



A CoP Chat Series

LET'S TALK PLASTICS

SESSION #7

PLASTICS IN A CIRCULAR ECONOMY:
LESSONS LEARNED IN EUROPE

27 January 2021, 8.30 - 9.30 AM EST

TODAY'S SPEAKERS



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Break Free From Plastic
Europe & Rethink Plastic
Coordinator



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#breakfreefromplastic

Plastics in a circular economy: lessons learned in Europe



Delphine Lévi Alvarès
Coordinator

Break Free From Plastic Europe
Rethink Plastic alliance





7930
Individuals



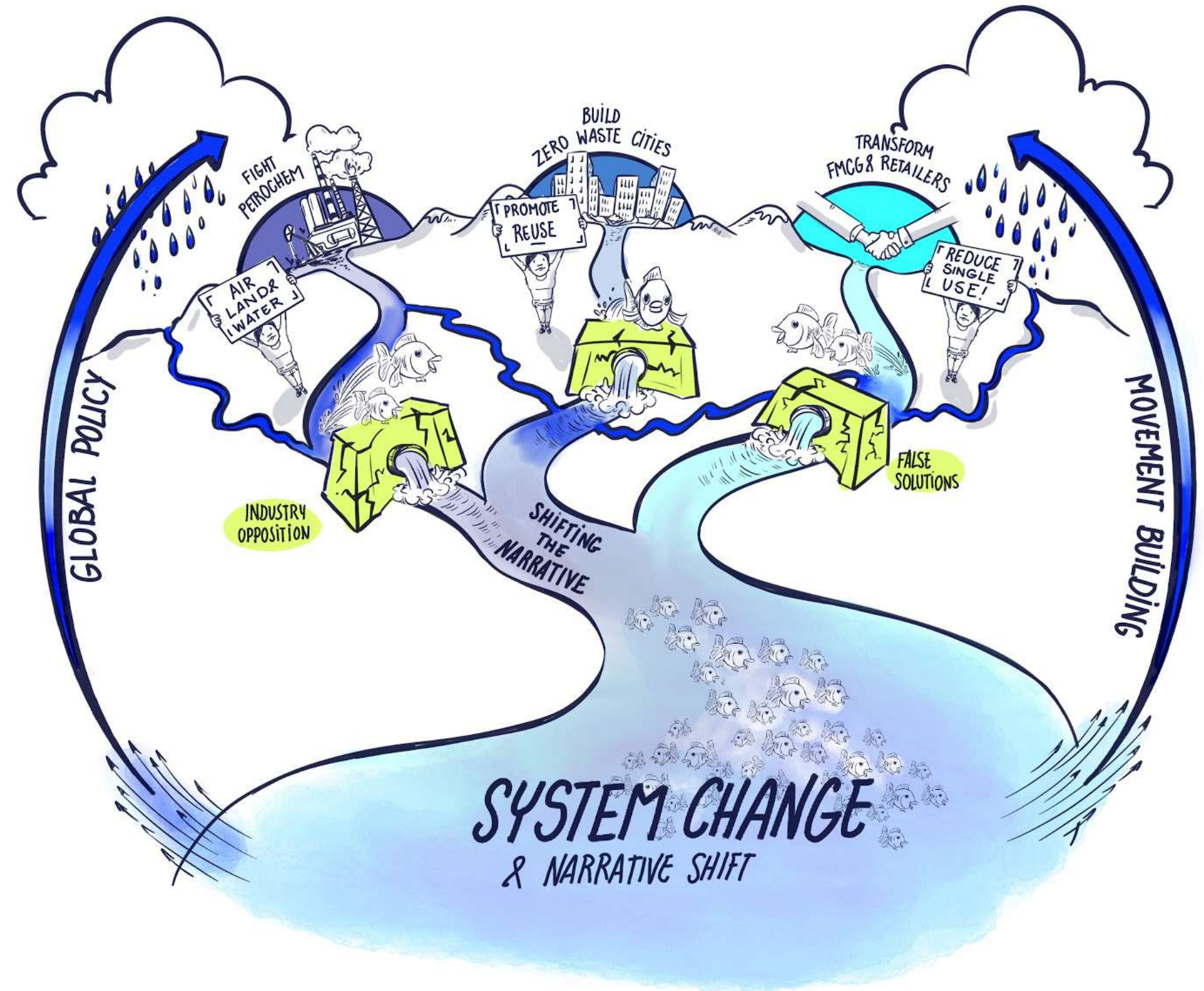
2670
Organizations

OUR GOAL

Bring systemic change through a holistic approach tackling plastic pollution across the whole plastics value chain, focusing on prevention rather than cure, and providing effective solutions

• BREAKFREEFROMPLASTIC •

TAGAYTAY 2.0.





