

focus **paper**

Sustainability strategy
“Naturally Positive”
Issue April 2024



Table of contents

The sustainability strategy of the Lenzing Group	3
New corporate strategy “Better Growth”	3
“Naturally Positive” sustainability strategy	3
Our sustainability vision	3
Our sustainability mission	3
Driving systemic change	4
Advancing circularity	4
Greening the value chain	5
Strategic focus areas	6
Raw material security	6
Water stewardship	6
Decarbonization	7
Sustainable innovations	7
Empowering people	7
Partnering for systemic change.....	7
Enhancing community wellbeing.....	8
Materiality analysis 2021	9
Development of the materiality analysis	9
Net-benefit concept.....	10
Products and technologies with a net benefit	10
Sustainability targets, measures and progress.....	13
Stakeholder dialog	17
United Nations Sustainable Development Goals (SDGs).....	17
Imprint	17

The sustainability strategy of the Lenzing Group

New corporate strategy “Better Growth”

As Lenzing has grown and advanced in recent years, it became necessary to ensure that the company could still maintain its momentum within a changing industry. In 2022, a new corporate strategy called “Better Growth” was defined, which places emphasis on expanding Lenzing’s foothold as a sustainability leader in a volatile economic environment.

Four strategic drivers were identified that map out a clear path ahead:

- Sustainability, moving from linear to circular
- Innovation to transform the cellulose industry
- Premiumisation through customer-centric solutions
- Excellence with a value-driven mind-set

These drivers strengthen differentiation and competitiveness to help Lenzing to achieve better growth across different market segments.

“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. The creation of more positive impacts and benefits is the guiding light for our innovation and business practices.



Figure 1: Strategic focus areas of sustainability in the Lenzing Group

“Naturally Positive”, the Lenzing Group’s sustainability strategy, was developed from the results of the materiality analysis and is firmly rooted in the Lenzing Group’s Better Growth strategy. Within the dimensions of People – Planet – Profit, this strategy defines the sustainability areas in which Lenzing can do the most to create a more sustainable world. It is the basis for Lenzing’s approach towards contributing to the United Nations’ Sustainable Development Goals (SDGs).

Three strategic principles

Driving systemic change

Complex global challenges call for a collaborative approach to designing systemic solutions that involve many stakeholder groups. As a leader in regenerate 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.

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 in Lenzing's sustainability report.

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.

Strategic focus areas

Within the three principles described above, Lenzing identified seven focus areas in which the Lenzing Group substantially contributes to creating positive impacts and benefits:

- Raw material security
- Water stewardship
- Decarbonization
- Sustainable innovations
- Empowering people
- Partnering for systemic change
- Enhancing community wellbeing

Lenzing sets targets in these areas to further advance its performance and positive impact. These focus areas are directly contributing towards several Sustainable Development Goals (SDGs).

Raw material security

Lenzing's long-term business success depends on the availability and quality of responsibly sourced and sustainably manufactured raw materials. Wood, dissolving wood pulp and chemicals such as caustic soda, carbon disulfide and N-Methylmorpholi N-oxide are the most important basic materials for the Lenzing Group. Lenzing strives to improve the efficiency with which natural resources are used. This encompasses the design, manufacture and use of efficient, effective, safe, and more environmentally benign chemical products and processes. The company focuses on responsible sourcing practices through assessments and certifications, responsible consumption, and the highly efficient use of wood through biorefinery.

Growing global demand for wood-based biomass and alternative land use is putting pressure on the world's forests, which provide fresh water, oxygen, climate regulation, flood resilience, biodiversity, recreation, and valuable renewable raw materials to society.

Lenzing promotes conservation solutions to protect ancient and endangered forests. Innovation of alternative cellulose sources is a strategic priority for the Lenzing Group, for example textile recycling. For more information please see [the "Biodiversity" focus paper](#).

Water stewardship

Water is a precious resource and its increasing scarcity in many parts of the world constitutes a threat to people, the environment as well as to economic development. Poorly managed wood plantations can cause pressure on the regional water balance. Lenzing procures certified wood from sustainable managed forests and therefore mitigates impacts relating to water stress. On the other hand, some materials used in the textile supply chains occasionally create high water impacts through both water consumption and pollution. Key topics for 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 low water impact for the growing world and innovates products that omit downstream value chain steps. This substantially reduces water use and impacts. At the end of life, Lenzing's fibers are biodegradable and compostable in marine and freshwater environments and therefore do not contribute to microfiber pollution, unlike fossil raw material-based fibers.

Decarbonization

The climate crisis is one of today's most pressing challenges, calling for collaborative solutions involving a multitude of relevant stakeholders, from value chain partners to authorities.

Dissolving wood pulp and fiber production are energy-intensive processes. The Lenzing Group will substantially reduce its GHG emissions in the coming years through a number of corresponding measures. In line with the Paris Agreement and the UN SDG 13, in 2019, the Lenzing Group set an ambitious science-based target (SBT). Those targets was updated in 2024:

- Near-term science-based 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)
- 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).

