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EU CIRCULAR ECONOMY FORUM
belgium24.eu

BEYOND EXPERIMENTATION

Europe's leading role in mainstreaming circular practice



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DEPARTEMENT
ECONOMIE
WETENSCHAP &
INNOVATIE



WELCOME!

Mastering reuse of plastics in the circular economy?



Luk Umans

OVAM

Working agenda

Chemicals & plastics



Els Herremans

OVAM

Cmartlife

01

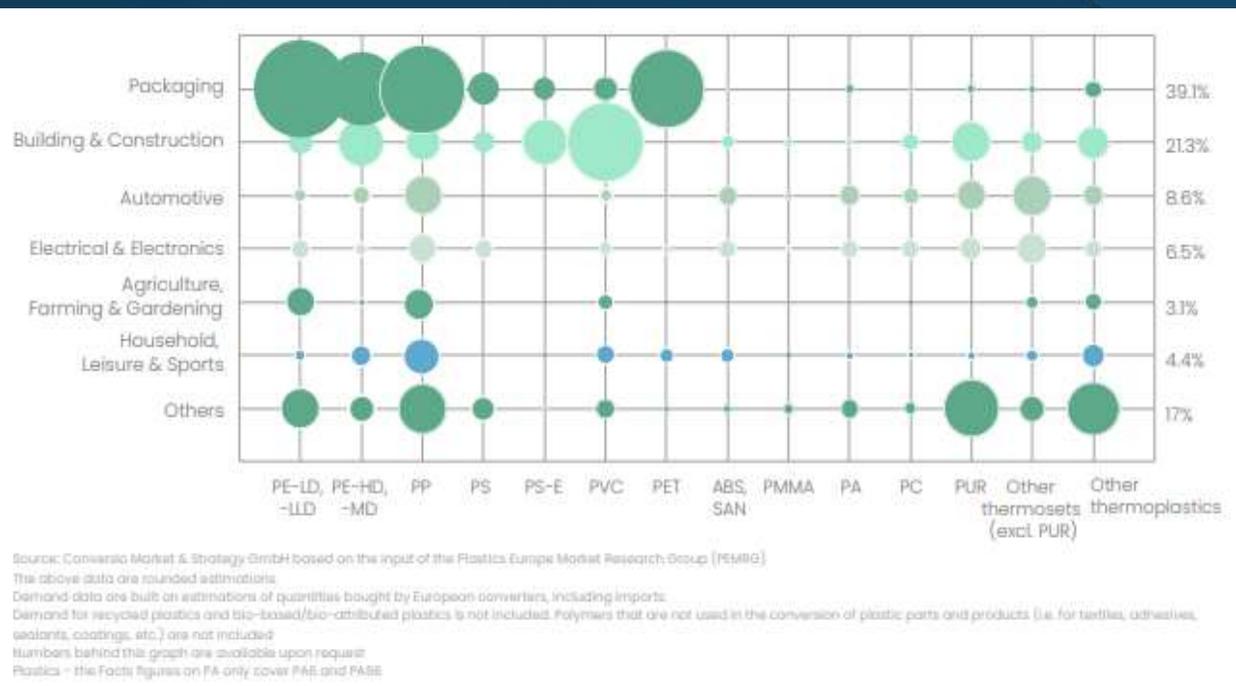
SETTING THE SCENE

PLASTICS IN THE CIRCULAR ECONOMY



WERNER ANNAERT
OVAM

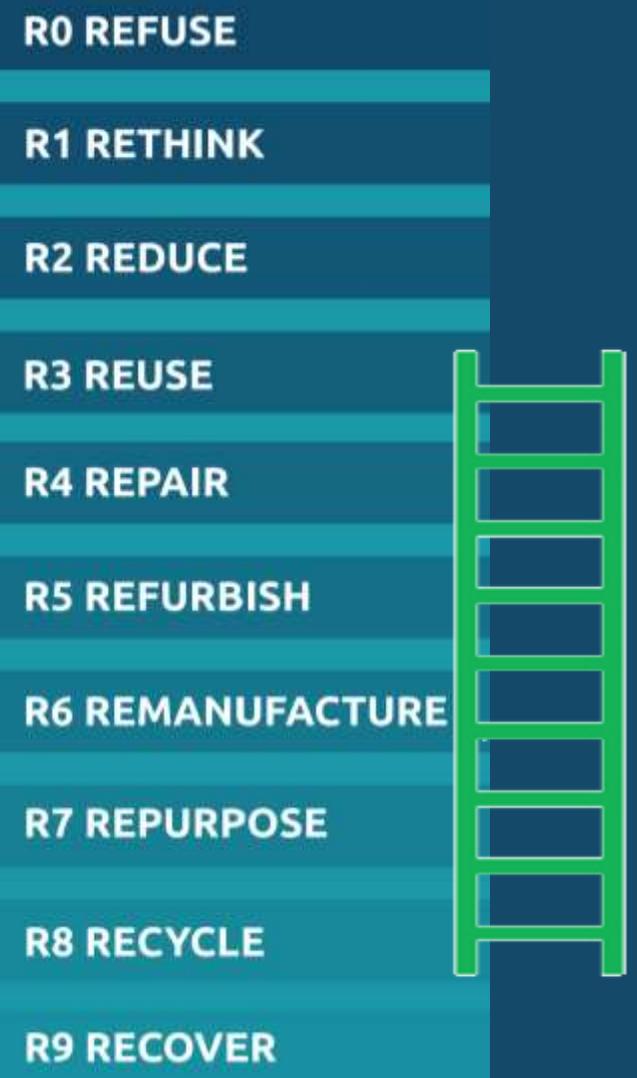
Why a session on plastics and reuse?



CIRCULAR ECONOMY

INCREASING CIRCULARITY

LINEAR ECONOMY



the **strong** numbers of **REUSE**

Total amount
reused goods*
in 2022 in Flanders.

* a discarded product that is used
by another user in the same
function

14,1kg

household goods
40%

13,5kg

furniture
38%

4,6kg

textiles
13%

2,9kg

electrical and
electronic equipment
8%

0,4kg

other
1%



total: **238 kton**
35,5 kg/capita



Power of partnerships



cmartlife[©]



Packaging: household – commercial

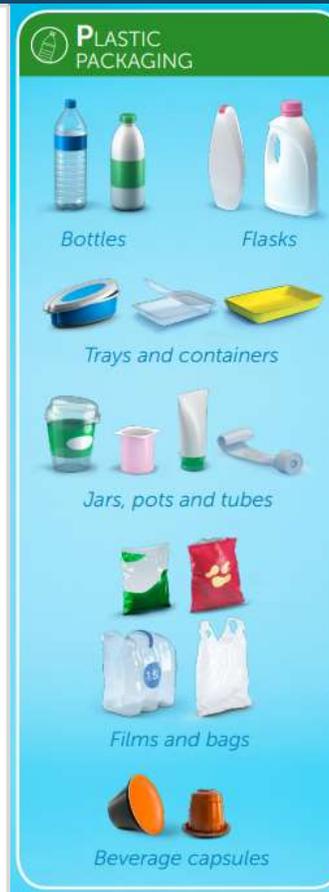
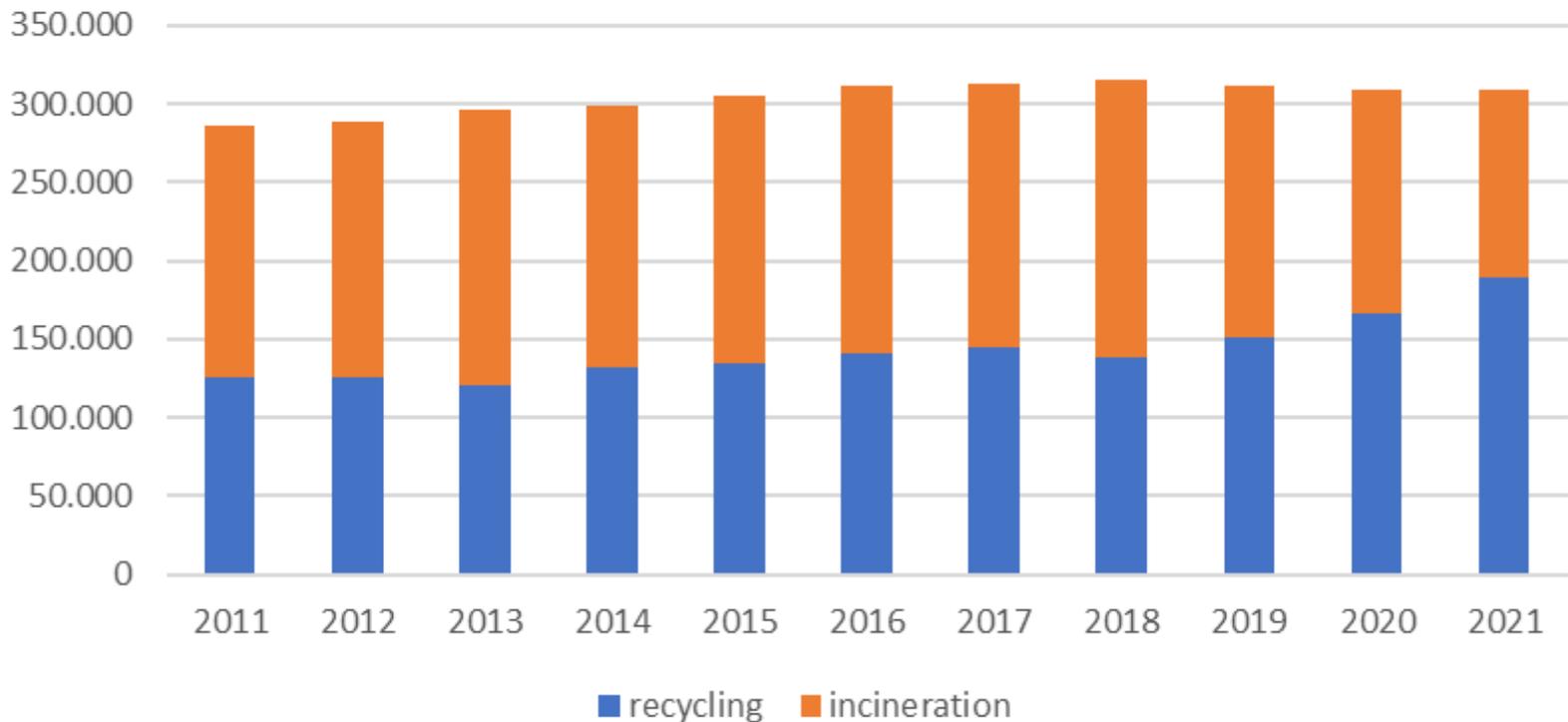


	Wood (in kilotonnes)	Plastic (in kilotonnes)	Ferrous metals (in kilotonnes)	Ratio of reusable to one-way packaging among Valipac members (as %)
2015	1,417	715	620	389%
2016	1,484	852	776	431%
2017	1,471	856	770	417%
2018	1,460	871	715	410%
2019	1,436	931	718	414%
2020	1,491	963	768	436%
2021	1,501	991	795	421%

“Towards a world without disposable packaging: an illusion or the way forward?”



Plastic Packaging Waste (BE) (ton)



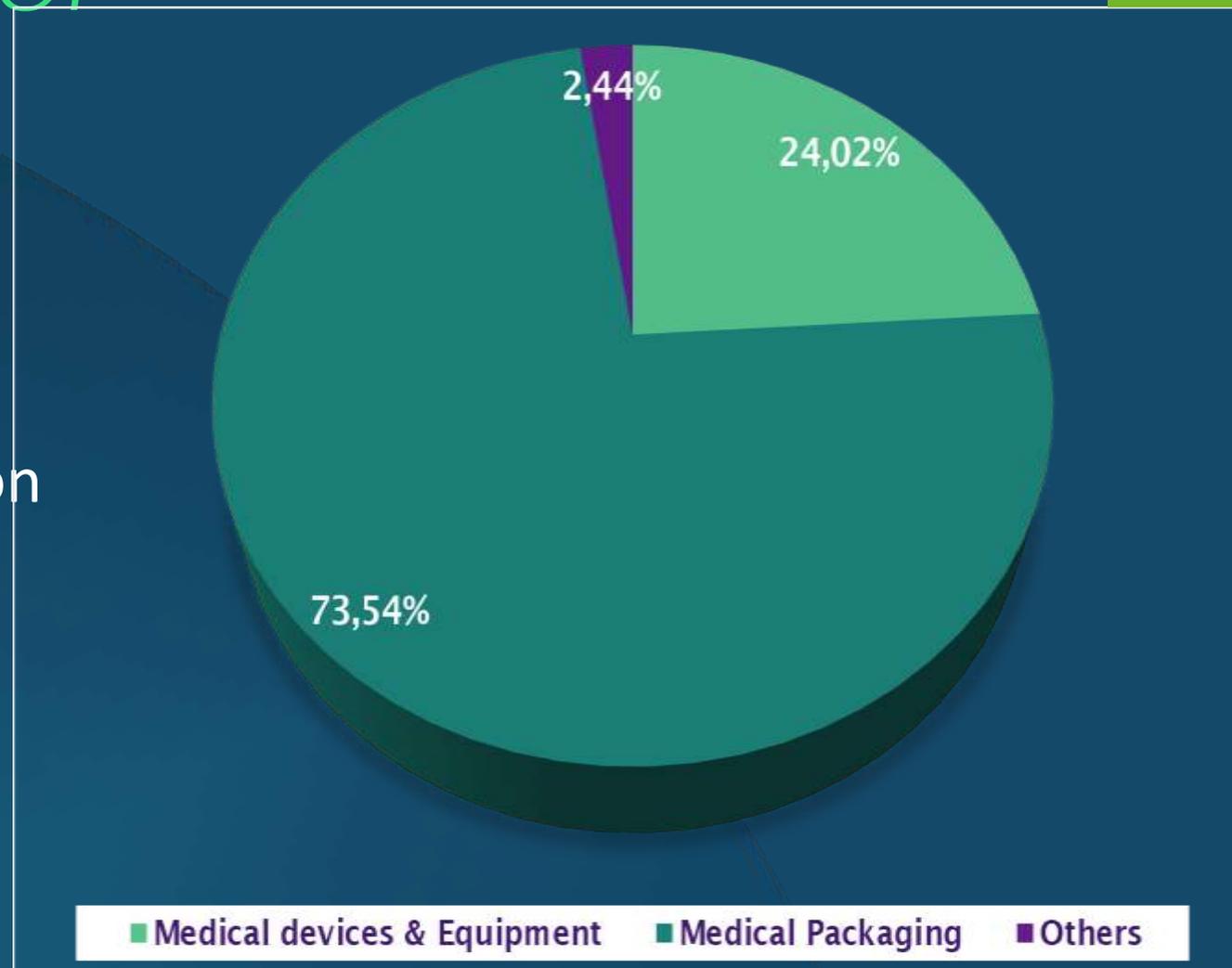
Medical sector

2020

52 000 ton

2027

expected rise > 75 000ton



Source: European Medical Polymer Market Report, Global Market Insights, 2021

01

Thank you!

