



COLLECTORS

Circular approach for CDW

Webinar, 26 June 2020

Ive Vanderreydt VITO







Outline

- 1. COLLECTORS project
- 2. Improving circularity
- 3. Focus on CDW



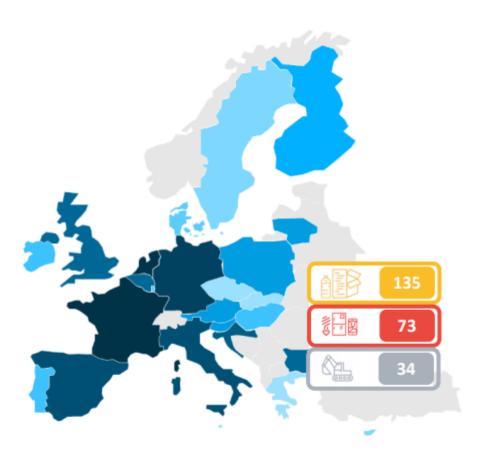


Objective:

Identify good practices in waste collection and increase knowledge sharing; to ensure that good performing regions and cities can serve as examples and inspiration for regions with similar local contexts



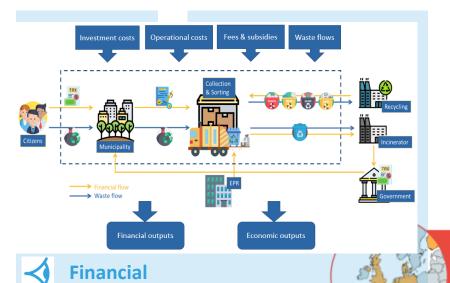












Recycling intention

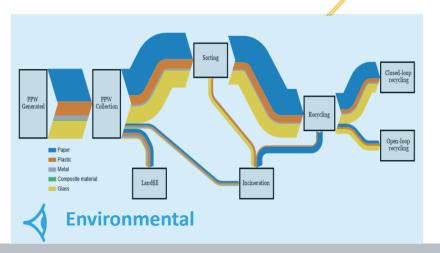
Social norms

Convenience

Societal acceptance

12 case studies

5 PPW, 5 WEEE, 2 CDW



	Scope	Collection method	Collection output	Sorting output	Recycling output
Glass	Transparent glass Clear versus mixed colored glass Clear versus green versus brown glass Mixed glass	CAS Bring point Door-to-door Bring points + CAS Road containers + CAS Door-to-door + bring points Bring points + CAS + other Door-to-door + bring points + CAS	Clear container glass Colored container glass Mixed container glass Mixed container glass co-mingled with other wastes	Clear container glass cullet Brown container glass cullet Green container glass cullet Mixed container glass cullet	Container glass (flint, brown, green) Insulation mineral wool (short glass fibre) Ceramic sanitary ware Fluxing agent in brick manufacture Sports turf and related applications Water filtration media Abrasive Aggregate in construction materials Reflective highway paint
\triangleleft	Circular	economy			





June 2020

June 2020 END

Brussels

Phase 1. Inventory

Map and harmonize existing information on waste collection systems throughout Europe for packaging and paper waste, WEEE, and CDW.

Disclose it on a web-based platform to help decision-makers find systems that are in line with their needs.

Inventory of waste collection practices

September 2018

Malta

Phase 2. Assessment

Assess the overall performance of waste collection systems in different geographical areas based on comparable data, using life-cycle assessments and cost-benefit analyses.

> June 2019 Warsaw

Twelve case studies

Phase 3. Implementation

implementation Stimulate successful better-performing waste collection systems by providing the necessary tools for decision makers, with tailored instructions per type of location.

Multi-criteria decision making will be applied as participatory learning exercises.

- Implementation guidelines
- Policy recommendations on aligning the different policy levels involved.
- 3 customised factsheets on waste collection systems

January 2020 Thessaloniki

Events

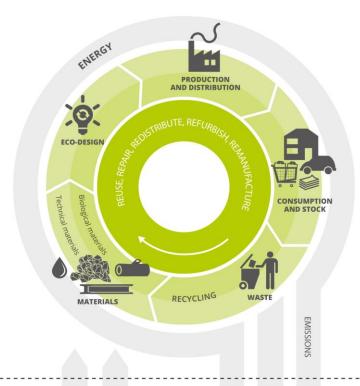
COLLECTORS will organize five events which include different types of workshops and sessions: 4 regional conferences and 1 EU conference

Treviso December 2017 START

March 2018







Minimise



EXTRACTION AND IMPORT OF NATURAL RESOURCES, INCLUDING ENERGY CARRIERS





LANDFILL

INCINERATION



tonnes of materials per person were extracted in the EU in 2014 (direct material consumption



tonnes of materials
per person were imported
to the EU in 2014
(direct flows).



0.3 tonnes of waste per person were incinerated in the EU in 2012.



2.2 tonnes of waste per person were sent to landfill in the EU in 2012.

