



Best Practice and Future targets for Plastics Recycling and Recovery

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PlasticsEurope
Association of Plastic Manufacturers

- 1. Who is PlasticsEurope**
- 2. Why do we use plastics?**
- 3. Resource Efficiency.....and plastics**
- 4. How to boost recycling and recovery of plastics**
- 5. Summary**

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The plastics industry in Europe

- employ 1.6 million people in ~50.000 companies
- generate 300 billion € turnover/year



PlasticsEurope is the trade organisation for the European plastics producers. We:

- have ~100 members making 90% of all plastics in Europe
- have offices in 6 biggest countries and Brussels with ~ 55 staff
- communicate facts about plastics and deal with the issues

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What benefits do plastics bring?

- Contribute to resource efficiency
 - Less resources to deliver daily needs
 - Minimise wastage of products e.g. food and water



- Contribute to climate protection
 - Light weighting transport
 - Insulation
 - Enabling renewable energy sources



- Bring quality of life and serve our daily needs better
 - Better life: medical devices, artificial prosthesis..
 - More convenient: packaging, contact lenses,
 - More enjoyable: tennis racket, down hill ski...



Must take better care of plastics after the use phase

Take better care means.....

....to litter plastics – and other materials – responsibly



Take better care means.....

....to waste **NO** plastics on landfills





Sustainability higher up the societal agenda



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Why is resource efficiency so important?

- We use 1.3 times our earth's capacity – and continue increasing...
- How will we secure energy supply going forward?
 All sources and efficiency measures must be explored
- How will we feed a population growing from 7 billion to 9-11 billion by 2050?
 Grow more and waste less....
- and WATER.....

Securing food, water and energy is an as pressing problem as climate change

..and Plastics offer solutions to all!

Waste Framework Directive sets the path away from landfill/disposal



The WFD sets the 4R priority order

- plastics offer solutions on all levels



Reduce

- + less plastics used
- + less resources
- + less wastage
- + light



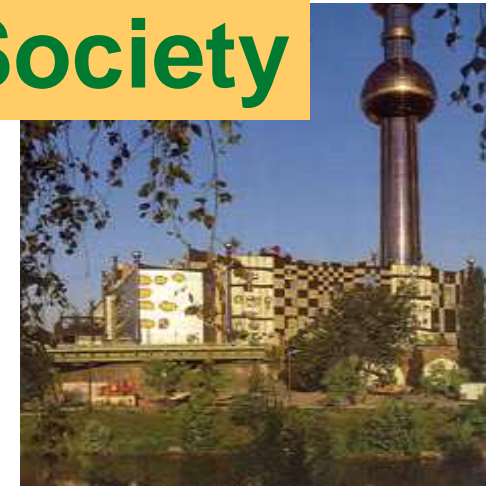
From a Recycling Society to The Resource Efficient Society

Reuse

- + sho
- + tray

Recycle

- + bottle, industry film
and pots, tubs and trays



Recover

- + EfW plants
- + SRF for industry

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To recover plastics from landfill we must address every step of the value chain in an integrated way

Waste production by consumer



Collection



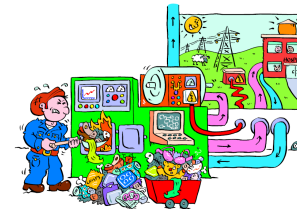
Sorting



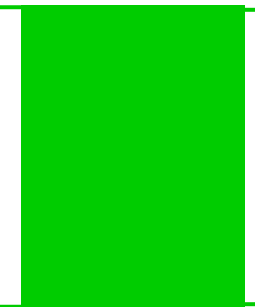
Recycling



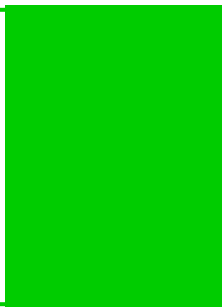
Energy recovery



Landfilling



**Extend
Collection
Schemes**



**Drive Quality Recycling
In sorting and reprocessing**



**Strongly
Support
Efficient
Energy
Recovery**



**Target
ZERO
landfill**

**Plastics -
Champions
of
Resource
Efficiency**

- **Plastics have role in preventing waste of other materials - this is broadly unknown**
- **Policy shapers often look at packaging in isolation when they should look at packaging and protected product**
- **Prevention tops the waste hierarchy, above reuse and recycling and will be the focus for EU and national waste policy in 2010-2014**
- **Using more plastics will reduce waste and resources needed for our daily needs**



