

# PM- Obstacles getting in the way of sustainable investments within waste management in the Baltic Sea region

## Background

Today the municipalities and regions in the Baltic sea region (BSR) lack a long-term strategic direction for waste management investments, based on life cycle cost analyses, as well as full access to experts, technologies, best practice, competence and experience. Furthermore the present lack of cooperation within the region and coordination in waste management leads to lost opportunities for using more efficient large-scale technology, a risk of overcapacity in investment in treatment facilities but also to decreased possibilities of attracting EU and other funding for waste system infrastructure investments. The above mentioned problems were some of the reasons why the RECO Baltic 21 Tech project was launched in 2010.

One way to overcome these problems is to develop a joint strategy for the region. The overall aim of such strategy is to lower transaction costs for project development, reducing risks for implementation and ensuring cross-regional fertilization of ideas and competences within waste management in the region.

For the strategy to be useful to overcome today's problem, the problems must be concretized to a greater extent than today. Furthermore, possible solutions to overcome present problems must be identified.

## Aim

The overall aim of the study was to identify and evaluate the problems and challenges getting in the way of sustainable investments within waste management in the Baltic Sea region and to identify possible solutions to the identified problems. The results are to be used as input to the joint strategy as part of the Reco Baltic 21 Tech project.

## Method

Present problems and challenges were obtained primarily from the national reviews carried out in work package 3 in Reco Baltic 21 Tech. The overall aim of work package 3 was to develop a basis for how to assign the most appropriate recovery method in order to climb in the waste hierarchy. In the national reviews a status report was written about the waste management in each of the countries in the BSR. In the reviews some of the present problems were dealt with.

Based upon the identified problems, a workshop was held at which people working with waste issues were attending. This included researchers, purchasers, engineers and waste managers from different countries in the BSR. The topics discussed were:

- What other obstacles are getting in the way of sustainable investments within waste management?
- What are the consequences of the existing obstacles/challenges, i.e. how do the obstacles affect you and your organization in your daily work?
- How could the identified obstacles and challenges be overcome?

## Results

The identified problems were categorized into *responsibilities and cooperations, financial and market aspects, legal matters, public awareness and political awareness and priorities.*

### Responsibilities and cooperations

Table 1 shows the identified challenges, their consequences in for the waste management and possible solutions to overcome the problems.

*Table 1. Identified problems, their consequences and how the problems could be overcome concerning responsibilities and cooperations.*

Problems	Consequence	Solutions
Relatively small cooperations between municipalities and institutions.	Insufficient financial means to provide necessary investment.	Make stakeholders aware of the problem. Only give fundings if actors cooperate.
No distinct areas of responsibilities and roles in waste management between municipalities, regions/regional centres and on a national level.	Governments place all responsibility on the municipalities. Because of low cooperations the roles of the different actors are not clear.	Implementation of clearer legislation. Negotiations and discussions between actors. Implementation of waste management plans on a national level.
Weak motivation from municipalities. This as municipalities are not interested in an improved waste management.	Limited motivation for municipalities and institutions to manage their responsibilities in waste management.	Implementation of policy instruments.
Lack of competence in waste management within municipalities and institutions.	Limited ability for municipalities and institutions to manage their responsibilities in waste management.	Exchange of knowledge between countries and benchmarking. More cooperations between municipalities and regions.
Lack of experience in waste management within municipalities and institutions.	Limited ability for municipalities and institutions to manage their responsibilities in waste management.	Exchange of knowledge between countries and benchmarking. More cooperations between municipalities and regions.
Small municipalities which have limited resources to manage the waste management imposed on them.	Limited ability for municipalities and institutions to manage their responsibilities in waste management.	Exchange of knowledge between countries and benchmarking. Establishment of regional centres.
Producer's responsibility is not working in practise. This because of weak legislation where responsibility is needed only on "paper".	-	Clearer requirements for producers. Stricter legislation. Increased public awareness.
Lack of waste management plans, especially on a regional level but also on a national level.	Important activities to improve waste treatment are missed/overlooked.	Benchmarking towards other countries. Implementation of legislations in which roles and responsibilities are clearly defined.
Lack of analytical input to what is strategically wise to implement in a certain region.	Overcapacity of waste management facilities. Poor optimized waste management.	Regional cooperations.
No time, resources for strategic analysis where there are too many urgent problems which need to be solved now.	Current problem solving is not sustainable where necessary decisions within waste management are being postponed.	Regional cooperations.
Too many stakeholders within waste management	-	Joint strategy for certain regions.
It takes too long to implement waste management policies.	-	Development of a joint strategy.
Overcapacity in waste management facilities	Difficult to climb in the waste hierarchy as the facilities need to be fed by waste. There are too many landfills and sorting facilities financed by the EU funds. The prices go down which makes it more difficult to run different waste treatment facilities.	Improved waste management planning.

## Financial and market aspects

Table 2 shows the identified problems regarding financial and market aspects, their consequences and possible solutions to identified problems.

