



Institute for European
Environmental Policy

**Economic Instruments and
Waste Management Performances**

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Emma Watkins, IEEP

**IEEP with BIO Intelligence Service, Ecologic,
Umweltbundesamt, Arcadis and Eunomia**



- Independent not-for-profit institute
- Aim to advance an environmentally sustainable Europe
- Policy research, analysis, development and dissemination
- Offices in London and Brussels



IEEP work areas





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Use of economic instruments and waste management performances

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- Study for DG Environment, 2011-12
- Study objectives:
 - Analyse relationship between economic instrument (EI) use and waste management performances of Member States (MS)
 - Assess potential of moving towards a common EU approach to use of EIs
- EIs studied:
 1. Waste disposal & treatment fees (landfill & incineration)
 2. Pay-as-you-throw (PAYT) schemes
 3. Producer responsibility schemes (specific waste streams)



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Overview of main results

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Landfill & incineration



- **Landfill taxes / charges:**

- 19 Member States have a tax
- Taxes vary: €3 (BG) - €107.49 (NL) per tonne
- Total charge: €17.50 (LT) - €155.50 (SE)
- Higher landfill charge = less waste to landfill
- All MS with charge < €40 landfill 60% of waste

- **Incineration taxes / charges:**

- 6 Member States have a tax
- Taxes vary: €2.40 (FR) - €44 (DK) per tonne
- Total charge: €55 (UK) to €190 (IT)
- Broadly, higher incineration charge = more recycling

Pay-as-you-throw schemes (PAYT)



- 14 MS have some PAYT schemes for municipal waste
- Volume-based: 10 MS; Weight: 8 MS; Frequency: 7 MS
- Broad range of amounts charged:
 - **Fixed annual fees per household:** €40 (ES) - €350 (LU)
 - **Fees for mandatory refuse bags:** €0.65 (ES) - €5.50 (DE)
 - **Fees per emptying of a bin:** €3.17 (FI) - €4.20 (FI)
 - **Fees per kg:** €0.17 (SK) - €0.36 (SE)
- Important design factors include:
 - Basis for charging → can lead to very different revenues
 - Population coverage → greater coverage = larger volumes, more efficient
 - Regional cooperation → can increase effectiveness and efficiency
 - Awareness and advice to citizens → change waste behaviour

Producer responsibility schemes



- Study defined ‘producer responsibility’ as: financial responsibility placed on producers / importers for waste management of their products
- Focus on schemes developed to implement EU legislation:
 - **Packaging:** 27 MS – mix of taxation, deposit-refund, ‘Green Dot’ – fee per tonne of material
 - **WEEE:** 25 MS – fee per unit or per kg of type of appliance sold
 - **Batteries:** 24 MS – fee per kg or per battery (use/chemical content/size or weight) or based on market share
 - **ELV:** 24 MS – fee based on EURO standard or per tonne of vehicle or based on market share



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Main packaging results

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Packaging producer responsibility (1)

