

Lithuanian experience with Financing Municipal Energy Efficiency



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National Energy Strategy

- ◆ Energy saving and effective consumption of energy resources; promotion of producers and consumers to use effective local and renewable resources are the main goals of Lithuanian energy policy.
- ◆ National Energy Strategy underlines the importance of increasing of energy efficiency in buildings and their modernization.

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- ◆ 17 000 thousand multi-family buildings:
(approximately 7000 buildings are supervised by associations, other buildings are supervised by municipal administrators).
- ◆ approximately 50,9 percent buildings are provided with district heating

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- ◆ It was assessed that heat energy consumption in non renovated houses is 2-3 times higher than in new built houses

For example:

- ◆ owners of 60 m² apartments in non renovated house for heat pay 156 lt/month,
- ◆ whereas owners of 60 m² apartments in new built house - 54 lt/month.

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Data by Lithuanian District Heating Association

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- ◆ Importance of EE projects showed Energy Efficiency Housing Pilot Project implemented in year 1996-2004
(Till 1996 there were no project related with houses renovation)
- ◆ Project was financed by World bank and State. Governments of Denmark Netherlands also supported this project.
- ◆ Owners participating in this project had possibility to get credit on easy terms.

During this project:

- ◆ Over 700 multi-family buildings were renovated;
- ◆ Total investment amount – over 70 mln. Lt.
- ◆ Energy consumption was reduced on average by 24%, in better size project - over 50%.

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Lithuanian Housing Strategy:

(approved by Government on January 21, 2004)

- ◆ to improve the population's potential of covering the housing-related expenses;
- ◆ to motivate the owners of the housing buildings to better understand their rights and duties and financial obligations in regard to community property and use of energy resources in multi-family housing buildings;
- ◆ to develop the necessary incentives and conditions for the improvement of existing accommodation, with the with the help of its proper maintenance and renovation.

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Multi-family housing building modernization program *(approved by Government on September 23, 2004)*

The main goal is to promote and to help the owners to modernize their multi-family buildings, to increase effective energy consumption and reduce expenses for heating

Support is given to buildings, which were built till 1993 (it is estimated that physical state of these buildings is very critical).

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State support:

- ◆ In years 2005-2006 - 9 mln. Lt.
- ◆ In years 2007 – 15 mln. Lt.
- ◆ Till 2020 years planned investment quantity is 7,2 billions Lt

Municipal support

Commercial banks

Inhabitants

EU funds for 2007 – 2013 period

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- ◆ 70 percent multi-family buildings is expected to be modernized by the year 2020;
- ◆ Heat inputs will decrease about 30 percent;
- ◆ Expenses of state budget for compensations will decrease about 35 proc.

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Role of municipalities:

Municipalities participate in EE depending on their financial possibilities.

Municipalities participation is not very active at this moment. But their number increases.

Why municipalities are interested in promotion of EE:

- ◆ Municipalities are responsible for district heating organizing in their territories and confirms the heat price (Law on Self Government)
- ◆ Fuel prices increase and herewith heat prices increase, too.
- ◆ One of the ways to decrease heat price is buildings modernization.

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Municipalities' special programs for promotion of energy efficiency projects.

(Panevezio m., Kauno m., Vilniaus m., Klaipėdos m., Šiaulių m., Marijampolė and etc.);

- ◆ Problems with small municipalities

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- ◆ Example of Municipalities' programs:
- ◆ Council of Utena municipality confirmed **Multi-family housing building modernization program.**

Utena municipality grants non repayable support for the housing owner's association

The support will cover costs for carrying out energy audits and investment projects.

It is planned to give 4000 Lt. for one association.

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Modernization finance also consist of:

- ◆ owners finance (owners have to pay basic contribution, no less than 10 percent from investment amount)
- ◆ Banks credit (credit size can exceed 90 percent)
- ◆ State support (up to 30 percent)

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Conditions for support to buildings renovation and modernization:

- ◆ to establish and register a House Owners Association;
- ◆ to have as many voices as possible, which would sanction the renovation
- ◆ to have decision for finance accumulation;
- ◆ to have basic contribution to building modernization;
- ◆ to have plan;

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Kaunas city and Klaipėda city cases:

Municipalities councils confirmed foundation “Municipality Support for House Owners Association”.

Foundation support different activities, one of them is EE in buildings

Support is 30 percent from investment amount.

If association receive finance from state (30 percent) this foundation don't give the support.

Kaunas city support in 2006 was 300 000 Lt, in 2007 planned support - ~1 mln. Lt.

Klaipėda city support in 2006 was 648 531 Lt, in 2007 planned support - ~1 ml. Lt.

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- ◆ On 28 June 2004 Vilnius city Council adopted the programme

"Renew the House– Renew the City“

and approved JSC "Vilnius City Heating Company" as the coordinator of the programme

- ◆ The objective of the programme is to renovate and modernize the housing and residential areas.

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"Renew the House – Renew the City"

- ◆ **This program is the first independent housing renovation and modernization program in Lithuania initiated by the city.**
- ◆ It is planned that about 300 housing renovation projects should be implemented in Vilnius city in the due course of this program.
- ◆ Vilnius city heating company and bank “Hansabankas” have signed a cooperation agreement for financing building renovation and modernization projects.
- ◆ “Hansabankas” will be able to lend up to 90 percent of the funds required by the associations for renovation of buildings

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"Renew the House – Renew the City" tasks:

- ◆ Prepare for housing renovation and modernization project implementation;
- ◆ Implement public awareness campaign;
- ◆ Implement a model housing renovation and modernization project;
- ◆ Ensure the financing of housing renovation and modernization projects;
- ◆ Ensure the financing of residential area renovation projects;
- ◆ Motivate the establishment of the multi-family housing owners' associations and their activity effectiveness.

