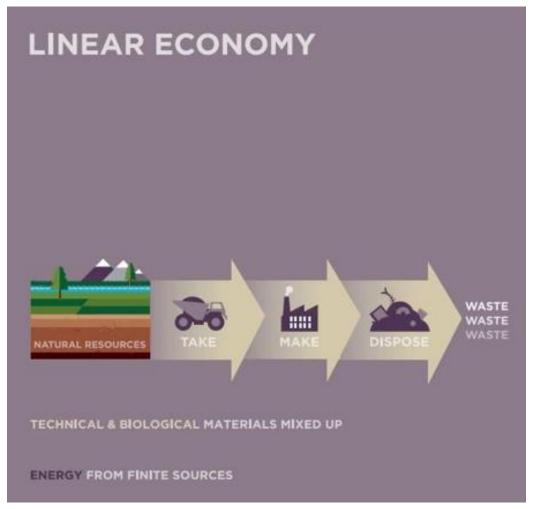


## Aims of waste legislation

- proper waste management
  - without adverse impacts on environment and human health
- reduce generation of waste
  - □ limit hazardous substances in waste
- **□** improve resource efficiency
  - waste as a resource





Circular Economy

https://www.youtube.com/watch?v=\_9mHi93n2Al https://www.ellenmacarthurfoundation.org/

## EU waste legislation: system

#### general framework

- □ Directive 2008/98/EC on waste (WFD)
- Regulation (EC) 1013/2006 on shipments of waste (WSR)

#### waste management operations

- □ Directive 99/31/EC on the landfill of waste
- □ Directive 2010/75/EU on industrial emissions: for waste incineration

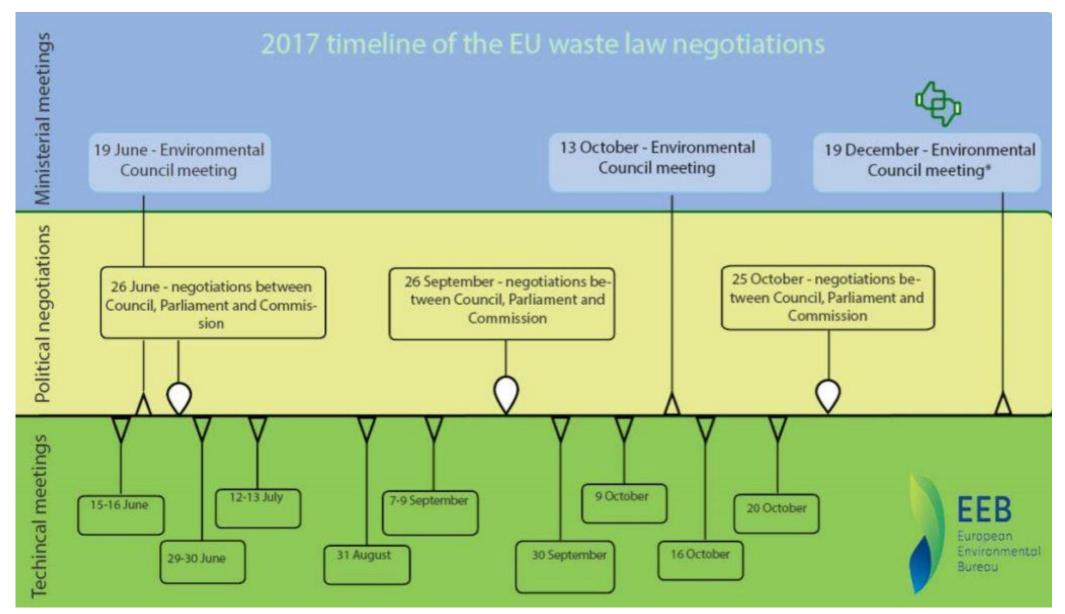
#### specific waste streams (e.g.)

