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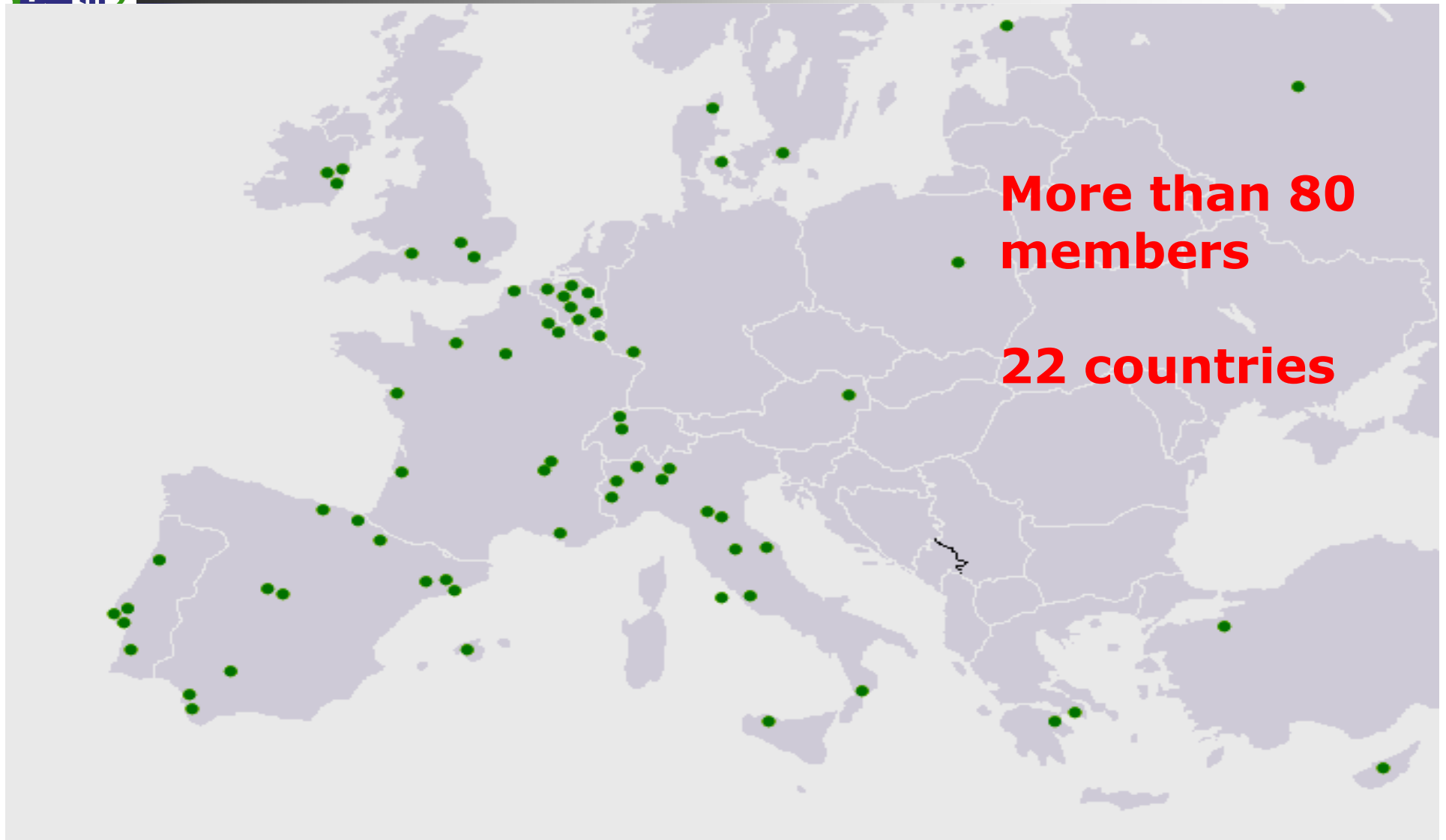
# Financing Instruments for Waste Management

*Francis RADERMAKER*

*Dublin, 20 June 2006*

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an international network of  
Waste Management Actors



