousand as at December 31, 2023 (December 31, 2022: EUR 333,554 thousand). The existing tax loss carryforwards can be utilized as follows:

Loss carryforwards (assessment basis) EUR '000

	31/12/2023	31/12/2022
Total	808,080	333,554
Thereof capitalized loss carryforwards	239,169	46,644
Thereof non-capitalized loss carryforwards	568,911	286,910
Possible expiration of non-capitalized loss carryforwards		
Within 1 year	51,485	572
Within 2 years	78,168	26,820
Within 3 years	40,565	80,394
Within 4 years	140,430	43,195
Within 5 years or longer	181,428	135,913
Unlimited carryforward	76,835	16

As of December 31 2023, deferred tax assets totaling EUR 48,559 thousand (December 31, 2022: EUR 1,716) were capitalized. Of this amount, EUR 46,786 (December 31, 2022: EUR 0 thousand) are attributable to deferred tax assets relating to Group units that generated losses in either the past or previous year. If there is no substantial evidence for recoverability, deferred tax assets are recognized to the extent that sufficient taxable temporary differences exist.

The increase in loss carryforwards in the 2023 financial year also includes losses of foreign Group members in Austria, which are offset in addition to the current tax loss of the Austrian Group members. A provision for recapture taxation on foreign losses was formed.

The valuation adjustment to deferred tax assets relates mainly to companies based in Austria in the amount of EUR 16,519 thousand (December 31, 2022: EUR 4 thousand), in China in the amount of EUR 34,120 thousand (December 31, 2022: EUR 24,742 thousand), in Indonesia in the amount of EUR 104,881 thousand (December 31, 2022: EUR 37,826 thousand), in the USA in the amount of EUR 6,545 thousand (December 31, 2022: EUR 41 thousand) and in Thailand in the amount of EUR 35,428 thousand (December 31, 2022: EUR 16,381 thousand). Certain loss carryforwards were not capitalized because their usability is restricted. If all tax loss carryforwards could be utilized in full, the deferred tax assets on loss carryforwards would total EUR 180,427 thousand (December 31, 2022: EUR 73,941 thousand) instead of EUR 55,009 thousand (December 31, 2022: EUR 10,952 thousand).

The financial assets and other assets shown under deferred tax assets in the above table include amounts for outstanding partial write-downs to investments in accordance with Section 12 Para. 3 no. 2 of the Austrian Corporation Tax Act ("Siebentelabschreibung", the partial write-downs of investments over a period of seven years for tax purposes) corresponding to a measurement base of EUR 7,335 thousand (December 31, 2022: EUR 11,090 thousand). Partial write-downs of EUR 3,755 thousand were utilized for tax purposes in 2023 (2022: EUR 3,905 thousand).

The recoverability of deferred tax assets is generally based on the positive taxable results expected in the future – after the deduction of taxable temporary differences – in line with the forecasts approved by the Managing Board. These forecasts are also used for impairment testing (see note 10). The assessment of unused tax loss carryforwards and tax credits also involves the consideration of utilization requirements.

Deferred tax liabilities were not recognized for temporary differences with a measurement base of EUR 542,772 thousand (December 31, 2022: EUR 507,985 thousand) in connection with investments in subsidiaries, joint ventures and associates and the related proportional share of net assets held by group companies because the Lenzing Group is able to control the timing of the reversal of the temporary difference and these differences are not expected to reverse in the foreseeable future.

The receivables from current taxes include prepayments made to foreign taxation authorities. These amounts are recognized when the recoverability is probable, while valuation adjustments are made in all other cases. The gross carrying amount of non-current receivables from current taxes as at December 31, 2023 amounts to EUR 21,068 thousand (December 31, 2022: EUR 21,155 thousand). Payments are sometimes uncertain, especially the timing of payments due to the sometimes long duration of proceedings. For this reason, as at December 31, 2023, write-downs of EUR 4,887 thousand were recognized (December 31, 2022: EUR 5,250 thousand).

Current liabilities for current taxes include a provision for uncertain tax items of EUR 12,992 thousand (December 31, 2022: EUR 0 thousand) in connection with regular tax audit procedures.

Lenzing AG and the subsidiaries included in the group tax agreement are members of the tax group between B&C Holding Österreich GmbH, as the head of the group, and Lenzing AG and other subsidiaries of Lenzing AG, as group members, in accordance with Section 9 of the Austrian Corporation Tax Act.

Group taxation includes the offset of taxable profits and losses between the group members. The deferred tax assets and deferred tax liabilities of the group members are also offset based on their joint tax assessment. Future tax liabilities from the offsetting of losses of foreign subsidiaries are recognized in the consolidated financial statements without discounting and are reported under non-current liabilities for current taxes. The group and tax equalization agreement requires Lenzing AG to pay a tax allocation equal to the corporate income tax attributable to the taxable profit of the company and the subsidiaries included in the tax group. The tax allocation payable by Lenzing AG is reduced by any domestic and foreign withholding taxes deductible from the overall group result by the group parent and by any transferred minimum corporate income taxes.

The tax allocation to be paid by Lenzing AG is also reduced by any current losses/loss carryforwards caused by the group parent that can be offset against positive earnings of Lenzing AG's tax group in the assessment year. The tax allocation is reduced by 25 percent (2022: 25 percent) of the corporate tax rate (i.e. currently 6 percent; 2022: 6.25 percent) applicable to the current losses/loss carryforwards recorded by the head of the tax group that are offset against positive earnings in an assessment year for the head of the tax group. Tax losses recorded by Lenzing AG and the participating subsidiaries are kept on record and offset against future tax gains. An equalization payment is made as compensation for any losses that are not offset when the contract is terminated.

The Lenzing Group includes the effects of uncertain tax positions in the calculation of current and deferred taxes. Tax claims are recognized at the expected reimbursement amount in cases where the claim is sufficiently certain. The tax returns of the Lenzing Group's subsidiaries are reviewed regularly by the taxation authorities. Appropriate provisions have been recognized for possible future tax obligations based on a number of factors which include interpretations, commentaries and legal decisions relating to the respective tax jurisdiction and past experience. In addition, uncertain tax positions are evaluated on the basis of estimates and assumptions for future events. New information can become available in the future that leads the Group to change its assumptions regarding the appropriateness of tax positions. Any such changes will affect tax expense in the period in which they are identified.

Note 30. Provisions

The Lenzing Group's provisions are classified as follows:

Provisions EUR '000

	Total		Thereof current		Thereof non-current	
	31/12/2023	31/12/2022	31/12/2023	31/12/2022	31/12/2023	31/12/2022
Provisions for pensions and similar obligations						
Pensions and severance payments	74,842	77,646	6,149	7,149	68,693	70,497
Jubilee benefits	14,766	14,899	929	936	13,837	13,963
	89,608	**92,544**	**7,078**	**8,084**	**82,530**	**84,460**
Other provisions						
Restructuring measures	24,087	21,125	24,087	21,125	0	0
Anticipated losses and other risks	10,806	23,545	10,806	23,545	0	0
Emission certificates	9,972	12,493	9,972	12,493	0	0
Sundry	7,218	8,134	656	1,047	6,562	7,087
	52,082	**65,297**	**45,521**	**58,210**	**6,562**	**7,087**
Total	**141,690**	**157,841**	**52,599**	**66,295**	**89,091**	**91,547**

Provisions for pensions and similar obligations

Pensions and severance payments

The Lenzing Group has entered into obligations for pensions and severance payments from defined benefit plans, which are reported under provisions for pensions and severance payments, and from defined contribution plans.

Defined benefit plans (for pensions and severance payments)

The benefits resulting from the defined benefit plans for pensions and severance payments are dependent on the final salary or wage and the length of service. They do not require any contributions by employees.

The defined benefit pension plans are based on contractual obligations. The Lenzing Group's most important defined benefit pension plan is located in Austria. It applies to employees who joined the Group before January 1, 2000 and decided to remain in the plan. The claims generally arose after a vesting period of at least 10 or 15 service years. A retirement age of 58 to 63 years is assumed for the beneficiaries, depending on their gender. At present, the plan primarily covers employees who have already retired. Qualifying insurance policies were recognized as plan assets in some cases, while coverage for these obligations is also provided by securities that do not qualify as plan assets.

The defined benefit severance plans are based on statutory obligations and obligations under collective agreements. The Lenzing Group's most important defined benefit severance plan is located in Austria. This plan entitles employees whose employment relationship is governed by Austrian law and started before January 1, 2003 to a severance payment in specific cases, in particular when they reach the statutory retirement age and in the event of termination by the employer ("old severance payment system"). The amount of the severance payment depends on the employee's salary or wage at the termination of employment and on the length of the employment relationship. There are similar major defined benefit severance plans in Indonesia and the Czech Republic, which apply to all employees irrespective of when they joined the respective company. The defined benefit severance plans are not covered by assets but are financed entirely through provisions.

In the 2023 and 2022 financial years, parts of provisions for accrued defined benefit severance plans were reclassified to other provisions for restructuring measures (see the section "Other provisions").

The defined benefit pension and severance plans are principally connected with the following risks that influence the amount of the obligations to be recognized:

- **Investment risk**: A decline in the income from plan assets below the discount rate will result in a plan deficit and an increase in the obligations.
- **Interest rate risk**: A decrease in the discount rate due to lower bond interest rates on the capital market will result in an increase in the obligations.
- **Salary and pension trend**: An increase in the actual salary and pension trends over the expected future levels will result in an increase in the obligations.
- **Personnel turnover and departure risk**: A decline in the expected personnel turnover rates will result in an increase in the obligations.
- **Longevity risk**: An increase in the life expectancy of the beneficiaries will result in an increase in the obligations.

The Lenzing Group is also exposed to currency risks in connection with these plans.

The Lenzing Group takes various steps to reduce the risks from defined benefit plans. The related measures include, in particular, the external financing of defined benefit plans with plan assets or the coverage of obligations with securities that do not qualify as plan assets and the settlement of existing defined benefit plans with lump sum payments. In addition, pension and similar commitments are now only concluded as defined contribution commitments where possible and legally permissible.

The objectives of the investment policy are to create an optimal composition of plan assets and to ensure sufficient coverage for the existing claims of participating employees. The investment strategies (asset allocations) for the plan assets are contractually regulated. A reinsurance policy was concluded for part of the claims from the Austrian pension plan. It is reported as plan asset in the amount of EUR 2,344 thousand (December 31, 2022: EUR 2,469 thousand). This policy is a conventional life insurance policy which invests primarily in debt instruments that reflect the maturity profile of the underlying claims and are intended to maintain a high degree of investment security. The Lenzing Group makes no further contributions to this insurance policy.

The fair value of the insurance policy is not determined on an active market, but corresponds to the reported policy reserve. The plan assets do not include any financial instruments issued by or assets used by the Lenzing Group. The actual return on plan assets totaled EUR 158 thousand in 2023 (2022: EUR 155 thousand). The net interest expense from the defined benefit plans (expenses from the accrued interest on the obligations and the return on plan assets) is reported under financing costs.

The most important actuarial parameters applied to the defined benefit pension and severance plans are as follows:

Actuarial assumptions for defined benefit pension and severance plans p. a. in %

31/12/2023	Discount rate	Salary increase	Pension increase	Staff turnover deductions
Austria – pensions	3.4	3.0	0.0-3.0	0.0
Austria – severance payments	3.4	3.0	N/A	0.0
Indonesia	6.5	7.5	N/A	1.0-5.0
Czech Republic	3.9	4.5	N/A	1.6
31/12/2022				
Austria – pensions	4.1	3.0	0.0-3.0	0.0
Austria – severance payments	4.1	3.0	N/A	0.0
Indonesia	7.0	7.5	N/A	1.0-5.0
Czech Republic	3.5	4.2	N/A	1.6

The major obligations from the defined benefit plans are the obligations for pensions and severance payments in the Lenzing Group's Austrian companies. The discount rate for these obligations was derived from high-quality fixed-income corporate bonds with at least an AA rating based on an international actuary's standards. Bonds with significantly higher or lower interest rates than the other bonds in their risk class ("statistical outliers") were not included in the calculation. The currency and terms of the bonds used to derive the discount rate are based on the currency and expected terms of the obligations to be settled. The estimated salary and pension increases, which are also considered realistic for the future, were derived from the averages of recent years. Separate employee turnover rates were applied for each company depending on the composition of the workforce and the employees' length of service. The retirement age used for the calculation is based on the applicable legal regulations. Individual, country-specific assumptions were made for each of the other countries to determine the discount rate, salary increases, employee turnover rates and retirement age.

The parameters used to calculate the defined benefit pension plans in Austria included the biometric data from AVÖ 2018 P – the calculation base for pension insurance for salaried employees

The following biometric data and assumptions are used in other countries:

- Indonesia: Tabel Mortalita Indonesia (TMI 2019)
- Czech Republic: AVÖ 2018-P
- Other: No biometric assumptions were made because of the low number of beneficiaries.

The obligations (carrying amounts) from defined benefit pension and severance plans reported in the consolidated statement of financial position comprise the following:

Development of defined benefit plans **EUR '000**

	Present value of pension and severance payment obligation (DBO)		Fair value of plan assets		Carrying amounts of defined benefit pension and severance plans	
	2023	**2022**	**2023**	**2022**	**2023**	**2022**
As at 01/01	85,847	104,818	2,469	2,598	83,377	102,220
Service cost						
Current service cost	3,635	2,694	0	0	3,635	2,694
Gain/loss on curtailments of plan	0	671	0	0	0	671
Net interest	3,769	1,957	95	22	3,674	1,935
Income and expenses from defined benefit plans recognized on the income statement	**7,404**	**5,322**	**95**	**22**	**7,309**	**5,300**
Remeasurement during the reporting period						
On the basis of demographic assumptions	(119)	(35)	0	0	(119)	(35)
On the basis of financial assumptions	3,673	(19,177)	0	0	3,673	(19,177)
On the basis of experience adjustments	893	7,690	0	0	893	7,690
On the basis of income from plan assets, excl. amounts included in interest income	0	0	62	133	(62)	(133)
Remeasurement of defined benefit plans included in other comprehensive income	**4,447**	**(11,522)**	**62**	**133**	**4,384**	**(11,655)**
Cash flows						
Payments made from the plan	(283)	(283)	(283)	(283)	0	0
Direct payments and contributions by the employer	(15,750)	(12,238)	0	0	(15,750)	(12,238)
Currency translation adjustment	(683)	(250)	0	0	(683)	(250)
Other reconciliation items	**(16,716)**	**(12,771)**	**(283)**	**(283)**	**(16,433)**	**(12,488)**
As at 31/12	**80,982**	**85,847**	**2,344**	**2,469**	**78,638**	**83,377**
Thereof pensions in Austria	19,243	18,214	2,344	2,469	16,899	15,744
Thereof severance payments in Austria	38,069	42,636	0	0	38,069	42,636
Thereof pensions and severance payments in other countries	19,874	19,265	0	0	19,874	19,265
Thereof restructuring measures	3,796	5,732	0	0	3,796	5,732

Sensitivity analyses are performed to evaluate the risk of changes in the actuarial parameters used to measure the present value of the obligations from defined benefit plans. These sensitivity analyses show the effects on the present value of the obligations from hypothetical changes in key parameters that could have reasonably changed as at the reporting date. One parameter was changed for each analysis, while all other parameters were kept constant. The sensitivity analyses are based on the present values of the obligations as at the reporting date before the deduction of plan assets (gross obligation/DBO) and before reclassification to other provisions for restructuring measures.

The sensitivities of the parameters as at the reporting dates are as follows:

Sensitivity analysis of the defined benefit pension and severance payment obligations

31/12/2023	Change in parameters (percentage points)	Decrease in parameter/ change in present value of obligation in EUR '000	Increase in parameter/ change in present value of obligation in EUR '000
Discount rate	1.0	6,368	(5,587)
Salary increase	1.0	(4,431)	4,960
Pension increase	1.0	(1,144)	1,271

Sensitivity analysis of the defined benefit pension and severance payment obligations (previous year)

31/12/2022	Change in parameters (percentage points)	Decrease in parameter/ change in present value of obligation in EUR '000	Increase in parameter/ change in present value of obligation in EUR '000
Discount rate	1.0	6,542	(5,760)
Salary increase	1.0	(4,714)	5,263
Pension increase	1.0	(1,084)	1,203

The above sensitivity analyses represent hypothetical changes based on assumptions. Actual deviations from these assumptions will result in other effects. In particular, the parameters changed individually for the analysis may actually correlate with each other. The deduction of plan assets and of the amount reclassified to other provisions for restructuring will lead to a further reduction of the effects.

The weighted average terms (durations) of the defined benefit pension and severance payment obligations in years are as follows:

Weighted average durations of the defined benefit pension and severance payment obligations Years

	31/12/2023	31/12/2022
Austria – pensions	7	7
Austria – severance payments	8-21	7-11
Indonesia	7	7
Czech Republic	8	8

Defined contribution plans (for pensions and severance payments)

The Lenzing Group makes payments to pension funds and similar external funds for defined contribution pension and severance plans. The most significant defined contribution pension and severance plans for the Lenzing Group are located in Austria ("new severance payment system" and individual contractual commitments).

The expenses for defined contribution plans are as follows:

Expenses for defined contribution plans EUR '000

	2023	2022
Austria – pensions	2,227	2,098
Austria – severance payments	2,861	2,927
Other countries	6,335	5,557
Total	**11,423**	**10,581**

Provisions for jubilee benefits

Collective agreements require Lenzing AG and certain subsidiaries, particularly in Austria and the Czech Republic, to pay jubilee benefits to employees who have been with the company for a certain length of time. In the Austrian companies employees have the option to convert the jubilee benefits into time credits. No assets were segregated from the company and no contributions were made to a pension fund or any other external fund to cover these obligations. The jubilee benefits do not require any contributions by employees.

The obligations from jubilee benefits for employees (long-service bonuses) are considered other long-term employee benefits under IFRS. The net interest expense from jubilee benefits (expenses from the accrued interest on the obligations) is recorded under financing costs. The discount rate applied to the Austrian obligations is similar to the discount rate used for the other defined benefit plans. Employee turnover rates were determined separately for each company depending on the composition of the workforce and employees' length of service. Individual, country-specific assumptions were made for the discount rate, employee turnover rates and salary increases in the other countries.

The main actuarial parameters applied to the obligations for jubilee benefits are as follows:

Actuarial assumptions for the jubilee benefit obligations p. a. in %

31/12/2023	Discount rate	Salary increase	Staff turnover deductions
Austria	3.5	3.0	0.0-8.9
Czech Republic	3.9	4.5	1.6
31/12/2022			
Austria	4.2	3.0	0.0-7.7
Czech Republic	3.4	4.2	1.6

The following table shows the development of the obligation (provision) for jubilee benefits:

Development of the jubilee benefit obligation (provision) EUR '000

	2023	2022
As at 01/01	**14,899**	**18,812**
Service cost		
Current service cost	875	1,234
Net interest	608	201
Remeasurement during the reporting period		
On the basis of demographic assumptions	(1,017)	2
On the basis of financial assumptions	1,131	(5,078)
On the basis of experience adjustments	(482)	1,235
Income and expenses from jubilee benefit obligations recognized on the income statement	**1,115**	**(2,406)**
Cash flows		
Direct payments by employer	(1,247)	(1,508)
Currency translation adjustment	(1)	1
Other reconciliation items	**(1,248)**	**(1,507)**
As at 31/12	**14,766**	**14,899**

Other provisions

Other provisions developed as follows:

Development of other provisions EUR '000

2023	As at 01/01	Currency translation adjustment	Reclassi-fication	Utilization	Reversal	Addition	As at 31/12	Thereof current	Thereof non-current
Restructuring measures	21,125	0	(1,936)	(11,293)	(4,100)	20,291	**24,087**	24,087	0
Anticipated losses and other risks	23,545	(124)	0	(20)	(14,757)	2,163	**10,806**	10,806	0
Emission certificates	12,493	(4)	0	(10,813)	0	8,295	**9,972**	9,972	0
Sundry	8,134	(82)	0	(1,080)	(420)	666	**7,218**	656	6,562
Total	**65,297**	**(210)**	**(1,936)**	**(23,206)**	**(19,277)**	**31,415**	**52,082**	**45,521**	**6,562**

Development of other provisions (previous year) EUR '000

2022	As at 01/01	Currency translation adjustment	Reclassi-fication	Utilization	Reversal	Addition	As at 31/12	Thereof current	Thereof non-current
Restructuring measures	0	0	5,732	0	0	15,394	**21,125**	21,125	0
Anticipated losses and other risks	25,978	0	0	0	(7,977)	5,544	**23,545**	23,545	0
Emission certificates	6,508	14	0	(10,742)	0	16,713	**12,493**	12,493	0
Sundry	3,750	102	0	(370)	(39)	4,691	**8,134**	1,047	7,087
Total	**36,236**	**116**	**5,732**	**(11,112)**	**(8,016)**	**42,342**	**65,297**	**58,210**	**7,087**

The measurement of provisions is based on past experience, current cost and price information and estimates/appraisals by internal and external experts. The assumptions underlying the provisions are reviewed regularly. The actual values may differ from these assumptions if general conditions develop in contrast to expectations as at the reporting date. Changes are recognized in profit or loss when better information is available and the premises are adjusted accordingly.

