

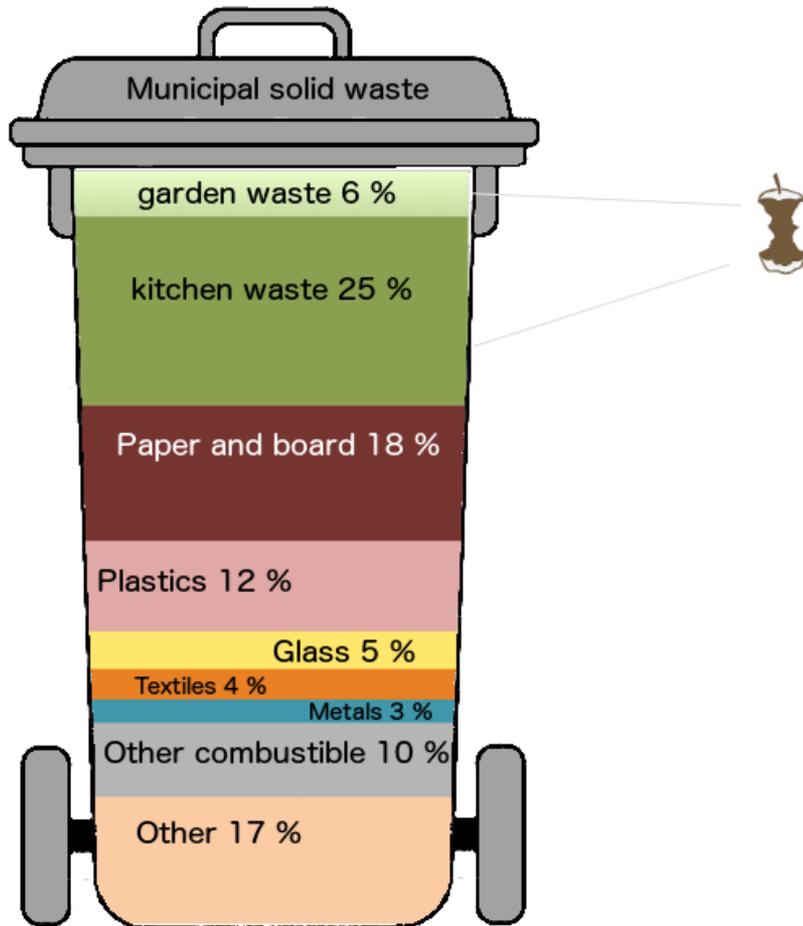


Rijkswaterstaat
Ministry of Infrastructure and the
Environment

European recycling guidelines and management of organic waste at landfills

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Acodal, Expo Residuos
Bogota July 9th 2014



Content



EU Policy framework

- waste hierarchy
- targets and ongoing target review
- roadmap on resource efficiency

2. Waste Management Planning

3. Landfill directive

4. EU- legislation Biowaste



Waste prevention and Recycling Strategy

Framework Legislation

Waste Framework Directive

Waste Shipment Regulation

Waste Treatment Operations

Incineration
(Energy Recovery)

Landfill Directive

Recycling standards
(under new WFD)

