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COMMUNITY LEARNING FOR LOCAL CHANGE



Intensive Study Programme Bucharest
Bucharest 5th - 14th May 2019





A circular economy for Bucharest



Source: recicleta.ro

- **Global context**
- **Local context** – Bucharest's ecosystem for circular economy
- **Environment** – waste management and circular economy models
- **Community** – social businesses already active in waste mngmt
- **Goal** – strengthening the capacity and supporting business development plans of social enterprises based in Bucharest
- **Relevance** – addressing challenges these social businesses are facing

Living with limited resources

Mr Timmermans, Vice-President of the Commission, **when the CE package was adopted by the Commission in December 2015:**

"Our planet and our economy cannot survive if we continue with the 'take, make, use and throw away' approach. We need to retain precious resources and fully exploit all the economic value within them.

The circular economy is about reducing waste and protecting the environment, but it is also about a profound transformation of the way our entire economy works. By rethinking the way we produce, work and buy we can generate new opportunities and create new jobs.

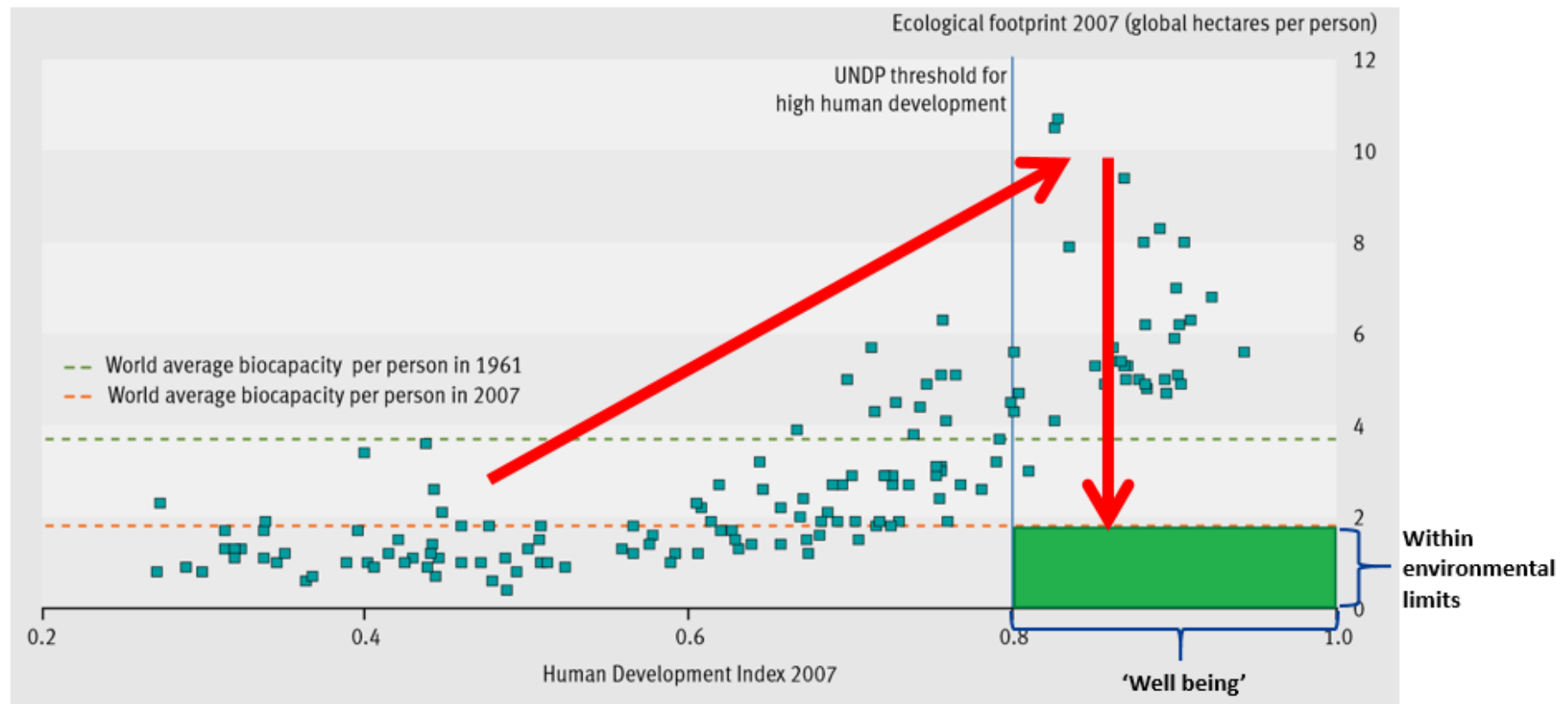
Living with limited resources

... today's package, we are delivering the comprehensive framework that will truly enable this change to happen. It sets a credible and ambitious path for better waste management in Europe with supportive actions that cover the full product cycle.

This mix of smart regulation and incentives at EU level will help businesses and consumers, as well as national and local authorities, to drive this transformation."



