

Suntory Introduces 100% Plant-Based PET Bottle Prototypes



Pictured: Orangina 100% plant-based PET bottle prototype, excluding cap and label

London, UK - December 3, 2021 – Suntory Group today announced that, as a crucial step toward its aim to use 100% sustainable PET bottles globally by 2030 and eliminate all petroleum-based virgin plastic from its global PET supply, the company has successfully created a prototype PET bottle made from 100% plant-based materials. The prototype has been produced for the company’s iconic *Orangina* brand in Europe along with its best-selling bottled mineral water brand in Japan, *Suntory Tennensui*. This announcement marks a breakthrough after a nearly decade-long partnership with the US-based sustainable technology company Anellotech.

This milestone amplifies the great momentum of Suntory Beverage and Food Europe’s (SBFE) continuous work on promoting a plastic circular economy, through the development of sustainable materials, adoption of circular processes, investment in advanced recycling technologies such as the ground-breaking partnership with Carbios - pioneers in enzymatic recycling, and promotion of behavioural change for consumers. Suntory aims to commercialize this 100% plant-based bottle as soon as possible to meet its 2030 fully sustainable PET bottle goal.

PET is produced using two raw materials, 70% terephthalic acid (PTA) and 30% mono ethylene glycol (MEG). Suntory’s prototype plant-based bottle is made by combining Anellotech’s new technology, a plant-based paraxylene derived from wood chips, which has been converted to plant-based PTA, and pre-existing plant-based MEG made from molasses which Suntory has been using in its *Suntory Tennensui* brand in Japan since 2013. The fully recyclable prototype plant-based bottle is estimated to significantly lower carbon emissions compared to petroleum derived virgin bottle. an important contribution to the company’s path to net zero emissions by 2050 across its whole value chain.

“We’re delighted with this achievement, as it brings us one step closer to delivering this sustainable PET bottle to the hands of our consumers,” said Tsunehiko Yokoi, Executive Officer of Suntory MONOZUKURI Expert Ltd. “The significance of this technology is that the PTA is produced from non-food biomass to avoid competition with the food chain, while MEG is also derived from non-food grade feedstock.”

This latest technology will enable SBFE to fulfill its ambition to use only plastic made from post-consumer waste or plant based materials. Already the company produces many of its brands using recycled plastic including Ribena, Maytea and Pulco and aims to use more than 50% rPET across its whole drinks portfolio by 2025 or sooner. And earlier this year the company launched the world's first Orangina bottle made from an enzymatic recycling process. With the company's drinks containers now designed for practical recycling, the company is fully supporting the acceleration of recycling systems across Europe including the introduction of deposit return systems and improved waste management infrastructure.

SBFE's R&D Director Vincent Meron commented, "We strongly believe that plastic, when produced and recycled responsibly, has a significant role to play in soft drinks manufacturing. Today's announcement demonstrates that we can take wood chips and molasses and turn them into plastic which can then be recycled again. In the future we will integrate this new bio plastic with plastic made from post-consumer waste. This will enable us to move away from plastic bottles made from fossil fuel, which also supports our green-house gas emissions reduction activity."



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Notes to editors

Comment from David Sudolsky, President and CEO of Anellotech

"This achievement is the result of over ten years of thorough and painstaking development work by Anellotech's dedicated employees, together with Suntory and other partners. The competitive advantage of Anellotech's Bio-TCat generated paraxylene is its process efficiency (it uses a single-step thermal catalytic process by going directly from biomass to aromatics (benzene, toluene and xylene)), as well as the opportunity it creates for a significant reduction in greenhouse gas emissions as compared to its identical fossil-derived paraxylene in the manufacture of PET, especially as it generates required process energy from the biomass feedstock itself."

Comment from Tomomi Fukumoto, COO of Sustainability Management at Suntory Holdings.

"Suntory has been entrenched in the work to create sustainable packaging solutions since 1997. This plant-based bottle prototype honors our historic dedication while shining a light, not only on our path to achieving our 2030 fully sustainable PET bottle goal, but also towards our ambition to net-zero greenhouse gas emissions across the entire value chain by 2050."

About Suntory Beverage & Food Europe

Suntory Beverage & Food Europe (SBFE) was established in 2014 and is one of five regional divisions of the Japan-based Suntory Group, one of the leading global drinks companies. We're proud to be part of a family-owned business with its inspiring 120-year heritage and we are guided by Shinjiro Torii's founding spirit. SBFE is made up of 3,800 passionate people working throughout Europe on hugely iconic brands including Schweppes*, Orangina, Lucozade, Ribena, La Casera, Oasis*, Pulco and MayTea with a commitment to producing great-tasting, healthier drinks. Everything we do flows from our Mizu To Ikiru promise and our vision of Growing for Good. Being in harmony with people and nature is at the heart of our business, and we're working every day to ensure that future generations inherit and enjoy a healthy planet.

*Owned and commercialized within SBFE respective territories

For more information, please visit:

<https://www.suntorybeverageandfood-europe.com>

<https://www.linkedin.com/company/suntory-beverage-&-food-europe-limited/>

About Anellotech

Founded in 2008, Anellotech (<http://www.anellotech.com>) is a sustainable technology company focused on commercializing the innovative production of cost-competitive renewable chemicals and fuels from non-food biomass or waste plastics. Its patented Bio-TCat™ technology is an efficient thermal catalytic process for converting biomass into benzene, toluene and xylene, which are chemically identical to their petroleum-based counterparts. The process has been extensively demonstrated with loblolly pine feedstocks at Anellotech's TCat-8® pilot plant in Silsbee, Texas. Engineering work to design the first commercial plant is underway by Anellotech and its R&D, engineering and licensing partners IFPEN and Axens.

The Bio-TCat™ platform is now being leveraged for Plas-TCat™, a development-stage process technology aiming to convert mixed waste plastics into commodity chemicals such as olefins and aromatics, the primary chemicals used to make plastic packaging and other products.