

Waste Management in European Union



European Union



- 28 Member States
- 500 million of residents
- Countries with different population and size
- EU enlargement process

European Institutions



Council of the European Union



European Parliament



European Council



European Commission



EUROPEAN CENTRAL BANK



EUROSYSTEM



EUROPEAN COURT OF AUDITORS



European Investment Bank



European Bank for Reconstruction and Development



European Environment Agency



Citizens, interest groups, experts: discuss, consult



Commission: makes formal proposal



Parliament and Council of Ministers: decide jointly



National or local authorities: implement



Commission and Court of Justice: monitor implementation

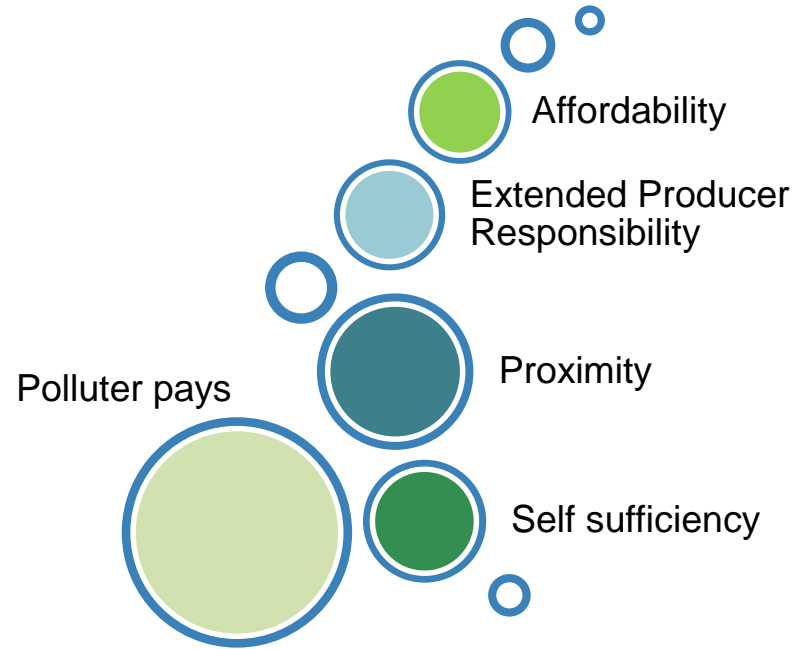
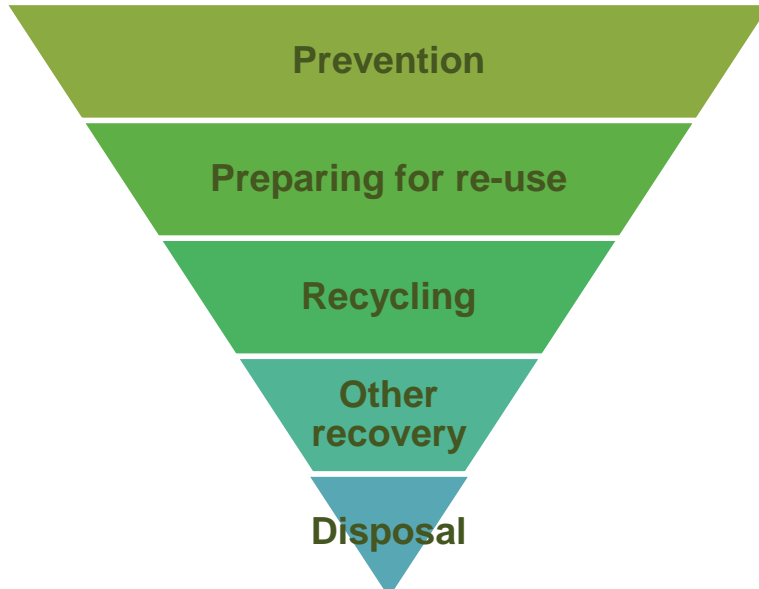
EU waste management legislation and policy





