

Borcycle™ C

The solution for high purity, high performance recycled materials

Transformational solutions for chemical recycling that gives polyolefin-based, post-consumer waste another life; a solution creating both virgin-level grade materials and high safety and performance qualities fit for demanding applications.

EverMinds™
Accelerating Action on Circularity



Borcycle™ C renews plastic back to plastic; creating recycled materials with a level of purity fit for protective, food-safe and other demanding applications

It's never been a more important time to address the urgent issue of plastic waste and its impact on the planet. At Borealis, we believe that waste is just unused potential; value waiting to be reignited.

Chemically recycled plastic waste

Borcycle™ C is our portfolio of transformational chemical recycling solutions, giving polyolefin-based, post-consumer waste another life. It offers all-round benefits, supercharging the transition to a circular polyolefin industry whilst creating virgin quality plastic products.

Food-safe and high performance

Borcycle C renews plastic back to producing virgin-like grade materials: offering recycled materials with a level of purity fit for food, healthcare and other demanding applications.

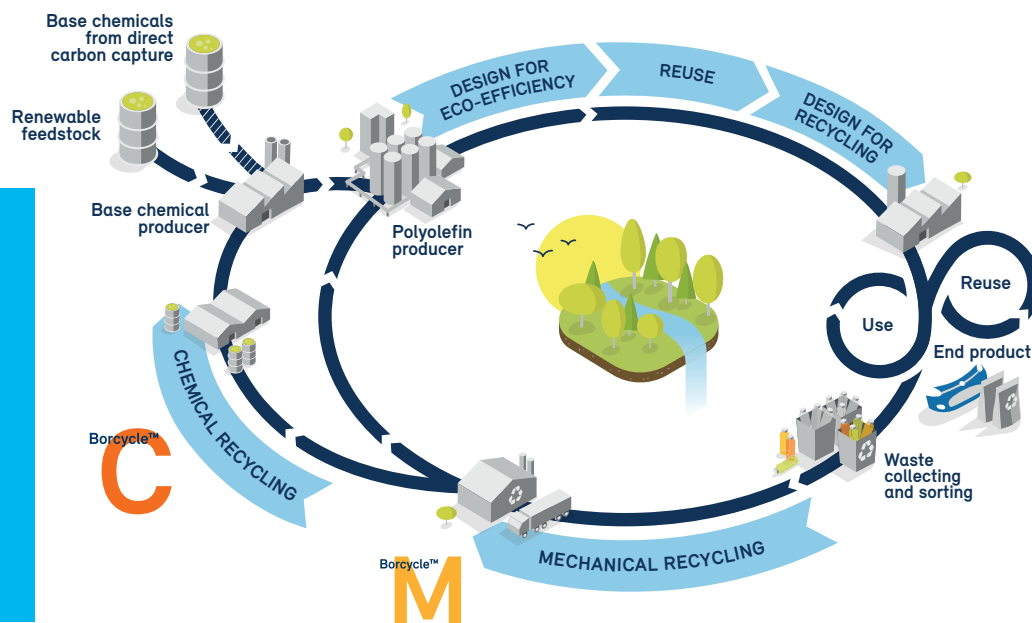
Borcycle suite of technologies

Our Borcycle solutions are scalable and ever-advancing, using value chain collaboration and Borealis expertise, experience and innovative strength. Borcycle C is at the heart of Borealis' drive for progress towards a circular future, captured in our EverMinds™ platform and its ambition for Accelerating Action on Circularity.

To build up a Circular Economy, Borealis takes a wider view on the value chain: following our Circular Cascade.

Closing the loop of recycling technology solutions with our Borcycle C portfolio.