- □ Directive 94/62/EC on packaging and packaging waste
- □ Directive 2000/53/EC on end-of-life vehicles (ELV)
- Directive 2006/66/EC on batteries and accumulators
- □ Directive 2012/19/EU on waste electrical and electronic equipment (WEEE)

### Future?

#### Circular economy package

- December 2015
- **the main elements of proposal** are:
  - increase of the preparing for re-use and recycling target for municipal waste to 65 % by 2030
  - gradual limitation of the landfilling of municipal waste to 10 % by 2030
  - simplification of the legal framework on by-products and end-of-waste status
  - + proposals of European Parliament
    - separate collection of textiles by 2020
    - reduce the amount of food waste to 50 % of the total amount of food waste produced in 2014



http://eeb.org/monitoring-eu-waste-law-negotiations/

#### The Who is supporting the Circular Economy?

Leaders and laggards we reveal where EU governments stand









#### Recycling

Supports 65% or higher recycling target for Municipal Solid Waste



#### Corporate responsibility Supports binding minimum

requirements for extended producer responsibility at EU level. including full cost coverage and modulated fees



#### Biowaste

Supports a mandatory separate collection of biowaste and/or a biowaste recycling target



#### Reuse

Supports specific targets for preparation for reuse of Municipal Solid Waste



#### Waste prevention

Supports waste prevention targets



#### Packaging

Supports 10% or higher packaging reuse target

Related country data

m Waste generation



**G**LT

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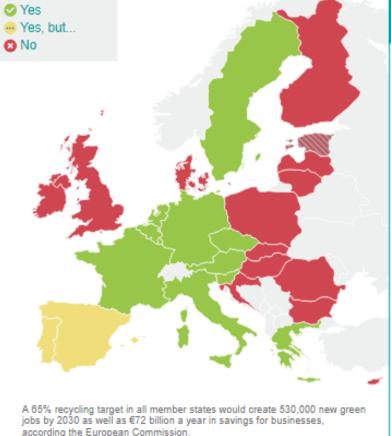
3 PL

· PT RO

SE SE

SI 🛇

SK UK



according the European Commission.

Data updated 15.05.2017 See a historical view

#### Czech Republic



#### Country position

Czech Republic fully supports a 65% recycling target by 2030.

#### Our assessment

Czech Republic has intensified recycling over the last decade, bringing its ambition to the negotiating table in Brussels.

#### Waste generation

316 (kg/capita per year)

600 800 1000

Recycling rate 30%

SourceEurostat, 2015

# Zero-waste bloggers: the millennials who can fit a year's worth of trash in a jar

These bloggers treasure taking a sleek, modern approach to reducing waste in their efforts to save the planet - but they face their fair share of criticism, too

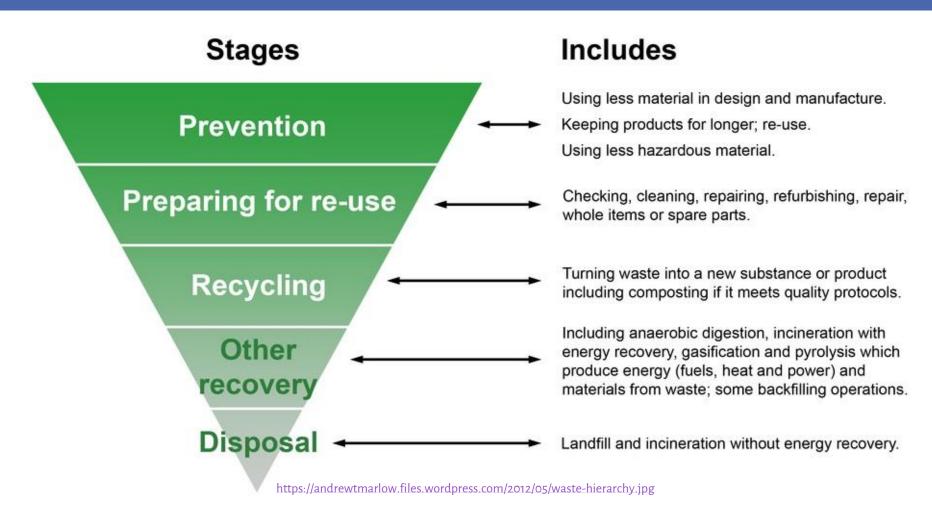
In pictures: how to produce nearly zero waste

