

# Bio-based PE

## The straightforward replacement for conventional PE

A new label for Ecover from Avery Dennison shows how easily converters can switch to more sustainable materials when they have the right support.



The move to more sustainable packaging depends on innovative products and strong technical backup. The bio-based PE facestock from Avery Dennison has been developed to give converters a very easy replacement material for conventional PE facestocks, and a recent project with Ecover reveals the product's potential.

### AN AMBITIOUS GOAL

Historically, Ecover has taken a leadership role, including its adoption of packaging containers made from sugar cane resin and recycled plastic. When informed about the possibility of sourcing a facestock made from the same renewable ingredients, Ecover was enthusiastic to participate in this development.

Avery Dennison was able to provide Ecover with a label that met its sustainability requirements, using new Bio-based PE facestock – see page 6 for the full story. The material's facestock is made from sugar cane ethanol, certified under the Bonsucro® scheme.

### EASY TO SWITCH

Avery Dennison Bio-based PE facestock offers the simplest possible transition for converters, needing only standard converting equipment. The material converts with very similar properties to conventional polyethylene (PE)\*, ensuring easy requalification and providing the functionality and performance of a regular PE label.

### RENEWABLE AND RECYCLABLE

The raw material behind Bio-based PE is sugar cane ethanol, a first-generation biofuel widely recognized for unique environmental and social benefits. The sugar cane crop captures CO<sub>2</sub> from the atmosphere as it grows, actively compensating greenhouse emissions rather than adding to them. Grown on degraded pastures, it also has a low impact on biodiversity, and can be recycled in standard PE recycling facilities.

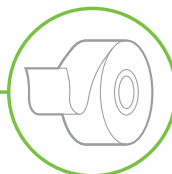
Sugar cane



Resin



Facestock



Label



\* Due to the nature of the resin, special care is required for optimal conversion on the press. We recommend the dies should be sharp and not damaged for the die-cutting

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# Insight into an Engineered Solution

**With its bio-based detergent and containers made from sugar cane resin, Ecover responded with enthusiasm when Avery Dennison contacted them and suggested a label to match.**

Cradle-to-cradle certification is the 'gold standard' of sustainable products, involving an independent external assessment. When Avery Dennison suggested a bio-based facestock to Ecover, it was clear that this solution would help them reach a higher standard – and technical sales specialist Gerrit Heersink was ready and able to help.

Gerrit Heersink was a key player in a multi-functional Avery Dennison team that drove the Ecover project, seeking ideas and managing the entire value chain. Many different contributions led to the final result, including close collaboration with the resin producer Braskem and development work with the label converters.

As a requirement, Ecover wanted at least 80% sugar cane content in the label's facestock to get external EPEA certification. Avery Dennison worked closely with Braskem and its film supplier to create a construction that contained even more than 80% sugar cane. Sample rolls were available 3 months after the initial meeting with Ecover, and a successful trial was achieved with the Ecover product the following month.



Gerrit Heersink gave close support throughout all development stages, visiting the label converter, the dispensing Ecover line in France and actively reaching out to the die manufacturer, to continuously ensure easy conversion and smooth operations.

**“ Technical Sales Specialists go beyond ‘problem solving’. In fact, we aim to drive innovation, ensuring a smooth customer journey and a successful outcome. ”**

**Gerrit Heersink,**  
Technical Sales Specialist  
Avery Dennison Europe, Benelux

**“ This was a fast and productive journey for us. Avery Dennison gave us all of the support needed to ensure the result we wanted, with production on a very short timescale. ”**

**Tom Domen,**  
EU Head of Greenskeeping and Long  
Term Innovation, Ecover

**“ The benefits of reaching out to the whole value chain when improving sustainability were clear in this project - we went from initial discussions to converted labels in less than five months. ”**

**Xander van der Vlies,**  
Sustainability Director,  
Avery Dennison Europe