100 active European member NGOs in Europe

An expertise all along the value chain



RETHINK PLASTIC



RETHINK
PLASTIC

#breakfreefromplastic

III
ADVENTURES ...
AND LESSONS
LEARNED

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*If you are not (really)
putting prevention
first, you could create
a lock-in effect*

RETH!NK PLASTiC

#breakfreefromplastic



@bryanMatters

*Creating products
from waste that should
be eliminated in the
first place is not a (real)
solution*



Incineration (even with energy recovery) is not a solution



ENERGY INTENSIVE ~~~~~ VERY EXPENSIVE



WARNING:
IMPACT
UNCLEAR



LET THE PLASTIC INDUSTRY
TAKE YOU FOR A RIDE!

EPR schemes without (real) prevention and reuse policies create a lock-in effect too, centred on recycling





And 'recycling' can mean many different things...



There are no sustainable products, there are only sustainable systems...



**“BIOPLASTICS” ARE STILL PLASTICS
AND THE TERM ITSELF IS AMBIGUOUS.**

THERE ARE:



Bio-based plastics



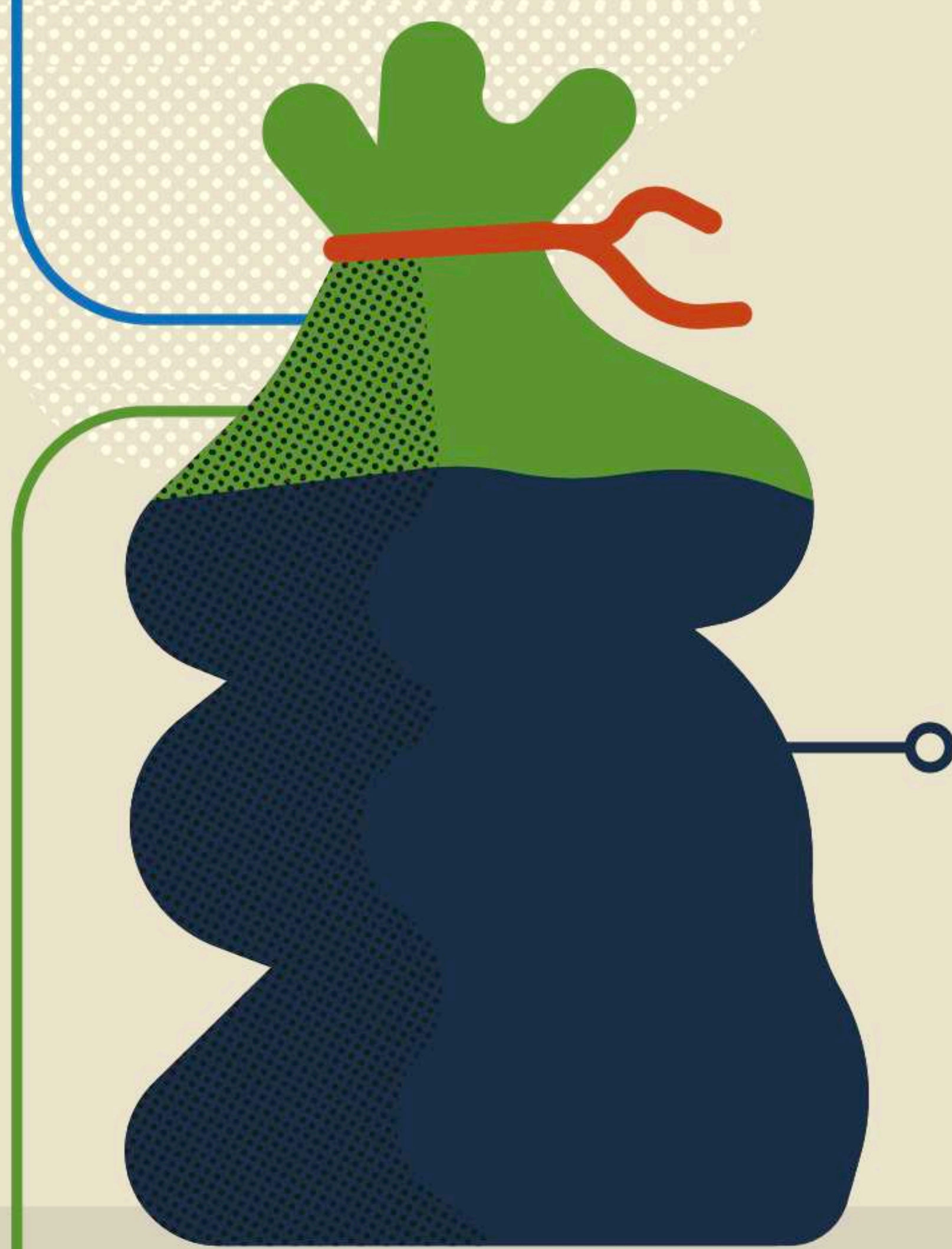
Made partly or fully from **organic matter** from plants and animals,
often in combination with **fossil fuels**.