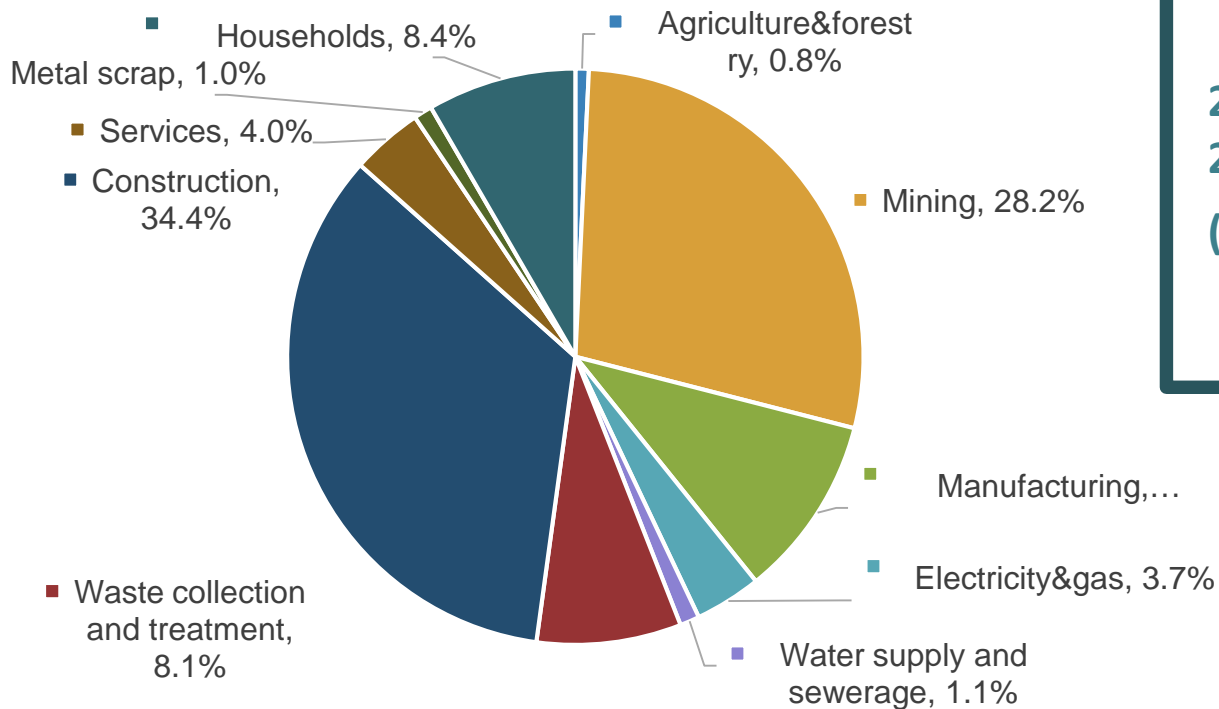
EU Waste Management Principles

Waste Hierarchy





Waste generation in EU



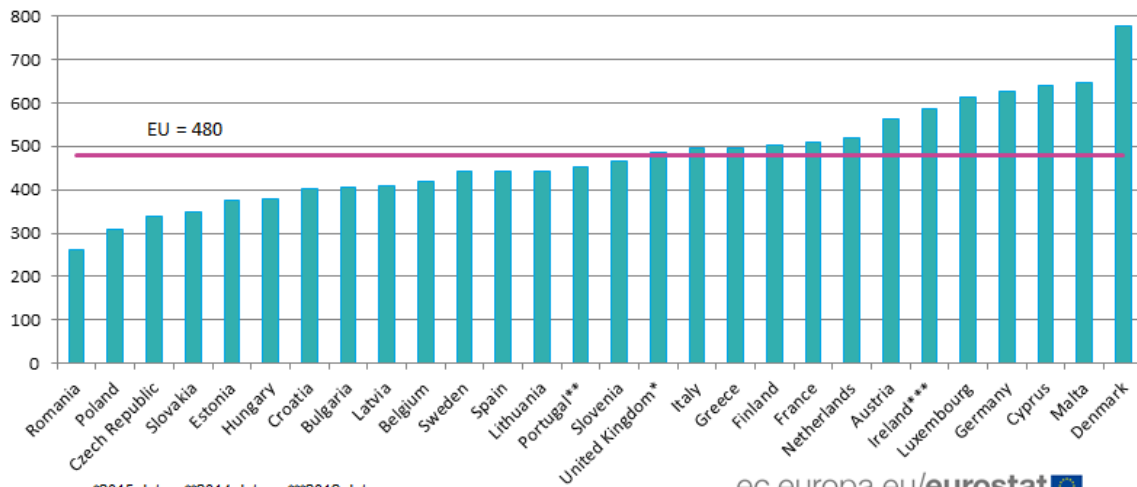
2 495 million tonnes in 2014

(5 tonnes per capita)