# Association of Cities & Regions for Recycling & Sustainable Management of Resources



## 66 LRAs

Aalborg (DK), Agence de l'Énergie et de l'Environnement en Poitou-Charentes (APCEDE – F), *Amalga* (P), Ancona (Provincia di - I), Andalucía (E), Antwerpen (B), Barcelona (Ayuntamiento - E), Barcelona (Area Metropolitana - E), Basel (CH), Brussels (ABP-B), Brussels (Region-B), Catalunya (E), Charentes (F), Charleroi (ICDI) (B), Chiclana de la Frontera (E), Doncaster (UK), Dublin (Irl), South Dublin County Council (Irl), Dunkerque (F), Fingal County Council (Irl), Gipuzkoa (E), Hasselt (B), Hampshire (UK), Helsingborg (S), IDELUX (B), INTRADEL (B), Kairouan (TN), La Coruna (E), Lausanne (CH), Leiria (Valorlis, P), Liège (B), Lille (F), Lisbon (P), London (UK), *Lons-le-Saunier* (F), Luxembourg (GDL), Lyon (F), Mahdia (T), Madrid (E), Malaga (E), Mallorca (E), Marche (Regione – I), Marseille (F), Milton Keynes (GB), Nantes (F), Nicosia (Chypre), Odense (DK), Oeiras (P), Oporto (Lipor) (P), OVAM (B), Pamplona (E), Paris (F), Perugia (I), Rabat-Salé (M), Regio Emilia (Provincia di - I), San Boit de Llobregat (E), Settimo Torinese (I), Sousse (TN), Torino (AMIAT & AMIAT TBD, I), *Département de Vendée* (F), Vienna (A), Wallonia (B), Warszawa (PL), Zagreb (Cr)

## 5 Networks

AMORCE (F), Cercle National du Recyclage (F), Club Español de los Residuos (E), AICA (I), AECR (S),