Bio-based plastics rely
on limited land resources
and chemical-intensive
industrial agriculture.

less than 40%

of bio-based plastics
are designed to be
biodegradable.





Most bio-based plastics still contain oil:

Today, the term "**bio-based**" is used to describe plastics that can contain up to

75% OF OIL

since the minimum recommended biomass in a so-called bio-sourced plastic is 25%.

Biodegradable plastics



ONE SIZE DOES NOT FIT ALL!

There are different types of biodegradable plastics



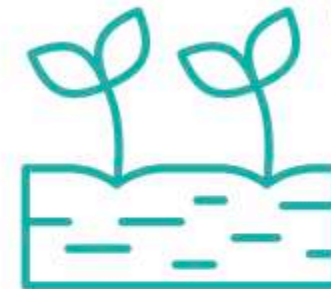
INDUSTRIALLY COMPOSTABLE?

Only if your area has industrial composting infrastructure & you know the right bin. If not, **the plastic will end up in landfill, incinerators or the environment.**



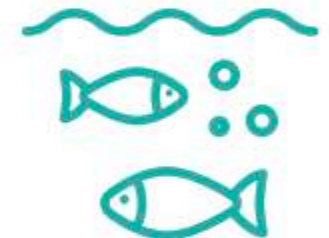
HOME COMPOSTABLE?

It can take **up to 1 year per item**, and only if you have access to a home or community composter which is well managed.



SOIL BIODEGRADABLE?

Current uses such as covering of crops still contribute to **plastic pollution.**



MARINE BIODEGRADABLE?

No adequate scheme to prove it. **Still impacts sealife.** Why would we design products to end up in the ocean?



Recycling is part of the solution, but only if products are well designed and toxic-free

RETHINK PLASTIC

DISPOSABILITY IS A DESIGN FLAW



FULLY RECYCLABLE



TOXIC FREE

REDESIGN PLASTIC PRODUCTS

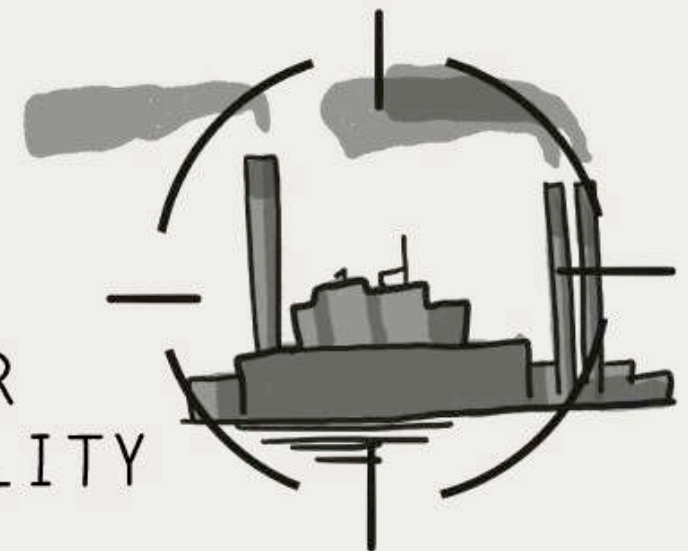


PRODUCER ACCOUNTABILITY

INCORPORATE RECYCLED PLASTICS



BETTER TRACEABILITY



Over 11,000 chemicals.