Living with limited resources



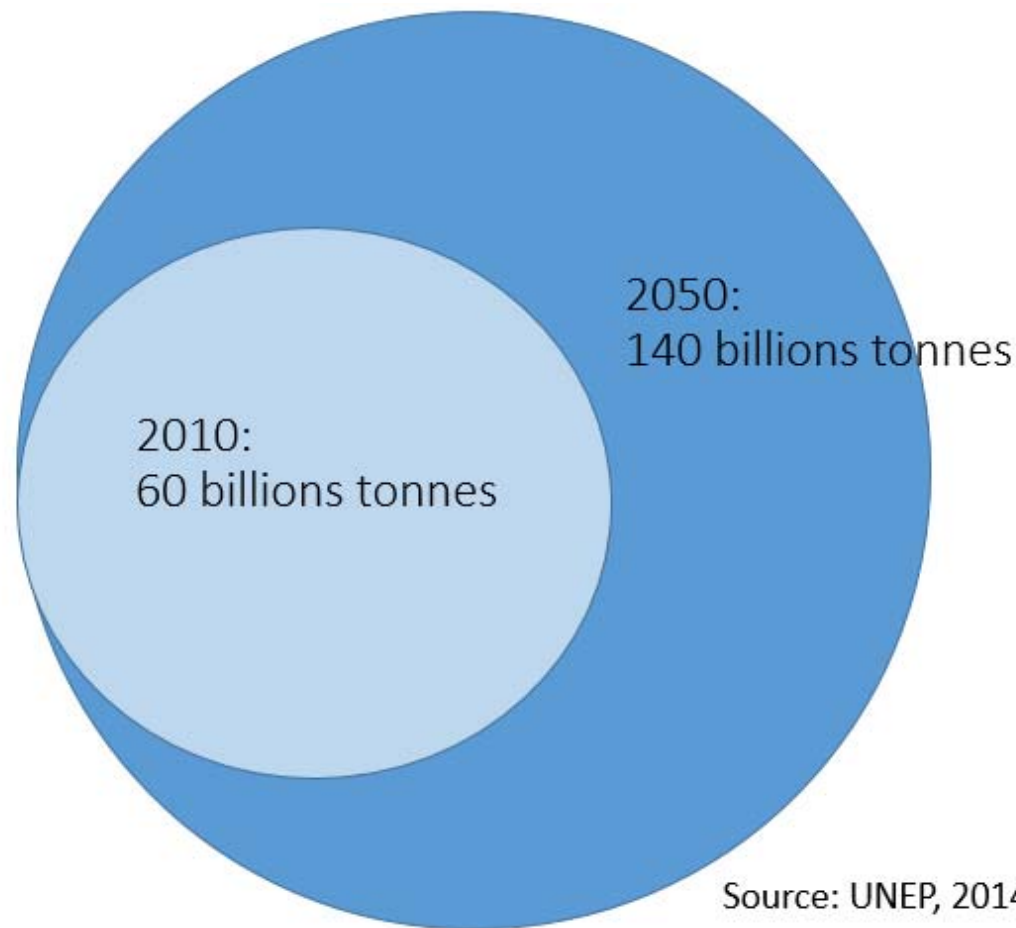
Source: UNEP – GOE5, 2012



Global raw material consumption



Global material consumption