As in the previous year, other provisions for restructuring measures in the 2023 financial year relate particularly to provisions due to staff reductions as part of reorganization and cost-cutting programs. The provisions were formed particularly for resultant severance payments and termination benefits. As of December 31, 2023, provisions of EUR 3,796 thousand (December 31, 2022: EUR 5,732 thousand) arising from previously formed provisions (in particular from the statutory provision for severance payments; see the section "Defined benefit plans (for pensions and severance payments)") were reported under provisions for restructuring measures. The remaining amount of the necessary provisions of EUR 20,291 thousand (2022: EUR 15,394 thousand) was allocated mainly to personnel expenses and to other operating expenses (administrative expenses). The total provisions of EUR 24,087 thousand (December 31, 2022: EUR 21,125 thousand) are expected to be fully utilized within the next 12 months.

Other provisions for anticipated losses and other risks include, in particular, provisions for onerous procurement contracts of EUR 10,772 thousand (December 31, 2022: EUR 23,300 thousand) and for other onerous contracts. Other provisions for emission certificates comprise the equivalent value of the emission certificates used.

Miscellaneous other provisions mainly relate to obligations for litigation in the amount of EUR 3,208 thousand (December 31, 2022: EUR 3,940 thousand) and include, in particular, provisions for legal defense costs in connection with a lawsuit in which, among other matters, Lenzing AG is being sued for damages (see note 40). The anticipated cash outflow is expected in the 2025 financial year.

The other current provisions and accruals are expected to lead to an outflow of funds within the next twelve months. The outflow of funds arising from the long-term portion of other provisions is dependent on various factors (in particular, guarantee and warranty periods, contract terms and other events).

Note 31. Trade payables

Liabilities that are part of reverse factoring agreements are evaluated to determine whether the original trade payable must still be reported or whether it must be derecognized and a new financial liability recognized in accordance with the agreement. The decisive factor is whether the Lenzing Group was released from its original obligation. In cases where there was no release from the original obligation, the Lenzing Group evaluates whether the reverse factoring agreement has led to a new obligation that must be recognized in addition to the trade payable. If that is also not the case, a present value test is carried out to determine whether the reverse factoring agreement has resulted in significant changes to the contractual terms of the trade payable which lead to derecognition of the trade payable and the recognition of a new financial liability.

Suppliers of the Lenzing Group finance their trade receivables from the Lenzing Group with reverse factoring agreements. These suppliers can commission their banks to forward payment for the receivables at an earlier point in time. The present value test indicates that these agreements do not significantly change the contract terms (in particular payment terms and interest rates). The agreements do not lead to the reclassification of the involved trade payables to another class of liability under civil law or IFRS regulations from the Lenzing Group's perspective. Consequently, there are no changes to the presentation on the consolidated statement of financial position (under trade payables) or the consolidated statement of cash flows (under cash flow from operating activities). The potentially affected trade payables totaled EUR 81,177 thousand as at December 31, 2023 (December 31, 2022: EUR 116,391 thousand). The carrying amount of the potentially affected trade payables for which the suppliers have already received payments from the banks stands at EUR 65,349 thousand (December 31, 2022: EUR 87,881 thousand). As in the previous year, the Lenzing Group has not provided any collateral.

The liquidity risk of the reverse factoring agreements consists of a concentration since the reverse factoring agreements currently in place have been made with only two financial institutions, giving rise to the risk of a revocation of the reverse factoring agreement by the same financial institution. The liabilities affected by these reverse factoring agreements are settled in accordance with the agreed due date. The related, estimated outflows are taken into account in liquidity planning. The Lenzing Group assesses the risk concentration with regard to sufficient financing sources as rather low because the risk spread of the Lenzing Group's financing over different financial institutions is maintained. Furthermore, the reverse factoring agreements include no material financing component and their discontinuation would therefore also not result in a significant increase in financing requirements. Liabilities relating to reverse factoring agreements amount to 3.3 percent as at the reporting date (December 31, 2022: 5.0 percent) relative to the group's total financial liabilities.

Information regarding the liquidity and foreign currency risk of the group exposure is presented in note 37.

Note 32. Other liabilities

Other non-current liabilities consist of the following:

Other non-current liabilities — EUR '000

	31/12/2023	31/12/2022
Other non-current financial liabilities (in particular from derivatives and contingent considerations as well as other financial liabilities)	8,434	0
Non-current non-financial accruals for personnel expenses	1,917	609
Other non-current non-financial liabilities (particularly partial retirement obligations)	3,208	3,006
Total	**13,559**	**3,615**

Other current liabilities consist of the following:

Other current liabilities — EUR '000

	31/12/2023	31/12/2022
Other current financial liabilities		
Derivatives not yet settled (open positions)	8,315	8,981
Other accruals	33,672	34,113
Contract liabilities – accruals for discounts and rebates (see note 5)	4,525	2,976
Debtor payments from factoring not yet forwarded	9,438	19,202
Other current financial liabilities	10,819	7,062
	66,769	**72,333**
Other current non-financial liabilities		
Liabilities from other taxes	6,503	6,315
Wage and salary liabilities	10,585	9,102
Social security liabilities	7,769	7,116
Contract liabilities – down payments received (see note 5)	12,198	12,298
Accruals for personnel expenses	24,018	24,134
Deferred income and other	1,403	1,706
	62,476	**60,671**
Total	**129,244**	**133,005**

The other accruals mainly cover liabilities for the delivery of goods and the performance of services by third parties which have not yet been invoiced.

The accruals for personnel costs consist primarily of liabilities for short-term claims by active and former employees (in particular, for unused vacation and compensation time, overtime and performance bonuses).

Note 33. Disclosures on the Consolidated Statement of Cash Flows

Liquid funds represent cash and cash equivalents as shown on the statement of financial position. Cash and cash equivalents include cash in hand and cash at banks, demand deposits, checks and short-term time deposits.

Other non-cash income and expenses both in the 2023 financial year and in the previous year include the measurement of inventories, financial assets, and other non-current financial assets. Other non-cash income/expenses also contain unrealized net exchange rate gains/losses and measurement effects from receivables.

Cash flows from investing activities (purchases of intangible assets, property, plant and equipment and biological assets) are adjusted either for payments not yet rendered to suppliers in the current period, or for payments rendered to suppliers for payables from prior periods. In the 2023 financial year, these are mainly payments to suppliers of payables from prior periods in the amount of EUR 29,821 thousand (2022 EUR 28,458 thousand).

Reconciliation of financial liabilities EUR '000

2023		Private placements	Bank loans	Loans from other lenders	Lease liabilities	Subtotal other financial liabilities	Total
As at 01/01		569,691	1,640,106	42,843	69,590	1,752,539	2,322,230
Cash flows	Increase in financial liabilities	0	226,023	617	0	226,640	**226,640**
	Repayment of financial liabilities	0	(140,711)	(5,542)	(23,979)	(170,232)	**(170,232)**
Non-cash changes	Currency translation adjustment	(2,118)	(42,473)	(49)	3,391	(39,131)	**(41,248)**
	Discounting/accrued interest	232	4,947	20	16,557	21,524	**21,756**
	Additions to lease liabilities	0	0	0	78,444	78,444	**78,444**
	Other changes	0	0	0	(1,895)	(1,895)	**(1,895)**
As at 31/12		**567,805**	**1,687,892**	**37,890**	**142,107**	**1,867,889**	**2,435,694**

Reconciliation of financial liabilities (previous year) EUR '000

2022		Private placements	Bank loans	Loans from other lenders	Lease liabilities	Subtotal other financial liabilities	Total
As at 01/01		637,841	1,342,661	57,183	63,475	1,463,320	2,101,161
Cash flows	Increase in financial liabilities	0	255,777	3,130	0	258,907	**258,907**
	Repayment of financial liabilities	(72,000)	(10,871)	(21,085)	(14,644)	(46,601)	**(118,601)**
Non-cash changes	Currency translation adjustment	3,592	47,440	2,611	4,989	55,040	**58,631**
	Discounting/accrued interest	258	5,099	1,004	7,025	13,128	**13,386**
	Additions to lease liabilities	0	0	0	14,191	14,191	**14,191**
	Other changes	0	0	0	(5,446)	(5,446)	**(5,446)**
As at 31/12		**569,691**	**1,640,106**	**42,843**	**69,590**	**1,752,539**	**2,322,230**

Notes on Risk Management

Note 34. Capital risk management

General information

The overriding objective of equity and debt management in the Lenzing Group is to optimize the income, expenditures and assets of the individual operations/business units and of the Group as a whole in order to achieve and maintain sustainably strong economic performance and a sound balance sheet structure. An important role in this process is played by financial leverage capacity, the protection of sufficient liquidity at all times and a clear focus on key cash-related and performance indicators in line with the Group's strategic course and long-term goals. This protects the ability of the group companies to operate on a going concern basis. In addition, the authorized capital and contingent capital give Lenzing AG greater flexibility in raising additional equity in order to take advantage of future market opportunities.

The equity management strategy followed by the Lenzing Group is designed to ensure that Lenzing AG and the other group companies have an adequate equity base to meet local requirements. For further details to the financial covenants see note 35 and 37 ("Liquidity risk" section).

Management uses an adjusted equity ratio for internal control purposes. Adjusted equity is calculated in accordance with IFRS and comprises equity as well as investment grants less the related deferred taxes. The adjusted equity ratio (= adjusted equity in relation to total assets) equaled 34.7 percent as at December 31, 2023 (December 31, 2022: 37.8 percent).

Adjusted equity is calculated as follows:

Adjusted equity EUR '000

		31/12/2023	31/12/2022
Equity		1,742,165	2,025,895
+	Government grants	86,244	82,774
-	Proportional share of deferred taxes on government grants	(19,338)	(20,045)
Total		**1,809,072**	**2,088,625**

The dividend policy of Lenzing AG, as the parent company of the Lenzing Group, is based on the principles of continuity and a long-term focus in order to support the future development of the company, to distribute dividends to shareholders in line with the company's opportunity and risk situation, and to appropriately reflect the interests of all other stakeholders who are decisive for the company's success.

Net financial debt

The Supervisory Board and Managing Board of Lenzing AG regularly review the development of net financial debt because this indicator is an extremely important benchmark not only for the Group's management, but also for the financing banks. The ratio of net financial debt to EBITDA is particularly relevant. The continued optimal development of the Lenzing Group is only possible with convincing internal financing strength as the basis for increased debt capacity. Since the second quarter of the 2023 financial year, net financial debt has been presented excluding lease liabilities (see note 35, table "Carrying amounts, category, fair values and fair value hierarchy of financial instruments"). In previous financial years, lease liabilities were included in net financial debt. The change in the calculation was implemented as key Lenzing Group stakeholders also monitor net financial debt excluding lease liabilities.

Interest-bearing financial liabilities are classified as follows:

Interest-bearing financial liabilities EUR '000

	31/12/2023	31/12/2022
Non-current financial liabilities	1,906,702	2,071,948
Current financial liabilities	528,992	250,282
Total	**2,435,694**	**2,322,230**

Liquid assets consist of the following:

Liquid assets EUR '000

	31/12/2023	31/12/2022
Cash and cash equivalents	725,639	446,873
Liquid bills of exchange (in trade receivables)	5,398	6,393
Total	**731,037**	**453,265**

Net financial debt in absolute terms and in relation to EBITDA (see note 4) is as follows:

Net financial debt (absolute) EUR '000

	31/12/2023	31/12/2022
Interest-bearing financial liabilities	2,435,694	2,322,230
- Liquid assets	(731,037)	(453,265)
Net financial debt incl. lease liabilities	**1,704,657**	**1,868,965**
- Current lease liabilities	(9,783)	(6,244)
- Non-current lease liabilities	(132,324)	(63,346)
Net financial debt	**1,562,550**	**1,799,375**[1]

1) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities.

Net financial debt in relation to EBITDA EUR '000

	31/12/2023	31/12/2022
EBITDA	303,318	241,916
Net financial debt / EBITDA	5.2	7.4[1]

1) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities.

Note 35. Disclosures on financial instruments

Carrying amounts, fair values, measurement categories and measurement methods

The following table shows the carrying amounts and fair values of the financial assets and financial liabilities for each class and each IFRS 9 category and reconciles this information to the appropriate line items on the statement of financial position. “Other assets” (non-current and current) and “Other liabilities” (non-current and current) as reported on the statement of financial position include financial instruments as well as non-financial assets and liabilities. Therefore, the “no financial instrument” column allows for a complete reconciliation with the line items on the statement of financial position. Lease liabilities which are to be considered financial liabilities but cannot be allocated to a measurement category in accordance with IFRS 9 are also reported in this column.

Carrying amounts, category, fair value and fair value hierarchy of financial instruments **EUR '000**

	Carrying amount						Fair value	
Financial assets as at 31/12/2023	**At amortized cost**	**At fair value through profit or loss**	**At fair value through other comprehensive income**		**No financial instrument**	**Total**	**Fair value**	**Fair value hierarchy**
			Equity instruments	**Cash flow hedges**				
Originated loans	14,561					**14,561**	14,561	[1]
Non-current securities		6,464	0			**6,464**	6,464	Level 1
Other equity investments			12			**12**	12	[1]
Current securities			18,721			**18,721**	18,721	Level 1
Financal assets (current and non-current)	**14,561**	**6,464**	**18,734**	**0**	**0**	**39,759**	**39,759**	
Trade receivables	**294,480**	**0**	**0**	**0**	**0**	**294,480**	**294,480**	[1]
Derivatives with a positive fair value (cash flow hedges)				30,817		**30,817**	30,817	Level 2
Derivatives with a positive fair value (cash flow hedges with the underlying already recognized in profit or loss)		7,113				**7,113**	7,113	Level 2
Other	24,098	0			216,518	**240,615**	24,098	Level 3
Other assets (current and non-current)	**24,098**	**7,113**	**0**	**30,817**	**216,518**	**278,545**	**62,028**	
Cash and cash equivalents	**725,639**	**0**	**0**	**0**	**0**	**725,639**	**725,639**	[1]
Total	**1,058,777**	**13,577**	**18,734**	**30,817**	**216,518**	**1,338,423**	**1,121,905**	

	Carrying amount						Fair value	
Financial liabilities as at 31/12/2023	**At amortized cost**	**At fair value through profit or loss**	**At fair value through other comprehensive income**		**No financial instrument**	**Total**	**Fair value**	**Fair value hierarchy**
			Cash flow hedges/Fair value hedges	**Retained earnings**				
Private placements	567,805					**567,805**	560,533	Level 3
Liabilities to banks	1,687,892					**1,687,892**	1,743,524	Level 3
Liabilities to other lenders	37,890					**37,890**	36,800	Level 3
Lease liabilities					142,107	**142,107**		
Financial liabilities	**2,293,587**	**0**	**0**	**0**	**142,107**	**2,435,694**	**2,340,857**	
Trade payables	**296,322**	**0**	**0**	**0**	**0**	**296,322**	**296,322**	[1]
Provisions (current)	**0**	**0**	**0**	**0**	**52,599**	**52,599**		
Puttable non-controlling interests	**0**	**0**	**0**	**249,418**	**0**	**249,418**	**249,418**	Level 3
Derivatives with a negative fair value (cash flow hedges)			11,534			**11,534**	11,534	Level 2
Derivatives with a negative fair value (cash flow hedges with the underlying already recognized in profit or loss)		142				**142**	142	Level 2
Contingent consideration		877				**877**	877	Level 2
Other	62,650				67,601	**130,250**	62,650	[1]
Other liabilities (current and non-current)	**62,650**	**1,019**	**11,534**	**0**	**67,601**	**142,804**	**75,203**	
Total	**2,652,559**	**1,019**	**11,534**	**249,418**	**262,307**	**3,176,837**	**2,961,800**	

1) The carrying amount approximates fair value.

Carrying amounts, category, fair value and fair value hierarchy of financial instruments (previous year)

EUR '000

Financial assets as at 31/12/2022	Carrying amount						Fair value	
	At amortized cost	At fair value through profit or loss	At fair value through other comprehensive income		No financial instrument	Total	Fair value	Fair value hierarchy
			Equity instruments	Cash flow hedges				
Originated loans	8,403					**8,403**	8,403	[1]
Non-current securities		6,198	14,356			**20,554**	20,554	Level 1
Other equity investments			12			**12**	12	[1]
Current securities			12,395			**12,395**	12,395	Level 1
Financal assets (current and non-current)	**8,403**	**6,198**	**26,763**	**0**	**0**	**41,363**	**41,363**	
Trade receivables	**293,611**	**0**	**0**	**0**	**0**	**293,611**	**293,611**	[1]
Derivatives with a positive fair value (cash flow hedges)				55,494		**55,494**	55,494	Level 2
Derivatives with a positive fair value (cash flow hedges with the underlying already recognized in profit or loss)		1,673				**1,673**	1,673	Level 2
Other	32,279	4,087			230,359	**266,726**	36,366	Level 3
Other assets (current and non-current)	**32,279**	**5,761**	**0**	**55,494**	**230,359**	**323,893**	**93,534**	
Cash and cash equivalents	**446,873**	**0**	**0**	**0**	**0**	**446,873**	**446,873**	[1]
Total	**781,165**	**11,958**	**26,763**	**55,494**	**230,359**	**1,105,740**	**875,380**	

Financial liabilities as at 31/12/2022	Carrying amount						Fair value	
	At amortized cost	At fair value through profit or loss	At fair value through other comprehensive income		No financial instrument	Total	Fair value	Fair value hierarchy
			Cash flow hedges/Fair value hedges	Retained earnings				
Private placements	569,691					**569,691**	542,894	Level 3
Liabilities to banks	1,640,106					**1,640,106**	1,640,731	Level 3
Liabilities to other lenders	42,843					**42,843**	37,635	Level 3
Lease liabilities					69,590	**69,590**		
Financial liabilities	**2,252,641**	**0**	**0**	**0**	**69,590**	**2,322,230**	**2,221,259**	
Trade payables	**435,433**	**0**	**0**	**0**	**0**	**435,433**	**435,433**	[1]
Provisions (current)	**0**	**0**	**0**	**0**	**66,295**	**66,295**		
Puttable non-controlling interests	**0**	**0**	**0**	**266,085**	**0**	**266,085**	**266,085**	Level 3
Derivatives with a negative fair value (cash flow hedges)			7,602			**7,602**	7,602	Level 2
Derivatives with a negative fair value (cash flow hedges with the underlying already recognized in profit or loss)		1,380				**1,380**	1,380	Level 2
Other	63,352				64,286	**127,638**	63,352	[1]
Other liabilities (current and non-current)	**63,352**	**1,380**	**7,602**	**0**	**64,286**	**136,619**	**72,333**	
Total	**2,751,425**	**1,380**	**7,602**	**266,085**	**200,170**	**3,226,662**	**2,995,111**	

1) The carrying amount approximates fair value.

