Master Thesis

LONG-TERM POLICY RECOMMENDATIONS FOR IMPROVING THE EFFICIENCY OF HEATING AND COOLING

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A European Green Deal

GHG to zero in 2050
Increased energy efficiency
Energy produced from renewable sources
Sustainable development and economic growth
Halting climate changes

A clear development strategy at the national level to reduce energy efficiency and resource consumption in heating and cooling

Appropriate policies and policy instruments have been developed and applied in line with the development strategy
Hypothesis:
current policies and policy instruments applied have created fragmentation in
the sector of heating and cooling in Latvia. There is not a clear and unifying
energy efficiency improvement strategy that could lead Latvia to achieving
energy efficiency goals set by the EU within the framework of the Green Deal.

Novelty:
to create a methodology to effectively select and adapt policies and policy
instruments to achieve long-term energy efficiency improvement goals. To
develop a methodology that would allow to evaluate the effectiveness of
existing policies and to provide recommendations for long-term policy
development in the sector of heating and cooling
Theory on green government methods, policies and policy instruments

Types of policy instruments used in solving environmental problems.

Priorities set by the European Union

- A European Green Deal
  - Preference for green and sustainable solutions
  - Building renovation (private; public)
  - Tax reforms
  - Financial support for renovation and insulation of older buildings to avoid creating energy poverty
  - Energy end-user must be able to install individual meters and influence energy consumption
  - Energy end-user must be able to install individual meters and influence energy consumption

  - Stimulate energy production from renewable energy sources
  - Invoices for heating, cooling and hot water must be detailed and comprehensible
  - Increase energy efficiency of buildings
  - Smart metering system

- Financial support for energy efficiency improvement
- Public education on energy efficiency and energy saving
- Excess heat and cold for central heating and cooling networks
- Polluter pays principle
- No subsidies for fossil fuels
- Transparent energy consumption accounting system.
- Intelligent metering system, heat allocators in multi-apartment buildings.
- Break down barriers. Achieve an open energy market.
Latvian policy planning system for energetics by 2030
Long-term plans for the development of heating and cooling (1)

Latvia's strategic planning documents contain almost all the objectives identified by the EU.

- Energy efficiency improvements
- Reduction of heat loss in transmission networks
- Installation of more efficient equipment for heat production
- Heat production from renewable energy sources
- Building insulation and renovation
- Reduction of support for fossil energy resources
- Development of long-term development plans
- Reduction of GHG emissions
- Tax «greening»
- Educating the public about the implementation of energy efficiency measures
- Energy poverty reduction
Long-term plans for the development of heating and cooling (2)

Despite the optimistic intentions in the strategic development documents, in reality the development documents are contradictory and many of the intentions specified in the policy documents are not fully implemented or do not work in practice.

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<thead>
<tr>
<th>Issue</th>
<th>Details</th>
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<tbody>
<tr>
<td>No clear strategy for the development of district heating at the national level;</td>
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<td>Non-existent cooling network and its implementation strategy;</td>
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<td>Support for fossil fuels in the form of tax rebates still continues;</td>
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<td>The possibility of abandoning the use of fossil energy resources is not seen;</td>
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<td>There are no tax relief for households that have improved energy efficiency. In some cases, the tax burden increases;</td>
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<td>In one case, the need for energy security and independence is emphasized, in another the price of energy, which promotes economic growth, is seen as the main goal;</td>
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<td>There are no clear and specific goals for heating and cooling as well as for the renovation of buildings to be achieved set;</td>
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<td>The principle of &quot;energy efficiency first&quot; is not implemented and is not taken into account in policy planning and funding planning documents have been developed only until 2030</td>
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