

**Media Release**

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**Borealis announces launch of the Borstar® Nextension Technology, a step change for performance-based polyolefins**

- **Breakthrough technology broadens range of polypropylene (PP) properties thanks to proven Borstar® performance and unique single-site Borstar® Nextension catalysts**
- **Groundbreaking proprietary technology drives plastics circularity by simplifying design for recycling**
- **Novel proprietary Borstar Nextension catalysts produced at newly-built Borealis plant in Porvoo, Finland**

Borealis announces the launch of its proprietary Borstar Nextension technology, a step change for PP performance. The combination of Borstar and the proprietary Borstar Nextension catalysts produces a wider range of tailored polyolefins. In multilayer applications, this groundbreaking technology enables the replacement of multiple different materials with only one material, thus enabling easier recycling and encouraging design with recycling in mind. The single-site Borstar Nextension catalysts are being produced at a newly-built plant at the existing Borealis site in Porvoo, Finland. With the development and launch of the Borstar Nextension technology, Borealis is consolidating its industry position as a leader in innovation and technology and an accelerator of plastics circularity.

**Universal solution for multilayer, multimaterial-based PP applications**

The Borstar Nextension technology yields synergistic effects resulting from the combination of proven Borstar performance based on multimodality and the controlled incorporation of the comonomer, in this case higher  $\alpha$ -olefins\*; and the novel, single-site Borstar Nextension catalysts. The technology is a step change for PP performance because it broadens the range of PP properties thanks to its ability to tailor polymers for unrivalled higher purity, excellent transparency and optics after sterilisation, as well as superior sealing and bonding at lower temperatures. This universal solution sets new standards by enabling material substitution in multilayer, multimaterial-based applications in a range of industries, including flexible packaging, healthcare and moulding. Initial product introductions for selected consumer packaging solutions offer unbeatable transparency for film applications. For mobility applications, the Borstar Nextension Technology will enable purity levels beyond today's automotive industry requirements with reduced odour and volatiles in automotive interior and exterior applications.

The Borstar Nextension technology drives plastics circularity. Its outstanding performance properties enable the use of only one material instead of many in multilayer applications. In a large number of applications, these circular packaging designs may include non-virgin grades like those from the [Bornewables™](#) portfolio of circular polyolefins manufactured with second generation renewable feedstock; or from the transformative Borcycle™ portfolios containing grades made of polyolefins-based, post-consumer recyclate.

The monomaterial solutions enabled by this technology are easier to sort and recycle at the end of their first life cycle. Crucially, the high-performance monomaterial applications produced using this technology encourage design for

recycling. In sum, using Borstar Nextension technology in the production of PP applications helps close the loop on plastics circularity while pushing performance boundaries.

The novel Borstar Nextension catalysts are being manufactured at the purpose-built Borealis plant in Porvoo, which started up in the first part of 2022. The present plant output supplies selected innovation grades at Borealis operations in Europe.

“Our Borstar Nextension Technology opens exciting new horizons for PP by uniting outstanding performance characteristics with enhanced circularity,” says Lucrece Foufopoulos, Executive Vice President Polyolefins, Circular Economy and Innovation & Technology. “By setting new standards in advanced and circular polyolefins, we are leading the way in re-inventing essentials for sustainable living.”

**For more information on Borstar Nextension [click here](#).**



Photo: The combination of Borstar® and the proprietary Borstar® Nextension catalysts produces a wider range of tailored polyolefins.

Photo: © Borealis

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**About Borealis**

Borealis is one of the world's leading providers of advanced and sustainable polyolefin solutions and a European front-runner in polyolefins recycling. In Europe, we are a market leader in base chemicals and fertilizers. We leverage our polymer expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries such as consumer products, energy, healthcare, infrastructure and mobility.

In re-inventing essentials for sustainable living, we build on our commitment to safety, our people, innovation and technology, and performance excellence. We are accelerating the transformation to a circular economy of polyolefins and expanding our geographical footprint to better serve our customers around the globe.

With head offices in Vienna, Austria, we employ 6,900 employees and operate in over 120 countries. In 2021, we generated total sales of EUR 12.342 billion and a net profit of EUR 1,396 million. OMV, the Austria-based international oil and gas company, owns 75% of our shares, while the remaining 25% is owned by a holding company of the Abu-Dhabi based Mubadala. We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with the Abu Dhabi National Oil Company, or ADNOC, based in UAE); and Baystar™ (with TotalEnergies, based in the US). [www.borealisgroup.com](http://www.borealisgroup.com) | [www.borealiseverminds.com](http://www.borealiseverminds.com)

Borstar is a registered trademark of Borealis AG.  
Bornewables is a trademark of Borealis AG.

\*Higher  $\alpha$ -olefins refers to controlled Butene and Hexene incorporation instead of ethylene.