

A hand holding a glass of water, with a blue circular overlay in the center. The background is a soft, warm gradient of light blue and orange. The text "Visible Progress" is written in white, bold, sans-serif font across the center of the blue circle.

# Visible Progress

EverMinds™  
Accelerating Action on Circularity

 **BOREALIS**  
Keep Discovering

# How chain of custody models, led by Mass Balance, can help push us forward towards plastic circularity

The world is changing and people are more aware of their impact on the planet than ever before. There is a growing demand for sustainable products.

## The challenges

**The plastics industry needs to move to a circular business model.** We need plastic and depend on it today, but the many benefits we reap need to come with no cost to the planet. Therefore the endgame is circularity; retaining value through recycling and reusing materials.

**Getting to circularity is a journey.** Change is not easy and we can't wait for it to be all or nothing. To get there, we need to be able to make iterative strides forward, allowing us to become ever-more sustainable, ever-more circular. In order to increase the amount of recycled and renewable material in the products we make, we need chain of custody models to track, trace and verify these feedstocks throughout the value chain.

**There are a number of different approaches, but Mass Balance is right for now.** Multiple chain of custody models exist, varying in how they approach offsetting or replacing virgin materials in the material mix. We believe the best model for now, as we aim for a more fully circular future where we no longer need such models, is to Mass Balance.



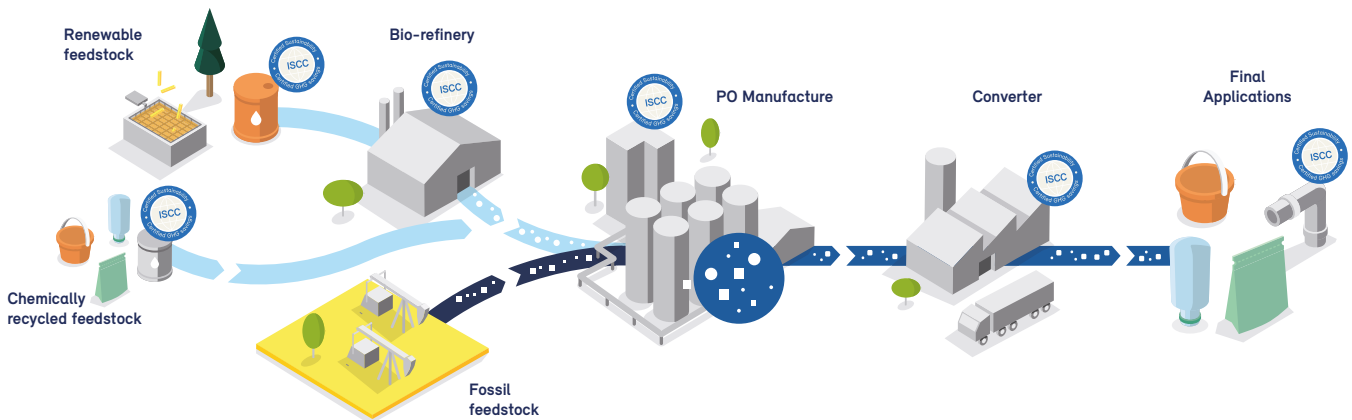
Visible Progress

## How does Mass Balance Work?

At Borealis, we are always looking to produce materials that are both sustainable and reliable. Our EverMinds™ platform is dedicated to accelerating the transformation towards the circular economy and this includes producing materials that can be traced from the beginning of the supply chain all the way through to finished products.

To lower our environmental footprint and take a stand against climate change, we started to make polyolefins using alternative sustainable feedstocks, like chemically recycled feedstock or renewably sourced feedstock. How? Using a process called the mass balance model.

“We started to make polyolefins using alternative sustainable feedstocks.”



It works by partially replacing fossil feedstock with sustainably sourced alternative feedstocks. It allows us to make ISCC certified sustainable polyolefins without reducing quality or safety standards. All while minimising CO<sub>2</sub> emissions and helping to reduce plastic waste.

The ISCC plus certification means sustainable materials can be traced all the way through the chain of custody. It makes it easier to meet sustainability targets and stay on top of changing legislation.