All plastics should be collected for recycling and recovery

- Landfilling cements low value perception and litter behaviour
- Plastics are complicated for consumers to sort
- Technical innovation and investment will enable recycling and recovery of all collected plastics
- Co-mingled collection is not more expensive than separate collection and increase collection rate
- Collection schemes must be optimised with downstream infrastructures of sorting, recycling and recovery
- Promote the extension of post-consumer waste collection for recycling and recovery of all waste plastics

All dry household recyclables collected in co-mingled scheme



Drive quality in the recycling value chain

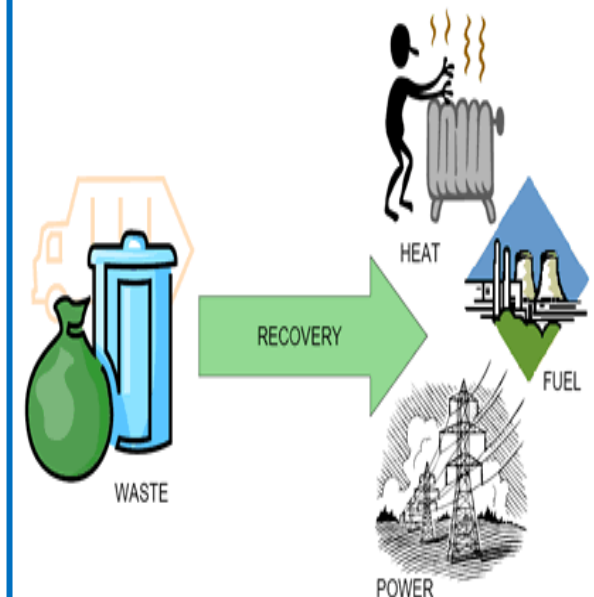
- **Recycling has reputation as the “superior” waste management option – when it is only level 3 of WFD**
- **Quality recycling from plastics – and mixtures of plastics - is complex but possible and needs to meet HSE & market requirements for the intended application**
- **Quality (not quantity) should be the focus for the recovery chain and its efficient organization**
- **Quality recycling will need - but will also benefit – complementary feedstock recycling and efficient EfW**
- **Plastic recyclates are suitable in many product applications**



Vivienne Westwood Shoes from recycled plastics

Strongly support efficient energy recovery

- **Historic incineration track record has led to HSE concerns and “NIMBY” attitude**
- **EfW is not seen as a CO₂-responsible solution**
- **Both EfW and high quality SRF are needed to recover all used plastics and contribute to energy supply**
- **Improved quality focus in recycling will give more fractions for efficient EfW/SRF**
- **Promote efficient EfW as a needed part of an integrated waste management system**
- **EfW contribute to supply security, CO₂ reductions and resource efficiency**

