

Mondi Sustainability Glossary

AOX

Adsorbable organic halogen compounds is a metric for emissions to water and is measured in tonnes.

Attrition rate

Attrition rate is a metric that quantifies the rate at which employees depart an organisation, whether voluntarily or involuntarily. It represents the pace of employee turnover, expressed as a percentage.

BAT

Best Available Technique (BAT) is a technically and economically feasible environmental technology that is efficient and advanced, generally to reduce emissions and the impact on the environment. BAT values are defined by IPPC (the European Integrated Pollution Prevention and Control Bureau) in the 'Reference Document on Best Available Technique for the Pulp and Paper Industry'.

Biodegradable

Designates a property that is needed – among others – to make a package compostable. It means that the product can be broken down by the action of living organisms, such as bacteria, into carbon dioxide, water and biomass. 90% of the organic material is converted into CO₂ within six months.

Bioenergy feedstocks

In the context of biofuels, a feedstock is any biomass destined for conversion to energy or biofuel.

Biogenic emissions

Biogenic emission sources are emissions that come from natural sources.

Blue water

Potable, surface, second-class and groundwater.

CAPEX

Capital expenditures (CAPEX) are investments made to acquire, upgrade and maintain non-current assets, such as property, plants, buildings or equipment.

Carbon sink

A carbon sink is anything, natural or otherwise, that absorbs more carbon from the atmosphere than it releases – for example, plants, the ocean and soil.

Cascading use of wood

Cascading use is a strategy to use raw materials such as wood, or other biomass, in chronologically sequential steps as long, often and efficiently as possible for materials and only to recover energy from them at the end of the product life cycle.

CEN

The European Committee for Standardization, responsible for developing and maintaining voluntary European Standards across most industrial and service sectors.

CFCs

Chlorofluorocarbons are greenhouse gases that lower the average concentration of ozone in the stratosphere, commonly found in spray cans, refrigerators, air conditioners and Styrofoam cups, among other products.

Chain-of-Custody (CoC)

Chain-of-Custody is a tracking system that allows manufacturers and traders to demonstrate that wood comes from a forest that is responsibly managed in accordance with credible standards.

Circular economy

A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the 'end-of-life' concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals that impair reuse and aims for the elimination of waste through the superior design of materials, products, systems and, within this, business models.

CITES

The Convention on International Trade in Endangered Species is an international agreement between governments with the aim of ensuring that international trade in specimens of wild animals and plants does not threaten their survival.

CO₂e

Greenhouse gases other than CO₂ (such as CH₄, CFCs or N₂O) can be converted into an equivalent amount of CO₂ according to their global warming potential. Total GHG emissions are the sum of the equivalent amount of CO₂ for each GHG, abbreviated as CO₂e.

COD

Chemical oxygen demand is a measure of the oxygen consuming capacity of inorganic and organic matter present in waste water; it quantifies the amount of oxidisable pollutants in water and is measured in tonnes.

Composite packaging

As defined under the PPWR, a unit of packaging made of two or more different materials, which are part of the weight of the main packaging material and cannot be separated manually and therefore form a single integral unit, unless a given material constitutes an insignificant part of the packaging unit and in no case more than 5% of the total mass of the packaging unit. This definition excludes labels, varnishes, paints, inks, adhesives and lacquers.

Compostable

For a product to be considered compostable it must meet the following criteria. It must: 1) biodegrade; 2) disintegrate (after three months' composting and sifting, no more than 10% residue remaining); and 3) support plant growth with no ecotoxicity. As defined by EN 13432.

Contact water

The sum of all water volumes used on the production site for use in processes, for washing and as product input; for sanitary purposes and for non-industrial operations (e.g. in kitchens, toilets and bathrooms); and for use in boilers for steam production.

Controlled Wood

Controlled Wood is wood of known origin with a minimum risk that it is harvested in an unacceptable way. The Controlled Wood system defines the minimum standards for wood that can be mixed with FSC wood. Products made from such material can use the FSC Mix label.

