



**Consorzio Gestione Rifiuti
Medio Novarese**

***La politica dei rifiuti: da problema ad
opportunità***

BORGOMANERO, 18 dicembre



**Consorzio Gestione Rifiuti
Medio Novarese**

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“La riduzione dei rifiuti e gli stili di vita”

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Drivers of Evolution in MSWM

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European Policy

Planning and monitoring

1. Dir. 91/156 on waste
2. Dir. 99/31 on waste landfilling
3. Dir. 00/76 on the incineration of wasteMaterial specific targets

Waste specific targets

1. Dir. 94/62 on packaging and packaging waste
 2. Dir. 02/96 on WEEE
- ... (Batteries, organic, hazardouswaste...)



Prevention, Recycling, Recovery European achievements

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	1995	1999
Landfilling	67%	57%
Recovery (0 ⇒ 80% efficiency)	17%	16%
Recycling + composting	15%	20%
Prevention		-10%



Drivers of Evolution in MSWM (2)

Increasing waste production



Drivers of Evolution in MSWM (3)

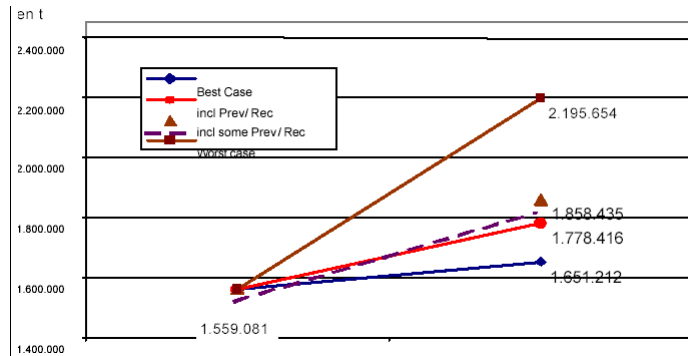
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Increasing complexity of waste flows

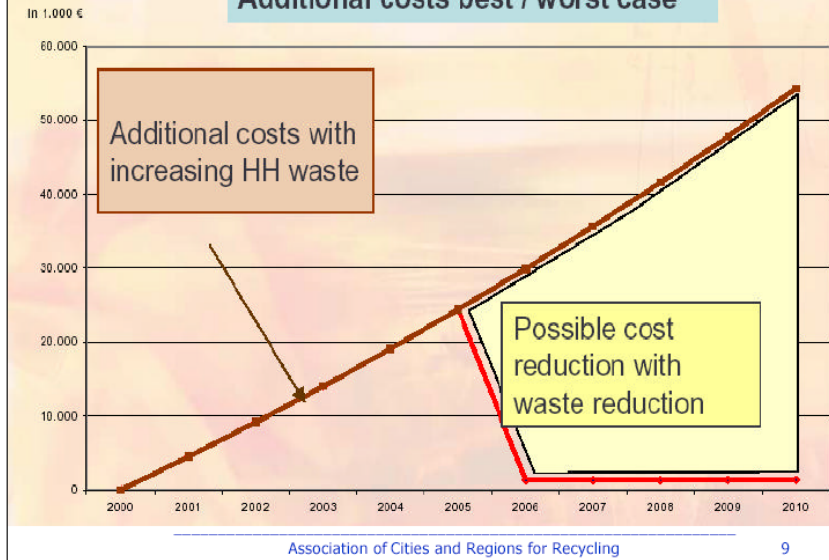
- Packaging waste
 - Glass
 - Plastics
 - paper & cardboard
 - metals
- WEEE
-
- batteries
- hazardous waste
- organic waste
- C&D waste

Increasing costs

Potential evolution of waste production in Vienna



Additional costs best / worst case





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A new playing field : the economy

Before

- one single waste stream for disposal

Now

- complex scenarios for recycling
 - increasing burden for local authorities
 - increasing risks : quality, quantity, supplies

Partnership ↔ citizen-sorter-consumer



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Global challenges

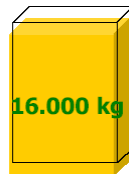
From waste to resource management



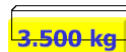
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Ressources



Raw material



Industrial waste



Municipal waste



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Where is the difference ?

