GLOSSARY OF TERMS FOR SUSTAINABILITY AND ESG

The field of sustainability and ESG (Environmental, Social, and Governance) covers many concepts, terms, and practices. These terms highlight the increasing focus on sustainability and ESG in manufacturing and plastics. Companies aim to lessen environmental impacts, cut waste, and improve social and governance practices in their operations.

Bio-Based Plastics

Plastics made from renewable biomass sources like plants or algae. They require less oil and gases, which can reduce carbon emissions.

Biodegradable Plastics

Plastics that decompose naturally through microbial action.

Carbon Footprint

Total greenhouse gas emissions caused by human activities, measured in carbon dioxide equivalents (CO2e). We measure and set internal goals for reducing our overall footprint.

Chemical (Advanced) Recycling

Unique chemical process that breaks down a plastic into its original chemical structure so it can be converted into virgin-quality material. There is no limit to the number of times material can be chemically recycled without affecting process ability.

Circular Economy

An economic system aimed at eliminating waste and continually using resources through reuse, repair/repurposing, and recycling.

Closed-Loop Manufacturing

Continuously recycling materials within the production cycle to reduce waste.

Code of Conduct

A set of rules guiding the behavior and relationships within an organization.

Commingled Extrusion

Mixing various materials, including recycled ones, into a homogeneous blend for manufacturing. We can use up to 100% PCR in the extrusion blow molding process, also referred to as the mono-layer extrusion blow molding process.

Corporate Social Responsibility (CSR)

Integrating social and environmental concerns into business operations and interactions with stakeholders. CSR is when a company places a high priority on showing how they care for people, the environment, and integrity. CSR should be documented and measured by the company.

Design for Environment (DfE)

Designing products to minimize environmental impacts throughout their life cycle.

ESG (Environmental, Social, and Governance)

ESG refers to a set of criteria used to evaluate a company's performance in areas beyond financial metrics. Environmental criteria assess a company's impact on the environment; social criteria evaluate how a company manages relationships with employees, suppliers, customers, and communities; governance criteria examine the company's leadership, executive pay, audits, internal controls, and shareholder rights.

Extended Producer Responsibility (EPR)

Holding manufacturers responsible for the environmental impact of their products throughout the product's life cycle. These responsibilities are usually legislation/agreements set by Federal/State governments to define costs to producers that would cover costs of recycling and clean-up programs.

Greenhouse Gas (GHG)

Gases like CO2 and methane trap heat in the atmosphere, leading to global warming. GHGs are primarily made by burning fossil fuels to make and transport products as well as generated by farming and landfill composting.

Greenwashing

Misleading claims by a company about the environmental benefits of their product, policy, or action.

Life Cycle Assessment (LCA)

Evaluating the environmental impact of a product from raw material extraction to disposal.

Mechanical Recycling

Recycling plastic waste without changing its chemical structure, producing pellets or flakes for reuse. It involves a consumer collection process, a sorting process, cleaning, and processing into pellet/flake form as reusable raw materials that are made into products again. There is a limit to the number of times products can be mechanically recycled without affecting process-ability.

Multi-Layer Extrusion

Manufacturing process that combines different materials in layers, often including recycled content; extruding a parison that has multiple layers sandwiched within a single extruded tube (parison). It allows the use of post-consumer resins without exposing it to the customer's product.

PCR (Post-Consumer Resin)

Material recycled after consumer use, reducing demand for new plastics.

Recycled Content

The proportion of recycled materials in a product, reducing demand for virgin materials.

Recycling

Converting waste materials into new materials to reduce waste and landfill use and conserve resources.

Regulatory Compliance

Refers to adherence to relevant laws, regulations, and standards related to environmental protection, waste management, and sustainable packaging. Brands should inquire about regulatory compliance and certifications obtained by packaging manufacturers to ensure compliance with sustainability requirements and avoid legal risks.

Renewable Energy

Energy from naturally replenished sources like sunlight, wind, and geothermal heat.

Supply Chain Transparency

Providing visibility into the ethical and environmental performance of suppliers.

Sustainability

Meeting today's needs without compromising future generations' ability to meet theirs, covering environmental, social, and economic factors.

Sustainability Legislation

These laws set requirements, standards, and penalties for businesses and industries to comply with environmental regulations, reduce environmental impacts, and mitigate climate change. Sustainability legislation covers various areas such as waste management, pollution control, renewable energy, resource conservation, and environmental protection, to shape corporate practices and drive sustainability initiatives.

Sustainable Development Goals (SDGs)

17 global goals set by the UN to address issues like poverty, inequality, and climate change by 2030.

Waste Management

Managing waste through sorting, collection, recycling, and disposal to minimize environmental impact.

Zero Waste Manufacturing

A manufacturing approach that aims to eliminate waste by redesigning processes, optimizing resource use, and maximizing recycling and reuse. Zero waste manufacturing seeks to minimize the environmental impact of manufacturing operations while reducing costs and improving efficiency.