*PLASTICS IN THE
CIRCULAR ECONOMY*



WERNER ANNAERT
OVAM



Prof. Dr. Els Dubois
University of Antwerp
ReuseLAB

02

KEYNOTE

*Making reuse the new
normal*

*Who has a library book
at home?*



Who's currently wearing
anything second-hand?



*Who made use of a sharing
system today?*

e.g. Car, bike...



*Who sometimes borrows a
stepladder from the neighbors?*

Or any other product?

Or from someone else?



Who uses reusable toilet paper?

Not recycled, but washable



*Who goes to the snack kiosk
(frituur) with a reusable pot?*



*Who has drunk from a deposit
bottle before?*



We already reuse many products

So why is reuse still so difficult?

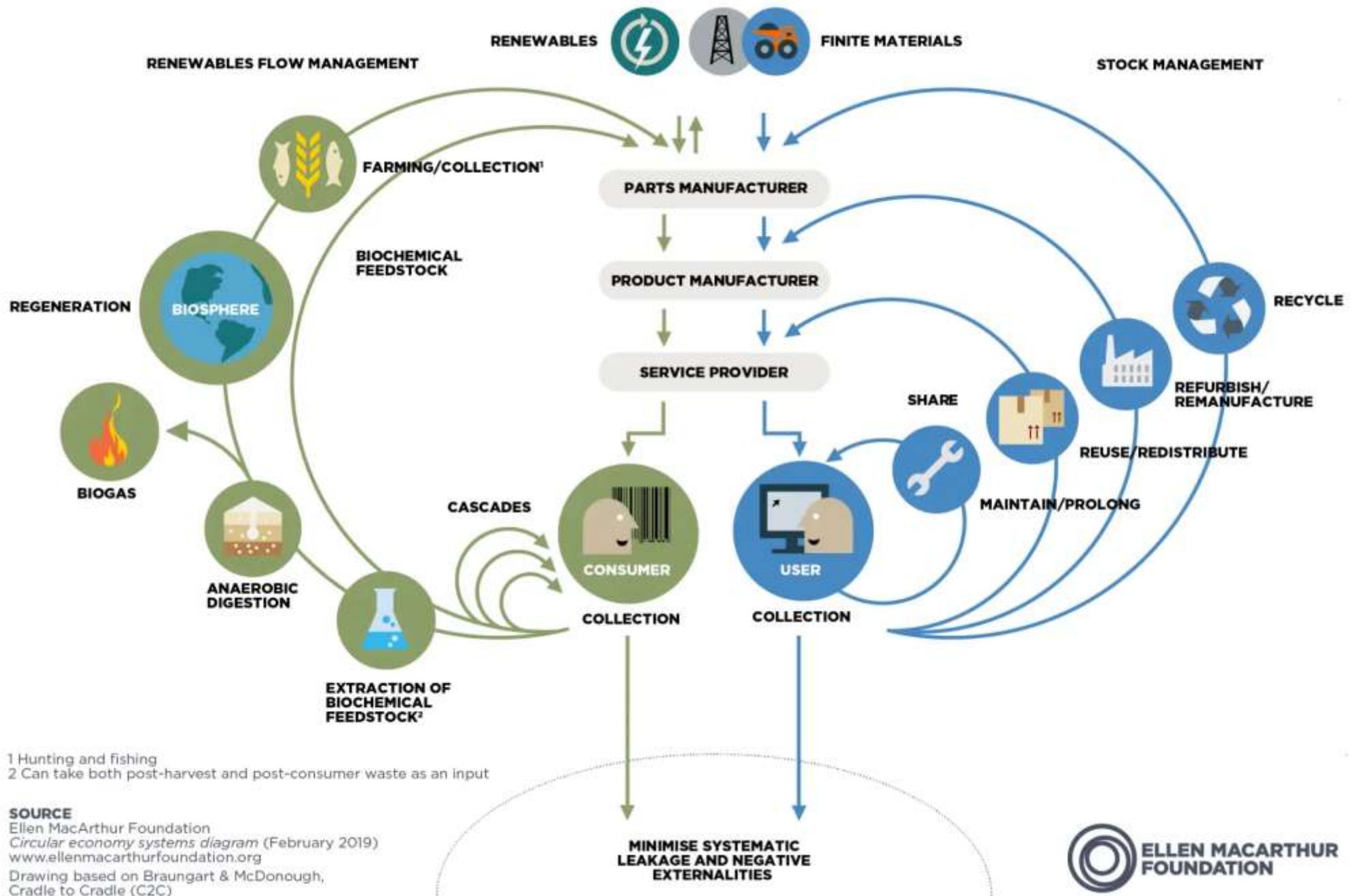
Definition

REuse

Continued use of a product for the same function, whether by different users or not

Synonyms: elongated lifetime, longevity, lifetime extension

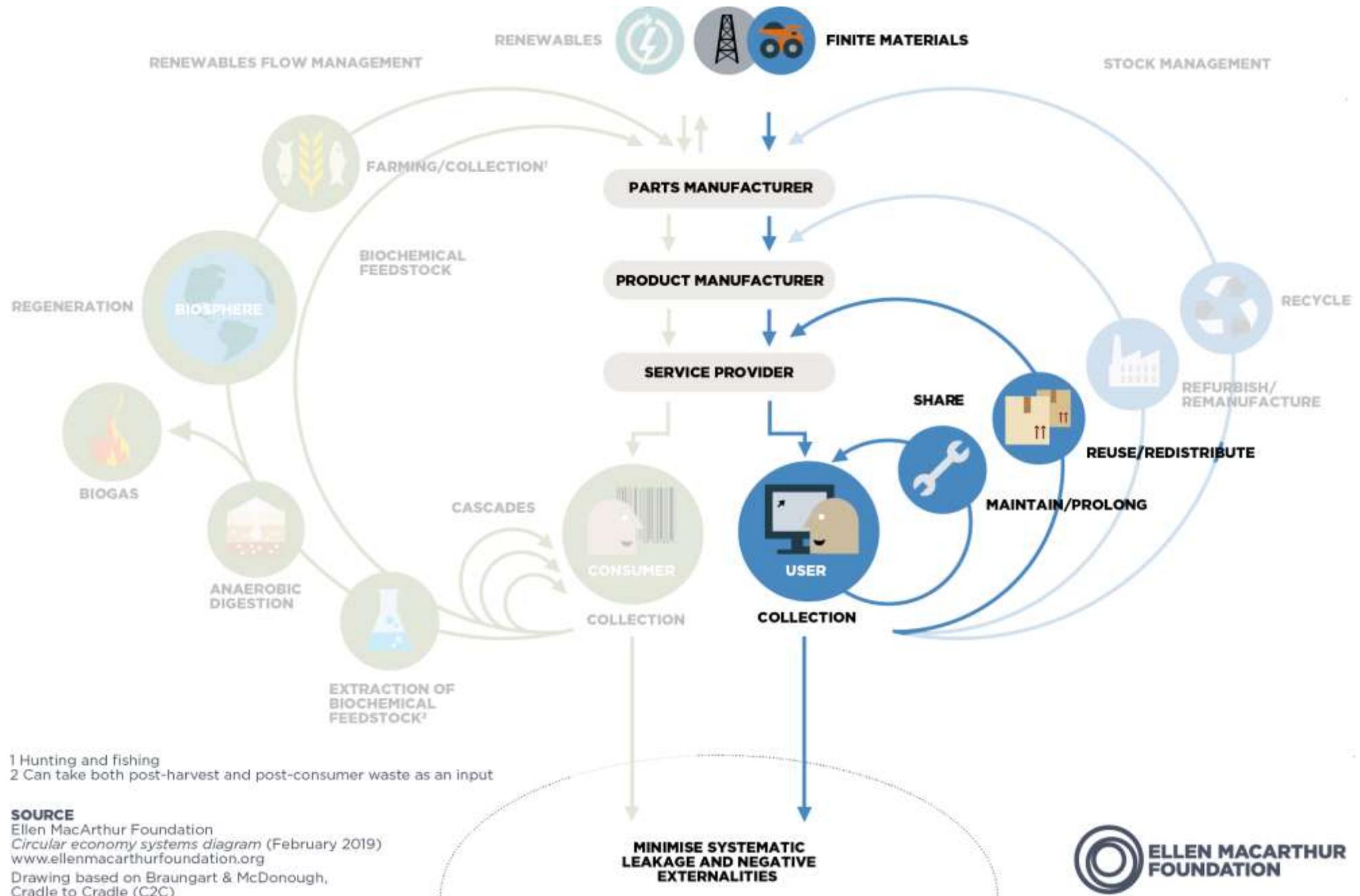
NOT: recycling or upcycling



1 Hunting and fishing
 2 Can take both post-harvest and post-consumer waste as an input

SOURCE
 Ellen MacArthur Foundation
Circular economy systems diagram (February 2019)
www.ellenmacarthurfoundation.org
 Drawing based on Braungart & McDonough,
 Cradle to Cradle (C2C)





1 Hunting and fishing
 2 Can take both post-harvest and post-consumer waste as an input

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Circular economy systems diagram (February 2019)
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 Drawing based on Braungart & McDonough,
Cradle to Cradle (C2C)

Reuse = complex

=> Need change from everyone in the value chain

Not IF but HOW to reuse

Complexity

1. Single-use is too easy and comfortable



Complexity

~~1. Single-use is too easy and comfortable~~

✓ Desired usability and perception

Bottlenecks:

- Additional effort & time
- Unknown potential for more comfort
- Habits and behaviour change



Complexity

2. Single-use is too cheap



Complexity

~~2. Single use is too cheap~~

✓ Robust qualitative design

Bottlenecks:

- Purchase cost versus total cost
- Purchase cost versus cost per usage
- Design for cleaning, repair, maintenance,...



Complexity

3. Single-use is easy to organize



Complexity

~~3. Single use is easy to organise~~

✓ Quality assurance through the circular value chain

Bottlenecks:

- Change of ownership
- Collaboration
- Need for standardisation

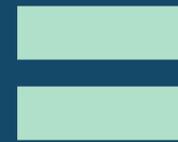


Complexity

Single-use is cheap

Single-use is
easy and
comfortable

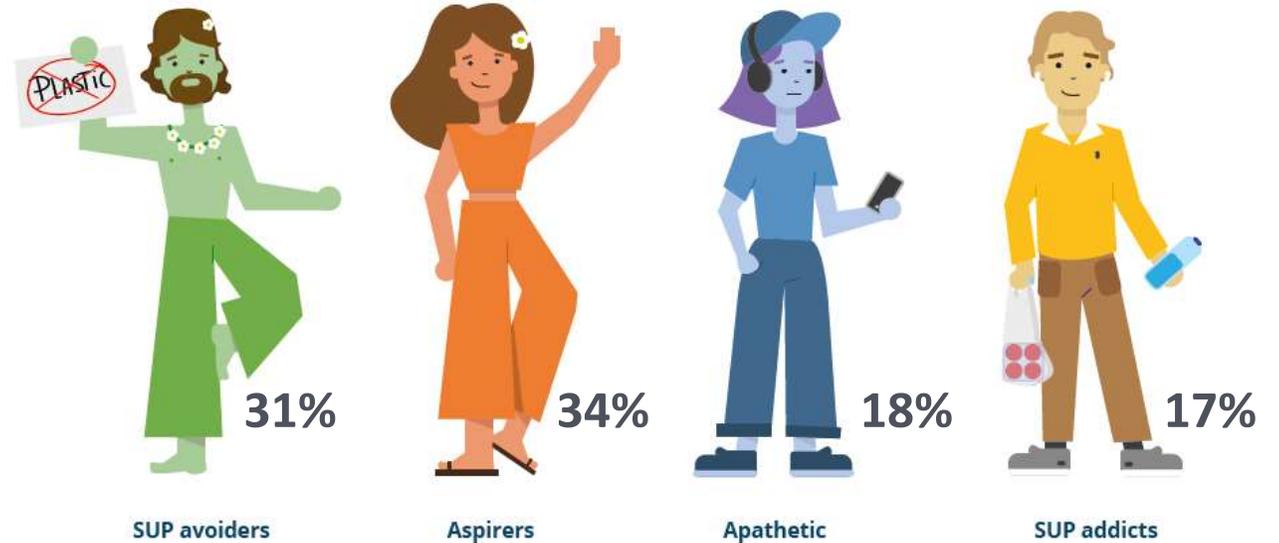
Single-use is
easy to organise



“the consumer **doesn't** want it”

