

Circular economy and plastic packaging:

Five recommendations



**The International Solid
Waste Association (ISWA)
is a global, independent and
non-profit making association,
working in the public interest to
promote and develop sustainable
waste management.**

Everybody talks about the **circular economy**

Everybody talks about the circular economy. So does ISWA. In 2015, we published six reports and presented nine key messages on circular economy and resource management. But what does it really take to make the production and consumption patterns of today more circular in practice?

One thing is for sure – all actors throughout the value chain have to work together to create change. Therefore, we gathered a group of manufacturers, designers and waste managers around two concrete and specific cases: jeans and plastic packaging - for cheese to be more precise.

What did we find out? Going from linear to circular calls for new ways to work together throughout the value chain. All aspects of your product, business and ways of doing things must be open to change - even aspects of your business that seem set in stone. The designer's tool box has shown to be very useful, but making the necessary adjustments will doubtlessly drag you through the darkest co-creational agony before you can see the circular light at the end of the tunnel – no one said it would be easy!

Did we manage to go more circular? Well, we are still talking, but we are talking to the right people and we came up with five overall recommendations for manufacturers wanting to go circular and matched them with five commitments for the waste management sector to support that movement.

This booklet presents the recommendations and commitments coming out of the plastic packaging case. Another booklet presents the same for the jeans case.

Design

disassembly and recycling

Mixed-material packaging makes the recycling process difficult. The different types of plastic must be physically separated before recycling. Otherwise, the quality of the recycled material will be compromised. Plastics also contain different kinds of additives to increase their performance. These can also complicate the recycling process.

Make a difference

- » **Design packaging using only one type of plastic**
or make them separable upon disposal.
It's a matter of keeping it simple.
- » **Minimise the use of additives**
where possible, use generic, common plastic blends to simplify recycling.

The waste management sector will test products for recyclability and provide input to the design process

Rethink Resources

consider secondary raw materials

Recycled plastics can be technically suitable for packaging, and the price more attractive than for virgin plastic. However, it can be less transparent and carry a different look than virgin plastic. Consumers are becoming increasingly interested in the sustainability of packaging, particularly for goods branded as sustainable.

Make a difference

- » **Take advantage of the different visual look of recycled plastics**
use the look of recycled plastics to communicate sustainability.
- » **Push the market by promoting the recyclability of your product**
use the fact that consumers appreciate sustainable products.

The waste management sector will recover plastics from the waste streams and make them available to the industry

Cooperate

throughout the value chain

Switching to recycled materials in packaging requires cooperation, communication and investments in the value chain. At the same time, it will make environmentally sound products more available to the customers. Dual drivers of consumer demand and regulatory push make change inevitable - stay ahead of the curve.

Make a difference

- » **Expand your design toolbox to include sustainability as a standard element**
push demands down the value chain.
- » **Investigate and understand the needs of consumers**
help them be more sustainable by default.



The waste management sector will engage value chain actors to jointly develop resource efficient solutions

Innovate

keep an open mind for innovation

Recycled plastics can be of sufficiently high quality for use in packaging solutions, but integrating them often relies on process and design innovation. Innovation and openness will keep you one step ahead.

Make a difference

- » **Consider your choice of material**
investigate the use of recycled plastics for new products. Think beyond traditional approaches.
- » **Invest in technological development**
adapt existing designs to include recycled plastics: you don't need to reinvent the wheel, but you can fit new rims.

The waste management sector will invest in developing collection, sorting and recycling technologies for the products and materials of tomorrow

Partner up

with the waste management sector

Designing and producing packaging products that can be easily collected and recycled requires an understanding of the problems that can occur at end of life. The waste management sector, sorters and recyclers, has this knowledge and experience. Working together will produce better quality recycled plastics.

Make a difference

- » **Communicate your demand**
ensure that recycled plastic meets your needs.
- » **Team up with the waste management sector when developing new products**
what happens to your packaging when it becomes waste? Collaborate to facilitate easier collection, sorting and recycling.

**The waste management sector
will transform itself into a
resource management sector**

Project Team

City of Oslo

Ingunn Dale Samset
Lars Haug Andersen

Design School Kolding

Tobias Tøstesen
Lykke Block Kjær

Worldperfect

Søren Stochholm

NVRD

Maarten Goorhuis

Tommen Gram

Finn Robert Müller

G-Star

Frouke Bruinsma

ISWA

Paul Stegmann
Project secretary

DAKOFA

Annette Braunstein
Morten Carlsbæk

Ramboll

David McKinnon
Frank Holmgaard
Julie Maria Falk
Björn Appelqvist
Project manager

Project Partners



City of Oslo
Agency for Waste Management





ISWA

International Solid Waste Association

Auerspergstrasse 15/41,
1080, Vienna, Austria
iswa@iswa.org

iswa.org/resourcemanagement

Copyright © ISWA September 2017, all rights reserved