Ecological rucksack :

- 1kg steel : 2.3 kg
- 1kg zinc : 8 kg
- 1kg copper: 15 kg
- 1 kg stain : 6,500 Kg

- toothbrush: 1.5kg
- Mobile : 75 kg
- chips 0.09gr : 20 kg
- Computer: 1,500 kg



Gold ring 5g : 3,000 kg



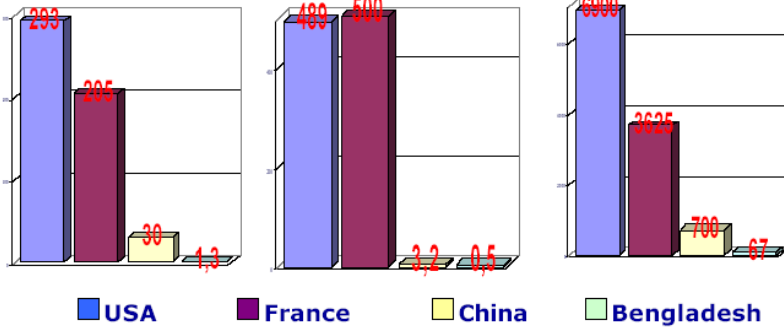
A question of equity !

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Paper

Cars

Oil



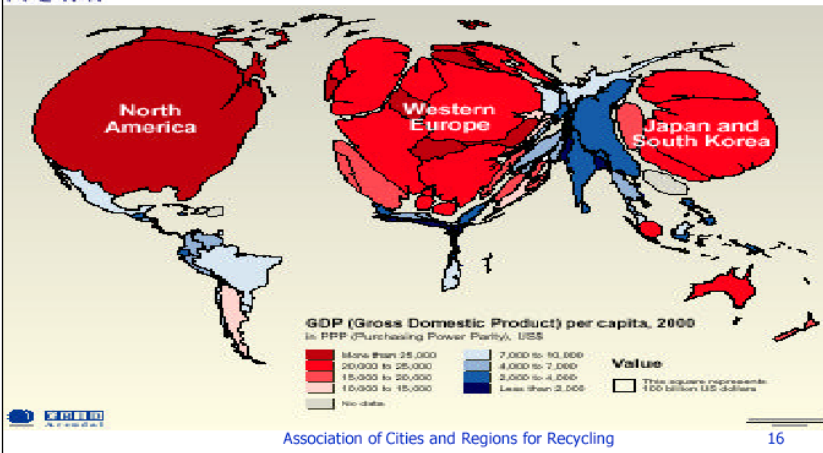
Association of Cities and Regions for Recycling

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Consumption : another vision of the world

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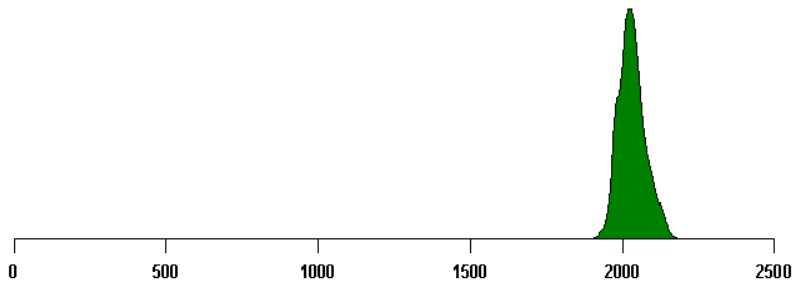
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A question of sustainability (1) !

