

# Measures against Energy Poverty in Estonia

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# Storyboard

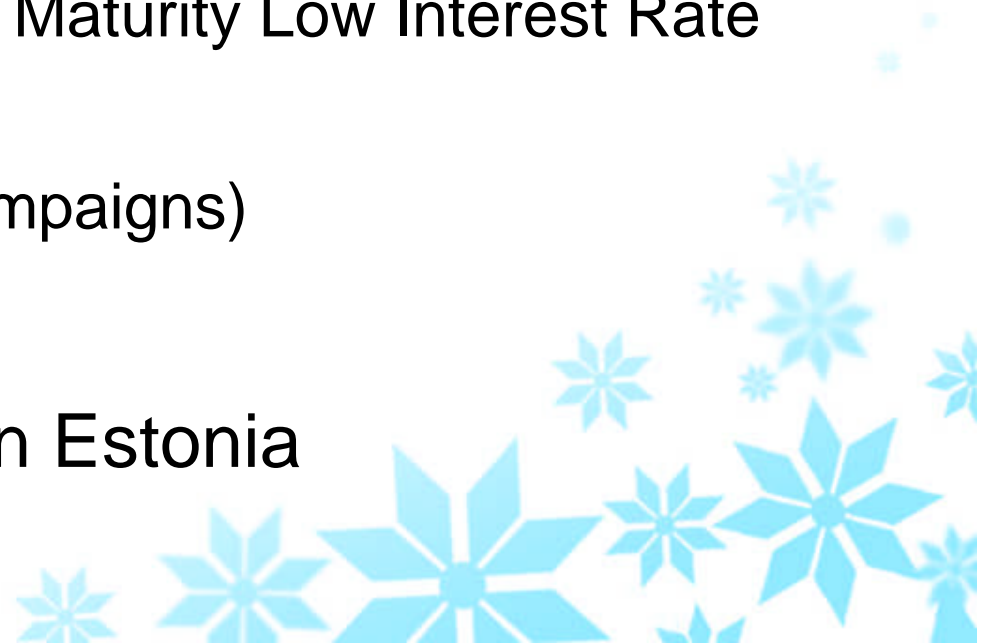
⇒ State Measures for Energy Efficiency investments of households

⇒ Grant scheme

⇒ State Guaranteed Long Maturity Low Interest Rate Loan

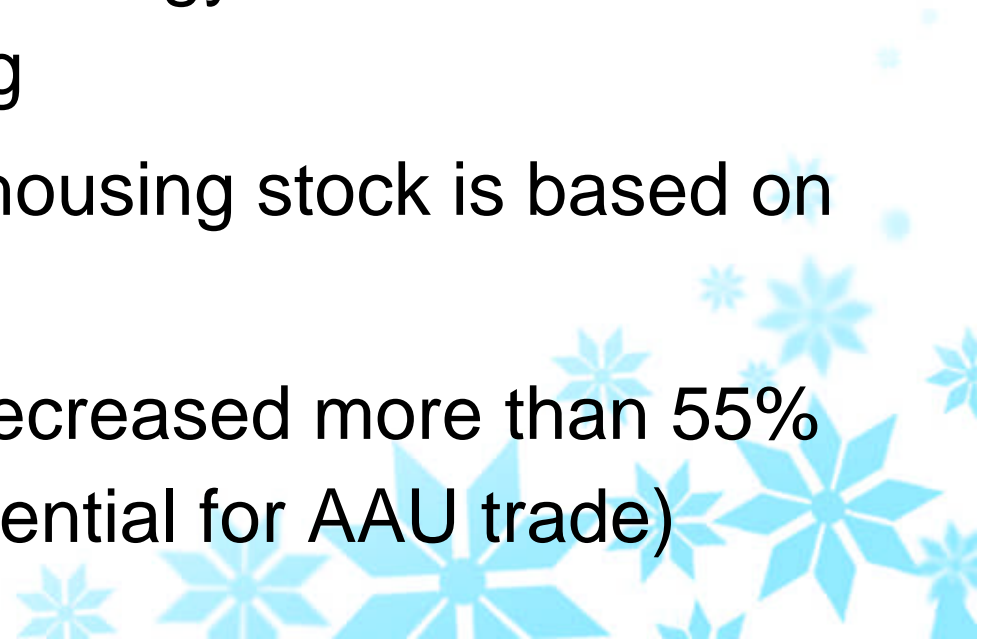
⇒ (Technical Support, Campaigns)

