

Reduce

Much more than using less packaging material

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Presentation

Bart Calis

Lecturer and researcher in packaging

Department Graphical and digital media

Packlab
circulaire verpakkingen



Research projects
Education: bachelor
External services
Open labs



What is it about?

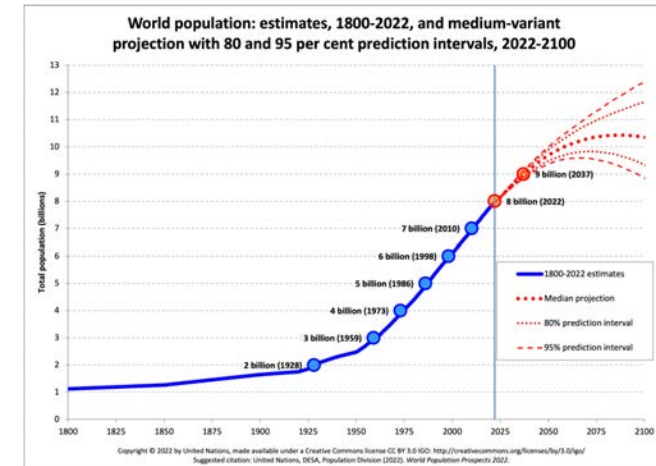
 **PackItBetter**
The Belgian Hub for Packaging Eco-Design



