**Master Thesis** 

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

Author: Bc.sc.pol., Krista Laktuka

Scientific supervisor: RTU Dr.sc.ing., leading researcher, Dace Lauka Dr.sc.ing., leading researcher, leva Pakere Vilnius Tech. assoc. prof. dr. Marina Valentukevičienė

RTU

**ASSI** 

### **Topicality:**

#### **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:

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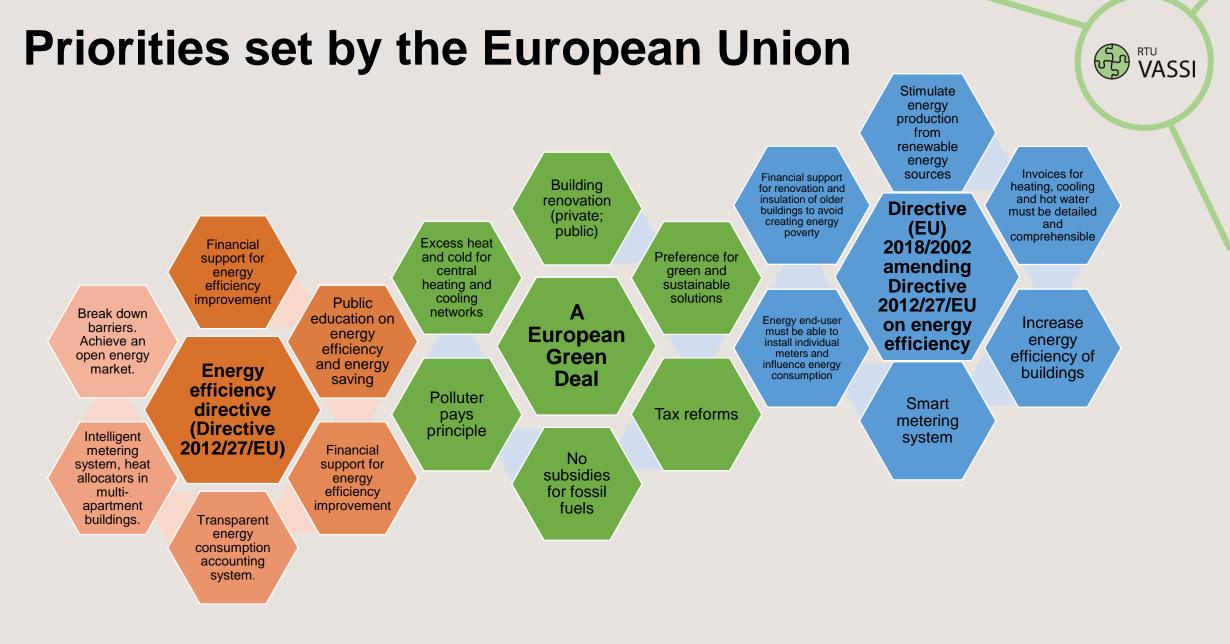
to create a methodology to effectively select and adapt policies and policy instruments to achieve long-term energy efficiency improvement goals. To develop a methodology that would allow to evaluate the effectiveness of existing policies and to provide recommendations for long-term policy development 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.

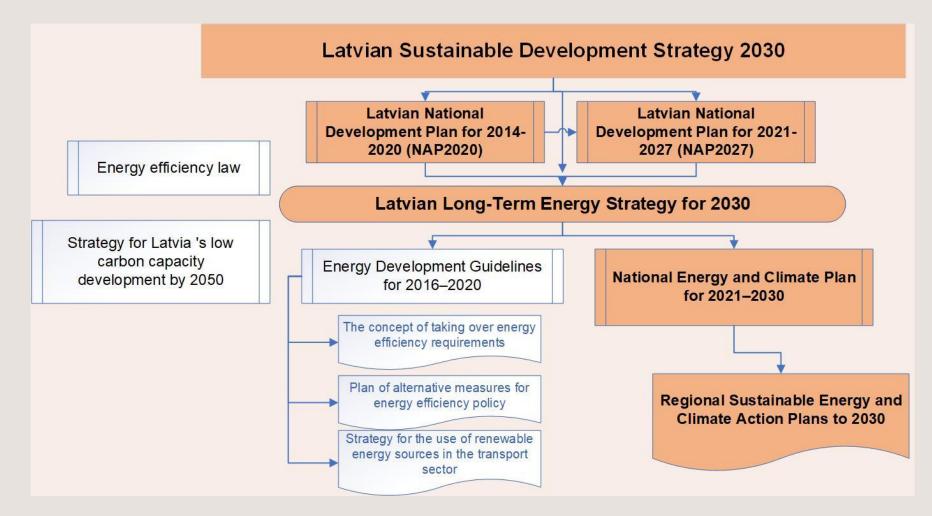


Source: Carter Neil (2004) *The Politics of the Environment. Ideas, Activism, Policy.* Cambridge University

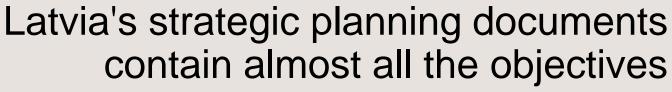


#### 15.03.2021

## Latvian policy planning system for energetics by 2030



## Long-term plans for the development of heating and cooling (1)



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)

no clear strategy for the development of district heating at the national level;

non-existent cooling network and its implementation strategy;

support for fossil fuels in the form of tax rebates still continues;

the possibility of abandoning the use of fossil energy resources is not seen;

there are no tax relief for households that have improved energy efficiency. In some cases, the tax burden increases;

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;

there are no clear and specific goals for heating and cooling as well as for the renovation of buildings to be achieved set;

the principle of "energy efficiency first" is not implemented and is not taken into account in policy planning and funding

planning documents have been developed only until 2030

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

#### Krista Laktuka

e-mail: krista.laktuka@gmail.com

rtu VASSI

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