Waste Streams

Sewage
Sludge

Batteries
Accumulators

Packaging
Packaging
Waste

Mining
Waste

End-of-Life
Vehicles

Electrical &
Electronic
Equipment

PCBs, PCTs

Hazardous
Substances in
WEEE



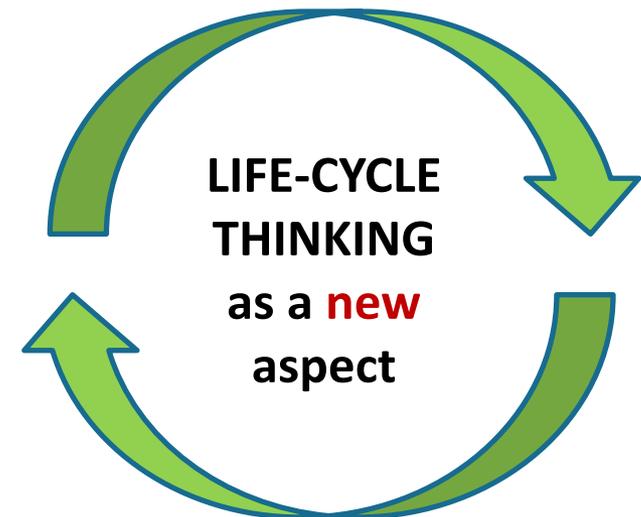
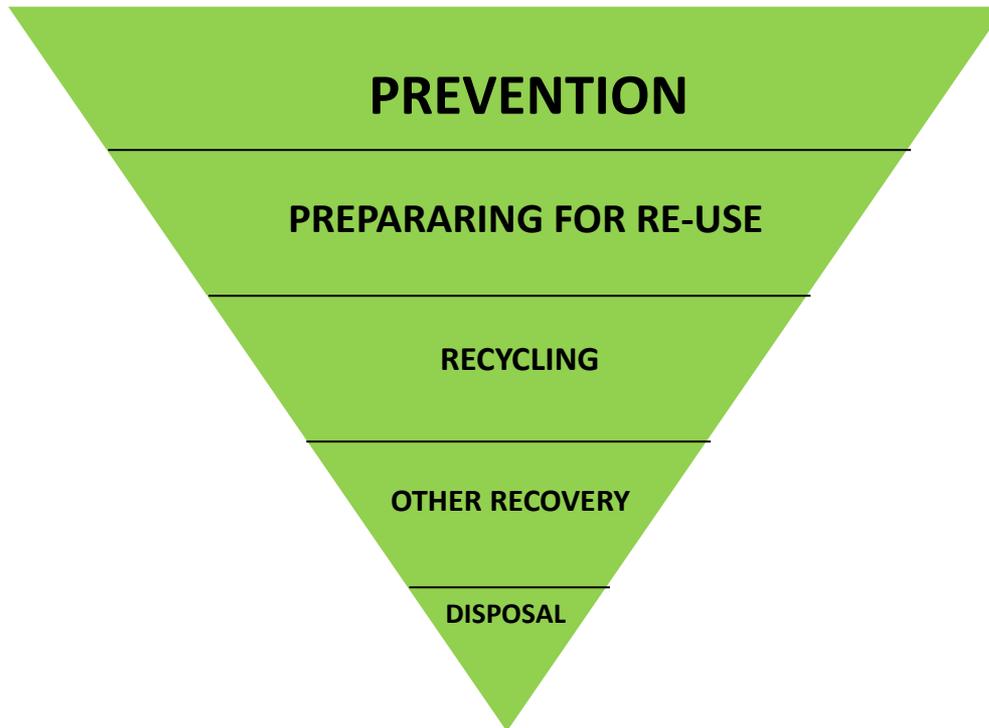
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environment

