Estonian Energy Targets for Building Renovation

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Energy Department

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National Energy Policy

- Adopted in Parliament June 2009
- Key issues for Estonia
  - Security of electricity supply, reduction of carbon intensity on power generation mix
  - Future of domestic oil shale power generation
  - Oil shale mining and shale oil production
  - Diversification of natural gas supply sources
  - Opening of electricity market
  - More efficient energy consumption
  - Higher share of renewable energy
National housing policy

- Adopted in 2008 by the Government
  - Accessibility of dwelling spaces
  - Residential building stock
    - Improving quality and energy efficiency of residential building stock
    - Improving awareness on management of residential building stock
    - Mapping of residential building stock
  - Living environment
The EE policy target is stabilisation of final energy consumption in 2020 at the level of 2010.

In 2010, the Total Final Consumption of energy in Estonia was 119 PJ. No specific targets for individual subsectors or activities. Indicators for the measures: expected levels of the indicators are set.
Improving quality and energy efficiency of residential building stock

• Adopted indicators:
  – The number of apartment buildings renovated with the help of renovation support
    ▪ 2006: 1411, plan for 2013: 8000

• Main activities:
  – Renovation loan for the apartment buildings
  – Renovation grants
Renovation loan for the apartment buildings

• Started in June 2009, providing the loans finished in 2013
• Revolving fund
• Implemented by KredEx Foundation in collaboration of two largest banks in Estonia (SEB, Swedbank)
• Total volume of loans 72 M€, total volume of projects 92 M€
• Average loan 110’000 €
• Expected average energy savings in buildings: 48%
Renovation grants

- Grant depends on the scale of renovation activity
  - Three support levels: 15%, 25%, and 35% (respective expected savings 20-30%, 40%, and 50%)
- Total amount of grants: 37.8 M€
- Implemented by KredEx Foundation
Renovation loan and renovation grants: the results

- 2009-2013, 1.4 million m² renovated (7% of total area of targeted apartment buildings)
- By the end of 2013, 798 buildings were renovated as follows:
  - 415 buildings used reconstruction grant and renovation loan
  - 185 buildings used only renovation loan
  - 198 buildings used only reconstruction grant
Energy strategy until 2030: building renovation scenarios

Annual renovated area, mio m²

- **Today**
- **Limited**
- **Moderate**
- **Active**
## Energy strategy until 2030: key features of building renovation scenarios

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<thead>
<tr>
<th>Limited</th>
<th>Moderate</th>
<th>Active</th>
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| Total renovated are in next 20 years:  
  - Small residential buildings - 10% - energy class = E  
  - Apartment buildings - 15% - energy class = E  
  - Non-residential buildings - 10% - energy class = D | Total renovated are in next 20 years:  
  - Small residential buildings - 20% - energy class = C or D  
  - Apartment buildings - 30% - energy class = C  
  - Non-residential buildings - 15% - energy class = C | Total renovated are in next 20 years:  
  - Small residential buildings - 40% - energy class = C or D  
  - Apartment buildings - 50% - energy class = C  
  - Non-residential buildings - 20% - energy class = C  
  - Schools and kindergartens – 40% |
Energy strategy until 2030: key features of building renovation scenarios

- Limited
- Moderate
- Active

Direct costs vs. All costs (direct costs, energy savings, taxes, replacement)
Planned funding of energy efficiency 2014-2020, M€

- Renovation of apartment buildings; 112,5; 27%
- Upgrade of district heating systems; 78; 19%
- Upgrade of street lighting systems; 43; 10%
- Energy efficiency in public buildings; 50; 12%
- Resource efficiency in industry; 131; 32%

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Thank you!

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