Depending on the classification/measurement category, financial instruments are subsequently measured at (amortized) cost or fair value. The Lenzing Group uses the following measurement categories: "at amortized cost", "at fair value through profit or loss" and "at fair value through other comprehensive income". The measurement category "at fair value through profit or loss" is solely used for financial assets that are mandatorily measured at fair value.

The Lenzing Group accounts for reclassifications in the fair value hierarchy at the end of the reporting period in which the changes occur. In the 2023 and 2022 financial years, no shifts occurred between the various levels of the fair value hierarchy for financial instruments.

The measurement of financial instruments is monitored and reviewed by the Lenzing Group. The necessary market data are validated based on the dual control principle.

In light of the varying influencing factors, the fair values presented can only be regarded as indicators of the values that could actually be realized on the market.

Financial assets

Securities are measured at fair value and are recognized directly in equity due to the exercise of the corresponding option. In the 2023 and 2022 financial years, some of the shares in Spinnova OY, Jyväskylä, Finland, and some of the ordinary shares in Oberbank, were divested (see note 22).

The fair value of shares is derived from the current stock exchange prices. These securities are assigned to the category "at fair value through other comprehensive income".

The fair value of investment funds is derived from the latest calculated value. These securities are assigned to the category "at fair value through profit or loss".

The other equity investments are classified as "at fair value through other comprehensive income".

Other financial assets

Other financial assets from earn-out agreements are classified "at fair value through profit or loss". The fair value of these other financial assets is determined based on an income approach. It is to be categorized in level 3 of the fair value hierarchy. The measurement model is based on the planned EBITDA, the weighted average cost of capital (WACC) after tax and the repayment terms.

Due to the medium-term planning provided and the resultant budgeted EBITDAs, realistically expected changes in the discount rate (WACC) after taxes and the repayment terms do not lead to a positive fair value. For this reason, a sensitivity analysis was not conducted as at December 31, 2023.

Development of level 3 fair values of other financial assets **EUR '000**

	2023	2022
As at 01/01	4,087	4,087
Gain/loss included in financial result	(4,087)	0
As at 31/12	**0**	**4,087**

A change in significant unobservable input factors would have had the following effect on the measurement of other financial assets as at December 31, 2022:

Sensitivity analysis of level 3 input factors for other financial assets **EUR '000**

	Financial result	
	31/12/2022	
Other financial assets	**Increase**	**Decrease**
EBITDA (+/- 5 %)	133	(166)
Discount rate (WACC) after tax (+/- 1 %)	(747)	926
Repayment two years earlier	395	n/a

The sensitivities were determined by conducting the measurements again using the changed parameters.

Puttable non-controlling interests

The Dexco-Group (formerly known as Duratex Group) has a put option and has the right to sell its shares in LD Celulose S.A., Indianópolis, Brazil if a change of control occurs regarding the owner of the Lenzing Group (change of control clause). This obligation is recognized under liabilities from puttable non-controlling interests. The liability from redeemable non-controlling interests is subsequently measured at fair value directly through retained earnings (not in profit or loss). The fair value of these puttable non-controlling interests is determined based on the planned or projected cash flows less cost of disposal and net debt at the measurement date. The budget approved by the Management and Supervisory Boards and the medium-term plans approved by the Management Board are the starting point for the cash flow projections. After the detailed planning period of five years, a 25-year return based on a sustainable EBITDA margin is expected based on the assumptions for the last year. The planning period for the calculation of fair value is contractually limited to a maximum of 30 years. Cash flows are discounted to their present value with a discounted cash flow method. The applied discount rate represents a composite figure (weighted average cost of capital – WACC) that combines the average interest rate for debt and the anticipated return on equity employed. An after-tax WACC of 8.2 percent (December 31, 2022: 8.8 percent) was used at the measurement date. Fair value measurement is classified in full as level 3 of the fair value hierarchy because key input factors (in particular, cash flows) cannot be observed on the market.

Development of level 3 fair values of puttable non-controlling interest EUR '000

	2023	2022
As at 01/01	266,085	234,409
Measurement of puttable non-controlling interest recognized directly in equity	(16,667)	31,676
As at 31/12	**249,418**	**266,085**

The determined fair value would increase (decrease) if the operating margin increased (decreased) or if the after-tax WACC decreased (increased). A change of these unobservable input factors would have the following effects on the measurement of puttable non-controlling interests:

Sensitivity analysis of level 3 input factors for puttable non-controlling interest EUR '000

	Measurement result offset against retained earnings			
	31/12/2023		31/12/2022	
Puttable non-controlling interests	**Increase**	**Decrease**	**Increase**	**Decrease**
EBITDA (+/- 1 %)	8,879	(8,879)	9,032	(9,032)
Discount rate (WACC) after tax (+/- 0.25 %)	(16,142)	16,649	(16,450)	17,017

The sensitivities are determined by conducting the measurements again using the changed parameters.

The loan agreements, which were concluded for the construction of the dissolving wood pulp pant in Brazil (see note 28), include, at the company level and group level financial covenants that relate to financial and liquidity ratios or other financial criteria and may trigger an obligation to repay the financial liabilities if the covenants are not met. These financial covenants are regularly monitored by the Global Treasury department and are considered in the determination of distributions by the group companies involved. All financial covenants were met during the reporting year. Lenzing AG and the joint venture partner have committed to a fixed debt/equity ratio of the project company (63/37) and guarantee the financial liabilities of the project company in the amount of their share in the capital. Lenzing AG therefore guarantees 51 percent. Due to the full consolidation, 100 percent of the project company's financial liabilities are included in the consolidated statement of financial position.

Other financial liabilities

The fair values of the other financial liabilities are determined in accordance with generally accepted valuation methods based on the discounted cash flow method. The most important input factor is the discount rate, which incorporates the available market data (risk-free interest rates) and the credit standing of the Lenzing Group, which is not observable on the market. The fair values of the financial guarantee contracts represent the estimated expected default arising from the maximum possible payment obligation and the expected loss.

The fair value of the contingent consideration is determined by means of option valuation using an arbitrage-free Monte Carlo model approach. The gas price (TTF ICE) is the main input factor in this context. This liability is assigned to the category "at fair value through profit or loss".

Derivative financial instruments and hedges

Derivatives are measured at fair value. The fair value corresponds to the applicable market value, if available, or is calculated using standard methods based on the market data available at the measurement date (in particular exchange rates and interest rates). Currency and commodity forwards are measured at the respective forward rate or price at the reporting date. These forward rates or prices are based on the spot rates or prices and include forward premiums and discounts. The Group's own models are used to estimate the measurement. The measurement of derivatives also includes the counterparty risk (credit risk/counterparty risk/non-performance risk) in the form of discounts to the fair value that would be used by a market participant for pricing.

As a matter of principle, the Lenzing Group applies the hedge accounting rules defined by IFRS 9 to the following derivative financial instruments. The retrospective hedging effect or ineffectiveness is evaluated with the dollar-offset method, which compares the accumulated changes in the fair value of the hedged items with the accumulated changes in the fair value of the hedges in line with the compensation method.

The measurement of the hedged item is offset by the hedge and is therefore effective. Risks of ineffectiveness include the credit risk of a counterparty, a significant change in the credit risk of a contractual party in the hedging relationship or the change of time of payment of the hedged item, reduction of the total invoice amount or price of the hedged item. Risks are always hedged in their entirety. The target hedging ratio for the hedged nominal values is about 67 percent.

The critical terms of payment of the hedged items and hedging instruments (in particular, the nominal value and time of payment) are generally identical or offset one another ("critical terms match"). Therefore, when forming a measurement unit, the Managing Board considers the offsetting of value changes of the hedged items and of the hedging instrument resulting from changes of the hedged risk as highly effective.

Cash flow hedge derivatives for currency risks

The Lenzing Group uses derivative financial instruments to hedge currency risks arising from the operating business. These derivative financial instruments serve to balance the variability of cash flows from future transactions. Hedges are determined in advance on the basis of the expected purchases and sales in the relevant foreign currency. In hedging future cash flows in foreign currencies (cash flow hedges), the Lenzing Group typically hedges the risk up to the time of the foreign currency payment. Hedge effectiveness is measured by grouping the hedged items and hedging instruments together in at least quarterly maturity ranges for each hedged risk. Cash flow hedges whose underlying hedged item was already recognized in profit or loss are used to hedge foreign currency receivables/liabilities that were recognized at the reporting date but do not impact cash until a later time.

When forward foreign exchange contracts concluded to hedge the currency risk of highly probable expected capital contributions are realized, the amounts of the changes in value initially recognized in other comprehensive income are reclassified to the foreign currency translation reserve. No reclassification occurred as of December 31, 2023, as the forward foreign exchange transactions concluded to hedge the currency risk were realized in full in the 2022 financial year. As of December 31, 2022, an amount of EUR 1,525 thousand was reclassified to the foreign currency translation reserve.

The nominal values and fair values of the cash flow hedges are as follows as at the reporting date:

Nominal value, fair value and hedging period of cash flow hedge derivatives for currency risks

	31/12/2023							EUR '000
		Nominal value in '000	**Positive fair value**	**Negative fair value**	**Net fair value**	**Hedging period until**	**Average hedging rate**	**Change in fair value used to calculate ineffectiveness**
Forward foreign exchange contracts								
CNY/CNH-sale / EUR-buy	CNY/CNH	614,700	1,223	(116)	1,107	11/2024	7.70	936
CNY/CNH-sale / GBP-buy	CNY/CNH	172,300	291	(27)	264	11/2024	8.79	256
BRL buy / USD sale	BRL	265,000	1,429	0	1,429	09/2024	5.08	1,305
USD-sale / CZK-buy	USD	111,300	429	(1,802)	(1,373)	12/2024	22.21	(3,051)
USD-sale / EUR-buy	USD	33,200	329	(72)	257	12/2024	1.10	255
Total			**3,702**	**(2,018)**	**1,684**			**(299)**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.

Nominal value, fair value and hedging period of cash flow hedge derivatives for currency risks (previous year)

	31/12/2022							EUR '000
		Nominal value in '000	**Positive fair value**	**Negative fair value**	**Net fair value**	**Hedging period until**	**Average hedging rate**	**Change in fair value used to calculate ineffectiveness**
Forward foreign exchange contracts								
CNY/CNH-sale / EUR-buy	CNY/CNH	605,100	3,060	0	3,060	12/2023	7.23	1,220
CNY/CNH-sale / GBP-buy	CNY/CNH	159,000	634	(215)	419	12/2023	8.18	5
BRL buy / USD sale	BRL	150,736	12	(1,543)	(1,532)	09/2023	5.41	73
EUR-sale / GBP-buy	EUR	1,200	0	(46)	(46)	03/2023	0.86	(46)
USD-sale / CZK-buy	USD	118,100	7,202	(42)	7,161	12/2023	24.19	6,578
USD-sale / EUR-buy	USD	35,600	1,509	(287)	1,222	12/2023	1.06	1,309
Total			**12,416**	**(2,132)**	**10,284**			**9,140**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.

The carrying amounts and the ineffectiveness of the hedged items (purchases and sales) designated as hedging instruments as of the balance sheet dates are as follows:

Disclosures on hedged items of cash flow hedge derivatives for currency risks – ineffectiveness **EUR '000**

	2023			2022		
Currency risks	**Change in fair value used to calculate ineffectiveness**	**Ineffectiveness**	**Line item in the income statement**	**Change in fair value used to calculate ineffectiveness**	**Ineffectiveness**	**Line item in the income statement**
Sales	(1,604)	0	Financial result	9,067	0	Financial result
Purchases	1,305	0	Financial result	73	0	Financial result
Total	**(299)**	**0**		**9,140**	**0**	

Cash flow hedge derivatives for combined interest rate/currency risks and interest rate risks

The Lenzing Group deploys derivative financial instruments in order to hedge interest rate/currency risks arising from private placements denominated in US dollars. Hedges are utilized to offset the variability of interest and principal payments resulting from the hedged item.

The Lenzing Group uses derivative financial instruments to hedge interest rate risks arising from loans taken out with variable interest rates. These hedges are used to offset the variability of cash flows from future interest payments resulting from the hedged item.

The nominal values and fair values of the cash flow hedge derivatives for combined interest rate/currency risks and interest rate risks are as follows as at the reporting dates:

Nominal, fair value and hedging period of cash flow hedge derivatives for combined interest rate/currency risks and interest rate risks

	31/12/2023							EUR '000
	Nominal in EUR '000	**Positive fair value**	**Negative fair value**	**Net fair value**	**Hedging period until**	**Average fixed interest rate**	**Average hedging rate**	**Change in fair value used to calculate ineffectiveness**
Interest rate and currency derivatives								
Fixed purchase / variable sale USD purchase / EUR sale[1]	58,824	2,012	0	2,012	12/2024	0.75	1.10	2,143
	58,824	**2,012**	**0**	**2,012**				**2,143**
Interest rate derivative								
Fixed purchase / variable sale	100,000	0	(2,109)	(2,109)	12/2028	2.98	-	(2,099)
Fixed purchase / variable sale[1]	393,213	25,103	0	25,103	06/2029	1.83	-	25,233
	493,213	**25,103**	**(2,109)**	**22,994**				**23,134**
Total	**552,036**	**27,116**	**(2,109)**	**25,006**				**25,276**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.
1) As of December 31, 2022, the underlying contracts were linked to the USD LIBOR reference interest rate and were switched to the alternative Secured Overnight Financing Rate (SOFR) reference interest rate in the 2023 financial year.

Nominal, fair value and hedging period of cash flow hedge derivatives for combined interest rate/currency risks and interest rate risks (previous year)

	31/12/2022							EUR '000
	Nominal in EUR '000	Positive fair value	Negative fair value	Net fair value	Hedging period until	Average fixed interest rate	Average hedging rate	Change in fair value used to calculate ineffective-ness
Interest rate and currency derivatives								
Fixed purchase / variable sale USD purchase / EUR sale[1]	60,941	5,724	0	5,724	12/2024	0.75	1.10	5,854
		5,724	**0**	**5,724**				**5,854**
Interest rate derivative								
Fixed purchase / variable sale[1]	444,403	37,354	0	37,354	06/2029	1.83	-	37,354
		37,354	**0**	**37,354**				**37,354**
Total		**43,078**	**0**	**43,078**				**43,208**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.
1) As of December 31, 2022, the underlying contracts were linked to the USD LIBOR reference interest rate and were switched to the alternative Secured Overnight Financing Rate (SOFR) reference interest rate in the 2023 financial year.

The carrying amounts and the ineffectiveness of the hedged items (loans) designated as hedging instruments as at the balance sheet dates are as follows:

Disclosures relating to hedged items of cash flow hedge derivatives for combined interest rate/currency risks and interest rate risks – ineffectiveness

EUR '000

	2023			2022		
	Change in fair value used to calculate ineffectiveness	Ineffectiveness	Line item in the income statement	Change in fair value used to calculate ineffectiveness	Ineffectiveness	Line item in the income statement
Combined interest/ currency rate						
Fixed purchase / variable sale USD purchase / EUR sale[1]	2,143	0	Financial result	5,854	0	Financial result
	2,143	**0**		**5,854**	**0**	
Interest rate derivative						
Fixed purchase / variable sale[1]	23,134	(10)	Financial result	37,354	0	Financial result
	23,134	**(10)**		**37,354**	**0**	
Total	**25,276**	**(10)**		**43,208**	**0**	

1) As of December 31, 2022, the underlying contracts were linked to the USD LIBOR reference interest rate and were switched to the alternative Secured Overnight Financing Rate (SOFR) reference interest rate in the 2023 financial year.

Cash flow hedge derivatives for commodity price risks

In addition to physical purchase contracts, the Lenzing Group deploys derivative financial instruments in order to hedge against gas price risks. These hedges are used to offset the variability of cash flows from future gas price payments deriving from the hedged item.

The nominal values and fair values of the commodity hedges are as follows as at the reporting dates:

Nominal value, fair value and hedging periof of cash flow hedge derivatives for commodity price risks

					31/12/2023			EUR '000
		Nominal in MWh	Positive fair value	Negative fair value	Net fair value	Hedging period until	Average hedging rate	Change in fair value used to calculate ineffectiveness
Commodity derivatives								
Gas purchase	EUR	33,699	0	(665)	(665)	09/2024	52.00	(661)
Gas purchase	EUR	8,779	0	(118)	(118)	03/2025	51.60	(118)
Gas purchase	GBP	17,206	0	(256)	(256)	09/2024	40.63	(256)
Gas purchase	GBP	250,702	0	(5,234)	(5,234)	12/2024	46.93	(5,200)
Gas purchase	GBP	16,642	0	(235)	(235)	03/2025	47.44	(235)
Gas purchase	GBP	33,871	0	(436)	(436)	06/2025	43.86	(436)
Gas purchase	GBP	45,342	0	(464)	(464)	09/2025	40.05	(464)
		406,243	**0**	**(7,407)**	**(7,407)**			**(7,369)**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.

Nominal value, fair value and hedging periof of cash flow hedge derivatives for commodity price risks (previous year)

					31/12/2022			EUR '000
		Nominal in MWh	Positive fair value	Negative fair value	Net fair value	Hedging period until	Average hedging rate	Change in fair value used to calculate ineffectiveness
Commodity derivatives								
Gas purchase	EUR	94,925	0	(4,281)	(4,281)	12/2023	99.54	(4,281)
Gas purchase	GBP	65,925	0	(1,188)	(1,188)	12/2023	88.05	(1,188)
		160,850	**0**	**(5,469)**	**(5,469)**			**(5,469)**

Fair value: + = receivable, – = liability from the Lenzing Group's perspective
The hedging period represents the period for the expected cash flows and their recognition in profit or loss.

The carrying amounts and the ineffectiveness of the hedged items designated as hedging instruments as at the balance sheet dates are as follows:

Disclosures relating to hedged items of cash flow hedge derivatives for commodity price risks – ineffectiveness EUR '000

	2023			2022		
Commodity derivatives	**Change in fair value used to calculate ineffectiveness**	**Ineffectiveness**	**Line item in the income statement**	**Change in fair value used to calculate ineffectiveness**	**Ineffectiveness**	**Line item in the income statement**
Commodity price risks						
Purchases	(7,369)	(38)	Cost of sales	(5,469)	0	Cost of sales
Total	**(7,369)**	**(38)**		**(5,469)**	**0**	

Hedging Reserve

The change in the hedging reserve is as follows:

Changes in the hedging reserve EUR '000

	2023			2022		
	Hedging reserve	**Cost of hedging**	**Total**	**Hedging reserve**	**Cost of hedging**	**Total**
Hedging reserve as at 01/01	28,609	10,776	39,385	(39,658)	9,086	(30,573)
Currency risks	13,911	0	13,911	(7,293)	1,144	(6,150)
Combined interest rate/currency risks	3,241	(3,417)	(176)	6,689	(5)	6,684
Interest rate risks	4,017	0	4,017	39,886	0	39,886
Commodity price risks	(18,268)	0	(18,268)	841	0	841
Cash flow hedges – changes in fair value recognized during the year	2,901	(3,417)	(516)	40,122	1,138	41,260
Currency risks	(17,749)	(1,858)	(19,607)	26,774	444	27,217
Commodity price risks	16,500	0	16,500	(6,332)	0	(6,332)
Reclassification to earnings before interest and tax (EBIT)	(1,249)	(1,858)	(3,107)	20,442	444	20,885
Currency risks	(5,571)	(125)	(5,696)	(1,938)	(4)	(1,941)
Reclassification to inventories	(5,571)	(125)	(5,696)	(1,938)	(4)	(1,941)
Currency risks	0	0	0	9,073	112	9,185
Reclassification to property, plant and equipment	0	0	0	9,073	112	9,185
Combined interest rate/currency risks	(3,740)	0	(3,740)	568	0	568
Interest rate risks	(17,295)	0	(17,295)	0	0	0
Reclassification to financial result	(21,035)	0	(21,035)	568	0	568
Hedging reserve as at 31/12	**3,654**	**5,377**	**9,031**	**28,609**	**10,776**	**39,385**

Offsetting financial assets and liabilities

The Lenzing Group has concluded a number of framework netting agreements (in particular, master netting arrangements) with some credit institutions. The amounts owed by each counterparty under such agreements on a single day in the same currency based on the total outstanding transactions are aggregated into a single net amount to be paid by one party to the other.