⇒ RES support scheme in Estonia



# Background for Households Energy Efficiency Measures

- ⇒ 80% of the housing stock is built in 1960-1990
- ⇒ 2/3 of the housing stock is apartment houses
- ⇒ 40-60% of households energy costs are associated with heating
- ⇒ 70% of the heating of housing stock is based on district heating
- ⇒ CO<sub>2</sub> emissions have decreased more than 55% compared to 1990 (potential for AAU trade)



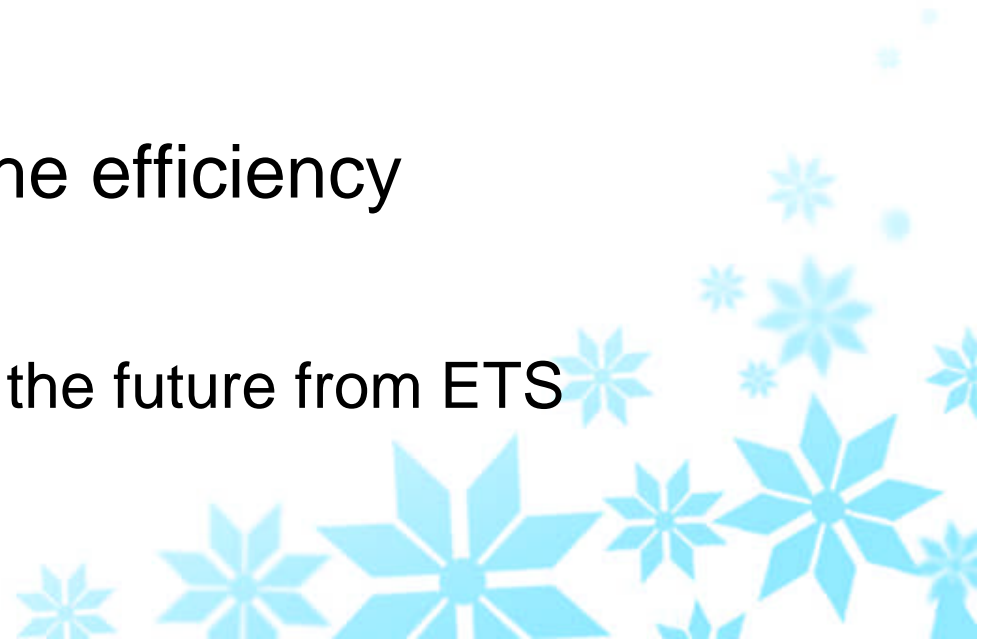
# Applied Policy Measures for households energy efficiency