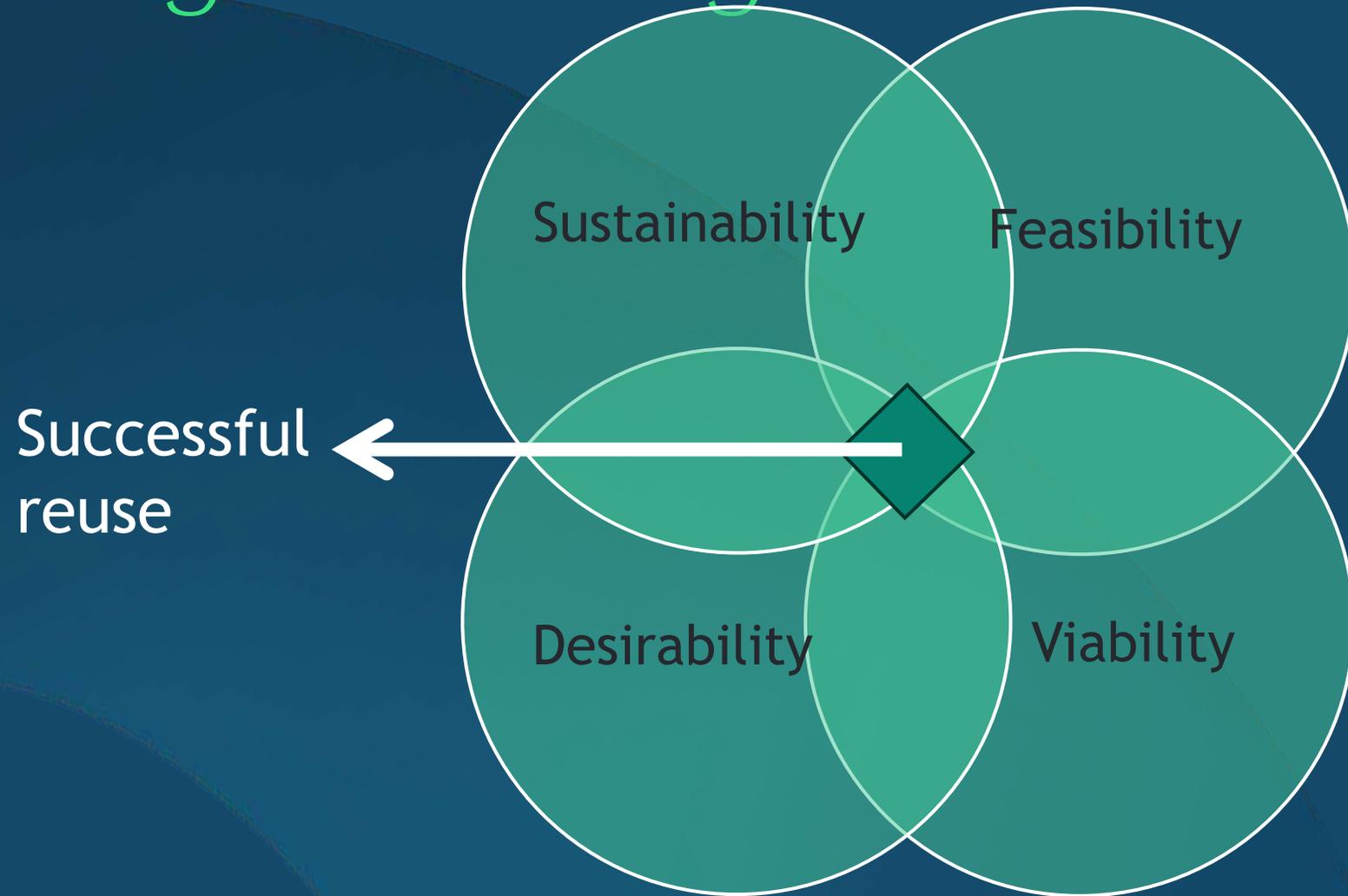
Our brain is constantly focused on conserving as much mental energy as possible
=> changes = resistance

Different types of people
=> different barriers & motivations to avoid single-use
=> High intention, but need help



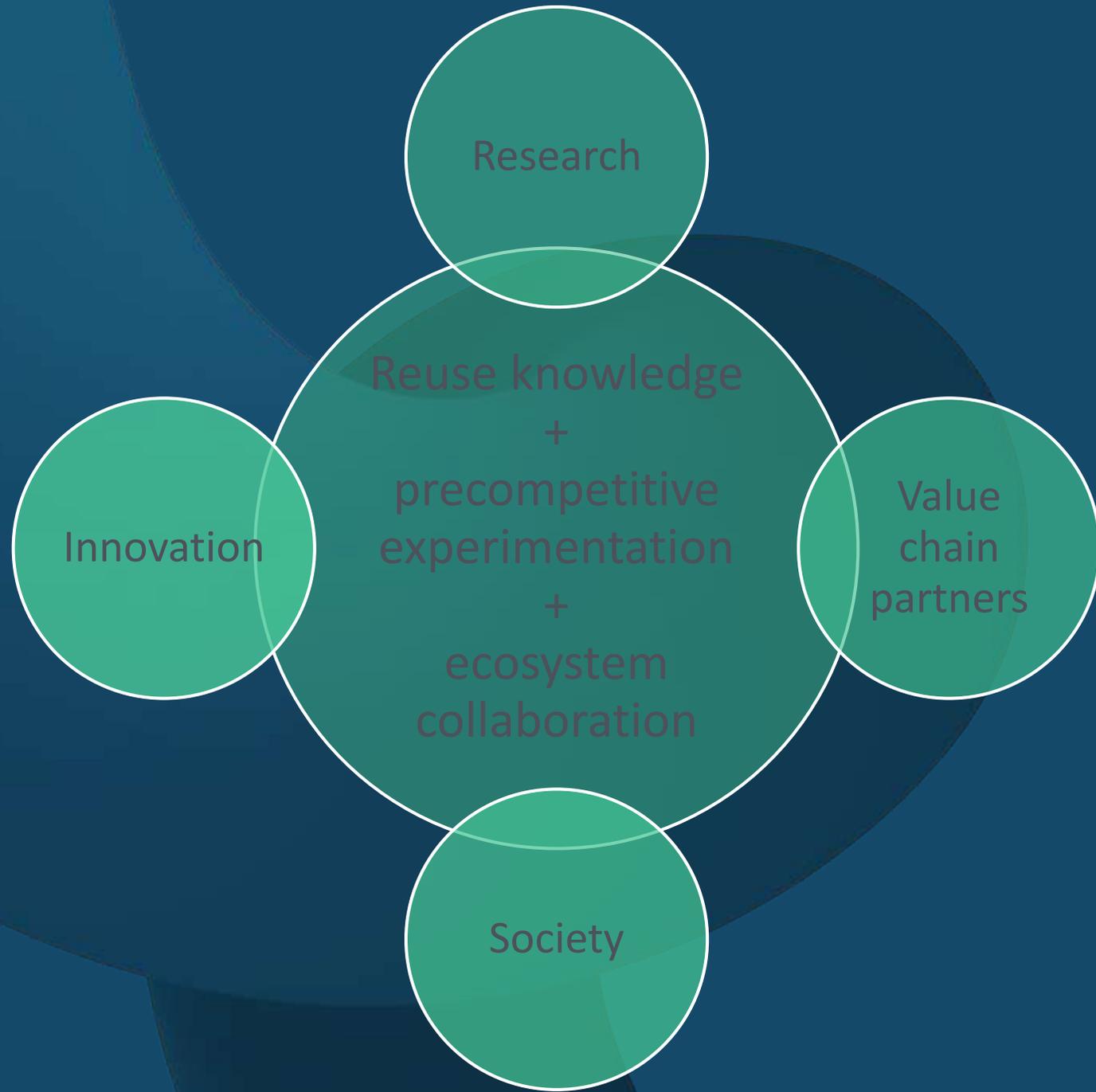
Laure Herweyers, et al. (2023) Understanding who avoids single-use plastics and why: A cross-country mixed-method study, Journal of Cleaner Production

Design Challenge





**REuse Lab generates knowledge to support
the successful implementation of reusable alternatives**



Research

Reuse knowledge
+
precompetitive
experimentation
+
ecosystem
collaboration

Innovation

Value
chain
partners

Society

REUse Lab

powered by  University
of Antwerp

SCAN

DESIGN

CHANGE

REDOSE (Loore Nelen)

Reusable syringe for anesthesia

Learnings:

- Prefilled “syringe”
- Usability & time saving & less accidents

DESIGN



AGIZO *(Kaat Dhondt)*

sustainable surgical instrument management

Learnings:

- Ecosystem solution
- Communication problem
- Increasing efficiency of sterilisation departments

DESIGN



REuse Lab

powered by  University of Antwerp

FASHION



Logos in the Fashion sector include: yuma labs, de kringwinkel, Mayerline, CiLAB Collective, Samsønite, DECATHLON, CKS, HOIHOI, LIES MERTENS, Entusia, VETEX, CleanLease, AMA, FLANDERS DC, jbc, Alsico, and van Dijk Holland.

PACKAGING & FOOD



Logos in the Packaging & Food sector include: MIVAS, 012. ANDERS VERPAKT, GREENDEAL, komida, deSter, and ubuntu.

MEDICAL



Logos in the Medical sector include: FLANDERS CARE, zorg net, UZA, and VETEX.

VLAIO



Logos for Vlaanderen is ondernemen and Provincie Antwerpen.

CHEMISTRY



Logos in the Chemistry sector include: ECO VER, Port of Antwerp, W, pharma, NEKTARI, ERGOTRICS, MARIA MIDDELARES, CAPTURE, Cerba Research, 013. DUURZAME ZORG, and GREENDEAL.

AGRICULTURE



Logos in the Agriculture sector include: Brightlands, maurice, PROEFSTATION, Botany GROUP, INNOVEINS, and ILVO.



SAMEN MAKEN WE MORGEN MOOIER

OVAM



Make ourselves obsolete
(Product longevity = standard & everyone knows how)

ed by  University
of Antwerp

REuse Lab

**REuse Lab generates knowledge to support
the successful implementation of reusable alternatives**

Prof.dr. Els Du Bois

els.dubois@uantwerpen.be

<https://www.uantwerpen.be/reuse-lab/>

Let's co-create
a reusable future

REuse Lab
powered by  University of Antwerp

All warmed up?

SLIDO time

slido



**Join at slido.com
#1992**

ⓘ Start presenting to display the joining instructions on this slide.

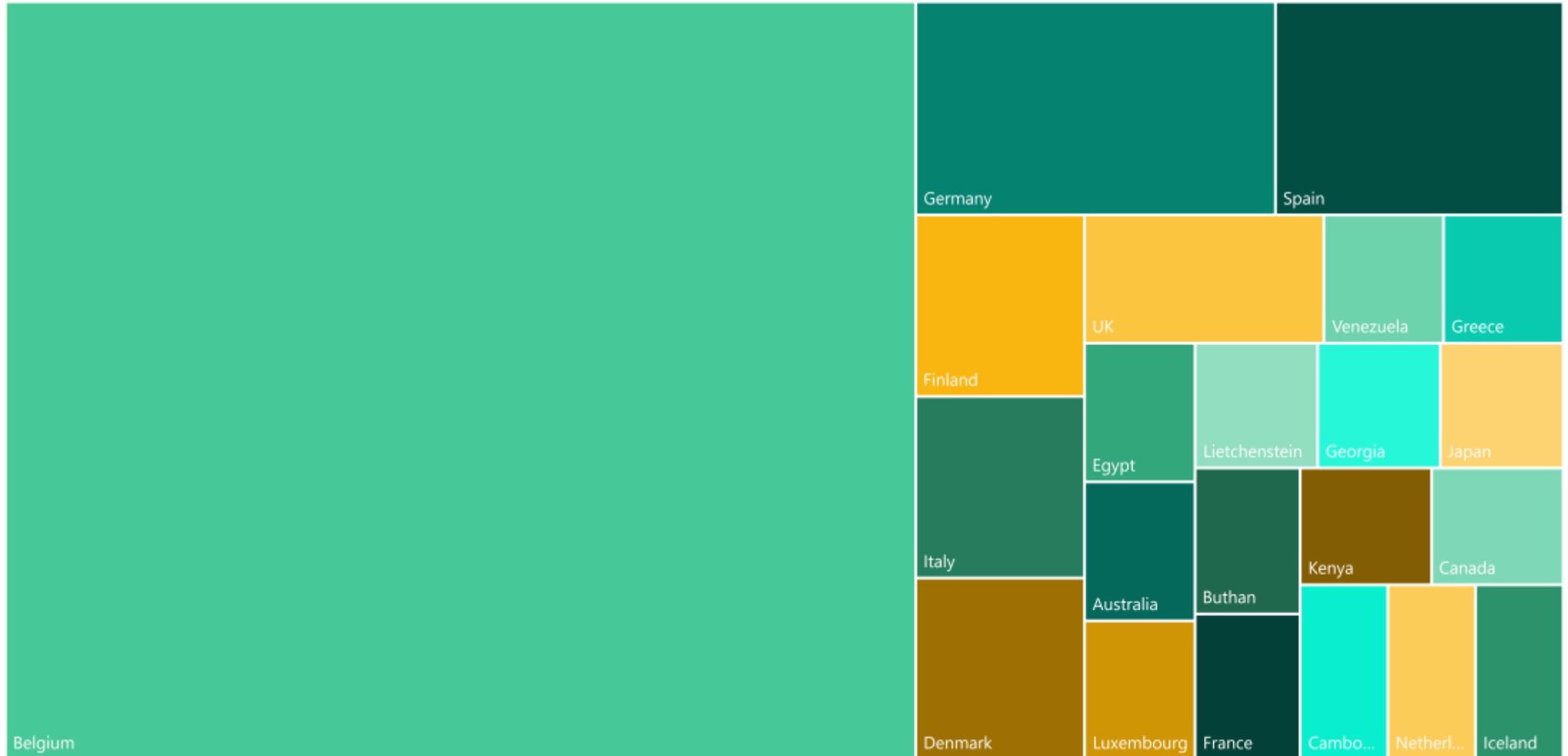
slido



Which country are you joining us from?

ⓘ Start presenting to display the poll results on this slide.

