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Synvina receives interim approval from European PET Bottle Platform: PEF to be integrated in circular economy

- Interim approval granted for the disposal of polyethylenefuranoate (PEF) through existing recovery systems
- / Major step towards integration of packaging from Synvina's PEF in the circular economy
- / Interim approval applies to Synvina's intended 50.000 tons reference plant

The European PET Bottle Platform (EPBP) has given interim approval for the recyclability of polyethylenefuranoate (PEF), produced by Synvina C.V., Amsterdam, in the European bottle recycling market. Following EPBP's assessment PEF bottles are expected to be disposable through existing recovery systems the same way as polyethylene terephthalate (PET), the conventional material for plastic bottles. The interim approval applies to a PEF market penetration of up to 2%. This corresponds to the amount of PEF that could be produced Synvina's reference from intended 50,000 tons plant furandicarboxylic acid (FDCA). FDCA made from renewable resources is the main building block for PEF. A final statement based on PEF quality, packaging designs and regional launch markets will be issued before market introduction of the novel material.

Major step to proceed with market launch

"EPBP confirms that consumers are expected to be able to return or dispose PEF bottles the way they are used to do with PET bottles. This is a major milestone for our innovative material based on renewables",

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says Patrick Schiffers, CEO of Synvina. He continues: "The recyclability has become one of the most important aspects for the packaging industry to meet the standards of the circular economy. EPBP's interim approval confirms that with PEF we are able to offer solutions for our customers to meet these standards."

PEF quantities in the European packaging market are expected to exceed the 2% market share on a medium term. Therefore, Synvina works jointly with recyclers and brand owners to develop a dedicated recycling stream for PEF based bottles to separate the valuable PEF from conventional plastics. PEF recycling in other markets like the US and Japan will be reviewed near-time. The EPBP interim approval can be found here.

PEF offers benefits for packaging industry

PEF is a bio-based plastic with improved barrier properties for gases like carbon dioxide and oxygen which leads to a longer shelf life of packaged products. With its recyclability, Synvina's PEF offers a significant advantage to the packaging industry in comparison to alternative bio-based plastics or barrier materials. Moreover, it also offers a higher mechanical strength, thus thinner PEF packaging can be produced and fewer resources are required. PEF is suitable as the main component or as a barrier layer in cups and trays, flexible packaging as well as bottles for carbonated and non-carbonated soft drinks, water, dairy products, still and sports drinks, alcoholic beverages as well as personal and home care products.

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About EPBP

The European PET Bottle Platform is a voluntary initiative of industry organizations representing waste collectors, plastic recyclers, PET material producers and brand owners. EPBP provides PET bottle design guidelines for recycling, evaluates PET bottle packaging solutions and technologies as well as facilitates the understanding of the effects of new PET bottle innovations on recycling processes. The results for the recyclability of PEF followed the standard EPBP test protocol and were conducted at a recognized 3rd party test lab. The approval is marked as interim since the tests were done with developmental PEF bottles from early-stage resins. More information on EPBP is available at www.epbp.org.

About Synvina

Synvina is a Joint Venture of Avantium and BASF, located in Amsterdam. Operating a pilot plant in Geleen, the Netherlands, Synvina produces and markets furandicarboxylic acid (FDCA) from renewable resources on pilot plant scale and markets the new polymer polyethylenefuranoate (PEF). Synvina aims to commercialize their activities in the future. FDCA is a building block for various products. Most significantly the polyester PEF, which is suitable for food and beverage packaging and for fibers for carpets and textiles. For the packaging industry, PEF offers superior characteristics like improved barrier properties and a higher mechanical strength enabling thinner packaging. PEF is recyclable. Our strength lies in the combination of our mother companies' expertise. We merge technology leadership with market leadership. Creativity with reliability. Innovative spirit with production excellence. Together, we aim to become market leaders in FDCA and PEF. Please find further information at www.synvina.eu.