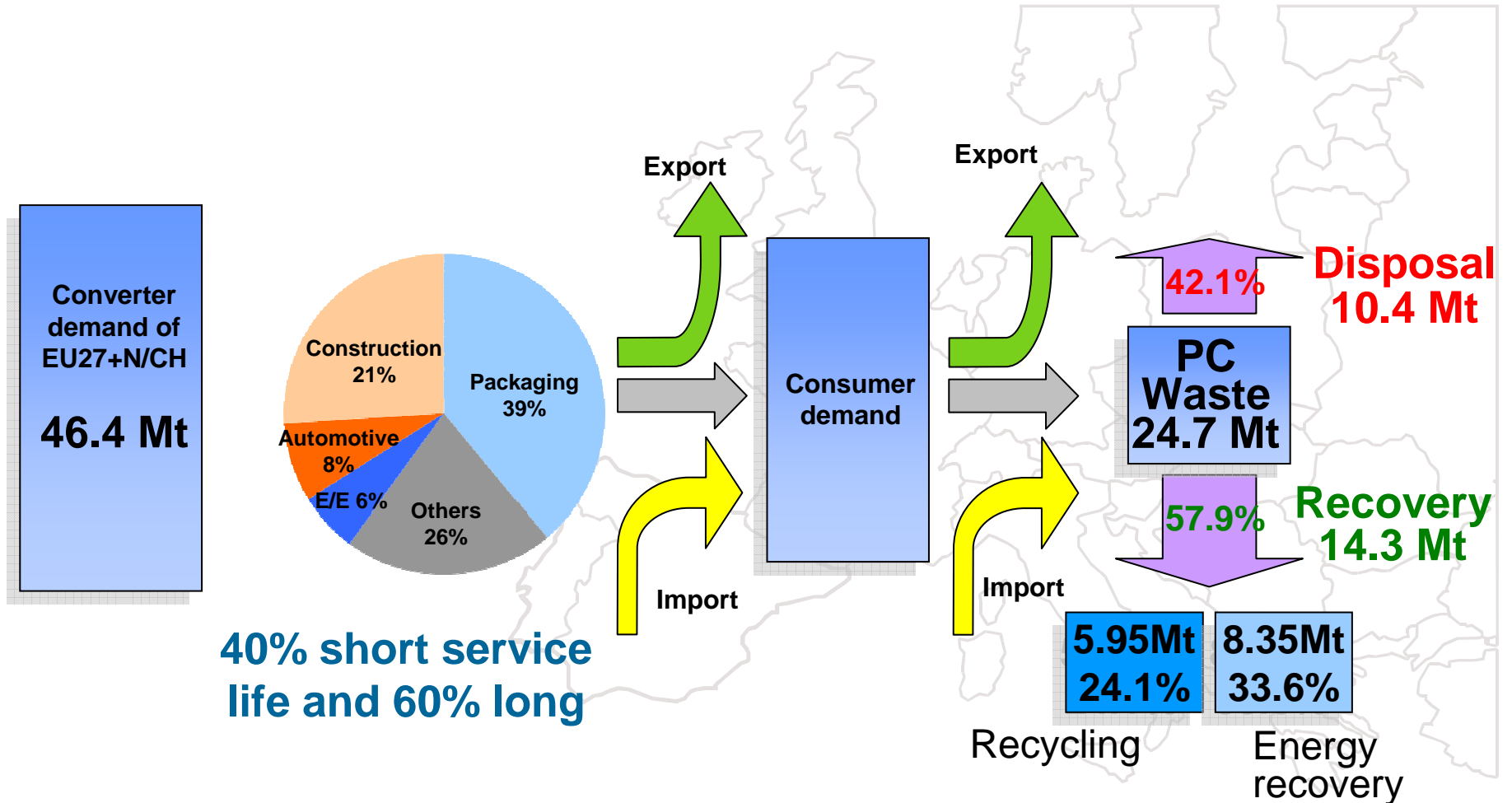


Waste NO plastics on landfills

- Landfilled waste reinforces the “no value“ perception of plastics – and other landfilled products and is a source of litter
- Waste owners favour cheapest legal option
- EU countries with landfill restrictions have high plastics recovery & recycling rates
- Advocate at EU and national levels for targeting 100% plastics recycling/recovery
- Strongly promote landfill restrictions and related financial instruments to stimulate investment into advanced collection, sorting and recovery

