



CAPonLITTER

Interreg Europe



European Union
European Regional
Development Fund

State-of-the art collection and recycling strategies for plastics waste

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Zero Waste Europe



NGOs, local groups and communities



Change European policies



Mentor Cities towards a Zero Waste transition

Our Zero Waste Cities Programme

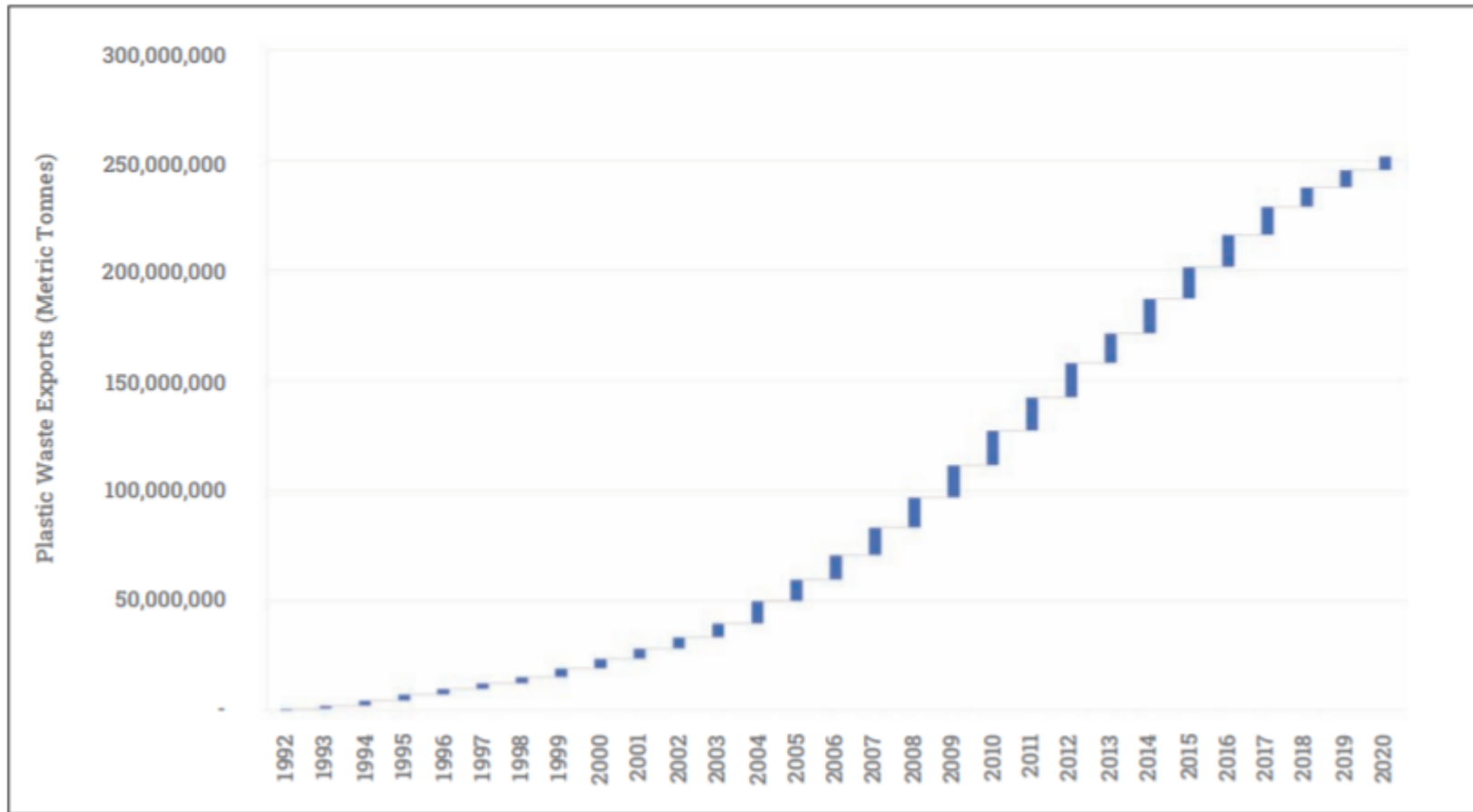
- **Over 450 municipalities** engaged & supported to develop Zero Waste Strategies in Europe
- **A network of local and national coordinators** via Zero Waste Europe Members
- **We model front-runners** and best zero waste practices
- Led by the **world's first Zero Waste Cities Certification** - the 'to-do list' for municipalities

Quick reminder on the 'why'