What is it about

Shortage of raw materials

- More population (with purchasing power)
- Raw materials getting exhausted

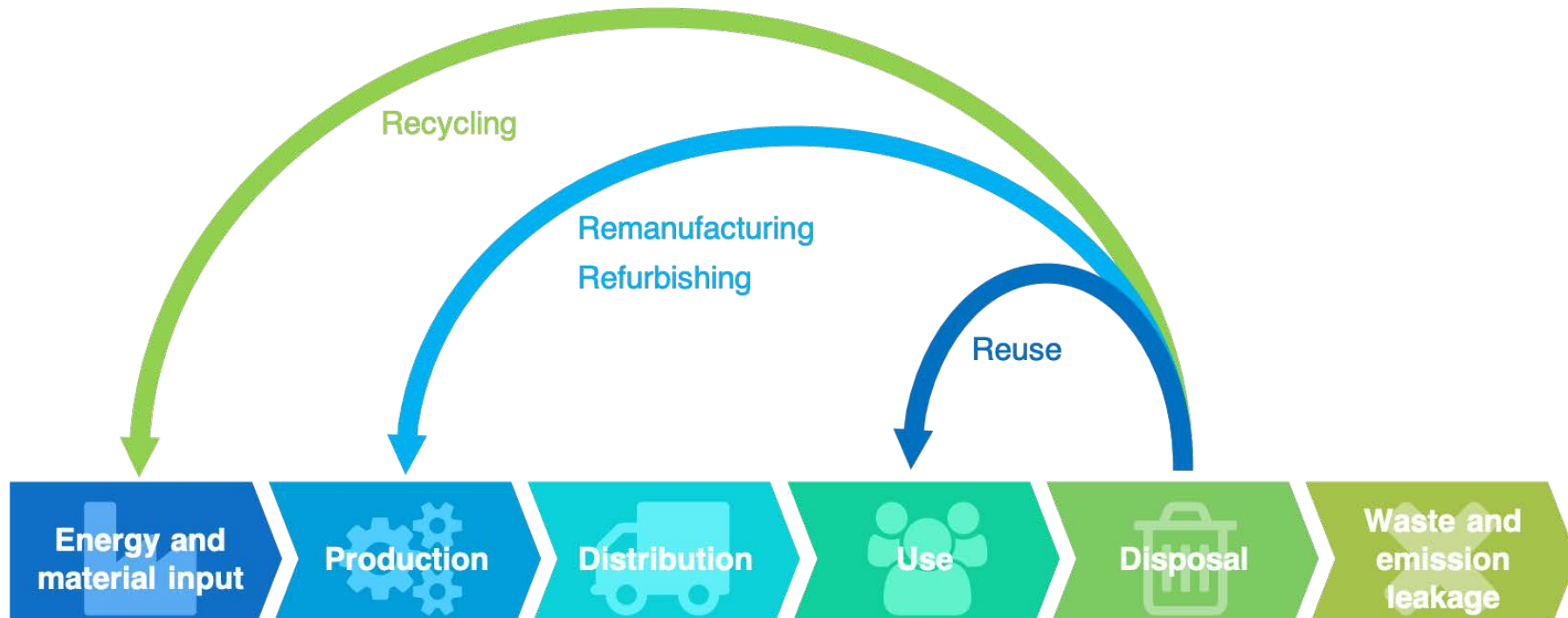


Environmental and climate problems



What is it about

Circular economy



Bron: Vlaanderen Circulair

What is it about

3R

REDUCE

REUSE

RECYCLE

Reduce



Reduce Overpacked?



Bron: soranews24.com, dailymail.co.uk

Reduce

Overpacked?



Bron: valipac

Een verpakking heeft meer dan 10 functies...



Transport



Informatie



Bescherming



Duurzaamheid



Beleving



Marketing



Gebruiksgemak



Beveiliging



Houdbaarheid



Operationeel

Reduce

Functies van een verpakking

Maak een ranking van de belangrijkste functies

- Transport
- Bescherming
- Operationeel/logistiek
- Houdbaarheid
- Informatie
- Duurzaamheid
- Beveiliging
- Marketing
- Beleving
- Gebruiksgemak



Reduce

Less use of raw materials

Chape optimisation



Source: preventpack



Reduce

Less use of raw materials

Concentrate



Source: CITEO

Reduce

Less combinations of materials

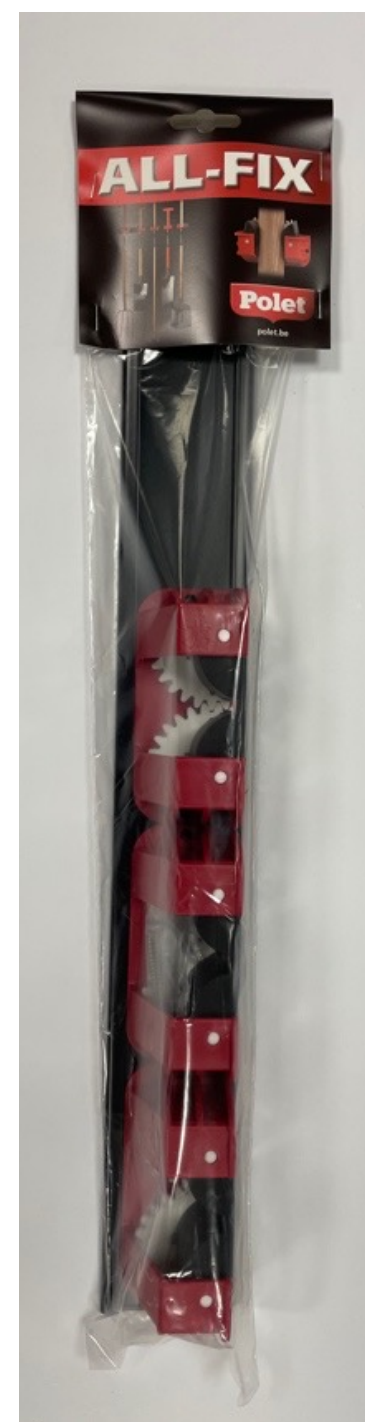
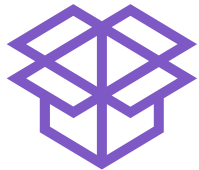


Reduce

Less combinations of materials

Better sorting by consumer

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Reduce

Less additives as glue, ink...



