CASE STUDY

Creating sustainable yogurt cups using the Bornewables™



CASE STUDY Delta Foods and Kotronis

Background

Delta Foods is the leading producer and distributor of authentic dairy products and fresh juices in Greece. With a history spanning 70 years, the company has dedicated itself to supporting Greek families by delivering high-quality products that meet modern nutritional needs. As part of its commitment to environmental protection, Delta Foods aims to increase the sustainability of its packaging while maintaining product quality and safety.

One of Delta Food's key suppliers is Kotronis Packaging, a producer of premium high-quality containers and caps for food packaging for the Greek market and beyond. Their innovative, functional, and attractive solutions are designed to ensure food safety and freshness while also contributing to a sustainable future.

Challenge

Kotronis Packaging saw the opportunity to increase the sustainability of Delta Foods yogurt cup packaging and collaborated with them to find a solution. Together, they sought to replace the fossil-based polypropylene in the cups with a circular alternative that still met all necessary requirements.

The new packaging material needed to meet strict food safety standards, use less energy during production, and transfer zero taste or odor. It also required the right balance of stiffness and toughness to allow for reduced material use while maintaining durability. Additionally, it had to be fully recyclable, ensuring it could reenter the circular economy at the end of its life.



"Integrating the Bornewables into our packaging highlights our commitment as a sustainable partner, providing our customers with innovative and environmentally responsible options. This new solution reinforces our role as leaders in the food packaging industry and showcases the power of collaboration in bringing about a more sustainable future."

Augustinos Kotronis

Managina Director, Kotronis Packagina





Katerina Kokkinopoulou
Packagina Legislation & Sustainability Engineer Delta Foods

derived from plant waste."

Solution

Kotronis Packaging worked with Borealis to develop more sustainable yogurt cups for Delta Foods. They selected Borealis Bn BJ368MO-90, a grade in the Bornewables $^{\text{TM}}$ portfolio of ISCC PLUS-certified premium polyolefins made from renewable feedstocks that do not compete with the food value chain.

The grade is a polypropylene (PP) block copolymer based on Borealis' Borstar® Nucleation Technology (BNT). BNT provides an excellent balance of stiffness and toughness, improves material flow, and reduces energy consumption during production. As drop-in solution, Bn BJ368MO-90 required no new approvals, making it easy to integrate into existing production processes.



Benefits

Delta Foods switched to renewable PP provided significant environmental benefits: for every metric ton of yogurt cups produced with Borealis Bn BJ368MO, the CO₂e partial footprint is 1.7 metric tons lower than for yoghurt cups produced using conventional Borealis BJ368MO. This reduction is equivalent to the emissions from charging 1700 smartphones for a year, assuming a two-hour charge at 6W in the EU (2018) with a CO₂ equivalent output of approximately 230g per kWh.*



"At Borealis, we're committed to finding innovations that make everyday life easier for consumers. Our sustainable solutions for yogurt pots are a perfect example, ensuring that there's no need to choose between convenience and sustainability. This collaboration in the spirit of EverMinds™ has demonstrated how working together can unlock real progress towards a sustainable future."

Florin Sabau

Global Commercial Director Consumer Products Rigid, Borealis

* Please note that the CO₂ reduction calculation made by our value chain partner was not verified by 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 sustainable polyolefin solutions. In Europe, Borealis is also an innovative leader in polyolefins recycling and a major producer of base chemicals. 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.

With operations in over 120 countries and head offices in Vienna, Austria, Borealis employs around 6,000 people. In 2022, we generated a net profit of EUR 2.1 billion. OMV, the Austria-based international oil and gas company, owns 75% of our shares. The Abu Dhabi National Oil Company (ADNOC), based in the United Arab Emirates (UAE), owns the remaining 25%.

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 or polyoiethis and expanding our geographic footprint to better serve our customers around the globe. Our operations are augmented by two important plint universe. Borouge (with ADNOC, headquartered in the UAE); and Baystar^{mi} (with TotalEnergies, based in the USE) as based in the USE.

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