Table 2. Identified problems, their consequences and how the problems could be overcome concerning financial and market aspects.

Problems	Consequence	Solutions
Low gate fees for the landfilling of waste.	Difficult for other treatment methods to be financially competitive.	Increase the fees and taxes for landfilling of waste.
Price sensitivity in waste management.	Difficulties in taking political decisions.	
Lack of financing of waste management infrastructure.	Small investments in waste management infrastructure.	
Too much dependencies on EU fundings.	Too many landfills and sorting facilities which have created an overcapacity.	Increase the environmental awareness among politicians.
Increased free competition and thereby an increased number of private actors in waste management.	Difficult for municipalities to carry out reasonable waste management planning, including investments.	Waste management should be public serviced. Change current legislations which give municipalities more control over the waste management. Properly contracted private companies and better control by the municipalities.
	Limited ability for the municipality to direct waste to specific waste management facilities.	
	Private interest which might outweigh more sustainable investments.	
	Less focus on the less populated areas in a country.	
	Harder competition lowers the price of waste handling why there is a risk of financial problems within waste management companies.	
Private investor's major interest is to make money from waste handling where climbing in the waste hierarchy are of less importance.	No climbing in the waste hierarchy.	Implementation of stricter regulations. Implementation of policy instruments.
Short term thinking by private investors.	No climbing in the waste hierarchy.	Implementation of stricter regulations and penalties.
No expertise within waste management is present in the decision process of EU fundings.	Bad decisions where the projects which are the best from an environmental point of view not always get fundings.	Require that experts within waste management are involved in the decision process.
	Lack of compliant landfills.	Implementation of severe penalties for dumping of waste. The revenues from the penalties should go to sustainable waste management investments exclusively.
	Lack of remediation of non-compliant dumpsites.	Lobbying towards decision makers.
	Extensive landfilling of municipal waste.	Increase the fees and taxes for landfilling of waste.
No external fundings (EU fundings etc.) for recycling projects as recycling process generate output fractions which provide revenues.	Only approval of landfilling and waste sorting projects. Relative small improvement in the waste management system.	Provide fundings for investments for profitable recycling. When companies and municipalities are making profit from recycling a certain amount of the revenues have to be paid back to the structural fundings.
No possibility to fund "crazy projects" from the EU which could have a high potential.	Only approval of landfilling and waste sorting projects. Relative small improvement in the waste management system.	Change the regulations of the structural fundings.
Difficulties in receiving investment funds for smaller project (Only the bigger projects receive fundings)	-	Smaller projects and investments should also be entitled/considered in the evaluation and decision process of EU fundings.
Too much bureaucracy in the decision process.	The decision process is very long why investors in waste management infrastructure lose patience and interest in the potential investment.	Shorten the decision process.
Difficulties in making investments within waste management. This because of very long processes before a permit is received.	Companies/actors are hesitant to make investments within waste management.	Less bureaucracy and less strict regulations.

## Legal aspects

Table 3 shows identified problems, their consequences and possible solutions to identified problems related to legal aspects.

*Table 3. Identified problems, their consequences and how the problems could be overcome concerning legal aspects.*

Challenges	Consequence	Solutions
Legal problems regarding the ownership of the waste between municipality and private actors.	-	-
No legal right to charge for waste collection and waste treatment.	-	Change current legislations to make it possible to charge for waste handling.

## Public awareness

Table 4 shows the problems identified regarding public awareness, their consequences and possible solutions.

*Table 4. Identified problems, their consequences and how the problems could be overcome concerning public awareness.*

Challenges	Consequence	Solutions
The public opinion is against waste treatment facilities in its neighbourhood	Difficulty in establishing waste management facilities. Small focus on source sorting approaches and investments.	Municipalities can invite the general public to public events and inform them about the environmental consequences of an improper waste management treatment.
Low public awareness with respect to waste management and its effect on the environment.	-	Municipalities can invite the general public to public events and inform them about the environmental consequences of an improper waste management treatment.
No trust in politicians	-	-
Very little focus to involve households (for example source sorting) and too much focus on "end-of-pipe" solutions.	-	Municipalities can invite the general public to public events and inform them about the environmental consequences of an improper waste management treatment.
Weak motivation from the public to improve waste handling.	Individuals are not interested in good waste management if they are not forced.	Implementation of policy instruments. Increase the public awareness.

## Political awareness

Table 5 shows the identified challenges and their possible solutions related to political awareness.

*Table 5. Identified problems, their consequences and how the problems could be overcome regarding political awareness.*

Challenges	Consequence	Solutions
Investments in waste management infrastructure are facing competition from other types of investments such as construction of buildings and roads etc. Politicians have the tendency to financially support those types of investments over waste management investments.		Municipalities can invite the general public to public events and inform them about the environmental consequences of an improper waste management treatment.
Lack of political will to improve present waste treatments of waste.		Increase the public environmental awareness and the awareness among politicians.