⇒ Loan up to 60% of the investment guaranteed by the state

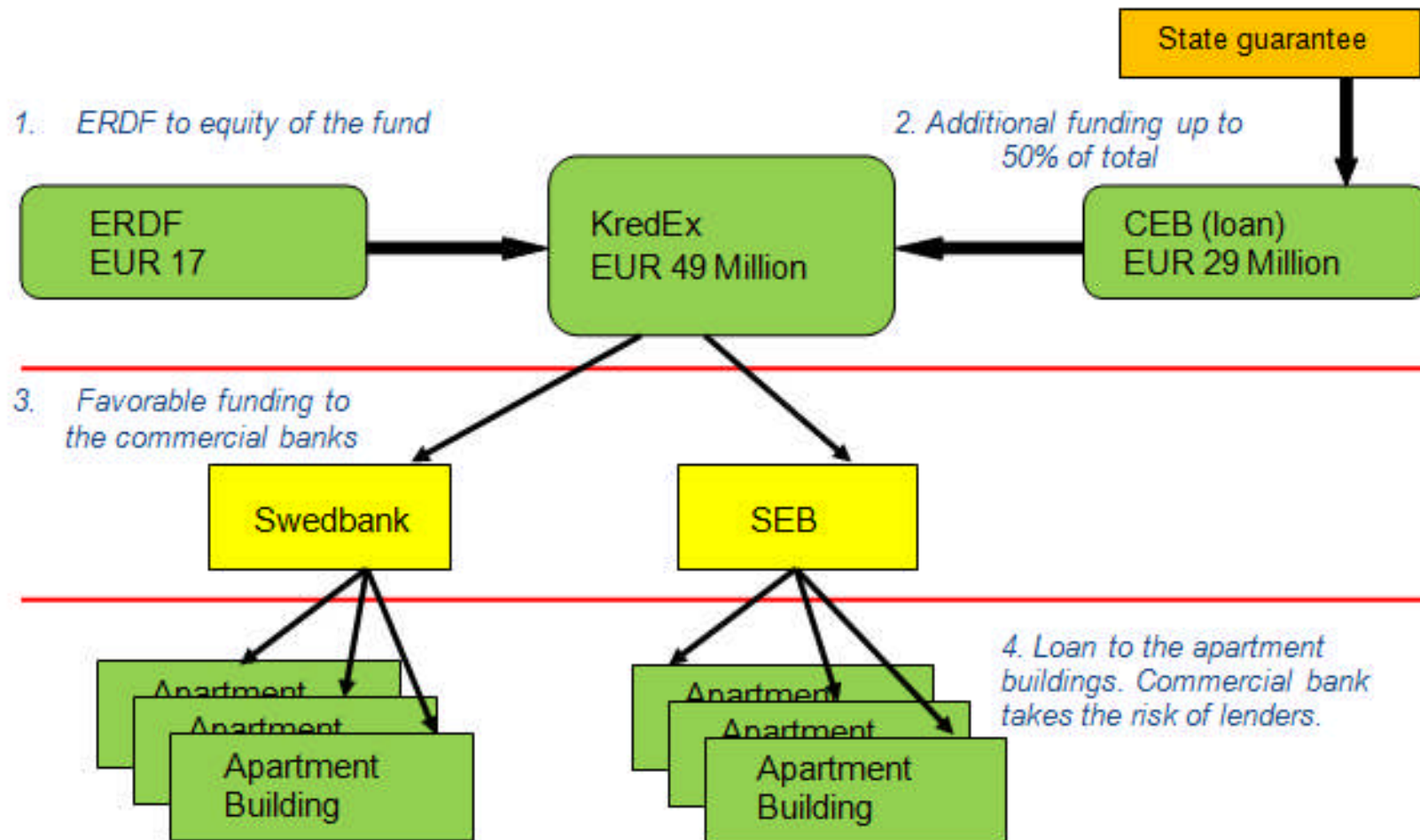
⇒ Financing from ERDF and State budget

⇒ Grants depending on the efficiency improvements

⇒ Financing from AAU, in the future from ETS revenues

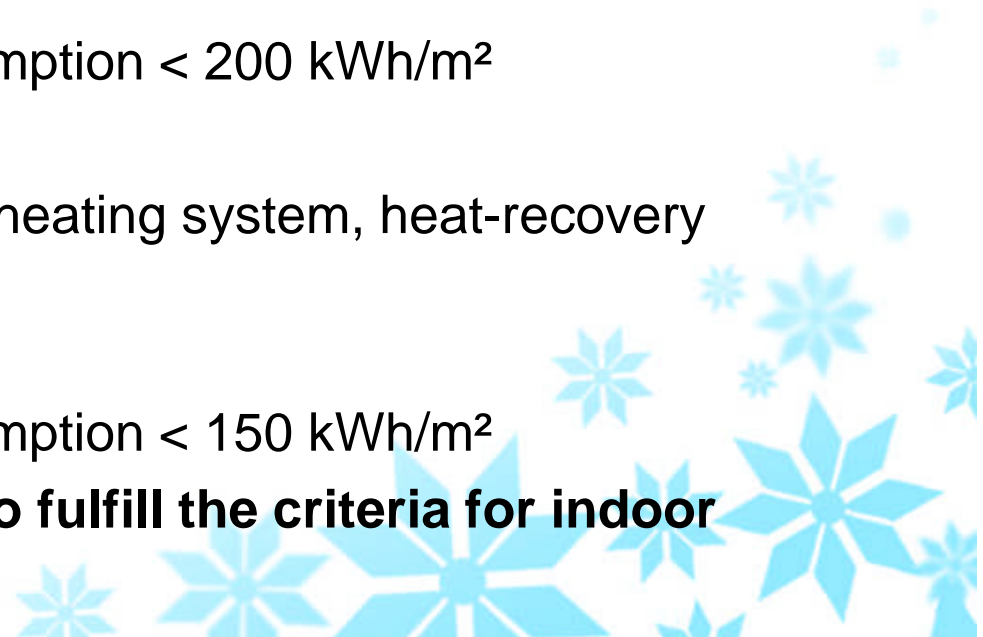


# Revolving fund scheme

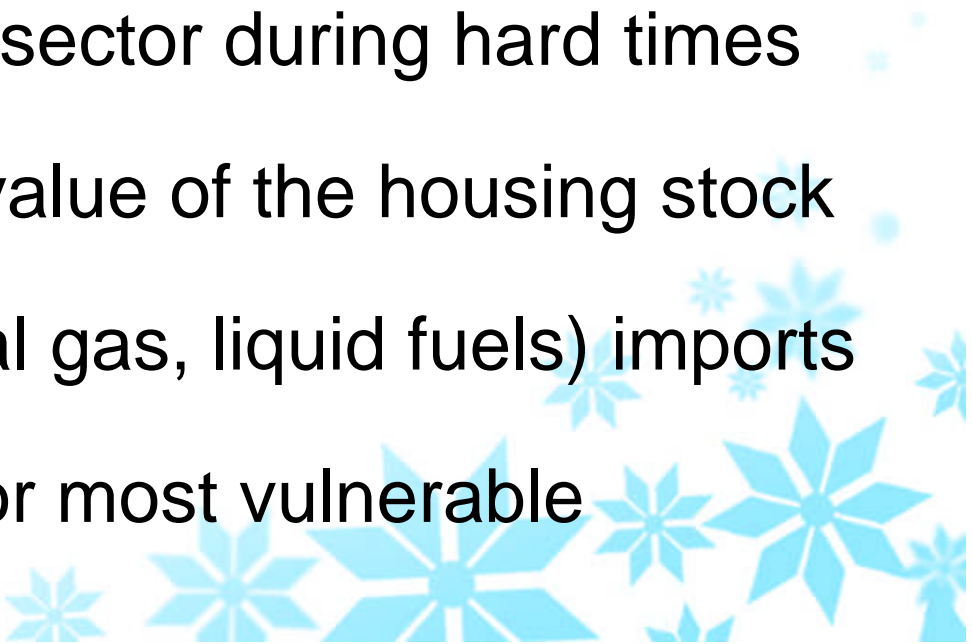


# Grant 15, 25 or 35% - do more, get more

- Grant 15% of the investment
  - fulfill the terms for renovation loan,
  - energy saving 20 or 30%, according to the size of the building
  - Energy label E, energy consumption < 250 kWh/m<sup>2</sup>
- Grant 25% of the investment
  - roof, facade, windows (U 1,1) heating system,
  - energy saving at least 40%
  - Energy label D, energy consumption < 200 kWh/m<sup>2</sup>
- Grant 35% of the investment
  - roof, facade, windows (U 1,1) heating system, heat-recovery ventilation system,
  - energy saving at least 50%
  - Energy label C, energy consumption < 150 kWh/m<sup>2</sup>
- **In all the cases it is obligatory to fulfill the criteria for indoor climate!**