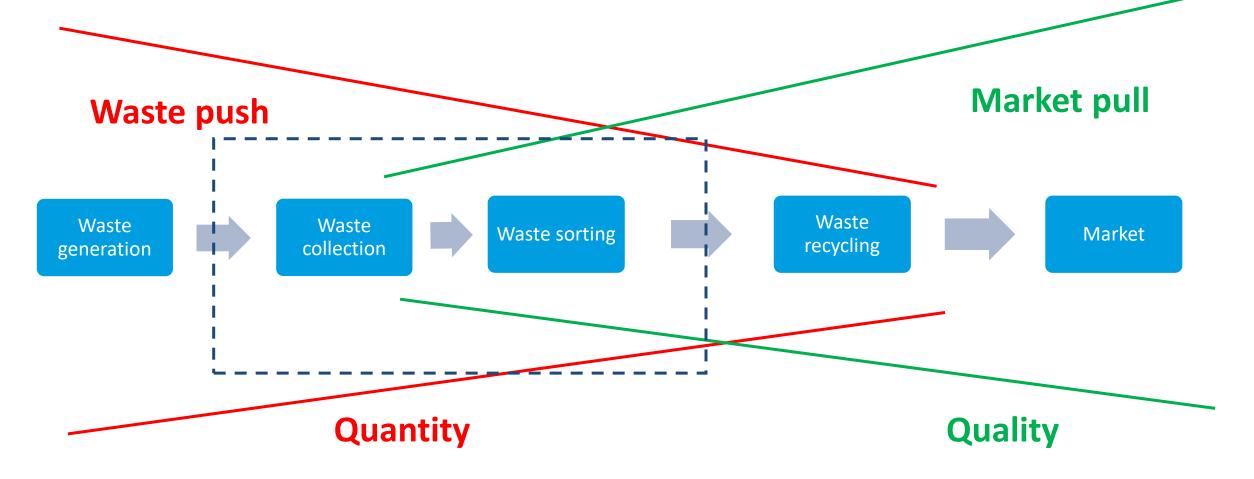
Data: Eurostat, 2015, 'Material flow accounts' and 'Treatment of waste', ec.europa.eu/eurostat.

Source: European Environment Agency



Role of recycling in CE





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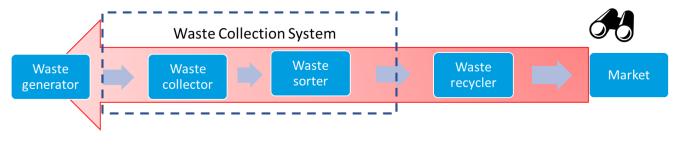
Role of waste collection in recycling value chain

2 perspectives:

From citizen point of view (societal perspective)



From systemic and technical point of view (CE perspective)





MAIN QUESTION

Which conditions enable the recycling value chain to produce more value, by producing more (quantitative) and/or better (qualitative) secondary materials?







for secondary materials or for end applications

- MANUFACTURING INFRASTRUCTURE with feedstock flexibility to absorb/use sec. materials
- SORTING AND RECYCLING INFRASTRUCTURE availability of this infrastructure
- SUPPLY minimum amount

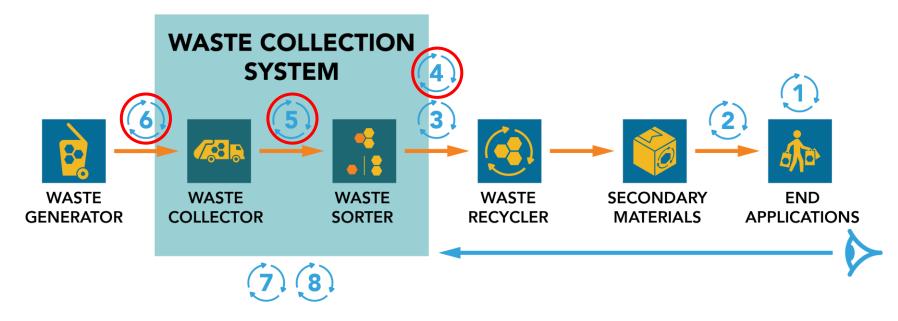
- **QUALITY OF WASTE**quality requirements / uncertainty & stability
- TRACEABILITY proxy for quality
- POLICY OBLIGATIONS such as recycling targets
- ECONOMICS costs ≤ revenues for each link in the value chain

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Which conditions enable the recycling value chain to produce more value, by producing more (quantitative) and/or better (qualitative) secondary materials?







MARKET/DEMAND

for secondary materials or for end applications



MANUFACTURING INFRASTRUCTURE

with feedstock flexibility to absorb/use sec. materials



SORTING AND RECYCLING INFRASTRUCTURE

availability of this infrastructure





QUALITY OF WASTE

quality requirements / uncertainty & stability



TRACEABILITY

proxy for quality



POLICY OBLIGATIONS

such as recycling targets



ECONOMICS

costs ≤ revenues for each link in the value chain





Focus on CDW

2 cases

- Reimerswaal, focus on gypsum
- Odense, focus on bricks



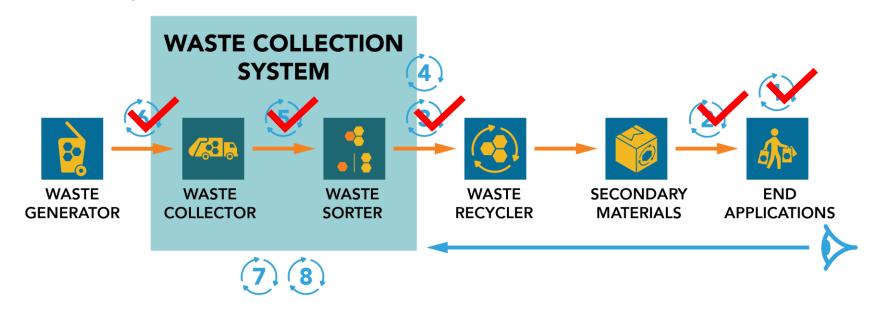
Figure 3: The CDW case studies: Odense (DK) and Reimerswaal (NL)



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COLLECTORS
WASTE COLLECTION SYSTEMS ASSESSED AND GOOD PRACTICES IDENTIFIED

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Thank you!

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For more info about the project visit the COLLECTORS website at www.collectors2020.eu