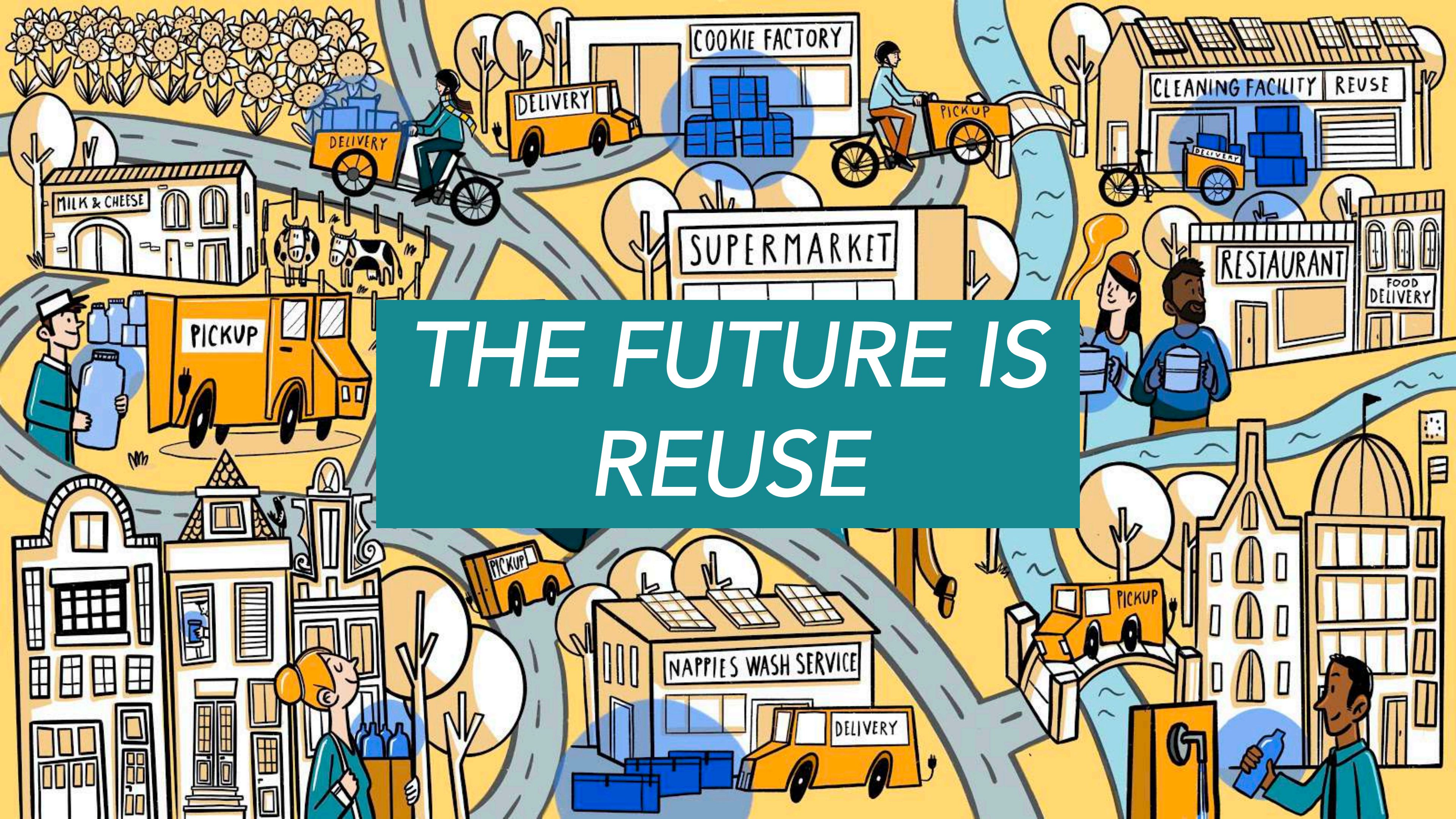
That's how many chemicals are used to make the materials that come into contact during the transporting, manufacturing, processing, and/or cooking of your food.

Can you guess how many have been tested for safety?

UNWRAPPED
#breakfreefromplastic







THE FUTURE IS REUSE

RECOMMENDATIONS TO UNDP

Put real prevention first: work with stakeholders to tackle the problem at source

Support upscaling of existing reuse systems

Support labour intensive waste management systems involving waste pickers rather than capital intensive investments in end-of-pipe technologies

Thank you

Delphine Lévi Alvarès

Coordinator

Break Free From Plastic Europe

Rethink Plastic alliance

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**#break
free
from
plastic**



“Plastics in a Circular economy – lessons learned in Europe”

