

RAKVERE ON IT'S WAY TO BECOME THE ESTONIAN LEADER CITY IN ENERGY SAVINGS



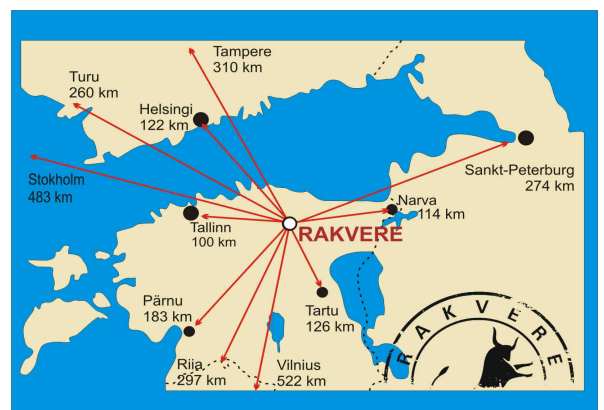
RAKVERE CITY (Estonia)

Summary

In 2006 Rakvere city began to get involved in energy saving projects. The city became a partner in a European project “Energy Efficient and Integrated Urban Development Action” and signed up to the European initiative “The Covenant of Mayors”. Energy audit for Rakvere’s apartment and municipal buildings was realized to get a detailed overview of the city’s energy consumption. On this basis, the city developed a priority list selecting municipal buildings with the highest level of energy consumption. The municipal Council reviewed different financial possibilities and decided which buildings would be refurbished. Rakvere city aims to increase sustainable energy use through the installation of a biomass boiler house for district heating and the introduction of biofuels into city transport.

Short presentation of Rakvere

Rakvere city – is situated in North Estonia on the northern foot of the Pandivere upland, 20 km south of the Gulf of Finland. The Tallinn - Narva - St. Peterburg railway runs through the town and the Tallinn - Narva - St. Peterburg highway is located just north of the town. Rakvere is about 100 km from Estonia’s capital Tallinn And has 16 965 inhabitants. The buildings in this area are mostly low, wooden houses dating from the 19th century, limestone and brick houses, an impressive bank and other buildings built from 1920 – 1940, as well as five-story concrete-houses from the soviet times. There are about 500 dwellings with over 5,000 apartments. Approximately half of population lives in five-story dwellings but there are also many private houses in the suburbs.



Sustainable energy development approach

Rakvere is very innovative and wants to become an Estonian leader city in energy savings. The city is engaged in several cross-border projects in order to both **raise awareness** of energy savings and implement **concrete measures** in urban environment:

As a partner in a project „**Energy Efficient and Integrated Urban Development Action**“ (Urb.Energy, financed by Baltic Sea Region Programme 2007-2013) Rakvere's main ambition is energy efficient refurbishment of urban housestock. Rakvere, as many other cities of new EU member states, is confronted with a problem of a high number of residential buildings from soviet times. Little importance was attached to energy efficiency at that time due to low energy costs. To reach a modern energy efficiency level set by the European Union directives the refurbishment projects for these residential buildings are elaborated focusing on façades, foundations and attic renewal as well as an overall appearance of the city, such as a colour scheme for the apartment buildings.

An important measure aiming to raise citizens' awareness is a project “**Encouraging simple energy efficient behavioural patterns at schools**” (“Flick the Switch”), supported by the Intelligent Energy Europe Programme. The project aims to encourage energy saving behaviour of pupils of primary and secondary schools with a focus on efficient use of electric equipment and lighting. Switching off lights and appliances when they are not in use instead of keeping them switched on or on standby, leads to an enormous reduction of energy consumption. 200 schools and some 100,000 students participate in the project campaign.

How Rakvere started:

The city has signed up the **Covenant of Mayors on 12th January 2009**, committing itself to go beyond the objectives of the EU energy policy in terms of CO₂ saving through enhanced energy efficiency and cleaner energy production and use.



In 2007 an energy audit for the four most common types of apartment buildings dating back to the soviet times was realized. Consequently, energy saving measures for each building type were recommended – refurbishment and retrofitting (insulation of the façades, attics and foundations). In order to guarantee high energy efficiency of these buildings in the long term, guidelines on how to renovate and manage the buildings in the future have been developed. Following this example, energy use databases for all municipal buildings (schools, day care centre, gymnasiums, etc.) have been developed.

Meanwhile, the mayor of Rakvere, Mr. Andres Jaadla (right on the photo), accepted the idea to become the first Estonian observer pilot city within the European MODEL project. The member of Rakvere city economy department, Kätlin Madis (left on the photo), actively participated in the MODEL project workshops with the aim to get knowledge on energy management in the municipalities and exchange experience with other MODEL pilot cities. In order to inform and involve the citizens on energy saving activities, a “Forum for end users of apartment buildings” was held in December 2008.

Current situation in Rakvere:

As a result of a study the Rakvere Music School turned out to be one of the highest energy consumers in the city. In 2009 the building will be completely refurbished, including technical systems, and with the support from the EU funds. To renovate the City Hall lighting system, all bulbs are replaced by high energy efficient ones yet, reducing the electricity consumption up to three-fold!

Currently, an overall energy efficiency plan for the whole city is elaborated. It aims to contribute to the achievements of the local Covenant of Mayors objectives by 2020. The main objectives are the use of green electricity in all municipal buildings and for street lighting from 2010 on. The city is already negotiating favourable conditions with its electricity provider.

A company Rakvere Soojus, where the city is a major owner, is looking for an investor to build a biomass boiler house for district heating replacing partly natural gas. City representatives established relations with a city transport service provider in order to use sustainable fuel within the city transportation.



Main achievements

In this stage, it is quite early to demonstrate the results, as the energy consumption database has been developed and the first activities have been carried out just recently. The positive results will be visible after some time, when the new energy consumption data will be available.

Suggestions for other municipalities

The first step to be taken is to monitor the energy consumption in the city through development of a detailed energy database. Once you know which sector is the most energy demanding, which buildings are the least energy efficient, you can set up the priorities and decide on which activities should be undertaken.

MODEL PARTNER RESPONSIBLE FOR THIS CASE STUDY

Energie-Cités

Energie-Cités is the association of European local authorities for the promotion of local sustainable energy policies. This network has over 150 members in 26 countries representing more than 1000 towns and cities. Energie-Cités builds European projects for helping its different members. Its main objectives are :

- to develop initiatives through exchange of experiences, the transfer of know how and the organisation of joint projects,
- to allow partners to benefit from shared expertise in local energy strategies,
- to strengthen its partners' role and skills in the sphere of energy efficiency, in the promotion of renewable and decentralized energy sources and in protection of the environment,
- to influence the policies and proposals made by European Union institutions in the fields of energy, environmental protection and urban policy.



Visit the web page: www.energie-cites.eu

NATIONAL MODEL PARTNER

REC Estonia (Regional Energy Centres Estonia)

Acting since 1996 in Estonian regions, the REC Estonia is an organization providing services for local governments and other energy end users.

Its main activities are:

- energy planning
- energy audits
- energy labels
- trainings
- studies



Further information

Contact person: Aare Vabamägi.

Position: Adviser, Observer

Organization: REC Estonia

Address: Vabaduse plats 4-313, Viljandi, Estonia

E-mail: aareva@estpak.ee

MODEL website: www.energymodel.eu

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Project Coordinator



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