The following tables present information on offsetting financial assets and liabilities in the consolidated statement of financial position on the basis of framework netting agreements. The (gross) amounts presented in the "Financial assets" and "Financial liabilities" columns correspond to the (net) financial assets and liabilities recognized in the statement of financial position. The column "effect of framework netting agreements" shows the amounts which result from these types of agreements, but which do not meet the criteria for offsetting in the IFRS consolidated statement of financial position.

Offsetting of financial instruments EUR '000

Financial assets as at 31/12/2023	Financial assets (gross=net)	Effect of framework netting agreements	Net amounts
Other financial assets – derivative financial instruments with a positive fair value	37,930	(885)	37,045
Financial assets as at 31/12/2022			
Other financial assets – derivative financial instruments with a positive fair value	57,167	(1,681)	55,486

Offsetting of financial instruments EUR '000

Financial liabilities as at 31/12/2023	Financial liabilities (gross=net)	Effect of framework netting agreements	Net amounts
Other financial liabilities – derivative financial instruments with a negative fair value	12,553	(885)	11,668
Financial liabilities as at 31/12/2022			
Other financial liabilities – derivative financial instruments with a negative fair value	8,981	(1,681)	7,300

Transfer of financial assets (sale of receivables/ factoring)

Factoring agreements are in place which require the banks to purchase certain trade receivables from the Lenzing Group for a revolving monthly nominal amount. The Lenzing Group is entitled to sell these receivables. The agreements have indefinite terms, whereby each party has the right to cancel the agreements with notice and allow them to expire. Factoring agreements that have been inactive since 2017 were utilized again in the 2022 financial year. As at December 31, 2023 the factoring agreements have a maximum usable nominal volume totaling EUR 80,000 thousand (December 31, 2022: EUR 60,000 thousand), of which USD 33,000 thousand (December 31, 2022: USD 33,000 thousand) in US dollars can be utilized.

The risks relevant to the risk assessment of the receivables sold include credit default risk (del credere risk), foreign currency risk in the case of receivables denominated in foreign currencies, and the risk of late payments. Credit risk-related defaults and, in the case of receivables in foreign currencies, exchange rate fluctuations represent the main opportunities and risks associated with these receivables. The risk of late payments is borne by the Lenzing Group in all factoring agreements and is considered to be negligible.

The Lenzing Group assumes a default liability of 10 percent per payment default. This amount, which cannot be reimbursed by another party, is not advanced by the bank. The remaining credit default risk (90 percent per default) and – in the case of receivables not denominated in the reporting currency – foreign currency risk is assumed by the bank. As a consequence, the main opportunities and risks were divided between the Lenzing Group and the bank; however, the power of disposal over the receivables was transferred to the bank. The Lenzing Group has undertaken to take out credit insurance for the receivables sold and to assume responsibility for debtor management. The banks involved have the right to transfer overdue receivables back to the Lenzing Group for procedural reasons in the event of a legal dispute. However, this does not transfer the credit default risk back to the Lenzing Group and has no effect on the Lenzing Group's liquidity position.

As at December 31, 2023, receivables under the factoring agreements totaling EUR 77,442 thousand (December 31, 2022: EUR 57,149 thousand) were sold and derecognized from the Lenzing Group's consolidated statement of financial position. As at December 31, 2023, the unadvanced amount was recognized under other current assets (financial) in the amount of EUR 7,744 thousand (December 31, 2022: EUR 5,715 thousand). The fair values correspond approximately to the stated carrying amounts, as especially the remaining terms of the respective receivables are also categorized as current.

From the Lenzing Group's perspective, the unadvanced amount stated above corresponds to the theoretical maximum credit-risk-related loss for the assumption of the default liability. The fair value of this default liability amounts to EUR 12 thousand as at December 31, 2023 (December 31, 2022: EUR 34 thousand). An other current liability (financial) equivalent to the fair value of this contingent liability was recognized. For the obligations assumed and risks arising from the factoring agreements, EUR 20 thousand other current liabilities (financial) were recognized as at December 31, 2023 (December 31, 2022: EUR 152 thousand). In the 2023 financial year, service fees amounting to EUR 172 thousand were expensed (2022: EUR 152 thousand) in the other operating expenses. Since the start of the agreement, a cumulative amount of EUR 511 thousand has been expensed. At the time of the transfer of the receivables, a total of EUR 315 thousand was expensed.

Payments received from customers in the period between the last advance and December 31 are deferred in other current liabilities (financial).

Note 36. Net interest and net result from financial instruments and net foreign currency result

Net interest and net result

The following table shows the net interest and net result from financial instruments by class/measurement category in accordance with IFRS 9:

Net interest and net result from financial instruments EUR '000

2023	Interest income	Interest expense	Net interest	From subsequent measurement at fair value through profit or loss	From subsequent measurement at fair value through other comprehensive income	Measured at fair value through other comprehensive income and reclassified to profit or loss	From impairment/ reversal of an impairment loss	Result on disposal	Net result (total)
Financial assets measured at amortized cost	16,270	0	**16,270**	0	0	0	(6,534)	0	**9,737**
Financial assets measured at fair value through profit or loss	64	0	**64**	1,628	0	0	(4,087)	0	**(2,395)**
Equity instruments measured at fair value through other comprehensive income	203	0	**203**	0	(3,412)	0	0	0	**(3,209)**
Financial liabilities measured at amortized cost	0	(124,091)	**(124,091)**	0	0	0	0	0	**(124,091)**
Financial liabilities measured at fair value through profit or loss	0	0	**0**	57	0	0	0	0	**57**
Total	**16,537**	**(124,091)**	**(107,553)**	**1,685**	**(3,412)**	**0**	**(10,621)**	**0**	**(119,902)**

Net interest and net result from financial instruments (previous year) EUR '000

2022	Interest income	Interest expense	Net interest	From subsequent measurement at fair value through profit or loss	From subsequent measurement at fair value through other comprehensive income	Measured at fair value through other comprehensive income and reclassified to profit or loss	From impairment/ reversal of an impairment loss	Result on disposal	Net result (total)
Financial assets measured at amortized cost	10,859	0	**10,859**	0	0	0	(2,883)	0	**7,976**
Financial assets measured at fair value through profit or loss	48	0	**48**	(775)	0	0	(26)	0	**(753)**
Equity instruments measured at fair value through other comprehensive income	140	0	**140**	0	(16,830)	0	0	0	**(16,690)**
Financial liabilities measured at amortized cost	0	(68,302)	**(68,302)**	0	0	0	0	0	**(68,302)**
Total	**11,047**	**(68,302)**	**(57,255)**	**(775)**	**(16,830)**	**0**	**(2,909)**	**0**	**(77,769)**

The net result from financial instruments comprises the following: net interest (current interest income and expenses, including the amortization of premiums and discounts and dividends from companies not accounted for using the equity method), gains/losses on fair value measurement which are recognized in profit or loss or through other comprehensive income and the result of impairment losses (recognition and reversal of bad debt provisions/valuation adjustments) and on disposals. Income from equity and debt instruments measured at fair value through other comprehensive income includes gains/losses from remeasurement and from the reclassification of remeasurement gains/losses to profit or loss. Net result from financial instruments does not include exchange rate gains/losses (with the exception of financial instruments carried at fair value through profit or loss), commitment fees and gains/losses from hedging instruments (cash flow hedges).

The change in the bad debt provisions for receivables measured at amortized cost is mainly recognized under "income from non-current and current financial assets".

The component recognized directly in equity from the subsequent measurement of equity and debt instruments measured at fair value through other comprehensive income is reported under the "reserve for financial assets measured at fair value through other comprehensive income". The remaining components of the net result are included under "income from non-current and current financial assets" (see note 13) and in "financing costs" (see note 14).

Net foreign currency result

Net foreign currency gains/losses are included in other operating income/expenses in the amount of EUR minus 17,186 thousand (2022: EUR plus 4,922 thousand), in income from non-current and current financial assets in the amount of EUR minus 13,424 thousand (2022: EUR plus 3,567 thousand), and in financing costs in the amount of EUR plus 1,982 thousand (2022: EUR minus 3,341 thousand).

Note 37. Financial risk management

As an international company, the Lenzing Group is exposed to financial and other market risks. A company-wide risk management system, which is regulated comprehensively in guidelines, has been implemented to identify and assess potential risks at an early stage. This system is designed to achieve maximum risk transparency and provide high-quality information by quantifying all risk categories, with a particular emphasis on risk concentration. The efficiency of group-wide risk management is evaluated and monitored on an ongoing basis by both the internal control system (ICS) and the internal audit department.

The financial risks arising from financial instruments – credit risk, liquidity risk, currency risk (above all with regard to the BRL, CNY, CZK, HKD, IDR, THB and USD), commodity price risk and interest rate risk – are classified as relevant risks for the Lenzing Group. Corresponding hedging measures are used to minimize these risks wherever possible.

Credit risk

Credit risk represents the risk of asset losses that may result from the failure of individual business partners to meet their contractual obligations. The credit risk from transactions involving the provision of goods and services (in particular, trade receivables) is secured in part by credit insurance and bank security (guarantees, letters of credit, bills of exchange etc.). Outstanding receivables and customer limits are monitored on an ongoing basis. The credit risk from investments at banks (particularly cash and cash equivalents) and derivatives with positive market values is reduced by ensuring that transactions are only concluded with counterparties with good credit ratings, and that investment limits are defined and continuously monitored for these banks.

Receivables are measured individually. Individual bad debt provisions are recognized for receivables if there are indications of credit impairment (individual measurement) and if they are not expected to be collectible in full. This applies especially when the debtor has significant financial difficulties, is in default or has delayed payments or when there is an increased probability that the debtor will enter bankruptcy and the involved receivable is not sufficiently collateralized. The expected loss is low because of the Lenzing Group's comprehensive receivables management (extensive collateralization with credit insurance and bankable security as well as continuous monitoring of accounts receivable and customer limits).

To determine the required impairment for trade receivables for which no individual bad debt provisions were recognized, the defaults of the past years were evaluated in the Lenzing Group. The analysis has shown that there is only an immaterial risk for receivables overdue for a certain period.

The loss ratios are based on historical default rates of the last nine years, whereby a distinction is drawn between companies and overdue periods. The default rates were multiplied by a macroeconomic factor weighted by geographical area in order to reflect the economic conditions over the expected term of the receivables.

For originated loans and other financial assets (current and non-current), which are measured at amortized cost, as well as cash and cash equivalents, the calculation of impairment is based on the average default rates. The impairment is based on the default rate per rating for the respective financial instrument. A significant change in credit risk is identified based on the rating and default of payment. Regarding instruments with a low credit risk, the Lenzing Group assumes that the credit risk has not increased significantly since the first recognition. Consequently, the twelve-month credit loss is always recognized for such instruments. Since the expected impairment is immaterial, no expected credit loss is recorded for these financial assets.

The reduced earning power and uncertainties, in particular due to a fire at a plant of the buyer of EFB in 2018 (including its subsidiaries), result in a higher default risk for the receivables from these companies. Therefore, the calculation of bad debt provisions for these originated loans was changed from the expected twelve-month credit loss to lifetime expected credit loss in 2018. The lifetime expected credit loss was determined based on the difference between the contractual payments and all payments expected by the management in the future.

Trade receivables are considered defaulted when they are overdue for more than 270 days or when it is unlikely that the debtor can meet the obligations without the realization of collateral. This long period is due to the fact that around 90 percent of trade receivables are secured by credit insurance or bank collateral (guarantees, letters of credit, bills of exchange, etc.).

Financial assets are only derecognized directly if the contractual rights to payments cease to exist (particularly in the event of bankruptcy). An impairment loss is reversed up to amortized cost if the reasons for its recognition no longer exist.

The Group considers the risk concentration in trade receivables to be rather low because its customers are based in various countries, operate in different sectors and are active on largely independent markets. A rather small amount of the receivables is overdue and not individually impaired (see table "aging of receivables" below). Important effects for a change in bad debt provisions include possible default of payment by major customers or a general increase of receivables at the reporting date. During the 2023 financial year there was no significant increase in defaults.

The bad debt provisions developed as follows:

Development and reconciliation of bad debt provisions EUR '000

2023	Lifetime expected credit loss (portfolio measure-ment)	Lifetime expected credit loss (individual measure-ment)
Trade receivables		
Bad debt provisions as at 01/01	328	7,605
Utilization	0	(98)
Reversal	(63)	(1,772)
Addition	123	42
Currency translation adjustment	(5)	(284)
Bad debt provisions as at 31/12	**383**	**5,492**

Development and reconciliation of bad debt provisions (previous year) EUR '000

2022	Lifetime expected credit loss (portfolio measure-ment)	Lifetime expected credit loss (individual measure-ment)
Trade receivables		
Bad debt provisions as at 01/01	753	9,760
Utilization	0	(2,180)
Reversal	(470)	(107)
Addition	34	194
Currency translation adjustment	11	(63)
Bad debt provisions as at 31/12	**328**	**7,605**

Lifetime expected credit loss (individual measurement) EUR '000

	2023	2022
Originated loans at amortized cost		
Bad debt provisions as at 01/01	8,234	5,600
Reversal	(800)	(600)
Addition	7,616	3,235
Currency translation adjustment	(21)	(1)
Bad debt provisions as at 31/12	**15,029**	**8,234**
Other financial assets (non-current and current)		
Bad debt provisions as at 01/01	1,209	713
Reversal	(561)	(66)
Addition	587	561
Bad debt provisions as at 31/12	**1,234**	**1,209**

The bad debt provisions for trade receivables include bad debt provisions of EUR 0 thousand (December 31, 2022: EUR 1,720 thousand) for companies accounted for using the equity method. Impairment losses on loans include impairment losses on companies accounted for using the equity method and their subsidiaries in the amount of EUR 5,000 thousand (December 31, 2022: EUR 1,417 thousand).

The bad debt provisions for trade receivables are related primarily to bad debt provisions for overdue, uninsured receivables.

The carrying amount of the impaired receivables is as follows:

Aging and expected credit loss for trade receivables EUR '000

31/12/2023	Gross carrying amount	Expected credit loss
Not overdue	276,739	255
Overdue up to 30 days	16,196	55
Overdue for 31 to 90 days	1,646	9
Overdue for 91 to 365 days	58	3
Overdue for more than one year	61	61
Credit impaired receivables (individual measurement)	5,654	5,492
Total	**300,355**	**5,875**

Aging and expected credit loss for trade receivables (previous year) EUR '000

31/12/2022	Gross carrying amount	Expected credit loss
Not overdue	275,436	243
Overdue up to 30 days	13,491	53
Overdue for 31 to 90 days	1,608	4
Overdue for 91 to 365 days	828	15
Overdue for more than one year	13	13
Credit impaired receivables (individual measurement)	10,169	7,605
Total	**301,543**	**7,932**

Aging of financial receivables EUR '000

2023	Originated loans	Other financial receivables (current and non-current)
Gross carrying amount as at 31/12	29,590	63,262
Thereof not overdue	14,561	62,028
Thereof impaired	15,029	1,234

Aging of financial receivables (previous year) EUR '000

2022	Originated loans	Other financial receivables (current and non-current)
Gross carrying amount as at 31/12	16,636	94,742
Thereof not overdue	838	93,534
Thereof impaired	15,798	1,209

Securities in the scope of the impairment rules of IFRS 9 as well as cash and cash equivalents have a rating between AAA and BBB.

There are currently no doubts concerning the collectability of financial assets that are neither past due nor impaired.

The maximum exposure to credit risk from recognized financial assets is as follows:

Maximum exposure to credit risk from recognized financial assets EUR '000

	31/12/2023	31/12/2022
Carrying amount of asset financial instruments (see note 35)	1,121,905	875,380
Less risk reduction in relation to receivables due to		
Credit insurance received for trade receivables (not including deductibles)	(138,717)	(102,865)
Guarantees received for trade receivables	(24,856)	(18,507)
Total	**958,332**	**754,009**

The maximum exposure to credit risk from financial guarantee contracts and contingent liabilities is shown in note 40.

Liquidity risk

Liquidity risk represents the risk of not being able to obtain sufficient funds to settle incurred liabilities at all times. The management of liquidity risk has a high priority in the Lenzing Group. Corporate guidelines require uniform, proactive liquidity planning and medium-term planning throughout the entire Group. Ensuring solvency for current and future obligations at all times comprises a key objective of the Lenzing Group's risk management activities. For this reason, the risk of a potential liquidity shortfall is monitored constantly.

To secure short and medium-term liquidity, a reserve is held in the form of bank balances and unutilized credit lines at banks. As part of its liquidity planning, the Lenzing Group at all times also takes into consideration compliance with the minimum liquidity requirements contained in financing agreements (see note 35). If necessary, surplus liquid funds are invested in non-speculative, highly liquid financial instruments. These are mainly overnight money, fixed-term deposits and money market securities, which generally have a term of less than three months.

Liquidity risks are determined by rolling liquidity planning conducted throughout the Group. On the basis of the results of rolling liquidity planning and medium-term planning, appropriate financing and capital measures are planned and implemented at an early stage.

The Lenzing Group's refinancing options are determined by numerous financial, macroeconomic and other factors, which the Lenzing Group management takes into consideration as part of its short- and medium-term liquidity management. These influencing factors also include financing conditions (negative covenants) in current and future financing agreements, which may restrict the Lenzing Group's refinancing options if certain financial covenants fail to be met. In particular, this also includes compliance with the thresholds for standard market liquidity and financing ratios contained in financing agreements, which were last amended in June 2023. To ensure that these thresholds do not lead to restrictions for any refinancing of the Lenzing Group, measures have been and will continue to be taken to reduce gearing and improve liquidity.

The Lenzing Group had liquid assets totaling EUR 731,037 thousand (December 31, 2022: EUR 453,265 thousand) in the form of cash and cash equivalents including money market funds and liquid bills of exchange (see note 34). Unused credit facilities of EUR 202,990 thousand were available as at December 31, 2023 (December 31, 2022: EUR 232,276 thousand) to finance necessary working capital and to cover any shortfalls caused by economic cycles. The medium- and long-term financing for the Lenzing Group is provided by equity and financial liabilities, in particular bonds, private placements and bank loans. Current financial liabilities can regularly be extended or refinanced with other lenders. Trade payables provide short-term financing for the goods and services purchased. The liabilities covered by reverse factoring agreements are settled in line with their agreed maturity, whereby the related cash outflows are included in liquidity planning. For this reason, the Group considers the concentration of risk with regard to sufficient financing sources to be of minor importance.

