

# KREDEX

## Energy efficiency measures for apartment buildings

Energy Efficiency in Housing Renovation  
10.09.2020

# Housing stock

## Apartment buildings

- Over 90% of housing stock is in private ownership
- ~70% population living in apartment buildings
- Managed by Apartment Associations (legal body, non-profit association)
- All apartment owners are responsible for decisions and payments
- 50%+1 simple majority for decisions



# Renovation loan

- Loan by private banks
- Renovation grant is considered as self-financing
- Loan maturity: up to 20 years
- Interest rate ca 2-3% + 6 month Euribor
- No collateral is needed, credit against cash flow

## **Renovation loan by KredEx**

- For apartment associations who have received a negative response from bank
- Self-financing starting from 5%.
- Loan maturity: up to 20 years
- Interest rate at 3% + 6 month Euribor

# Loan guarantee

- Up to 80% of the loan amount
- The guarantee amount decreases in proportion to the loan amount
- Guarantee fee 1.0% to 1.5% of the balance of the guarantee
- Mainly for:
  - higher risk areas for banks (rural area, low market value)
  - complex renovation (renovation cost is higher)

# Renovation grants



## 2015-2017 (Structural funds, 102 million euros)

- 15% grant - EPC class E / energy saving  $\geq 20\%$
- 25% grant - EPC class D / roof, facade, windows, heating system
- 40% grant - EPC class C / roof, facade, windows, heating system, heat-recovery ventilation system (deep renovation)
- Compulsory technical consultants, third party expertise for design documentation, ventilation airflow measurement protocols
- Total 401 buildings, >90% of applications for 40% grant

## 2015-2017 results

- Average investments  $\sim 280 \text{ €/m}^2$  (grant  $\sim 100 \text{ €/m}^2$ )
- Expected average heating saving 60% (total  $\sim 80 \text{ GWh}$  per year)
- Expected increase of electricity use 5% (total ca  $\sim 2 \text{ GWh}$  per year)
- Commercial banks may not fund projects outside the bigger cities



# Renovation grants

## Deep renovation

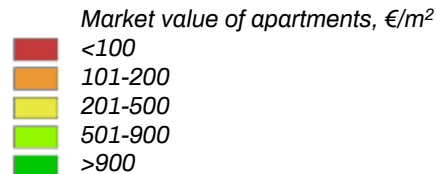
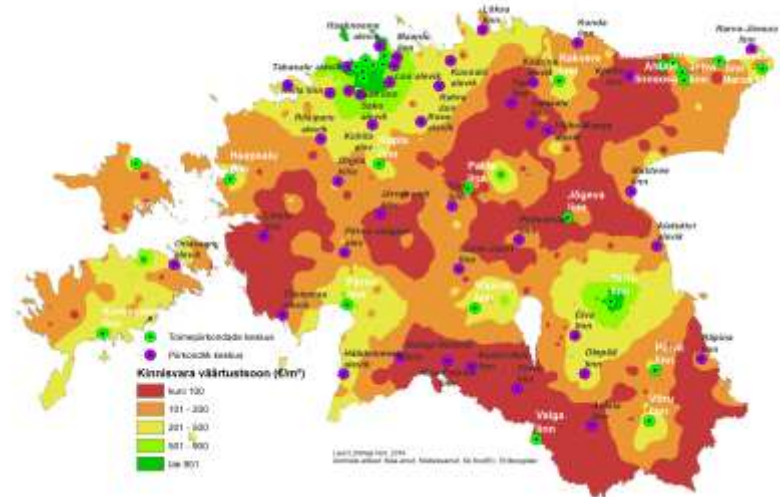
- Insulation of external walls (150-200mm)
- Change of windows (triple glazed windows)
- Insulation of roof (300-400mm)
- New heating system
- New mechanical ventilation system with heat recovery (ventilation ducts inside insulation layer)
- PV panels for on-site renewable energy production



# Renovation grants

2019-2020 (Structural funds, 46 million euros)

- Same technical terms as 2015-2017
- No 15% grant (minor energy savings, lack of interest)
- Different grant share based on regional location:
  - Higher grant for rural areas (50%)
  - Lower grant for two largest cities Tallinn and Tartu (30%)
- Total 135 buildings



# New measures

- Innovation and automation are needed to increase volumes
- New grant measure for renovation with prefabricated buildings (starts at the end of 2020)
- Aim is to renovate Soviet era mass construction buildings (housing estates in larger cities) with industrial approach
- Prefabrication allows shorter construction time, better quality, possibility to automate renovation process and reliefs labor shortage problems in construction sector





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# More Information

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