2 Private companies  
SUEZ Environnement, ENVAC

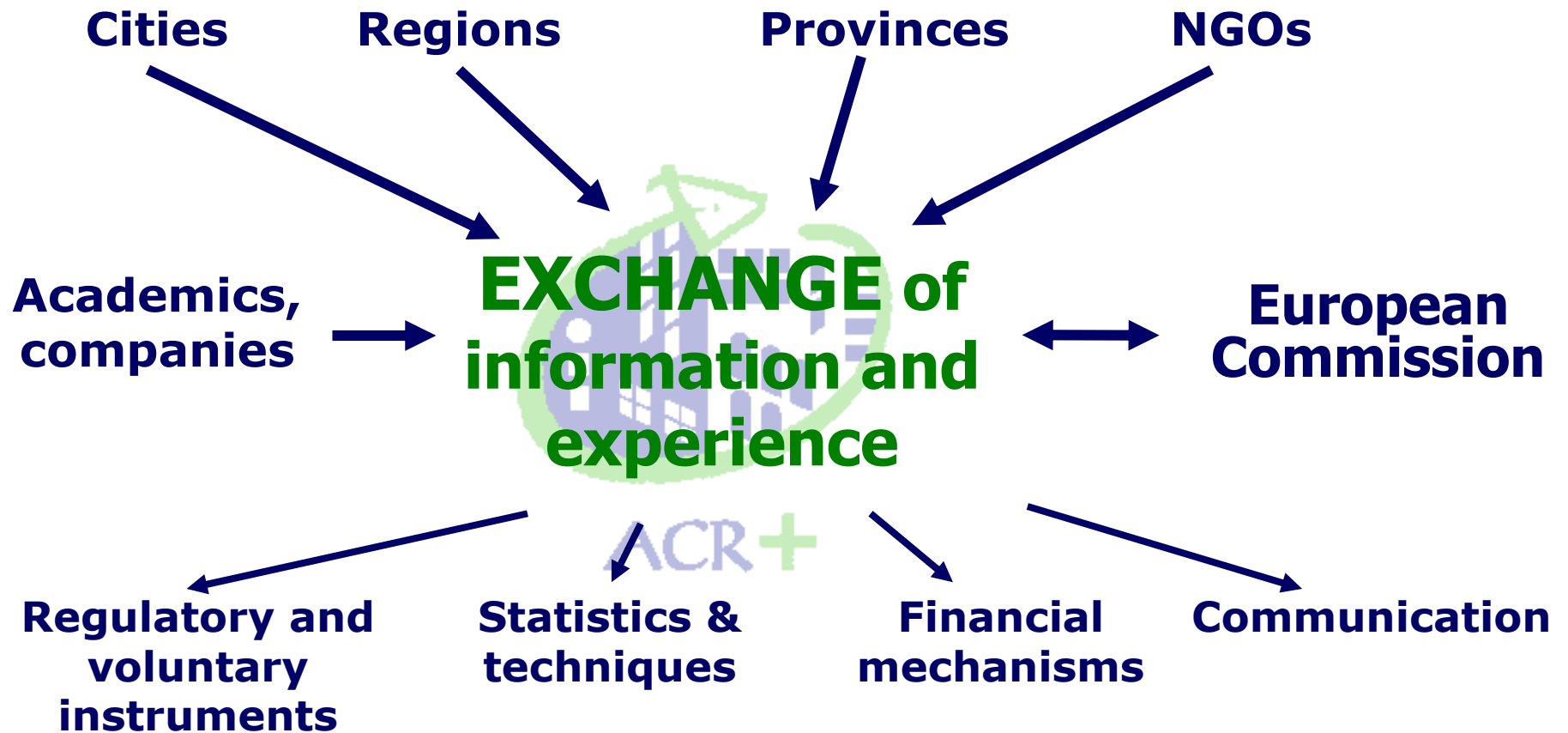
## 8 NGOs & Academics

Ecological Recycling Society (Gr), ERICA (I), Espace Environnement (B), Federambiente (I), Fundacion Traperos de Emaus (E), Green Steps for Environmental Literacy (TR), RAL Assurance Quality (D), Swansea Institute (UK)



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# Association of Cities & Regions for Recycling



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Exchange & partnership

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## Background

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### Proposal for a Directive on waste

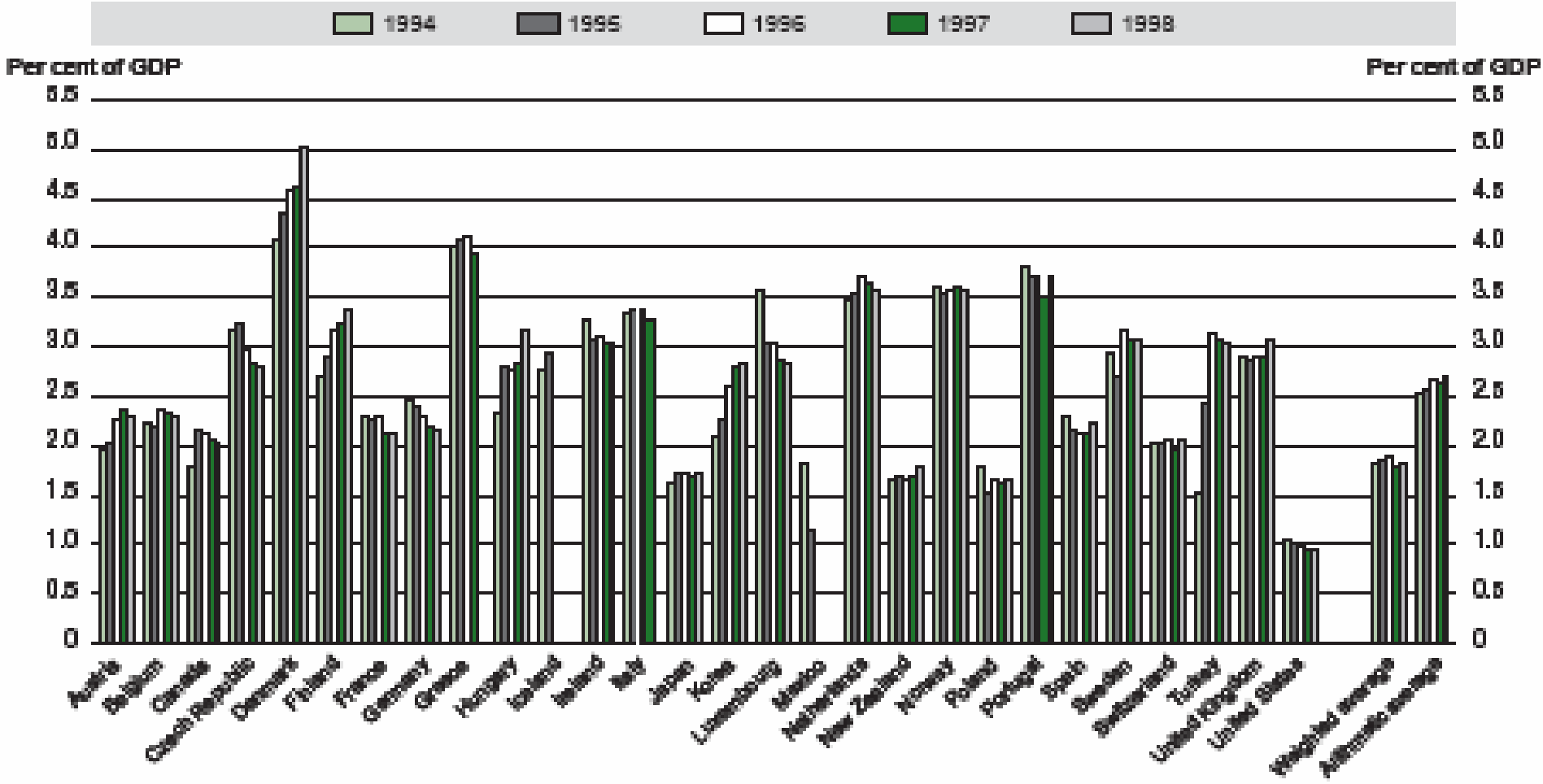
#### ***Article 4 - Economic instruments***