Total ink surface **78,1%**



Total ink surface **48,5%**

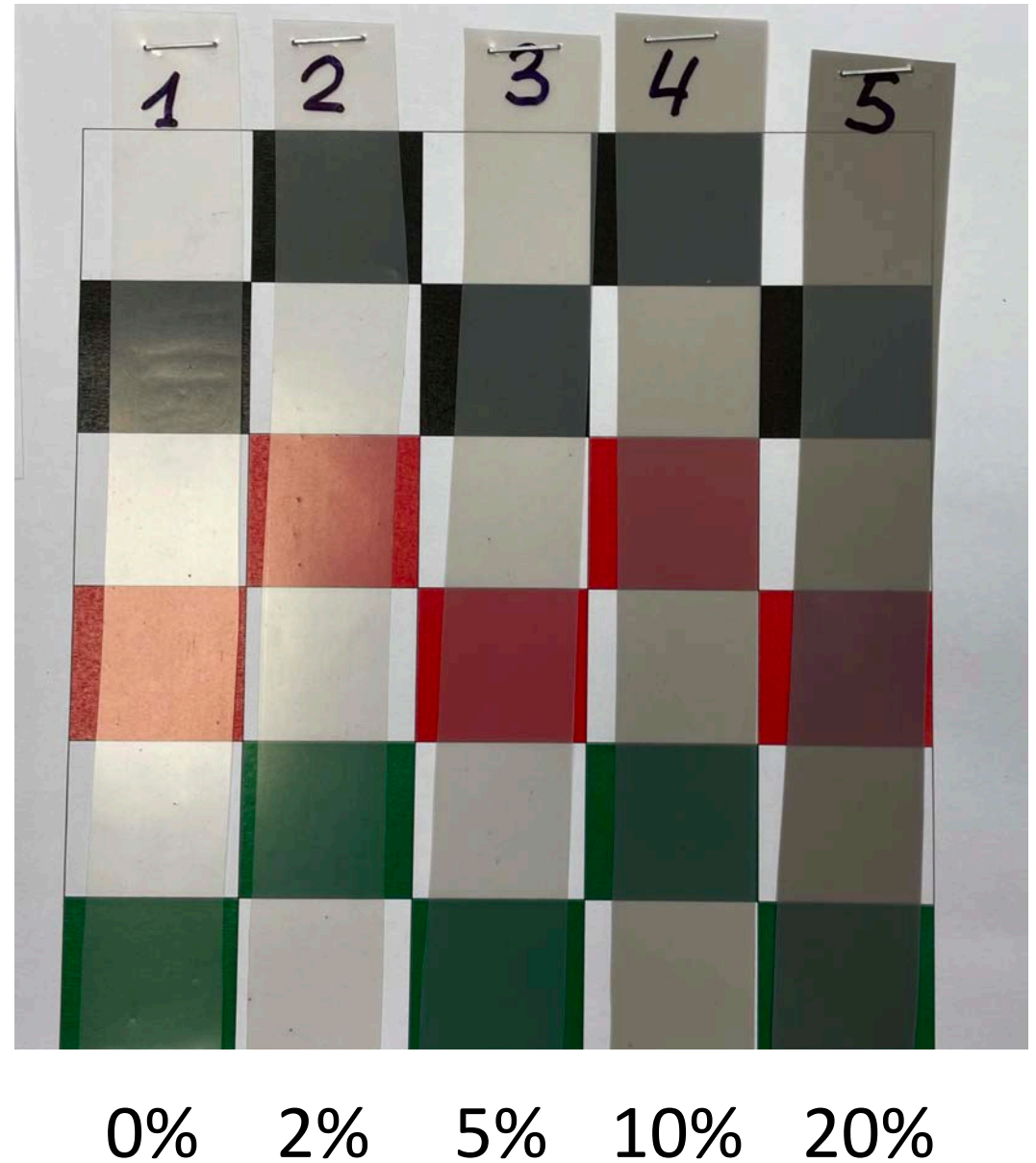
Benefit -29,6%

Source: Peltier

Reduce

Less additives
as glue, ink...

