



# **Green Certificates for the Recycling Sector Realistic ?**

*Y Decelle – Brussels 4Th June 2010*



## We will soon be in a shortage of natural resources

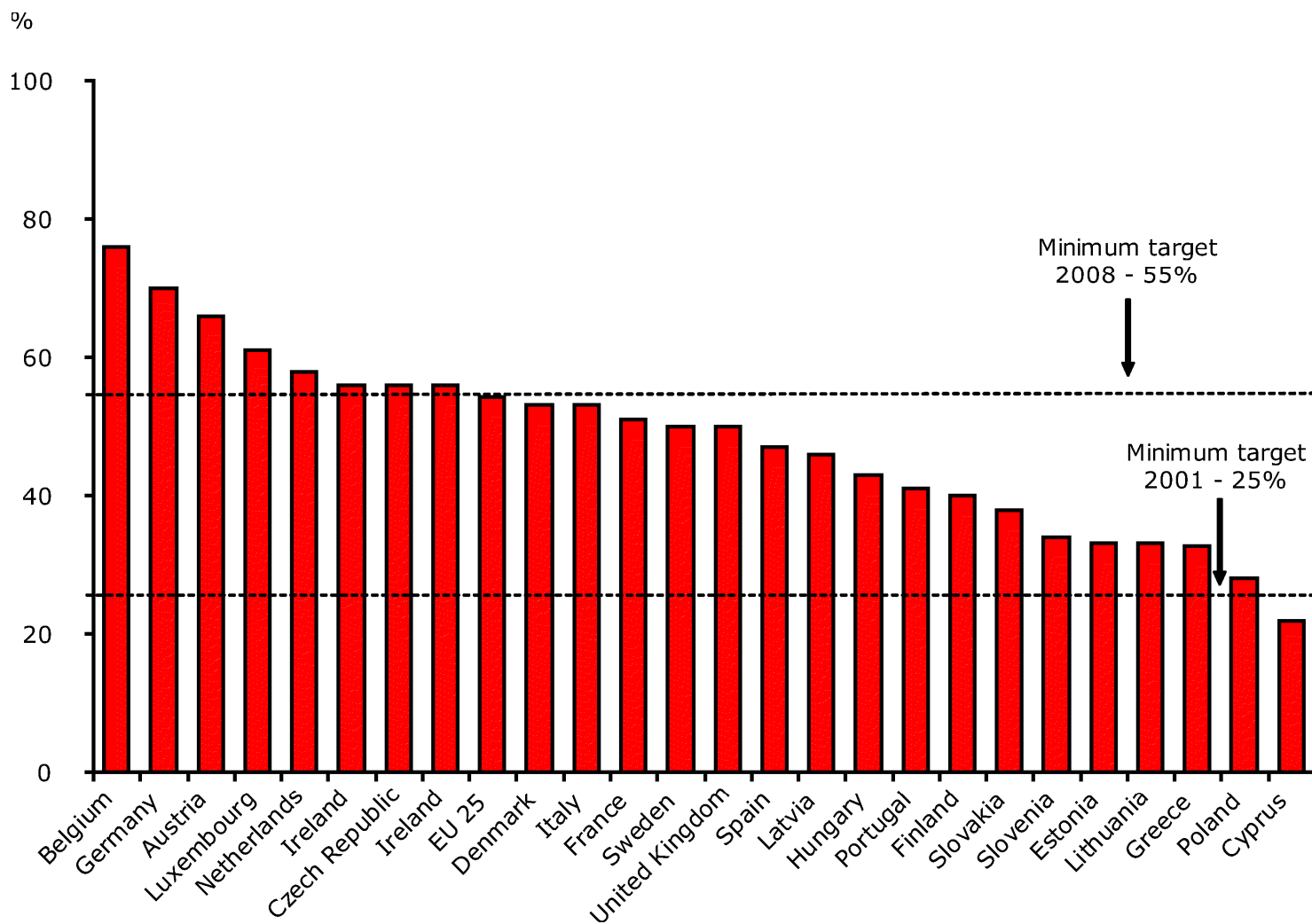
- **According to the US Geological Survey (cited in Capital Magazine, April 2008 and Enjeux Magazine, Sept 2008), the world mineral reserves amount to :**
  - 18 years for Lead
  - 20 years for Tin
  - 25 years for Copper
  - 64 years for Iron
  - 69 years for Bauxite
  - 31 years for Antimony
  - 29 years for Silver
  - 13 years for Indium (used in LCD screens)
  - 59 years for Uranium
- **It is tomorrow !**