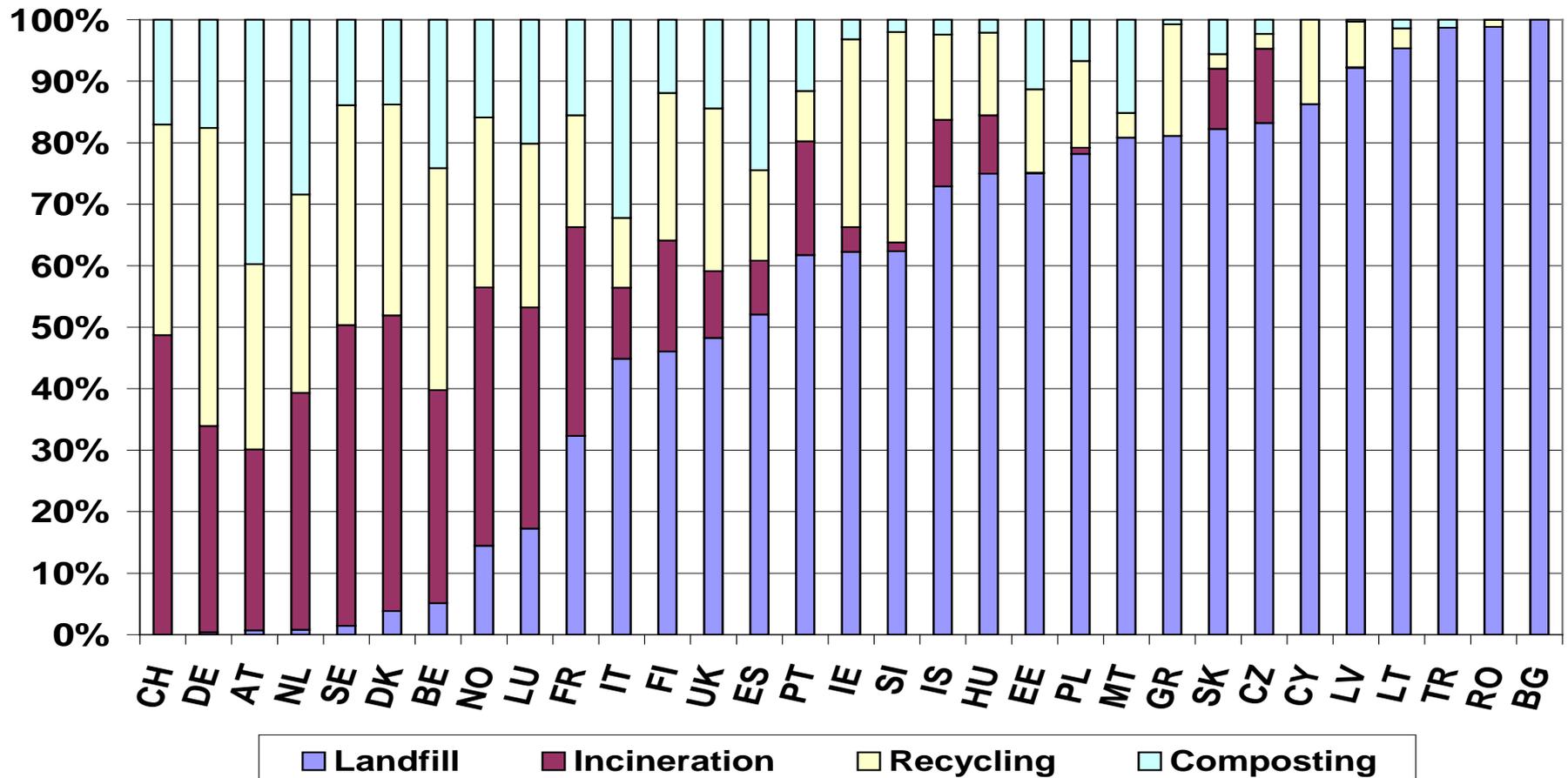
The new waste hierarchy (Art. 4)

The three-stage –hierarchy of waste management options has been expanded to a **five-stage hierarchy**:



MS shall take measures to encourage the options that deliver the best overall environmental outcome. This may **require specific waste streams departing from the hierarchy** where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste (Art. 4(2))

Statistics on Municipal Solid Waste



Source: Eurostat 2010

SOME TARGETS IN EU WASTE LEGISLATION



		min recovery	min recycling	collection rate
Packaging	2008	60%	55%	
Cars	2015	95%	85%	100%
Electronics	2006 2016	70%	50%	min 4 kg per inhabitant per year 85% of WEEE arising
Batteries	2011		50% to 75% (efficiency)	
	2012			25%
	2016			45%
Tyres	2006	0 landfill of tyres		
Biowaste diverted from landfills	2006	reduction to 75% of the 1995 level		
	2009	reduction to 50% of the 1995 level		
	2016	reduction to 35% of the 1995 level		
New targets	2015	Separate collection: at least paper/metal/plastic/glass		
(WFD)	2020	50% recycling household waste		
	2020	70% construction and demolition waste re-use/recovery and recycling		

Roadmap on Resource Efficiency



2020 aspirational (and inspirational) objectives

- Full implementation of the EU waste lex
- Waste generation per capita in decline
- Recycling and reuse are economically attractive
- Energy recovery limited to non-recyclable materials
- Landfilling virtually eliminated

ONLY ONE EARTH



On-going Target Review



Objective 'translate' Roadmap and 7th EAP aspirational targets into legislation

Scope Review Directives on Waste, Landfill, and Packaging

Timing Proposal by 2014 – stakeholder consultation in 2013 – IA beginning of 2014

Binding Targets?