Discoloration of the recycled
printed surface:



Source: Valipac

Reduce

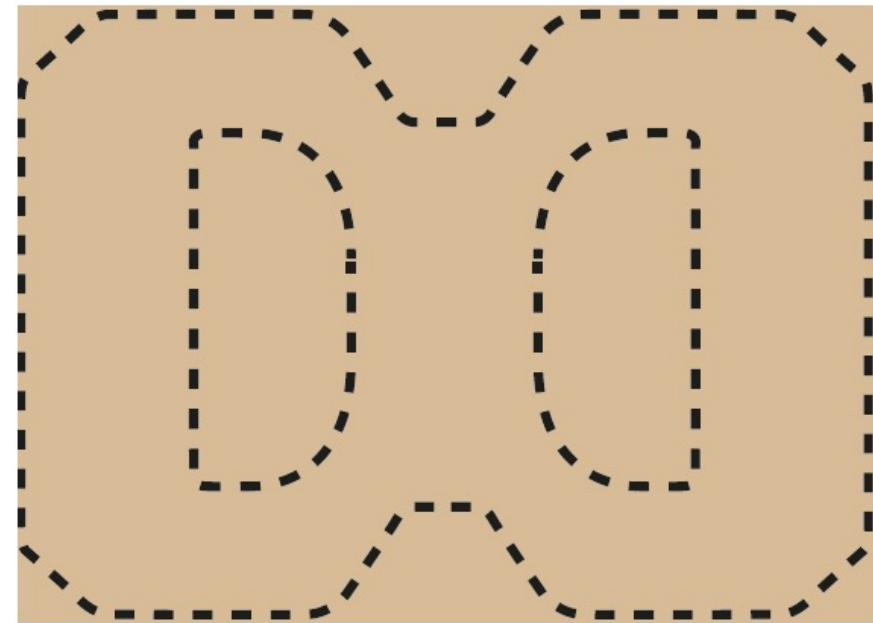
Less additives
as glue, ink...



