

Monitoring report

Recommendations for national policy makers and support scheme managers in Latvia

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1. Introduction

In the frame of Bioenergy promotion 2 the main aim of the Task 4.3 is to derive lessons from the demo, transfer and testing activities performed in the demo regions under WP 3, and to feed them into higher-level, i.e. regional (where applicable) and national policy formulation processes in order to improve policy frameworks and support schemes. This shall enable demo and “learning” regions and municipalities to develop and formulate integrated strategies to promote sustainable bioenergy production and consumption. The target group of the activities consists of super-ordinate regional (where applicable) and national policy makers and support scheme managers in the field of bioenergy.

2. Brief description of the activities in the demo and transfer regions in Latvia

2.1 Demo region Tukums

At the end of 2012 there was held the first workshop in the demonstration region – Tukums which brought together the main stakeholders involved in the project - energy experts, heads of the district heating companies, municipality and parish leaders and administrations. It was decided that in Tukums there will be seminars and workshops organized, to promote the interest for the general public for the use of RES and increase of energy efficiency and will be analyzed also boiler houses of Tukums and Slampe.

Within the framework of Bioenergy Promotion 2 the Latvian Environmental Investment Fund in cooperation with municipality of Tukums, organized the Energy Day in Tukums on 11th of April, 2013. The main activity of the Energy Day was a workshop with the aim to raise the capacity of Sustainable Energy Action Plan implementation and awareness raising on regional and local level about energy performance in buildings.

In summer 2013 the implementation process of the Tukums Sustainable Energy Action Plan was analyzed. To find out how effectively national and European financial instruments are being used and what is the attitude of the local government regarding implementation of the actions a round table discussion was held with the Head of the Development Department of Tukums municipal council - Anita Selunda.

The municipal Sustainable Energy Action Plan which was approved in 2011 envisages fully replacing fossil fuels in the district heating system by renewable energy sources. Until 2011, 30% of heavy fuel oil was used in boiler houses. "Tukuma Siltums" is the largest heat energy supplier in the town of Tukums – owning four boiler houses with the total installed thermal capacity up to 42 MW. The aim of district heating company was to replace fossil fuels with renewable energy sources in the district heating system. The municipality and the district heating company prioritised this aim in 2011 and the decision to modernize the entire district heating system was included into the Sustainable Energy Action Plan of the municipality. The boiler houses have undergone several cycles of modernizations and upgrades. The last one was finished at the end of 2011, and now all boilers are operated fully on wood chips. In addition, fuel gas condensers have been installed in each of the new boilers, thus providing additional 15-25% of efficiency in terms of heat energy production. Since 2011, the average conversion efficiency reaches 80%. During modernization of the boiler houses, two new building block constructions with two additional wood chip boilers (5 MW+5 MW) to provide the total heat output of 20 MW were commissioned and the remaining share of heavy fuel oil in the municipal heat balance was completely replaced with RES. The wood chips are obtained mostly from the region around towns and transportation distance does not exceed 50-60 km. The municipal Sustainable Energy Action Plan aimed to ensure 100% RES in district heating system and this has been reached now.

2.2 Transfer region Latgale

One of the key objectives of the project "Bioenergy Promotion 2" was to create a dialogue with **non-partner regions** outside the project, to support the development of local and regional bioenergy strategies in those regions and to “transfer” knowledge and good practice. Among the non-partner regions which signalled interest to enter in such a dialogue was the Region of Latgale in the eastern part of Latvia. Based on previous working contacts in Latgale, the Region of Zealand (Denmark) in co-operation with the Environmental Policy Research Centre (Germany) and the Latvian Environmental Investment Fund, initiated a transfer co-operation initiative which was later joined by the Chamber of Agriculture of Lower Saxony (Germany) and the University of Roskilde. This initiative comprised mainly site visits and workshops with public decision makers, plant operators and other stakeholders in the region of Latgale.

In October 2012 the Latvian Environmental Investment Fund, together with project partners from Germany and Denmark visited the Latgale region, in order to investigate the actual use of bioenergy, to analyse the unused biomass potentials and to enter into a dialogue with local decision-makers, development planners and energy sector stakeholders. During the visit, the project team was joining a roundtable with the mayor of Ludza municipality and other decision-makers in Ludza. Ludza has already a number of “best practice” examples in the use of biomass for district heating, in energy management, as well as information from county's sustainable development strategy about possibilities to use renewable energy resources. The dialogue led to the decision of Ludza municipality to develop a Sustainable Energy Action Plan (SEAP), and pay more attention to the existing unused biomass potential.