The contractually agreed (undiscounted) interest and principal payments for primary financial liabilities (including financial guarantee contracts) are shown below:

Maturity analysis of non-derivative financial liabilities **EUR '000**

	Carrying amount as at 31/12/2023	Cash flows 2024	Cash flows 2025 to 2028	Cash flows from 2029
Private placements	567,805	249,334	328,667	28,712
Bank loans	1,687,892	370,140	1,298,770	356,830
Loans from other lenders	37,890	5,139	25,104	8,494
Lease liabilities	142,107	26,318	77,048	344,065
Trade payables	296,322	296,322	0	0
Puttable non-controlling interests	249,418	0	0	249,418
Other financial liabities[1]	62,650	58,454	4,195	0
Total	**3,044,084**	**1,005,707**	**1,733,785**	**987,519**
Thereof:				
Interest payments (fixed)		31,776	89,903	232,410
Interest payments (partly fixed)		143	559	64
Interest payments (variable)		82,940	176,299	26,654
Repayment		890,849	1,467,023	728,391

1) The above includes the maximum possible payment obligations from financial guarantee contracts. The amounts are assumed to be due in the first year.

Maturity analysis of non-derivative financial liabilities (previous year) **EUR '000**

	Carrying amount as at 31/12/2022	Cash flows 2023	Cash flows 2024 to 2027	Cash flows from 2028
Private placements	569,691	15,926	574,811	29,191
Bank loans	1,640,106	331,371	1,221,991	447,287
Loans from other lenders	42,843	5,102	24,996	14,210
Lease liabilities	69,590	13,453	38,173	147,170
Trade payables	435,433	435,433	0	0
Puttable non-controlling interests	266,085	0	0	266,085
Other financial liabities[1]	63,352	63,352	0	0
Total	**3,087,100**	**864,636**	**1,859,971**	**903,943**
Thereof:				
Interest payments (fixed)		20,397	56,553	105,137
Interest payments (partly fixed)		150	606	160
Interest payments (variable)		91,821	186,000	33,762
Repayment		752,268	1,616,813	764,884

1) The above includes the maximum possible payment obligations from financial guarantee contracts. The amounts are assumed to be due in the first year.

The above tables include all primary financial liabilities held at the reporting date but exclude estimated future liabilities. Foreign currency amounts were translated with the spot exchange rate in effect at the reporting date. Floating rate interest payments were calculated on the basis of the last interest rates set before the reporting date. Financial liabilities that are repayable at any time are always assigned to the earliest time period.

The contractually agreed (undiscounted) interest and principal payments for derivative financial instruments are as follows:

Maturity analysis of derivative financial instruments **EUR '000**

	Carrying amount as at 31/12/2023	Cash flows 2024	Cash flows 2025 to 2028	Cash flows from 2029
Currency, combined currency/interest rate and interest rate derivatives and commodity derivatives				
Derivatives with a positive fair value (cash flow hedges)	30,817	5,714	0	25,103
Derivatives with a positive fair value (cash flow hedges with the underlying already recognized in profit or loss)	7,113	6,466	0	647
Positive fair value	**37,930**	**12,180**	**0**	**25,750**
Derivatives with a negative fair value (cash flow hedges)	(11,534)	(8,173)	(3,362)	0
Derivatives with a negative fair value (cash flow hedges with the underlying already recognized in profit or loss)	(1,019)	(142)	(877)	0
Negative fair value	**(12,553)**	**(8,315)**	**(4,239)**	**0**
Total	**25,377**	**3,865**	**(4,239)**	**25,750**

Cash flows consist solely of principal and do not include any interest components.
Fair value: + = receivable, - = liability from the Lenzing Group's perspective

Maturity analysis of derivative financial instruments (previous year) **EUR '000**

	Carrying amount as at 31/12/2022	Cash flows 2023	Cash flows 2024 to 2027	Cash flows from 2028
Currency, combined currency/interest rate and interest rate derivatives and commodity derivatives				
Derivatives with a positive fair value (cash flow hedges)	55,494	12,416	5,724	37,354
Derivatives with a positive fair value (cash flow hedges with the underlying already recognized in profit or loss)	1,673	1,673	0	0
Positive fair value	**57,167**	**14,090**	**5,724**	**37,354**
Derivatives with a negative fair value (cash flow hedges)	(7,602)	(7,602)	0	0
Derivatives with a negative fair value (cash flow hedges with the underlying already recognized in profit or loss)	(1,380)	(1,380)	0	0
Negative fair value	**(8,981)**	**(8,981)**	**0**	**0**
Total	**48,186**	**5,109**	**5,724**	**37,354**

Cash flows consist solely of principal and do not include any interest components.
Fair value: + = receivable, - = liability from the Lenzing Group's perspective

Currency risk

Cash flows from capital expenditures and the operating business as well as investments and financing in foreign currencies expose the member companies of the Lenzing Group to currency risks. Some foreign currency risks are hedged insofar as they affect the Group's cash flows. In the operating business, the individual group companies are exposed to currency risk in connection with planned incoming and outgoing payments which are not denominated in their functional currency. Forward foreign exchange contracts, which are recognized at fair value, are used to hedge the exchange rate risk from foreign currency positions arising from expected future transactions in foreign currencies by group companies.

For companies with the same functional currency, the respective net foreign currency exposures are calculated for the following sales year as part of the budgeting process. Foreign currency purchases and sales are aggregated into separate groups for each currency. Approximately 33 percent of the budgeted net exposure for the following financial year was hedged for EUR/CNY, the dominant currency pair in the Lenzing Group, as at December 31, 2023 (December 31, 2022: EUR/CNY approximately 34 percent). The USD also plays an important role. The resulting risk concentration at the reporting date can be seen in the following tables (especially the tables on "sensitivity analysis and risk exposure for foreign currency risks").

Translation risk is also regularly assessed and monitored at the Group level. Translation risk represents the risk arising from the consolidation of foreign investments whose functional currency is not the euro. The greatest risk exposure here is in relation to the US dollar.

Commodity risk

In addition to physical purchase contracts, the Lenzing Group deploys derivative financial instruments in order to hedge against gas price risks (see note 35). The Group uses OTC gas swaps as cash flow hedges to manage gas price risks. The hedging strategies are determined based on the planned gas consumption figures in the relevant currency and are compared with the current market prices on a monthly basis ("mark to market" assessment). The Lenzing Group is exposed to accounting-related price risks because of the gas swaps. These risks particularly relate to the possibility that fair value measurement of the gas swaps may result in a negative impact on other comprehensive income/equity in the event of an adverse change in market prices.

The Group is subject to the usual market price risks in connection with its business activities (especially relating to wood, chemicals, pulp and energy). Although such risks are not hedged with derivatives or financial instruments, they are protected through other measures (above all, long-term and short-term supply contracts with various suppliers). The Lenzing Group has concluded several long-term power purchase agreements for electricity generated from renewable energy sources in order to achieve its climate targets and hedge against fluctuating prices. The term amounts to 15 to 30 years. The contracted volume for 2024 amounts to around 20 gigawatt hours and to around 55 gigawatt hours for 2025. A fixed price was agreed for a significant part of the volume. Some of the electricity purchase agreements are leases where the payments are entirely variable and are consequently included in the variable lease payments (see note 20). The so-called “Own Use Exemption” is applied to the other part of the electricity purchase agreements. Provisions must be formed for any contingent losses (see note 30).

Interest rate risk

The Lenzing Group is exposed to interest rate risk through its business-related financing and investing activities. Interest rate risks arise through potential changes in the market interest rate. They can lead to a change in the fair value of fixed rate financial instruments and to fluctuations in the cash flows from interest payments for floating rate financial instruments. Interest rate risks and the resulting risk concentrations are managed by monitoring and adjusting the composition of fixed rate and floating rate primary financial instruments on an ongoing basis and by the selective use of derivative financial instruments. The level of the resulting risk concentration as at the reporting date is presented in the following tables (see section “Sensitivity analysis and exposure for interest rate risks”).

Sensitivity analysis and exposure for currency risks

The Lenzing Group uses the following assumptions for its sensitivity analysis:

- The sensitivity of profit or loss is based on the receivables and liabilities recognized by the group companies which are denominated in a currency other than the functional currency of the relevant company and the open derivatives from cash flow hedges for currency risks in cases where the hedged item was already recognized in profit or loss as at the reporting date. The carrying amounts of the receivables and liabilities, respectively the nominal values of the derivatives, correspond to the exposure. The individual exposures are presented consistently in relation to the US dollar and euro for the aggregation to the Group’s exposure.
- The sensitivity of other comprehensive income as at the reporting date is based on the open derivatives from cash flow hedges for currency risks in cases where the hedged item has not yet been recognized in profit or loss. The nominal value of the open derivatives corresponds to the exposure.

The following tables show the sensitivities and exposure for currency risk as at the reporting dates:

Sensitivity analysis and risk exposure for foreign currency risks (EUR) EUR '000

	31/12/2023			31/12/2022		
	Group exposure in relation to EUR	Sensitivity to 10 % devaluation of the EUR	Sensitivity to 10 % revaluation of the EUR	Group exposure in relation to EUR	Sensitivity to 10 % devaluation of the EUR	Sensitivity to 10 % revaluation of the EUR
EUR-USD	538,335	59,815	(48,940)	540,038	60,004	(49,094)
EUR-GBP	(295)	(33)	27	478	53	(43)
EUR-CNY/CNH	49,812	5,535	(4,528)	50,748	5,639	(4,613)
EUR-CZK	(660)	(73)	60	(2,650)	(294)	241
EUR-HKD	(3,881)	(431)	353	(3,184)	(354)	289
Sensitivity of net profit or loss after tax (through receivables and payables)	**583,311**	**64,812**	**(53,028)**	**585,430**	**65,048**	**(53,221)**
Sensitivity of other comprehensive income after tax (through cash flow hedge derivatives)		(9,193)	7,760		(10,130)	8,306
Sensitivity of equity		**55,619**	**(45,269)**		**54,917**	**(44,915)**

Group exposure: + receivable, – liability; sensitivity: + increase in profit/other comprehensive income, - decrease in profit/other comprehensive income

Sensitivity analysis and risk exposure for foreign currency risks (USD/GBP) EUR '000

	31/12/2023			31/12/2022		
	Group exposure in relation to USD/GBP	Sensitivity to 10 % devaluation of the USD/GBP	Sensitivity to 10 % revaluation of the USD/GBP	Group exposure in relation to USD/GBP	Sensitivity to 10 % devaluation of the USD/GBP	Sensitivity to 10 % revaluation of the USD/GBP
USD-IDR	(20,259)	(2,251)	1,842	(33,850)	(3,761)	3,077
USD-GBP	559	62	(51)	(5,971)	(663)	543
USD-CNY/CNH	39,108	4,345	(3,555)	25,979	2,887	(2,362)
USD-CZK	(14,958)	(1,662)	1,360	(8,768)	(974)	797
USD-THB	602	67	(55)	0	0	0
USD-BRL	(75,311)	(8,368)	6,846	(35,503)	(3,945)	3,228
GBP-CNY/CNH	9,283	1,031	(844)	3,016	335	(274)
Sensitivity of net profit or loss after tax (through receivables and payables)	**(60,975)**	**(6,775)**	**5,543**	**(55,098)**	**(6,122)**	**5,009**
Sensitivity of other comprehensive income after tax (through cash flow hedge derivatives)		5,754	(5,165)		(11,841)	11,836
Sensitivity of equity		**(1,021)**	**378**		**(17,963)**	**16,845**

Group exposure: + receivable, – liability; sensitivity: + increase in profit/other comprehensive income, - decrease in profit/other comprehensive income

Sensitivity analysis and exposure for commodity price risks

Sensitivity analyses are performed for the price change risk from gas swaps. They show the effects of hypothetical changes in gas prices on profit or loss/other comprehensive income/equity.

The Lenzing Group uses the following assumptions in its analysis:

- Open derivatives from cash flow hedges as at the reporting date are used as the basis for the sensitivity.
- The exposure corresponds to the nominal values of the derivatives (not including the hedged items). In economic terms, the derivatives are used to hedge physical hedged items that will impact profit or loss in subsequent periods, meaning that from an economic perspective there is no risk exposure in combination with the hedged items.

If the market price level for gas had been 10 % higher/lower as at December 31, 2023, this would have changed other comprehensive income (after tax) by EUR +/-1,163 thousand (December 31, 2022: EUR +/-929 thousand).

Sensitivity analysis and exposure for interest rate risks

The following tables show the exposure for interest rate risks at the reporting dates in the form of the carrying amounts of interest-bearing primary financial instruments:

Risk exposure for interest rate risks EUR '000

	31/12/2023				
	Fixed interest	Fixed and floating rate interest	Floating rate interest	No interest	Total
Cash and cash equivalents	0	0	725,639	0	725,639
Financial assets	0	0	13,679	26,079	39,759
Financial liabilities	(918,815)	(28,100)	(1,488,780)	0	(2,435,694)
Net risk position	**(918,815)**	**(28,100)**	**(749,461)**	**26,079**	**(1,670,297)**
Effects from derivative instruments (hedging)	(552,036)	0	552,036	0	0
Net risk position after hedging effect	**(1,470,851)**	**(28,100)**	**(197,425)**	**26,079**	**(1,670,297)**

+ Receivables, - Liabilities

Risk exposure for interest rate risks (previous year) EUR '000

	31/12/2022				
	Fixed interest	Fixed and floating rate interest	Floating rate interest	No interest	Total
Cash and cash equivalents	0	0	446,873	0	446,873
Financial assets	39	0	7,564	33,760	41,363
Financial liabilities	(911,083)	(30,005)	(1,381,143)	0	(2,322,230)
Net risk position	**(911,044)**	**(30,005)**	**(926,706)**	**33,760**	**(1,833,994)**
Effects from derivative instruments (hedging)	(60,941)	0	60,941	0	0
Net risk position after hedging effect	**(971,985)**	**(30,005)**	**(865,765)**	**33,760**	**(1,833,994)**

+ Receivables, - Liabilities

Sensitivity analyses are performed for the interest rate risks arising from floating rate financial instruments and from the fluctuation in the market values of cash flow hedge derivatives. They show the effects of hypothetical changes in interest rates on profit or loss, other comprehensive income and equity.

The Lenzing Group uses the following assumptions in its analysis of the interest rate risk arising from floating rate financial instruments:

- The sensitivity analysis includes all floating rate primary and derivative financial instruments as at the reporting date.
- The exposure corresponds to the carrying amount of the floating rate financial instruments.

The sensitivities and exposure for the interest rate risks arising from floating rate financial instruments are as follows as at the reporting dates:

Sensitivity analysis for interest rate risks from floating-rate primary and derivative financial instruments **EUR '000**

31/12/2023	Net risk position after hedging effect	Sensitivity to a 100 bp increase in the interest rate level	Sensitivity to a 100 bp decrease in the interest rate level[1]
Sensitivity of net profit or loss after tax	(197,425)	(1,124)	1,124[2]
31/12/2022			
Sensitivity of net profit or loss after tax	(865,765)	(5,889)	5,884[2]

1) A reduction in the basis points results in a proportional decrease in the sensitivity.
2) The evaluation is based on the assumption that negative interest rates are paid on cash and cash equivalents. The evaluation does not include liabilities for which no negative interest is calculated.

The Lenzing Group bases the sensitivity analysis for the interest rate risk from the fluctuation in market values of cash flow hedge derivatives for interest rate risks on the following assumptions:

- The sensitivity of other comprehensive income as at the reporting date is based on the open derivatives from cash flow hedges for interest rate risks in cases where the hedged item has not yet been recognized in profit or loss.
- The exposure corresponds to the nominal value of the derivative in the amount of EUR 493,213 thousand (December 31, 2022: EUR 444,403 thousand).

An increase in the interest rate level by 1 percentage point would lead to an increase in other comprehensive income (after taxes) of EUR 7,513 thousand (December 31, 2022: EUR 8,975 thousand). A decrease in the interest rate level by 1 percentage point would lead to a reduction in other comprehensive income (after taxes) of EUR 7,653 thousand (December 31, 2022: EUR 8,857 thousand). The interest rate sensitivity has no effect on profit or loss, as the measurement of interest rate derivatives is recognized in the hedging reserve with no effect on profit or loss.

The Lenzing Group completed the transition to alternative reference interest rates (IBOR reform) in the 2023 financial year. For those financial instruments that were linked to the IBOR reference interest rate USD-LIBOR as at December 31, 2022, the changeover to the alternative reference interest rate, the Secured Overnight Financing Rate (SOFR), was completed in the 2023 financial year.

Additional information on financial risk management and financial instruments is provided in the risk report of the Lenzing Group's management report as at December 31, 2023.

Disclosures on Related Parties and Executive Bodies

Note 38. Related party disclosures

Overview

Related parties of the Lenzing Group include, in particular, the member companies of the B&C Group together with its subsidiaries, joint ventures and associates and its corporate bodies (executive board/management and supervisory board, where applicable) as well as close relatives of the members of the corporate bodies and companies under their influence (see note 1, section “Description of the company and its business activities” and note 39). The amounts and transactions between Lenzing AG and its consolidated subsidiaries are eliminated through consolidation and are not discussed further in this section

B&C Privatstiftung is managed by a board of trustees. No member of the Managing Board of Lenzing AG is a member of this board of trustees or the management/Managing Board of a subsidiary of B&C Privatstiftung, with the exception of subsidiaries of the Lenzing Group. The Lenzing Group has no influence over the business activities of B&C Privatstiftung.

The members of the corporate bodies of Lenzing AG (in particular, the Supervisory Board) and the above-mentioned entities are, in some cases, also members of the corporate bodies or shareholders of other companies with which Lenzing AG maintains ordinary business relationships. The Lenzing Group maintains ordinary business relationships with banks that involve financing, investing and derivatives.

Relationship with related companies

In connection with the tax group established with B&C Group (see note 29) the Lenzing Group recognized a tax credit of EUR 0 thousand through profit or loss in 2023 (2022: EUR 2,660 thousand). In 2023, the payment or advance payment respectively of the tax allocation to the B&C Group totaling EUR 153 thousand (2022: EUR 20,679 thousand) and a repayment of the tax allocation from previous years from the B&C Group in the amount of EUR 10,590 thousand (2022: EUR 0 thousand) occurred pursuant to the contractual obligation. As of December 31, 2023, the Lenzing Group recognized a liability to the B&C Group of EUR 4,759 thousand from the tax allocation (December 31, 2022: receivable of EUR 10,438 thousand). The deferred tax on the tax loss of EUR 48,020 thousand (December 31, 2022: EUR 4,626 thousand) was recognized under deferred tax assets. Income tax income of EUR 38,893 thousand was recognized in 2023 as a result of the tax allocation to B&C Group (2022: EUR 2,403 thousand).

Relationships with companies accounted for using the equity method and their material subsidiaries

Transactions with companies accounted for using the equity method and their material subsidiaries relate primarily to:

Material relationships with companies accounted for using the equity method

EQUI-Fibres Beteiligungsgesellschaft mbH and its subsidiaries (EFB)	Distribution of fibers, delivery of pulp, loan assignment
Lenzing Papier GmbH (LPP)	Provision of infrastructure and administrative services
RVL Reststoffverwertung Lenzing GmbH (RVL)	Operation of a recycling plant and purchase of the generated steam; letting of land
Gemeinnützige Siedlungsgesellschaft m.b.H. für den Bezirk Vöcklabruck (GSG)	Provision of infrastructure and administrative services
PT. Pura Golden Lion (PGL)	Holds an interest in a Lenzing Group subsidiary (see note 41)
Wood Paskov s.r.o. (LWP)	Purchase of wood
LD Florestal S.A. (LDF)	Land use rights, loan receivable, purchase of mature timber

The scope of material transactions and the outstanding balances with companies accounted for using the equity method and their major subsidiaries are as follows:

Relationships with companies accounted for using the equity method and their material subsidiaries EUR '000

2023	EFB	LPP	Other associates	LDF	Other joint ventures	Total
Goods and services provided	42,434	13,409	49	10,674	11,150	**77,717**
Goods and services received	0	1,661	54	0	11,399	**13,115**
Receivables as at 31/12	5,017	1,613	6	18,418	4	**25,058**
Liabilities as at 31/12	0	21	5	0	15	**40**

Relationships with companies accounted for using the equity method and their material subsidiaries (previous year) **EUR '000**

2022	EFB	LPP	Other associates	LDF	Other joint ventures	Total
Goods and services provided	50,436	27,741	40	6,719	14,440	**99,375**
Goods and services received	1,417	3,731	49	(2,248)	14,692	**17,642**
Receivables as at 31/12	9,122	2,403	0	357	4	**11,887**
Liabilities as at 31/12	0	23	0	2,236	46	**2,305**

In relation to trade receivables due from companies accounted for using the equity method, EUR 1,720 thousand of income (2022: EUR 90 thousand of income) was recognized from impairment losses (expense) and reversals of impairment losses (income) and EUR 3,583 thousand of expense (2022: EUR 1,417 thousand of expense) was recognized on loans to companies accounted for using the equity method, and their subsidiaries.