Source: Valipac

Reduce

Less production
waste

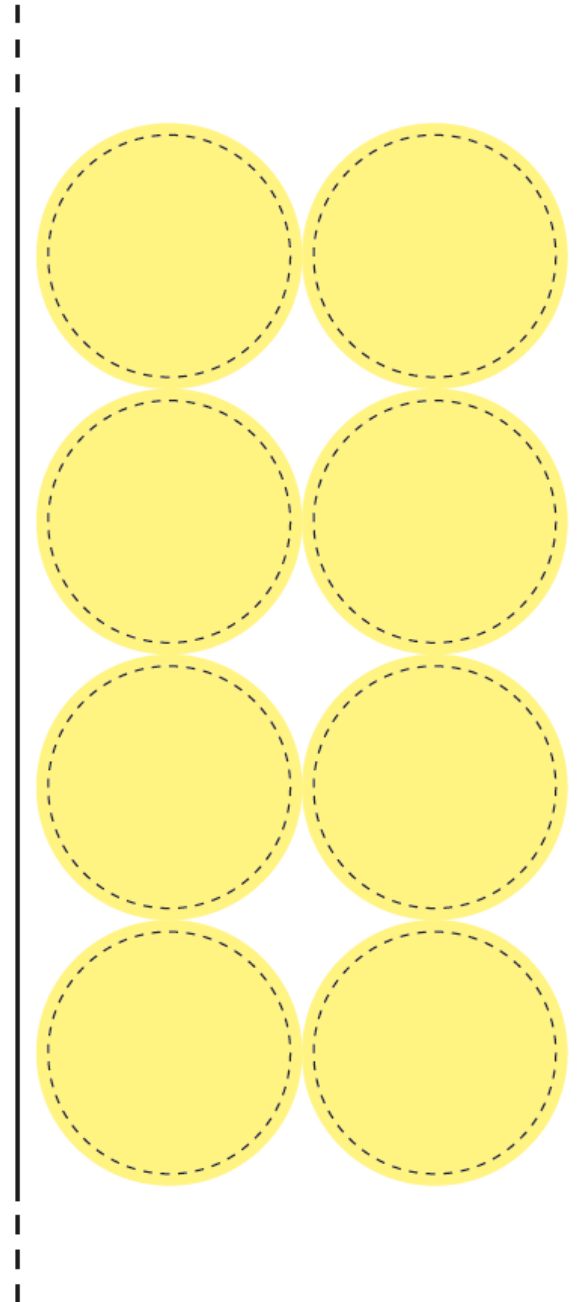


25% of the material is waste in
production

Reduce

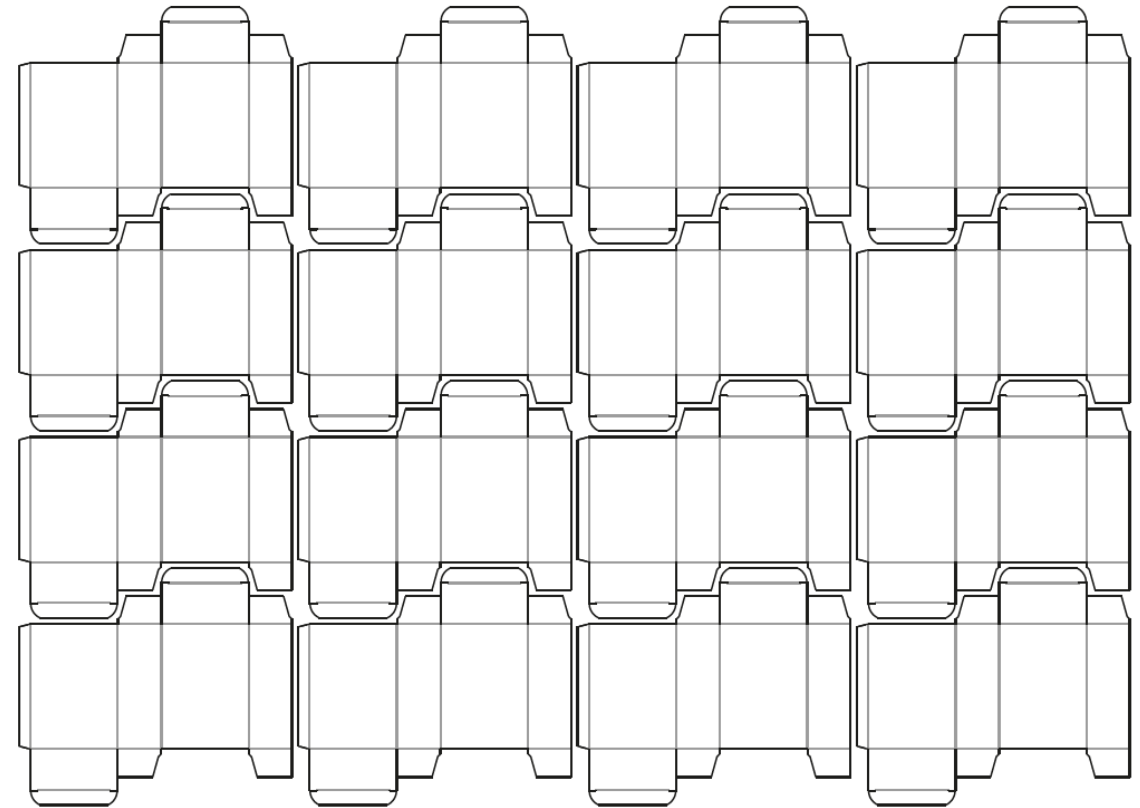
Less production waste

30% of the material is
waste in production



Reduce

