

Sustainability Glossary



AFIRM

The Apparel & Footwear International RSL Management Working Group is a global organization providing resources for sustainable, self-governing RSL implementation across the apparel and footwear supply chain. It provides an RSL toolkit for brands and retailers

BCI

The Better Cotton Initiative is a holistic approach to sustainable cotton production, which covers three pillars of sustainability: environmental, social and economic. The system is designed to ensure the adoption of good practices, and to encourage the scaling up of collective action to establish a sustainable mainstream commodity.

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

The ability of a substance to be broken down by micro-organisms (bacteria, fungi, etc.) into carbon dioxide (CO₂) and water, so that it can be consumed by the environment. Test methods describe a certain time, conditions of temperature, oxygen availability, and humidity, and set a certain percentage of breakdown. The term does not mean the material should be freely released into the environment in an uncontrolled manner, as the speed, method and nature of biodegradation differs between materials.

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. Biodiversity is important to the health of ecosystems as it provides food, materials and contributes to the economy.

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.

Biofuel

A fuel produced directly or indirectly from living matter, including plant material and animal waste. Examples of biofuels include ethanol, biodiesel and biogas. Biofuels are seen as a viable alternative to fossil fuels as they can be replenished as quickly as they are used and burn cleanly.

Biomass

Organic matter, such as timber and crops, that can be converted to fuel and is generally regarded as a renewable fuel source. Biomass is sustainable and generally carbon-neutral because the carbon released in the combustion process is offset by the carbon trapped in the organic matter by photosynthesis during its growth. In biomass power plants or boilers, wood waste or other waste is burned to produce steam that runs a turbine to make electricity. Biomass is considered by many companies and governments to be a renewable and sustainable source of energy.

Bioplastics

Bioplastics are biodegradable or compostable materials that come from renewable sources such as vegetable fats and oils, corn starch or microbiota. Production of such plastics tends to require less fossil fuels and to produce less greenhouse gases (GHG) than the production of fossil-fuel based polymers. Not all bioplastics are biodegradable nor biodegrade more readily than commodity fossil-fuel derived plastics.

Biorefinery

A biorefinery is a facility for sustainable processing of biomass into a spectrum of marketable biobased biorefinery products and bioenergy.

Blusign technologies

A Swiss-based company which examines natural resources and chemicals used in textile production, occupational health. It takes a holistic view of safety and environmental issues in the textiles and apparel supply chain. Bluesign's blueXpert tool is designed to allow textile mills to benchmark the efficiency of wet processing.

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 TENCEL™ branded 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.

Canopy Planet Society

The Canopy Planet Society is a Canadian nonprofit organization that focuses on the conservation and protection of ancient and endangered forests.

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 negative

The reduction of an entity's carbon footprint to less than neutral, so that the entity has a net effect of removing carbon dioxide from the atmosphere rather than adding it.

Carbon sequestration

The long-term capture and storage of carbon dioxide from the atmosphere in carbon sinks such as oceans, forests or soils to mitigate global warming and avoid dangerous climate change. A classic example is the photosynthesis of trees and plants, which absorb carbon dioxide and produce oxygen.

Carbon neutral

Achieving carbon neutrality, or having a net-zero carbon footprint, requires a nation or business to balance its carbon emissions with an equivalent amount sequestered or offset. Alternatively, it can purchase enough carbon credits to make up the difference between its emissions and a zero-carbon baseline.

Cellulose

The raw material for pulp production. Cellulose is a component of all plants. The cellulose content of wood is about 40 percent.

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.

Chemical Recycling

Chemical recycling entails waste materials going through a chemical process to produce new filaments or fibers that can be transformed into new yarns and fabrics. Currently this technique requires textiles consisting only of the same fibre or fiber chemistry. Polyester chemical recycling has been commercial for some years. REFIBRA™ from Lenzing is the only cellulose product that is produced en masse.

Circular Economy

In a circular economy, waste is designed out of the system from the beginning, and economic activity is decoupled from the consumption of finite resources. The aim is for resources in the system to cycle multiple

times within and across industries. Ideally in this system, materials are constantly reused or recycled, and waste is eliminated. The system is restorative and regenerative by design.

Climate change

A long-term shift in global weather patterns or average temperatures. Scientific research shows that, compared with climate change patterns throughout Earth's history, the rate of temperature rise the Industrial Revolution is extremely high. Rising temperatures can lead to extreme weather such as droughts, sea level rises and retreating glaciers.