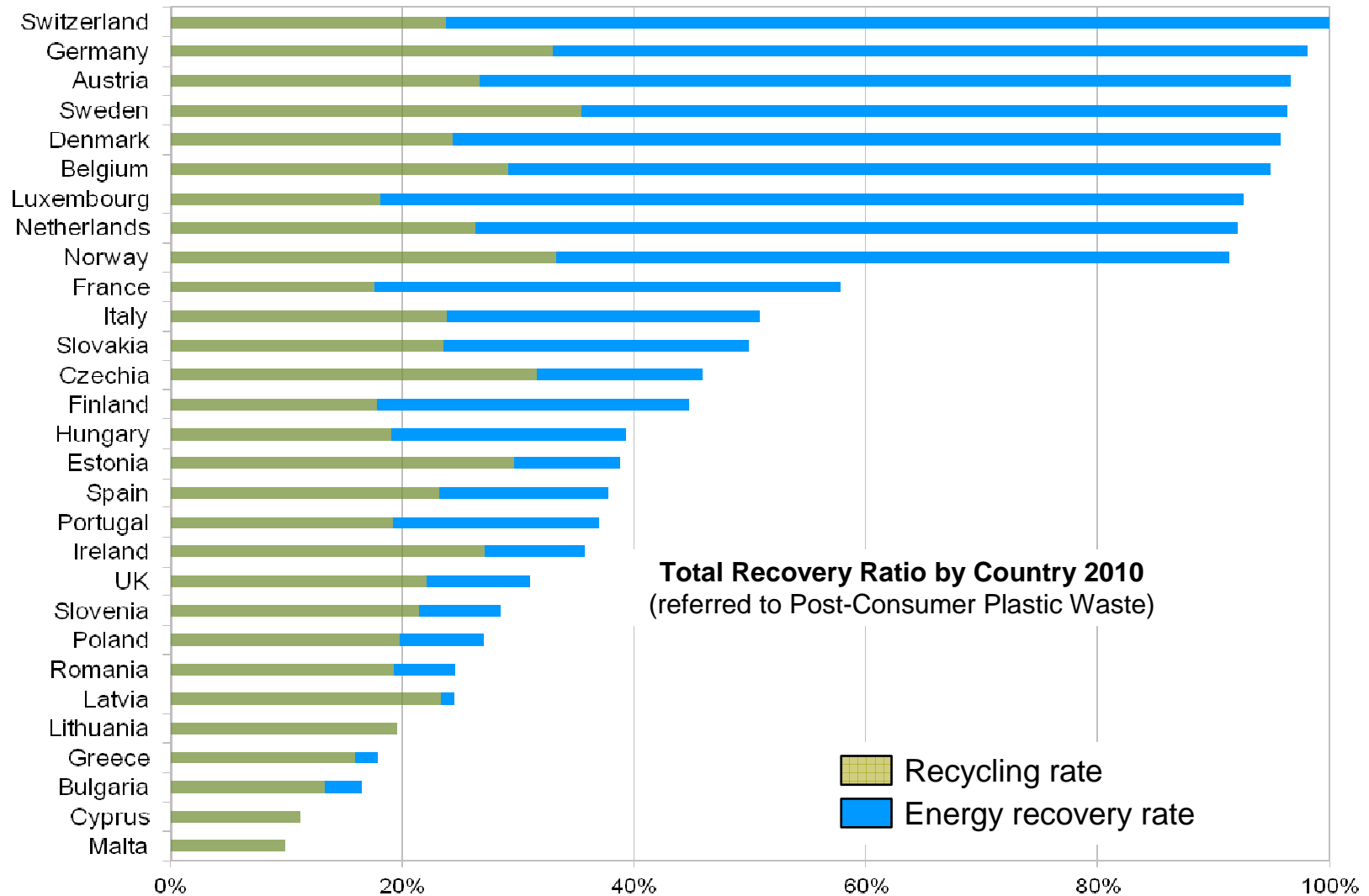


Recovery rate reached 58% in 2010 ...and continue increase at 2.5%/y

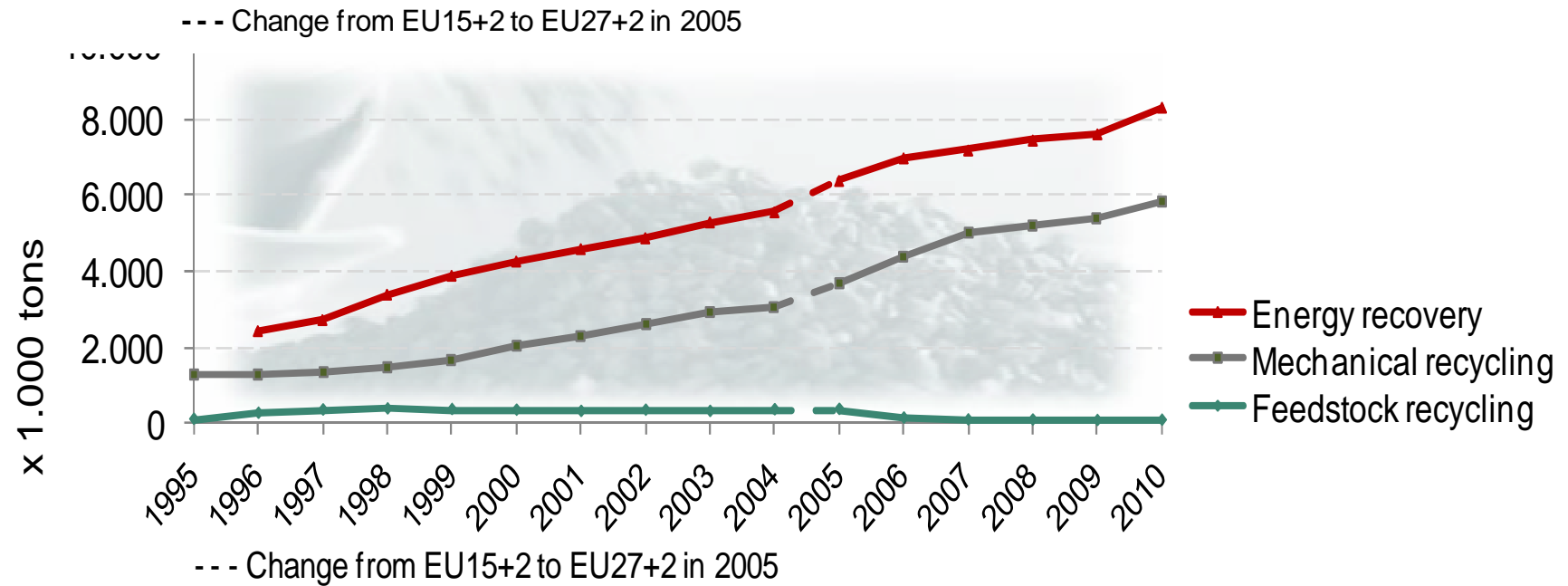
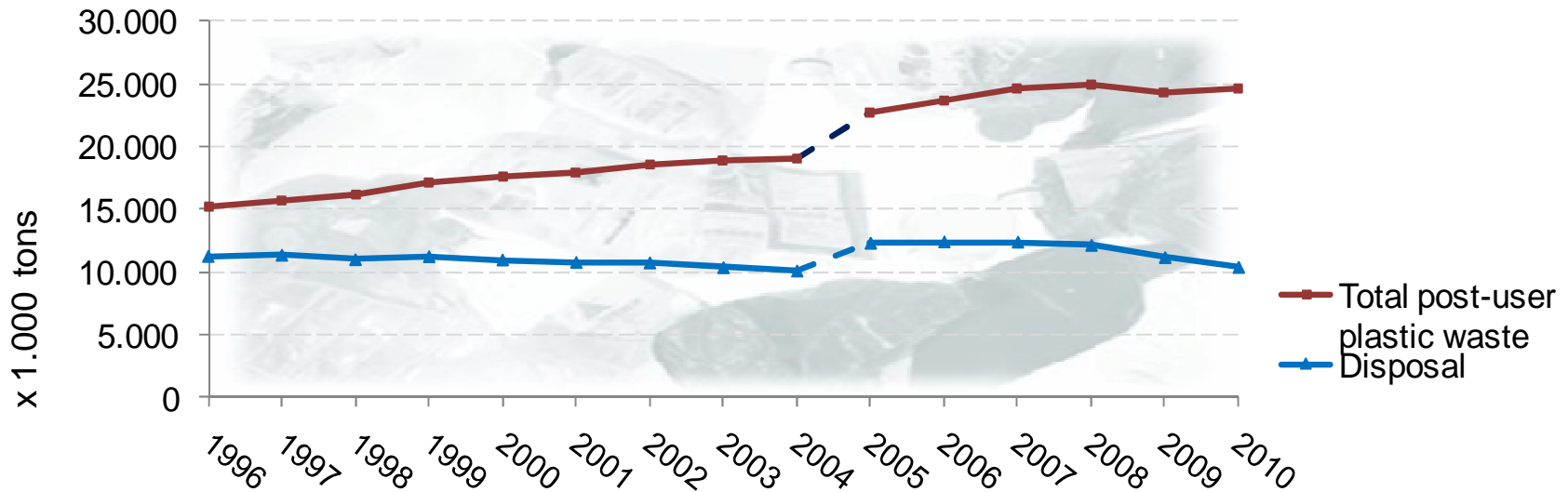


