

# How Co-op, Coveris, and Eastman are **driving plastics recyclability** to support the circular economy

## What if:

- Food could be packaged with peelable plastic lidding that rendered the trays recyclable?
- Supermarkets could reduce packaging weight, thereby enhancing recyclability ratios?
- All plastic packaging could be reusable or recyclable by 2023?

These “what ifs” are actually “why nots” thanks to an innovative collaboration between Co-op, Coveris, and Eastman that has drawn praise from RECOUP, a nonprofit, member-based organization promoting plastics recycling within the U.K.

## Collaboration enhances sustainability.

Co-op is the largest consumer-owned cooperative in the world. Its 5 million members overwhelmingly support the supermarkets' efforts to offer food products in recyclable packaging. In the U.K., Co-op works with Coveris, a global manufacturer of innovative food packaging solutions, and Eastman, the maker of Eastman Eastobond™ 19412 copolyester, a revolutionary polymer that acts as a universal sealant allowing packaging manufacturers to switch to fully recyclable mono-APET trays. This ongoing collaboration is putting more recyclable products on grocery shelves and helping reduce the amount of plastic waste that is sent for disposal in landfills and incinerators.

According to the European Commission, only 5% of the value of plastic packaging material stays in the economy, while the rest is lost after its first use. The annual cost for this lack of recycling is between €70 and €105 billion. The EU Action Plan for the Circular Economy calls for all plastic packaging to be reusable or recyclable in a cost-effective manner by 2030.

European grocery retailers can be part of the solution by asking their suppliers to use food-packaging materials, such as Eastobond, that protect food while lowering costs and enhancing recyclability.



## Co-op cares about the environment.

Co-op worked with Coveris to develop a food pack featuring a monolayer material for the tray film. Coveris sourced Eastobond resin to act as a sealant layer in the lidding film to ensure direct sealing, allowing Co-op to feature food products with fully recyclable trays. Imagine the possibilities if grocers like Co-op requested Eastobond upfront when selecting a packaging manufacturer. Downstream retailers of finished goods can positively impact recyclability by specifying which materials are used by their suppliers.

While pots, tubs, and trays are generally labelled as “Widely Recycled,” food trays historically have required a two-layer construction consisting of both PE and APET films. Using Eastobond-enhanced lidding films can eliminate the need for PE lamination on the tray and facilitate tray recyclability, reducing costs for the bottom web tray film.

“To help recyclability of the base part of the pack, the lidding film should be made with a sealant layer compatible with mono-APET. Also, per Recyclability Guidelines, the film should peel away with no residue,” said Paul East, RECOUP packaging technologist.

## Coveris perfects the process.

Co-op and Coveris changed from laminated film to mono film for food packaging trays and are exploring switching from black to clear plastic. Clear plastics are preferable in the recycled materials market because of issues associated with the detection of black plastic by the optical sorting systems widely used in plastics recycling. Coveris utilized its integrated capabilities in extrusion, print, lamination, and finishing to optimize the process.

"We're looking to apply mono-material packaging more broadly," said Rob Thompson, Co-op packaging technologist.

## Eastman understands materials matter.

Eastman Eastobond has been cleared for use in food contact applications under European Union Commission Regulation (Commission Regulation (EU) No. 10/2011) and U.S. FDA (21 CFR 175.300). Eastobond requires a lower heat-seal initiation temperature and can seal to mono-APET trays of different compositions. By eliminating the need for PE lamination film on food trays, brands can feature food packaging with fully recyclable mono-APET trays. Eliminating the PE layer also means lighter packaging and less waste. All mono-APET tray waste from thermoforming can be reground and reused. Furthermore, using Eastobond eliminates the need for additional laminating adhesives, which can reduce the production of volatile organic compounds (VOC). Eastobond protects your food and improves your bottom line.

"Working closely with Coveris, Eastman was able to support the production process, addressing questions and resolving issues in real time from sourcing through fulfillment," said Ian Fearnley, associate technical service and applications development representative at Eastman.

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*"Coveris always tries to stay ahead of our competition by innovating, and faced with a difficult challenge, we turned to Eastman as the material experts. Following collaborative discussions, trialing, and mutual testing, we were able to couple the Eastman copolyester expertise to our own PE extrusion technology to satisfy our customer brief."*

— Ian Shaw,  
Coveris extrusion technical development manager

## RECOUP recognizes a job well done.

RECOUP produces Recyclability Guidelines aimed at packaging technologists, buyers, and designers to inform them how to make their packaging more recyclable and provide an independent view. The latest version of these guidelines includes Co-op's mono-material food packaging produced by Coveris using Eastobond as a best-in-class example of recycling.

This type of value-chain collaboration is atypical, but RECOUP would like to encourage more of it. According to East, "We are often asked what the main issues are for recyclability of plastic packaging. The idea of this latest work is not only to illustrate some of the issues, but just as importantly, provide examples of solutions."

Co-op, Coveris, and Eastman are working together to simplify plastics construction to make food packaging more recyclable.

**For more information, visit [www.eastman.com/eastobond](http://www.eastman.com/eastobond) and complete the contact form.**