Out of sight, out of mind? European waste management and prevention policies for a better tackling of household waste

European Virtual Seminar 2013-2014 GROUP 2

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Team Members & Expertise



Bettina Gösweiner (Austria) Geography and English



Roeland Sterkens (Belgium) Biotechnology options/ Environmental Sciences



Chrisanthi Gatidou (Greece) Environmental Sciences and Biodiversity



Michiel Kerpel (The Netherlands) Environmental and Natural Sciences



Iulia Zaharia (Romania) Geography, Conservation of Natural and Cultural Heritage

Introduction

\triangleright	Why	does	waste	prevention	matter?

- Overall target: To determine whether the long-term goal of waste prevention as defined in the EU Directive 2008/98 is being achieved in selected European countries: Austria, Belgium, Greece, Netherlands and Romania
- To show innovative solutions for waste prevention that support the EU directive 20008/98
- To help promoting waste prevention and contribute to a more effective implementation of the EU directive.
- To contribute to a sustainable European society and economy

Household Waste Prevention in the EU

The problem:

- Over the last 10 years, each European produced on average 502 kg of waste per year (Eurostat, 2010)

- **25 % of food bought by EU households is thrown away** (*Waste & Resources Action Program, 2010*)

- September 1989: First broad communication on waste; 'extremely difficult if not impossible' to estimate the quantity of waste produced in the EU.
- The Waste Directive requires that EU Member States establish national waste prevention programs by the end of 2013
- National plans must include objectives for waste prevention and specific targets for waste management
- The Commission will continue to monitor the implementation and enforcement of waste legislation at national level and develop support for Member States.

Methods

Objectives based on

First research goal

Second research goal

Third research goal

the general concept of sustainable development, and in particular on sustainable development concerning waste
the long term goal of the EU to remain a recycling society that seeks to prevent waste and treats it as a resource

• to understand and describe the European prevention policy in connection with the Directive 2008/98/EU

the implementation of the EU prevention policy in selected EU member states

• suggest how individuals can contribute to the waste prevention by recommending two innovative ideas: SOCIAL-Culinary Misfits and TECHNICAL-Cradle 2 Cradle



Results: Comparison Table

Country Criteria	AUSTRIA	BELGIUM	GREECE	NETHERLANDS	ROMANIA
Year of implementation of the EU Directive 2008/98/EU	2010	Brussels 2012 Flanders & Wallonia 2011	2012	2011	2011
Waste management plan?	Federal Waste Management Plan (F.W.M.P.) of 2011. New every 6 years	Regional Waste Management Plan of Flanders, Wallonia and Brussels, all revised in 2011	National Solid Waste Management Program	First Waste Management Plan in 2002. Second in 2009 Landelijk Afvalbeheerplan (LAP) (2009-2021)	Waste Management Plan (2012). National Strategy on Waste Management (S.W.M.) 2014-2020
Waste prevention plan?	Waste Prevention Plan in 2011 as a part of the F.W.M.P	As part of the Waste Management Plan	National Strategy Plan for Waste Prevention 2006- 2013	As part of Waste Management Plan since 2002 and since 2013 Waste Prevention Program	No. Only sections about prevention in the National Strategy on Waste Management and in National Waste Management Plan
Awareness programs on waste and recycling?	By the government	By the government	By the state, private corporations and nongovernmental organizations	By the government, municipalities and private organizations	By private corporations and nongovernmental organizations

Continuation comparison table

Country	AUSTRIA	BELGIUM	GREECE	NETHERLANDS	ROMANIA
Criteria Management entity of these plans?	9 provinces of Austria, municipalities, Ministry of Agriculture, Forestry, Environment and Water Management	Each region has a governmental organization	Ministry of Environment, Energy and Climate Change	Ministry of Infrastructure and the Environment (Rijkswaterstaat)	Ministry of Environment and Climate Change, National Environmental Protection Agency
How much household waste in kg/capita in 2000 and in 2013?	2011: 552 kg/capita	2000: 560 kg/capita 2010: 525 kg/capita	2002: 422 kg/capita 2010: 521 kg/capita 2011: 496 kg/capita	2000: 647 kg/capita 2012: 588 kg/capita	2009: 393 kg/capita 2011: 312 kg/capita
How much residual waste in 2000 and in 2013?	2009: 168 kg/capita	2000: 191 kg/capita 2010: 150 kg/capita	2002: 37 kg/capita 2011: 88 kg/capita	2000: 248 kg/capita 2012: 219 kg/capita	n/a
How much packaging plastic waste in kg/capita in 2000 and in 2012?	2000: 26 kg/capita 2010: 32 kg/capita	2000: 24 kg/capita 2010: 32 kg/capita	2000: 25,1 kg/capita 2011: 12,3 kg/capita	2000: 0,1 kg/capita 2012: 6,5 kg/capita	2011: 36 kg/capita/year (40% recycled)

Continuation comparison table

Country	AUSTRIA	BELGIUM	GREECE	NETHERLANDS	ROMANIA
Criteria					
Household waste coupling, relative decoupling or absolute decoupling?	Coupling	Relative decoupling	Coupling	Coupling	Coupling
Selected STRENGTH from the Directive's SWOT analysis	Managed to reach several goals of the EU Directive	Lots of activities and innovations for the increase of awareness among citizens	Decreased generation of biodegradable waste and almost all recyclable materials except metal and glass	Far ahead with waste management in the EU	EcoRom Expansion program for separate collection and monitoring existing collection schemes and collection of packaging waste <u>Company's</u> <u>Initiatives</u> Develop accessible selective collection systems
Selected WEAKNESS from the Directive's SWOT analysis	Coupling of GDP and household waste generation	No landfill or incineration ban/tax due to lack of facilities	Failure to mee some deadline CO M CC	stems did not ver all unicipalities. oupling of GDP	Derogation period or the fulfilment of he 2020 target of 50% recycling of MSW
				id nousehold aste generation	9