- **Prevention/Re-use** – opportunity for a quantitative target?
- **Recycling**
 - ✓ Increase the 50% MSW and 70 % C & D targets?
 - ✓ Increase the existing packaging targets?
 - ✓ New recycling targets for other waste streams – which ones?
- **Energy recovery** limited to non-recyclable waste?
- **Disposal** – "zero" landfilling/incineration of untreated waste



Waste management plans (Art. 28) – Voluntary elements



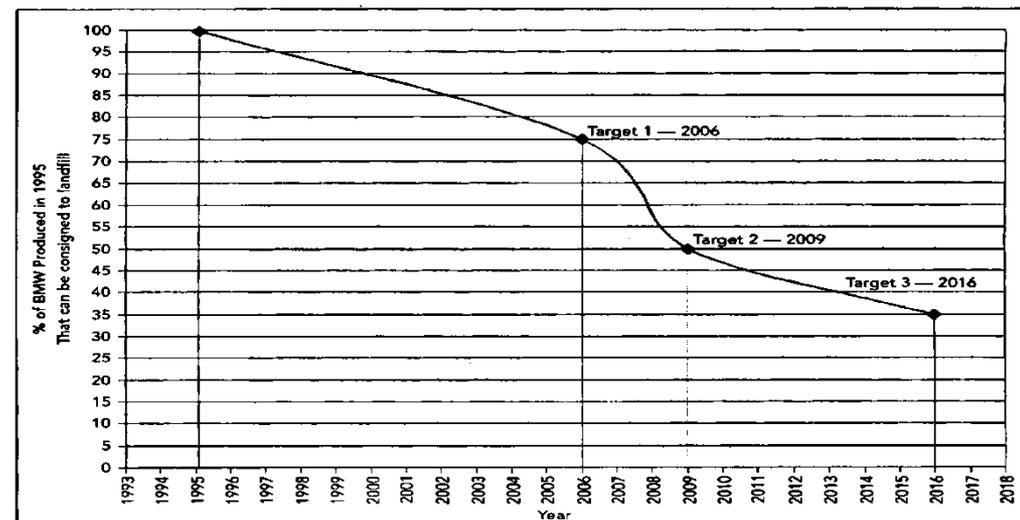
- **organisational aspects** related to waste management
(including description of allocation of responsibilities between public and private actors)
- **evaluation of usefulness** and **suitability** of the use of economic and other instruments in tackling waste problems
(taking into account need to maintain the smooth functioning of the internal market)
- use of **awareness campaigns** and **information provision** directed at the general public or at a specific set of consumers
- **historical contaminated waste disposal** sites measures for their rehabilitation



Landfill directive

- Aim: reduction negative effects of land filling
- Kyoto protocol: reduction of CH4 emission
- Reduction land filling biological degradable waste (more composting, incineration, biogas production)
- Reference 1995: targets in 2010: 75%; in 2013: 50%; 2020: 35% biological degradable municipal waste to landfills
- Landfill ban of liquid, corrosive, oxidative and specific hospital waste, tires (2003/2006)
- Different type of landfills for different categories of waste
- Landfill ban untreated waste
- Full cost recovery of tariffs
- 3 categories of landfills: hazardous, non-hazardous and inert.

Landfill directive targets



Bio-waste in Europe



- 118 to 138 mt of bio-waste generated every year
 - about 88 mt are municipal waste
 - expected to increase about 10%
- Still 40% landfilling of bio-waste in the EU
- waste treatment for source separated bio-waste only in some countries
- Potential financial benefits of 1,5 up to 7 billion Euro by 2020
 - depending on the ambition of the set objectives

(Source: Commission's Communication COM(2010)235 "on future steps in bio-waste management in the European Union", 2010)