Controversial sources

Mondi defines controversial sources as wood that is illegally harvested, sourced in violation of traditional and civil rights or harvested in forest management units in which high conservation values (see 'HCVs') are threatened by management activities. It also relates to wood that is harvested in areas in which primary forests are being converted to plantations or non-forest use or harvested from forests in which genetically modified trees are planted.

Country-level risks

The country risk level is identified by Mondi as a combination of indices characterising the strength of national governance (Transparency International's Corruption Perception Index, the World Bank's Worldwide Governance Indicators) and the prevalence of forestry-related legality issues in the country (FSC's Centralised National Risk Assessments, Preferred by Nature's Sourcing Hub), as well as the risk of deforestation and forest degradation (the European Commission's EUDR country-risk benchmarking).

Cradle to Cradle

Cradle to Cradle Certification® is a globally recognised product certification that verifies products are designed and manufactured for a safe, circular and responsible economy. It moves beyond traditional 'less harmful' sustainability standards by evaluating whether a product is positively designed for human and environmental health throughout its lifecycle.

DDMS

Mondi's Due Diligence Management System is used to govern our approach to the responsible sourcing of wood and fibre.

Deforestation

The conversion of forest to other land use regardless of whether human induced or not. This definition implies permanent tree-cover loss.

Double materiality

Double materiality is a concept in which companies must consider how their actions impact both people and the planet. It indicates if a sustainability issue might create financial risks for a company (financial materiality) and if the company will impact on people and the environment (impact materiality).

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EAP

Mondi's Employee Assistance Programme (EAP) is a confidential hotline for supporting employees and their families on professional and private topics ranging from work and occupation, and personal and family topics, to addiction and dependency, financial issues and debt counselling.

Ecosystem services

Ecosystem services are the multitude of benefits that nature provides to society. These include provisioning services, such as food and water; regulating services such as regulation of floods, drought, land degradation and disease; supporting services, such as soil formation and nutrient cycling; and cultural services, such as recreational, spiritual, religious and other non-material benefits.

EVOH

Ethylene-vinyl alcohol copolymer is a flexible, clear thermoplastic copolymer; EVOH offers excellent gas barrier properties, thus making it especially suited for packaging of food, drugs, cosmetics and other perishable or delicate products to extend shelf life.

FLAG emissions

Defined by the SBTi, FLAG emissions relate to Forest, Land and Agriculture (FLAG) companies that are considered land intensive, for example, forest and paper products, food production and tobacco. The FLAG project was initiated to provide tools and guidance for land-intensive sectors to set science-based targets in line with the goals of the Paris Agreement.

Fluorochemicals

A chemical compound containing fluorine.

Forest degradation

Forest degradation is the reduction of the capacity of a forest to provide goods and socio-cultural and environmental services, which is caused by disturbances.

FSC™ certified

Forest Stewardship Council™ (FSC) certification ensures that products come from responsibly managed forests that provide environmental, social and economic benefits. The FSC Principles and Criteria provide a foundation for all forest management standards globally.

GHG

Greenhouse gases (GHG) have the property of absorbing infrared radiation (net heat energy) emitted from Earth's surface and re-radiating it back to Earth's surface, thus contributing to the greenhouse effect. The greenhouse gases that contribute to the greenhouse effect are listed in the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC). Companies report their GHG emissions according to the GHG Protocol, published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute

GHG Protocol

Developed by the World Resources Institute and the WBCSD, the GHG Protocol establishes comprehensive global standardised frameworks to measure and manage GHG emissions from private and public sector operations, value chains and mitigation actions.

Green liquor dregs

Green liquor dregs are residues formed during the kraft pulp process and typically contain sodium carbonate, calcium carbonate and sodium sulphide, as well as some other insoluble solids in small quantities.

Green water

Rainwater stored in vegetation or soil as moisture. Water consumption during fibre growth in forests is counted and reported as green water.

Grey water

Waste water that is generated from all streams of water, which have been in contact with process chemicals.

