

Position of European Bioplastics

HOME COMPOSTING OF COMPOSTABLE BIOPLASTICS

Municipalities usually treat separately collected organic waste from households in industrial composting, which is increasingly found connected with an anaerobic digestion phase. In addition, or in replacement for an organized collection, households may also choose to recover their organic waste by home composting.¹

Home composting – when done properly – can have a number of benefits compared to landfill and incineration: It is a type of biological recycling of organic waste, can lead to reduced waste management fees, and produces compost as a soil improver. However, home composting can complement, but not entirely substitute industrial composting or anaerobic digestion. Not every kind of organic waste is suited for home composting and unskilled biological recycling of organic waste can lead to emissions of unwanted greenhouse gases.

EUBP therefore recommends a separate kerbside collection of organic household waste via separate waste collection systems (e.g. provided organic waste bins) and treatment in industrial plants. Properly managed home composting can be considered an additional feature for the treatment of organic waste, especially for garden waste.

Bioplastics in composting - compostability and standards

Certified biodegradable and compostable bioplastics have a number of benefits. Compostable waste bags can facilitate the separate organic waste collection and increase its out-

put.² Other products, such as certified compostable service ware and food packaging, also contribute to more organic waste such as food or kitchen scraps finding its way to the organic waste collection.

Compostable plastics currently available in the market are usually certified according to the harmonized European standard EN 13432. This standard (and EN 14995 for plastic materials) refers specifically to compostability in industrial composting. Home compostability is not in the scope of this standard. EN 13432 certified bioplastics can be recognized by logos such as the “Seedling”, “OK compost” or “DIN geprüft industrial compostable”. Those materials are suitable for a separate organic waste collection with treatment in industrial composting.

Standards for home compostability on national level

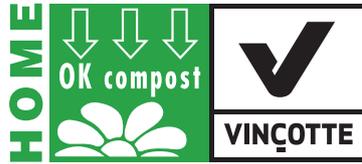
Currently, several certifications or national standards for home compostable bioplastics exist which are usually based on modifications of the EN 13432 standard. Those bioplastics are tested according to specific conditions, which are similar to those in home composting, e.g. lower temperatures, longer time frame etc. The materials or products can then be recognized by a label stating its home or garden compostability.

For example, the Belgian certifier Vinçotte offers a specific “home compostability” certification programme. DIN CERTCO (Germany) offers certification for “garden com-

¹ For more comprehensive information on home composting, please refer to the European Bioplastics Fact Sheet on Home Composting: http://en.european-bioplastics.org/wp-content/uploads/2011/04/fs/FactSheet_Home_Composting.pdf

² Kern, Michael; Siepenkothen, Jörg: Biowaste potential in household waste. Modelling a collection increase of bio waste from household waste. Müll und Abfall 07/2014. p. 356-360.

postability” according to the Australian standard AS 5810. Italy has a national standard for composting at ambient temperature, UNI 11183:2006.



Examples for home compostability logos

EU home composting standard needed

EUBP supports the development of a European standard on home compostability of compostable bioplastics to harmonize those different certifications, claims and labels. The need for a separate standard for home compostable packaging is also highlighted by the European Parliament and the Council of the EU in a Directive of April 2015 amending the “Packaging Directive”³.

Such standardization activity will require a parallel definition of the characteristics and requirements for the typical home composting process, to be set as a reference.

Although municipalities or composting associations often provide guidelines for home composting, a regulated or harmonized processing is not ensured and appears difficult to obtain, considering that it is not a professional activity. A common norm should be built on wide scientific and practical experiences, bearing in mind the performance and requirements of the existing and proven national standards or certification schemes.

EUBP considers industrial composting and anaerobic digestion as the preferred treatment methods for organic household waste. Home composting should, however, be considered complementary.

About European Bioplastics

European Bioplastics represents the interests of around 70 member companies throughout the European Union. With members from the whole value chain, European Bioplastics serves as both a contact platform and catalyst for advancing the objectives of the growing bioplastics industry. For further information, please visit <http://en.european-bioplastics.org>

³ Directive (EU) 2015/720 of the European Parliament and the Council of the European Union amending Directive 94/62/EC on packaging and packaging waste to reduce the consumption of lightweight plastic carrier bags.