Less production
waste

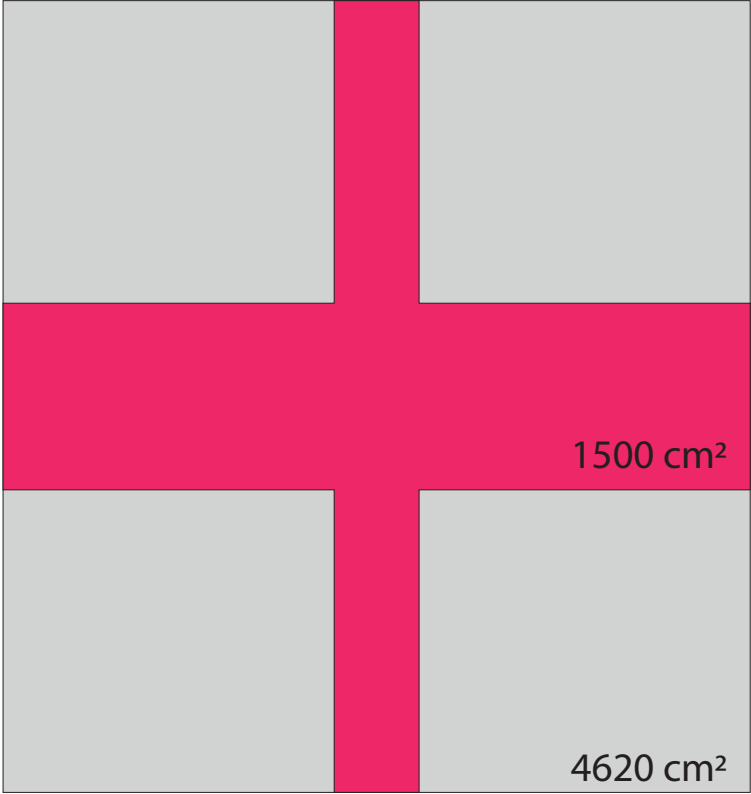


Optimal chape and nesting prevents waste of material

Reduce

Less production waste

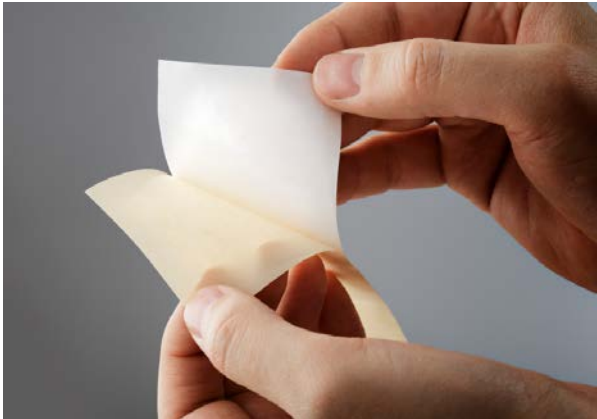
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68% waste