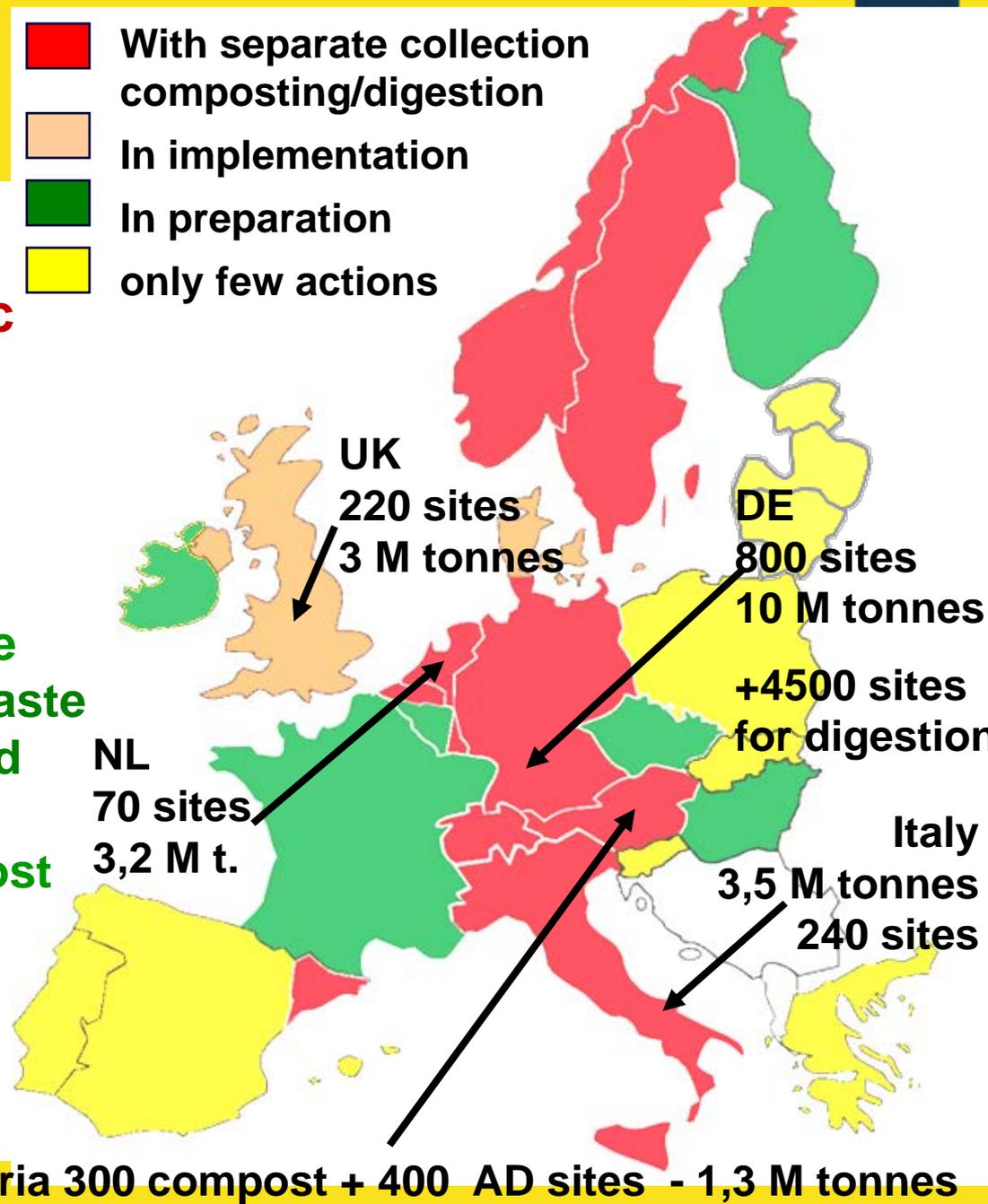


- With separate collection composting/digestion
- In implementation
- In preparation
- only few actions

Potential of organic waste in EU27:
115 M tonnes / year

Recycling in 2008:
 15 M tonnes biowaste
 11 M tonnes green waste
 4.5 M tonnes digested
 = 15 M tonnes compost

Only 1/4 of the potential - still a long way to go





- **European framework for bio-waste**
- Art. 3 Waste Framework Directive
Biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants (not: forestry agricultural residues, manure, sewage sludge)
- Art. 22 Waste Framework Directive
Member States **shall** take measures (...) to encourage:
 - (a) the separate collection of bio-waste (...)
 - (b) the treatment of bio-waste (...)
 - (c) the use of environmentally safe materials produced from bio-waste.

Conclusion: Setting the right framework in the EU



- Product status for compost and digestate
- Approach 2: Product criteria within the fertiliser regulation
- DG ENTR aims at
 - **harmonising** the EU market for fertilisers
 - including **organic fertilisers, soil improvers and growing media**
 - combining product requirements with a **limited negative list of substances** that may not be used to produce fertiliser with a product status