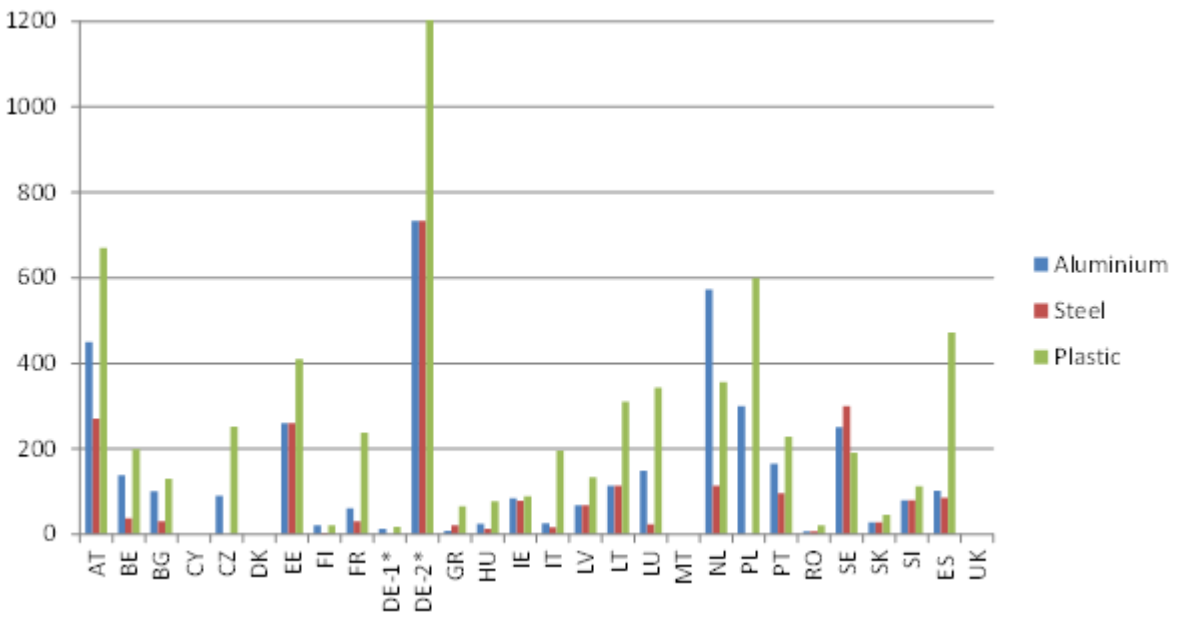
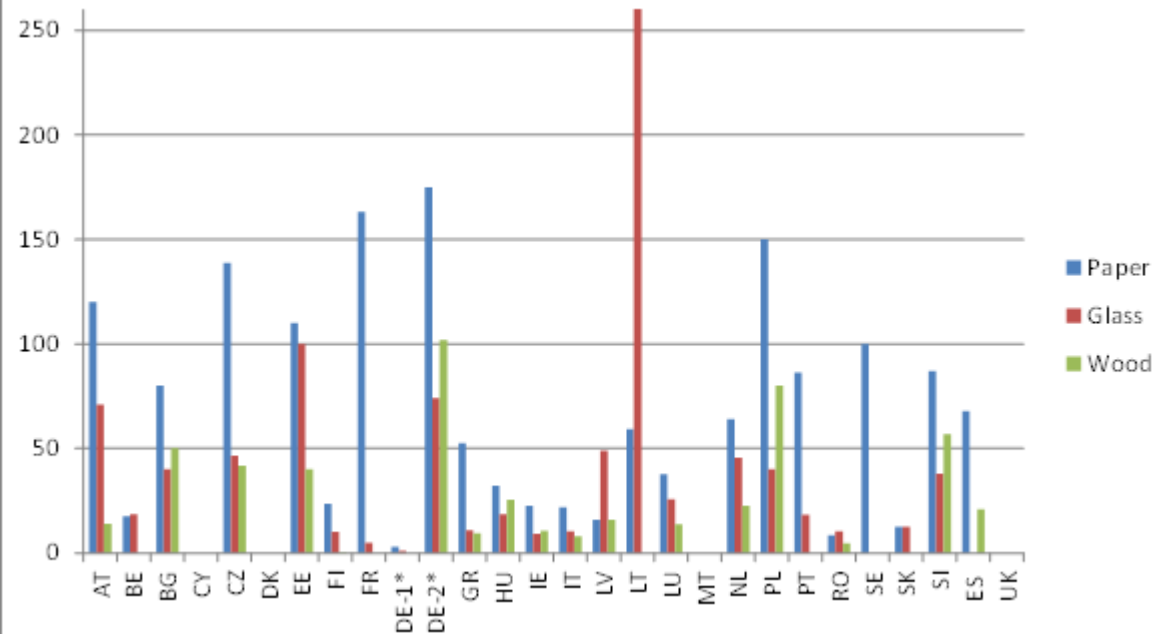


- Schemes identified in all 27 MS
- Mix of approaches:
 - ‘Green Dot’ – fee per tonne of material: 23 MS
 - Deposit-refund: 8 MS
 - Taxation: 3 MS
 - Tradable credits: 1 MS (UK)
- Main focus of study on **Green Dot schemes**:
 - Aim to reduce packaging and/or ensure producers cover the cost of collection / sorting / recycling of waste packaging
 - Schemes in 7 MS (AT, BE, CY, DE, LV, SI, ES; also soon FI) aim to fully cover costs of collection / sorting / recycling

Packaging producer responsibility (2)



Maximum average fee charged under Green Dot schemes (€ per tonne) for **paper, glass and wood** packaging (latest available data)