Kelheim Fibers GmbH, Kelheim, Germany, a subsidiary of the equity-accounted investee EQUI-Fibres Beteiligungsgesellschaft mbH, Kelheim, Germany, received a long-term, unsecured loan of EUR 5,000 thousand from Lenzing AG in 2017. The interest reflects standard bank rates.

LD Florestal S.A. received a long-term, unsecured loan of EUR 13,679 thousand from the fully consolidated subsidiary LD Celulose S.A. in the 2023 financial year. The interest reflects standard bank rates. In the 2019 financial year, LD Florestal S.A. issued a long-term unsecured loan in the amount of EUR 27,913 thousand to the fully consolidated subsidiary LD Celulose S.A. The interest reflected standard bank rates. The loan liability was fully repaid as at December 31, 2023 (December 31, 2022: EUR 2,236 thousand of the loan liability utilized). In addition, LD Florestal S.A. granted LD Celulose S.A. a land use right in the 2020 financial year. The carrying amount of the resulting lease liability amounts to EUR 117,677 thousand as at December 31, 2023 (December 31, 2022: EUR 46,098 thousand).

There were no major transactions with the other non-consolidated subsidiaries in 2022 and 2023.

Relationships with members of the Managing Board and Supervisory Board of Lenzing AG

The remuneration expensed for key management personnel, which comprises the active members of the Managing Board and Supervisory Board of Lenzing AG, in line with their functions is summarized below (including changes in provisions):

Remuneration for key management personnel (expensed) **EUR '000**

	2023	2022
Remuneration for the Managing Board		
Basic salary	2,076	1,934
Benefits in kind and other benefits (in particular use of company vehicles)	60	46
Short-term variable performance bonus (short-term incentive; STI)	0	75
Other performance-based remuneration	1,215	200
Short-term employee benefits	**3,351**	**2,255**
Long-term variable performance bonus (long-term incentive; LTI)	(204)	(323)
Other performance-based remuneration	1,430	0
Other long-term employee benefits	**1,226**	**(323)**
Contributions to multiemployer pension fund	233	208
Post-employment benefits	**233**	**208**
Compensation for non-competition clauses and one-off gratuity	403	200
Termination benefits	**403**	**200**
Remuneration for the Managing Board	**5,213**	**2,340**
Remuneration for the Supervisory Board		
Short-term employee benefits	1,221	745
Total	**6,434**	**3,085**

The benchmark for the long-term bonus component of the members of the Managing Board (long-term incentive/LTI) consists of selected key indicators of the Lenzing Group, each over a three-year calculation period. In addition, the company's capital market performance is assessed in comparison with a group of selected listed companies during these periods.

The employee representatives on the Supervisory Board who were delegated by the Works Council are entitled to regular compensation (wage or salary plus severance and jubilee benefits) under their employment contracts in addition to the compensation for their activity on the Supervisory Board (in particular attendance fees). This compensation represents appropriate remuneration for their role/activities performed in the company.

In line with customary market and corporate practice, Lenzing AG also grants additional benefits, which are considered non-cash benefits, to the members of the Managing Board, selected senior executives and Supervisory Board members. One example of such benefits is insurance coverage (D&O, accident, legal protection etc.), whereby the costs are carried by the Lenzing Group. The insurers receive total premium payments, i.e. there is no specific allocation to the Managing Board and the Supervisory Board. In addition, the members of the Managing Board and selected senior executives are provided with company vehicles. The members of the Managing Board and the Supervisory Board are also reimbursed for certain costs incurred, above all travel expenses. The principles of the remuneration system for the Managing Board and the Supervisory Board are described in detail and disclosed in the 2023 remuneration report of the Lenzing Group.

The members of the Managing Board and Supervisory Board received no advances, loans or guarantees. The Lenzing Group has not entered into any contingencies on behalf of the Managing Board or Supervisory Board.

Expenses of EUR 1,469 thousand in total (2022: income of EUR 826 thousand) were recognized through profit or loss or as revaluation through other comprehensive income with relation to post-employment benefits for former members of the Managing Board of Lenzing AG. The present value of the pension provision recognized in this context, after deduction of the fair value of plan assets (net obligation), amounted to EUR 5,548 thousand as at December 31, 2023 (December 31, 2022: EUR 4,923 thousand).

Note 39. Executive Bodies

Members of the Supervisory Board

- Thomas Cord Prinzhorn
  Chairman (since April 26, 2022)
- Stefan Fida
  Deputy Chairman
- Helmut Bernkopf
- Christian Bruch
- Nicole van der Elst Desai (since April 19, 2023)
- Markus Fürst
- Franz Gasselsberger
- Melody Harris-Jensbach
- Gerhard Schwartz (since April 19, 2023)
- Astrid Skala-Kuhmann

- Peter Edelmann
  Chairman (up to April 26, 2022)
- Patrick Prügger (up to April 19, 2023)

Appointed by the Works Council

- Johann Schernberger
  Chairman of the Group Works Council
  Chairman of the Works Council for Waged Employees
- Helmut Kirchmair
  Chairman of the Works Committee
  Deputy Chairman of the Works Council for Waged Employees
- Georg Liftinger
  Deputy Chairman of the Group Works Council
  Deputy Chairman of the Works Committee
  Chairman of the Works Council for Salaried Employees
- Bonita Haag (since April 19, 2023)
- Stephan Gruber (since April 19, 2023)
  Deputy Chairman of the Works Council for Waged Employees

- Herbert Brauneis (up to April 19, 2023)
  Deputy Chairman of the Works Council for Waged Employees
- Daniela Födinger (up to April 19, 2023)
  Deputy Chairwoman of the Works Council for Salaried Employees

Members of the Managing Board

- Stephan Sielaff
  Chief Executive Officer (since April 1, 2022)
- Nico Reiner
  Chief Financial Officer (since January 1, 2023)
- Christian Skilich
  Chief Pulp Officer & Chief Technology Officer

- Robert van de Kerkhof
  Chief Commercial Officer (up to December 31, 2023)
- Thomas Cord Prinzhorn
  Chief Executive Officer (November 4, 2021 up to March 31, 2022)
- Thomas Obendrauf
  Chief Financial Officer (up to May 31, 2022)

Note 40. Financial guarantee contracts, contingent assets and liabilities, other financial obligations and legal risks

The Lenzing Group has entered into contingent liabilities of EUR 8,590 thousand (December 31, 2022: EUR 4,601 thousand), above all to secure claims related to the sale of certain equity investments and claims by suppliers and for claims by third parties outside the Group. Less important contingent liabilities involve granted retentions. The reported amounts represent the maximum payment obligation from the viewpoint of the Lenzing Group, and there is only a limited potential for recoveries.

The Lenzing Group provides committed credit lines of EUR 1,376 thousand (December 31, 2022: EUR 3,091 thousand) to third parties. These credit lines were not used as at December 31, 2023 and December 31, 2022 (also see note 21).

The Lenzing Group carries obligations for severance payments and anniversary benefits for former employees of certain sold equity investments up to the amount of the notional claims at the sale date. Provisions were recognized for these obligations as at the reporting date at an amount equal to their present value calculated in accordance with actuarial principles. Lenzing AG, in particular, has also assumed liabilities to secure third-party claims against consolidated companies; these claims are considered unlikely to be realized. The Managing Board is not aware of any other financial obligations with a significant impact on the financial position and financial performance of the Group

The obligations arising from outstanding orders for intangible assets and property, plant and equipment amounted to EUR 48,828 thousand as at December 31, 2023 (December 31, 2022: EUR 185,721 thousand). The Lenzing Group has long-term purchase obligations related to raw material supplies, in particular for wood, pulp, chemicals and energy.

In the 2021 financial year, a lawsuit was filed in a US court against Lenzing AG for unspecified claims for damages in connection with a former investment. Lenzing AG has rejected these claims. Payment of damages was not considered probable by management as at December 31, 2023 as well as at December 31, 2022. Details about the provision for legal defense costs are provided in note 30

As an international corporation, the Lenzing Group is exposed to a variety of legal and other risks. These risks are related, above all, to product defects, competition and antitrust law, patent law, tax law, employees and environmental protection. It is impossible to predict the outcome of pending or future legal proceedings. Consequently rulings by the courts or government agencies or settlement agreements can lead to expenses that are not fully covered by insurance and hence could have a material impact on the group's future financial position and financial performance. Additional information can be found in the risk report in the Lenzing Group management report as at December 31, 2023.

Note 41. Group companies

In addition to Lenzing AG, the Lenzing Group includes the following companies (list of group companies in accordance with Section 245a Para. 1 in conjunction with Section 265 Para. 2 of the Austrian Commercial Code):

Group companies

		31/12/2023		31/12/2022	
	Currency	Share capital	Share in %	Share capital	Share in %
Consolidated companies					
Beech Investment s.r.o., Zlaté Moravce, Slovakia	EUR	6,639	100.00	6,639	100.00
BZL – Bildungszentrum Lenzing GmbH, Lenzing, Austria	EUR	43,604	75.00	43,604	75.00
LD Celulose S.A., Indianópolis, Brazil	BRL	2,913,721,980	51.00	2,913,721,980	51.00
Lenzing Biocel Paskov a.s., Paskov, Czech Republic	CZK	280,000,000	100.00	280,000,000	100.00
Lenzing E-commerce (Shanghai) Co., Ltd., Shanghai, China[1]	CNY	-	-	0	0.00
Lenzing Elyaf Anonim Şirketi, Istanbul, Turkey	TRY	3,500,000	100.00	3,500,000	100.00
Lenzing Fibers (Shanghai) Co., Ltd., Shanghai, China	USD	200,000	100.00	200,000	100.00
Lenzing Fibers GmbH, Heiligenkreuz, Austria	EUR	363,364	100.00	363,364	100.00
Lenzing Fibers Grimsby Limited, Grimsby, UK	GBP	1	100.00	1	100.00
Lenzing Fibers Holding GmbH, Lenzing, Austria	EUR	35,000	100.00	35,000	100.00
Lenzing Fibers (Hongkong) Ltd., Hong Kong, China	HKD	30,300,000	100.00	30,300,000	100.00
Lenzing Fibers Inc., Axis, USA	USD	10	100.00	10	100.00
Lenzing Fibers India Private Limited, Coimbatore, India	INR	25,464,000	100.00	25,464,000	100.00
Lenzing Fibers Ltd., Manchester, UK	GBP	1	100.00	1	100.00
Lenzing Germany GmbH, Münchberg, Germany	EUR	25,000	100.00	-	-
Lenzing Global Finance GmbH, Munich, Germany	EUR	25,000	100.00	25,000	100.00
Lenzing Holding GmbH, Lenzing, Austria	EUR	35,000	100.00	35,000	100.00
Lenzing Italy S.r.l, Rome, Italy	EUR	25,000	100.00	-	-
Lenzing Korea Yuhan Hoesa, Seoul, Republic of Korea	KRW	280,000,000	100.00	280,000,000	100.00
Lenzing Land Holding LLC., Dover, USA	USD	10,000	100.00	10,000	100.00
Lenzing Modi Fibers India Private Limited, Mumbai, India	INR	1,187,241,341	96.54	1,187,241,341	96.52
Lenzing (Nanjing) Fibers Co., Ltd., Nanjing, China	USD	135,440,000	100.00	135,440,000	100.00
Lenzing Singapore Pte. Ltd., Singapore, Republic of Singapore	EUR	1,000,000	100.00	1,000,000	100.00
Lenzing Taiwan Fibers Ltd., Taipei, Taiwan	TWD	5,300,000	100.00	5,300,000	100.00
Lenzing (Thailand) Co., Ltd., Prachinburi, Thailand	THB	5,368,463,500	100.00	5,368,463,500	100.00
PT. South Pacific Viscose, Purwakarta, Indonesia[2]	IDR	150,068,343,000	96.53	106,614,724,000	95.12
Pulp Trading GmbH, Lenzing, Austria	EUR	40,000	100.00	40,000	100.00
Wasserreinhaltungsverband Lenzing – Lenzing AG, Lenzing, Austria[3]	EUR	0	Membership	0	Membership
Companies accounted for using the equity method					
Associates					
EQUI-Fibres Beteiligungsgesellschaft mbH, Kelheim, Germany	EUR	2,000,000	20.00	2,000,000	20.00
Gemeinnützige Siedlungsgesellschaft m.b.H. für den Bezirk Vöcklabruck, Lenzing, Austria[4]	EUR	1,155,336	99.90	1,155,336	99.90
Lenzing Papier GmbH, Lenzing, Austria	EUR	35,000	40.00	35,000	40.00
PT. Pura Golden Lion, Jakarta, Indonesia	IDR	2,500,000,000	40.00	2,500,000,000	40.00
Joint ventures					
LD Florestal S.A., Indianópolis, Brazil	BRL	177,452,357	50.00	177,452,357	50.00
RVL Reststoffverwertung Lenzing GmbH, Lenzing, Austria	EUR	36,336	50.00	36,336	50.00
Wood Paskov s.r.o., Paskov, Czech Republic	CZK	2,000,000	50.00	2,000,000	50.00

Notes:
1) Lenzing E-commerce (Shanghai) Co, Ltd, Shanghai, China, was liquidated in the 2023 financial year.
2) The share held directly by the Lenzing Group equals 94.22 percent (December 31, 2022: 91.87 percent). A further 5.78 percent (December 31, 2022: 8.13 percent) of the shares are held indirectly via PT. Pura Golden Lion, Jakarta, Indonesia, an associate of the Lenzing Group. The total calculated share therefore equals 96.53 percent (December 31, 2022: 95.12 percent).
3) The Lenzing Group participates through a membership. It holds 50 percent of the voting rights and can appoint half of the Managing Board members. Since all assets are attributable to the respective landowner under company law, the entity is notionally a separate company (a so-called "silo structure"). Assets located on the Lenzing Group's land are therefore included in the consolidation.
4) This investment is not included in the consolidated financial statements as a subsidiary, even though the Lenzing Group holds 99.9 percent of the voting rights in the company. In light of the given circumstances, the Lenzing Group does not control this company because its power is limited and because the returns hardly vary or can hardly be influenced by the Lenzing Group. Significant influence is exercised by the Lenzing Group over the financial and operating policies of this company, in particular through representation on management bodies and participation in decision-making processes.

Note 42. Significant events after the end of the reporting period

The Lenzing Group is not aware of any significant events occurring after the reporting date on December 31, 2023 which would have resulted in a different presentation of its financial position and financial performance.

Note 43. Authorization of the consolidated financial statements

These consolidated financial statements were approved on February 28, 2024 (consolidated financial statements as at December 31, 2022: March 1, 2023) by the Managing Board for review by the Supervisory Board, presentation to the Annual General Meeting and subsequent publication. The Supervisory Board may require changes to the consolidated financial statements as part of its review.

Lenzing, February 28, 2024
Lenzing Aktiengesellschaft

The Managing Board

Stephan Sielaff
Chief Executive Officer

Nico Reiner
Chief Financial Officer

Christian Skilich
Chief Pulp Officer & Chief Technology Officer

Auditor’s Report

Report on the Consolidated Financial Statements

Audit Opinion

We have audited the consolidated financial statements of Lenzing Aktiengesellschaft, Lenzing, Austria, and its subsidiaries (“the Group”), which comprise the consolidated Statement of Financial Position as at December 31, 2023, and the Consolidated Income Statement and Consolidated Statement of Other Comprehensive Income, Consolidated Statement of Changes in Equity and Consolidated Statement of Cash Flows for the year then ended, and the Notes to the Consolidated Financial Statements.

In our opinion, the consolidated financial statements comply with the legal requirements and present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2023, and its consolidated financial performance and consolidated cashflows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, and the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code).

Basis for our Opinion

We conducted our audit in accordance with the EU Regulation 537/2014 ("AP Regulation") and Austrian Standards on Auditing. These standards require the audit to be conducted in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the "Auditor’s Responsibilities" section of our report. We are independent of the audited Group in accordance with Austrian company law and professional regulations, and we have fulfilled our other responsibilities under those relevant ethical requirements. We believe that the audit evidence we have obtained up to the date of the auditor’s report is sufficient and appropriate to provide a basis for our audit opinion on this date.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, however, we do not provide a separate opinion thereon.

Impairment of assets and cash-generating units of “Division Fiber”
Refer to note 10

Risk for the Consolidated Financial Statements

In the financial year 2023, Lenzing Aktiengesellschaft identified triggering events for impairment of individual assets as well as cash-generating units within the “Division Fiber” and determined the recoverable amount in accordance with IAS 36 for each asset or cash-generating unit. Based on this assessment, an impairment loss of EUR 464,906 thousand was recognized in the consolidated income statement. Of this amount, EUR 135,912 thousand relate to impairment losses for individual assets, and EUR 328,995 thousand relate to impairment losses for cash-generating units.

The measurement of the recoverable amount of cash-generating units in accordance with IAS 36 requires assumptions and estimates, such as the estimated future cashflows, as well as the determination of the applicable discount rate.

There is a risk that inappropriate assumptions and estimates used to measure the recoverable amount could have a significant impact on the recoverable amount and therefore the carrying amounts of the cash-generating units in the consolidated statement of financial position, as well as the operating result in the consolidated income statement.

Our Response

We assessed the impairment tests carried out by the company with support of our internal valuation experts as follows:

- In order to assess the appropriateness of the cashflow projections used by management to measure recoverable amount, we gained an understanding of the planning process, discussed the assumptions regarding growth rates and operating results with the relevant senior personnel within the Group. Additionally, we have compared these cashflow projections with the most recent budget approved by the supervisory board as well as the mid-term planning approved by the management board.
- We conducted a comparison of the significant planning assumptions in prior periods with the actual values and analyzed whether historical deviations were appropriately considered by management in their planning assumptions.
- Our internal valuation experts reviewed and assessed the methodology used in the impairment tests to ensure compliance with relevant standards. The assumptions used to determine the cost of capital rates were compared by our valuation specialists with market and industry-specific benchmarks, and the accuracy of the calculation scheme was verified.

- Additionally, we compared the impairments recognized in the consolidated financial statements for assets and cash-generating units with the results of the impairment tests, ensuring that the recognition of impairments complies with the requirements of IAS 36.
- Furthermore, we have evaluated whether the disclosures regarding the impairments of assets and the impairment tests of the cash-generating units within the "Division Fiber" in the consolidated financial statements are appropriate.

Valuation of puttable non-controlling interests
Refer to note 3, note 26 and note 35

Risk for the Consolidated Financial Statements
The minority shareholder of LD Celulose S.A, Indianópolis, Brazil, has an option to sell its non-controlling interests to Lenzing Aktiengesellschaft upon the occurrence of contractually agreed events. As of December 31, 2023, Lenzing Aktiengesellschaft recognized a liability at a fair value of EUR 249,418 thousand for these puttable non-controlling interests. Subsequent measurement of the liability is carried out using the present access method via retained earnings.

