



Sustainability

Sustainable Packaging: Glossary of Common Terms

American Society for Testing and Materials (ASTM)

An international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services

Biodegradable

A material goes through a chemical reaction, in which it uses oxygen (O₂) and hydrogen (H) from the environment and then dissolves into water (H₂O) and gases such as carbon dioxide (CO₂) and methane (CH₄) or also new biomass. For this reaction to take place, microorganisms also need to be in place. This means that, in the ideal chemical process, nothing remains of the original material.

The term “biodegradable” is accurate when used in technical contexts but is highly problematic and even illegal to use in sales and marketing language for single-use products, including those certified and marketed as “compostable”.

“Biodegradable” is not an appropriate marketing term or claim for describing end of life behavior because it lacks specificity on timeframe and environment. More importantly, the term is often used to describe non-compostable products intentionally made to look similar to certified compostable products. These products are commonly referred to as “lookalikes” and are a leading cause of contamination at compost facilities. For these reasons, four US states have made it illegal to use the term “biodegradable” in sales and marketing language for single-use products.

Biodegradable Products Institute (BPI)

BPI is the leading authority on compostable products and packaging in North America thanks, in large part, to its certification program that has been operating for over 20 years. That program, and the Certification Mark associated with it, is the most reliable, widely-recognized third-party verification of whether or not an item meets ASTM’s compostability standards – a metric required by every US state that has regulatory language around the definition of compostability, and a method for meeting the FTC’s requirement that all claims of compostability are supported by scientific evidence.

Bioplastics

Plastics made wholly or in part from bio-based polymers (renewable biomass sources such as sugarcane and corn, or from microbes such as yeast). Bioplastics may or may not be compostable. Standards include the United States' Department of Agriculture's USDA Certified Biobased Product label.

Cellulose

Fiber produced exclusively from the wood pulp of eucalyptus trees.

Circular Economy

A circular economy is aimed at minimizing waste and making the most of resources. This 'reduce, reuse, recycle' regenerative approach contrasts with the traditional linear economy, which has a 'take, make, dispose' model of production.

Compostable

A term used for products which are suitable for organic recycling. This means it is one kind of biodegradation in a specific environment, but for a product to be called "compostable", it also needs to fulfill other requirements, such as disintegration in a defined time, no harmful substances or ecotoxicity. Standards for compostable include but are not limited to the following, EN16640, EN 13432, ASTM D6400, ASTM D6866.

Compostable Polymers

Polymers produced from wide ranging materials which meet the criteria including but not limited to the following: EN16640, EN 13432, ASTM D6400, ASTM D6866. Consult local waste management officials for applicable standards.

Degradable

Capable of being decomposed chemically or biologically.

European Standard (EN)

Technical standards which have been ratified by one of the three European standards organizations: European Committee for Standardization, European Committee for Electrotechnical Standardization, or European Telecommunications Standards Institute.

FSC

The Forest Stewardship Council (FSC) is an international, non-governmental organization dedicated to promoting responsible management of the world's

forests. Since its foundation in 1994, FSC has grown to become the world's most respected and widespread forest certification system.

FTC (Federal Trade Commission)

The FTC is a bipartisan federal agency that champions the interests of American consumers by protecting consumers from deceptive and unfair business practices.

FTC Green Guides

A growing number of American consumers are looking to buy environmentally friendly, "green" products, from recycled paper to biodegradable trash bags. Companies have responded with "green" marketing touting the environmental benefits of what they're selling. But sometimes what companies think their green claims mean and what consumers really understand are two different things. The Federal Trade Commission's Green Guides are designed to help marketers avoid making environmental claims that mislead consumers.

The Green Guides were first issued in 1992 and were revised in 1996, 1998, and 2012. The guidance they provide includes: 1) general principles that apply to all environmental marketing claims; 2) how consumers are likely to interpret particular claims and how marketers can substantiate these claims; and 3) how marketers can qualify their claims to avoid deceiving consumers.

The FTC's most recent update of the Guides is designed to make them easier for companies to understand and use. The changes include new guidance on marketers' use of product certifications and seals of approval, claims about materials and energy sources that are "renewable," and "carbon offset" claims.

GreenBlue

The Sustainable Packaging Coalition is a trademark project of GreenBlue.Org. GreenBlue is a 501(c)(3) nonprofit dedicated to the sustainable use of materials in society. GreenBlue brings together key stakeholders to encourage innovation and best practices to promote the creation of a more sustainable materials economy.

Greenhouse Gases (GHG)

Gases that trap heat in the atmosphere. The main gases include carbon dioxide, methane, nitrous oxide and fluorinated gases.

H2R (How2Recycle)

The How2Recycle® Label is the leading US-based on-package recycling label created by the SPC in 2012. The program now consists of over 150 member

companies that place the How2Recycle label on packaging to inform consumers how to recycle accurately and where to go if they need to find information specific to their municipality.

Home Compostable

Refers to a product's ability to compost in a home composting environment. These environments must provide optimal conditions for composting to occur such as microorganisms, ideal temperatures, ideal moisture levels, oxygen levels and nutrient ratios. Certification schemes include TÜV Austria, which uses a combination of standards.

Industrial Compostable

Refers to a product's ability to compost through industrial composting facilities. These facilities use technologies to provide controlled environments for composting (microorganisms, temperature, moisture, oxygen, and nutrient ratios). Certification schemes include Biodegradable Products Institute (BPI), which uses ASTM D6400 and ASTM D6866, and TÜV Austria which uses EN 13432.

Life Cycle Assessment (LCA)

The systematic analysis of the potential environmental impacts of products or services during their entire life cycle. An LCA study involves a thorough inventory of the energy and materials that are required across the industry value chain of the product, process or service, and calculates the corresponding emissions to the environment.

Materials Recovery Facility (MRF)

A facility designed to handle materials collected from a municipal/household curbside collection system, and to sort such materials, as well as recyclables collected from commercial and industrial sources. A MRF will employ various manual and automated processes to sort recyclable materials, remove contamination, and process, usually by baling, for shipment and sale to various markets.

Monomaterial

A product which is composed of a single type of material. Because they only consist of a single material, monomaterials are typically easier to recycle than products made from multiple substrates.

Resin Identification Code (RIC)

Developed in 1988 by the Plastics Industry Association. It was created for workers in the plastic and recycling industry to be able to sort and recycle plastics more

efficiently. Each RIC corresponds to a specific type of resin used in a plastic product. By recycling according to a product's RIC, the product can be properly recycled and have its value preserved. The RIC only applies to plastic (not glass, paper, or any other recyclable materials).

SPC (Sustainable Packaging Coalition)

The Sustainable Packaging Coalition is a membership-based collaborative that believes in the power of industry to make packaging more sustainable. Their mission is to bring sustainable packaging stakeholders together to catalyze actionable improvements to packaging systems and lend an authoritative voice on issues related to packaging sustainability. This membership-based organization consists of the largest International CPG companies.

TÜV Austria

TÜV AUSTRIA (formerly Vinçotte) is a certification body authorized by European Bioplastics and may therefore award the Seedling logo to products that are in compliance with EN 13432.