Represented countries in Reuse session
based on 77 slido participants



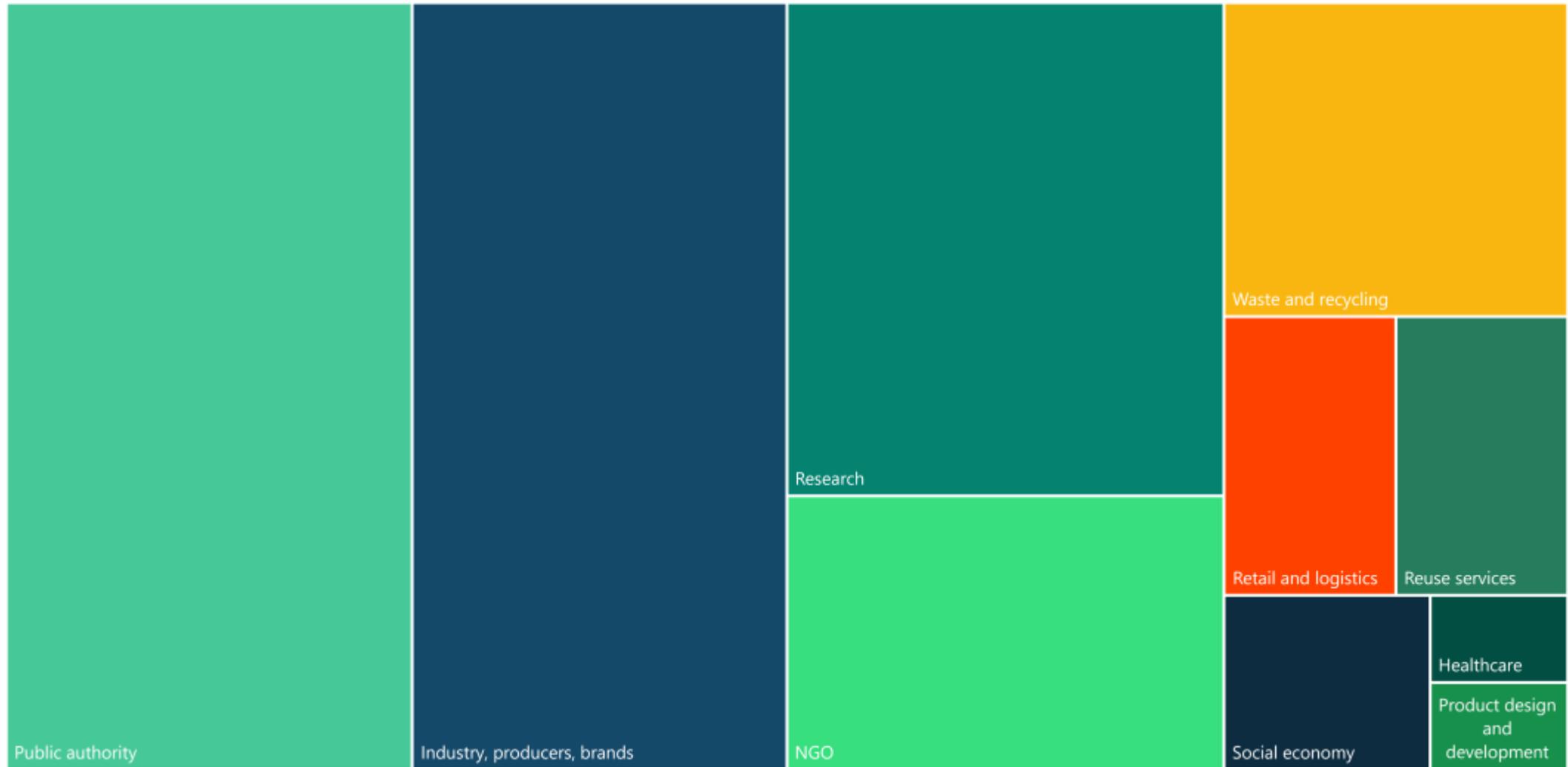
slido



Which sector are you active in?

ⓘ Start presenting to display the poll results on this slide.

Represented sectors in Reuse session
Based on 78 slido participants



slido

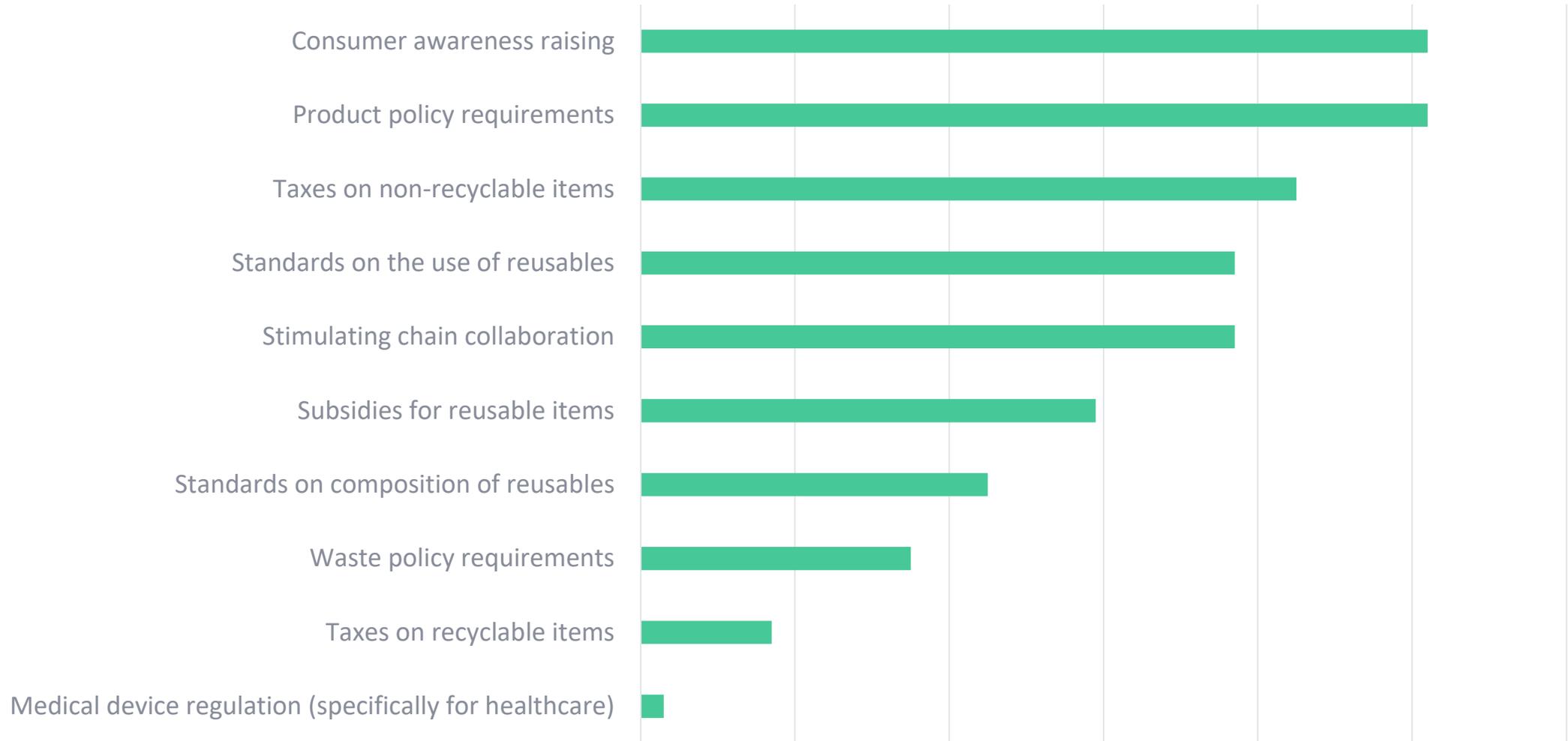


**What are the most effective instruments to stimulate reuse?
(across sectors and applications)**

ⓘ Start presenting to display the poll results on this slide.

What are the most effective instruments to stimulate reuse? (across sectors and applications)

Based on 65 Slido participants



slido



Which technical bottleneck for reusable packaging should be tackled with highest priority?

ⓘ Start presenting to display the poll results on this slide.

Which technical bottleneck for reusable packaging should be tackled with highest priority?
Based on 71 Slido participants



slido

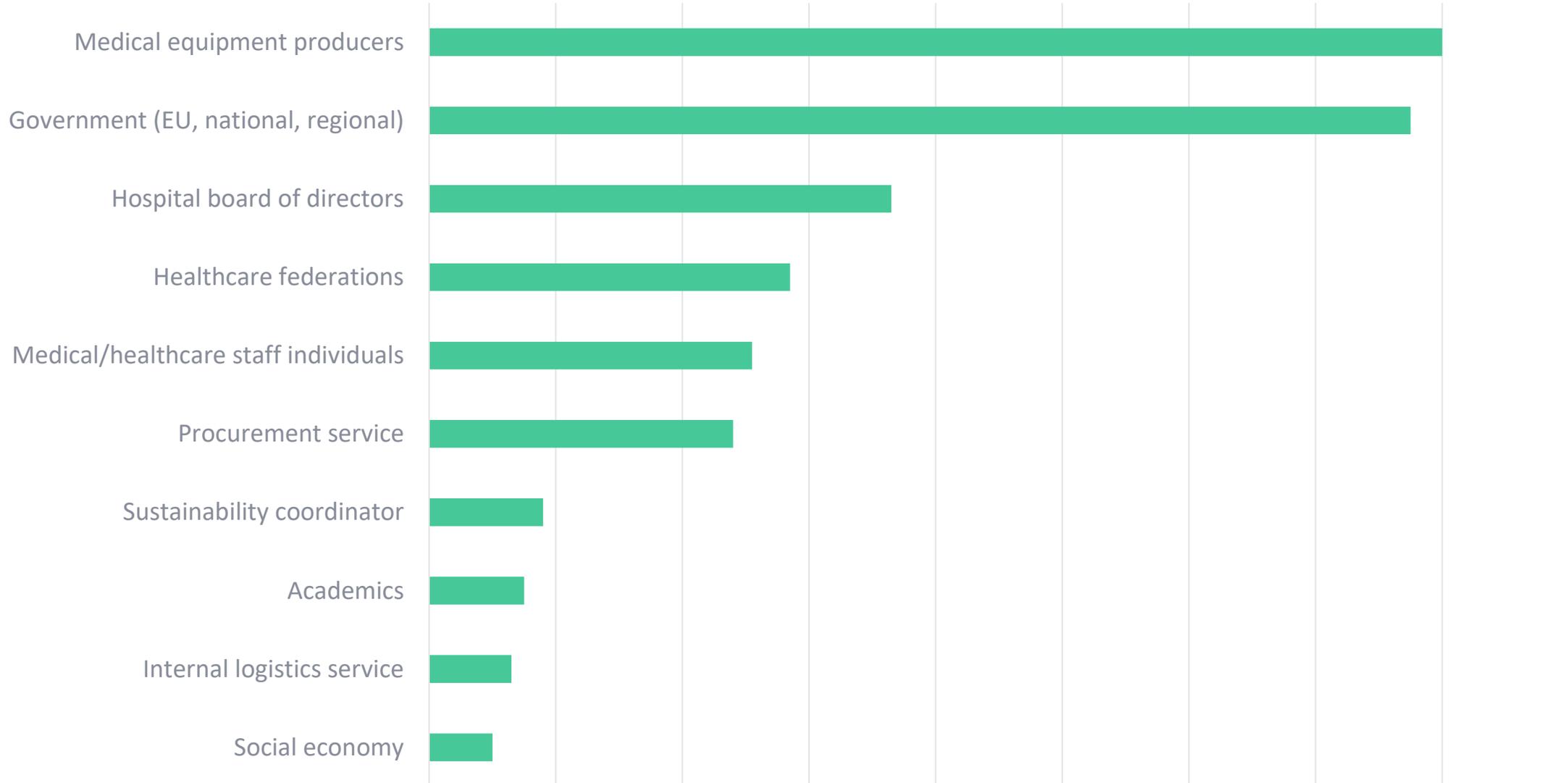


Which players are most suited to take a leading role to increase reuse in health care?

ⓘ Start presenting to display the poll results on this slide.

Which players are most suited to take a leading role to increase reuse in health care?

Based on 67 Slido participants





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BEYOND EXPERIMENTATION

Europe's leading role in mainstreaming circular practice



DEPARTEMENT
ECONOMIE
WETENSCHAP &
INNOVATIE



Let's go 'beyond experimentation'

Testimonials

03

CASE



dw
REUSABLES



Tine De Pooter
DW Reusables

Carrefour



Lotte Krekels
Carrefour

Retailer launches shelf ready returnable sixpacks

Agenda

SIXPACK: A Living Lab funded by VLAIO

From linear to circular

Design for circularity

Reduced footprint

Benefits for the entire supply chain

An answer to the high reuse targets in the PPWR for the beverage industry

An answer to changing consumer habits

Changes and challenges in the retail



SIXPACK

System change and
Innovation in the
contexT of reusable
PAckaging for Circular
economy on the
Shelves of
supermarkets



VLAIO



Vlaanderen
is ondernemen

dw
REUSABLES

SIXPACK

- The first returnable packaging for beer on the shelves
- First and last mile solution
- Returnable via Reverse Vending Machines (Tomra)
- The customer pays a small deposit



Strong partnership for a maximum leverage effect



Extend to which the project can create a **positive impact** in contributing to the **reduction of material footprint** and **climate objectives** in Flanders when **upscaled**

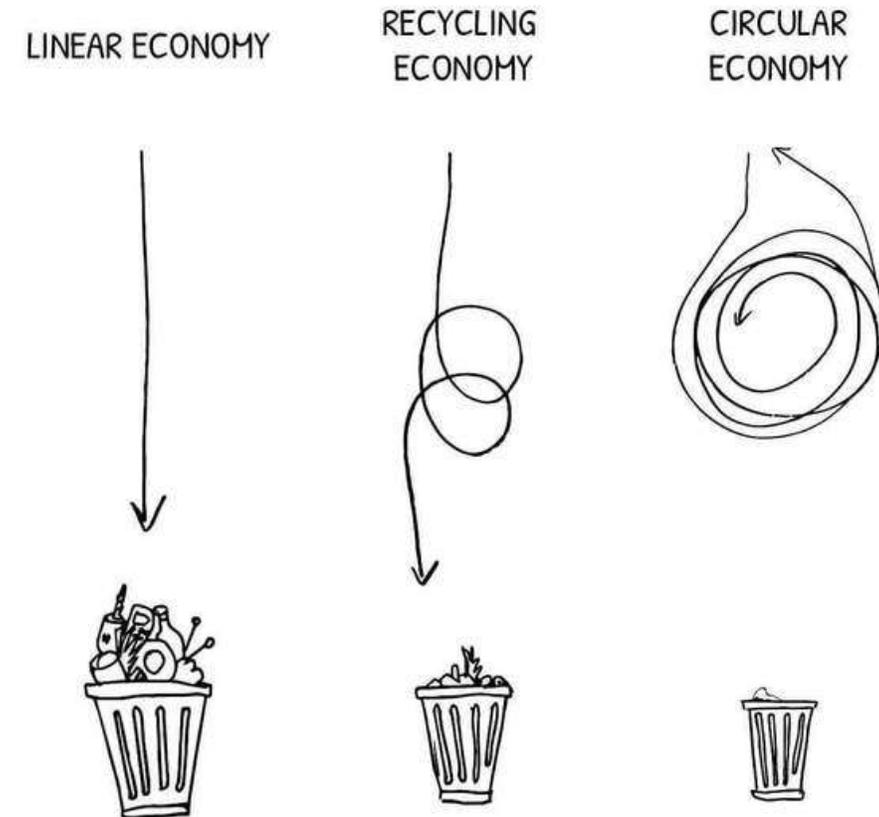
Project goal of the Living Lab

1. **Facilitate as a pioneer:** with this consortium we want to take a pioneering role to accelerate the transition and shape our role in this circular future
2. **Accelerate:** with a test pilot understanding what it will take to realize returnable shelf ready packaging on a large scale.
3. **Maximizing potential:** Belgium is already a pioneer in returnable primary packaging, the potential for returnable secondary packaging still needs to be shaped and utilized.
4. **Strong partner network:** A transition to returnable packaging on the shelves has an impact on the entire packaging value chain. To guarantee the change in the longer term, we formed a strong network of partners who are willing to take the plunge.