Closed loop

A business model that completely reuses, recycles, or composts all materials. The term can also be used to refer to corporate take-back schemes, where companies that produce a good are also responsible for its disposal.

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.

Compostable

A material which is certified to biodegrade or decompose under industrial composting conditions. Industrial composting conditions require elevated temperature (55-60°C) combined with a high relative humidity and the presence of oxygen.

COP (Conference of the Parties)

The Conference of Parties, known as COP, is the decision-making body responsible for monitoring and reviewing the implementation of the United Nations Framework Convention on Climate Change. It brings together the 197 nations and territories – called Parties – that have signed on to the Framework Convention. Decisions can only be made unanimously by the States Parties or by consensus.

Corporate Social Responsibility (CSR)

A concept which encourages a company to take responsibility for its impact on environmental and social wellbeing. CSR is a broad movement which encompasses a variety of issues such as human rights, corporate governance, responsible sourcing and environmental footprints.

Cradle to cradle

Using the end-use product (waste) for the source of a new product: a circular economy. All products can be designed for continuous recovery and re-utilisation.

Decarbonization

Decarbonization denotes the declining average carbon intensity (CO₂ emission per unit of a product) over time. Products can be e.g. (primary) energy, gross domestic product, or any units produced by a company.

Dissolving pulp

A special kind of pulp with special characteristics 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.

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. Eco-Vadis operates the first collaborative platform to deliver CSR ratings from suppliers to global supply chains.

Environmental, social and governance standards (ESG).

Environmental, social and governance (ESG) refers to the three central factors in measuring the sustainability and ethical impact of an investment in a company or business.

Extended Producer Responsibility (EPR)

In the field of waste management, extended producer responsibility is a strategy to add all of the environmental costs associated with a product throughout the product life cycle to the market price of that product. The concept was first formally introduced in Sweden by Thomas Lindqvist in a 1990 report to the Swedish Ministry of the Environment.

Eutrophication

A process of pollution that occurs when a lake or stream becomes over-rich in plant nutrient; as a consequence it becomes overgrown in algae and other aquatic plants.

Fair trade

A social movement which aims to ensure that fair prices are paid to producers in developing countries, as well as delivering improved social and environmental standards. The movement focuses in particular on commodities or products sold by producers in developing countries to companies in developed countries, such as coffee, cocoa, sugar and chocolate.

FSC®

The Forest Stewardship Council® (FSC) is an international non-profit organization for wood certification.

Global Reporting Initiative (GRI)

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.

Global warming

A gradual increase in the world's average temperature, due to the release of fossil fuels such as oil, gas and coal into the atmosphere.

Global Recycled Standard

The Global Recycled Standard (GRS) addresses input material verification, chain of custody, environmental principles, social requirements, and labelling for textile products made from recycled materials. It aims to be a full-product standard for recycled material content that balances rigor and practicality for the industry and end consumers.

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GOTS

The Global Organic Textile Standard (GOTS) is a voluntary, certified standard that covers all aspects of the production of all natural fibers of organic status including textile processing, manufacturing, packaging, labelling, exportation, importation and distribution.

Greenhouse gas (GHG) emissions

Emissions of gases which contribute to global warming by absorbing infrared radiation, thereby heating the atmosphere. The main contributors are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O).

Greenwashing

The practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, technology or company practice. Greenwashing can make a company appear to be more environmentally friendly than it really is.

Higg Index

The Higg Index is the core driver of the Sustainable Apparel Coalition (SAC), an association of leading companies in the textile and chemical industry, non-profit organizations as well as research and educational experts aiming to create a more sustainable international textile industry. This suite of self-assessment tools empowers brands, retailers and facilities of all sizes, at every stage in their sustainability journey, to measure their environmental and social and labor impacts and identify areas for improvement. The Higg Index provides a holistic overview of the sustainability performance of a product or company – a big-picture perspective that is essential for progress to be made.

Integration

All stages of fiber production are concentrated at one and the same site, from wood, the raw material, to pulp and fiber production.

International Labor Organization (ILO)

The International Labor Organization (ILO) 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.

ISO 14001:2015

An international standard for the certification of environmental management systems. It is designed to help businesses remain commercially successful without overlooking environmental responsibilities.