The fair value of the liability for the puttable non-controlling interests is determined in accordance with the contractual agreement with the minority shareholder according to a discounted cash flow method. This requires assumptions and estimates, such as estimating future cash flows and determining the applicable discount rate.

There is a risk for the consolidated financial statements that inappropriate assumptions and estimates may have a significant impact on the fair value and thus the valuation of the liability for the puttable non-controlling interests in the consolidated statement of financial position and equity.

Our Response
We assessed the valuation of puttable non-controlling interests as follows:

- We assessed whether the chosen valuation model is consistent with the contractual agreements for determining the option exercise price.
- In order to assess the appropriateness of the cashflows used in the valuation model, we gained an understanding of the planning process and discussed the assumptions about growth rates and operating results with the relevant senior personnel within the Group.
- We compared the planning data assumed in the valuation model with the current budget figures approved by the Management Board and the Supervisory Board and the mid-term plan.
- Our internal valuation experts assessed the adequacy of the valuation model and verified the mathematical accuracy. Our experts compared the determined country and maturity-specific capital costs with market and industry-specific benchmarks.
- Finally, we assessed whether the disclosures on the determination of the fair value for the liability for puttable non-controlling interests in the consolidated financial statements are appropriate.

Valuation of Biological Assets
Refer to note 19.

Risk for the Consolidated Financial Statements
Lenzing Aktiengesellschaft recognized biological assets (timber plantations) in Brazil amounting to EUR 194,759 thousand in the consolidated statement of financial position as at December 31, 2023.

Timber plantations are measured at fair value less costs of disposal according to IAS 41 and IFRS 13. The fair value measurement is classified as Level 3 in the fair value measurement hierarchy under IFRS 13. The valuation of timber plantations requires assumptions and estimates, such as sales prices for mature timber and the growth of the plantation.

For the consolidated financial statements, there is a risk that inappropriate assumptions and estimates could have a material effect on the fair value of the timber plantations and thus on the valuation of biological assets in the consolidated statement of financial position and the valuation result in the consolidated income statement.

Our Response
We assessed the valuation of plantations in Brazil carried out by the company with support of specialists for forestry valuation as follows:

- We gained an understanding of the valuation process and assessed management's actions to monitor this process.
- We have assessed whether the valuation model chosen to determine the fair value is consistent with the requirements of IAS 41 and IFRS 13
- We assessed the key assumptions and estimates used in determining fair value, including assumptions about selling prices, growth, costs and discount rates.
- Furthermore, we considered the adequacy and appropriateness of the Group's disclosures in respect of the valuation of plantations in accordance with IAS 41 and IFRS 13.

Other information
Management is responsible for other information. Other information is all information provided in the annual report, other than the consolidated financial statements, the group management report and the auditor's report.

Our opinion on the consolidated financial statements does not cover other information and we do not provide any kind of assurance thereon.

In conjunction with our audit, it is our responsibility to read this other information and to assess whether, based on knowledge gained during our audit, it contains any material inconsistencies with the consolidated financial statements or any apparent material misstatement of fact. If we conclude that there is a material misstatement of fact in other information, we must report that fact. We have nothing to report in this regard.

Responsibilities of Management and Audit Committee for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code) and for such internal controls as management determines are necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Management is also responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless management either intents to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's financial reporting process.

Auditor’s Responsibilities

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our audit opinion. Reasonable assurance represents a high level of assurance, but provides no guarantee that an audit conducted in accordance with the AP Regulation and Austrian Standards on Auditing (and therefore ISAs), will always detect a material misstatement, if any. Misstatements may result from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the AP Regulation and Austrian Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit.

Moreover:

- We identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, we design and perform audit procedures responsive to those risks and obtain sufficient and appropriate audit evidence to serve as a basis for our audit opinion. The risk of not detecting material misstatements resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- We conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the respective note in the consolidated financial statements. If such disclosures are not appropriate, we will modify our audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the consolidated financial statements, including the notes, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- We obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.
- We communicate with the audit committee regarding, amongst other matters, the planned scope and timing of our audit as well as significant findings, including any significant deficiencies in internal control that we identify during our audit.
- We communicate to the audit committee that we have complied with the relevant professional requirements in respect of our independence, that we will report any relationships and other events that could reasonably affect our independence and, where appropriate, the related safeguards.
- From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit i.e. key audit matters. We describe these key audit matters in our auditor’s report unless laws or other legal regulations preclude public disclosure about the matter or when in very rare cases, we determine that a matter should not be included in our audit report because the negative consequences of doing so would reasonably be expected to outweigh the public benefits of such communication.

Report on Other Legal Requirements

Group Management Report

In accordance with Austrian company law, the group management report is to be audited as to whether it is consistent with the consolidated financial statements and prepared in accordance with legal requirements.

It is our responsibility to determine whether the consolidated non-financial statement has been prepared as part of the group management report, to read and assess whether, based on knowledge gained during our audit, it contains any material inconsistencies with the consolidated financial statements or any apparent material misstatement of fact.

Management is responsible for the preparation of the group management report in accordance with Austrian company law and other legal or regulatory requirements.

We have conducted our audit in accordance with generally accepted standards on the audit of group management reports.

Opinion

In our opinion, the group management report is consistent with the consolidated financial statements and has been prepared in accordance with legal requirements. The disclosures pursuant to Section 243a UGB (Austrian Commercial Code) are appropriate.

Statement

Based on our knowledge gained in the course of the audit of the consolidated financial statements and our understanding of the Group and its environment, we did not note any material misstatements in the group management report.

Additional Information in accordance with Article 10 AP Regulation

We were elected as auditors at the Annual General Meeting on April 19, 2023 and were appointed by the supervisory board on June 7, 2023 to audit the financial statements of Company for the financial year ending on December 31, 2023.

We have been auditors of the Company, without interruption, since the consolidated financial statements as at December 31, 2017.

We declare that our opinion expressed in the "Report on the Consolidated Financial Statements" section of our report is consistent with our additional report to the Audit Committee, in accordance with Article 11 AP Regulation.

We declare that we have not provided any prohibited non-audit services (Article 5 Paragraph 1 AP Regulation) and that we have ensured our independence throughout the course of the audit, from the audited Group.

Engagement Partner

The engagement partner is Mr Alexander Gall.

Linz, March 01, 2024

KPMG Austria GmbH

Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Alexander Gall

Austrian Chartered Accountant

This report is a translation of the original report in German, which is solely valid.
The consolidated financial statements, together with our auditor's opinion may only be published if the consolidated financial statements and the group management report are identical with the audited version attached to this report. Section 281 Paragraph 2 UGB (Austrian Commercial Code) applies.

Declaration of the Managing Board

Declaration of the Managing Board according to Section 124 (1) No. 3 of the Stock Exchange Act

We confirm to the best of our knowledge that the consolidated financial statements of the Lenzing Group as at December 31, 2023 2022 that were prepared in accordance with the applicable accounting standards pursuant to International Financial Reporting Standards (IFRSs) give a true and fair view of the assets, liabilities, financial position and profit or loss of the Lenzing Group and that the group management report gives a true and fair view of the development and performance of the business and the position of the Lenzing Group, together with a description of the principal risks and uncertainties the Lenzing Group faces.

Lenzing, February 28, 2024
Lenzing Aktiengesellschaft

The Managing Board

Stephan Sielaff
Chief Executive Officer

Nico Reiner
Chief Financial Officer

Christian Skilich
Chief Pulp Officer & Chief Technology Officer

Lenzing Group Five-Year Overview

Key earnings and profitability figures

EUR mn	2023	2022	2021	2020	2019
Revenue	2,521.2	2,565.7	2,194.6	1,632.6	2,105.2
EBITDA (earnings before interest, tax, depreciation and amortization)	303.3	241.9	362.9	192.3[1]	329.9[1]
EBITDA margin	12.0 %	9.4 %	16.5 %	11.8 %[1]	15.7 %[1]
EBIT (earnings before interest and tax)	(476.4)	16.5	200.6	33.9[1]	165.3[1]
EBIT margin	(18.9)%	0.6 %	9.1 %	2.1 %[1]	7.9 %[1]
EBT (earnings before tax)	(585.6)	(10.1)	182.9	22.3	163.8
Net profit/loss after tax	(593.0)	(37.2)	127.7	(10.6)	114.9
Earnings per share in EUR	(20.02)	(2.75)	4.16	0.24	4.63
ROCE (return on capital employed)	(14.2)%	2.0 %	5.4 %	(0.5) %[1]	5.4 %[1]
ROE (return on equity)	(30.1)%	(0.5)%	9.1 %	1.3 %	10.5 %
ROI (return on investment)	(8.9)%	0.3 %	4.2 %	0.9 %[1]	5.7 %[1]

Key cash flow figures

EUR mn	2023	2022	2021	2020	2019
Gross cash flow	88.5	244.8	372.0	126.8	294.0
Cash flow from operating activities	160.3	(43.2)	394.0	48.9	244.6
Free cash flow	(122.8)	(740.7)	(445.5)	(614.8)	0.8
CAPEX	283.6	698.9	844.3	668.8	244.0
Liquid assets as at 31/12	731.0	453.3	1,124.1	1,081.1	581.0
Unused credit facilities as at 31/12	203.0	232.3	454.5	1,031.4	266.6

Key balance sheet figures

EUR mn as at 31/12	2023	2022	2021	2020	2019
Total assets	5,214.6	5,525.0	5,322.8	4,163.0	3,121.1
Adjusted equity	1,809.1	2,088.6	2,115.7	1,907.0	1,559.3
Adjusted equity ratio	34.7 %	37.8 %	39.7 %	45.8 %	50.0 %
Net financial debt	1,562.6	1,799.4[2]	913.6[2]	410.5[2]	364.3[2]
Net financial debt / EBITDA	5.2	7.4[2]	2.5[2]	2.1[1, 2]	1.1[1, 2]
Net financial debt incl. lease liabilities	1,704.7	1,869.0	977.0	471.4	400.6
Net debt	1,779.5	1,946.6	1,079.3	575.0	511.4
Net gearing	86.4 %	86.2 %[2]	43.2 %[2]	21.5 %[2]	23.4 %[2]
Trading working capital	551.1	570.7	387.4	383.8	403.5
Trading working capital to annualized group revenue	21.0 %	24.0 %	16.0 %	21.9 %	20.7 %

Key stock market figures

EUR	2023	2022	2021	2020	2019
Market capitalization in mn as at 31/12	1,372.9	1,454.9	3,239.1	2,198.3	2,198.3
Share price as at 31/12	35.55	54.80	122.00	82.80	82.80
Dividend per share	0.00	0.00	4.35	0.00	0.00

Employees	2023	2022	2021	2020	2019
Full-time equivalents (FTE) as at 31/12[3]	7,917	7,931	7,585	6,992	6,685

1) Reclassification of capitalized borrowing costs, net interest from defined benefit plans and commitment fees from EBIT/EBITDA to the financial result (see note 2 of the consolidated financial statements as at December 31, 2022).
2) Since the second quarter of the 2023 financial year, net financial debt is presented excluding lease liabilities (see the supplement to the management report "Notes on the Financial Performance Indicators of the Lenzing Group").
3) The number of employees has been reported on a full-time equivalent basis since the third quarter of the 2023 financial year. Until the third quarter of the 2023 financial year, the figure was based on the number of individuals.

The above financial indicators are derived primarily from the IFRS consolidated financial statements of the Lenzing Group. Additional details are provided in the section „Notes on the financial performance indicators of the Lenzing Group", in the glossary to the Annual Report and in the consolidated financial statements of the Lenzing Group. Rounding differences can occur in the presentation of rounded amounts and percentage rates.

Financial calendar

Publication of financial calendar 2024 (acc. to prime market regulation)

	Date
Financial results 2023	Fri., 15.03.2024
Record date „Annual General Meeting“	Mon., 08.04.2024
80th Annual General Meeting	Thu., 18.04.2024
Quotation Ex-Dividend	Mon., 22.04.2024
Record Date „Dividends“	Tue., 23.04.2023
Dividend distribution	Thu., 25.04.2024
Results 1st quarter 2024	Wed., 08.05.2024
Half-year results 2024	Wed., 07.08.2024
Results 3rd quarter 2024	Thu., 07.11.2024

Glossary

A

Accelerating Circularity

Accelerating Circularity is a collaborative effort to accelerate the textile industry's move from linear to circular. The textile industry must move from a take, make waste system to circularity, avoiding the massive amounts of textile waste annually put into landfill.
www.acceleratingcircularity.org

AFRAC – Austrian Financial Reporting and Auditing Committee

The Austrian Accounting Standards Committee, whose activities are not aimed at profit, serves the research, documentation and further development of accounting and auditing in Austria, taking into account international and European developments and Austrian interests in this field.
www.afrac.at

Austrian Sustainability and Diversity Improvement Act

The "Nachhaltigkeits- und Diversitätsverbesserungsgesetz" (NaDiVeG) implements the European "NFI Directive" (2014/95/ EU) in Austria. It expands the reporting obligations in the area of non-financial information for large companies of public interest, with an average of more than 500 employees.

B

BAT – Best available techniques

Best available techniques means the most effective and advanced stage in the development of activities and their methods of operations. The techniques should indicate the practical suitability of particular techniques for providing, in principle, the basis for emission limit values designed to prevent, and, where this is not practicable, generally to reduce emissions and the impact on the environment as a whole.

Better Growth

Lenzing's corporate strategy Better Growth stands for moving from linear to circular, transforming the cellulose industry, offering customer-centric solutions and achieving excellence with a value-driven mindset.

Biobased

Biobased products are those that originate partially or completely from renewable resources. These products can be either biodegradable or non-biodegradable.

Biobased chemicals

Chemicals from the biorefinery, originating from renewable resources and also referred to in this report as biorefinery products.

Biodegradable / Biodegradation

The property of a substance or material to be degraded by microorganisms (bacteria, fungi, etc.) to water and carbon dioxide (CO_2) and to be absorbed by the environment. Test methods specify a fixed time under defined conditions of temperature, oxygen and humidity, and a certain percentage of degradation. For information about biodegradability of Lenzing fibers, please see the definition of "TÜV certified biodegradable and compostable LENZING™ fibers" in this glossary.

Biodiversity

This is the variability among living organisms from all sources including, among others, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems.

Bioenergy

Bioenergy is energy derived from biomass. The term refers to various forms of energy, including heat and electricity. Also the biomass that contains this energy can be referred to as bioenergy. The main sources of bioenergy are renewable resources.

Biorefinery

A biorefinery can be defined as a framework or a structure in which biomass is utilized in an optimal manner to produce multiple products such as fibers, biobased biorefinery products and bioenergy.

Biorefinery products

Materials or products from a biorefinery, from renewable raw materials. In Lenzing's case, for example, LENZING™ Acetic Acid Biobased, LENZING™ Furfural Biobased, LENZING™ Magnesium-Lignosulphonate Biobased, LENZING™ Soda Ash, xylose;

Blended learning approach

Blended learning (also known as hybrid learning) is a method of teaching that integrates technology and digital media with traditional instructor led classroom activities.

Blockchain

Blockchains are forgery-proof, distributed data structures in which transactions are recorded in the time sequence, traceable, unchangeable and without a central instance linked in a peer-to-peer network. The blockchain technology enables digital traceability of fibers and the corresponding wood sources across each production and distribution step. The technology also allows consumers to verify the garment composition and the underlying textile supply chain.

C

Canopy

Canopy is a Canadian non-profit organization dedicated to the conservation and protection of ancient and endangered forests. Lenzing works together with Canopy to ensure responsible wood sourcing. Canopy publishes the Hot Button Report annually.
https://canopyplanet.org/campaigns/canopystyle/

CDP – Carbon Disclosure Project

The Carbon Disclosure Project (CDP) is a non-profit organization with the aim that companies and also municipalities disclose their environmental data, such as climate-damaging greenhouse gas emissions and water consumption. Once a year, the CDP collects data and information on behalf of investors using standardized questionnaires on CO_2 emissions, climate risks and reduction targets and strategies of companies. Participation is voluntary.
www.cdp.net

Carbon footprint

A carbon footprint is the sum of greenhouse gas emissions and greenhouse gas removals of a product system or an organization, expressed as a carbon dioxide equivalent.

Carbon-neutral

CO_2 neutrality means, in a narrow sense, that no CO_2 is emitted or that the CO_2 emissions are fully offset or compensated. Carbon-neutral is not the same concept as net-zero.
https://de.wikipedia.org/wiki/Klimaneutralit%C3 %A4t

Carbon-zero

Carbon-zero is the name of the concept for certain TENCEL™ fibers in our range. It is only offered to our TENCEL™ fibers with the lowest carbon footprint. The remaining emissions from our carbon-zero TENCEL™ fibers are offset by supporting renewable energy supply projects.

Cellulose

The biopolymer cellulose is a component of all plants. The cellulose content of wood depends on the species and is typically around 40 percent. It is a raw material for pulp production.

Chain of custody

The chain of custody documents the flow of materials and raw materials through various stages right up to the final product. It is important for the certification of raw materials and their traceability. In order to ensure that final products really meet the requirements of the standard, initiatives trace the flow of materials throughout the chain of custody.

COD

Chemical oxygen demand. A further method for assessing the organic load of wastewater (besides BOD biological oxygen demand). It measures the degree to which the wastewater can undergo chemical oxidation.

Compensation

Reducing the negative impact of greenhouse gas emissions in the atmosphere by saving greenhouse gas emissions elsewhere, e.g. by supporting climate protection projects.

Compostable / compostability

Compostable products undergone strict testing to ensure that they break down within a specific time frame and do not release anything harmful into the environment.

Compliance

In general, compliance means conforming to a rule, such as a specification, policy, standard or law. Regulatory compliance describes the goal that organizations aspire to achieve in their efforts to ensure that they are aware of and take steps to comply with relevant laws, policies, and regulations.

Controversial sources

Includes wood derived from: illegal logging or the trade in illegal wood or forest products; destruction of high conservation values in forestry operations - including ancient and endangered forests, and endangered species habitats; plantations established after 1994 through significant conversion of natural forests or conversions to non-forest use; introduction of genetically modified organisms in forestry operations; violation of traditional, community and/or human rights and any violation of the ILO Core Conventions as defined in the ILO Declaration on Fundamental Principles and Rights at Work.

Co-product

By-products recovered during pulp and fiber production.

D

Decarbonization

Decarbonization denotes the declining average carbon intensity (CO_2 emission per unit of a product) over time. Products can be, for example, (primary) energy, gross domestic product, or any units produced by a company.

Denial of service

A denial of service attack (DoS attack) is a cyber attack that prevents legitimate users from accessing services, computer systems, networks, or other information technology resources.

Dirty Dozen

The Dirty Dozen refers to twelve of the most common human error preconditions, or conditions that can act as precursors, to accidents or incidents. For example, tiredness.

Dissolving wood pulp

A special kind of pulp with distinct characteristics which is used to manufacture viscose, modal and lyocell fibers and other cellulose-based products. This grade of pulp is characterized by higher alpha cellulose content and by a high degree of purity.

E

ECF

Elemental chlorine free – a bleaching process without using elemental chlorine.

EcoVadis

EcoVadis aims to promote the environmental and social practices of companies through CSR performance monitoring within the supply chain and to support companies in improving sustainability. EcoVadis operates the first collaborative platform to deliver CSR ratings from suppliers to global supply chains.

eIDAS – electronic identification and trust services

eIDAS is an EU regulation on electronic identification and trust services for electronic transactions in the European Single Market.

e2e – End to End

End-to-end describes a process that takes a system or service from beginning to end and delivers a complete functional solution.

EPA – United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA, resp. USEPA) is an independent agency of the United States for the environmental protection and the protection of human health. EPA works to ensure that Americans have clean air, land and water.
https://www.epa.gov/

ERGs – Employee Resource Groups

Internal forums where employees have an opportunity to actively participate in topics they care about or are interested in and that support employees' beliefs, backgrounds and/or identities. They are voluntary in nature, cross-functional, company-wide and employee-run. Each group is normally focused on a particular common goal/theme e.g. gender diversity, disability, parenting, etc.