Source: UNEP, 2014



Municipal waste treatment in the EU

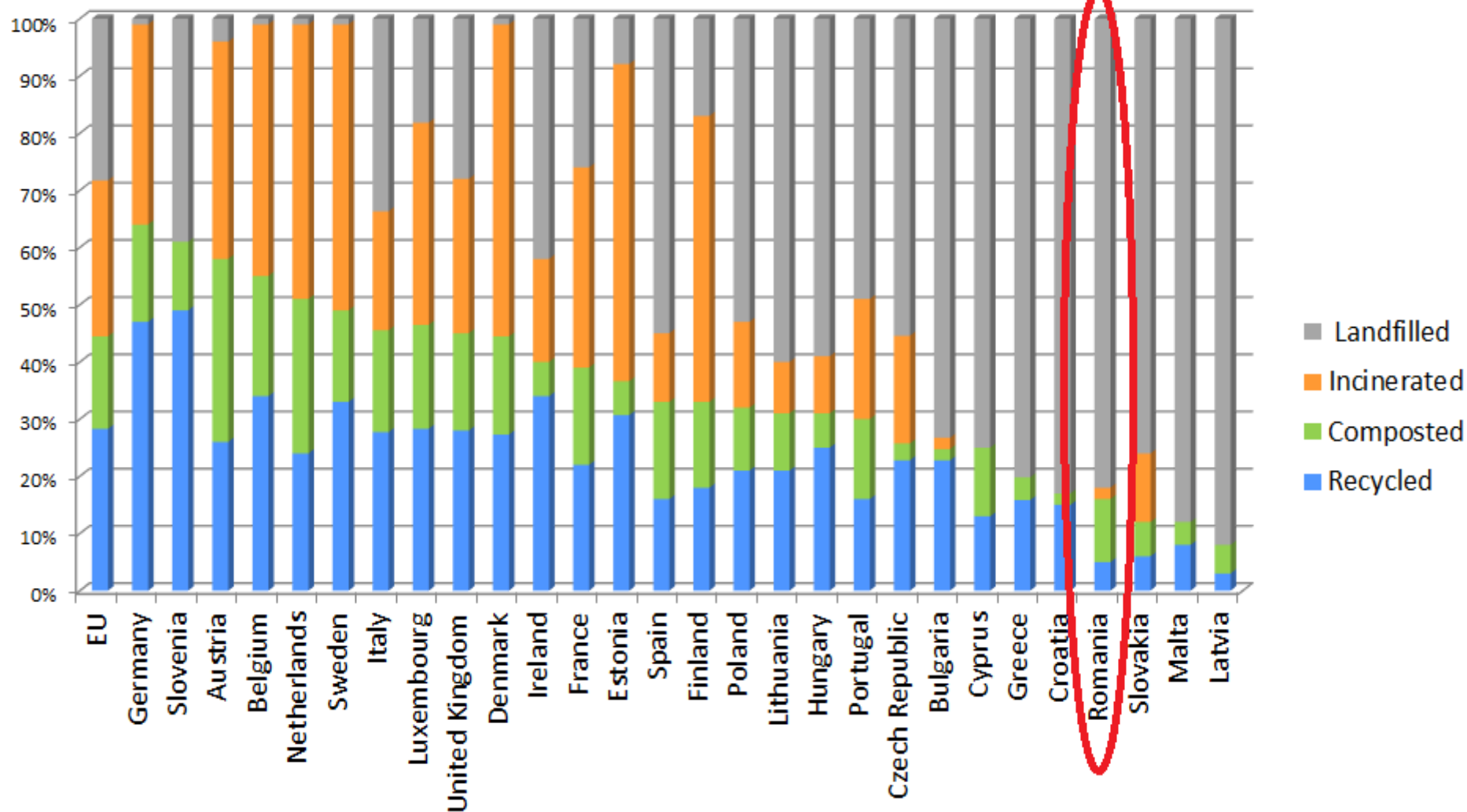
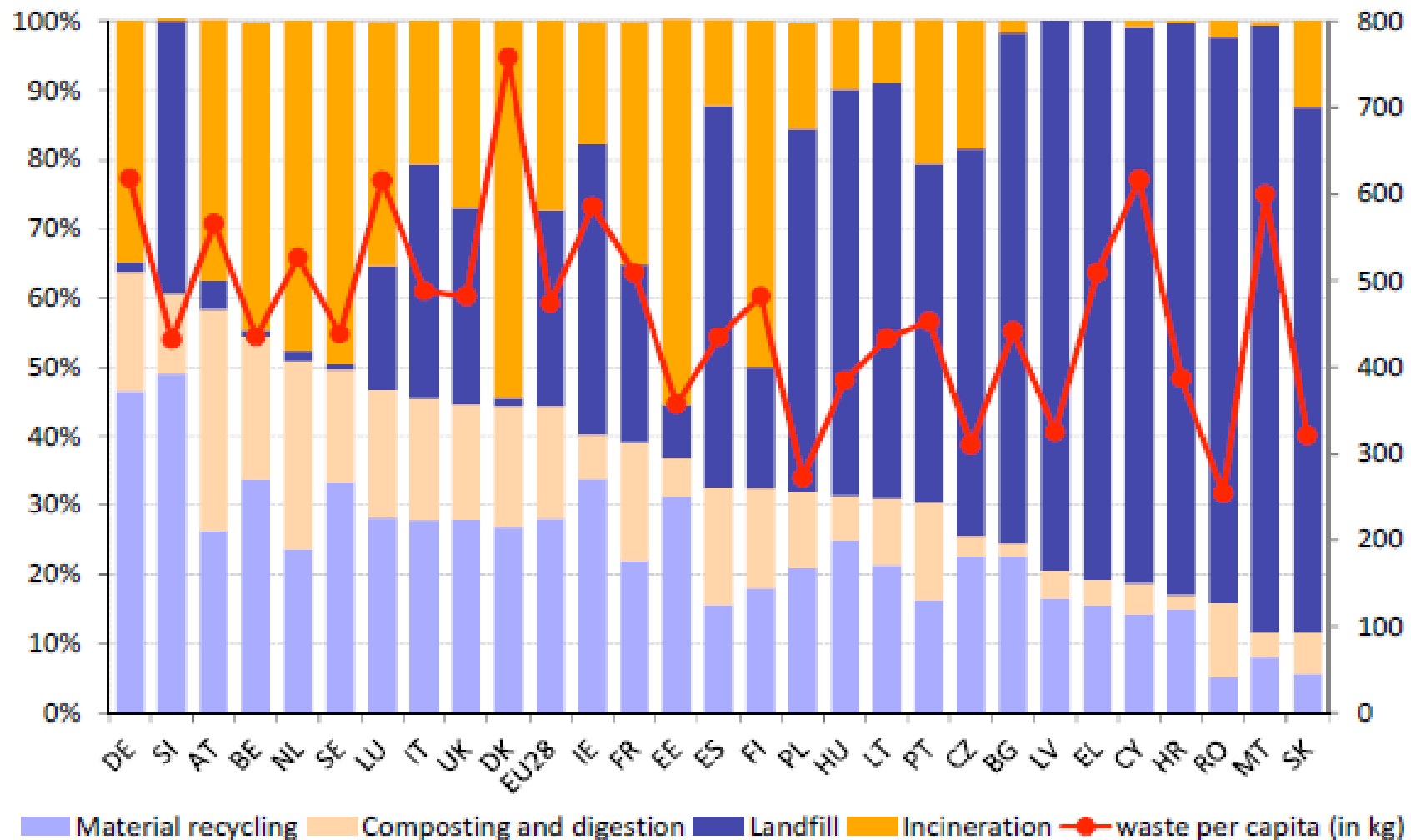
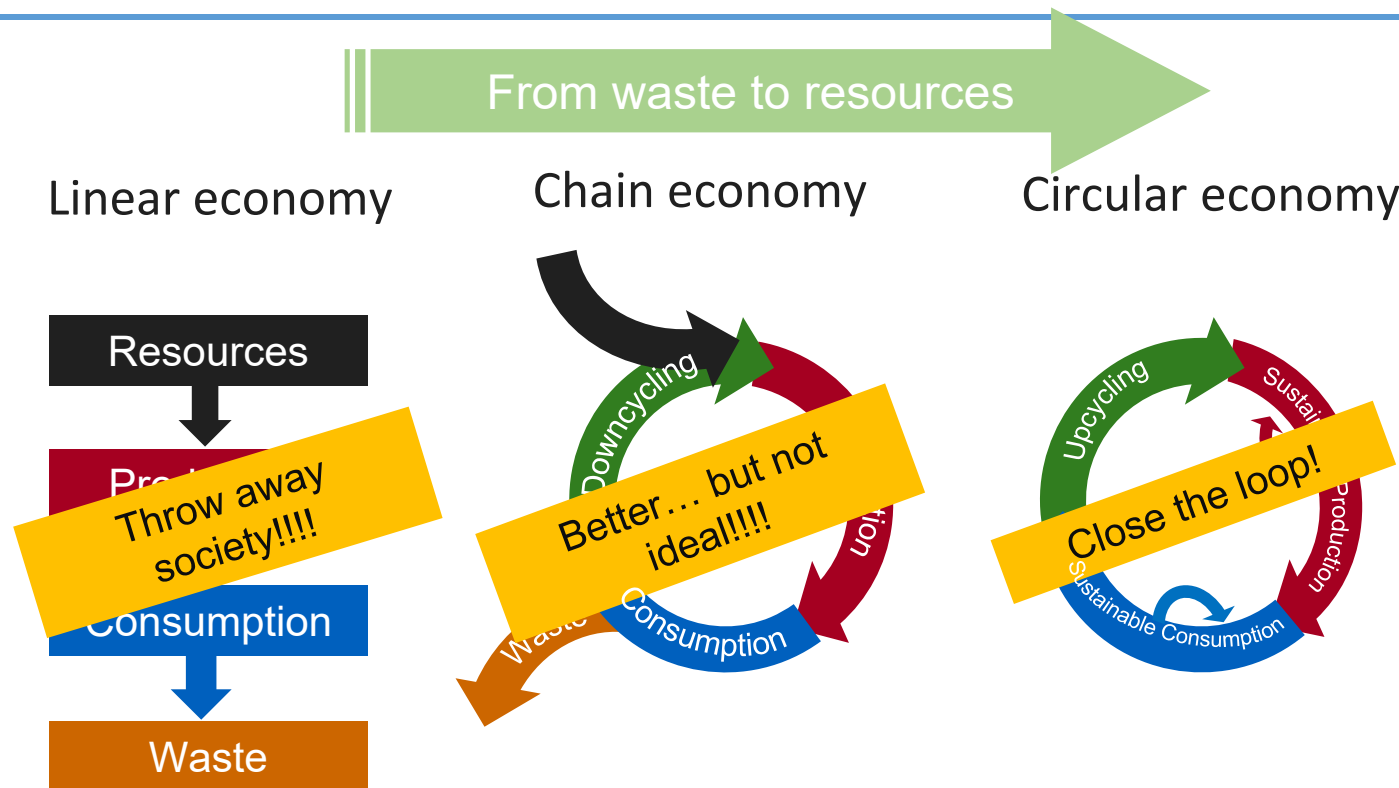


