Latvia: Encouraging signs in Liepaja

Introduction – Project in the context of the country situation

The project “Solid Waste Management in Liepaja Region” is part of the National Solid Waste Management Strategy that was elaborated upon in 1997 and adopted by the Cabinet of Ministers in June 1998 for the period 1998 - 2010. The aim of the Strategy is to ensure the fulfilment of requirements of EU directives and standards in the sector of solid waste management, including implementation of the ‘Polluter Pays’ principle and recycling of waste and ground on 10-12 regional landfills within the national waste management system. The Strategy also includes the closure of existing dumping sites that do not meet any sanitary requirements and cause serious damage to the environment and create a risk for human health. In order to ensure the implementation of the Strategy, the investment programme “500-” was prepared.

The National Development Plan recognises the need to improve the access to and quality of the environmental infrastructure in rural areas. It is indicated in the plan that just 20% of the inhabitants of rural areas have access to waste management services. Therefore waste management is set as one of the priorities.

The Liepaja Regional Waste Management project was initiated in early 1998 by the Liepaja City Council. Officially the project was started on December 1, 1998 when an agreement was signed with the Swedish company “SWECO International” about an elaboration on the paper “Research on possibilities, design and environmental assessment for sustainable waste management in Liepaja city and Liepaja region”.

The project has several objectives:

1) set up a regional waste management system with maximal utilisation of collected methane gas;
2) demonstrate a modern sanitary landfill on a regional basis with the application of collection technologies;
3) implement the ‘Polluter Pays’ principle, e.g., ensure that generators of waste pay for its management, and the tariffs are sufficient for covering the running costs;
4) close existing dumping sites and decrease their negative impact on the environment (including contamination of groundwater);
5) build a modern landfill applying techniques that correspond to the requirements of EU Directive 1999/31/EC and implement a waste management system that would ensure gradual compliance with the requirements of Directive 75/442/EEC;
6) promote the set up of a local waste management company and strengthen its institutional capacity;
7) reduce greenhouse gas emissions within the framework of an agreement with the Carbon Fund;
8) facilitate the separation of recyclable materials.

The project aims to build a new landfill in Grobina, and the works are split in several stages, e.g., land works, improvement of facilities, installation of infiltration and gas collection system, construction of buildings, access road, fences etc. The project also includes gas extraction and electricity production (using energy cells). The existing old dumping sites, including the largest one, would be completely closed and remediation started.
There are 147,890 inhabitants living in Liepaja region (about 6% of the total inhabitants in Latvia - data from 1999) and the area of the region is 3,653 km². Besides Liepaja city (95,000 inhabitants) the project encompasses five towns and twenty-five rural municipalities.

Total project costs form about USD 16,97m (according to the ISPA project sheet it makes EUR 14,433m); however this amount may be increased or adjusted according to the exchange rate.

The EU grant from the ISPA fund forms 63% of the total eligible project costs, which equal EUR 8,12m. The rest is financed by the state budget, the Liepaja City Council and municipalities from the Liepaja region. In addition, specific project parts are financed from SIDA (about USD 0,708m as a soft grant), the World Bank and the WB Carbon Fund. In detail, the financing consists of:

<table>
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<tr>
<th>Institution</th>
<th>Amount</th>
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<tbody>
<tr>
<td>WB loan</td>
<td>USD 2,2m</td>
</tr>
<tr>
<td>EU grant</td>
<td>EUR 5,097m</td>
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<tr>
<td>Carbon fund</td>
<td>USD 2m</td>
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<td>Nordic Investment Bank</td>
<td>USD 1,5m</td>
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<tr>
<td>Government of Latvia</td>
<td>USD 1m</td>
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<tr>
<td>Liepaja city and municipalities of Liepaja</td>
<td>USD 1m (investment in share</td>
</tr>
<tr>
<td>region</td>
<td>capital)</td>
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The project is implemented by the local waste management company “Liepajas RAS”, which is owned partly by the Liepaja City Council and Liepaja Regional Council. The project implementation period is 2001 – 2006 (completion in year 2007). The loan agreement with WB was signed in December 2000. Still, the financing memorandum on the project between the EU and the Government of Latvia was signed in November 2001, which actually marks the start of the ISPA project. Most of the work contracts, however, were just signed in July-September 2003.

**Evaluation of the Appraisal Process**

The decision on the need to prepare an EIA was taken on January 20, 1999 by the Liepaja City Council. The EIA was prepared during 1999. Thus the EIA process was started very soon after the official start of the project (December 1, 1998). The Terms of Reference (ToR) for the EIA was adopted on February 26, 1999. The ToR was in line with the ToR prepared by the World Bank. The EIA report was elaborated on by the Swedish company “SWECO International” in cooperation with the Latvian company “Geo Consultants”. The final version of the EIA report was published on September 5, 1999. On November 22, 1999 the EIA Office published its official statement on the project recommending Grobinas as a project site.