HCFCs

Hydrochlorofluorocarbons (HCFCs) are greenhouse gases intentionally developed as replacements for ozone depleting substances in the refrigeration, air conditioning, aerosols, fire suppression and foam blowing sectors.

HCVs

High conservation values (HCVs) are biological, ecological, social or cultural values which are outstandingly significant or critically important at the national, regional or global level.

HRDD

Through the Human Rights Due Diligence (HRDD) process companies identify, prevent, mitigate and account for how they address their actual and potential adverse impacts on human rights, as an integral part of decision-making and risk management systems.

IDP

An Individual Development Plan (IDP) is a tool supporting Mondi employees to define their short- and long term career goals through creating and aligning development objectives.

IAPs

Invasive alien plants (IAPs) are species whose introduction and/or spread, outside their natural distribution, threaten biological diversity. They are nonnative to an ecosystem and may cause economic or environmental harm.

ISO 5001

An international standard for energy management systems that helps organisations to establish, maintain and continuously improve energy management.

ISO 9001

An internationally recognised standard for quality management systems.

ISO 14001

Sets out the criteria for an environmental management system certification. It maps out a framework that a company or organisation can follow to set up an effective environmental management system.

ISO 45001

An international standard that specifies requirements for an occupational health and safety (OH&S) management system. It provides a framework for organisations to manage risks and improve OH&S performance.

Lag indicators

Lag indicators are the conventional safety performance metrics that measure past efforts and absence/presence of loss events, such as number of incidents, Total Recordable Case Rate, etc.

Landscape approach

Balancing competing land use demands in a way that is best for human wellbeing and the environment by creating solutions that consider food and livelihoods, finance, rights, restoration and progress towards climate and development goals.

LCA

Life cycle assessment (LCA) is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a product, process or service. Environmental impacts are considered from raw material extraction and processing (cradle), through the product's manufacture, process waste disposal, logistic of raw materials and waste (grave). A cradle to grave LCA also considers the distribution of products, product use, and recycling/disposal at end-of-life.

Lead indicators

Lead indicators can predict safety performance by measuring proactive efforts and concentrating on types of issues that are key to successful safety performance, such as Management Engagement Walkabouts, First line manager task audits, critical safety training, action tracking and employee engagement.

Lime kiln

A lime kiln uses heat, motion and air flow to convert lime mud (calcium carbonate) to lime (calcium oxide). Lime is used in several applications in pulp and paper mills, including the pulping process.

Life-altering injuries

A life-altering injury results in permanent or significant loss of a major body part or organ function that permanently changes or disables the person's normal life activity.

Major close call

An unplanned, undesired event, which, under slightly different circumstances, could have resulted in a life altering or fatal injury, or damage to property.

Mondi Sustainability Glossary continued

Mono-material packaging

A mono-material refers to a product composed of a single material or fibre, as opposed to packaging made from different materials. This makes the recycling process much easier, as it reduces the amount of energy required to split or separate various materials.

Natural capital

The stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils and minerals) that combine to yield benefits to people.

Nature positive

A high-level goal and concept describing a future state of nature (e.g. biodiversity, nature's contributions to people) which is greater than the current state.

Net-Zero greenhouse gas emissions

Net-Zero target setting supports the rapid decline of a company's value chain greenhouse gas emissions to limit global temperature rise to 1.5°C. Net-Zero covers the entire value chain emissions, including those produced by one's own processes (Scope 1), purchased electricity and heat (Scope 2) and indirect emissions generated by suppliers, service providers and customers (Scope 3).

Non-contact water

Water used for cooling purposes. It does not come into direct contact with any raw material, intermediate product, waste product or finished product.

NOx

NOx is the sum of nitrogen oxide compounds, which are generated mainly in the incineration process of fuels in our energy plants. Those inorganic air emissions are major contributors to acid rain and precursors for ozone creation in the atmosphere and the generation of smog and related detrimental environmental effects. The total amount of NOx emitted from all sources on-site is measured and reported as NO2.