Figure 1 – Municipal waste treatment methods and waste per capita in the EU-28 (2014)



Data source: Eurostat ([env_wasmun](#)), 2016. Data for IE, EL and RO relate to 2013.

Circular economy: Overview



“While you are protecting the environment you can boost your economic development and provide new growth and new jobs” - Janez Potočnik (European Commissioner Environment)



Circular economy: Overview

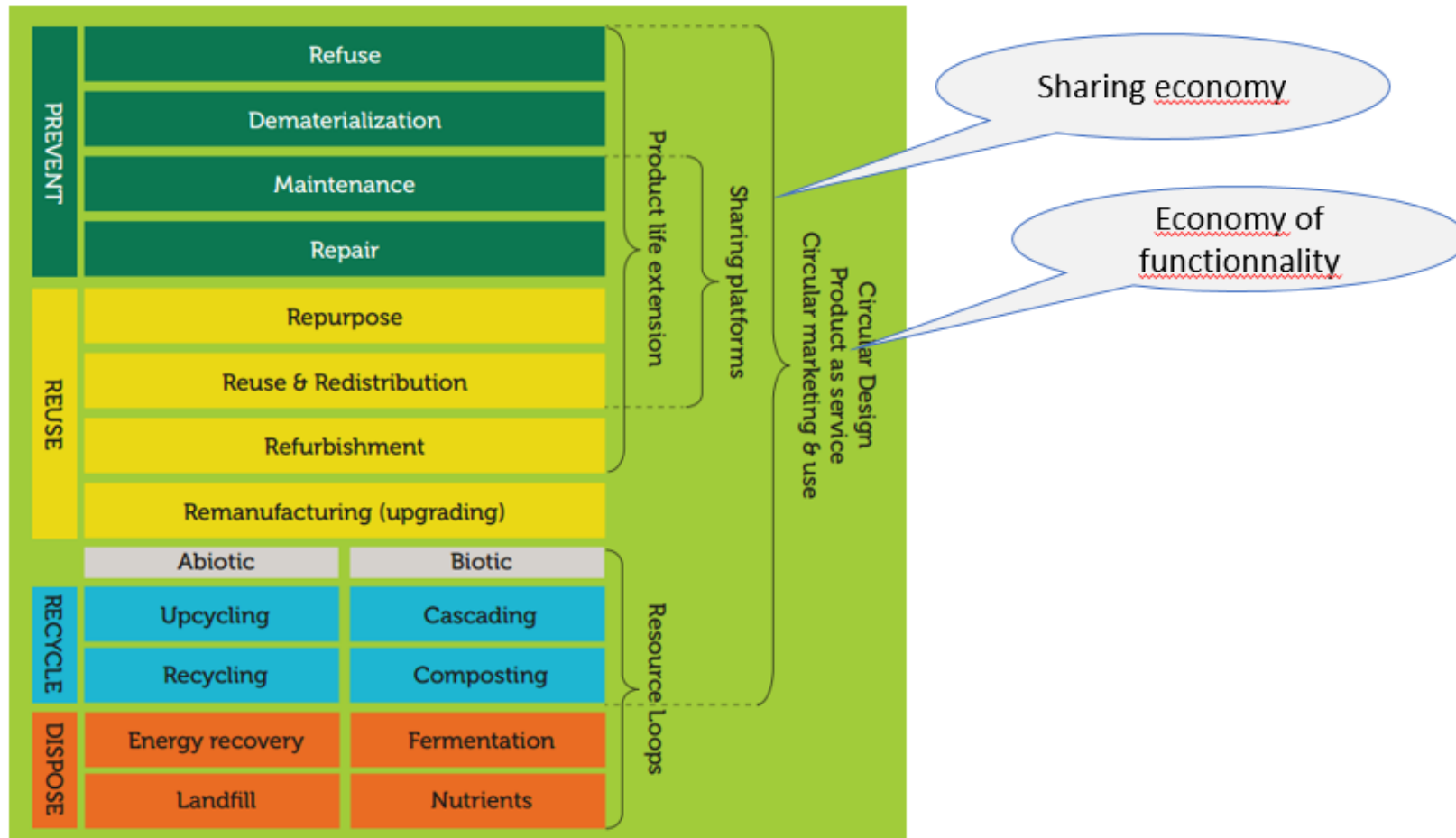
From waste to resources



“While you are protecting the environment you can boost your economic development and provide new growth and new jobs” - Janez Potočnik (European Commissioner Environment)