## Advantage of recycling in CO2 emission

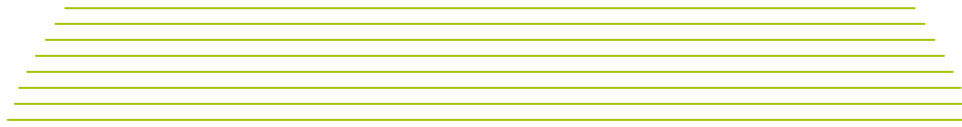
Material	ton CO2 per ton material			Advantage of recycling compared to :	
	Landfill	EfW	Recycling	Landfill	EfW
Paper/card	2,2	2,4	1,3	0,9	1,1
Plastic packaging	3,1	5	1,5	1,6	3,5
Textiles	18	9	2	16	7
Glass packaging	0,84	0,84	0,53	0,31	0,31
Steel packaging	3	1,3	0,7	2,3	0,6
White goods	3	3	0,7	2,3	2,3
Aluminium packaging	11,05	11,05	2	9,05	9,05
Garden waste	0,2	-0,14	-0,12	0,32	-0,02
Kitchen waste	4,5	4,2	4,08	0,42	0,12

Source : Okopol (2008), updated by WRAP (UK, 2009)

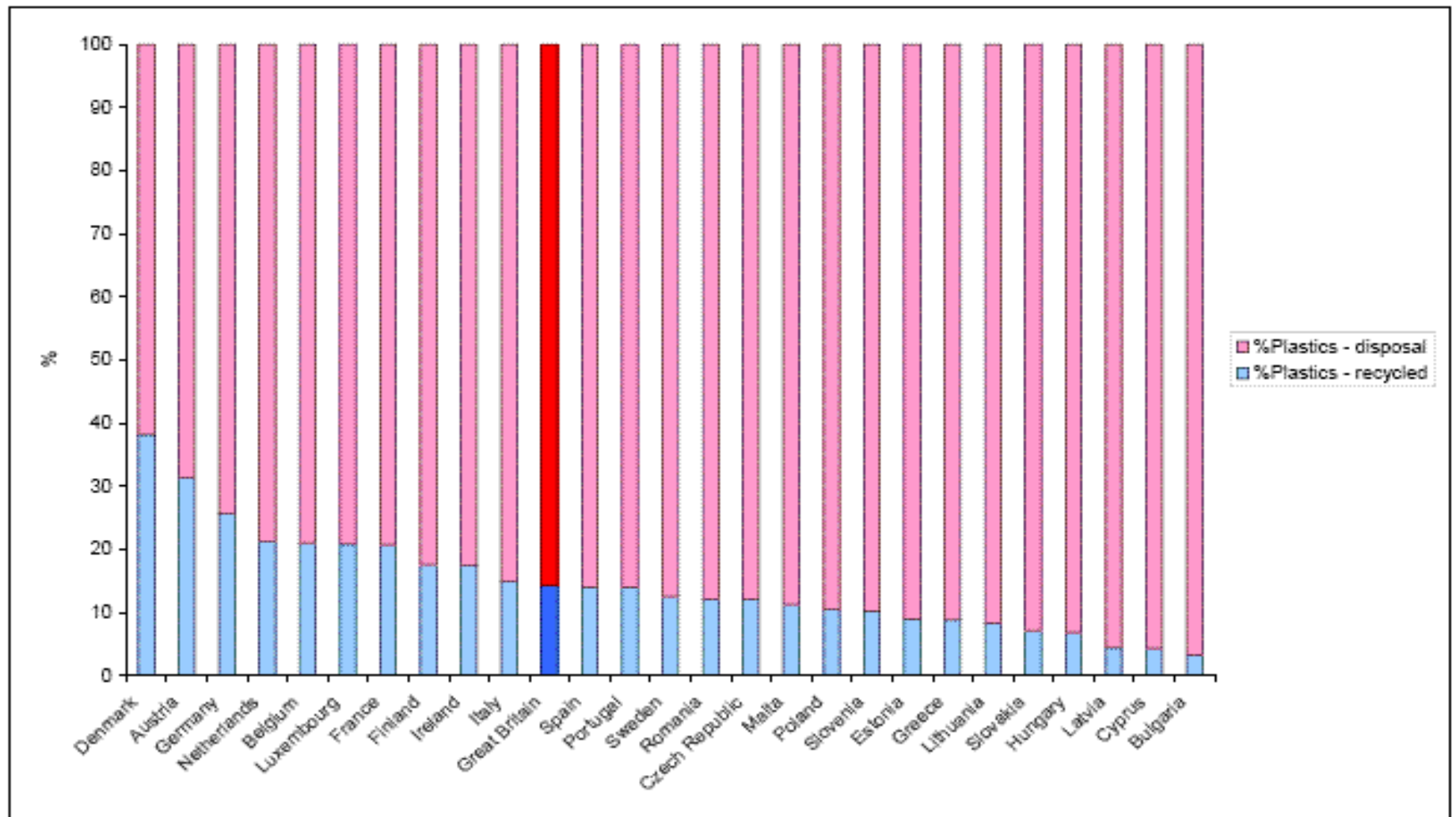
# Packaging recycling in the EU



Source : EUROSTAT (2007)