It should be pointed out that this project was also among those first projects that have tested the EIA process according to the requirements of new legislation, as the Law on EIA was just adopted in October 1998.

The compliance of the project with EU Directive 75/442/EEC on waste management is not analyzed in the EIA report. However, the general principles of the directive have been taken into account while designing the project, e.g., sorting of waste before depositing it in the landfill; separation of municipal and hazardous waste; decrease the amount of biodegradable waste that is deposited; ensure collection of methane from landfill. Still, the project doesn’t include the costs that would be needed for later closure of the landfill and management of the territory.
The EIA report doesn’t assess the impact of the project to climate change. In some parts of the EIA report there is a short note about the collection of methane, and in the calculation of the total project costs, the income from the sale of methane gas is taken into account. Still, there is no evaluation or calculation available on how the project would affect greenhouse gas emissions in the context of Latvian and EU priorities. The changes in the EU legislation affected the project as the managing company of the project “Liepajas RAS” in 2001 had asked for permission for the generation of electricity from waste. However, the EU directive from July 4, 2001 foresaw that support for electricity generation from non-sorted waste should be stopped.

At the same time, the project impact on the balance of greenhouse gas emissions in Latvia was analyzed in the working paper prepared by the World Bank. This is due to the fact that the project “Solid Waste Management in Liepaja Region” is the first ever project co-financed from the Carbon Fund.

**Analysis of the EIA Report**

The EIA report gives quite a good overview of the situation regarding waste management in the Liepaja region and describes the environmental problems needing solutions there. In 1998 waste from the Liepaja region was deposited in twenty-seven project sites, from which about 78.9% of the waste was deposited in Skede. In all of those project sites the contamination of surface water and groundwater was observed with maximal concentration around the Skede site. The EIA also includes the forecasts for the average amount of waste that would be deposited in the new landfill.

Following the decision of the Liepaja City Council (the project initiator), two alternatives for the location of the project were analyzed during the EIA process:

1) the existing project site of Skede that is located near Liepaja city, and
2) the former military territory at Grobina.

Additional to direct impact on the natural environment, the EIA also evaluated such aspects as project impact on biodiversity, value of land and landscape, cultural heritage, air quality and human health. There were three groups of criteria defined for comparison of the two alternatives: nature aspects; social and human health aspects; and economical aspects (in the order of decreasing importance).

The results of the EIA process showed that in Skede there are two excluding criteria for implementation of the project, e.g., biodiversity aspects and the closeness of the allotment village. The project implementation in Skede would cause eradication of two habitats that are protected in Latvia and endangered according to EU legislation. Moreover, the Skede site is located very close to Tosmare Lake in which the runoffs of infiltrate from the current dumping site have already been observed. At the same time in Grobina, there were no problems relating to a possible negative impact on nature and human health though the total costs of the project (including the maintenance costs) in that site were higher than in Skede. As the nature and human health aspects were rated higher than the economic criteria, Grobina was recommended as a project site. The results of the EIA were communicated to the public during the public hearing on the draft of the EIA report.

**The EIA Procedure on the Project**

Following the requirements of the national legislation on the EIA procedure, there was a scoping meeting organised on February 10, 1999. The meeting was announced in the local newspapers and held in the building of the Liepaja City Council (the initiator of the project). The aim was to discuss the general outlines of the project, but there were no concrete opinions formed from the public and NGOs
by the time when the meeting was held, because too little information was available on how the project would affect the local environment around the project site. Still, the local people living in the surrounding areas of the proposed sites were negative about the project.

Later, in May 1999, a survey was made to find out the detailed opinion of the affected people living in the area of a 3 km distance from the sites. The results of the survey showing the opinions and arguments of all owners of the houses are included in the final EIA report as an annex.

The draft EIA report was discussed with the public and other interested parties in the public hearing on August 15, 1999. The public hearing was announced in the local newspaper and held at the Liepaja City Council. Most of the participants of the meeting were people living in the surrounding areas of the possible project sites.

Other interested parties used the opportunity to comment on the draft report, e.g., WB, SIDA, Liepaja City Council, EIA office, experts and the public in general.

The official notes from the public hearings (both from the scoping meeting and the public hearing on the draft EIA) are included in the final EIA report as annexes. It is also stressed in the text of the EIA report that public opinion has been taken into account; however, there is no separate document that would show which comments have been taken into account and the arguments if this has not been done. For example, a letter from the gardening association “Skede” was annexed to the report, but there is no indication of how the opinion expressed in the letter has been taken into account.