*Facilitate⁽¹⁾ and
accelerate⁽²⁾ the
maximum⁽³⁾ reuse of
packaging in retail
with a strong partner
network⁽⁴⁾*

From Linear to Circular

- The packaging circulates between the brewery, the retailer and the end-consumer
- This first and last mile solution can not be found in many other supply chains
- A deposit keeps the material in the loop -> (collection rate +95% for beverage crates)
- After a life span of multiple years, the material returns to our facilities to be reground and turned into new products



Design for circularity

- The packaging is designed to protect the content so they can last up to 50 return trips
- The packaging will be produced from post-consumer material.
- The products have the same rigidity specifications as products made from virgin material.
- The IML label is made from the same material as the packaging (PP or HDPE)
- After their long lives, the products return to our facilities to be reground and turned into new products



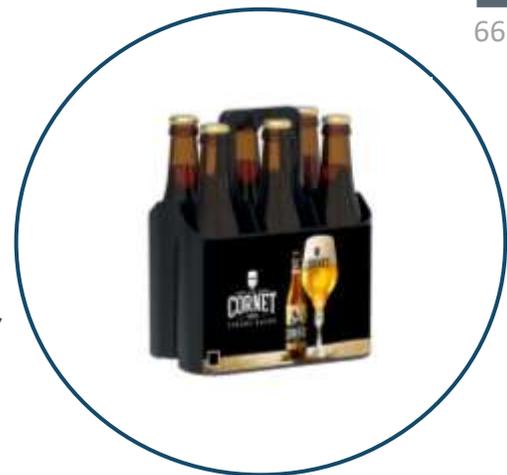
Reduced footprint in terms of emissions

- An independent LCA by the Copernicus University for Sustainable Development, shows that the SIXPACK in combination with reusable glass ⁽¹⁾ **emits 46% less CO₂** than cans with a plastic film⁽²⁾, **and 64% less CO₂** than single-use glass in combination with a cardboard ⁽³⁾.
- The LCA also shows that returnable packs in combination with reusable glass have a lower impact on all other environmental impact indicators, including water usage



Reduced footprint in terms of reduced packaging items

During its life cycle, **only 1 returnable pack** replaces:



When upscaled, the project has the potential to reduce billions of one-way packaging items

50 one-way sleeves and 300 one-way glass bottles



Benefits for the entire supply chain

Breweries	Retailers	Consumers
<ul style="list-style-type: none">• Fits on the existing filling lines for loose bottles• One crate to transport both cardboard and reusable sixpacks• Resistant in a wet environment• Lower cost driven by significantly lower material costs• Protects the bottles during transport and handling	<ul style="list-style-type: none">• The durable packaging avoids damage, pre-opened packs and unsellable units• Easy replenishment• Less sorting of loose bottles (return per 6)• Less handling costs• Fully brandable	<ul style="list-style-type: none">• Easy to carry• Easy to recognize returnable bottles• Easy to return

An answer to reuse targets in the PPWR for the beverage industry

	From 1 January 2030	From 1 January 2040
Alcoholic beverages (beer, carbonated alcoholic beverages, fermented beverages other than wine, aromatised wine products and fruit wine, products based on spirit drinks, wine or other fermented beverages mixed with beverages, soda, cider or juice)	Share of products made available in reusable packaging or by enabling refill 10 %	Share of products made available in reusable packaging or by enabling refill 25 %
Wine (except sparkling wine)	Share of products made available in reusable packaging or by enabling refill 5 %	Share of products made available in reusable packaging or by enabling refill 15 %
Non-alcoholic beverages	Share of products made available in reusable packaging or by enabling refill 10 %	Share of products made available in reusable packaging or by enabling refill 25 %
Transport packaging (pallets, plastic crates, foldable plastic boxes, pails and drums for conveyance or packaging)	Share of packaging used that is reusable 30 %	Share of packaging used that is reusable 90 %



-
- Convincing the consumer (crucial)
 - Convincing and training staff
 - Getting the franchise partners on board
 - Logistics
 - Adjusting logistic systems
 - Adjusting the Tomra machines (RVMs)
 - Convincing logistic partners
 - More storage space when upscaled
 - Convincing other retailers



An answer to changing shopping habits

- Proxy supermarkets: smaller volumes because less storage
- Trend towards smaller packaging sizes
 - Young people choose to live in bigger cities
 - Groceries by foot or by bicycle (design of bikes are changing)
 - Elderly people prefer smaller packaging
- Consumers are increasingly more conscience about packaging and packaging waste
- Vintage and used items are becoming more popular (Vinted, Carrefour initiative Reeborn,...)



dw
REUSABLES



Tine De Pooter
DW Reusables

Carrefour



Lotte Krekels
Carrefour

Thank you!

Q&A after next speaker...

made.



Tom Domen

www.madebe

04

CASE

**From “reuse being impossible”
to “reuse delivering value”**

15 years of reuse experience for large companies

REUSE WORKS

We have demonstrated the business case for reuse multiple times...

... at scale



Circular economy is providing new business opportunities,
not threats.

1. Reuse is (less)
ecological.

2. Reuse is (less)
profitable.

3. Reuse is (less)
convenient.

4. Reuse is (less)
safe.

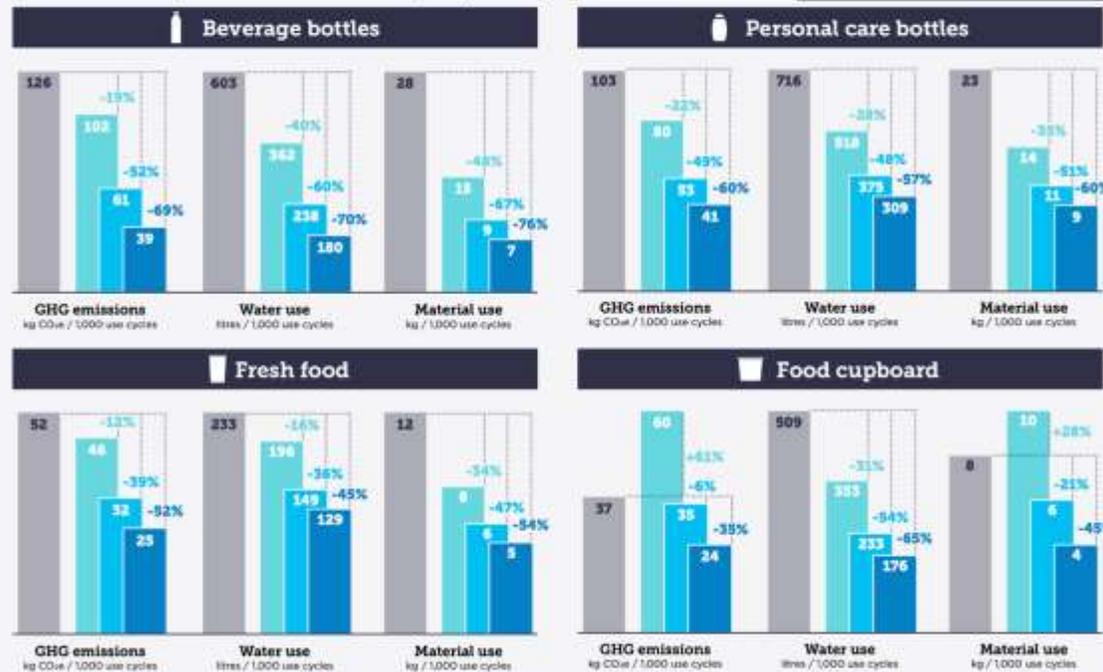
NEED FOR COLLABORATION & SYSTEM CHANGE



ELLEN
MACARTHUR
FOUNDATION

Figure 1:
Performance of return systems on environmental metrics, compared to single use

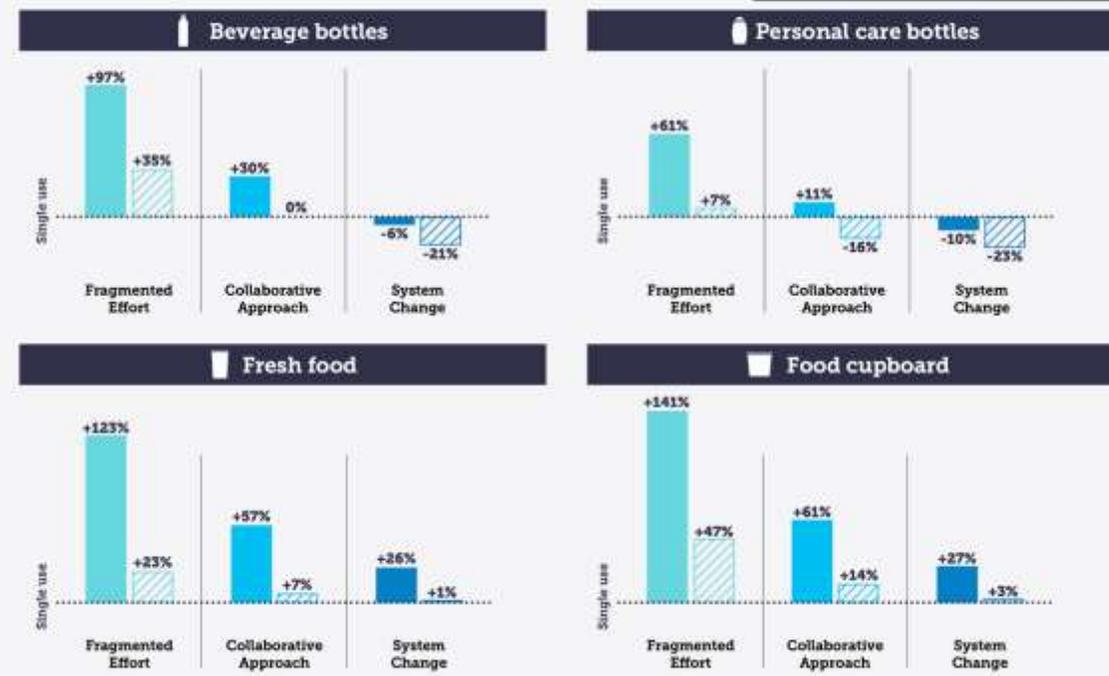
■ Single-use ■ Collaborative Approach
■ Fragmented Effort ■ System Change



To compare single-use to returnable packaging, we look at the cost of providing a unit of product. For example 1 litre of soda or 250ml of shampoo to a customer. For single-use packaging, 1,000 use cycles will be all the costs associated with 1,000 single-use packages. For returnable packaging, this will be the cost associated with providing 1,000 units of the same product, but using packaging to supply it to customers. Often, depending on the variables (for example, the return rate), this will require substantially less packaging.