Oil production from 0 to 2500 AC



Fed. Instit. Geosciences and Nat. Resources 2001

Association of Cities and Regions for Recycling

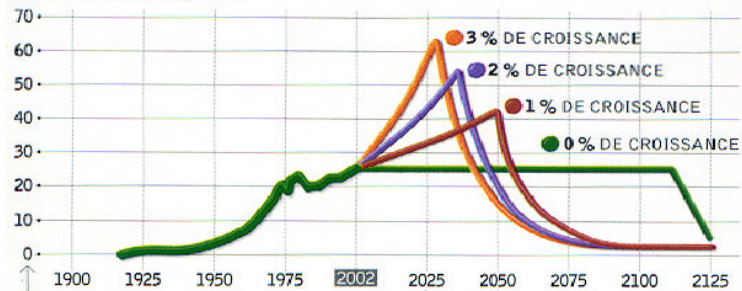
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A question of sustainability (2) !

Modélisation de la **production mondiale** de pétrole en fonction de la croissance de la demande en milliards de barils/an



Source : US Department of Energy-AIE

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What if Chinese would consume like Americans ?

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They would need :

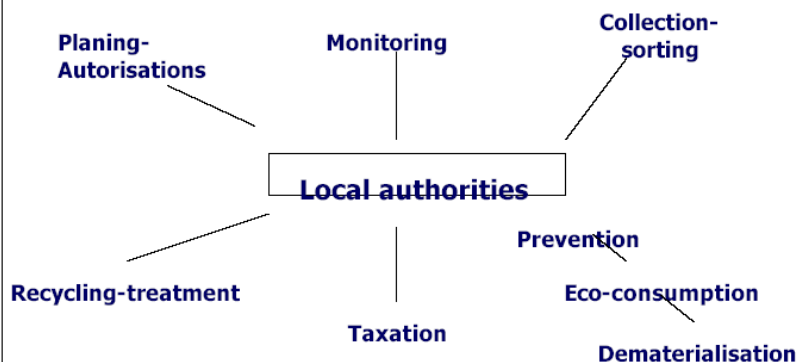
- 2X world production of paper
 - 2X world consumption of fish
 - 2X world oil production
- 2X CO2 emissions

→ **We would need 4 Earth !**



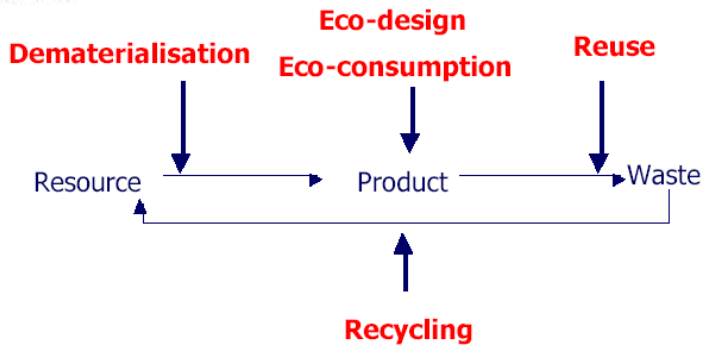
New roles for LRA's

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Awareness raising on the limits and consequences of consumption

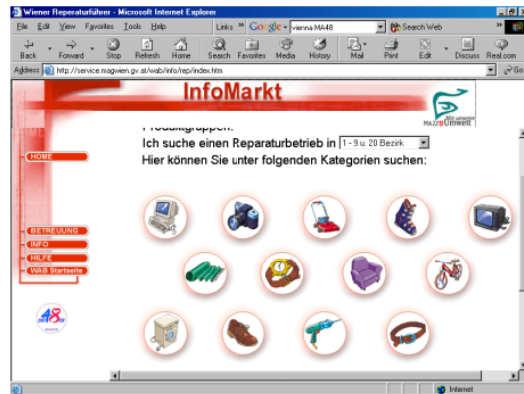




Promote reuse and repair

Vienna

- Repair
- 2nd hand
- Leasing/Renting
- Reuse



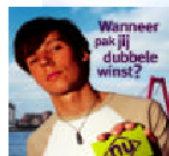
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Promoting sustainable consumption

Rotterdam : the « Spaarpas »



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Offering freedom to choose

Brussels : campaign on free press and advertising



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Offering freedom to choose

Brussels : campaign free press and advertising



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Replace products by services

Vienna : mobile dish-washing



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