Operational control principle

We report emissions from operations where we have day-to-day management control over GHG emission sources, including any key sub-contracted operations, which are a core part of the business. All activities of our global production operations in which we hold a minimum 50% shareholding or over which we have management control are covered.

ODS

Ozone-depleting substances that contribute to the depletion of the natural ozone layer in the stratosphere.

PA

A common abbreviation of polyamide, also known as nylon; it is a clear and printable thermoplastic that has a high melting point, exceptional strength and toughness, and good oxygen barrier properties. It is also scratch, puncture and flexcrack resistant and does not dissolve or absorb grease, oil, and acidic food when in direct contact.

Paper for recycling

Also known as 'recovered paper', this is a term used by Cepi to highlight the intended use of this secondary raw material for paper recycling only. It is natural fibre-based paper suitable for recycling, consisting of paper in any shape or product made (predominantly) from paper, which may include other constituents that cannot be removed by dry sorting, such as coatings, laminates, spiral bindings, etc.

PCR

Post-consumer resin (or post-consumer recycled resin) refers to material made from recycled plastic.

PDR

Performance and Development Review (PDR) is a process used at Mondi to set and agree an employee's individual objectives, aligned with Mondi Group objectives. The process is managed through SuccessFactors. PDR also provides a structured way to review achievements and overall job performance through an evaluation and feedback discussion.

PE

A common abbreviation for polyethylene; it is a versatile family of ethylene-based polymers and is resistant to chemicals and moisture and offers good sealing properties for various flexible packaging applications.

PEFC certified

Programme for the Endorsement of Forest Certification (PEFC) is a leading global alliance of national forest certification systems. As an international non-profit, non-governmental organisation, it is dedicated to promoting sustainable forest management through independent third-party certification.

PET

A common abbreviation of polyethylene terephthalate; it is a plastic resin that is used for bottles or flexible packaging for food storage and other consumer products.

PFC

Perfluorinated compounds are a greenhouse gas, used ubiquitously in the production of Teflon and related fluorinated polymers to make products water repellent or stain resistant, for example.

Planetary boundaries

The planetary boundaries concept presents a set of nine quantitative planetary boundaries within which humanity can continue to develop and thrive for generations to come. It defines the nine processes that regulate the stability and resilience of the Earth system.

Plantation forest

Planted forest that is intensively managed and meets all the following criteria at planting and stand maturity: one or two species, even age class, and regular spacing. Specifically includes short rotation plantation for wood, fibre and energy.

PO

A common abbreviation of polyolefin, also called polyalkenes (mixed PE and PP); olefins are thermoplastics that can be used as building blocks for a variety of materials. PO is durable, adequately heat resistant, thermo-sealable and able to withstand most forms of chemical corrosion.

PP

A common abbreviation for polypropylene; it is used in all kinds of applications, including packaging and labelling, textiles, containers and retort/sterilisable food packaging.

Primary forest

Naturally regenerated forest of native tree species, where there are no clearly visible indications of human activities, and the ecological processes are not significantly disturbed.

PVC/PVDC

Polyvinyl chloride and polyvinylidene chloride are standard polymers for many industrial and pharmaceutical applications, while PVDC in addition provides a strong barrier for oxygen, water, vapour, and aromas.

PVOH

Polyvinyl alcohol is a clear, water-soluble thermoplastic derived from polyvinyl acetate; it offers high chemical resistance to hydrocarbons, mineral oils and many organic solvents. Films made from PVOH have good heat-sealing properties and excellent gas barrier properties, and PVOH is widely used as a cold and hot water-soluble film for diverse packaging applications, including food, detergents and other products.

Recovered paper

See 'paper for recycling'.

Recyclable

A product or package is recyclable when it can be collected, separated, or otherwise recovered from the waste stream through an established recycling programme and returned to use in the form of raw materials or products. Thresholds and criteria applied by Mondi to classify our portfolio and monitor our progress are captured in our Path to Circularity Scorecard.

