

## WASTE TRANSPORTATION: REDUCTION OF WASTE TO PREVENT INCREASED WASTE TRANSPORTATION

### WHAT IS THE PROBLEM ?

Waste to be reused on a different site, recycled or disposed of needs to be transported to the location of treatment or disposal. Transportation of waste materials increases the number of polluting vehicles on EU roads both between place of production and treatment of waste creating air and noise pollution, congestion and all other problems relating to road transport. While the reduction of waste to transport plus the use of alternative transporters, for example, the train or barge/boat would reduce the number of vehicles on the road, the most favourable option is to reduce the amount of waste produced, reuse materials or compost waste at the location where it is produced.

The Directive on Landfill waste (EU, 1999) requires a substantial reduction in the amount of biodegradable municipal waste (BMW) being sent to landfill. The Directive recommends BMW is reduced to 75% (by weight) of the total amount by 2010 from 1995 levels, 50% by 2013 to and by 2020 to 35% resulting in an overall increase in this type of waste being treated locally through composting schemes rather than sent to landfill. This therefore requires alternative collection and disposal such as municipality composting to occur.

Hazardous waste from the construction sector, which has significantly increased due to the regeneration of brownfield sites, will become a much greater problem to dispose of in the near future as the number of landfills that can accept this type of waste will be significantly reduced (EU, 1999). Transportation of hazardous material across country, landfill tax and acceptance of material at landfill will all significantly increase in economic cost. This will encourage on-site treatment of hazardous materials (bioremediation) and separation at source to reduce the cost of long distance transportation which are more sustainable options.

Transportation of waste will always be an issue, however tools and methods for ways of reducing waste transportation will be essential to support companies Europe wide and where there is a need to transport waste, considerations should be made to utilise the most sustainable mode of transportation available.

### GEOGRAPHICAL AND TIME SCALE IMPACTS

National and municipality level involvement is required at all stages of a scheme to encourage on-site treatment of waste and/or to reduce the need to transport waste long distances particularly by road. Practical implementation at a building level also plays an essential role when considering the transportation modes and reduction of waste at source.

<b>Stage of project related to key problems</b> Please mark arrow/s for time period when tool can be used	<b>Construction waste</b>			<b>Operational Waste</b>		
	←	→		→		
	inception of project idea	Design	Design assessment	Construction	operation	demolition

<b>Scale of project related to key problems</b>	Component	Building	Neighbourhood	City	Region
		X	X	X	X

### CONFLICTING PROBLEMS

A major consideration is the perceived speed of disposing of waste via road transportation when compared to perceived slower alternative modes of transport.

### CASE STUDIE(S) LINKED TO THIS ISSUE

The Austrian recycling and waste management regulation in Graz, is the only PETUS case study relevant to this sector issue.

### WHAT WILL IMPROVE SUSTAINABILITY?

Incorporating mechanisms to encourage reducing waste, on-site reuse and composting of waste into the waste management process would reduce the amount being transported to treatment or disposal sites. However, care should be taken by municipalities to ensure parallel alternative waste collection schemes with nearby local authorities and that contracts should be put to tender so that public influence is reduced over such schemes.

To control and reduce the transportation of waste, the following issues should be considered:

- reducing the potential of easy disposal methods will encourage reduction and reuse,
- municipality encouragement, support and incentives to use a scheme,
- transfer of information from other successful schemes, as well as education and training to the general public would enhance alternative waste schemes.

### ANY OTHER INFORMATION

Waste references

EUROPA (2004) *Waste* European Commission Environment DG  
<http://europa.eu.int/comm/environment/waste/index.htm>

European Environment Agency (2002) *Case studies on waste minimisation practices in Europe* EEA Copenhagen  
[http://reports.eea.eu.int/topic\\_report\\_2002\\_2/en/Topic\\_report\\_2-2002\\_web.pdf](http://reports.eea.eu.int/topic_report_2002_2/en/Topic_report_2-2002_web.pdf)

European Union (1999) *Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste*  
*Official Journal L 182 , 16/07/1999 P. 0001 - 0019*

Topic Centre of European Environment Agency (2004) *The European Topic Centre on Waste and Material Flows* <http://waste.eionet.eu.int/etcwfm>