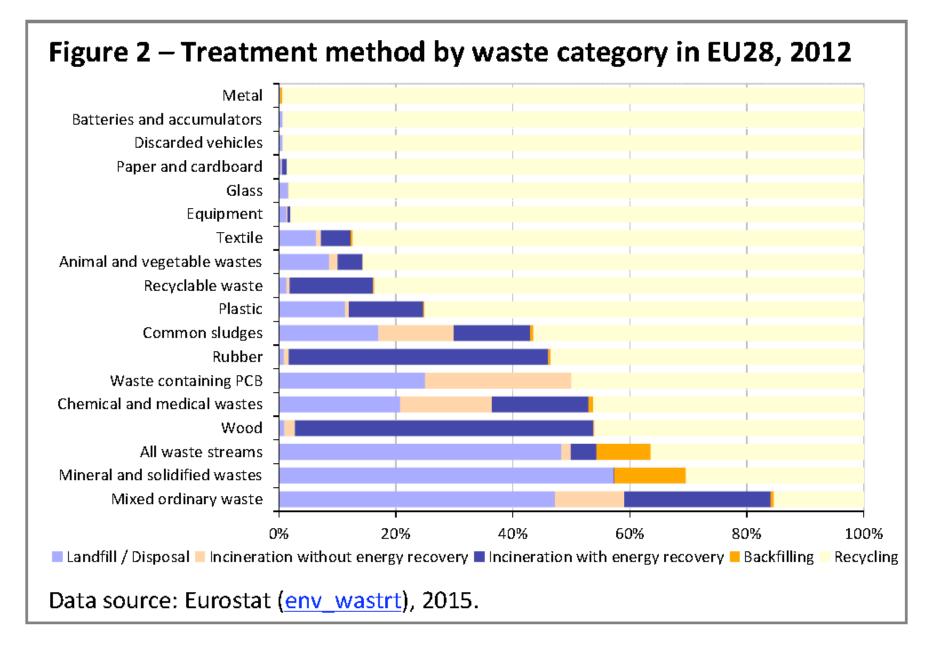


(1) Kathryn Kellogg, a 'zero-waste' practitioner, with a jar containing the total amount of landfill waste she's generated in the past year. Photograph: Andrew Burton for the Guardian

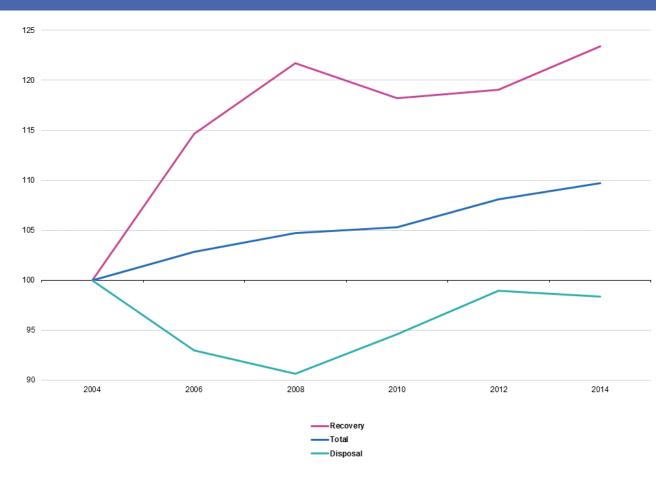
https://www.theguardian.com/environment/2016/apr/22/zero-waste-millennial-bloggers-trash-greenhouse-gas-emissions