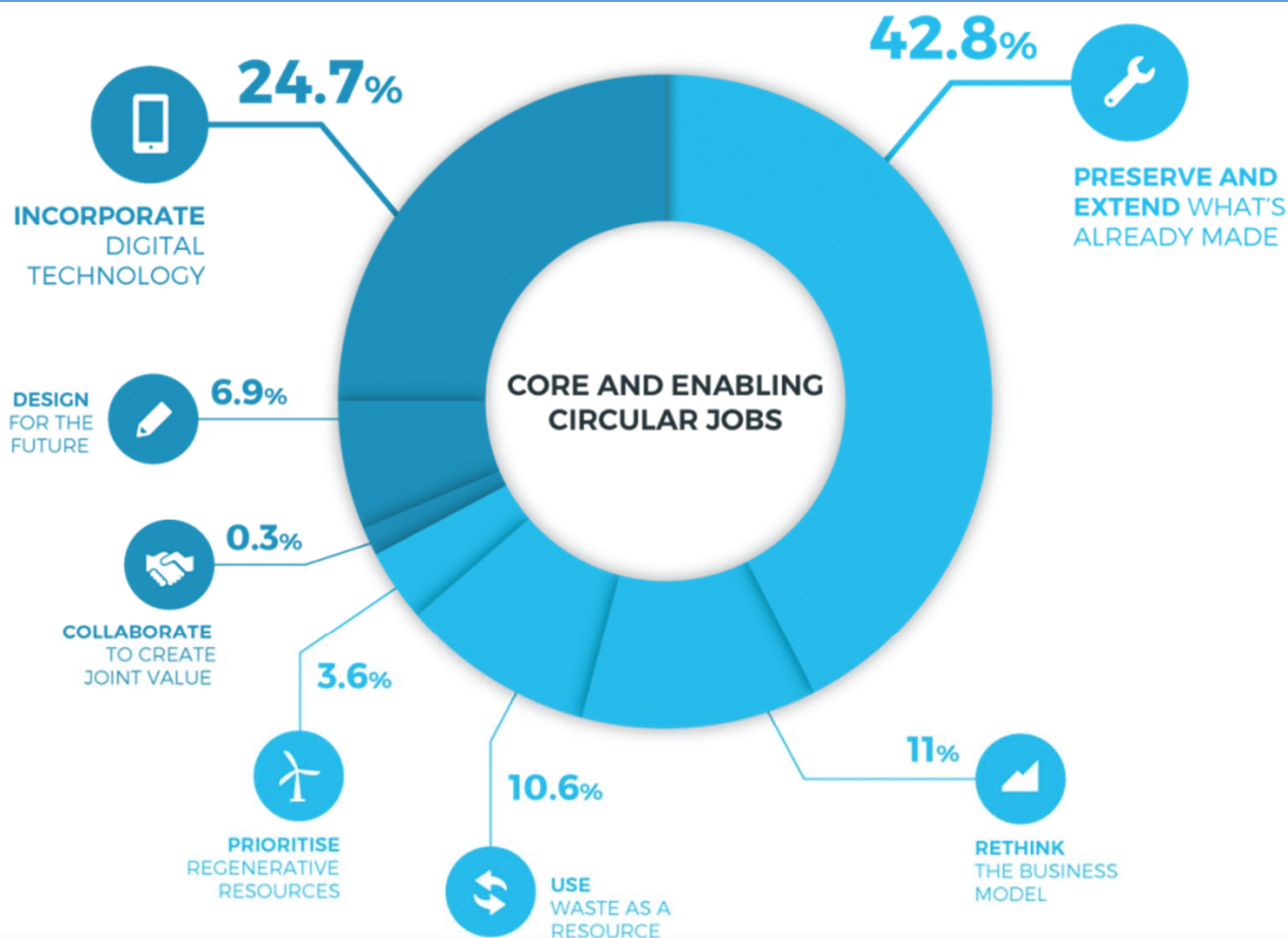


... And new business models

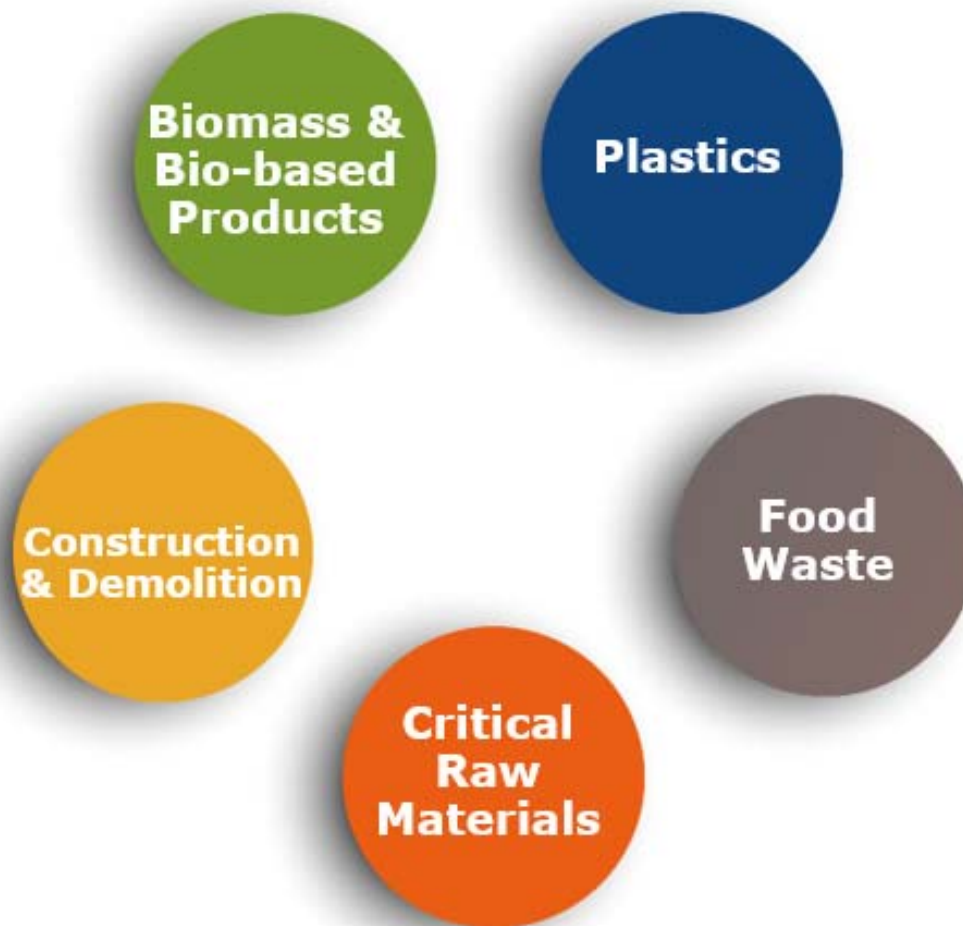


<http://www.govsgocircular.com/media/1354/governments-going-circular-dgz-feb2015.pdf>