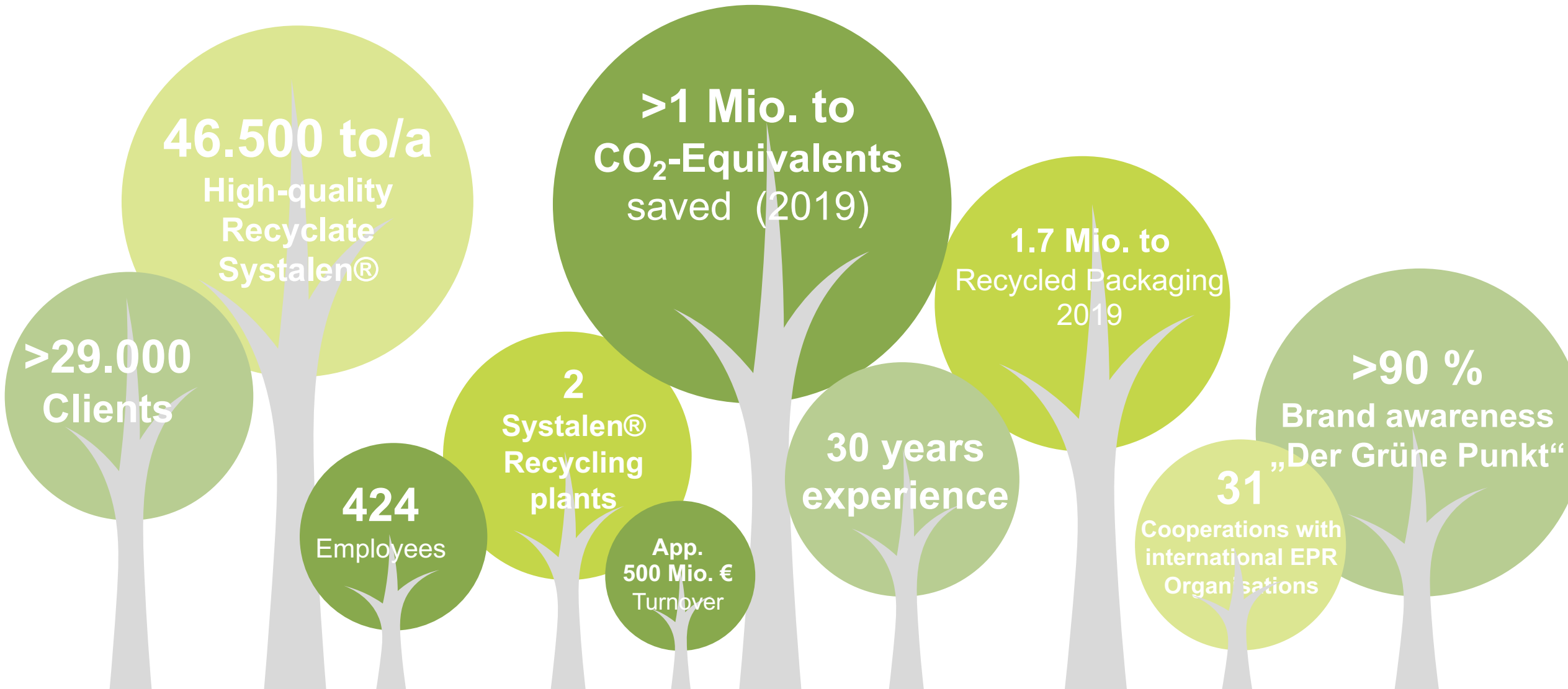
UNDP

27 January 2021

The Green Dot

Helmut Schmitz, Cologne, Germany

Der Grüne Punkt – The Green Dot in Numbers

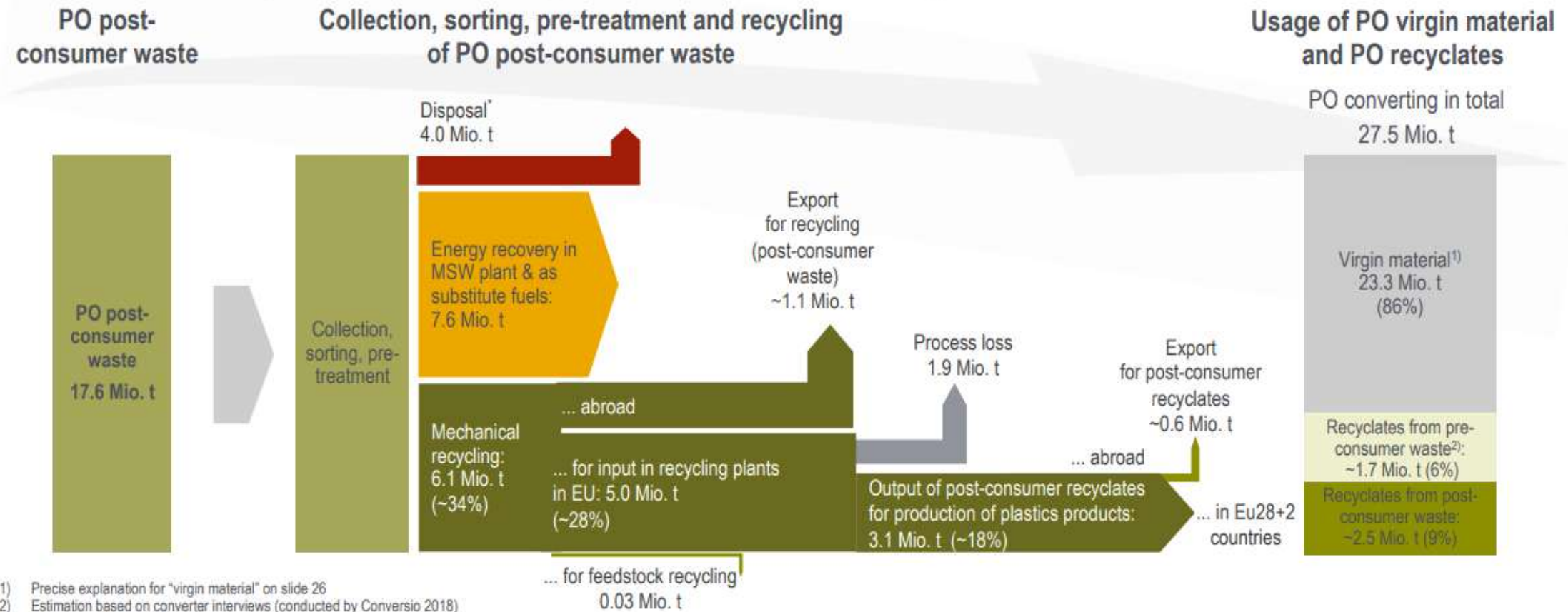




PO material flow in EU28+2 countries in 2019

Overview PO production, converting, consumption and waste treatment in EU28+2

Material flow: Predictive post-consumer PO recycling content stemming from the knowledge of the waste stream