Kyoto Protocol

An international agreement, adopted by nearly all nations in Kyoto, Japan, 1997 linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions.

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.

LCA

Life Cycle Assessment is a systematic analysis of the environmental impacts of products throughout their life cycle ("from cradle to grave").

Lyocell fibers

Lyocell fiber is the latest generation of wood-based cellulosic fiber. The generic fiber name is Lyocell, the branded products from Lenzing are marketed as TENCEL™ and VEOCEL™ fibers.

Made in Green

Made in Green by Oeko-Tex is a traceable label for textiles tested for harmful substances and manufactured using sustainable production practices and technologies.

Mass balance

A system for sourcing materials from certified sources. The system allows manufacturers to buy a proportion of a resource such as wood from certified sources and mix it with non-certified material while still labelling a proportionate amount of their end products with the certification label.

Mechanical recycling

Mechanical recycling is the simplest way to recycle materials. The process involves mechanically deconstructing the fabrics, in order to end up with re-useable fibers and material, that are ready to be used to make new yarn and fabric. The down side is that natural fibers are shortened and damaged during the shredding process. Their quality is therefore reduced, their circularity limited and they generally require being blended with other fibers to guarantee durability in the resulting textile.

Microplastics

Microplastics are very small pieces of plastic that pollute the environment. Microplastics are not a specific kind of plastic, but rather any type of plastic fragment that is less than 5 mm in length. They are often invisible or hard to see with the naked eye. Microplastics have been found in fish and shellfish bound for human consumption.

Modal

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 underwear and similar products. The fibers have improved use characteristics such as tenacity, dimensional stability, and so forth. Lenzing markets these fibers under TENCEL™ Modal.

MSI

Materials Sustainability Index. The quantitative part of the Higg Index, scoring materials according to their environmental impacts in the categories global warming, eutrophication, water scarcity, and abiotic resource depletion (fossil fuels), and according to chemistry applied.

Natural Capital

Natural Capital is another term for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. All this means is that any part of the natural world that benefits people, or that underpins the provision of benefits to people, is a form of natural capital.

Net-benefit thinking

Lenzing's net-benefit products offer positive impacts and benefits to environment, society, and value chain partners, which 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 that form part of the sCore TEN strategy.

Net zero carbon

A "net-zero" target refers to reaching net-zero carbon emissions by a selected date, but differs from zero carbon, which requires no carbon to be emitted as the key criteria. Net-zero refers to balancing the amount of emitted greenhouse gases with the equivalent emissions that are either offset or sequestered. This should be achieved primarily through a rapid reduction in carbon emissions, but where zero carbon cannot be achieved, offsetting through carbon credits or sequestration through rewilding or carbon capture and storage needs to be utilised.

NMMO

N-Methylmorpholine N-oxide is an aqueous, biodegradable, organic solvent.

Nonwovens

Nonwoven materials, fleece. Nonwovens made from Lenzing fibers are used for sanitary, medical, and cosmetics applications.

Oeko-Tex 100

The Oeko-Tex Standard 100, introduced in 1992, is a global uniform testing and certification system for textile raw materials, intermediate products and end-products at all stages of production. Textile products are certified according to Oeko-Tex Standard 100 only if all components meet the required criteria without exception.

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.

Paris Agreement

A global climate change deal signed at Paris at COP 21 in December 2015 and ratified by 97 countries in November 2016. The deal "emphasises with serious concern" the need to hold the increase in the global average temperature to "well below 2°C" above pre-industrial levels, and "pursuing efforts to limit the temperature increase to 1.5°C".

PEFC™

The Program for the Endorsement of Forest Certification Schemes™ (PEFC) is an international non-profit organization for wood certification.

Plantation

Forests of exotic species that have been planted or seeded by human intervention and that are under intensive stand management, fast growing, short rotation. Examples: poplar, acacia or eucalyptus plantations.

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).

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).

Post-Industrial

Post-industrial material is another name for the waste that is generated during production process of a product. As with pre-consumer waste, the reutilisation of production waste in the same process that generated it is excluded.