As the legislation on the EIA was relatively new, there was hardly any information on the appealing procedures. The local public and NGOs did not oppose the results of the EIA, thus there was no appeal made.

**Economical and Social Impacts of the Project**

A short analysis of social and economic impacts of the project is included in the EIA report. The municipalities (those where both proposed sites are located) had a very positive attitude towards the implementation of the project. Firstly, the budget of the local municipality where the project site would be located would receive additional income in the form of the Nature Resource Tax (according to national legislation, 60% from Nature Resource Tax payments go to the municipal budget where the object is located). Moreover, the implementation of the project would be beneficial for local development through improvement and reconstruction of local roads that are used for the transportation of waste and for improvement in the quality of the environment through re-cultivation of old dumping sites.

Within the EIA report there was also the aspect considering that it might be necessary for other municipalities involved in the project to subsidise the costs of waste management for poorer inhabitants (about 20% out of all inhabitants in small rural municipalities) as the expenditures for waste management would reach about 1.5% of the monthly income for those families; but it was stressed that it would not have any significant financial implications on the municipal budgets. According to recommendations from the WB, the monthly expenditures for waste management should not exceed 1%. In the case of the Liepaja region solid waste management project, the costs would be about 0.6% from the family income.

It is estimated that the project would create 13-17 new permanent workplaces directly in the landfill. Besides this, additional people might be employed during the construction phase. There is no net effect
evaluated of the project impact on employment in the region; however, it would be needed as waste collection is becoming more centralised.

Before the start of the project, eleven different tariffs existed in-between 0,25 Latvian Lat (LVL) and LVL 0,40 per person per month, or LVL 3 - 4,80 per person per year. The increase and equalisation of tariffs was an integral part of the project, e.g., an equal tariff was set for waste collection, transportation and disposal in the whole administrative territory of Liepaja. This was done mainly due to the strict requirements of the WB.

That time the average rate of waste disposal in Liepaja region was LVL 2,61 /m³ (the average in Latvia is LVL 2,6 - 2,8 /m³), while in smaller municipalities of the region the tariffs reached 3 -4,68 LVL/m³. The tariffs often didn’t cover the actual costs of waste disposal. At the same time just fifteen out of thirty-one local municipalities located in the region had set the tariff for waste collection, transportation and disposal - the expenses in the remaining sixteen municipalities were fully covered by the municipal budget. Thus the decision was taken to increase the average tariffs and make them equal in the Liepaja region, and introduce tariffs in those municipalities where no tariffs existed before. The new tariffs for waste management and disposal at the Grobina landfill should reach at least LVL 5 per inhabitant per year in order to ensure that the maintenance costs are covered. Actually the tariff is LVL 0,45 per person per month, which is similar to the tariffs in other regions in Latvia.

Before the start of the project, about 68,8% of inhabitants of the Liepaja region were involved in the centralised waste collection system, including 76,3% of the inhabitants of towns and 44,6% of the inhabitants of rural areas. According to the new requirements of Latvian legislation on waste management, the percentage of people served by the waste management system should be 90,58% in the Liepaja region. The project aims to serve 100% of the inhabitants of towns by 2005 and 80% of the inhabitants of small municipalities and rural areas by 2020. This would ensure the fulfilment of national legislation; however, there are some doubts about the capacity to ensure the full achievement of these targets by the set deadline.

The Feasibility Study

The feasibility study was prepared parallel to the EIA report in 1999 and 2000 by the World Bank. It was argued by the public and NGOs that it was hard to participate in the EIA process and formulate an opinion, because the feasibility study was not ready when the public hearings and surveys were organized. Just some of the conclusions from the economical analyses of the project were reflected in the final EIA report.

In the preparation process of the project, there was an assumption used that the amount of waste generated per person would gradually increase, also taking into account the fact that a partial reduction of the amounts of deposited waste would be possible due to waste separation and recycling.

There are no estimations available from the EIA report on what exactly would be the percentage of waste recycled, but the promotion of waste separation and recycling is an integral part of the project. The project implementing company is also coordinating the education of the public on how to separate the waste and why it is needed. Besides this, there is an economic incentive for the inhabitants to separate their waste as they don’t have to pay for the disposal of waste if it is separated, e.g., glass, plastic, metal, paper. Before the project start, waste separation was initiated only at a pilot level, and only the separation of glass turned out to be successful.

The project fully integrates the ‘Polluter Pays’ principle through the introduction of waste management
tariffs in those municipalities where it has never been applied as well as eliminating (or at least narrowing) the gap between the tariffs and the actual costs of waste management.