ESG – Environmental, social and governance standards

Environmental, social and governance (ESG) refers to the three central factors in measuring the sustainability and ethi-cal impact of an investment in a company or business.

ESRS – European Sustainability Reporting Standards

The ESRS is the new EU framework for sustainability reporting and is a key element of the EU's new Corporate Sustainability Reporting Directive (CSRD). The aim is to make reports more standardized and comparable. It is mandatory for Lenzing from 2024 onwards.

F

FAO – Food and Agriculture Organization of the United Nations

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger. It is based in Rome.

FSC®

The Forest Stewardship Council® (FSC) is an international non-profit organization for wood certification.

Furfural

A clear yellowish liquid with a characteristic scent of almonds. During viscose fiber production, beech wood is cooked and furfural is released in a double distillation process.

G

GHG – Greenhouse gas emissions

Emissions of gases which contribute to global warming by absorbing infrared radiation, thereby heating the atmosphere. The main contributors are carbon dioxide (CO_2), methane (CH4), and nitrous oxide (N2O).

GRI – Global Reporting Initiative

The Global Reporting Initiative (known as GRI) is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption. The purpose of GRI is to develop globally applicable guidelines for sustainability reporting.

H

Hay job

The Hay Method of job evaluation assesses a job based on skill (know-how), effort (problem solving), responsibility (accountability) and working conditions.

Hemicellulose

The designation for carbohydrates that are contained in wood but that are not cellulose. They can have the widest variety of compositions depending on the type of wood involved, e.g. xylan (in beech wood).

Higg FEM

The Higg Facility Environmental Module (Higg FEM) standardizes how facilities can measure and evaluate their yearly environmental performance. A clear picture of the environmental impact that a manufacturer and its facilities are having upon the environment and the world as a whole are provided. The Higg FEM helps manufacturers, brands, and retailers identify and prioritize opportunities for performance improvements. The Higg FEM assesses (a) environmental management system, (b) energy/GHG emissions, (c) water, (d) waste, (e) wastewater, (f) air emissions and (g) chemicals management.

Higg FSLM

The Higg Facility Social and Labor Module (FSLM) tool focuses on issues such as hours of work, wages and benefits, health and safety, and strengthening communities.

Higg MSI

The Higg Materials Sustainability Index (Higg MSI) is the apparel industry's most trusted tool to measure and score the environmental impacts of materials.

High-consequence work-related injuries

High-consequence work-related injuries are split between: Fatalities and other injuries from which the worker cannot recover (e.g. amputation of a limb), or does not or is not expected to recover fully to preinjury health status within six months (e.g. fracture with complications). The definition of high-consequence work-related injury uses recovery time instead of lost time as the criterion for determining the severity of an injury.

I

ILO – International Labour Organization

The International Labour Organization is a United Nations agency that sets international labor standards and promotes social protection and work opportunities for all. The ILO has 187 member states: 186 of the 193 UN member states plus the Cook Islands are members of the ILO.

Integration

All stages of fiber production are concentrated at one and the same site, from wood, the raw material, to pulp, biorefinery and co-products to fiber production

IOSH – Institute of Occupational Safety and Health

IOSH is the only Chartered body for safety and health professionals. Their members follow a strict Code of Conduct and a formal professional development program.

IPBES

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) is an intergovernmental body providing scientific policy advice on biodiversity – comparable to the IPCC (Intergovernmental Panel on Climate Change).
https://www.bmuv.de/faq/was-ist-und-macht-ipbes

IPCC

The abbreviation “IPCC” stands for Intergovernmental Panel on Climate Change. In German-language media, the IPCC is usually referred to as the “Weltklimarat”. The IPCC was founded in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). Its findings form the basis for international climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). In it, member states affirm their intention to prevent “dangerous climate change.”
https://wiki.bildungsserver.de/klimawandel/index.php/IPCC

ISO 14001:2015

An international standard for the certification of environmental management systems.

ISO 45001:2018

An international standard for management systems of occupational health and safety.

ISO 9001:2015

An international standard for the certification of quality management systems.

ISS ESG

ISS ESG is the responsible investment arm of Institutional Shareholder Services Inc., the world's leading provider of environmental, social, and governance solutions for asset owners, asset managers, hedge funds, and asset servicing providers.

K

KPI

The term key performance indicator describes indicators in business economics which are used to measure progress or achievements related to important targets or critical success factors within an organization.

L

LCA
Life Cycle Assessment is a systematic analysis of the environmental impacts of products throughout their life cycle ("from cradle to grave").

Lignin
A polyaromatic component of wood that cannot be used for fiber production. It is used for generating power and to recover co-products.

Lignosulfonate
The decomposition products of lignin from wood after pulping.

Lyocell fibers
Lyocell fiber is the latest generation of cellulosic fibers. In Lenzing's case the cellulose used is either wood-based or recycled cotton (REFIBRA™ Technology). The generic fiber name is lyocell, the branded products from Lenzing are marketed as TENCEL™ and VEOCEL™ fibers. It is known for its smooth and silky handfeel as well as performance aspects.

M

Microplastics
Small plastic particles of 5 mm or less in size – known as "micro-plastics" – are perceived to be a major pollution problem in freshwater bodies and the sea. While recent industry initiatives and legislation aim to promote the development of less polluting alternatives, Lenzing, as a producer of wood-based cellulosic fibers, laid the foundations for biodegradable products more than 80 years ago.

Modal fibers
Modal is a viscose fiber refined under modified viscose production conditions and spinning conditions. It is characterized by a particular softness and is the preferred fiber for high-quality next to skin applications like underwear and similar products. The fibers have improved characteristics such as tenacity, dimensional stability, and so forth. Lenzing markets these fibers under TENCEL™ Modal.

N

Net-benefit products
Lenzing's net-benefit products offer positive impacts and benefits for the environment, society, and value chain partners, and are better than most competing alternatives in the market. Net-benefit products take a life cycle perspective and thus include both upstream and downstream value chain processes. Net-benefit thinking describes the performance of our specialties and forward solutions.

Net-zero target
Companies shall set one or more targets to reach a state of net-zero emissions, which involves: (a) reducing their scope 1, 2 and 3 emissions to zero or to a residual level that is consistent with reaching net-zero emissions at the global or sector level in eligible 1.5°C scenarios or sector pathways and; (b) neutralizing any residual emissions at the net-zero target date and any GHG emissions released into the atmosphere thereafter.

Source: Net-Zero-Standard.pdf (sciencebasedtargets.org) When talking about net-zero, a maximum of 10 percent can be compensated by removal offsets (according to the science-based target initiative), 90 percent of absolute carbon must be reduced. This is the main difference to carbon-neutral, where there are no limits on the level of offsetting.

NIST Cyber Security Framework
The NIST Cyber Security Framework consists of voluntary guidelines, standards and best practices to manage cybersecurity risk.

NMMO
N-Methylmorpholine N-oxide is an aqueous, biodegradable, organic solvent.

Nonwovens
Nonwoven fabric materials, fleece. Nonwovens made from Lenzing fibers are used for sanitary, medical, and cosmetics applications.

O

Offsetting
Reducing the damage caused by releasing carbon dioxide into the environment by doing other things that remove carbon dioxide from the atmosphere, e.g. through climate protection projects.

P

PEFC
The Programme for the Endorsement of Forest Certification Schemes (PEFC) is an international non-profit organization for wood certification.

Plantation forest
Planted Forest that is intensively managed and meet all the following criteria at planting and stand maturity: one or two species, even age class, and regular spacing (FAO-FRA 2020). Examples: poplar, acacia or eucalyptus plantations.

Post-consumer
A product made from post-consumer material is made from waste that has been used and disposed of by a consumer (such as used clothing).

Pre-consumer
Pre-consumer upcycling is the reclamation of waste materials that were created during the manufacturing process prior to their delivery to a consumer (such as cotton scraps from garment making). Often also referred to as post-industrial waste.

R

RaaS – Ransomware as a Service
RaaS is a service in which cybercriminals provide a compact malware program that can be used to launch a ransomware attack. Ransomware is a malware, where cybercriminals attack a system with malicious code. The goal is to lock legitimate users out of their system and encrypt sensitive data. Companies are then often blackmailed into paying high ransoms in order to obtain the decryption key.

Regenerated cellulose
In the context of cellulosic fibers, regeneration means "bringing back into shape". Regenerated cellulose is a class of materials manufactured by the conversion of natural cellulose to a soluble cellulosic derivative using chemicals and subsequent regeneration, which also includes the separation of chemicals and cellulose. Leaving behind the cellulose in form of either a fiber (e.g., rayon) or a film (e.g., cellophane). The industry is also known internationally as the man-made cellulosic fiber (MMCF) industry.

S

Salutogenesis
Developed by Aaron Antonovsky († July 7, 1994), an Israeli-American professor of sociology. In contrast to pathogenesis, the salutogenic approach does not focus on the question "What makes a human being ill?" but rather "What keeps a human being healthy?"

SBT – Science-based targets

Targets adopted by companies to reduce greenhouse gas emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 1.5°C compared to pre-industrial temperatures, as described in the Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). (Applies to the 4th or 5th AR of IPCC as well as modelling of the IEA.)

Scope 1, 2 & 3 emissions

Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Security patch

A security patch is a method of updating applications, systems or software by inserting code to fix the vulnerability.

Semi-natural forest

Forests of native species, established either through assisted or natural regeneration, or a mix of these under intensive stand management (includes forests in which assisted regeneration carried out with same species and similar species composition as in the natural forests in the area). Examples: many production forests in Europe, some teak plantations. These forests include, according to FAO (2020): Naturally regenerating forests, which are forest predominantly composed of trees established through natural regeneration. Planted forests, which are forest predominantly composed of trees established through planting and or/deliberate seeding. But not plantation forests.

SFI – Sustainable Forestry initiative

The SFI program was developed in 1994 to ensure North America's valuable forests were protected and to document the commitment of forest products industry members to keep our forests healthy and to practice the highest level of sustainable forestry.

SHEARS

Safety, Health and Environment Action Reporting System of the Lenzing Group.

SLCP – Social & Labor Convergence Program

The Social & Labor Convergence Program provides the tools to capture accurate data about working conditions in global supply chains. This multi-stakeholder initiative replaces the need for repetitive social audits by facilitating data sharing.

Stakeholders

All internal and external persons or groups affected directly or indirectly by business activities currently or in the future.

SAC – Sustainable Apparel Coalition

An association of leading companies, non-profit organizations as well as research and educational experts aiming to create a more sustainable international apparel, footwear and textile industry. The SAC is the developer of the Higg Index.

Sustainalytics

Sustainalytics is a rating agency that assesses the sustainability of listed companies based on their environmental, social and governance performance.
www.sustainalytics.com

T

Talent grid

In the Lenzing Group, a "talent grid" is used to classify talents. It analyses the distribution of performance and potential within a specific team, department, function and business. The graphical representation in a nine-box grid helps to understand the "talent mix" within a particular part of the organisation.

TCF

Totally chlorine free (bleaching process).

TE – Textile Exchange

Textile Exchange, founded in 2002, is a global nonprofit organization that works closely with all sectors of the textile supply chain to find the best ways to minimize and even reverse the negative impacts on water, soil, air, animals, and the human population.

TÜV certified biodegradable and compostable LENZING™ fibers

LENZING™ fibers which are TÜV certified biodegradable (soil, fresh water & marine) and compostable (home & industrial) include the following products: LENZING™ Viscose Standard textile/ nonwovens, LENZING™ Lyocell Standard textile/nonwovens, LENZING™ Modal Standard textile, LENZING™ Lyocell Filament, LENZING™ Lyocell Dry and LENZING™ Web Technology. An exception in certification applies for the fibers LENZING™ Lyocell Filament and LENZING™ Lyocell Dry, for which the necessary tests for confirming biodegradability in marine environment were not yet done or finalized.

U

UNCITRAL – United Nations Commission on International Trade

The United Nations Commission on International Trade Law is a subsidiary body of the U.N. General Assembly responsible for helping to facilitate international trade and investment.

V

VÖNIX - VBV Austrian Sustainability Index

VÖNIX is Austria's first sustainability index. It was created by the VBV Austrian pension fund and is comprised of listed Austrian companies that are leaders in terms of social and environmental performance.

Viscose fibers

Viscose is a cellulosic fiber (also known as rayon). In Lenzing's case the cellulose used is wood-based. Wood from trees is processed into pulp which gets derivatized by a chemical reaction and then is dissolved until it becomes a sticky liquid. The solution is pushed through nozzles into a "spinning bath" which allows that fibers are regenerated from the solution into a shape suitable in diameter and length for use in textile and nonwoven applications. The cellulosic fiber viscose is a fiber with a flowy drape, in personal hygiene products it is used to absorb and retain liquid. LENZING™ ECOVERO™ Viscose is the branded fiber for textile and VEOCEL™ Specialty Viscose fibers for nonwovens applications.

W

Wood-based cellulosic fiber

A fiber industrially produced from the raw material wood. The industry is known as man-made cellulose fiber industry.

X

Xylose

Wood sugar, component of thick liquor and base material for xylitol (sweetener that inhibits tooth decay)

Z

ZDHC – Zero discharge of hazardous chemicals

The ZDHC Foundation is a global center of excellence in responsible chemical management which works towards zero discharge of hazardous chemicals in the textile, leather, and footwear value chain to improve the environment and people's wellbeing.

ZDHC MMCF Guidelines

The ZDHC MMCF Guidelines is a set of guidelines that addresses integrated expectations for discharge wastewater quality, emissions to air, and chemical recovery for manufacturing facilities producing man-made cellulosic fibers (MMCF).

Zero-day vulnerabilities

A zero-day vulnerability is a computer-software vulnerability that is unknown to the vendors and therefore has no patch ready. The term zero-day means that there is a zero-day gap between the time the vulnerability is discovered and the first attack happens.

Financial glossary

A

Adjusted equity

Equity including non-current and current government grants less the proportional share of deferred taxes on these government grants.

Adjusted equity ratio

Ratio of adjusted equity to total assets in percent.

C

CAPEX

Capital expenditures; i.e. acquisition of intangible assets, property, plant and equipment and biological assets and acquisition of business units as per consolidated statement of cash flows.

Capital employed

Total assets minus the following: non-interest-bearing debt, cash and cash equivalents, current securities, investments accounted for using the equity method and financial assets.

E

Earnings per share

The share of net profit/loss for the year attributable to the shareholders of Lenzing AG divided by the weighted average number of issued shares, calculated according to IFRS (IAS 33 Earnings per Share); the precise derivation can be found under note 16 in the notes to the consolidated financial statements.

EBIT (earnings before interest and tax)

Earnings before interest and tax, or operating result; the precise derivation can be found in the consolidated income statement.

EBIT margin

EBIT as a percent of revenue; represents the return on sales (ROS).

EBITDA (earnings before interest, tax, depreciation and amortization)

Operating result before interest, tax, amortization of intangible assets and depreciation on property, plant and equipment, right-of-use assets and depletion of biological assets and before income from the release of investment grants.

EBITDA margin

EBITDA as a percent of revenue.

EBT (earnings before tax)

Profit/loss for the year before income tax expense. The precise derivation can be found in the consolidated income statement.

Equity

The equity item aggregates the equity instruments as defined by IFRS. An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. This represents the funds provided to the entity by its owners.

F

Free cash flow

Cash flow from operating activities less cash flow from investing activities and net cash inflow from the sale and disposal of subsidiaries and other business areas plus acquisition of financial assets and investments accounted for using the equity method less Auszahlungen für an Gemeinschaftsunternehmen gewährte Kredite less proceeds from the sale/repayment of financial assets. Free cash flow corresponds to the readily available cash flow.

FTE

Abbreviation for Full-Time Equivalents.

G

Gross cash flow

Gross cash flow equals cash flow from operating activities before change in working capital; the precise derivation can be found in the consolidated statement of cash flows.

I

IAS

Abbreviation for International Accounting Standard(s), which are internationally recognized accounting rules.

IFRS

Abbreviation for International Financial Reporting Standard(s), which are internationally recognized accounting rules.

L

Liquid assets

Cash and cash equivalents plus liquid securities and liquid bills of exchange.

Liquid funds

Cash and cash equivalents plus current securities.

M

Market capitalization

Weighted average number of shares multiplied by the share price as at the reporting date.

N

Net debt

Interest-bearing financial liabilities (= current and non-current financial liabilities) less liquid assets plus provisions for pensions and severance payments.

Net financial debt

Interest-bearing financial liabilities (= non-current and current financial liabilities) less lease liabilities less liquid assets.

Net financial debt/EBITDA

Net financial debt as a percent of EBITDA.

Net gearing

Net financial debt as a percent of adjusted equity.

Non-interest-bearing debt

Trade payables plus the following: puttable non-controlling interests, other liabilities, current tax liabilities, deferred tax liabilities and the proportional share of deferred taxes on government grants as well as provisions (excluding post-employment benefits).

NOPAT

Net operating profit after tax; operating result (EBIT) less the proportional share of current income tax expense.

P

Post-employment benefits

Provisions for pensions and severance payments.

R

ROCE (return on capital employed)

NOPAT as a percent of average capital employed (average from January 1 and December 31).

ROE (Return on equity)

EBT (earnings before tax) as a percent of average adjusted equity (average from January 1 and December 31).

ROI (Return on investment)

EBIT (earnings before tax) as a percent of average total assets (average from January 1 and December 31).

T

Total assets

Total of non-current and current assets or the total of equity and non-current and current liabilities. The precise derivation can be found in the consolidated statement of financial position.

Trading working capital

Inventories plus trade receivables less trade payables.

Trading working capital to annualized group revenue

Trading working capital as a percent of the latest reported quarterly group revenue x 4.

W

Working capital

Net current assets. Inventories plus trade receivables and other non-current and current assets less current provisions, trade payables and other non-current and current liabilities.

SPECIAL THANKS FOR EDITORIAL CONTRIBUTIONS GO TO:

- Abdullah Ismail
- Allesch Markus
- Arnitz Alexander
- Bartsch Peter
- Bauhofer-Winter Franz
- Böhm Laura
- Buch Monique
- Buchleitner Robert Johann
- Cafuta Danijela
- Chan Linda
- Dachs Johanna
- Durz Angelika
- Eckmair Georg
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- Gluth Claudia
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- Gorringe Stuart Philip
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- Hackl Jasmin
- Herzog Matthias
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- Holzinger Franziska
- Margit Hinterwirth
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- Panholzer Thomas
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- Stanger Elizabeth
- Steinmair Philipp
- Stummer Lisa
- Tauzimsky Thomas
- Vieira Tiago
- Viehböck Johann-Peter
- Waldow Luise
- Wester Andreas
- Winkelmeier Daniel
- Wirth Florian
- Zak Sonja
- Zeiner Daniela
- Zimmermann Kerstin

Imprint

Copyright and published by

Lenzing Aktiengesellschaft

4860 Lenzing, Österreich

www.lenzing.com

Concept and edited by

TOWA (www.towa-digital.com),
Lenzing Group

Layout and graphic design

nexxar GmbH (www.nexxar.com)

Text pages 23–46, 48–175, 177–181, 184–266

Produced in-house using FIRE.sys

Photographs by

Markus Renner; Lenzing AG / Skyline Medien GmbH; Lenzing AG / Skyline Medien GmbH; Lenzing AG / Skyline Medien GmbH; Lenzing AG / Franz Neumayr; Lenzing AG / Lenzing AG / Christian Leopold; Lenzing AG / Kevin Wong; Lenzing AG / Lee Jian Shen; Lenzing AG / Cheung Chi Lock; Lenzing AG

Notes

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