**■ Member States shall use economic instruments to attain the objective of this Directive where they are appropriate, and shall co-ordinate the application of such instruments with other Member States where necessary in order to ensure the smooth functioning of the internal market.**

# Revenues from environmentally related taxes in per cent of GDP (OECD 2001)



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# Interest of economic instruments



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- **Implement “PPP” → fairer prices for products and services**
- **Provide « First-mover advantages » → competitiveness and innovation**
- **Flexible : leave choice of solution for others**
- **Continuous effect – no threshold**
- **Driver for behavioural change**
- **Generate revenues**
- **may offset other taxes (double dividend)**

# Inhibitors of Economic instruments



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- Industry Competitiveness
- Waste tourism
- Social aspects
- Administrative costs



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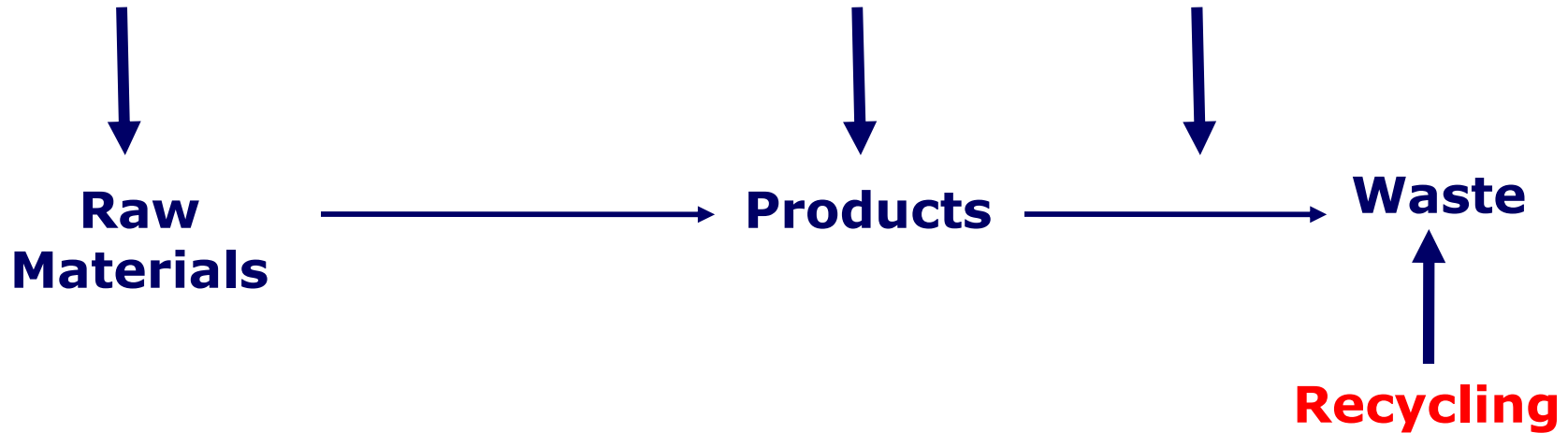
# Objectives of economic instruments