## Waste management hierarchy





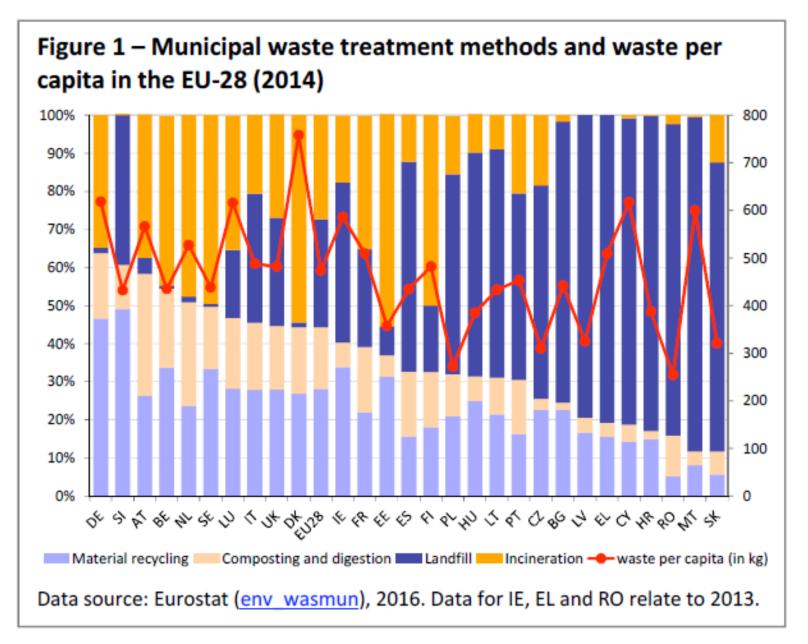
## Development of waste treatment



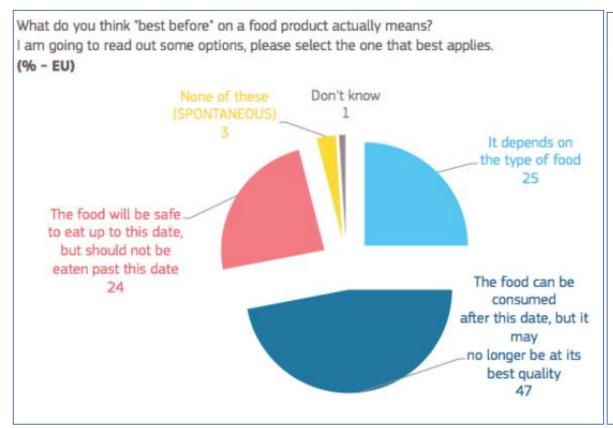
Source: Eurostat (online data code: env\_wastrt)

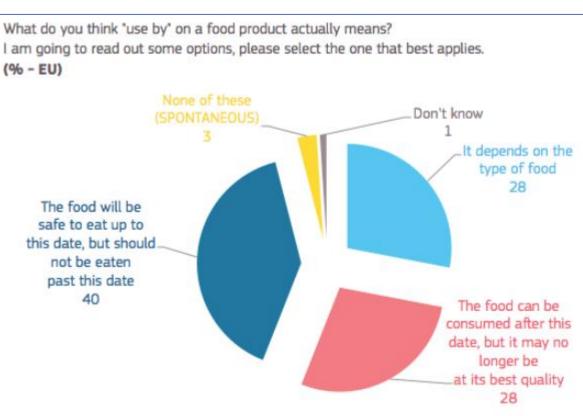
## Targets (e.g.)

- by 2016/2020 **biodegradable municipal waste going to landfills** must be reduced to 35 % of the total amount (by weight) of biodegradable municipal waste produced in 1995 (art. 5 Landfill directive)
- by 2020 the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50 % by weight (art. 11 WFD)



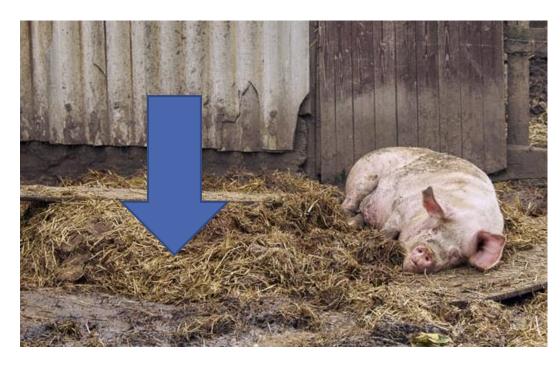
### Food waste





https://data.europa.eu/euodp/en/data/dataset/S2095\_425\_ENG

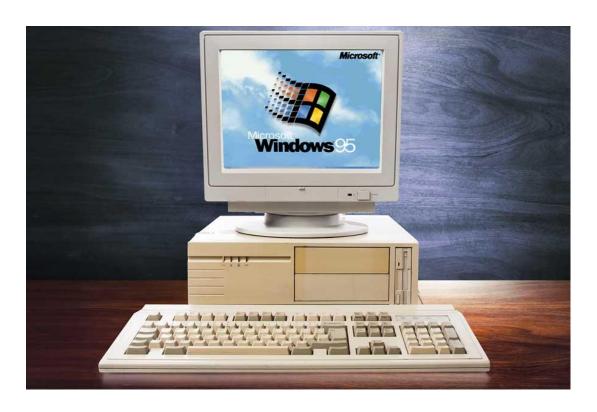
### Is it waste?