1) Precise explanation for "virgin material" on slide 26
 2) Estimation based on converter interviews (conducted by Conversio 2018)
 3) Export figures from 2018

Source: Conversio 2020

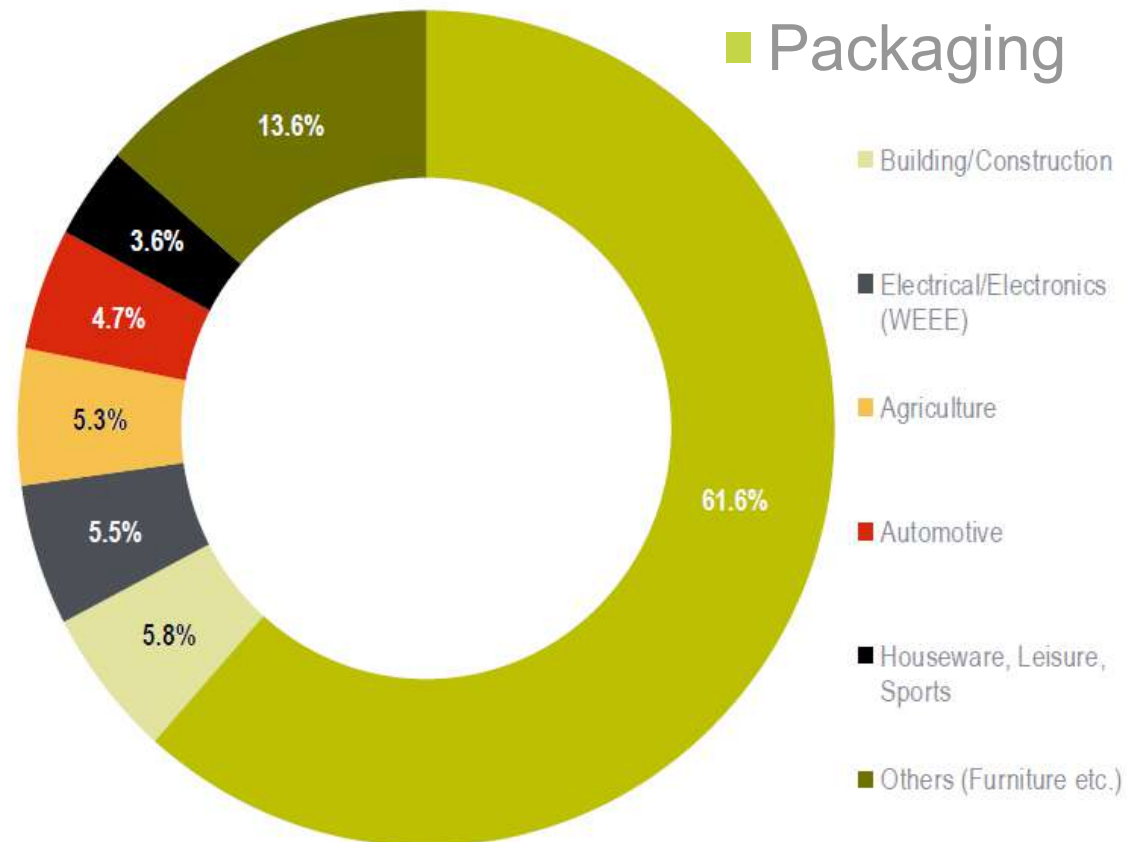
Principal source for secondary plastics: packaging

Plastic waste flows in the EU (incl. Norway and Switzerland; 2016)

- › In the plastic waste flow, sectors like the automotive and construction industries are underrepresented, due to the long-lived nature of the products.
- › Packages, by contrast, are very short-lived products.

→ Packages account for **almost two-thirds** of plastic waste!

Total post-consumer plastic waste by application



Source: Conversio 2018

EPR as a key element for a Circular Economy

1. **Extended Producer Responsibility** (EPR) is a resource management tool whereby producers have to take over an **individual responsibility** for the end of life management of their used products/packaging.
2. This individual responsibility **can be partly transferred** to a collective entity, the so called **“Producer Responsibility Organisation” (PRO)**
3. This PRO should fulfil the obligations of their members in the most efficient and effective way, so usually fulfil inter alia the recycling targets set by the national government or on top, additional targets set by the owners of the PRO.
4. The needed (usually external) **costs shall be internalized** into the product price
5. Higher costs for non-recyclable or difficult to recycle packaging should motivate industry to eco-design their packaging (ecomodulation of fees)

Why did Germany, why did the EU choose EPR?