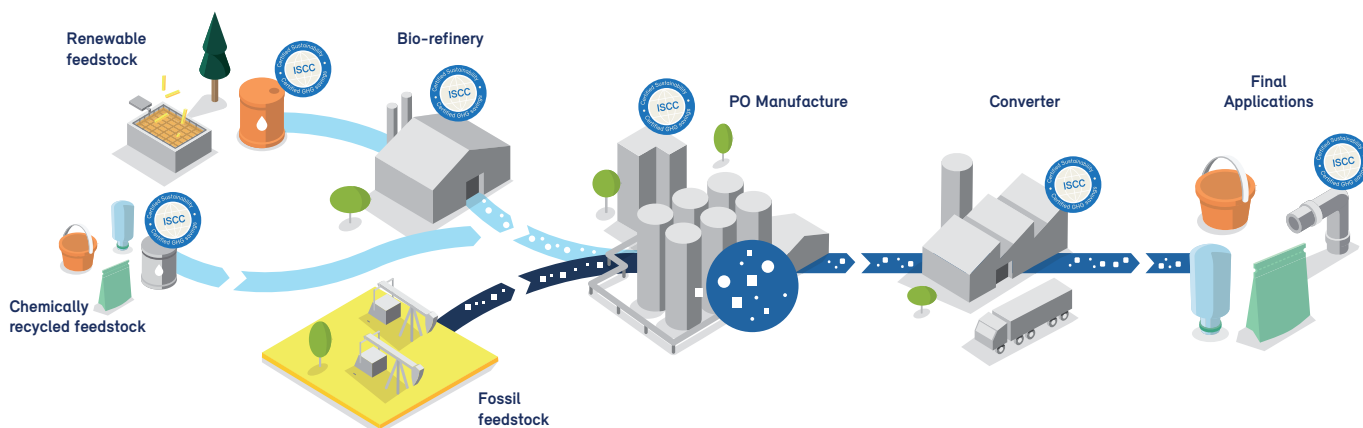
Chemical recycling is complementing mechanical recycling, by further valorising residual wastes streams from our mechanical recycling operations, as well valorize mixed plastic waste streams which would otherwise go to incineration or landfills.



Borcycle C technologies

- **Chemical recycling** is a process that converts plastic waste back to monomers, synthetic oil or gas, which are then used as a feedstock in the manufacturing of new products. The right technology depends on the type of polymer being processed. The chemical recycling technology suitable for polyolefins is called pyrolysis, in which mixed polyolefin waste is converted to a pyrolysis oil by using heat, which can be used as feedstock to produce new plastics.
- Borealis collaborates in **OMV's Reoil® Recycling Technology** that is developed for the chemical recycling of mixed polyolefin plastic waste. The current pilot plant and the next demo plant (16kt capacity) are fully integrated into the OMV's Austria refinery at Schwechat, Austria. The technology is designed to operate at an industrial-scale chemical recycling unit with a processing capacity of up to 200kt/year, which is expected to start in 2027.
- **Renasci** is a Belgian recycler, a provider of innovative recycling solutions and the creator of the novel Smart Chain Processing concept whereby household waste is sorted and converted into raw materials with a maximum material recovery. Renasci introduces an economically viable solution for waste treatment. Their first plant is located in Oostende, Belgium and can process 120 kilotonnes of waste. Borealis has majority ownership and will collaborate closely with Renasci to evolve and scale up the **unique Smart Chain Processing (SCP) technology**.

Borcycle C - Based on the mass balance model



We use the mass balance model to track and trace the amount of fossil-based feedstock which is replaced with chemically recycled feedstock in our monomer and polymer production.

The mass balance chain of custody allows to track the plastic waste feedstock back to the first collection point.

Another advantage of the mass balance model is that we can use our existing, cost-efficient, production assets, and do not need to build a parallel system to allow offering these sustainable solution to the market as of today.

All Borcycle™ C polymers are certified by ISCC Plus - a reliable global leading sustainability certification scheme.

**Be a part of the circular revolution for plastic.
Be a part of EverMinds™.**

A platform aiming to unlock and accelerate circular progress for plastic. We are building a community to bring stakeholders, influencers and circular gamechangers together. Uncompromising on quality and performance. Let's create new value that keeps giving back and create circular progress as one.

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About Borealis 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).

For more information visit: www.borealisgroup.com · www.borealiseverminds.com

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