In order to facilitate the development of Latgale as a bioenergy region in April 2013, project partners from Germany and Denmark came for a second 4-day visit to the region of Latgale,. During this study visit, they attended a number of bioenergy

objects like wood gasification plants, fossil and biomass based CHP plants, a biogas plant, boiler houses, as well as typical regional forest areas and residential areas in order to better understand the current situation and prepare recommendations to the region's bio-energy development planning. On 18th of April 2013 the "Environmental Investment Fund" organized the seminar "Latgale – bioenergy region: strategy and action" with the purpose to present the project experience from Germany and Denmark in the field of bioenergy planning as well as to make recommendations based on observations made during discussions in the Latgale region.

The workshop was organized in two parallel sessions "Cooperation contributing Latgale as a bioenergy energy region development", which was attended by representatives of local municipalities and the energy sector stakeholders as well as workshop for foresters - "Sustainable use of wood for bioenergy sector." During the seminar the development of possible directions of the Latgale region as bioenergy region and bioenergy production in the region and potential use of it were discussed

It was concluded that the Latgale region has a great potential for the use of existing biomass resources, but there is a lack of support mechanisms, lack of information on the resource potential and corresponding assessments. At the national level there is a lack of cooperation between different level organizations, as well as for the region of Latgale very significant drawback is the lack of a regional energy agency.

3. Plans for the future

3.1 Tukums

The municipality of Tukums has analyzed the implementation of measures planned in the SEAP and there is the intention to update the plan in order to make it more efficient as a planning tool also for the support schemes.

It is planned to take part in activities related to awareness raising about energy efficiency and environmentally friendly lifestyle for society. At the municipal level there is a plan to join the activities and workshops organised by ministries about



Green Public procurement implementation and other activities related to sustainable development.

3.2 Latgale

Latvian, German, and Danish project partners joining the transfer initiative are presently screening options to continue and intensify the dialogue with the Latgale Planning Region and the municipalities in Latgale. There were recommendations presented and guidelines provided for the Latgale Planning Region on how to build the capacity for supporting the municipalities to develop their bioenergy strategy and how to cooperate as region to plan energy activities.

4. Lessons learnt

4.1 Energy policy context

Energy is one of the most important sectors of national economy directly affecting the overall growth of Latvian economy. The major problems in Latvia in the field of energy is large dependence on the imported fuel (natural gas from Russia), decentralization of the heat supply, poor technical condition of heat supply systems and low energy efficiency at heat energy consumers.

It is required to implement the activities that may support the energy production from renewable sources in Latvia. However there is a need to understand the meaning of sustainable renewable energy production and use, including sustainable bioenergy production and use in Latvia. The Council of the European Union recently emphasized that the challenge in developing renewable energy sources not only needs to focus on making the relevant technologies more attractive and cost-efficient, but also to ensure that their entire lifecycle remains sustainable. Therefore, further consideration needs to be given to the economic, environmental and social aspects of production and use of renewable energy sources. In particular the expected rise in the use of biomass in the coming years heightens the need to consider the sustainability

dimensions of the use of sensitive biomass resources (Council of the European Union 2012).

Latvia is rich in forests with a significant potential of biomass, especially wood fuel which are the most used biomass type in heat production. In general there are very well developed forest harvesting and processing industries, but often low efficiency of individual heating systems. Historically there are well-developed district heating system networks. These systems use increasing shares of biomass. But there are high heat losses in the old distribution systems which need urgent reconstruction and modernisation. Regions are often lacking the capacity and knowledge on how to develop and implement projects related to the development of such infrastructure. Regions are lacking the financial sources for the reconstruction of heat supply systems as well.

4.2 Lessons from the demo activities in Tukums

The municipality of Tukums has initiated a number of other projects and plans to apply for a number of new tenders. The municipality achieved considerable progress in modernizing street lighting and successfully participated in various national level tenders, securing co-financing from the municipal budget. In the field of transport the municipality purchased energy-efficient vehicles and new buses and cars for various public services.