Reusable

A characteristic of a product or packaging that was conceived and designed to accomplish a certain number of trips, rotations or uses for the same purpose for which it was conceived within its life cycle.

Secondary raw material

Recycled materials that can be used in manufacturing processes instead of or alongside virgin raw materials.

Science-based target

A carbon emission reduction target is 'science-based' if it is in line with the scale of reductions required to keep global temperature rise to well below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C. The Science Based Targets initiative (SBTi) acts as an independent verification body for 'science-based' carbon emissions reduction targets.

Mondi Sustainability Glossary continued

Scope 1 emissions

Total direct GHG emissions from sources owned or controlled by a company and its subsidiaries. This includes CO₂e from fossil fuels and processes, company leased/owned vehicles, waste and wastewater treatment, make-up chemicals and other GHGs, for example.

Scope 2 emissions

Total indirect GHG emissions from sources that are related to generation of purchased energy outside the company boundaries.

Scope 3 emissions

Total indirect GHG emissions that occur in a company's value chain; for Mondi, the reported Scope 3 categories include purchased goods and services; fuel and energy-related activities; upstream and downstream transportation and distribution; and employee commuting. Other Scope 3 categories include capital goods; waste generated in operations; investments; processing; use and end-of-life treatment of sold products.

SDGs

The United Nations Sustainable Development Goals (SDGs) are a set of universal goals that meet the environmental, political and economic challenges facing our world.

SDMS

Sustainable Development Management System is used to govern Mondi's approach to sustainability and implement our sector policies.

Secondary containment

A secondary containment is any containment serving as a barrier to limit the consequences due to the loss of primary containment by containing or controlling a release from primary containment. Secondary containment systems include, but are not limited to, tank dikes, curbing around process equipment, drainage collection systems or the outer wall of double-walled tanks.

SHE

Safety, health and environment.

Silviculture

The growing and cultivation of trees.

Social Psychology of Risk

Understanding how decisions are influenced by the presence or perceived presence of people as well as the environment, bringing psychological and cultural dynamics into our safety and health approach.

SO₂ emissions

Sulphur dioxide is an air emission arising from the combustion of fossil fuels and biomass at our on-site energy generation plants.

Specific GHG emissions

Measurement of emissions or consumption normalised to volume, measured in saleable production tonnes.

Stakeholder Engagement Conversations

Mondi's Stakeholder Engagement Conversations (previously Socio-Economic Assessment Toolbox process) is a series of open and transparent dialogues with Mondi stakeholders, facilitated by an independent third party to obtain a thorough understanding of how our stakeholders perceive a mill or operation, and what the positive and negative impacts are of that operation on the surrounding communities and stakeholders.

TRCR

Total Recordable Case Rate (TRCR) is calculated as the number of total recordable cases (the sum of fatalities, lost-time injuries, restricted work cases and medical treatment cases), multiplied by 200,000 and divided by the total hours worked for the selected period.

TRS

Total Reduced Sulphur (TRS) compounds are generated in the pulping process and are the sum of the following reduced malodorous sulphur compounds: hydrogen sulphide, methyl mercaptan, dimethylsulphide and dimethyldisulphide, expressed as sulphur. It is a metric for emissions to air and is measured in tonnes.

UK Modern Slavery Act (MSA)

An Act of the Parliament of the United Kingdom, which came into force in 2015 to address slavery and trafficking in the 21st century.

UNGP on Business and Human Rights

United Nations Guiding Principles (UNGP) on Business and Human Rights provide a set of guidelines for States and companies to prevent, address and remedy human rights abuses committed in business operations.

UN Women's Empowerment Principles

A joint initiative of UN Global Compact and UN Women developed in 2010 to provide a holistic framework to empower women and girls in the workplace, marketplace and community.

Water catchment

An area of land that drains rainwater or snow into one location, such as a stream, lake or wetland. These water bodies supply drinking water, and water for agriculture and manufacturing, offer opportunities for recreation and provide habitats for plants and animals. Water scarcity occurs where there are insufficient water resources to satisfy long-term average requirements.