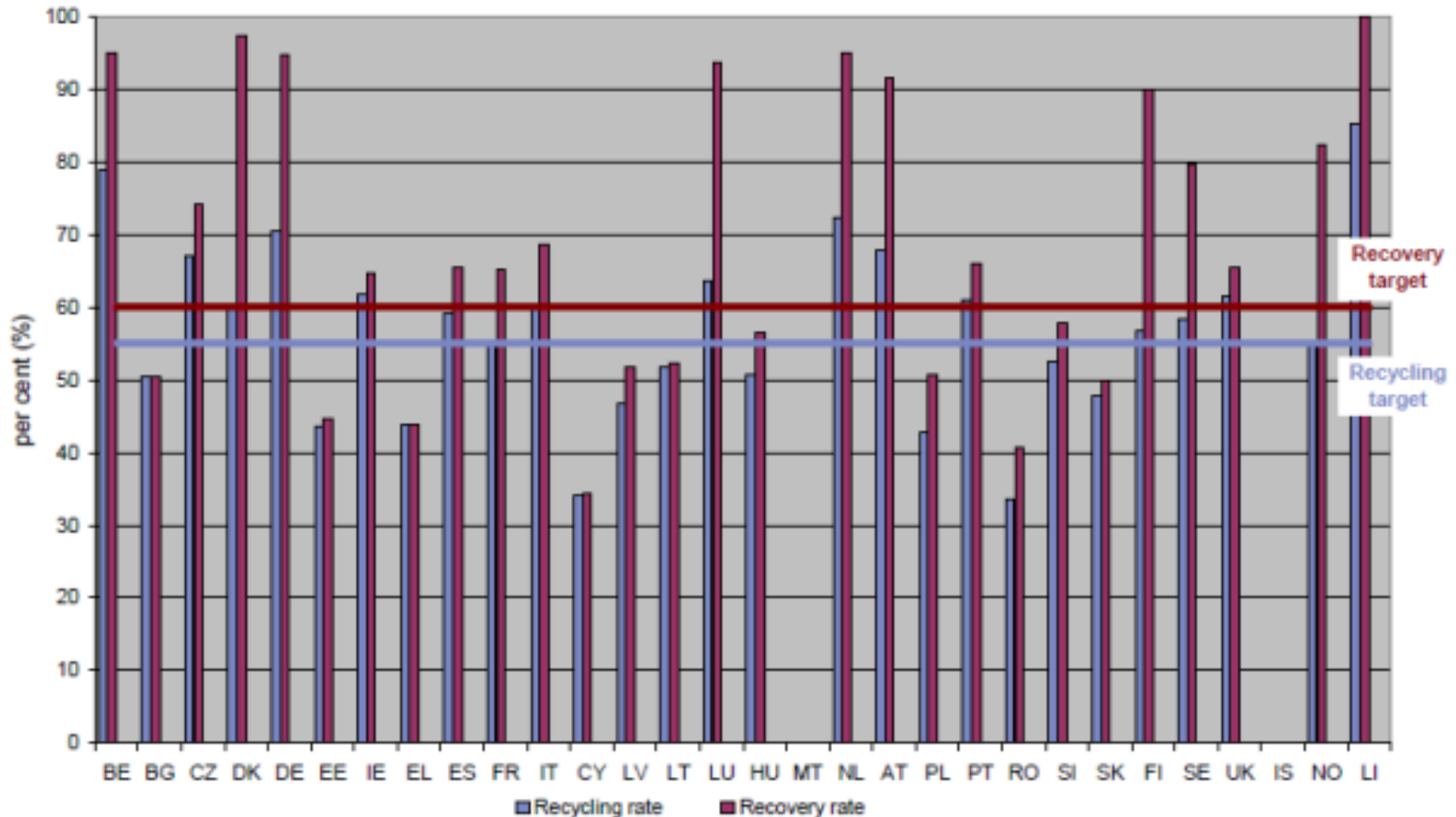


Maximum average fee charged under Green Dot schemes (€ per tonne) for **aluminium, steel and plastic** packaging (latest available data)

Packaging producer responsibility (3)



Recycling and recovery rates for packaging waste, 2008



Packaging producer responsibility (4)



Overall cost of contributions to packaging Green Dot scheme compared with recovery and recycling rates

Member State	%recycled	%recovered	Overall cost ranking	EUR per capita per year, 2008 (paper, plastic and glass)
BE	78	95	15	7.37
DE	71	95	1	17.41
NL	73	95	5	15.24
LU	63	93	12	19.54
AT	68	91	3	29.70
IT	60	78	17	7.46
CZ	67	74	7	9.37
PT	61	67	9	14.91
ES	59	66	8	21.72
FR	50	66	13	18.71
SI	52	58	10	6.70

Member State	%recycled	%recovered	Overall cost ranking	EUR per capita per year, 2008 (paper, plastic and glass)
FI	52	58	20	1.70
HU	51	57	16	3.03
LT	52	53	6	13.88
LV	47	52	14	4.29
BG	51	51	11	2.81
PL	43	51	2	16.49
SK	48	50	19	1.15
EE	43	44	3	31.89
GR	44	44	17	3.63
RO	34	41	21	0.55

Packaging producer responsibility (5)



Initial 'suggestions' for the design of successful producer responsibility schemes:

- A common, fully private body that is created, run, owned and supported by obligated producers
- Requiring producers to 100% fund the collection and recycling scheme
- High (recycling and recovery) targets
- Ensuring high quality of material collected

More general conditions that are beneficial:

- Clear, 'reliable' policy framework
- Appropriate balance between regulation and EIs
- Better data and reporting

New producer responsibility study



- Development of guidance on extended producer responsibility (EPR)
- For DG Environment, 2012-13
- Study objectives:
 - Identify optimal characteristics and conditions for EPR
 - Promote optimal use of schemes to help reach EU waste management & resource efficiency objectives
- Main tasks:
 1. Scoping and benchmarking of existing schemes
 2. In-depth information / comparison of schemes
 3. Identifying optimal characteristics / options for common EU approach



Thank you !

ewatkins@ieep.eu

www.ieep.eu

Twitter: [@IEEP_eu](https://twitter.com/IEEP_eu)

IEEP is an independent not for profit institute dedicated to advancing an environmentally sustainable Europe through policy analysis, development and dissemination.