C-113/12. Donal Brady v. Environmental Protection Agency

### Is it waste?





Vessoso and Zanetti joined cases 206/88 and 207/88

### Definition of waste

- any object which the holder discards or intends or is required to discard
- □ these types of waste are **excluded**:
  - e.g. gaseous effluents emitted into the atmosphere
  - land (in situ) including unexcavated contaminated soil and buildings permanently connected with land (see case C-1/03 Van de Walle)
  - radioactive waste
- excluded to the extent that they are covered by other Community legislation
  - waste waters
  - waste from extractive industries (Directive 2006/21/EC)

## Definition of waste (2)

#### □ **European List of Waste**: Commission Decision 2000/532/EC

20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides

## Definition of waste: interpretation (3)

restrictive interpretation is forbidden - high level of protection

□ classification as 'waste' is to be inferred primarily from the holder's actions → only the holder of the products can prove that he intends not to discard those products (C-113/12; 38, 64)

 $\square$  it is necessary to **consider all circumstances**  $\rightarrow$  see page 20

## Definition of waste: indications (4)

- the object is a production residue
  - $\blacksquare$  produced intentionally  $\Rightarrow$  product
- substances which are capable of economic reutilization (recovery) are not excluded
- the object holder uses a type of treatment which is commonly used to disposal of waste
- the object holder accepts that it is waste
- **composition of the object** is not suitable for the use made of it
- the method of production indicates that the object is unwanted
- no danger to environment
- degree of likelihood that the object will be used

### Is it waste?





## By-products

- substance (object) is result from production process
  - but primary aim is not the production of the substance
- conditions:
  - the substance is produced as an integral part of a production process
  - the substance can be used directly without any further processing other than normal industrial practice
  - further use is lawful
    - i.e. the substance fulfils all relevant product, environmental and health protection requirements for the specific use
    - will not lead to overall adverse environmental or human health impact
  - further use of the substance is certain

### End-of-waste criteria

- waste has undergone a recovery and complies with specific criteria based on these conditions:
  - the substance is commonly used for specific purposes
  - a market or demand exists for such a substance
  - the substance fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products
  - the use of the substance will not lead to overall adverse environmental or human health impacts

## End-of-waste criteria (2)





Commission Regulation (EU) No 1179/2012 establishing criteria determining when glass cullet ceases to be waste Commission Regulation (EU) No 333/2011 establishing criteria determining when certain types of scrap metal cease to be waste http://www.tradevenvironment.eu/uploads/papers/JEEP\_009\_02\_deSadeleer-1.pdf

### Hazardous waste

- □ is mentioned in the List of waste (\*)
- displays one or more of the properties listed in Annex III of WFD;
  Regulation (EU) No 1357/2014
- ban on the mixing of hazardous waste with other waste or substances
- packaging and labelling requirements
- traceability from production to final destination
- □ C-358/11 (Lapin)

### Proper waste management

- MS shall take the necessary measures to ensure that waste management is carried out without endangering human health and the environment
- permits for waste treatment facilities
  - may be granted for a specified period
  - □ shall contain
    - the types and quantities of waste that may be treated
    - the method to be used for each type of operation
    - technical and any other requirements
    - after-care provisions
  - EIA, IPPC

## Landfilling of waste

- □ landfilling is **the worst waste management option** 
  - greenhouse gas loss of resources soil and water pollution
- landfill: "waste disposal site for the deposit of the waste onto or into land (i.e. underground)"
- □ landfill classes
  - for hazardous non-hazardous inert waste
- proper treatment
  - permit is necessary
  - technical conditions (requirements)

## Landfilling of waste (2)

- the following waste may not be deposit:
  - liquid waste, tyres, waste with certain properties (e.g. explosive, flammable), infectious clinical waste
- closing and after-care
  - closed after final on site inspection carried out by competent authority
  - operator remains responsible for maintenance and control of the site
    - as long as is required by the authority (at least 30 years)
    - adequate financial security

## Infringements: Waste: Commission refers Italy to Court over failure to rehabilitate or close down 44 landfills

Brussels, 17 May 2017

The European Commission is taking Italy to the Court of Justice of the EU for its failure to rehabilitate or close down 44 landfills, which represent a serious risk for human health and the environment.

