

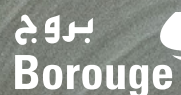
CASE STUDY

# Packcycle: improving the circularity of industrial flexible packaging

We start using plastic flexible packaging made from Ecoplast, a member of Borealis Group, Post Consumer Recyclate (PCR) to transport our products



Accelerating Action  
on Circularity





## Plastic sheet for pallet packaging made using PCR is Packcycle's first success

In 2020, Borealis launched Packcycle – a dedicated project to improve the circularity of flexible packaging used in the transportation and distribution of products to our customers. Now, we will be using pallet sheets made with outstanding levels of PCR, to be rolled out at Borealis' European locations in Q3 2021.

Replacing more than 300 tons of virgin polyethylene annually, the redesigned sheets contain over 80% of PCR Low Density Polyethylene (LDPE) NAV101 produced by Ecoplast, with

Borealis polyethylene virgin booster, BorShape™, used to maximise PCR content.

Once successfully implemented across Borealis operations, we will support the adoption of PCR based plastic sheets at sheet producers and users, in line with our EverMinds™ ambition to accelerate action on circularity of plastics across the value chain. And following on from the success of the pallet sheets, Packcycle will be looking at new ways to introduce PCR into virgin material based packaging.



### Why use PCR LDPE NAV101 produced by Ecoplast?

Based on a recycled plastic produced exclusively from post-consumer recyclate originating from municipal/household waste, the use of Ecoplast PCR LDPE NAV101 allows for outstanding circularity in flexible packaging, helping accelerate the transition towards a more circular economy. It brings a sustainable solution to flexible packaging's end-of-life (an alternative to landfill or energy recovery), and reduces traditional resource utilisation and CO<sub>2</sub> emissions.



© Borealis: Bottom sheet in place before loading the pallet

## Offering outstanding PCR content while meeting rigorous requirements

Pallet sheets are used to protect and stabilise the pallet load. Borealis requires the sheets to have high toughness performance, low odour, and comply with safety and stewardship requirements (internal migration and industrial tests).

By combining PCR LDPE NAV101 with BorShape, we were able to meet all functional requirements while significantly improving circularity. Made with Ecoplast PCR LDPE NAV101, a transparent recyclate made using municipal / household

waste, provides low odour, low colouration, and reduced gel content. It also comes with a REACH compliance statement, an EuCertPlast certificate and a statement on chemicals.

BorShape, Borealis' best-in-class material for improving extrusion processability and mechanical performance, allows the introduction of 80% PCR, with finished packaging material still fulfilling the application needs without increasing film thickness.

“The Packcycle project underlines our commitment to accelerating action on circularity. By developing this PCR packaging solution in collaboration with Ecoplast, and implementing it across all our European operations, Borealis is leading by example. We are eager to discuss with our partners the implementation of similar packaging across the value chain, and are excited about the future sustainable solutions Packcycle will innovate.”

**Peter Voortmans**

Global Commercial Director Consumer Products, Borealis

## Borealis and Borouge packaging solutions are making everyday life easier

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Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics. We leverage our polymers expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries. In re-inventing for more sustainable living, we build on our commitment to safety, our people and excellence as we accelerate the transformation to a circular economy and expand our geographical footprint.

With head offices in Vienna, Austria, Borealis employs 6,900 employees and operates in over 120 countries. In 2021, Borealis generated total sales and other income of EUR 10,153 million and a net profit of EUR 1,396 million. OMV, the Austria-based international oil and gas company, owns 75% of Borealis, 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).

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