**Eco-design**

**Dematerialisation**

**Prevention**

**Reuse**



# Some examples



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## Raw material extraction:

- **Aggregate levy (UK)**
- **Tax on gravel, sand... extraction (Dk)**

# Some examples



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## Products :

### •Taxes :

- batteries (A, Dk, Sw)
- beverage packaging (Dk, Finl )
- tyres (Dk, Finl)
- carrier bags (Irl, Dk)
- disposable tableware, PVC,.. (Dk)

### •Deposit-refund systems :

- electric bulbs (A)
- batteries (DK)
- beverage packaging (A, DK, Finl, NL, Sw)
- cars (Finl, Sw)

# Mandatory Deposit systems for Packaging in Europe



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## **SWEDEN - 1984**

- Cans & PET

## **FINLAND - 1996**

- Cans

## **NORWAY - 1999**

- One-way containers

## **DENMARK - 2002**

- one-way glass, PET and cans

## **GERMANY - 2003**

- One-way glass, PET, cans

## **ESTONIA - 2005**



# Some examples



## **Waste :**

1. **Producer responsibility**
2. **Waste collection fees**
3. **Landfill/incineration taxes**



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# Producer responsibility

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## Applied in Europe to :

- **Packaging and packaging waste (1994/62/EC)**
- **End of life vehicles (2000/53/EC)**
- **WEEE (2002/96/EC)**



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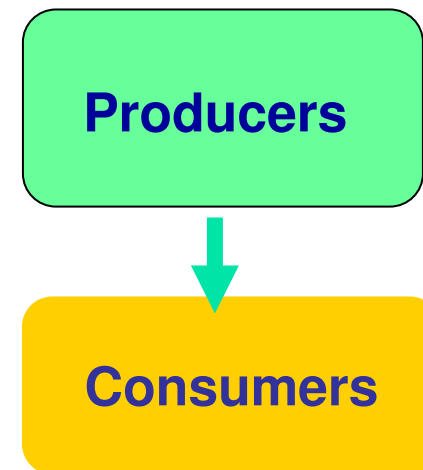
# Producer Responsibility

## Aims :

1. make producers physically or financially responsible of the management of waste from their products
2. encourage

1. **Eco-design**

2. **Eco-consumption**



# The Packaging Directive

## A global success story



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1. **avoided the disposal of 30M<sup>o</sup> tons of MW /year**
2. **created links between producers and managers**
3. **generated new sources of financing**
4. **boosted R&D on sorting and recycling technologies**
5. **allowed the creation of about 70,000 jobs**
6. **definitively anchored selective collection as local WM practice**
7. **contributed to transform waste into a resource**
8. **promoted awareness raising**