Tukums municipality takes part in different tenders at the national and regional programs with help of Investment and Development Agency of Latvia and Cohesion Fund to ensure the implementation of activities planned in SEAP. There were available support programs under the CCFI – climate change financial instrument or Green investment scheme. Under CCFI program the support was available for Municipality tender "Complex solutions to reduce greenhouse gas emissions" improve the energy efficiency in buildings. Municipality are curious about the next period of supporting scheme and willing to participate. It is highly recommended from the point of project managers of municipality to make the application and

reporting process more simple and there is a need to strengthen the capacity of implementation of the green public procurement. There is a lack of experienced managers in terms of energy efficient procurement regulations and technical criteria in municipalities.

The production, extraction, processing, transport and conversion of biomass into final energy can sometimes have adverse impacts for GHG balances, biodiversity, natural habitats and ecosystem services, and soil and water quality, on a global, regional or local scale.

In order to ensure a truly sustainable development in the regions it is important to apply principles and criteria for sustainable bioenergy production and use, covering issues such as biodiversity, energy efficiency, resource efficiency, climate change mitigation (GHG emission reduction), social aspects and economic aspects.

4.3 Lessons from the transfer activities in Latgale

In Latgale region there are already existing biogas, biomass CHP plants and very well developed biomass district heating systems, however there are still areas with lot of consumers constrained to use heat that is produced by burning natural gas from Russia (Rezekne particularly).

One of the key lessons of the transfer visits was that there is a strong need for intensifying the co-operation among key stakeholders in Latgale and to strengthen the Latgale Planning Region's role as the coordinator of this process. Another finding was that the Latvian, German, and Danish project partners joining the transfer initiative are presently screening options to continue and intensify the dialogue with the Latgale Planning Region and the municipalities in Latgale.

The development of a regional bioenergy strategy for the Latgale region might help both to achieve the EU energy targets for Latvia and to promote sustainable development of the region. Latvia is obliged to increase the share of the renewable energy in gross final energy consumption to a level of 40% in 2020. This strongly

requires the implementation of planned actions and energy planning at national, regional and local levels.

Sustainable energy action plans (SEAP) needs to be more promoted at the national level so more municipalities could plan their energy actions and use the SEAP as the base document for it.

The Fund has established contacts in the regions and developed the networks between the municipalities and the regional institutions also. Supporting structure needed to be established in order to develop and implement SEAPs in coordinated and well-structured way.

5. Recommendations for national policy makers and support scheme managers

- **Support the development and implementation of regional and local energy action plans:** this can provide multiple benefits at regional, national and EU level by achieving national and EU targets and raising public awareness and knowledge on renewable energy and energy efficiency.
- Increase the organisational, financial and human resources of planning regions and municipal authorities.
- **Increase the public available support for renewable energy production and use:** allocation of EU Funds, increase national support mechanisms to produce sustainable bioenergy and increase energy efficiency.
- Integrate **sustainability criteria** into national support schemes for bioenergy is required: policy development should consider **full life-cycle impacts** as well as direct and preferably indirect effects. This also includes avoiding the promotion of inefficient uses of biomass and encouraging resource and energy efficient uses, **e.g. biomass cogeneration plants.**

- Raise the awareness among all stakeholders about the economic, environmental and social opportunities and risks production and use of renewable energy sources, particularly local bioenergy.
- **Mandatory tender on purchasing bioenergy by state and municipal companies with clear sustainability criteria (green procurement principle):** currently for small-scale biomass plants there is no obligation to tender biomass purchases and not all companies do that. Mostly price of biomass is the only criterion considered, and there is no practice of checking the origin of biomass. On the other hand, choosing the cheapest supplier could be counterproductive in terms of sustainability (environment, local employment). Therefore, it would be advisable to introduce mandatory tender with clear elements of green procurement.
- **Requirement for biomass suppliers to prove the origin of biomass:** to avoid unsustainable biomass production and extraction, illegal logging, illegal employment the supplier should be able to prove the origin of biomass. Exemptions should be applied to small-scale suppliers, such as small farms, saw-mills etc.
- **Technical support and guidelines for preparing of tender documents and including sustainability criteria, green procurement principle:** there should be sample documents provided and technical support available to municipal heating companies to encourage them to include sustainability criteria into tender documents. It would be advisable to start with few criteria and if that proves to be successful, it can be extended. Municipalities are lacking knowledge of the implementation of green public procurement principle.