The feasibility study does also include the Cost-Benefit analysis of the project, where carbon benefits and other projected income are also included. When calculating the viability of the project, the running costs up to year 2020 were taken into account. The costs related to the closure and remediation of old dumping sites, including the existing waste disposal site at Skede, were also included in the total project costs. The financial analysis of the two proposed sites encompassed the investments, operational and maintenance costs and the possibility for a tariff increase. The Skede site had better rates of return than Grobina, but due to environmental concerns, Grobina was chosen as the project site.

The equity of the project implementing company is only around EUR 1m, and this low level of self-financing would not normally be considered acceptable for a commercial project. However, the EU grant financed 63% of the project costs. Besides, other grants, e.g., from Carbon Fund, the Government of Latvia, are available. The Internal Rate of Return (IRR) presented in the final EIA report was mentioned as 7% with the tariff rate of LVL 5 per inhabitant per year, but no calculations of this rate where included. The viability of the project is strongly connected to the tariffs for waste management that are collected from inhabitants. Thus if the tariff would be lowered to the level of LVL 4 per inhabitant per year, the IRR would decrease to a level of less than 1%. It is also clear that it would not be possible for the municipal company to pay back the loan without a significant increase of the tariffs for waste management.

The feasibility study is available from the World Bank office in Riga within the Project Appraisal Document (released on August 18, 2000), but there is no information given in the EIA report or in other publicly available documentation related to project about the feasibility study.

The information regarding costs and benefits of the project provided during discussions on the EIA report was very general, and no separate public discussion was organised on this topic. The public was also not consulted during preparation of the feasibility study.

The Project Selection Mechanism

The projects for ISPA financing are selected by the Ministry of Environment. Actually there have been several stages of selection: Firstly, the investment programme “500-” for creation of waste management system was elaborated on by the Ministry, including the priority list of projects; later, in 2000, these projects were included in the National ISPA Strategy for the Environment.

This centralised selection mechanism is justified by the fact that Latvia is a small country (just 10-12 regional landfills need to be built) and the Ministry of Environment has a good overview over priority projects as well as a good knowledge on the local situation. Municipalities and regional authorities are also partly involved in this process as they have to secure part of the financing (at least 10-15%) for the project. Thereby the process of selecting the projects for financing and prioritising them is locked in the Ministry of Environment with the participation of municipalities and without interaction with the broader public. Likewise, the application form for the project is filled in by the leading municipality or contracted consultancy company with assistance from the Ministry of Environment. The application forms are not available from the website, but they can be accessed at the Ministry.

Similarly, the project on developing a solid waste management system in the Liepaja region was also selected for financing.
Conclusions and recommendations

The new landfill in Grobina that would serve the needs of the Liepaja region is expected to meet all EU environmental standards, and it would also contribute to the decrease of greenhouse gas emissions. The project also foresees the installation of an electricity line from the landfill site to Grobina town and the creation of a monitoring system for surface waters etc.

Obviously it will also bring positive environmental effects, which are related to the implementation of the ‘Polluter Pays’ principle, closure and remediation of the old dumping sites that were a serious source of threat for surface and groundwater (especially in the surroundings of old dumping site at Skede) and for human health. Social aspects are respected through the introduction of equal tariffs for waste collection in the whole region, though the actual costs are higher in rural municipalities and considerably lower in towns (mostly due to transportation reasons).

It should be stressed that during the evaluation process of the two possible project sites, the priority was given to the alternative, which was friendlier to the environment and human health, even though this included higher costs for the project.

Still, there are several conclusions and recommendations regarding the EIA and project preparation process:

1) The EIA report was prepared during 1999 when legislation on the EIA was very new in Latvia. Moreover, the legislation environment regarding waste management was rather weak as new strategies were being elaborated upon at the time. The EIA report didn’t include concrete references to the requirements of EU directives on waste management as they were not binding for Latvia that time. However, as the project gets financing from the ISPA, it would be necessary to have clear references on project compliance with EU legislation. Moreover, an update of the EIA report might be needed to include the changes in the legislation (new national and EU legislative acts) if the actual implementation of the project starts a few years after completion of the EIA procedure.

2) The feasibility study was done by the World Bank as it provides a loan to the project as well as a grant through the Carbon Fund. The study was released in August 2000; almost one year after the preparation of the EIA report. Thus the data from the feasibility study on the economical effects were not incorporated in the EIA report. These processes, however, should go together.

3) During the public hearing on the draft EIA and, prior to this, when a survey was made of the people living in the surrounding areas of the possible project sites, there was no detailed data or analysis available on the economic and social effects of the project. Hence it was impossible for the people to argue about the effects of the project and define their attitude. Clear information at the early stage of project preparation helps to avoid later misunderstandings and a negative attitude towards the project.