... And new jobs potential



EU Priority sectors





EU Priority actions

**Promotion of
biobased
resources and
support for
innovation on
bioeconomy**

**Strategy on
Plastics and
reduction of
Marine Litter**

**Recovery of
valuable resources
and better
assessment of
environmental
performance of
buildings**

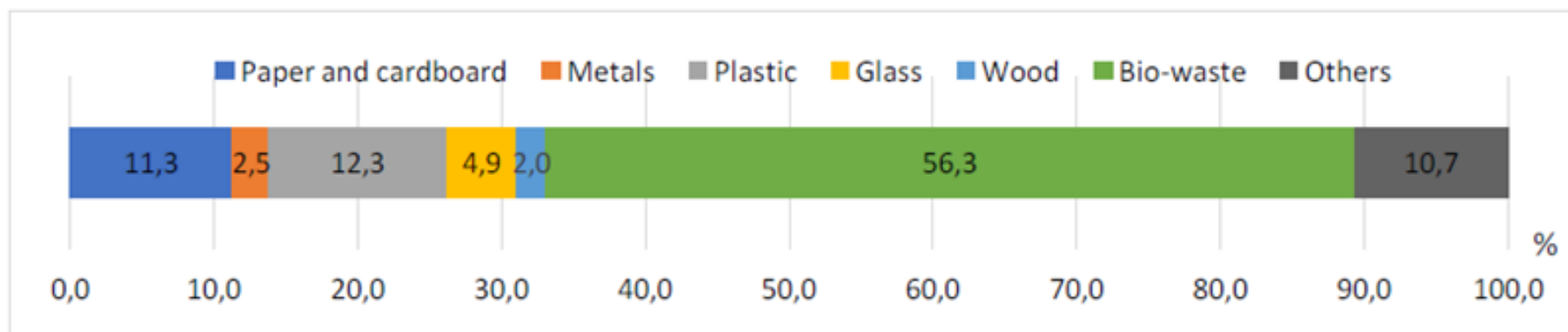
**Promotion of the
recovery of Critical
Raw Materials and
exchange of best
practices**

**Common
methodology to
measure Food
Waste**



A look at waste in Romania (1/2)

Figure 1: Composition of household waste and similar waste, 2014



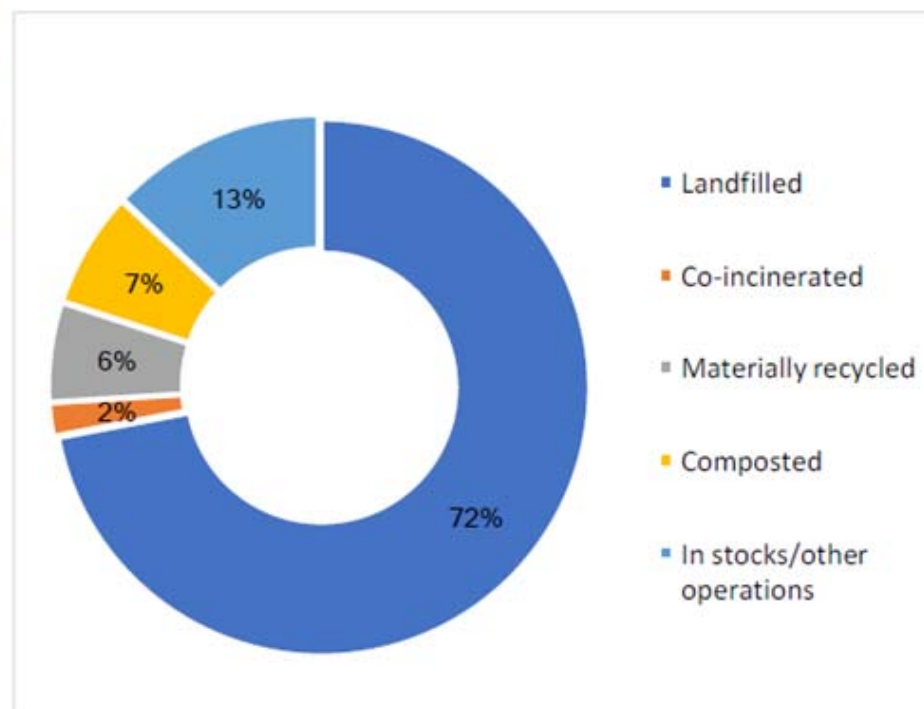
Source: The consultant's processing of data based on [ARSE Romania 2017]



A look at waste in Romania (2/2)

Figure 2: Waste management in Romania, 2014

Of the entire amount of generated municipal waste, around 87% was treated² - 72% was landfilled (D1), 2 % co-incinerated (R1), 6 % materially recycled (R2, R4-R11), and 7 % composted (R3, including home-composted) [EUROSTAT 2015].



Source: Consultant processing based on [EUROSTAT 2015]



CE legislation in Romania (1/2)

Main directions: National Waste Management Plan (NWMP)

Aims:

- (1) To encourage green investments;
- (2) Support initiatives which reward the consumers which reduce, reuse, recycle household waste;
- (3) Collaboration with the public administration authorities to increase the efficiency and the quality of the waste collected, to make it easier to recycle;
- (4) Collaboration with the public authorities and the business sector to improve waste collection systems;

Implemented by the local authorities.