Recovered (reclaimed) material

Material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered [reclaimed] as a material input, in lieu of new primary material, for a recycling or a manufacturing process. (ISO 14021:2016)

Recyclable

A characteristic of a product, packaging or associated component that can be diverted from the waste stream through available processes and programs and can be collected, processed and returned to use in the form of raw materials or products. (ISO 14021:2016)

Recycled Claim Standard

The Recycled Claim Standard (RCS) is a voluntary material content claim standard to track recycled raw materials through the supply chain to give credibility to recycled content claims on products.

Renewable energy

Renewable energy is energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.

Reusable

A characteristic of goods or packaging that has been conceived and designed to accomplish within its life cycle a certain number of trips, rotations or uses for the same purpose for which it was conceived. (ISO 14021:2016)

Science-based targets

Targets adopted by companies to reduce greenhouse gas (GHG) emissions are considered "science-based" if they are in line with the level of decarbonization required to keep global temperature increase below 2 °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 modeling of the IEA.]

Scope 1, 2 and 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.

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.

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Single-use plastics

Single-use is a term which can refer to any plastic items which are either designed to be used for one time by the consumer before they are thrown away or recycled, or likely to be used in this way. Such items include disposable cutlery, plastic straws, thin plastic carrier bags, drink stirrers and crisp packets.

Stakeholders

All internal and external persons or groups affected directly or indirectly by business activities currently or in the future.

Sustainable Apparel Coalition (SAC)

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.

Sustainable Development Goals (SDGs)

The Sustainable Development Goals are a UN initiative aimed at achieving a better and more sustainable future for all. They address global challenges including those related to poverty, inequality, climate change, environmental degradation, peace and justice. The 17 Goals are all interconnected. Delegates from 194 member states adopted the agreement in September 2015.

Sustainability report

A report published by a business about the economic, environmental and social and governance performance of its operations. It is aimed at enhancing an organization's commitment to sustainable development in a manner that can be verified to both internal and external stakeholders.

TCF

Totally chlorine free (bleaching process)

Textile Exchange (TE)

Founded in 2002, Textile Exchange 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.

SFI

Sustainable Forestry initiative

Traceability

A concept that ensures the reliability and visibility of sustainability claims associated with products along the supply chain. Traceability ensures good practice in the areas of human rights, labor, the environment and anti-corruption.

Triple bottom line

A concept which seeks to broaden the focus on the financial bottom line by businesses to include social and environmental responsibilities. A triple bottom line measures a company's degree of social responsibility, its economic value, and its environmental impact. The phrase was introduced in 1994 by John Elkington and later used in his 1997 book "Cannibals with Forks: The Triple Bottom Line of 21st Century Business."

UNFCCC

The United Nations Framework Convention on Climate Change is a framework adopted during the Rio de Janeiro Earth Summit in 1992. It entered into force on 21 March 1994 and has been ratified by 196 States, known as its State Parties. This Framework acknowledges the existence of human-induced climate change and says that industrialized countries should shoulder the major part of responsibility for combating it.

Upcycling

Industrial upcycling describes the use of technologies to reduce waste and resource consumption by creating a higher-value product from waste or byproduct streams.

USDA BioPreferred

Managed by the U.S. Department of Agriculture (USDA), the goal of the BioPreferred Program is to increase the purchase and use of biobased products. The BioPreferred Program was created by the 2002 Farm Bill. The two major parts of the program are the mandatory purchasing requirements for federal agencies and their contractors and a voluntary labeling initiative for biobased products.

Value chain

A concept builds on the notion of a supply chain but also considers the manner in which value is added along the chain, both to the product / service and the actors involved. From a sustainability perspective, 'value chain' has more appeal, since it explicitly references internal and external stakeholders in the value-creation process.

VBV Austrian Sustainability Index VÖNIX

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

Regenerated cellulose fibers produced from raw materials of plant origin (e.g. wood) using the viscose process.

Waste

Anything for which the generator or holder has no further use and which is discarded or is released to the environment. (ISO 14021:2016)

Waste stream

The complete flow of waste from domestic or industrial areas through to final disposal. The intervention of recycling may act to lessen the content of a waste stream as it moves down the line.

Wood-based cellulose fiber

A fiber industrially produced from raw materials of plant origin (e.g. wood), known in the industry as man-made cellulose fiber.

World Economic Forum (WEF)

The World Economic Forum (WEF) is a foundation which is primarily known for its annual meeting of the same name that takes place annually in Davos in the canton of Grisons.

Zero-carbon

Causing or resulting in no net release of carbon dioxide into the atmosphere.

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.