Waste generation in EU

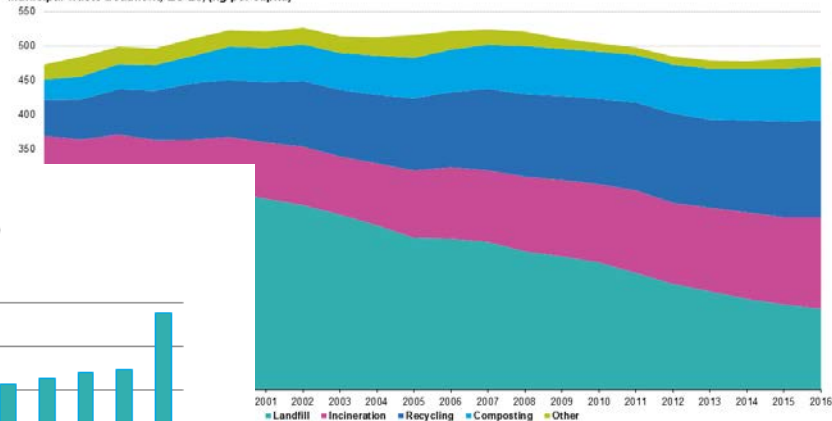
Municipal waste generation in the EU Member States, 2016 kg per person



*2015 data **2014 data ***2012 data

ec.europa.eu/eurostat

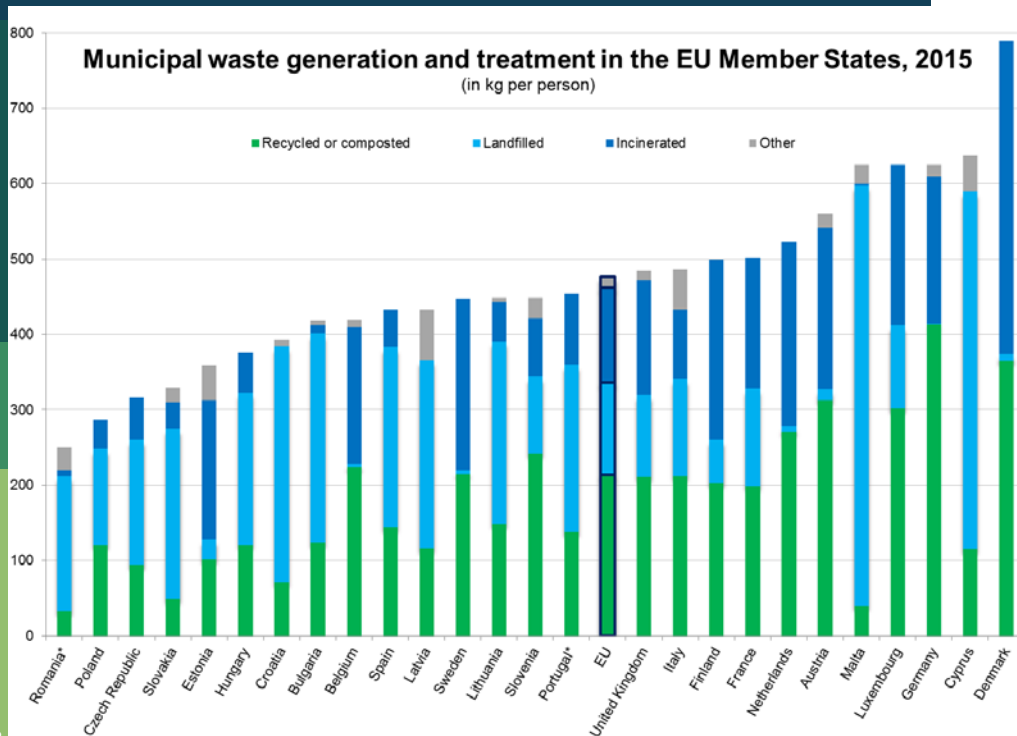
Municipal waste treatment, EU-28, (kg per capita)