# Why Mass Balance is the right way to gain scale before moving to a complete renewable feedstock

## Ease of adoption

Unlike other chain of custody models, such as segregation, the Mass Balance Model allows manufacturers to simply trace what percentage of their product is sustainable - whether that's 100% or 30%. This is ideal when it isn't economically or logistically impossible for the manufacturer to fully segregate.

## Tailored and versatile

It allows you to support partially sustainable plastics for customers that still need a higher percentage of virgin feedstock - while at the same time helping them to transition slowly to more sustainable alternatives.

## Scalable and efficient

Use of existing production plants saves time and costs, and minimises inefficiencies, allowing a controlled scale-up of circular solutions without compromises in product performance.

## Reliable and certifiable

This approach can be ISCC PLUS certified, ensuring that the information linked to the materials or products is transferred, monitored and controlled throughout the supply chain. Assessment is done according to a full set of sustainability criteria., with a multi-stakeholder panel (which includes NGOs).



## The benefits

By using the mass balance model, we can offer the best of both worlds. We can meet the same quality and sustainable standards that customers expect, while contributing to a better future for us all.

– **Stay ahead of current and future regulations.** In the EU 100% of plastic packaging needs to be reusable or recyclable by 2030, while beverage bottles will need to have 30% recycled content by 2030.

- Supports meeting sustainability targets, while giving a competitive advantage in helping customers to meet their sustainability targets.
- Responds directly to downstream customers and a desire for more sustainable products.
- Future proof businesses.
- Part of the solution for a more circular economy and an active agent in progress to a more sustainable and circular future.

# EverMinds™

Accelerating Action on Circularity

Launched in 2018, EverMinds™ is an umbrella brand uniting the wide range of Borealis activities and initiatives aimed at making plastics more circular. As a dedicated platform, EverMinds promotes a circular mind-set among all Borealis stakeholders.

The platform encompasses proprietary Borealis technologies as well as established brands such as Purpolen™ and Dipolen™. It facilitates deeper collaboration between Borealis and its partners in order to develop innovative and sustainable polyolefins solutions based on the circular model of recycling, re-use and design for circularity. EverMinds also extends to pioneering corporate programmes such as Project STOP,

and engagement in industry initiatives like the the Polyolefins Circular Economy Platform (PCEP), and Project CEFLEX.

Because thinking circular today will provide us, our partners and society with a better tomorrow.

## For more information:

visit [www.borealisgroup.com](http://www.borealisgroup.com),  
and [www.borealiseverminds.com](http://www.borealiseverminds.com)

**Borealis AG** · IZD Tower

Wagramer Strasse 17-19 · A-1220 Vienna · Austria

Tel +43 (0) 1 22 400 000 · Fax +43 (0) 1 22 400 333

EverMinds™ – Accelerating Action on Circularity | Date of issue: July 2021

**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 2020, Borealis generated EUR 6.8 billion in sales revenue and a net profit of EUR 589 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 Total, based in the US). [www.borealisgroup.com](http://www.borealisgroup.com) | [www.borealiseverminds.com](http://www.borealiseverminds.com)

**Disclaimer** The information contained herein is to our knowledge accurate and reliable as of the date of publication. Borealis and Borouge extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the consequences of its use or for any errors. It is the customer's responsibility to inspect and test our products in order to satisfy himself as to the suitability of the products for the customer's particular purpose. The customer is also responsible for the appropriate, safe and legal use, processing and handling of our products. Nothing herein shall constitute any warranty (express or implied, of merchantability, fitness for a particular purpose, compliance with performance indicators, conformity to samples or models, non-infringement or otherwise), nor is protection from any law or patent to be inferred. Insofar as products supplied by Borealis and Borouge are used in conjunction with third-party materials, it is the responsibility of the customer to obtain all necessary information relating to the third-party materials and ensure that Borealis and Borouge products, when used together with these materials, are suitable for the customer's particular purpose. No liability can be accepted in respect of the use of Borealis and Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

EverMinds, Purpolen and Dipolen are trademarks of the Borealis Group.