Continuation comparison table

Country	AUSTRIA	BELGIUM	GREECE	NETHERLANDS	ROMANIA
Criteria					
Selected OPPORTUNITY from the Directive's SWOT analysis	Raise awareness and inform people	Increase the public awareness by communications technologies	Develop ways to reuse waste	Introduction of Pay-As-You-Throw systems in more municipalities gives changes for waste prevention	Develop a viable market for recycling waste and respectively a market for valorizing the products from waste processing
Selected THREAT from the Directive's SWOT analysis	Import of commodities with unknown composition	3 different waste management plan of the 3 region with other main objectives	Current econon situation impos different priorities unfortunately	creasing the number of seholds due to al trends. As a result the usehold waste eneration has also grown	Unstable legal framework

Discussion

- Austria, Belgium and the Netherlands are succesfull in reducing waste and landfilling
- Austria, Belgium and the Netherlands score above average in "Screening of waste management performance of EU Member States
- Main measurements
 - Adopting of regulation
 - Economic instruments
 - Financial incentives
 - Producers are incited to reduce waste
- Further improvements:
 - Extended use of PAYT (Pay As You Throw principle)
 - Raise awaireness among citizens
- Greece and <u>Romania</u> score below or far below the average EU score in "Screening of waste management performance of EU Member States

In these countries, waste prevention is not yet on the political agenda

Discussion (continued)

Recommendations

- 12 recommendations for the EU: i.e. Formulate household waste prevention targets in a way that they can be assessed easily.
- 8 recommendations for citizens: i.e. Reduce waste by buying products with less packaging and re-use materials.
- 3 recommendations for reaching absolute decoupling: i.e.
 To come to an integral implementation of the polluter pays principle. A pay-as-you-throw scheme provides big chances for household waste prevention.

Innovative examples

Technical innovation: Cradle to Cradle concept
 Social innovation: Culinary Misfits

High importance of the contribution of citizens for successfull waste prevention, either as an INITIATOR of NEW IDEAS or

JOINING THESE IDEAS IN!

Conclusions

- All countries implemented the EU 2008/98/EC WFD.
- Implemented both waste prevention and management plans.
- Only Belgium has a relative decoupling
- More waste is recycled by "PAYT" (pay as you throw) and "EPR" (extended producer responsibility).
- Recommendations for the EU, the citizens and for reaching an absolute decoupling
- Innovative examples increase waste prevention

Out of sight, out of mind? -> Not a solution for the problem

THINK GREEN THINK CLEAN

THANK YOU



Urban Waste Prevention Across EU-boundaries:

An Overview on Implementation, Used Practices and Innovative Projects in 3 EU-Countries

(Austria, Belgium and Portugal)

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2013-2014

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Waste Prevention Tips



Back-to-school

URB 1

- Many of last year's supplies can be reused or recycled
- Share your used books with friends, relatives, or younger schoolchildren
- Purchase and use a wide assortment of supplies made from recycled products
- Cover your textbooks with cut-up grocery or shopping bags helps reduce waste and keeps your books in good condition
- If you bring your lunch to school, package it in reusable containers instead of disposable ones
- Community projects
 - Organize a recycling drive in your neighbourhood or school
 - When going to work or school, try carpooling, biking, walking, or riding public transportation to reduce pollution
 - Organize a green waste diversion and composting program for your neighbourhood
 - Hold a "donation picnic" where the members of your community can have lunch, talk, and bring their old toys, clothes, books, furniture, and other items for reuse by charitable organizations

Conclusions



URB 1

Waste data is not always completely reliable and often not perfectly comparable – conclusions have to be drawn carefully;

➡ Goals of the EU directive have partly been met due to measures taken by member states, but there still is a lot room for improvement, especially in prevention;

Economically successful countries in general show very high percentage of recycling and low percentage of landfilling, but still very high amounts of MSW production;

There exist **big differences** between individual countries but also smaller regions;

The countries and regions could learn a lot from each other by **looking at best practices** in other countries, exemplary regions as well as economically, socially and geographically similar countries;

❑ Austria can be a model for recycling (highest recycling rates in Europe); Belgium shows very good numbers in recycling too, but also produces substantially less MSW than Austria and the EU average; Portugal shows improvements in some fields and can therefore be a model for lesser developed countries.

Recommendations



... for the EU, local authorities and stakeholders:

➡ Informative and educational measures (information campaigns, ...) to improve the awareness for waste prevention, separation and consequences of waste, as well as the awareness of preventive actions and projects;

Keeping up the quality of waste collection by monitoring, and setting standards for monitoring and evaluation for all EU countries;

C Enhancing the system of the **polluter pays principle** by further accounting the real price of waste collection and treatment, thereby adjusting **taxes** and providing fiscal **incentives** for sustainable and long-lasting products;

Aking voluntary agreements with consumers and industries to achieve targets in resource efficiency, re-use of products, etc.;

Oving towards a more sustainable economy with reusable and refillable packaging; creating packaging that self-disintegrates; 'zero waste marketing' and requiring producers to only make products that are 100% recyclable.