Reduce

Less production waste

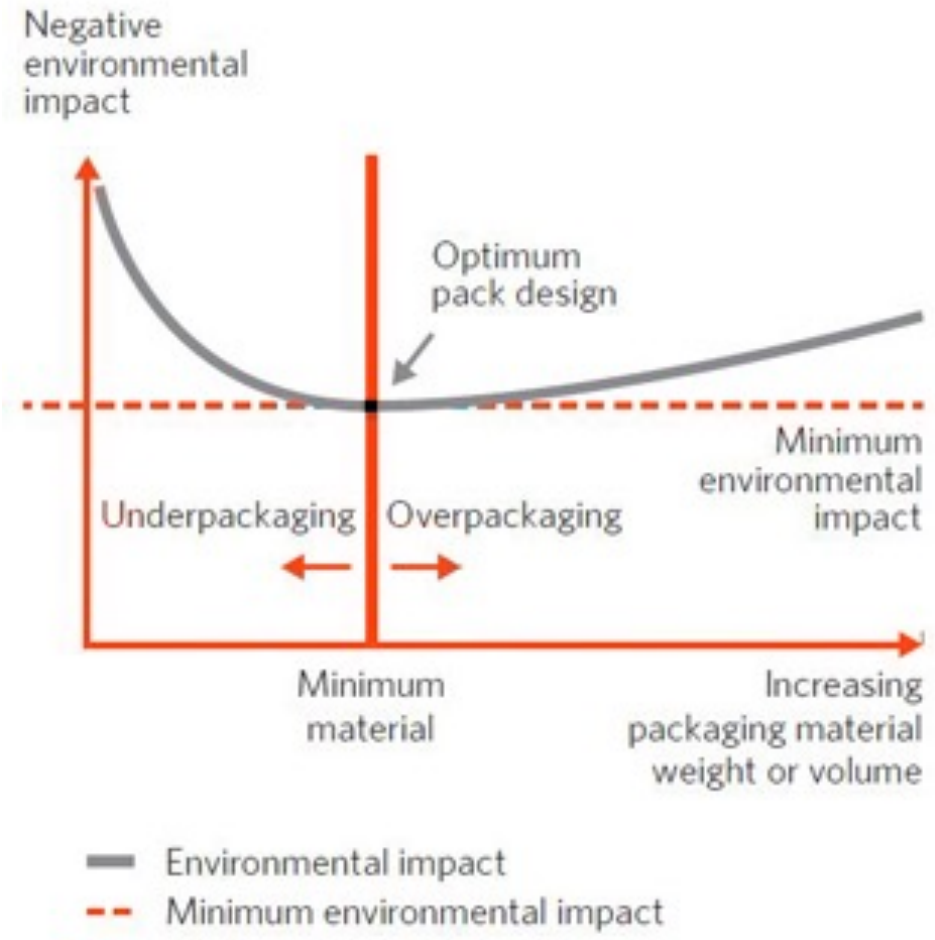


Pitfalls in Reduce



Pitfalls in ecodesign

Reduction of functionality



Source: europe.eu

Pitfalls in ecodesign

Reduced protection and shelf life



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+



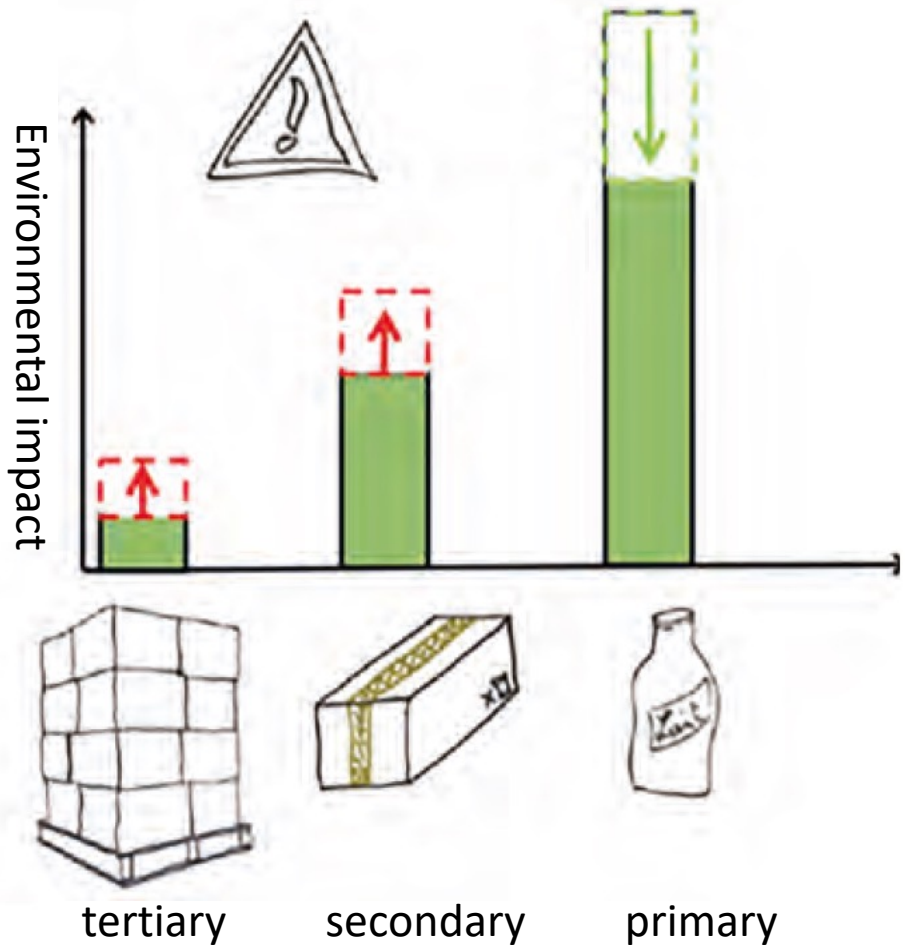
100%
Environmental impact

10%

90%

Pitfalls in ecodesign

Creation of other problems



Source: CITEO

Pitfalls in ecodesign

Environmental impact to be considered over the complete lifecycle



Source: Karine Van Doorselaer

Pitfalls in ecodesign

Greenwashing



Source: Korea Herald



Next up

EMPACK
Packaging Innovations Theater

Wednesday 25 oktober 10.30 – 11.00
Redesign naar herbruikbare verpakking, hoe begin ik eraan?

Thursday 26 oktober 10.30 – 11.00
Design thinking-ontwerpstrategie voor duurzame verpakkingen



Thank you!

