#### **CASE STUDY**

# Rethinking liner waste across Europe and beyond





#### The story

PET plastic is one of the most recycled materials in Europe. But the complexities of recycling the siliconized PET liners have historically been prohibitive enough to keep most recyclers from handling them. That began to change in 2014, when we developed a solution with Scottish recyclers PET U.K., who engineered a way of reclaiming the PET material in siliconized liners and turning it into resin for new PET.

"The resin is used as a feedstock for making new PET materials," explains Avery Dennison sustainability director Renae Kulis, "including thermoformable sheets used in the production of microwave trays."

Cider maker Brothers Drinks was the first brand to take advantage of PET U.K.'s service. In their first year of shipping the PET liner from their bottling facilities to PET U.K., Brothers Drinks diverted about 50 tons of siliconized PET liner from more than 1.5 million square meters of labels. The liners yielded enough PET resin to make almost 2 million microwave trays.

Peter Faxholm, operations manager at Brothers Drinks, said recycling the liners saved money as well.

"We estimate that we've saved around  $\pounds$ 7,000 by taking part in this program. Additionally, we're able to save significant amounts of CO<sub>2</sub> emissions by having our PET liner recycled instead of incinerated. From both business and brand value perspectives, this program is a real winner," he said.

FINAT, Europe's self-adhesive label industry association, thinks the program is a winner, too: The organization awarded Brothers its End-User Recycling Award in 2016.



Read more about sustainability at Avery Dennison at label.averydennison.com/sustainability

## A growing network of recycling solutions

More than 300,000 tons of liner waste are disposed of every year in Europe. Our partnership with PET U.K. is one of several on the continent intended to reduce that number. One program, developed with Smurfit Kappa Recycling (SKR), pays customers in Germany and the Benelux for delivering their liner waste to an SKR facility, resulting in a net savings on their disposal costs. SKR uses the liners to produce corrugated board. In Northern Italy, our partnership with Tramonto Antonio provides collection of liner waste, matrix waste and start-up reels. Instead of going to a landfill or an incinerator, the waste is turned into refuse-derived fuel and supplied to cement plants as a less carbon-intensive alternative to coal.

"We're collaborating with customers across every market in Europe," says Roland Simon, Avery Dennison's vice president for global procurement and global sustainability leader. "We believe reducing waste is part of our responsibility as a manufacturer. And helping the brands improve sustainability in their supply chains is just one more way we can support them with our expertise."

#### First steps toward a bigger vision

The recycling network we're building in Europe is just one step toward a more ambitious goal: eliminating 70 percent of matrix and liner as waste from our entire value chain by 2025. We're ultimately aiming to create a "closed loop" system in which liner and matrix waste becomes feedstock for more facestock and liner. And, of course, we're cleaning up our own operations as well. One of our 2025 goals is to be 95 percent landfill free globally-and at the end of 2015, we were already 92 percent landfill-free.

"We approach sustainability as something bigger than just within the walls of Avery Dennison," Kulis says. "Our industry works as a system and has the opportunity to reuse what we traditionally think of waste as raw materials for labeling, packing or products that require recycled content. We are working with our suppliers, customers, recyclers and universities to find the technologies needed to enable a circular economy for our industry in every region around the world."

### How Brothers turned liners into something new





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