Conclusion: Setting the right framework in the EU



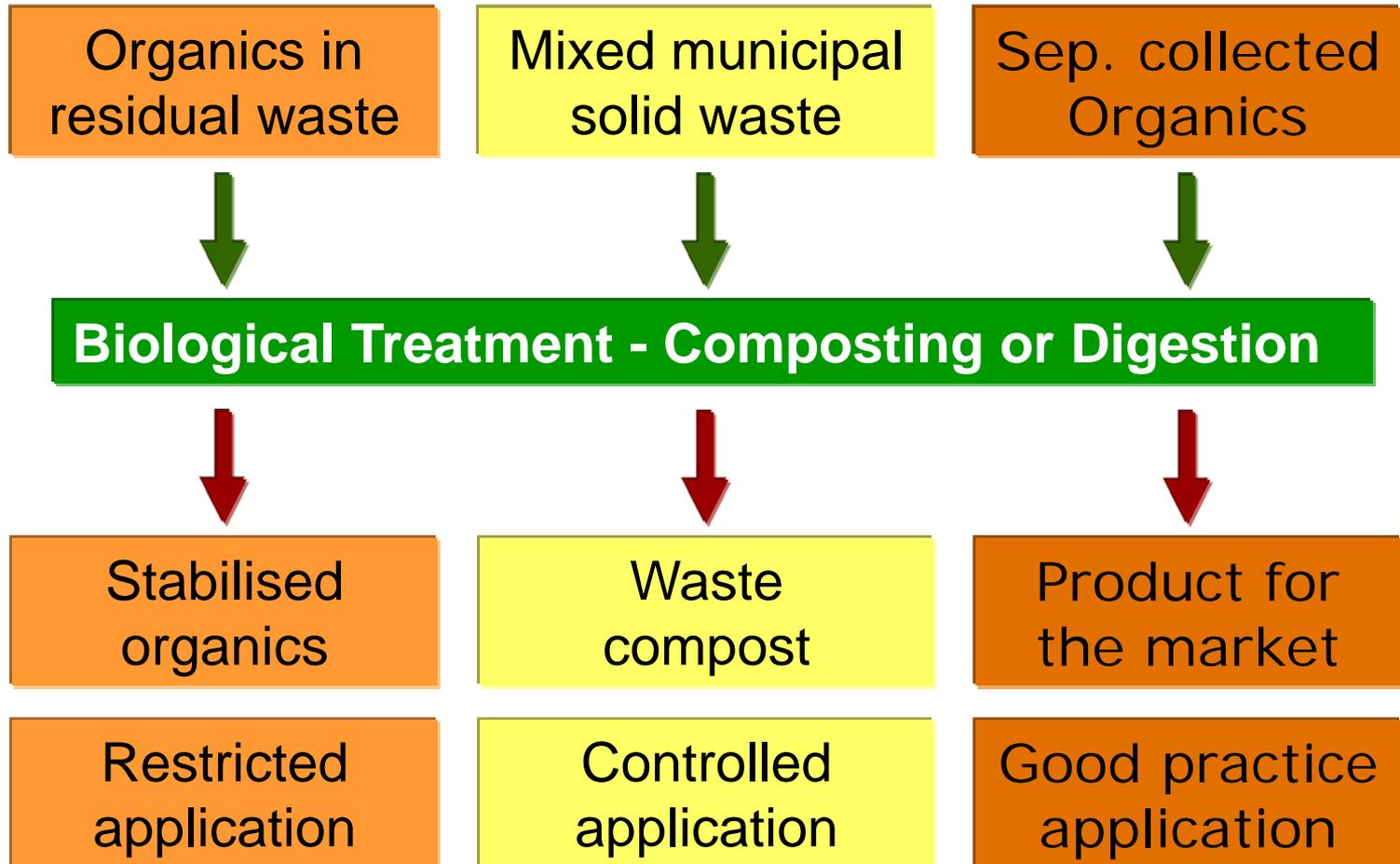
- **Managing bio-waste as a resource at European level:**
- **pre-treatment obligation** in the EU
 - to ban the landfilling for untreated municipal waste
- **complete separate bio-waste collection**
 - from private households and businesses
 - to direct the stream towards a high-quality treatment
- **criteria for the product status** of compost and digestate
 - to ensure high quality standards
- **EU-funding** aligned to the five-step **waste hierarchy**

Key policy drivers in Europe



- **EC Landfill Directive** which requires up to 65% diversion of organics in waste from landfilling
- **EC Soil Protection Strategy/Soil Biodiversity**
- **EC Climate Change Programme**
- **EU Renewable Energy/Biomass Targets**
- Additional drivers
 - - Recycling of valuable resources e.g. Plant nutrients (Phosphorus!!!, Nitrogen) and organic matter for soils)
 - - Peat replacement
 - - Cost savings delivered by waste/landfill taxes

Use of recycled organics on soils in EU



Thank you for listening!