CE legislation in Romania (2/2)

Legislation for:

Waste regime

Wastes from electrical and electronic equipment

Battery waste

Waste from used oils

Packaging waste

Waste storage

Local sanitation service

Amount of contributions to the Environmental Fund Administration
(according to the waste collection and recycling obligations)

**A document with the legislation for each of these directions
Is available.*





Circular economy: Local context



Source: Dreamstime.com

Bucharest: in numbers

2,287,347
inhabitants
(Eurostat, 2018)

Highest
GDP/inhabitant,
higher than the EU
avg. (Eurostat, 2018)

70.9% employees in
service; 10.5% in
construction, 9.4% in
manufacturing 8.1% in
public administration

128.000 HE students
(31%)
33 HE centers
(ZF, 2017)

25.0% of SMEs and
large enterprises of
the country
(INS, 2018)

Unemployment (15-74
years): 4,3% < 4.9%
(national average)
< 7,6% (EU-28 average)
(Eurostat, 2017)



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Job creation & workforce
attraction

Better development of the local
service economy and industry

Higher density of HEIs & RDI

Highly educated workforce

National transportation node

Higher availability of public utilities
& telecom infrastructure

16% st. corporate tax vs. 25,3 %
Eurozone avg. (The Economist)

Under-developed transportation
infrastructure: biking, train > traffic
congestion

Social exclusion and fragmentation

Bucharest & waste sources

Type of waste	2014	Projected for 2025
bio-waste	57,90%	55%
paper and cardboard	11,90%	13,50%
plastic	11,70%	10%
other	6,70%	6,80%
glass	5,10%	4,50%
metal	2,70%	3,50%
wood	1,00%	2,70%
textiles	under 1%	1,00%



Bucharest & waste generators

Household waste (400.000 tons)

Assimilable* waste (100.000 tons)

Street waste (50.000 tons)

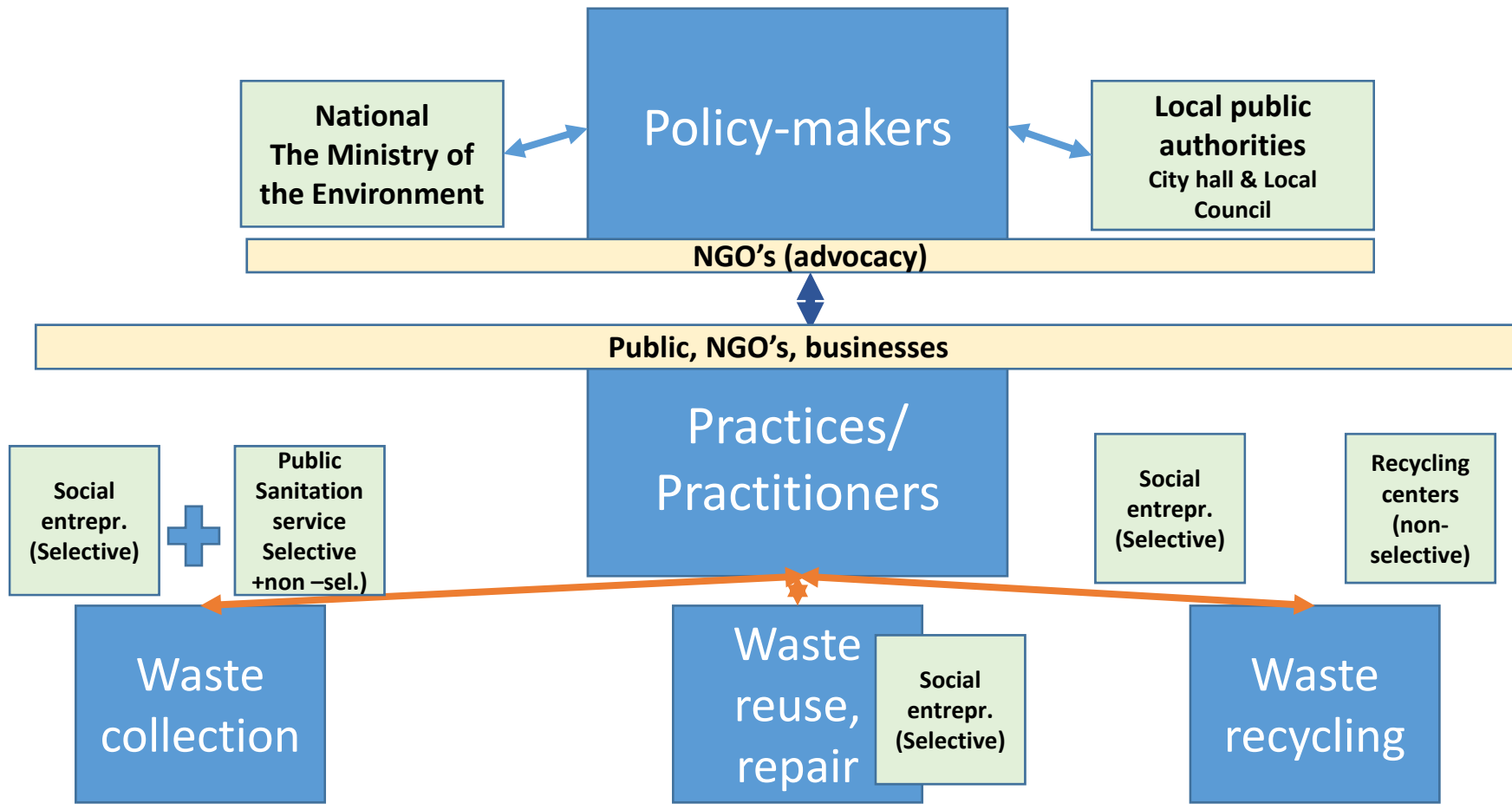
Gardens and parcs (10.000 tons)

Public open markets (10.000 tons)



**From industry, commerce, the public or administrative sector, which have composition and properties similar to household waste and which are collected, transported, processed and stored together with them).*