europa



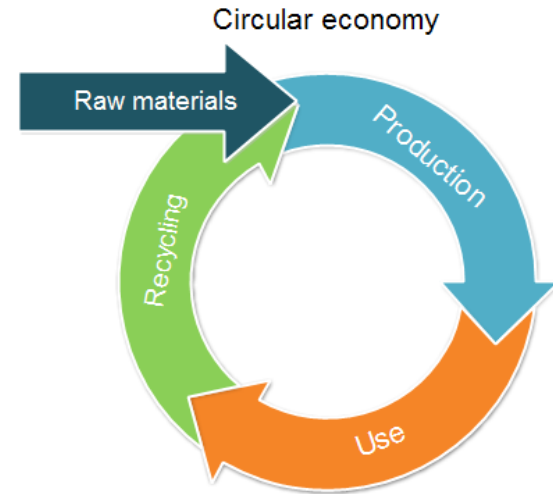
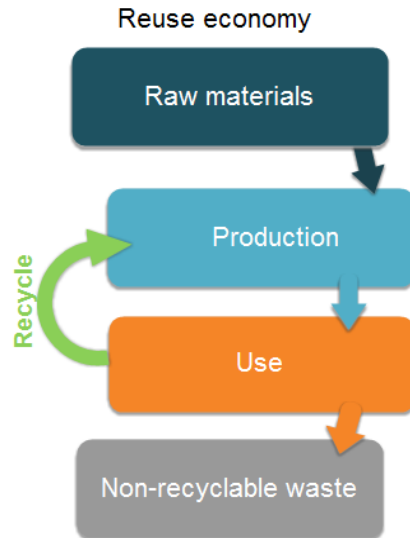
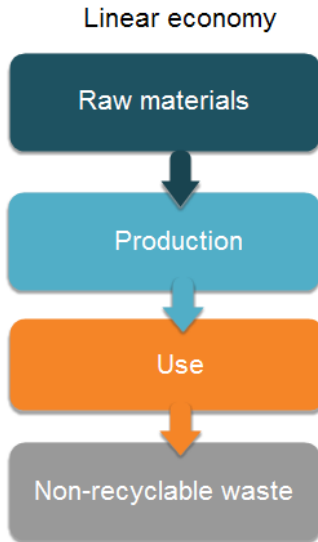
Municipal waste treatment



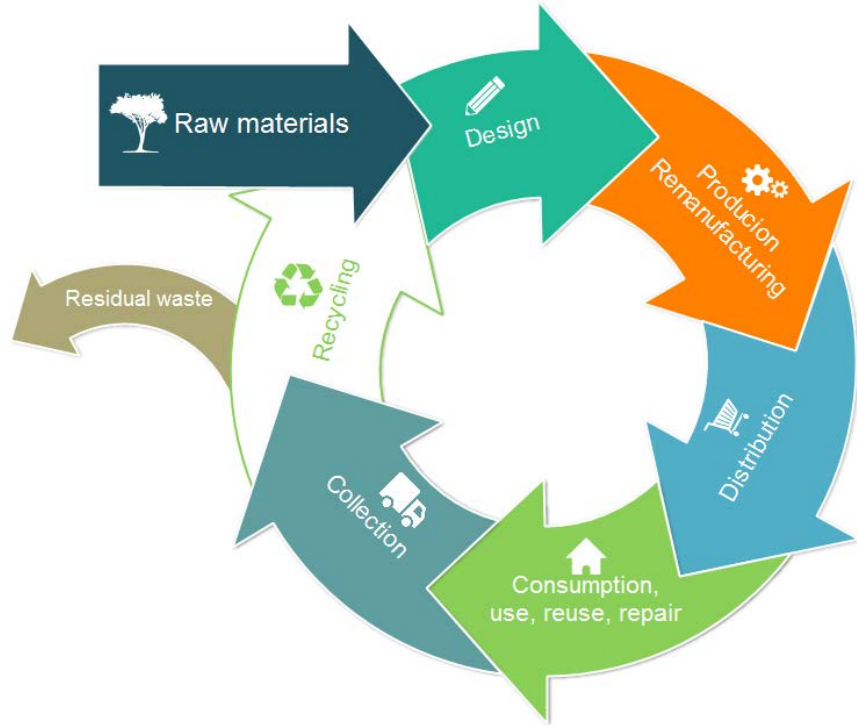
- Wide differences exist between Member States regarding the treatment of municipal waste.
- The share of recycling and composting among waste treatment methods ranges from 64 % in Germany to 12 % in Malta and Slovakia (the EU average is 44 %);
- seven Member States landfill less than 10 % of their municipal waste,
- eight Member States landfill over 70 % of their municipal waste (the EU average is 28 %).