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"Renew the House– Renew the City"

- ◆ State support for the renovation may amount up to 30 percent of the investment value.
- ◆ The municipality grants non-repayable support for carrying out energy audit and development of investment projects, for covering the cost of preparing technical documentation and may grant support for the renovation of a multi-family housing amounting up to 15 percent of investment value. (Municipality gives support from year 2005)
- ◆ Municipality appropriate for this programme of budget 2 mln. Lt. (2007 planned support also 2 mln. Lt)
- ◆ Vilnius city heating company consults the associations on renovation issues, pays for the energy audits and preparation of investment projects.
- ◆ Heating company has performed the energy audits of 90 buildings the investment value of which amounts up to 88 mln. 158 thous. litas.
- ◆ 30 investment projects developed for all of these buildings (till end of year 2005)

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- ◆ Associations municipality support can get if they comply with the requirements laid down in the State program and associations regularly accrue funds for housing.

For example

- ◆ The HOA of the house situated at Svyturio Str. 21 district replaced all windows in the staircases.
- ◆ Total value of the renovation works - 23 thousand Lt, municipality support amounted up to 24 percent of the total investment value.
- ◆ The HOA of the house situated at Erfurto Str. changed windows and balcony's doors
- ◆ Total sum 82 thousand Lt.
- ◆ Municipality support was 15 percent, state support – 26 percent. Other costs had cover owners.

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Sample project of complex building renovation in Zirmunai region

The aim of this project is to demonstrate the benefit of complex building renovation and the effect of a neat surrounding.

it was decided to renovate houses in Zirmunai region. Why?
house renovation in this region is profitable economically;
in Žirmūnai the demand of apartments is increasingly growing due to its unique location (nearby the Neris river and close to the city centre)

This project was implemented by municipal and owners finance (without state support)

At present, this is single complex renovated multi-family building in Lithuania

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House characteristic:

- ◆ Large block construction house number 3 in the Žirmūnai Street was built in 1965.
- ◆ Its physical condition is poor, as well as of other houses of this series. The supporting structure of the house is still suitable for further exploitation and modernization. There are 60 apartments in a five-floor building.

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The energetic audit of the building showed that:

- ◆ the thermal resistance of the walls does not meet the contemporary requirements and the joints of the slabs had been
- ◆ the number of new gaps is constantly increasing.
- ◆ the roof cover is old and worn
- ◆ the water penetrates to the apartments of upper floors.
- ◆ most of the windows are not hermetic and blow off a big amount of warmth.

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Renovation works:

- ◆ Change of windows;
- ◆ Glazing of balconies;
- ◆ Change of entrance roofs;
- ◆ Building insulation;
- ◆ Roof renovation;
- ◆ Adjustment of engineering systems.

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Finance

Total project amount 1,5 mln. lt.

50 percent renovation works financed by Vilnius City Municipality the inhabitants will have to return a half of the sum (50 percent) in a period of 15 years.

Depending from apartment size they have to pay from 48 till 98 Lt. every month.



Project benefit

- ◆ It is estimated that energy saving reduced cost for heat about 60 percent;
- ◆ EE projects improve living conditions;
- ◆ Increase real estate price (Zirmonu case showed that apartment's sale price growth up 30 percent)
- ◆ It was very good example for other owners. At present, inhabitants is more interested in renovation.

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Summing up of present situation in Lithuania:

National budget increases and there are more possibilities to promote energy efficiency in buildings, but processes goes very slowly

Outcomes:

- ◆ Low interest of inhabitants;
- ◆ Low income of inhabitants;
- ◆ Insufficiently explicate lending
- ◆ Regional differences

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Short information about Schools renovation:

In year 2002-2005 was implemented Education improvement program, funded by World bank loan and co-financed by Government and municipal funds.

Program was divided into 5 projects, one of them was

“Reduction of energy costs and improvement of learning conditions”

Project covered all municipalities of Lithuania (one school from each municipality) and several county schools.

- ◆ During 4 years was renovated 62 basic schools.
- ◆ Each municipality have invest 25 percent of the funds required

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Benefit

- ◆ improved learning conditions for the students of 62 basic schools including warmer classrooms;
- ◆ energy resources was saved; the funds saved can be used for the improvement of quality of education.
- ◆ Interior temperature in schools varied from 10° to 15° C; after renovation the temperature was be around 18° C.
- ◆ Savings of heat energy was of about 30-40 % (it was saved 5, 6 million Lt.)
- ◆ Condition of interior partitions was improved. Buildings' service life was prolonged by 23 years on average.

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- ◆ Project experience showed the importance of EE in buildings.
 - ◆ In year 2005 Government adopted schools reconstruction and provision by educational books for years 2006-2008.
 - ◆ State support - 75 percent
 - ◆ Municipalities support – 25 percent.
 - ◆ One of the aim of this program is EE in buildings.
 - ◆ Estimated finance demand for EE:
 - ◆ 2006 – 17500 thousand Lt.
 - ◆ 2007- 53000 thousand Lt.
 - ◆ 2008 – 72500 thousand Lt.
- Is planned to renovate 100 schools

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Thank You for attention!

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