Figure 15:
Total costs of returnable packaging, compared to single use for the three modelled scenarios

■ Costs, excluding revenues from unreturned deposits
■ Costs, including revenues from unreturned deposits

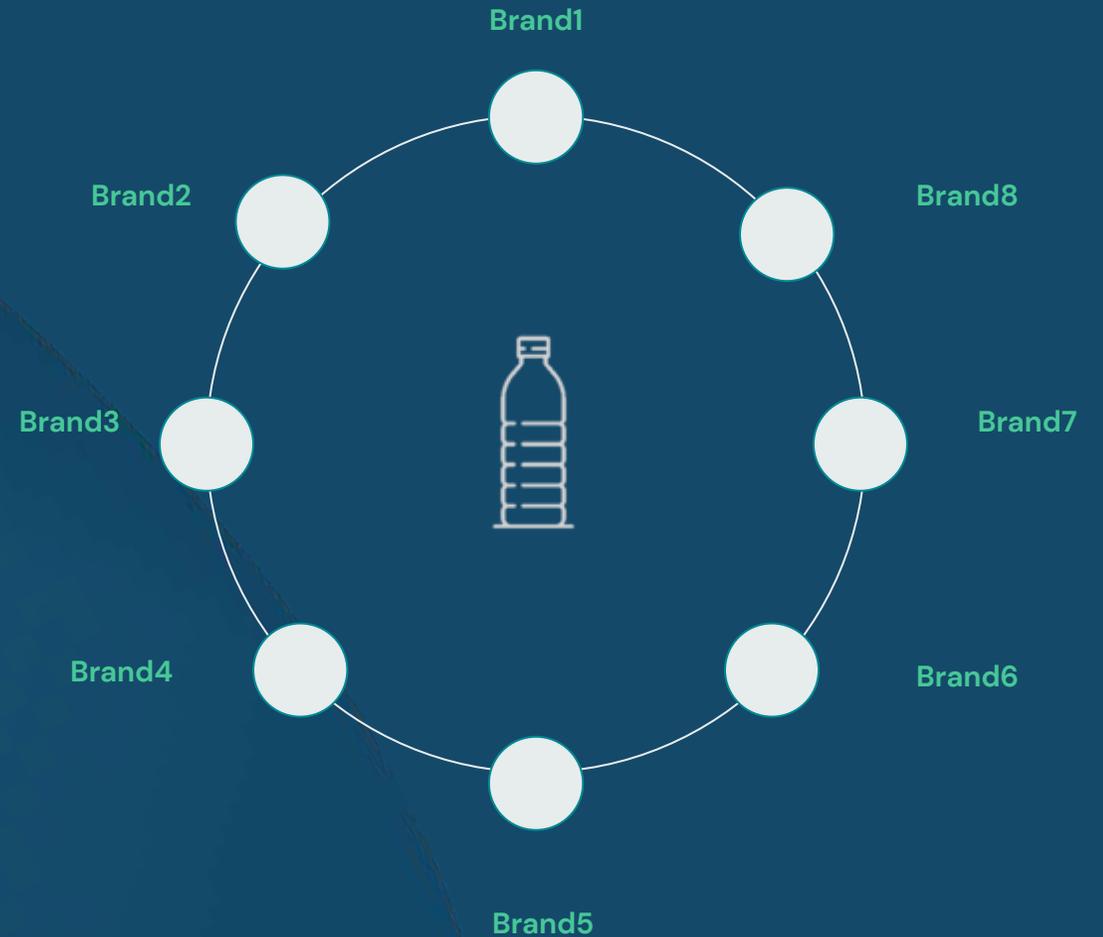


FRAGMENTED PILOTS -> SCALE

- Over the last 6 years, we have learned a lot from smaller individual pilots what is working and what is not working, thanks to a few pioneers
- Multiple papers have dealt with levers and barriers to reuse
- Global reuse standards are being locked (packaging, cleaning, logistics,...)
- But we continue to see fragmented initiatives that lack scale (multiple data platforms, different packaging formats and materials, ...) because of fragmented funding

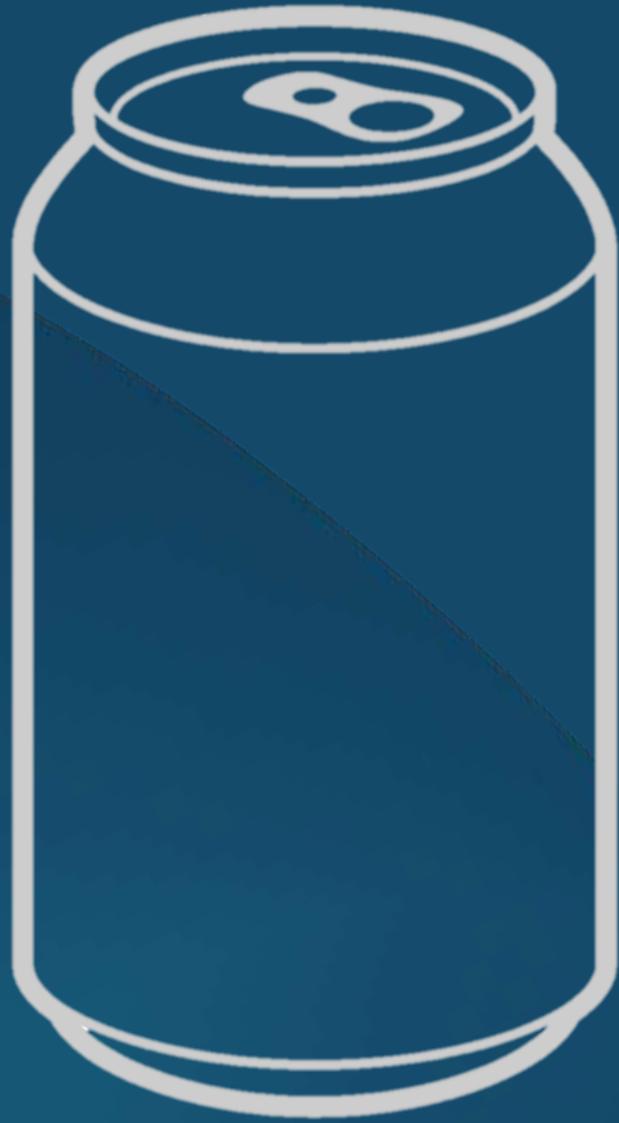
-> time to for larger standardized approaches across industries and cross competitive

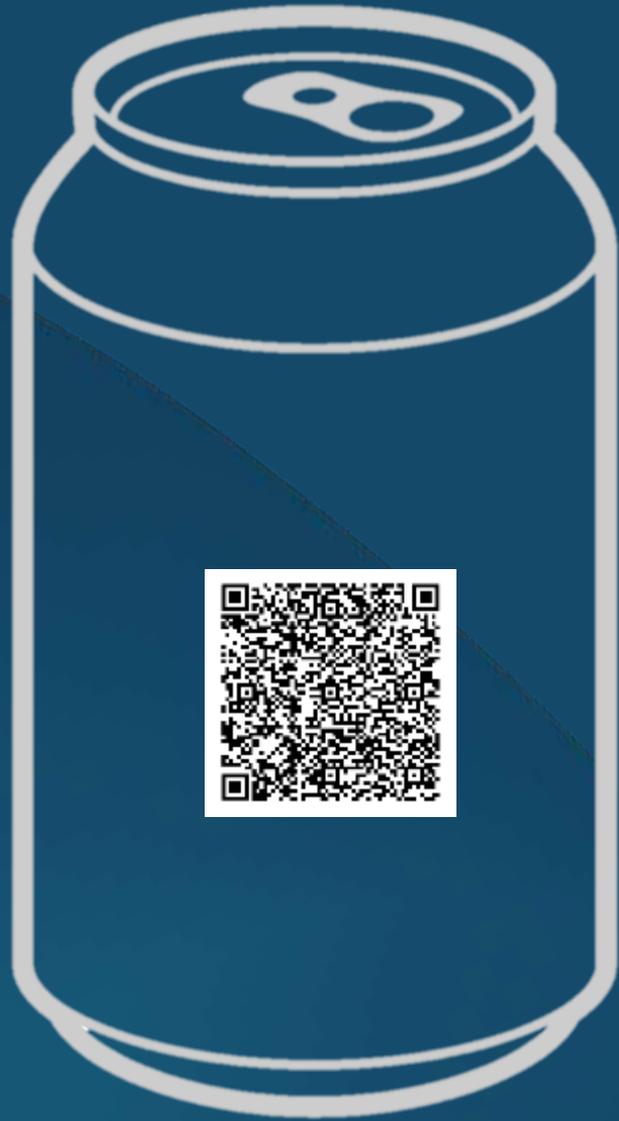
MAKING REUSE THE NEW NORMAL



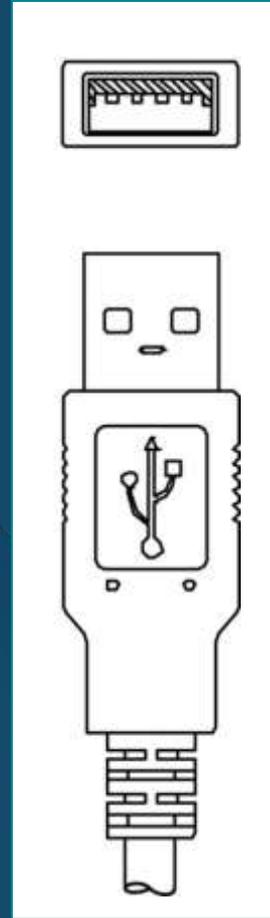
B2C CASE

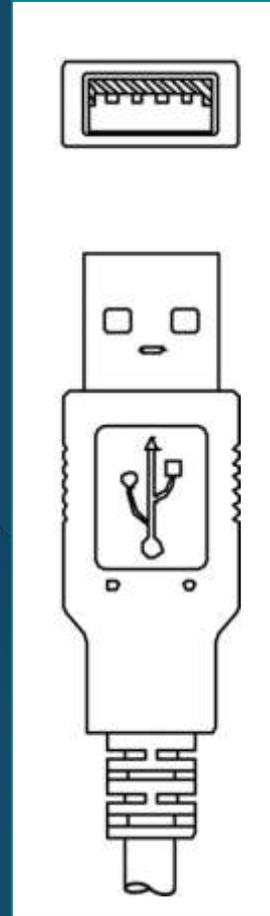














method.



RETURN POINT

How it works

- 1 Buy a prefilled bottle
- 2 Bring it back when empty
- 3 Scan this QR code:
This will be directed to a web page to continue the process in your account. If you can't find an account go to [here](#)
- 4 Get a £2 voucher towards your next prefilled purchase



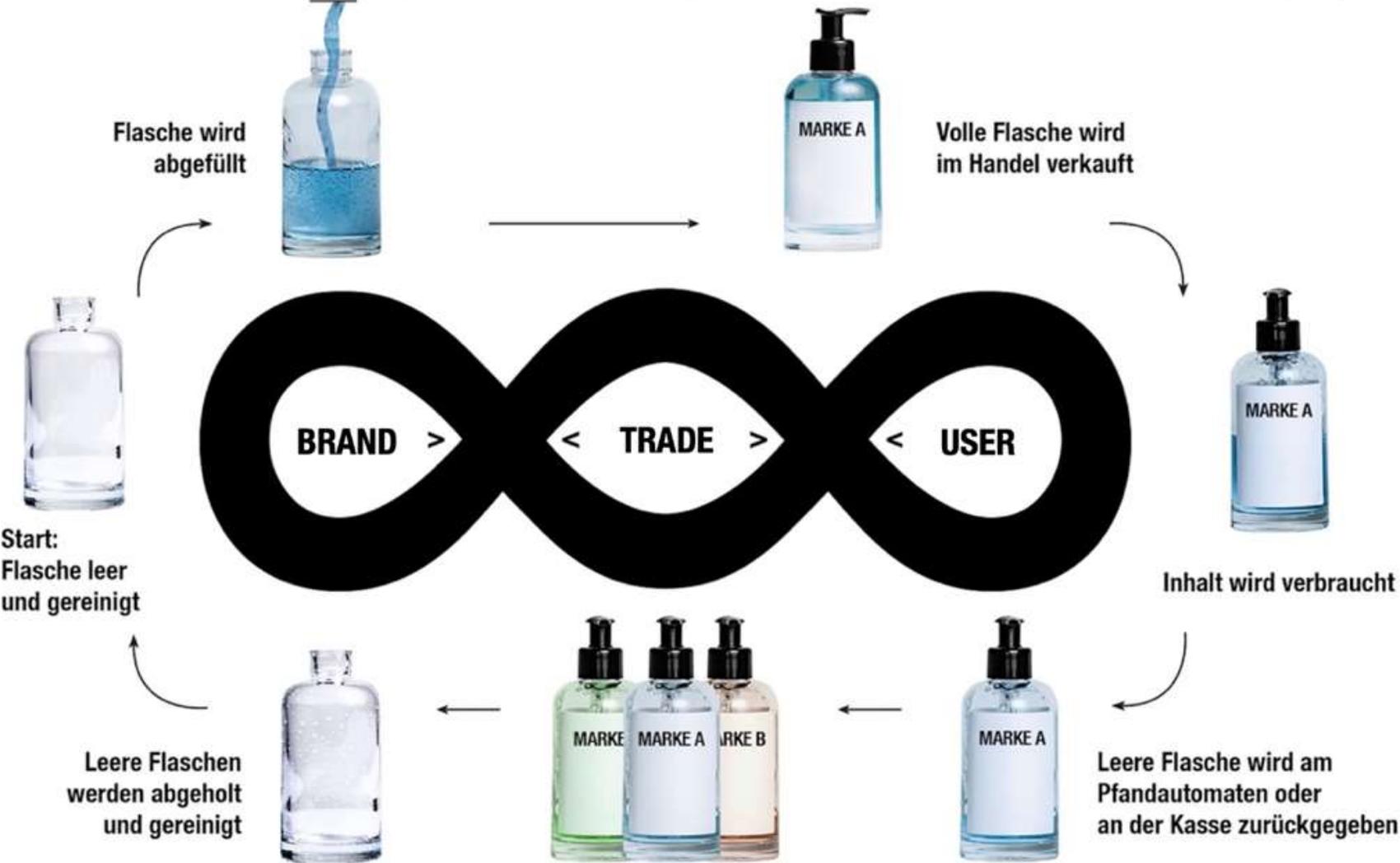
RETURN BOTTLE HERE



WEAR BABY!

WE ARE BUILDING A VALUE CHAIN WITH THE POTENTIAL TO BECOME ZERO WASTE ... FOR AN ENTIRE INDUSTRY

10.3g of CO2 emissions per reusable cycle (not scaled)





Fyllar

CLICK TO START



B2B CASE



"We're delighted to be launching this new refill solution - initially into Aldi, followed by Ocado Retail's online launch early next year- a system we're proud to have worked on for over three years to bring to market. As a Coalition we share the mutual objective of reducing single-use plastic packaging and believe that the solution we have developed presents a landmark opportunity for us to make a step change in the commercialisation of refills which we know can play a significant role in the reduction of single-use plastic packaging."

- a statement from the Refill Coalition



CONCLUSION

Retailers, brands, social economy,... are forming coalitions to make reuse scalable.

Legislation and funding needs to provide the conditions to allow a stable investment climate to scale.

made.

We define
design
deliver
what's next.

↳ made.be



tom.domen@made.be

jonas@made.be

Introduction

Q&A



Els Dubois
ReuseLab



Tine De Pooter
DW Reusables



Lotte Krekels
Carrefour



Tom Domen
Made

Thank you, speakers!

slido



**What are the most effective instruments to stimulate reuse?
(across sectors and applications)**

ⓘ Start presenting to display the poll results on this slide.

slido



Which technical bottleneck for reusable packaging should be tackled with highest priority?

ⓘ Start presenting to display the poll results on this slide.