# Producers responsibility

## -

### A Diversity of Approaches



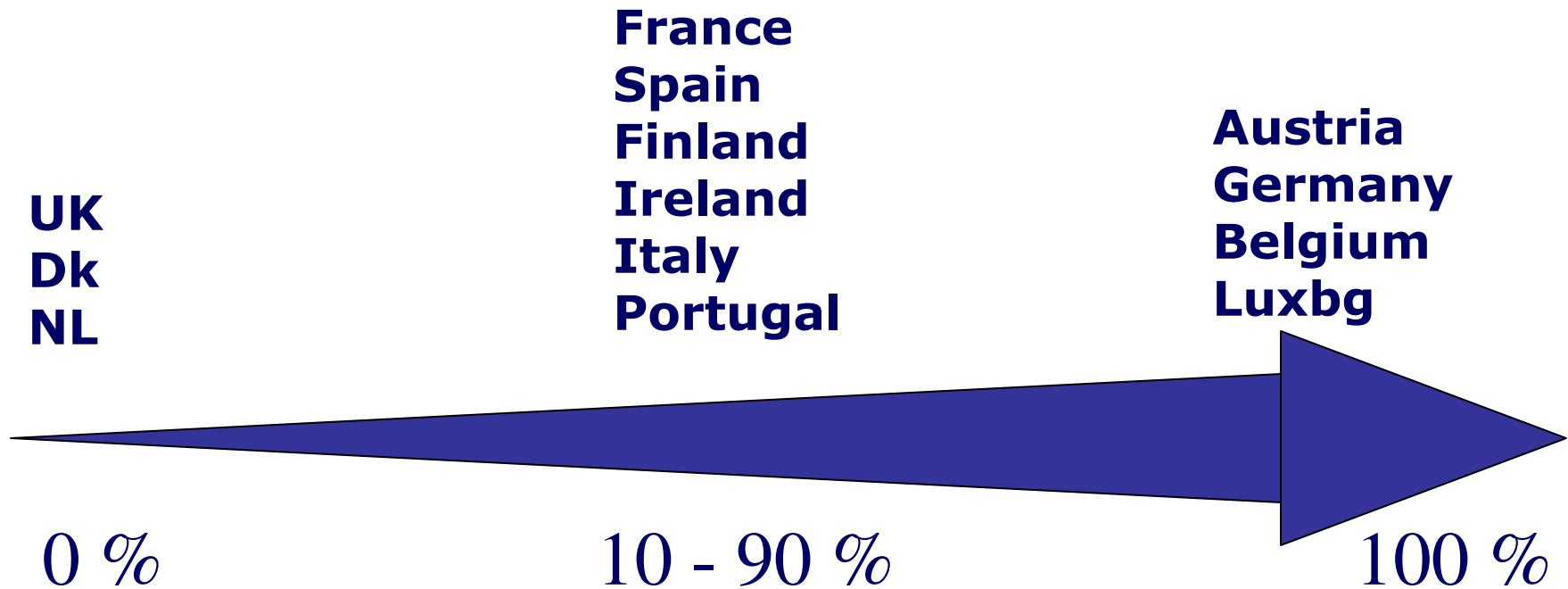
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	Collection (& sorting)		Recycling	
	Management	Financing	Management	Financing
<ul style="list-style-type: none"> <li>■Germany</li> <li>■Austria</li> </ul>	YES	YES	YES	YES
<ul style="list-style-type: none"> <li>■Belgium</li> <li>■Luxbg</li> </ul>	NO	YES	YES	YES
FR, SP, Finl, Irl, It, P, Sw	NO	Shared	YES	YES
Dk, NL, UK	NO	NO	YES	YES

# And different share of collection costs



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Sources : ARGUS + Cercle National du recyclage

# PAYT Systems



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## Main objectives :

- **Covering costs**
- **Influence citizens behaviour and encourage:**
  - **prevention at the point of sale**
  - **participation to selective collection and recycling**

## **Competences of local authorities to impose taxes and fees**

- **Obligation: CH, It, L**
- **Yes : A, B, D, DK, F, FIN, Gr, IRL, NL**
- **No: UK**

# PAYT Systems



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## Main instruments

- **General taxation :** UK
- **Specific tax :** E, F, It, P
- **Fixed fee :** G, Dk, Irl
- **Not related variable fee:** B, CH, F, Gr, NL
- **Related variable fee :** A, B, CH, G, Fin, L, Sw

# PAYT Systems



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## Billing Parameters

- Volume
- Weight
- Frequency

## Container dependent systems

- Bags : Stickers or pay-bags
- Individual bins : Size or weight

## Splitting of tariffs

- Stable income
- Prevention adverse effects



# PAYT Systems



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## Growing importance in waste policies

### Effects

- **reduction of residual waste**      **15-50%**
- **reduction of commercial waste**
- **reduction of organic waste**      **10-30%**
- **increased sorting**      **5-20%**
- **home composting**
- **prevention**
- **adverse effects (fly tipping, waste tourism,...)**

# PAYT Systems



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## **SOME RECOMMENDATIONS**

### **Importance of initial conditions**

- **Type and level of taxation**
- **Socio-economic context**
- **Payment modalities**