From linear to circular economy



Moving towards Circular economy



- the value of products, materials and resources is maintained in the economy for as long as possible
- waste generation is minimized
- reduce, reuse, recycle as much as possible

Priority objectives and actions

Incentives to boost CE product design

Innovative and efficient production processes

Durability, reparability and recyclability of products –
Ecodesign Directive, EPR

Industrial symbiosis, remanufacturing

Coherent policy framework for products

Tools for SMEs

Increase the use of secondary raw materials,
recycled nutrients and water

Safely managed chemicals

Improve knowledge of material flows

Analysis of the interface between chemicals,
product, and waste legislation

EU-wide electronic system for cross-border
transfers of waste



Better labelling: EU Eco-label, Environmental
Footprint

New forms of consumption – collaborative
economy, digital platforms

Circular Economy criteria in Green Public
Procurement

EU waste hierarchy

Revised EU targets for recycling of
municipal waste and 75% for packaging
waste by 2030

New binding target to reduce landfill to a
maximum of 10% of total waste by 2030

Improve waste management, new
investments in recycling capacity, avoid
overcapacity in incineration and MBT



Opportunities

Economic growth

Increasing resource productivity by 30 % by 2030 would increase GDP by 0.8 % in the EU.

Growth of up to +7% of GDP

Enhanced security of supply

risks associated with the supply of raw materials, such as price volatility, availability and import dependency, would be mitigated using secondary raw materials.

New quality jobs

create two million new jobs in the EU
estimated 170,000 direct jobs created in waste management sector by 2035

Energy and cost savings

up to 600 billion EUR in savings – 8% of annual turnover for business in EU

Environmental impacts

Manufacturing that uses fewer resources would have positive impacts on the climate, marine littering, and biodiversity.

Reducing total annual Greenhouse Gas Emissions by 2 – 4 %

Encouraging Innovation

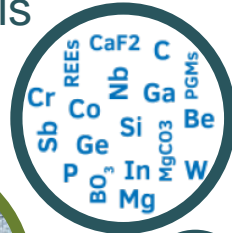


Priority sectors

Plastics



Critical Raw
Materials



Construction
& demolition



Biomass & bio-
based products



Food waste

EU Plastics Strategy

A new vision
for plastics
in Europe



What are you doing about plastic waste?



EU average



65%

separate waste
for recycling



34%

avoid single-use
goods like
cutlery & cups



24%

avoid buying
over-packaged
products



75%

use fewer
single-use
plastic bags

Source: Eurobarometer

#PlasticsStrategy



 **Provide consumers**
with durable and
sustainable products



Reduce
plastics'
toxicity



Create jobs



Protect
resources



Encourage
sorting, collection
and recycling



Decrease
plastic waste



Allow savings
for businesses



Turn plastic waste
into valuable
resource

**THE EU
GENERATED
15.88 MILLION
TONNES
OF PLASTIC PACKAGING
WASTE IN 2015**



EU average



31 kg/person
of plastic
packaging waste
was generated
(2014)



40%
of plastic packaging
waste was recycled
(2015)

**PUTTING AN END TO PLASTIC POLLUTION
THANKS TO THE CIRCULAR ECONOMY**



EU funding

European Structural and Investment Funds:

€35 billion allocated to 'Environment and resource-efficiency', including €5.5 billion for waste management: €2.1bn prevention and recycling; €2.8bn incineration and thermal treatment; €0.6bn hazardous waste management

Horizon 2020 - €650 m for research

European Investment Bank -

€24 billion financial support for research and innovation

Estimated funding needs

€40 billion until 2020 to fully implement current EU legislation (EIB).

€108 billion to create a fully efficient reuse and recycling system in the EU (Ellen Mac Arthur Foundation).

3% of GDP per year from now until 2030 to finance a transition towards a circular economy (Club of Rome).



Challenges

Finance

mass market development of radical innovations entails considerable transition costs (e.g. research and development, and asset investments, subsidy payments to promote new business models)

Missing skills

the workforce currently lacks technical skills. This is especially problematic for SMEs.

Missing economic tools

these include pricing systems that incorporate the full environmental cost; incentives for producers and recyclers to work together to improve performance of specific value chains; and markets for secondary raw materials.

Prevention

Steps need to be taken to tackle the lack of effective waste prevention measures and lack of appropriate data on waste prevention. This includes looking at the design, production and consumption of goods.

Limitations of recycling some materials cannot be recycled indefinitely, due to the build-up of impurities in recycled materials, such as metals, and glass, or the degradation of fibres which occurs when paper is made using repeatedly recycled material

Reuse vs recycling

The market share of reusable household packaging is decreasing. There are also potential conflicts between packaging reuse schemes and recycling schemes.

THANKS!

Any questions?

ndoychinov@epc-koc.com