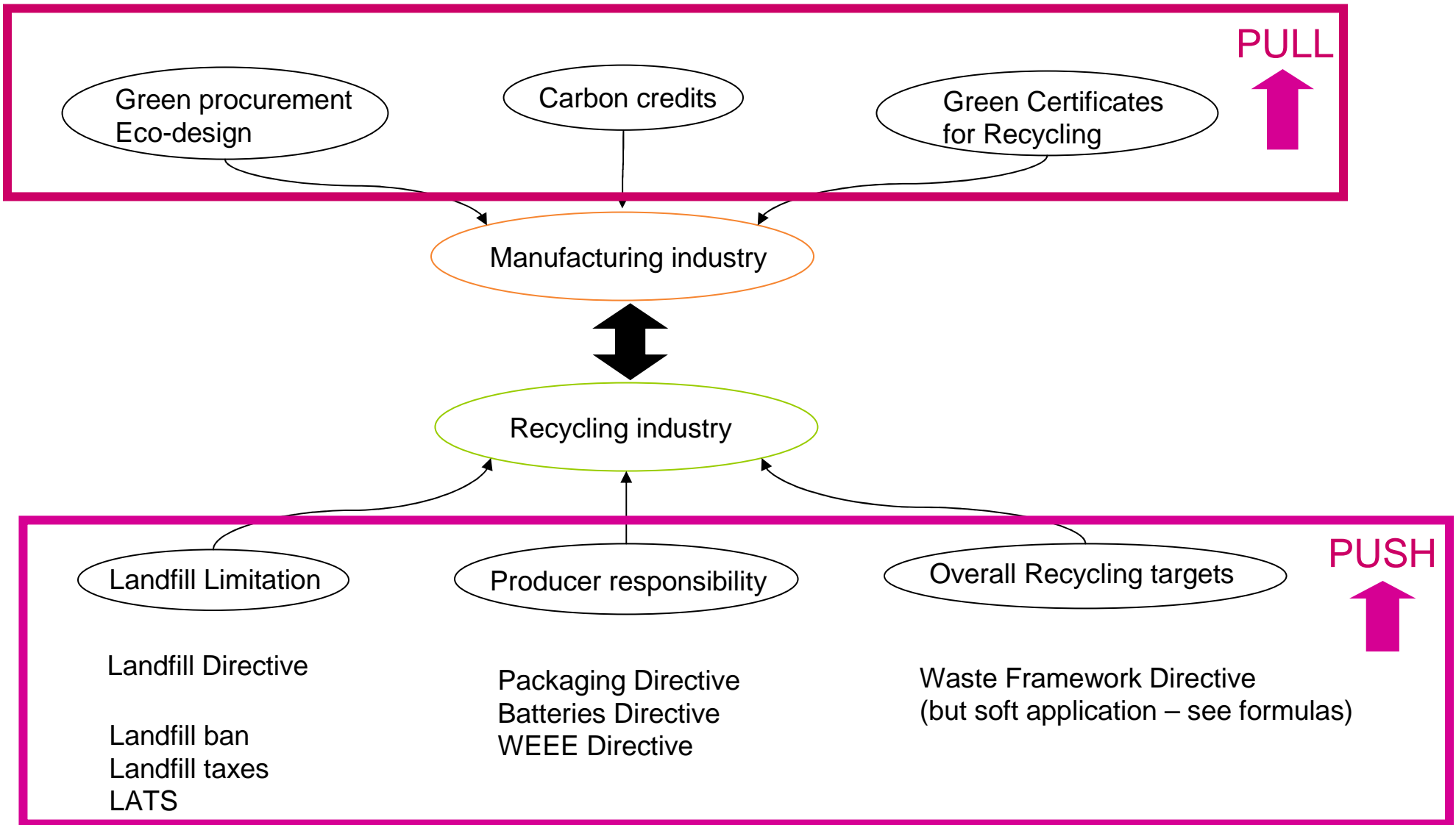


**Figure 5: Plastics - disposal and recycling in EU27**