Sustainable innovations

Sustainable innovations are those that improve the prosperity of our society within the limits of our planet. Sustainable innovations include substantial efficiency improvements of existing technologies, technological breakthroughs, driving systemic change through forward solutions and business models on a large scale. These innovations create net-benefit products and solutions offering positive impacts and benefits to the environment, society, and value chain partners that are better than most competing alternatives in the market. Sustainable innovation is a cross-cutting theme and is embedded in all other key focus areas such as raw material security, water stewardship, decarbonization, and partnering for systemic change.

Empowering people

The Lenzing Group is committed to conducting business in a manner that respects the rights and dignity of all people.

People are at the core of the company's business success. People who take ownership and feel able to take positive action drive a successful transformation to a more sustainable society and economy. Empowering the group's own employees and nurturing future leaders are key activities for driving improvements in sustainability. The Lenzing Group also motivates partners along the value chain to be change-makers and drivers of sustainability.

Partnering for systemic change

The world today is more interconnected than ever before. Improving access to technology and knowledge is an important way to share ideas and foster innovation.

Complex global sustainability challenges call for a collaborative approach to designing systemic solutions, involving many stakeholder groups. Transparency is a prerequisite for fostering trust and long-term relationships.

Guided by the United Nations Sustainable Development Goal SDG 17: Partnerships for the goals, the Lenzing Group regularly engages with a wide range of stakeholders and business partners in order to integrate different perspectives, understand global trends, and mitigate risks. Lenzing strives to identify and develop cross-industry business cases to make progress on the circularity of both the Lenzing Group and the industry.

With its contributions to developing methods and tools, Lenzing helps the industry to progress on its sustainability roadmap.

Enhancing community wellbeing

The Lenzing Group's various production sites operate in their respective ecological, social and economic environments. Lenzing's operations and their regional partners are mutually dependent, sharing opportunities, but also challenges. Community wellbeing is therefore a prerequisite for the company's license to operate.

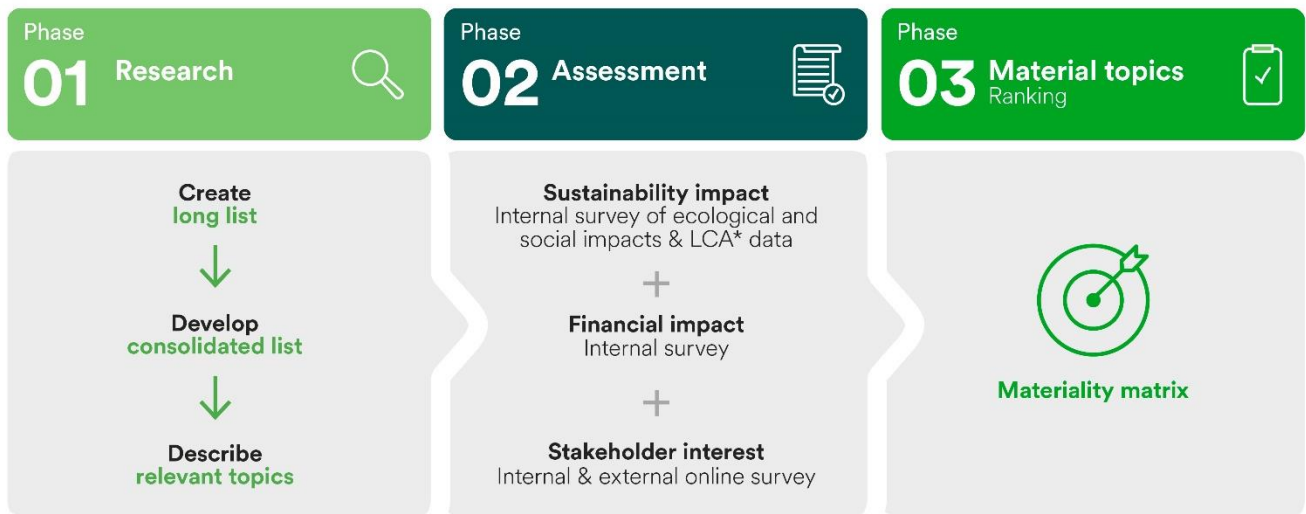
As a good corporate citizen, the Lenzing Group promotes the beneficial development of the communities and regions where it operates. This is achieved through safe and environmentally responsible operations, fair business practices and contribution to local economic development and community life. For more information, please see the ["Community engagement" focus paper](#).

Materiality analysis 2021

Regular updates of the materiality analysis are an integral part of Lenzing's sustainability strategy. In 2017, Lenzing presented its new "Naturally Positive" sustainability strategy. In the run-up to this, a comprehensive materiality analysis was carried out for the first time in 2015. In 2021, this materiality analysis was updated and expanded. For the first time, 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. For more information on updating the materiality analysis, please see the "[Materiality analysis](#)" focus paper.

