Financing of Apartment Building retrofitting projects in Lithuania

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UAB AF-TERMA
Gdansk, 8’th July, 2009

**Residential and Public Building stock data**

- **Public buildings**
  - Before 1993: 24,163,304 m²
  - Before 2007: 28,048,990 m²

- **Apartment buildings**
  - Before 1993: 46,905,725 m²
  - Before 2007: 52,122,026 m²

- **Single family houses**
  - Before 1993: 41,622,300 m²
  - Before 2007: 47,371,174 m²

**Space heating energy saving potential in Apartment Buildings**: 3,28 TWh/a (70%: 2,3 TWh/a)
- Average annual specific apartment building energy consumption before retrofitting: 150 kWh/m²
- Average annual specific apartment building energy consumption before retrofitting: 80 kWh/m²
- Floor area of Apartment buildings built before 1993: 46,9 mln. m²

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Apartment Building Modernization Programme, 2004

The Programme was approved on 23/09/2004

- New edition, valid since 24/06/2005
- Second new edition, valid since 30/03/2008
- Change, valid since 15/06/2008
- Change, valid since 04/03/2009

The Programme targets:
- It is expected 27000 of Apartment Building to be retrofitted
- Secure efficient dwelling operating, maintenance and renovation
- Increasing building’s energy efficiency
- Decreasing of space heating cost
- Reduction of Greenhouse Gas Emissions
- Decreasing of Energy Dependence from imported fossil fuel

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Progress of implementing of Apartment building Modernization Programme (Status 05/06/2009)

<table>
<thead>
<tr>
<th></th>
<th>year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>retrofitting completed</td>
<td></td>
<td>1</td>
<td>75</td>
<td>152</td>
<td>79</td>
<td>1</td>
<td>308</td>
</tr>
<tr>
<td>retrofitting ongoing</td>
<td></td>
<td>2</td>
<td>130</td>
<td>136</td>
<td>130</td>
<td>106</td>
<td>504</td>
</tr>
<tr>
<td>financial applications approved</td>
<td></td>
<td>54</td>
<td>177</td>
<td>346</td>
<td>143</td>
<td></td>
<td>720</td>
</tr>
</tbody>
</table>
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New Apartment Building retrofitting financing model

In April, 2009 was elaborated new Apartment Building retrofitting financing model based on establishing the Revolving Fund

- Long-term credit (20y)
- Annual interest 3%
- State subsidy up to 15%
- Financing of up to 100% of initial payment, bank interest and credit installments for low income families
- Technical support

According to theoretical calculations total sum of space heating cost and re-payment of bank loan after retrofitting will not exceed space heating cost before apartment building retrofitting.

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State financing demand for Apartment Building retrofitting financing according to new model

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Totally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of retrofitted building</td>
<td>500</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1400</td>
<td>4900</td>
</tr>
<tr>
<td>State subsidy of 15% (thousand LTL)</td>
<td>3997</td>
<td>11991</td>
<td>19986</td>
<td>27980</td>
<td>39172</td>
<td>103126</td>
</tr>
<tr>
<td>State financing of bank interest part exceeding 3% (thousand LTL)</td>
<td>300</td>
<td>2759</td>
<td>14462</td>
<td>28383</td>
<td>47873</td>
<td>93777</td>
</tr>
<tr>
<td>Financing of low-incomes families: loan, initial payment, 3% annual interest (thousand LTL)</td>
<td>4049</td>
<td>12148</td>
<td>20247</td>
<td>28345</td>
<td>39683</td>
<td>104472</td>
</tr>
<tr>
<td><strong>Totally, demand for State financing, (thousand LTL)</strong></td>
<td><strong>8346</strong></td>
<td><strong>26898</strong></td>
<td><strong>54695</strong></td>
<td><strong>84708</strong></td>
<td><strong>126728</strong></td>
<td><strong>301375</strong></td>
</tr>
</tbody>
</table>
Feasible Financial sources of Revolving Fund

- 475mln.LTL (or 137mln.EUR): 4% European Regional Development Fund for Building Retrofitting

- 300mln.LTL (or 87mln.EUR): Loan from the European Investment Bank for financing of State part of projects to be financed from EU Structural Funds

- 33mln. LTL (or 9,6mln.EUR): from State budget

- 700mln.LTL (or 203mln.EUR): borrowing from international financing institutions 2010 - 2013

RF Capital was calculated to be sufficient for financing of 500 -1400 of building retrofitting projects annually
Further Feasible Financial sources of Revolving Fund

- Revenues from trading of greenhouse gas emission allowances
- Charge for exceeding of standard energy consumption
- Contribution of Financial Institutions
- 2014 ES Funds
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Apartment Building Retrofitting Financing Model

Managing institution and Responsible institution

Revolving Funds:
1. Structural Funds
2. Loans from International Financing Institutions
3. State Budgetary Funds

Technical Support

Bank(s):
1. Revolving Fund
2. Bank’s Fund

Soft loan (95%)

Retrofitting Project

Accumulation account:
Owners

5% Initial payment

State support for low-incomes families

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Institutional scheme of implementing of Financing Model

Managing Institution (Ministry of Finance)

Responsible Institution (Ministry of Environment)

Contract with Fund Manager

Revolving Fund (European Investment Bank)

Contract with Banks

Agency

Project screening

Banks

Loan agreement

Technical support

Retrofitting Project

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# Change of financing conditions of Apartment building retrofitting during 2005 – 2009 period

<table>
<thead>
<tr>
<th>Year</th>
<th>New Model, since 2009</th>
<th>Since 2008</th>
<th>Since 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own financing share of retrofitting cost</td>
<td>5%</td>
<td>5% +5% loan insurancy</td>
<td>10% +5% loan insurancy</td>
</tr>
<tr>
<td>Bank loan share of retrofitting cost</td>
<td>95%</td>
<td>90%</td>
<td>85%</td>
</tr>
<tr>
<td>State subsidy</td>
<td>up to 15%</td>
<td>up to 50%</td>
<td>up to 30%</td>
</tr>
<tr>
<td>Subsidied share of retrofitting cost</td>
<td>14.2% (i.e. 95%*15%)</td>
<td>45% (i.e. 90%*50%)</td>
<td>25.5% (i.e. 85%*30%)</td>
</tr>
<tr>
<td>Loan interest</td>
<td>3%</td>
<td>average 8%</td>
<td>average 8%</td>
</tr>
<tr>
<td>Loan duration</td>
<td>20y</td>
<td>15y</td>
<td>15y</td>
</tr>
</tbody>
</table>

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Establishing of Holding Fund

On 11/06/2009 Lithuanian Minister of Finance (Mr. Algirdas Šemeta), Minister of Environment (Mr. Gediminas Kazlauskas) and Vice-president of European Investment Bank (Mr. Matthias Kollatz-Ahnen) signed financing agreement according to which the Holding Fund was established.

785 mln. LTL (or 227mln.Eur) from EU Structural Funds and State budget will be transferred to Fund and used for Apartment Building Retrofitting.

Call to submit the applications for retrofitting projects is scheduled on the end of July.

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Thank you for your attention

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