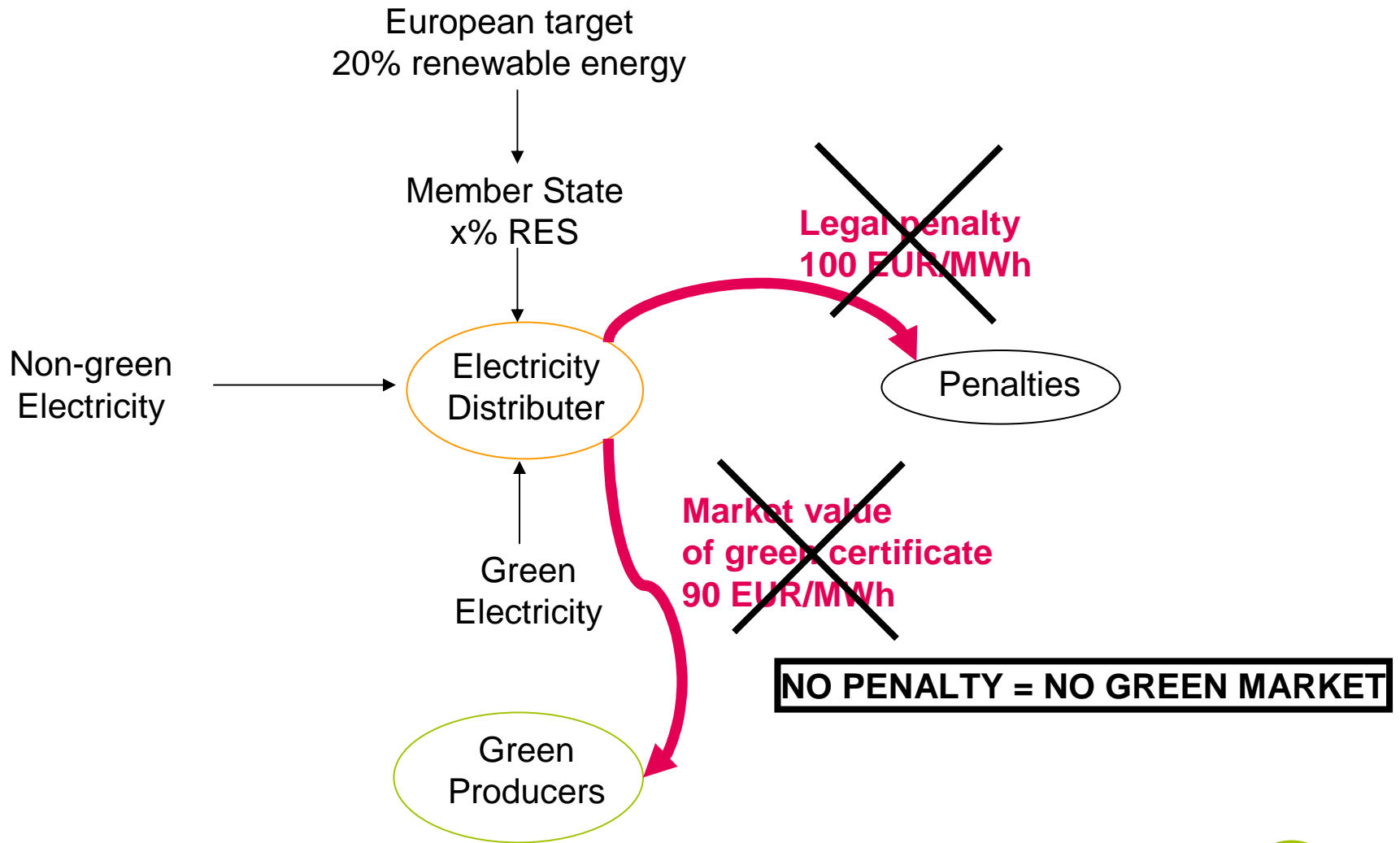


Source : Prognos (2008) in « Gone to Waste », Fiends of the Earth (2009)