Development of the materiality analysis

The new materiality matrix of the Lenzing Group was developed in three phases.



* LCA = Life cycle assessment

Figure 2: Development of the materiality analysis

Net-benefit concept

Lenzing's net-benefit concept guides and shapes all major decisions.

Lenzing's net-benefit products offer positive impacts and benefits to the environment, society, and value chain partners that exceed those of most competing alternatives on the market. Net-benefit products take a life cycle perspective and thus include both upstream and downstream value chain processes. Customers can replace resource-intensive and polluting 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

Modal



At the Lenzing 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. Raw material from beechwood and spruce is converted into cellulose and other biorefinery products. Beech forests grow naturally without the use of chemical fertilizers or artificial irrigation. 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 generate around 80 percent less greenhouse gas in production than generic modal fibers (according to Higg-MSI, based on Higg MSI database v3.5 (Dec. 2022)).

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, based on Higg MSI database v3.5 (Dec. 2022)).

Pulp



Dissolving wood pulp is the raw material for Lenzing's fibers and predominantly produced in the company's own biorefineries. Lenzing's biorefinery process ensures 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 "[Wood and pulp](#)" focus paper.

LENZING™ ECOVERO™ viscose fibers and VEOCEL™ viscose fiber



LENZING™ ECOVERO™ branded viscose (for textiles) and VEOCEL™ specialty viscose fiber with Eco Care technology (nonwovens) offer a 50 percent reduction in greenhouse gas emissions and water impact compared to generic viscose (according to Higg-MSI, based on Higg MSI database v3.5 (Dec. 2022)).

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 fabrics¹.

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.

¹ Terinte, N., Mando, 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

TENCEL™ Luxe filaments



The TENCEL™ Luxe branded lyocell filament aims to become a key milestone for eco-couture fabrics in the premium luxury market. The closed-loop lyocell production process ensures low environmental impact 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 30 percent of the total GHG emissions of the textile value chain (excluding use phase).

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.

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 with dissolving wood pulp and produces a directly formed cellulosic nonwoven fabric made of 100 percent continuous lyocell filament. This technology enables fiber and nonwoven production in only one step 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.

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 will be also available as carbon-neutral alternative to conventional fossil-based acetic acid, substantiated by a study conducted by an independent Life Cycle Assessment (LCA) consultant.

Sustainability targets, measures and progress

Lenzing 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.

Color	code	status
Green	On track	On track
Light Green	Achieved	Achieved
Grey	Delayed	Delayed
Yellow	New target	New target
Dark Green	Measures implemented	Measures implemented

Sustainability targets, measures and progress

		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 successfully 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.		
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^a	2028	6, 12
Measure(s)	First ZDHC Gateway reporting of MMCF waste water guideline v2 at all lyocell sites ^a in 2023	2023	
	First supplier platform implementation and reporting of MMCF Guideline v2 - Responsible fiber production at all lyocell sites ^a in 2023	2023	
	Lenzing lyocell sites ^a 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 wastewater treatment plant project in Grimsby (United Kingdom) is on track and will come into operation in 2024.		
Raw material security and biodiversity			
Conservation Albania	project 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 Development 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 detailed 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) ^b	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 continuous 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 States), Grimsby (United Kingdom), Nanjing (China), Purwakarta (Indonesia) and Paskov (Czech Republic) were completed successfully. 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 communities" 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

Table 1: Sustainability targets, measures and progress

Stakeholder dialog

Engaging in a dialog means respecting the stakeholders, contributing with Lenzing's expertise and knowledge, and the opportunity to learn from the partners' perspectives. Each dialog starts with providing transparent information. This helps stakeholders to form an educated opinion, to assess risks, and to avoid misunderstandings by building trust. Furthermore, continuous trusting stakeholder relationships contribute to resolving existing tensions and avoiding potential conflicts. For more information, please see the "Stakeholder engagement" focus paper.

United Nations Sustainable Development Goals (SDGs)

Adopted by world leaders in September 2015 at a historic UN summit, the 17 SDGs came into force on January 1, 2016. The Goals are unique in that they call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. The Goals serve as a framework for businesses to help create a more eco-responsible future by addressing such global challenges as poverty, inequality and climate change.

Lenzing recognizes its responsibility and sees its pioneering role in the textile and nonwoven industries as an opportunity to contribute to the achievement of sustainable development goals. Lenzing's sustainability strategy and targets contribute towards these goals. For more information on Lenzing's approach to the SDGs, please see the "Sustainable Development Goals" focus paper.

Imprint

Copyright & published by:
Lenzing Aktiengesellschaft
4860 Lenzing, Austria
www.lenzing.com

Inquiries to: sustainability@lenzing.com

Photographs by:
Isaiah & Taylor Photography/Stocksy United
Lauren Parker/EyeEm/gettyimages.com

Photographers:
Eugenia Chui
Karen Kao
Diora Kong
Franz Neumayr

Neumayr Fotografie – Christian Leopold Kevin Wong
Lily Yuen
Lenzing AG