Dr. Evelien Kieckens
UZ Ghent

05

CASE

REDUCING SINGLE-USE MATERIALS IN MEDICINE AND HEALTHCARE

From **today's** experience to ideas for the future

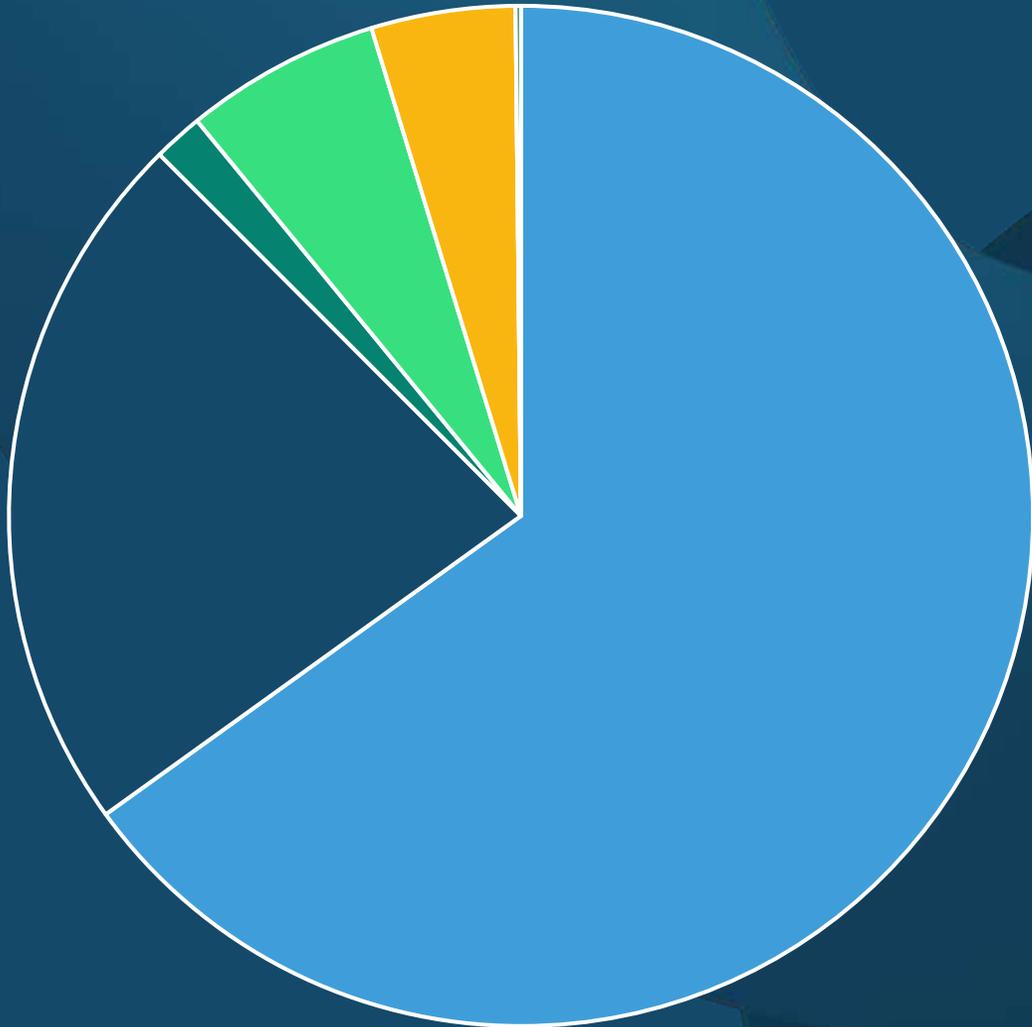
*16.000
tons/year*

to incineration

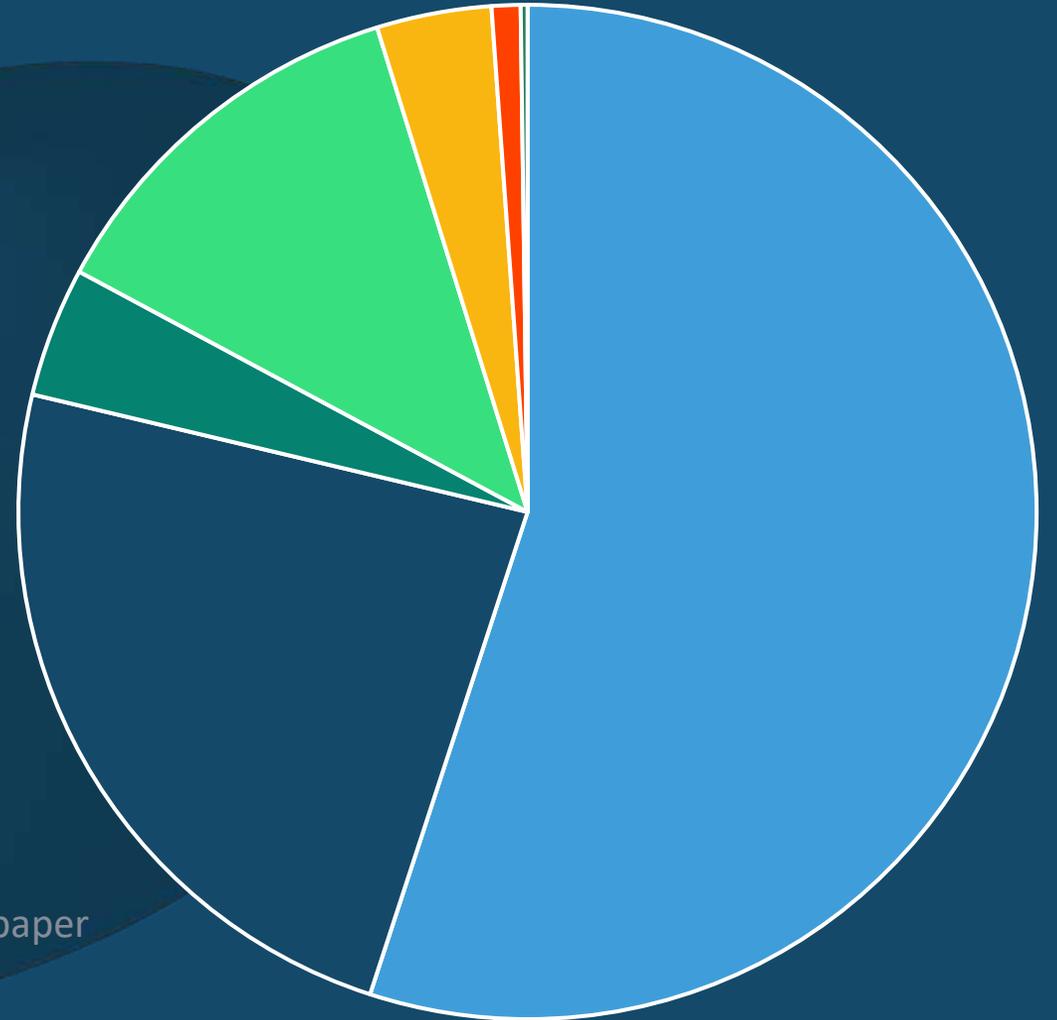


UZ GHENT

10% increase in recyclable content



2019

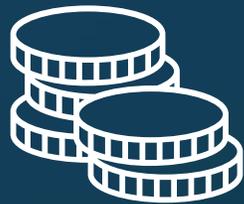


2023

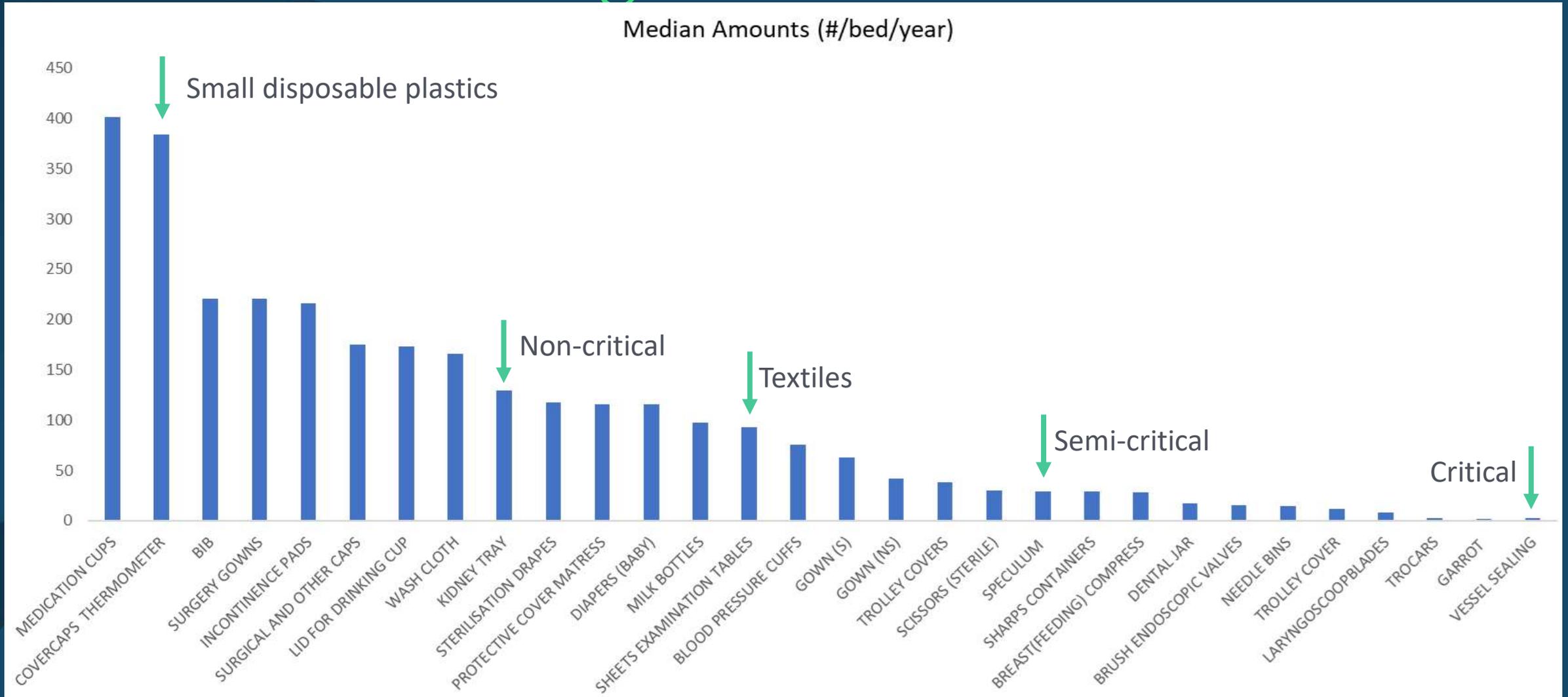
- NHMW
- HMW
- PMD
- Paper
- Confidential paper
- Blue wrap
- PP

STUDY: REDUCING SINGLE-USE MATERIALS IN MEDICINE AND HEALTHCARE

*An exploratory study on sustainability
of commonly used materials in hospitals*



Most used single-use medical items



THERMOMETER COVERCAPS



SINGLE-USE



REUSABLE



0,001-0,003 kg CO₂/ cover cap vs no additional material
or 0,016 kg CO₂/ disinfection wipe



Practical implementation
of reusable device:

- disinfection procedure has impact
- high volumes and certain costs



Need for further research e.g. disinfection procedure

PATIENT BLANKET



SINGLE-USE



REUSABLE



0,94 kg CO₂/ single-use blanket vs 0,09 kg CO₂/reusable blanket*

* 90 washes



Practical implementation of reusable textiles:

- augment capacity for cleaning, disinfection and/or sterilization
- in-house or external?



Procurement :

- implement sustainability criteria
- include reusable textiles
- include logistic process

KIDNEY TRAY



SINGLE-USE



REUSABLE



0,01 kg CO₂/ single-use tray vs 0,001 kg CO₂/ reusable tray*

* 1000 uses



Practical implementation
of reuse:

- augment capacity for cleaning, disinfection and/or sterilization
- disinfection using wipes or disinfectant?



Procurement strategy:

- implement sustainability criteria
- type of materials, used chemicals
- transport
- digital product passport (EU)

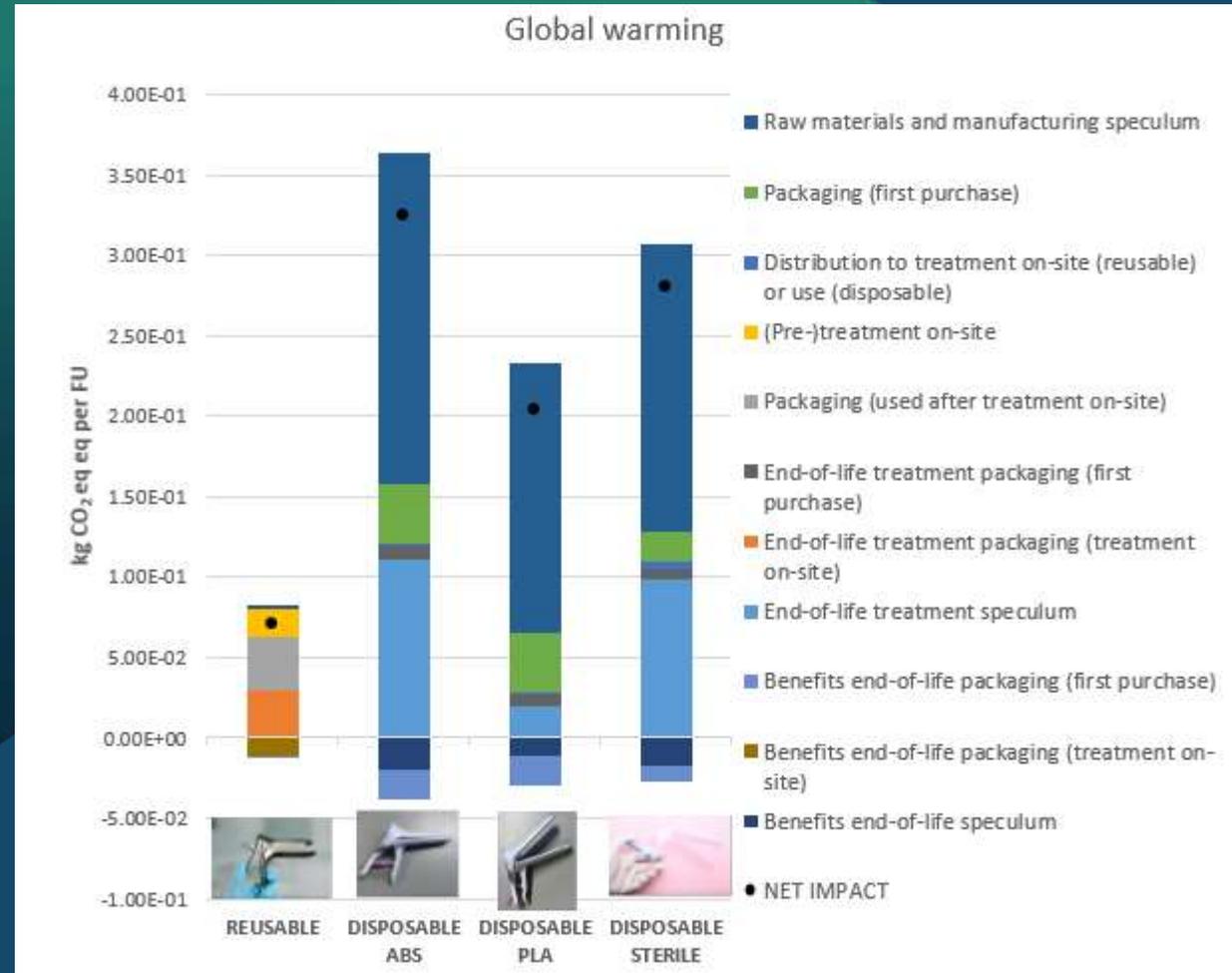
VAGINAL SPECULUM



Single-use



Reusable



Life cycle greenhouse gas emissions (kg CO₂ eq) of one pelvic examination

VAGINAL SPECULUM



SINGLE-USE



REUSABLE



Optimizing waste
sorting for recycling:

- clear instructions
- rethink packaging:
 - single-use sterile bags
 - sterilization sheets vs. containers



Sterilization process:

- in-house or outsourcing
- use of renewable energy/ heat
or steam from other process



Procurement process:

- beware of greenwashing
- ask manufacturers to develop/
(re-)introduce reusable devices

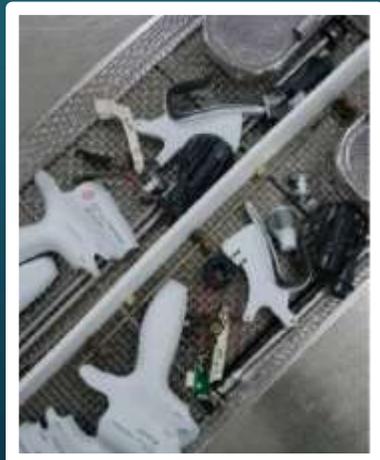
VESSEL SEALING DEVICE



SINGLE-USE



REUSABLE



REMANUFACTURED



Raw materials composition? Mechanical or electrical
CO₂ impact?
High amount of packaging + e-waste



Complex devices:

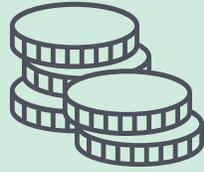
- remanufactured devices following legal regulations
- external partner with CE-label



Procurement:

- encourage remanufactured device or reusable parts

SINGLE-USE versus REUSABLE



Single-use

Reusable

Single-use

Reusable

Single-use

Reusable

Single-use

Reusable

Covercap

Blanket

Kidney
tray

Vaginal
speculum

Vessel
sealer



Obstacles towards a circular economy in healthcare

- Recycling of packaging – often complex composition and extra effort > quality of recycling?
- Remanufacturing – EVOA legislation not sufficient
- Composition and origin of materials unclear (product passport)
- Cost: linear economy often cheaper on short term
- Safety:
 - Patient safety is more difficult to prove for reuse process in hospital
 - Art 17 of European Medical Devices Regulation [2017/745 \(MDR\)](#) covers reprocessing of SU medical devices.
- (Reverse) logistics: investment needed in staff and equipment

THE TIME TO ACT IS NOW



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Dr. Evelien Kieckens
UZ Ghent

Thank you!

Q&A after next
speakers...

06

CASE

Together building the Care Square



Ann Van Den Bosch
EnAdvis



Dr. Nick Sablon
Roche Diagnostics
Belgium

The checklist for circular economy projects

There are “8 +1” operational changes to be developed

- | | |
|------------------------|----------------------------------|
| 1. Design | Start to design something new |
| 2. Raw materials | Your choice of materials |
| 3. Production | Set up a production process |
| 4. Logistics | Set up your logistic processes |
| 5. Distribution | Distribute products and services |
| 6. Usage | Use products and services |
| 7. End of life | Confrontation with waste |
| 8. Strategy and policy | Strategic policies |

The checklist for circular economy projects

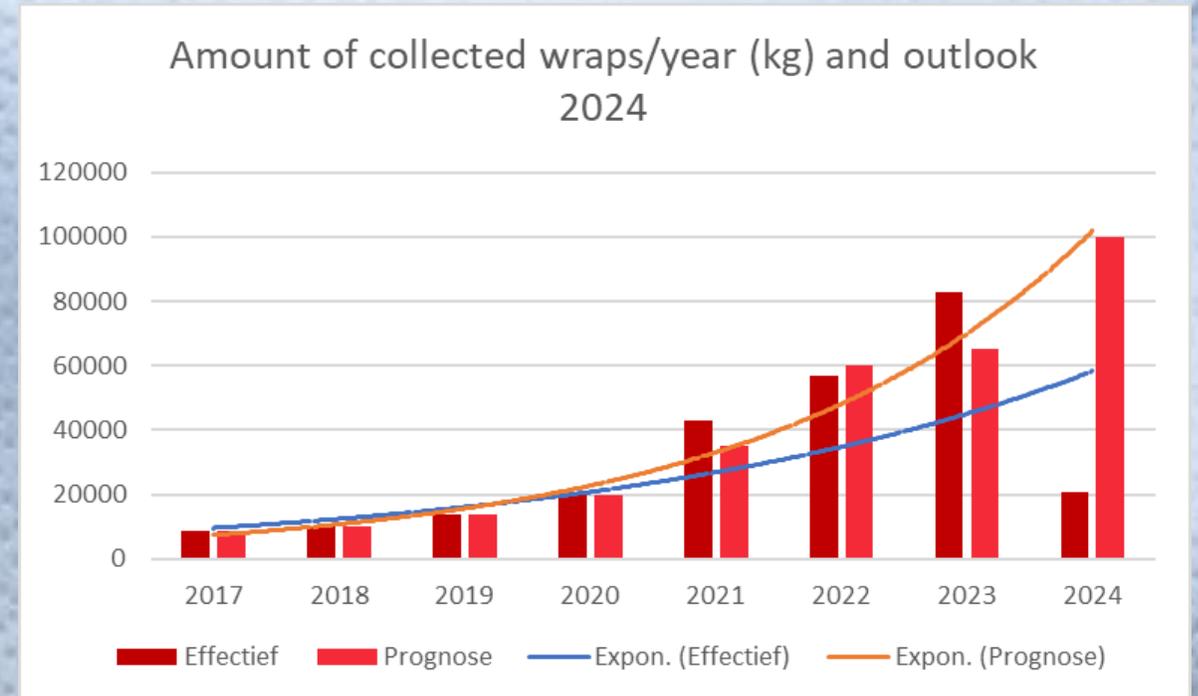
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| 5. Distribution | Distribute products and services |
| 6. Usage | Use products and services |
| 7. End of life | Confrontation with waste |
| Selective collection and return | Take action instead of being confronted with waste |
| 8. Strategy and policy | Strategic policies |

Operational changes - Selective collection

Case: selective collection of sterilisation wraps

- Started up in 2017 & survived 2 Corona years
- Anno 2023: 235 tons collected (80 tons in 2023)
- YTD 2024: on track for further growth
- Collaboration with day-care centers: inclusive society



Operational changes - Selective collection

Case: selective collection of sterilisation wraps

Challenge: small quantities per hospital

- Challenge 1: High volume, low weight -> transport & logistics
- Challenge 2: Not homogene
- Challenge 3: Our goal is to obtain the highest recycling level

Learnings

Feedback of learnings to the different operational steps:

- Design
- Raw materials
- Production
- Logistics
- Distribution
- Usage
- End of life

Operational changes - Selective collection

Case: selective collection of sterilisation wraps



Homogenisation: work in progress

Baling and transport

Shredded material and end product

After building the care square, building the care cube

The outcome for circular economy projects we aim for

1. Design
2. Raw materials
3. Production
4. Logistics
5. Distribution
6. Usage
7. End of life
- 8. Selective collection & return**
9. Strategy and policy



1. Resilience
2. Rethink
3. Redesign
4. Reduce
5. Reuse
6. Repair and remake
7. Recycle

Roche at a glance

Maintaining a long term orientation

<p>127 years founded in Basel in 1896</p>		<p>3 Nobel prizes and 44 Prix Galien, since 1974</p>		<p>50% lower environmental impact operations & products 2029 vs 2019</p>
	<p>A leader in healthcare R&D with CHF13.2 billion invested in 2023</p>		<p>>22 million people treated with our medicines in 2023</p>	
<p>Multiple Roche medicines & diagnostics on the WHO List of Essential Medicines & Tests</p>		<p>103,000+ dedicated employees worldwide</p>		<p>29 billion tests conducted with our Diagnostics products in 2023</p>

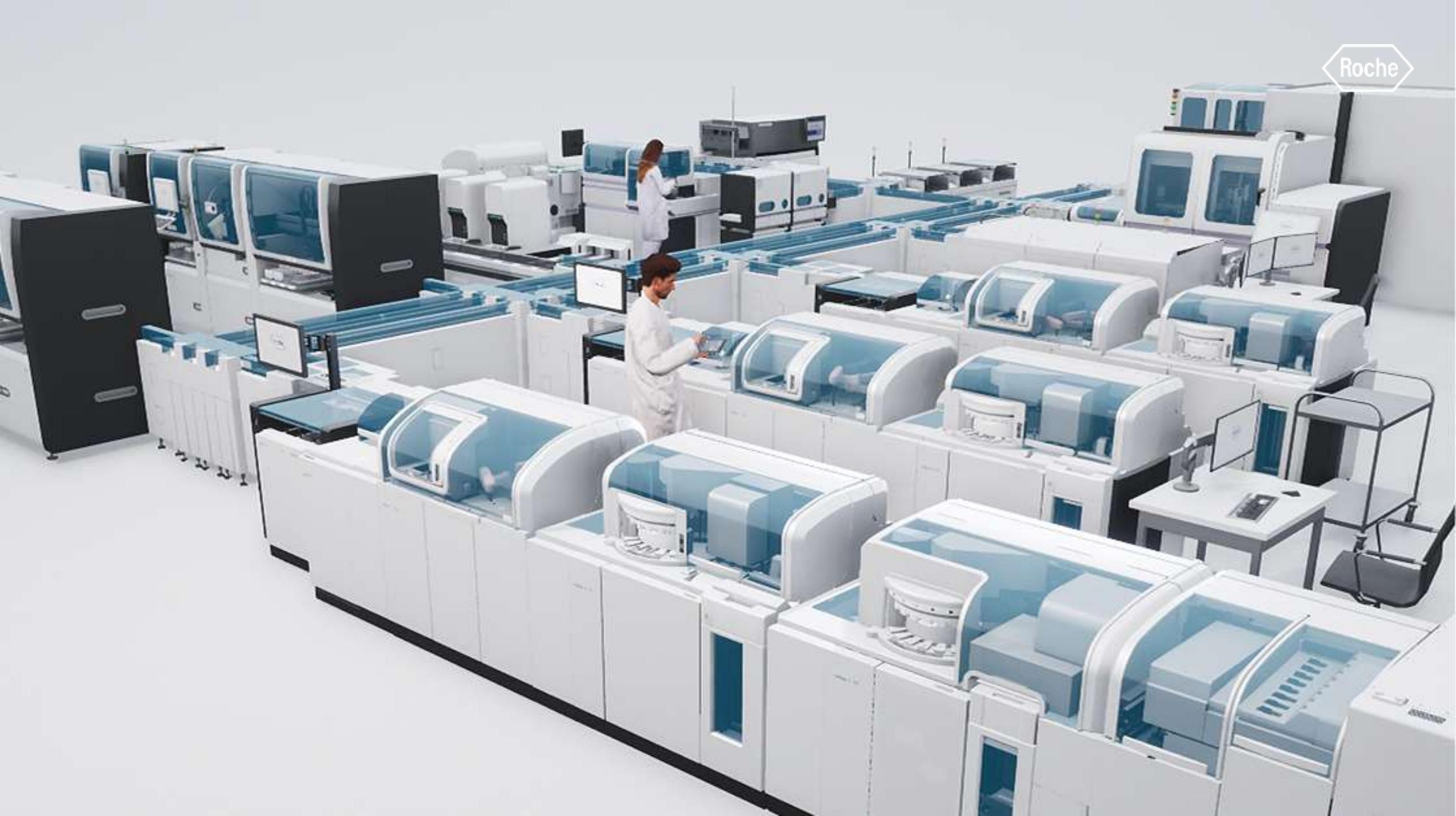
The clinical laboratory

Behind every test is a patient

Highly regulated
environment CE-IVDR

Quality
of test results comes first

Safety
& operational efficiency



There are opportunities to work in a more sustainable way



Product design



Recycling *



Re-use **

* Belgian pilots ongoing. ** Under investigation within project Vlaanderen Circulair

Specific and high-quality recycling is a major step towards circularity



Doing now what patients need next

Q&A



Els Dubois
ReuseLab



Evelien Kieckens
UZ Gent



Ann Van Den Bosch
EnAdvIS



Nick Sablon
Roche Diagnostics Belgium

Thank you, speakers!

Something to take home with you
to use and reuse and ...

CONCLUDING REMARKS



be EU CIRCULAR ECONOMY FORUM

belgium24.eu

BEYOND EXPERIMENTATION

Europe's leading role in mainstreaming circular practice



DEPARTEMENT
ECONOMIE
WETENSCHAP &
INNOVATIE