# Rationale for the households energy efficiency measures

- ⇒ More energy efficient housing stock
  - ⇒ Rational use for ERDF funds and AAU revenues
  - ⇒ Support for the building sector during hard times
  - ⇒ Increase of the market value of the housing stock
  - ⇒ Reduced energy (natural gas, liquid fuels) imports
  - ⇒ Decrease of the costs for most vulnerable
- 

## Results so far...

- Loan Facility available from 06.2009, Grant Scheme from 09.2010
- 635 buildings, 23 451 apartments, 54 000 inhabitants
- Ca 1 550 000 m<sup>2</sup> (6,7% from total ap. m<sup>2</sup>)
- Total € 48,2 Mill credit, € 19,4 Mill grant
- Total Investment € 87,2 mio, average € 137 000
- Expected average saving 39%, 75 GWh per year
- Total cost savings for consumers 5-20%





# Just one case: Tartu mnt 27C Elva

- 1029 m<sup>2</sup> (finalised 24 Apr. 2011)
- Investment € 127 000, 123 €/m<sup>2</sup>
- Grant 35% € 44 450, 43€/m<sup>2</sup>
- Credit € 76 121 for 9 years
- Inverter ventilation system
- Energy savings after first year 60%
- Before 186 kWh/m<sup>2</sup>, after 75 kWh/m<sup>2</sup>



# RES-E regulation in Estonia



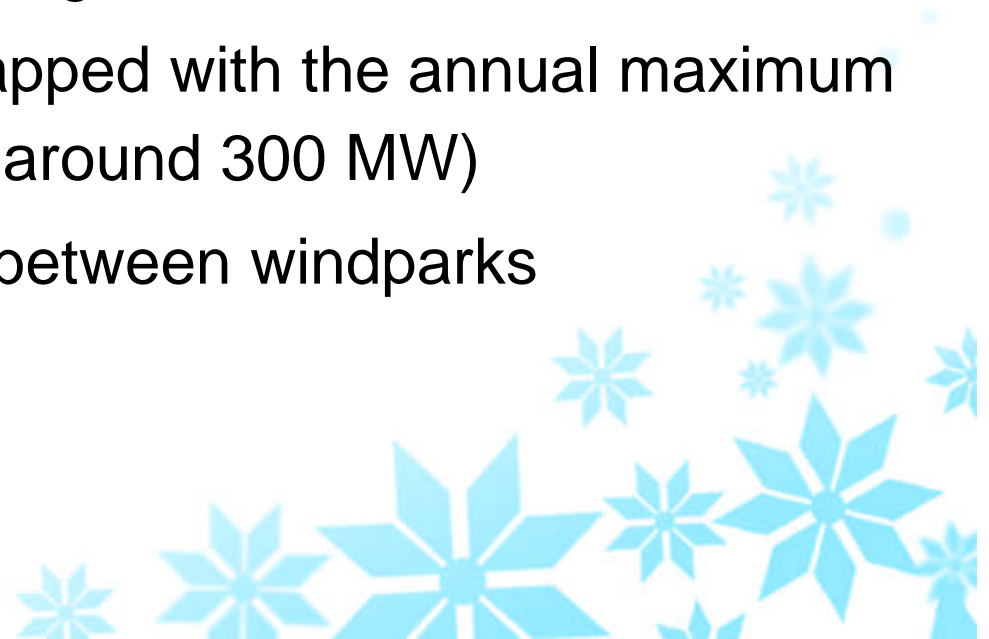
## Support scheme for all new RES-E producers

- Premium of 5,4 €cnt/kWh in top of the market price paid by the TSO, charged to consumers
- Available for 12 years from the start of operations
- Balance responsibility
- **For windpower:** premium is available until within the calendar-year the total production from windpower exceeds 600 GWh