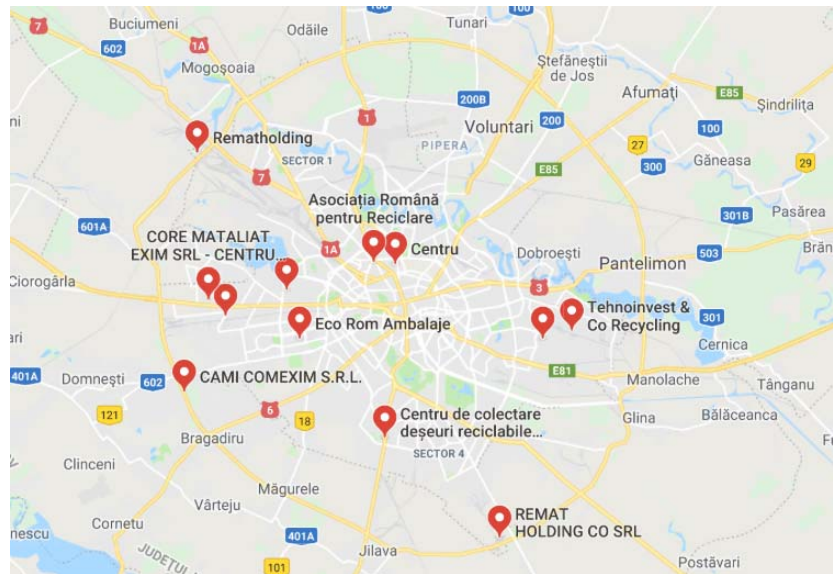
CE Stakeholders in Bucharest





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CE Stakeholders in Bucharest





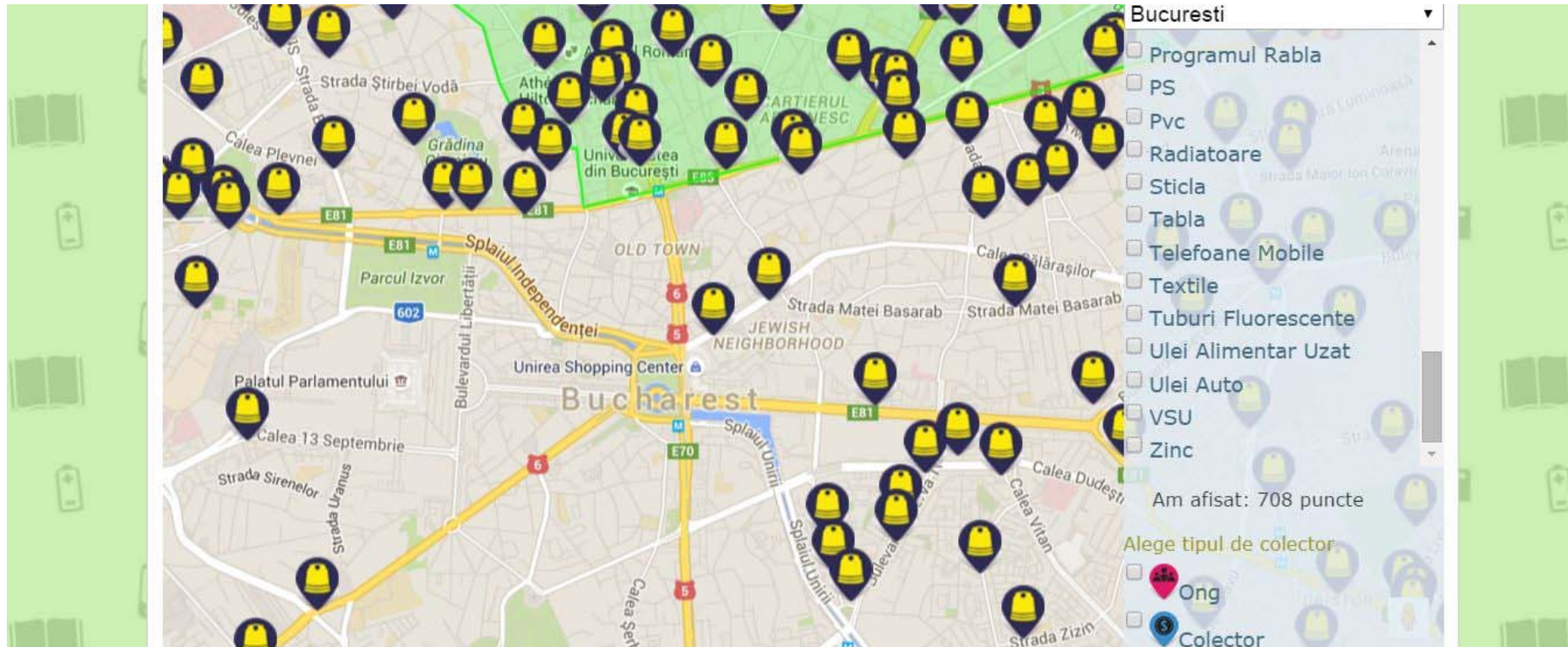
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Stakeholders' activities





The recycling map



The challenges for CE implementation

Pieces of legislation /incomplete legislation

“Tax per habitat“ - work in progress; 2.5eur/person/month

Zero starting Jan. 2020 if a household collects selectively 25% dry fraction of the amount of trash produced.

Ineffective distribution of the street selective-waste collection bins

Few private/company initiatives to collect own waste/post-consumer waste

„Invisible“ reuse and repair initiatives (Yard sales)

Monitoring on recycling activities/ How much is actually recycled and not incinerated or landfilled.

Consumption of new products when the old ones are still functional.

SE initiatives are not supported/no incentives to scale-up their activities.



ACT!

THINK CIRCULAR ECONOMY

reuse

HEALTHY EATING

create

collaborate

regenerate

food systems

reuse reuse

cleaner production

waste=energy

recycle

AGRICULTURE

collaborate

ACT!

WASTE

food

ACT!

food

innovation

BIOECONOMY

food technology

agriculture

resource efficiency

act sustainability

recycle