- EPR: „polluter pays“ principle, **direct influence and involvement** of fillers and packers in packaging recovery
- Industry with its **competence** can find solutions that are **efficient** both for the environment and for the economy
- Alternative: Inventing new **taxes**
- Packaging Supply Chain influences **design** of packaging - **optimisation** of packaging, waste prevention

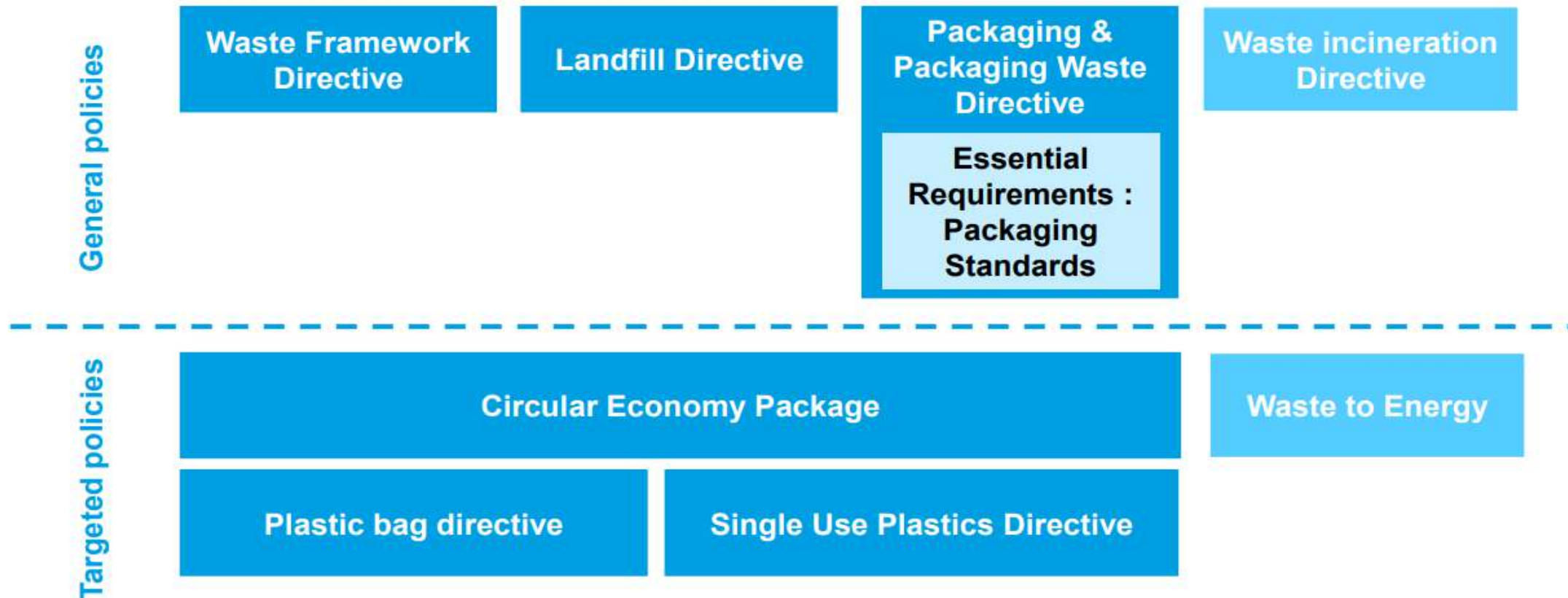


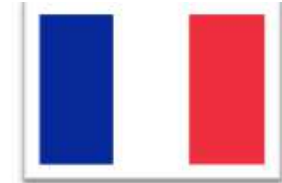
Success criteria for EPR

1. Legislation, support and enforcement
2. Professional and strong EPR system(s)
3. Value chain commitments and cooperation
4. Design for recyclability
5. Technology and infrastructure
6. Local waste management systems
7. Well functioning markets
8. Awareness and confidence
9. Certification and traceability
10. Reliable Statistics

Legislation as a key success criteria for EPR

Packaging & packaging waste related policies in the EU





Focus on the french national pact on plastic packaging

The Pact brings together **all voluntary actors in the plastic value chain** (producers, converters, national brands, distributors, waste management operators), **civil society and the Government**.

Beyond the stakeholders involved during its inception, **the Pact aims at mobilizing a growing number of signatories**.

It aims to support progress through **concrete commitments, dialogue and collaboration**



Source: CITEO, 2020

Example Germany - EPR Toolbox



PREVENT

Waste Alliance

Together for a circular economy



More than 150 Organisations

- › Private Sector Academia
- › Civil Society Public Sector

Objective

Contribute to minimising waste, eliminating pollutants and maximising the reutilisation of resources, through the development of functioning waste management and circular economy approaches.