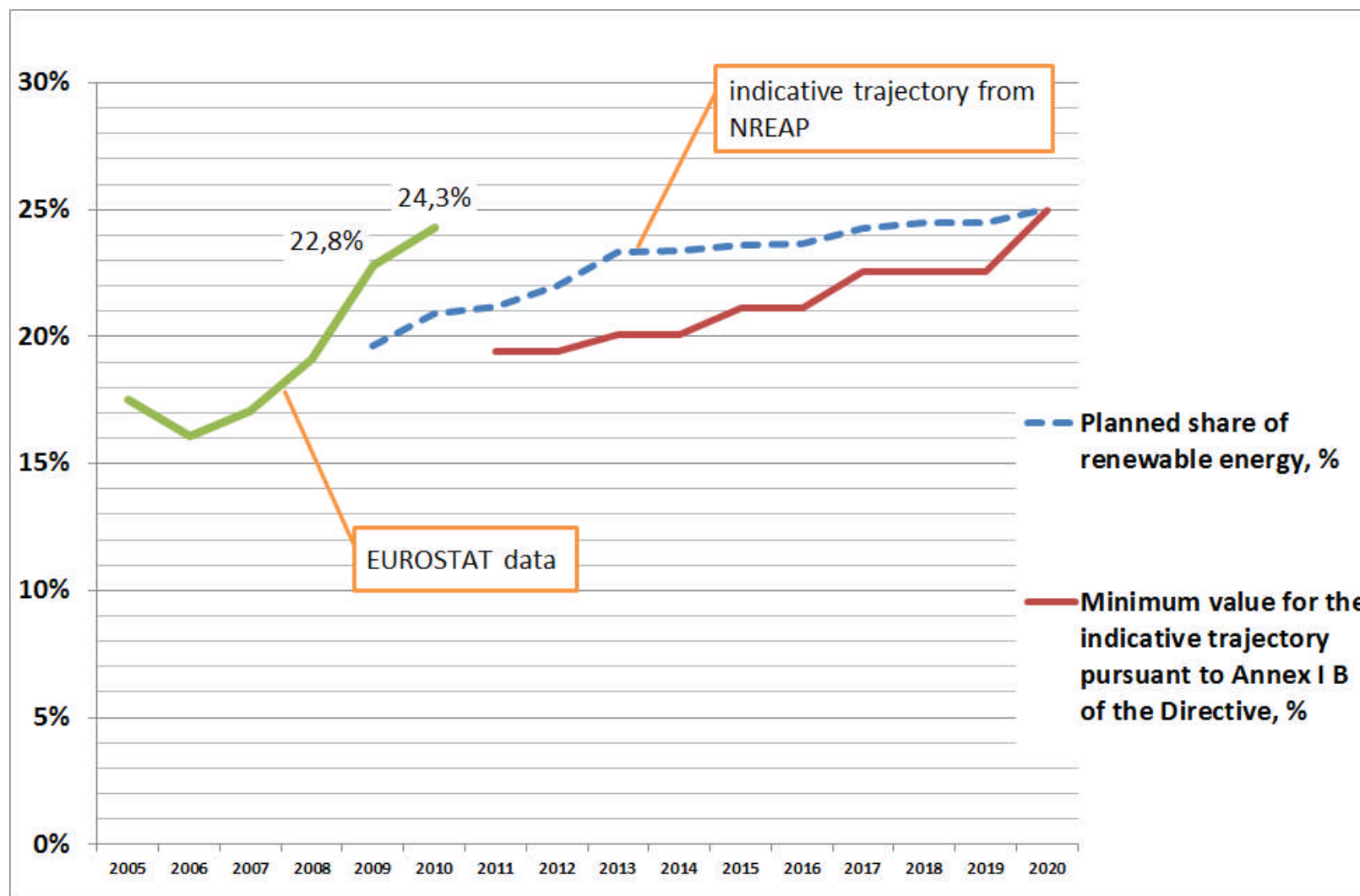


## Rationale of the support scheme

- ⇒ Only cost-effective solutions (small hydro, wind, biomass CHP and co-firing) enter the market
  - ⇒ Investment Grant scheme for more expensive solutions
- ⇒ Biomass capped by the heating market volume
- ⇒ Wind power development capped with the annual maximum support volume (600 GWh= around 300 MW)
  - ⇒ Encourages competition between windparks



# Total share of RES in Estonia



**Additional Cost of Premium to households is around 0,01 EUR/kWh**

Thank You for Your Attention!

