Municipal waste management
„Pay as you throw-system“
Land Vorarlberg/Austria

- Population approx. 380,000, most western part of Austria, close to the border of Bavaria, Switzerland, Liechtenstein
- Biggest town 45,000 inhabitants, smallest community 600;
- Urban and rural areas
- Municipal waste 2012: 300,6 kg per capita
- Collection of municipal waste: mixed system
  - Household collection, door-to-door, bag and bin
  - Container collection: collecting stations
  - Municipal/regional recycling centres
Municipal waste figures 2012

- Municipal waste 85,0 kg per capita
- Bulky waste 13,1
- Bio waste 38,1
- Waste Paper, newspaper, packaging 83,1
- Glass 35,3
- Metal packaging 6,1
- Other metal incl. cable 5,1
- Light fraction/plastic 27,3
- Used clothes 7,9
- Cooking oil/grease 0,3
- Dangerous waste 1,2
- **Total** 300,6

- Recycling
  - **213,1 kg = 70 %**
Development of municipal waste

- restover waste
- bulky waste
- metal
- plastic
- biowaste
- used clothes
- paper
- Cooking oil
- glass
- dangerous waste
Development of recycled waste compared to non-recycled waste
Main steps to success

- 1989 regional law for separate collection of municipal waste (metal, glass, paper)
- 1992 establishing municipal environment association by communities
- 1993 national law/packaging regulations/introducing disposal fee from polluters
- 1997 separate collection system for bio waste
- 99/00 light fraction/plastic collection changing from container to transparent bags
- 2006 extending regional law to avoid increasing waste figures
- 2006-2011 EU/national regulations on electrical/electronic waste
Obstacles and Challenges

- Increasing wealth still means increasing waste
- Decoupling economic growth from waste production failed so long
- Product cycles shorten
- Product design should be „easy to repair“/producers responsibility!
- Returnable packaging is decreasing
Who pays the bill?

Message: polluter pays

- Commerce, packaging industries, electrical/electronic producers have to pay disposal fees
- Recycling Organisations (f.e. ARA, ARGEV) collect the money, sell reusable materials and allocate the financial resources
- No garbage fee for metal-, glass-, plastic-, paper-packaging, electrical/electronic devices

Message: low basic charge

- €17 p.a./per person to the community for maintaining collecting system infrastructure, dangerous waste, etc.
Message: pay as you throw

- 60 litre waste bag € 4,-
- 40 litre waste bag € 2,70
- 15 litre biowaste € 1,20
- ¼ m2 bulky waste € 6,-

Message: the more you separate, the more you save!

- You save money
- You save resources
- You protect the environment
Open Days Brussels 2013, Waste management

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