- Only **9%** of all plastic waste ever produced has been recycled - **79%** in landfills / natural environment while about **12% has been incinerated**
- In Europe, packaging alone represents **36% of municipal solid waste**
- Changing composition of residual waste in EU: **more plastic, less organics** and the knock-on effect for disposal methods (carbon intensity of residual waste)
- **Toxic chemicals** commonly found in plastic that is proven to damage our health, as well as the environment
- Recent LCA analysis has showed that the **reusable containers have 13x and reusable cups have 4x lower environmental footprints** than single-use options
- Europe's inability to deal with the problem at home > global waste shipment issue
 - Malaysia produces **2.4 million tonnes** of plastic waste per year & imports on average **835,000 tonnes per year**
 - Annual capacity of all recycling facilities in Malaysia currently **just 515,009 tonnes** – a **2.7 million tonne discrepancy** between what is produced & imported vs what is responsibly managed.

Quick reminder on the 'why'

Figure 1: Cumulative global plastic waste exports (HS39151) from 1992 to 2020.





Challenges of collecting and recycling of plastic waste...

Challenges - Recycling

Product design

- Very often too complex & multi-layered to enable full recycling, showcases the need for policy reform

Recycling capacity in Europe

- Current limitations based on previous system of exporting our waste
- Needs to change given increasing demand for recycled content from manufacturers

Bio-plastics

- Need to differentiate between bio-based and biodegradable

Volatility of the secondary materials market

- Has been cheaper to produce virgin plastics than to use & get recycled

Challenges - Collection

Door-to-door, multi-stream separate collection proven to be the most effective & cost-effective model for households

- Our Zero Waste Cities prove its possible to separately collect 90% of municipal solid waste

Bioplastics continue to remain unclear for individuals

- *“Are they recycled with plastics or organics?!”*

Not all plastic is created equally...

- Plastic bottles vs toys vs packaging vs everything else...
- Different policies needed for each, makes life complicated & expensive for municipalities

Tourist destinations & the battle against single-use...

Simply put...

It takes **less time** and **makes more sense** to **replace non-recyclable and hazardous materials with reusable or recyclable ones** than it does to build new infrastructure to dispose of stuff which should not exist in the first place



Examples of the best practices

Reduce the availability of SUP

Introduce total or partial bans on single-use plastic throughout a city's borders

- ◆ Example of Paris becoming plastic-free by 2024

Eliminate the use of single-use plastic in public buildings, in public cafeterias/canteens and at events organized by local governments. Instead, make reusable alternatives mandatory.

- ◆ Barcelona, Tallinn, Vilnius... to name just a few

Establish ambitious public procurement guidelines that enforce the prioritisation of reusable products and services across all of the municipality's jurisdiction

- In 2016, the city of Hamburg introduced mandatory "Green Procurement Guidelines" which includes a ban on single-use bottles, coffee capsules & more items

Introduce & promote reuse solutions

Set reuse targets to galvanise action across the city

- The region of Flanders (Belgium) has a re-use target of 7kg of material per capita per year by 2022

Develop capacity for free tap drinking water all over the city

- Refill in the UK

Financial incentives and technical guidance to facilitate the growth of shops that offer products and goods in bulk

- Case study of Unverpackt, story of Jean Bouteille & many more

Engage the community with educational & fun challenges

- Zero Waste family challenge in Capannori produced an average residual waste of 3.8kg per capita compared to the city average of 87kg per capita



Deposit Return Schemes

Proven methodology for achieving results that optimise reuse systems

Greatest impact can be had nationally, but cities can be ideal testing hubs for DRS with immediate access to large populations

DRS for food & beverage packaging is being successfully applied in several European regions/countries

- Coffee cups most common & a 'low-hanging fruit' - 'Billie Cup' support in Belgium
- Provide guidance where DRS not legally possible - case of Schleswig-Holstein region



Ensure a strong recycling & collection system is in place

Door-to-door collection of as many materials as possible, supplemented with drop-off points of bulky/hazardous materials

- Wales' recycling 65% nationally through prioritising quality collection of 5 waste streams from every households & business

Implement economic incentives to further reduce waste

- Pay-As-You-Throw proven to be the most effective system

Invest in quality collection points

- 'Het Goed' in Nijmegen, 'Halle 2' in Munich and 'Reuse life' in Brno

Focus on organics! It has huge benefits for entire system


- Milan (1.08 million pop) collects 110kg of food waste per capita & total separate collection rate of 62%



ZERO
WASTE
EUROPE

Local guidance on implementing the Single-Use Plastics Directive

BEST PRACTICES TO REDUCE AND PHASE OUT SINGLE-USE PLASTICS IN EUROPE

 SEAS AT RISK

#breakfreefromplastic



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Thank you!



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