### **Importance of implementation conditions**

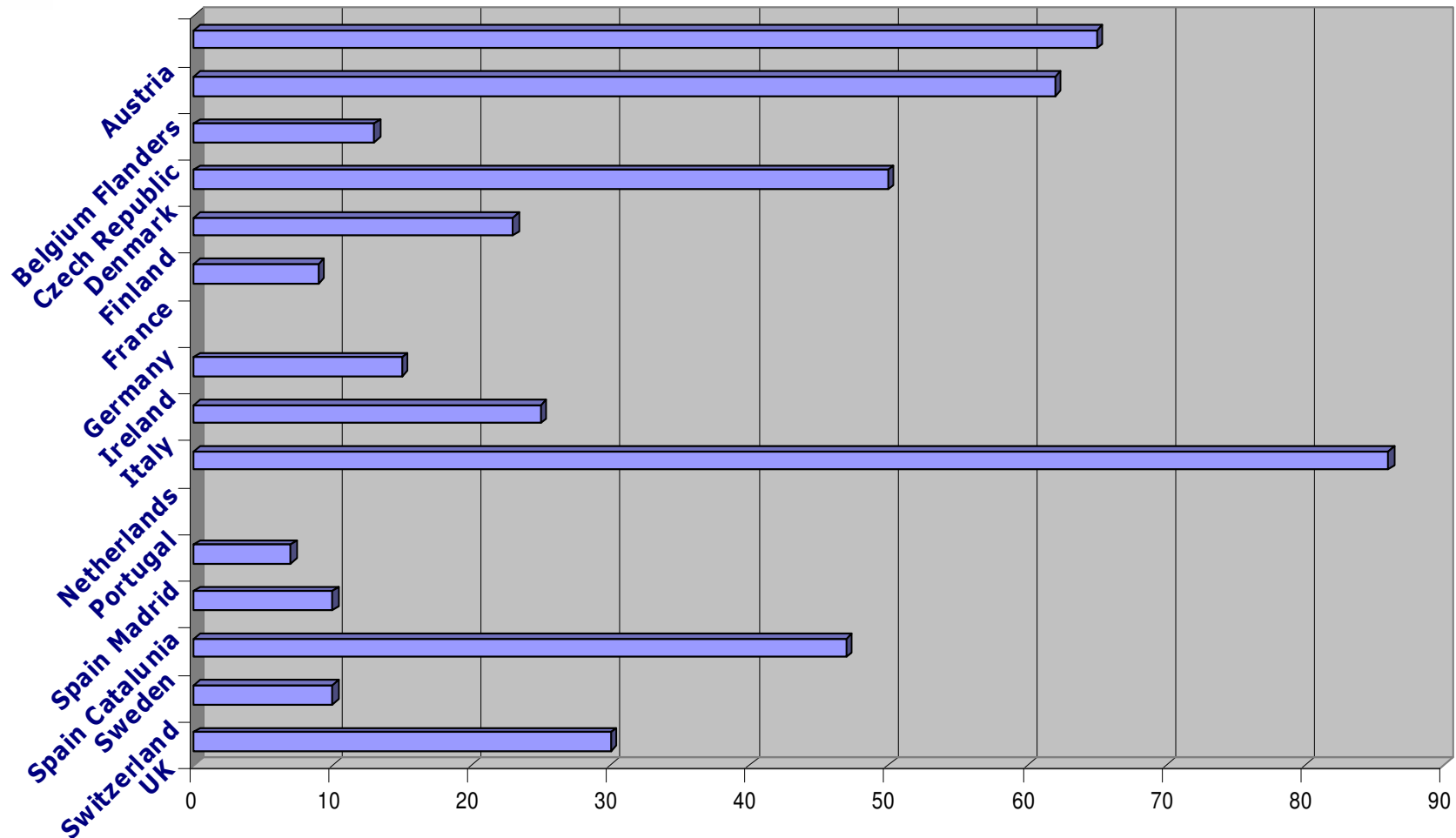
- **Selective collection infrastructure**
- **Communication, transparency**
- **Support to home composting**
- **Social control & repression**

# Landfill taxes and fees in EU 15

(in €/ton – 2006)



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# Conclusions

**Waste = Externality**  
**= a burden either for :**

- **The Environment**
- **LRA'S**

## **Economic instruments :**

- Interesting instruments for LRA's
- Powerful
- to be used carefully
- to be harmonised/concerted at the Local, National or International level

# Conclusions



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**Many thanks for your attention !**



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