Approach

work together to **support circular economy approaches and enhancement of waste management systems**, e.g. through waste prevention, collecting, and recycling and increased uptake of secondary resources **in low- and middle-income countries**.



EPR Toolbox

Know-how to enable Extended Producer Responsibility

Objective - to provide knowledge, definitions and methods to support establishment of EPR in low- and middle-income countries

› **Toolbox with 3 thematic modules and 13 sub-topics**

- includes video clips
- power point presentations
- FAQ
- case studies of selected countries and
- various exercises for training purposes



Module 1: General Aspects of EPR

1. How to define **roles and responsibilities** along the value chain?
2. How to establish a **Producer Responsibility Organisation (PRO)**?
3. How to manage **financial flows** and to determine **fee's and payments**?
4. How to establish a **registry** for the packaging / companies on the market?
5. How to design a **regulatory framework**?

Module 2: Packaging waste collection & sorting

6. Organizing **packaging waste collection**
7. How to sort **packaging waste**
8. How to involve the **informal sector**?
9. How to **incentivize citizens to separate** packaging waste?
10. How to establish **deposit-refund systems (DRS)**?

Module 3: Packaging waste recycling

11. How to involve **private sector recyclers**?
12. How to ensure **high-quality recyclables**?
13. How to **increase market demand for recycled plastics**?



EPR Toolbox – Co-creation process

Two consultation meetings, 27/28 January 2020, Jakarta

- *Day 1:* PRAISE; Indonesian Packaging Federation; Indonesian Plastic Recycling Federation; Association of Mineral Water Bottles; Institute of Technology Bandung; Waste4Change; Sustainable Waste Indonesia
- *Day 2:* National Development Planning Agency (BAPPENAS); Waste Management Section of Greater Jakarta; representative of Danish Embassy



Sharing of EPR Toolbox draft factsheets in April 2020

- In Indonesia with BAPPENAS, MoEF, PRAISE, Sustainable Waste Indonesia, Waste4Change; in Ghana with MESTI, GRIPE
- Regionally with GIZ/Expertise France staff of “[Rethinking Plastics](#)” project (EU/BMZ funded) and [WWF project on EPR](#) in Southeast Asia
- “Synthesis Workshop” May 15, 2020 with PREVENT members (Germany)



Projects

Project 2:

Mexico, India, Vietnam & Brazil



Plastic credits for Inclusive & transparent circularity

1. Development of a process standard (ValuCred) for the transparent calculation, verification and validation of plastic credits (India and Vietnam).
2. Establishment of a scientific framework and benchmarks for the environmental impact assessment of Plastic Credits projects (India).
3. Local collectors/recyclers are supported in achieving global market standards and offering materials through a global marketplace (Mexico).
4. Pilot the concept of performance-based payments for environmental services to further establish and improve the platform of the Circular Action Hub (Brazil).

Project partners:

Component 1 – [Yunus Environment Hub](#), [Rodiek GmbH](#), [BlackForest Solutions](#), Zero Plastic Waste Cities in India and Vietnam

Component 2 – [Wuppertal Institute for Climate, Environment, Energy](#); local social enterprises in India

Component 3 – [Entreamigos](#), [BV Rio Circular Action Hub](#), [cirplus GmbH](#)

Component 4 – [BV Rio Circular Action Hub](#), waste picker cooperatives in Brazil

Technology and infrastructure

- For the first time there is a packaging for a body-care product that consists of plastics from the Yellow Sack (German packaging waste collection).
- The bottles for the Frosch Senses shower gel are manufactured from 100 percent recycled HDPE.
- This is made possible by a special treatment process, jointly developed together with Der Grüne Punkt and the EREMA Group, Austria. A human-toxicological expertise confirms how safe the material is.
- Der Grüne Punkt was awarded the German Packaging Prize for this in 2019.



Showroom: Markets, Awareness and Confidence



- ✓ **The circular economy for plastics belongs on the agenda of both politicians and the business community**
- ✓ **Extended Producer Responsibility (EPR)** is an efficient tool to internalize external costs and to create sustainable solutions.
- ✓ **Cooperation and communication along the value chain is key – The EPR Toolbox offers valuable information** on how to get a process of implementing EPR can be started and describes the variety of options
- ✓ **The market for plastics recycling needs support ...**
... because it is in fact not regulated solely by supply and demand. There is no level playing field for recyclates.



Thank
you for
your
interest!

Helmut Schmitz

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Duales System Deutschland GmbH

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Q&A

RAISE YOUR HAND
OR POST YOUR QUESTION
IN THE CHAT BOX

THANKS TO TODAY'S SPEAKERS



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THANK YOU!

**STAY TUNED FOR SESSION #8
IN FEBRUARY**