> http://europa.eu/rapid/press-release\_IP-17-1283\_en.htm http://ec.europa.eu/environment/legal/law/press\_en.htm

### WMP&WPP

#### Waste management plans

- obligation of MS
- WMP shall cover the whole territory of the MS
- $\blacksquare$  evaluation at least every sixth year  $\Rightarrow$  review

#### Waste prevention programmes

- separate document, integral part of WMP or other environmental policy programme
- description and evaluation of existing prevention measures
  - see Annex IV WFD: examples of waste prevention measures

#### **Economic instruments**

- Art. 14 WFD "In accordance with the polluter-pays principle, the costs of waste management shall be borne by the original waste producer or by the current or previous waste holders."
- broad discretion by MS
  - landfilling fee
  - □ incineration fee
  - local fee for handling of household waste
    - https://www.interregeurope.eu/news-and-events/news/550/pay-as-you-throw-schemes-increase-recycling-rates/
  - payment for recovery and recycling of packaging waste

## Extended producer liability

- duties of producers of products from which the waste came
  - an acceptance of returned products
  - subsequent management of the waste and financial responsibility for such activities
    - costs of waste management could be borne partly or wholly by the producer of the product
  - e.g. packaging waste, end of life vehicles, batteries, electric and electronic equipment

## Packaging waste

- packaging: "all products made of any materials of any nature to be used for the containment, protection, handling, delivery and presentation of goods"
- technical requirements
  - standards concentration levels of heavy metals
- recycling targets for materials contained in packaging waste
  - collection systems producer responsibility organisations
  - separate collection shall be set up for at least the following: paper, metal, plastic and glass (art. 11 WFD)
  - obligation to offer re-usable packaging



100% 100% X 90% 90% X 80% 80% 70% 70% X 60% 60% 50% 50% 40% 40% 30% 30% 20% 20% 10% 10% 0% 4 4 8 6 6 3 4 4 W dy 1/8 4 St OF 12 \$ 'n 80 5 **<** ⟨v 4 ❖

▲ Plastic packaging

Figure 2 – Recycling rates for packaging waste by material in the EU-28 (2013)

Data source: Eurostat (env waspac), 2016. Data for Romania relate to 2012.

Paper and cardboard packaging

Wooden packaging

× Metallic packaging

Glass packaging

All packaging

# England's plastic bag usage drops 85% since 5p charge introduced

Number of single-use bags handed out dropped to 500m in first six months since charge, compared with 7bn the previous year



Plastic bag floating underwater at Pulau Bunaken, Indonesia. Around 8m tonnes of plastic flows into the world's oceans each year. Photograph: Paul Kennedy/Getty Images

https://www.theguardian.com/environment/2016/jul/30/england-plastic-bag-usage-drops-85-per-cent-since-5p-charged-introduced

## Plastic carrier bags

- directive (EU) 2015/720 of 29 April 2015
  - □ CZ: Act no. 149/2017 Coll. since 1/1/2018
  - however: http://www.balkaneu.com/commission-requests-croatia-and-romania-to-reduce-plastic-bags
- aim: sustained reduction in the consumption of lightweight plastic
  carrier bags (wall thickness below 50 micron)
  - annual consumption level does not exceed 90 lightweight plastic carrier bags per person by 31 December 2019
  - or by 31 December 2018, lightweight plastic carrier bags are not provided free of charge at the point of sale of goods

## Shipment of waste

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- Basel Ban: no export of hazardous waste and waste for disposal to non-OECD countries
- information procedure
  - waste has to be accompanied by documents signed by exporter and recovery facility
  - contract
- notification procedure

## Notification procedure

- all waste for disposal
  - including mixed municipal waste collected from private households
- waste listed in certain Annexes
- notification through competent authority of dispatch
- prior consent of the authority of destination
  - reasoned objection on the following reasons
    - disposal (art. 11) bad record of notifier, such shipments would result in national waste having to be disposed; proximity principle
    - recovery (art. 12)

## Proximity principle

- C-292/12 (Ragn-Sells AS)
- $\Box$  (63) Accordingly, in the case of waste destined for disposal operations and mixed municipal waste collected from private households and, as applicable, other producers, a Member State may confer on local authorities, on the geographical scale it deems appropriate, powers to manage the waste produced on their territory in order to ensure compliance with its obligations under Article 16 of Directive 2008/98. Those authorities may, as part of the powers conferred upon them, provide that those types of waste will be treated in the nearest appropriate facility.

#### Other issues

#### enforcement

- penalties
- take-back obligation (art. 22-25)
  - the shipment is illegal or cannot be completed
- financial guarantee
- checks on shipment (art. 50)
  - during the shipment at frontiers at the destination

#### shipment within MS

appropriate system for supervision and control of shipment of waste