

CIRCULAR PACKAGING SOLUTIONS

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How Evonik supports
your transformation towards
a circular value chain



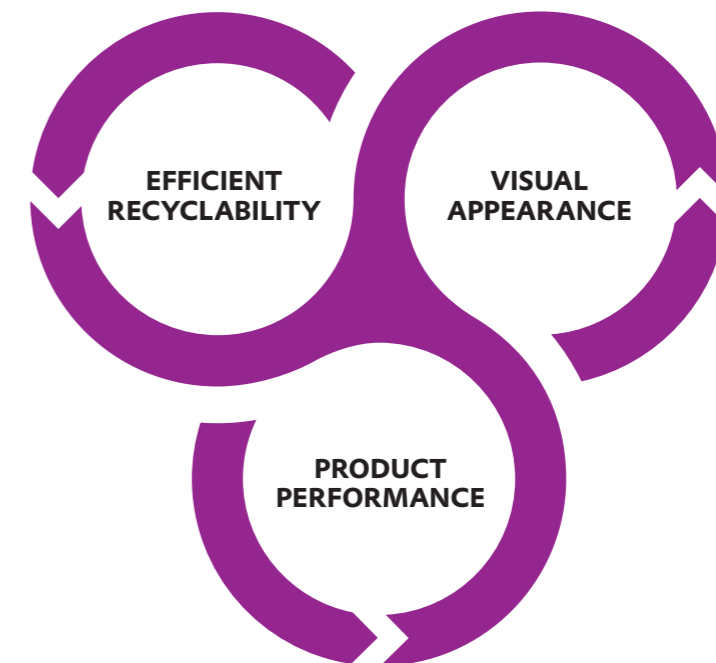
HOW TO MAKE THE MOST OF EXTENDED PRODUCER RESPONSIBILITY (EPR) FEES

As a branded-goods manufacturer, you strive to achieve a balance between an attractive visual appearance, exceptional product performance, and overall cost efficiency. But will the European Union's stringent demands for recyclable packaging disrupt this delicate balance?

The solution is **Design for Circularity**: You need to rethink how you use plastics, inks, paper, adhesives, and other packaging materials to ensure they can be recycled or reused efficiently.

Partnering with Evonik helps you reach your goals. We know how to future-proof your packaging materials.

We help you develop packaging solutions that are attractive to customers, beneficial for mother nature, and viable for your finance department, turning circularity into an efficient and stable business model. You benefit from our products. Our contacts. Our circularity expertise.



EVONIK IS PRESENT ALONG THE ENTIRE PACKAGING VALUE CHAIN



PRODUCTION

- Foam control additives
- Pulp additives for lightweight paper
- Release coatings to reduce label liner waste
- Fluorine-free polymer processing aids
- Co-binders for easy-to-remove printing inks
- Barrier coatings for paper
- Polymer additives to improve plastic recyclate quality
- Absorbers for odor mitigation
- Hydrogen peroxide for paper bleaching
- Upgrading for reinforced polyethylene and reinforced polypropylene with food contact
- Process chemicals to improve recyclate quality

USE

- Peroxides for aseptic application
- Heat-seal binders with clean peel
- Water-based ink additives for improved visual appearance
- Plastic additives for improved visual and haptic appearance
- Additives for productive processability

RECYCLING

- Process additives for label wash-off
- Pyoil upgrading for low-impact chemical recycling
- De-metallization agents
- De-inking agents
- De-coloring of recycled paper
- De-labeling agents
- Removal of contamination
- Bleaching of paper fibres

FOUR EXAMPLES OF OUR SUCCESSFUL CIRCULAR PACKAGING PARTNERSHIPS



1

CUSTOMER:

Cardboard manufacturer

SOLUTION:

Silica technology for lightweight paper and board

BENEFIT:

Ecological and economic advantages due to reduced shipment weight



2

CUSTOMER:

Packaging and beverage producer

SOLUTION:

Peroxides for energy-efficient sterilization of aseptic packaging

BENEFIT:

Preserving the value of shelf-stable products without the need for refrigeration to combat food waste



3

CUSTOMER:

Printing ink manufacturer

SOLUTION:

Co-binders for the efficient removal of printing inks during recycling process

BENEFIT:

Improved Design for Recycling leads to low color, high quality recyclates, and consequently lower costs for brand owner



4

CUSTOMER:

Plastic compounder


SOLUTION:

Additives enable highest recycle content and highest quality at the same time

BENEFIT:

Compounder and its customers meet recycle content targets without compromising quality, performance, or appearance





EVONIK INDUSTRIES AG
Rellinghauser Straße 1–11
45128 Essen
Germany
[evonik.click/Circular-Economy](https://www.evonik.com/evonik.click/Circular-Economy)

AT EVONIK, CIRCULARITY IS NOT JUST A SIDE DISH. WE OFFER A WHOLE BUFFET OF CIRCULAR SOLUTIONS FOR YOUR PRODUCTS AND PACKAGING.

Since launching our Circular Economy Program, we have been industry pacemakers in circularity. The goal of the program is to blend the ecological and economic needs of our customers. Together with our customers and partners, we establish new processes and new networks to turn circularity into profitable business.

Get in touch to find out how we can team up for circular business opportunities. We look forward to hearing from you:

Hendrik Rasch
Next Markets Program
Vice President Circular Packaging & Plastics Recycling
hendrik.rasch@evonik.com



 **EVONIK**
Leading Beyond Chemistry