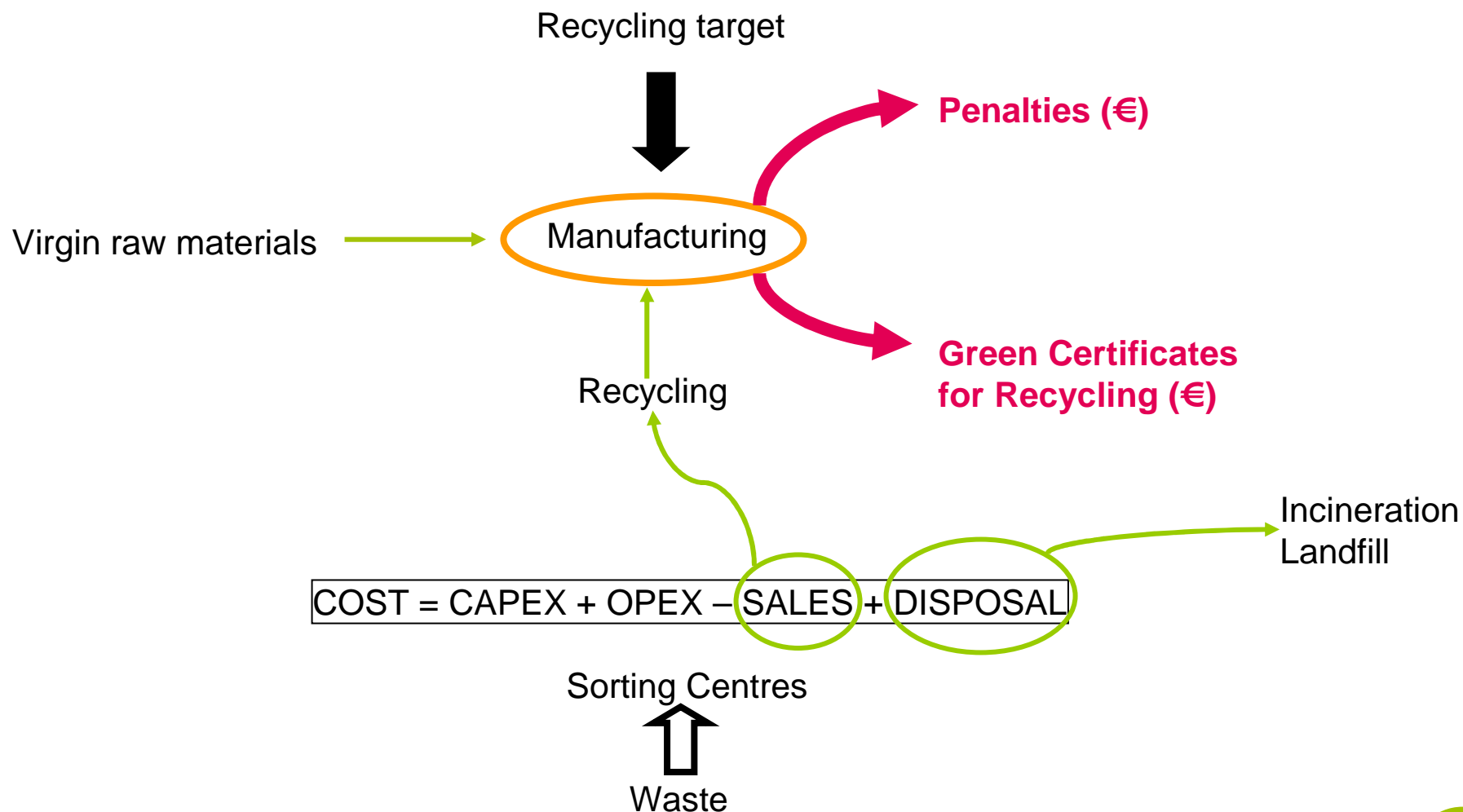
# Incentives to promote recycling



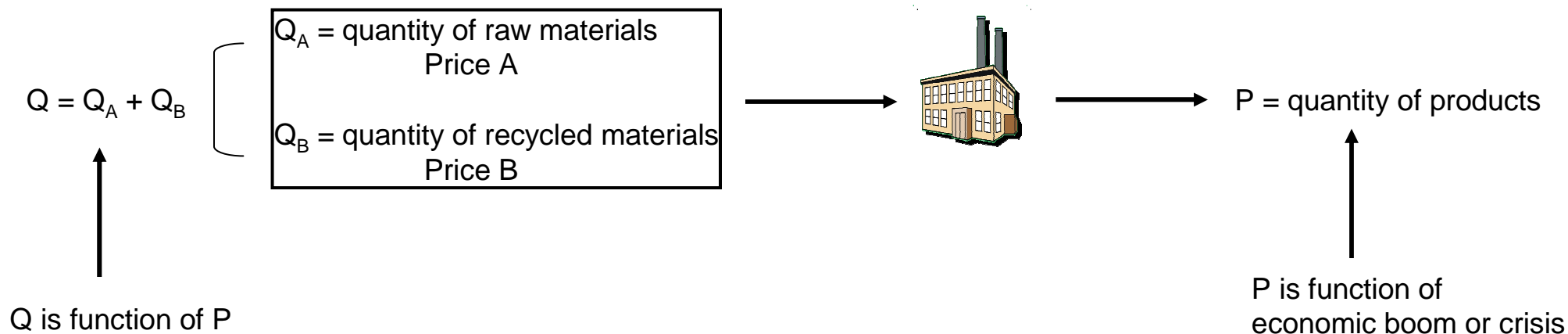
# Green Certificates for Energy



# Green Certificates for Recycling



# Substitution rate



$$\text{Substitution rate } SR = Q_B / Q$$

Substitution rate is function of :

1. Specific technical aspects linked with material (paper / plastic / aluminium ...)
2. Specific use of the product
3. Prices of raw materials and recycled materials
4. Quantity of recycled material available on the market
5. Other ?



## Necessary measures

### **1. Establish substitution rates per material / product use**

- Remark : SR can vary from product to product : overall goal is to reduce the total quantity of raw material used

### **2. Establish penalty rates per material / product**

### **3. Organise certification system for recycling industry which will determine the green certificates quantity**

### **4. Create a certification and control body**



## Constraints / problems

- **Recycling is a worldwide market**
  - How to control ? (see Reach principle on importers ?)
  - What about competition rules ?
  - European level is the best achievable target, but worldwide target should be the final goal
- **How to determine substitution rates ?**
  - To be detailed by sector
  - Remark : already done for CO<sub>2</sub> credits, which are much more impacted by economic variations
- **Economic booming or crisis create lack or overproduction of recycled products; substitution rates might not always be possible to reach**



## A similar system is already used in the UK

- **In the UK, the Packaging waste Recovery Notes (PRN) already attributes certificates to recyclers**
- **These certificates are sold to the Organisms in charge of PER who need to prove their recycling targets**
- **The value of the certificates is function of the demand from the organisms, which is directly linked with the recycling targets**
- **For European green certificates on recycling :**
  - Certificates could be sold to manufacturers instead or organisms (or through them)
  - If applicable in the UK, why not in Europe ?



## Conclusion : call for action

- **Tradable certificates for recycling have already been mentioned by European Institutions :**
  - Communication from the Commission : Towards a thematic Strategy on the prevention and recycling of Waste, 27 May 2003 – COM (2003) 301
    - *"The Commission intends to canvass opinion among stakeholders regarding the acceptability and feasibility of tradable certificates as a mean to implement waste recycling targets. In parallel, the Commission will analyse the practical aspects referred to above"*
  - European Parliament legislative Resolution on 20 April 2004
  - Commission Staff Working document SEC (2005) 1681 – Impact Assessment on the Thematic strategy on the prevention and recycling of waste and the immediate implementing measures.
- **BUT a comprehensive study should be carried out to evaluate the feasibility of the Green Certificates system for Recycling**