EU27+NO/CH 2010

Most Member States recycle 15-30%but EfW vary from 0-75%



Trends are continuing.....



Outline

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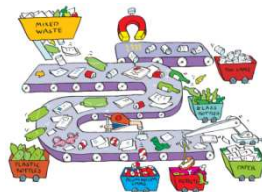
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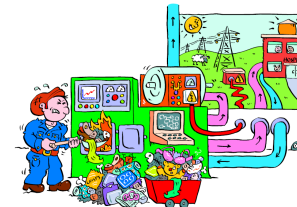
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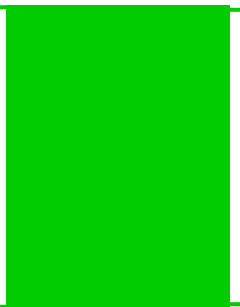
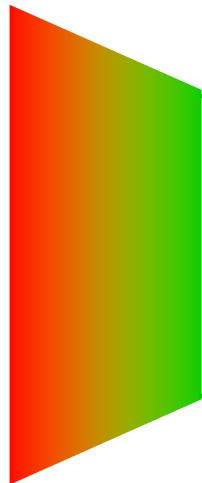
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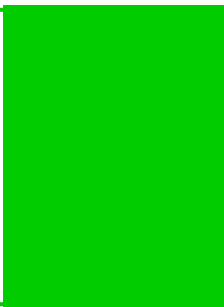
Energy recovery



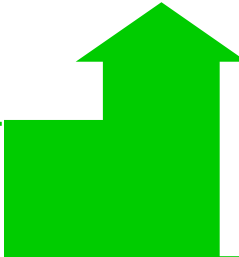
Landfilling



Extend Collection Schemes



Drive Quality Recycling In sorting and reprocessing



Strongly Support Efficient Energy Recovery



Target ZERO landfill

Plastics - Champions of Resource Efficiency



TOO VALUABLE TO WASTE



Plastics

The Material for the 21st Century