# ENERGY EFFICIENCY OF RESIDENTIAL BUILDINGS







23.02.2021.







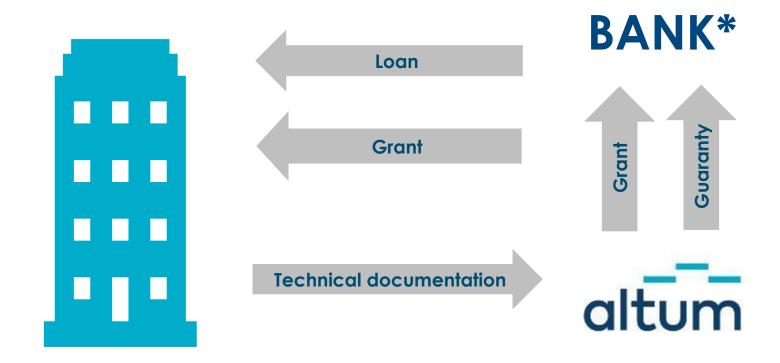
#### **AVAILABLE FUNDING:**

- ► 169 mio EUR for Grants until end of 2023
- ► Total investments together with Bank financing 350 mio EUR

#### TYPES OF SUPPORT:

- **▶** Consultations
- Grant
- Loan guaranty or Direct Loan

#### Cooperation – Altum and banks



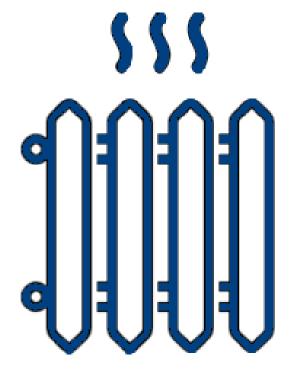
#### The scheme consists of

- 2 financial instrument operations (guarantee or loan)
- 1 grant operation (combined with Fls)

\* There are 4 cooperation agreements signed with commercial banks (SEB, Swedbank, Citadele Bank and Luminor Bank)

Projects can receive promotional loan from Altum, if a bank does not approve commercial loan.

#### REGUIREMENTS FOR PROJECT



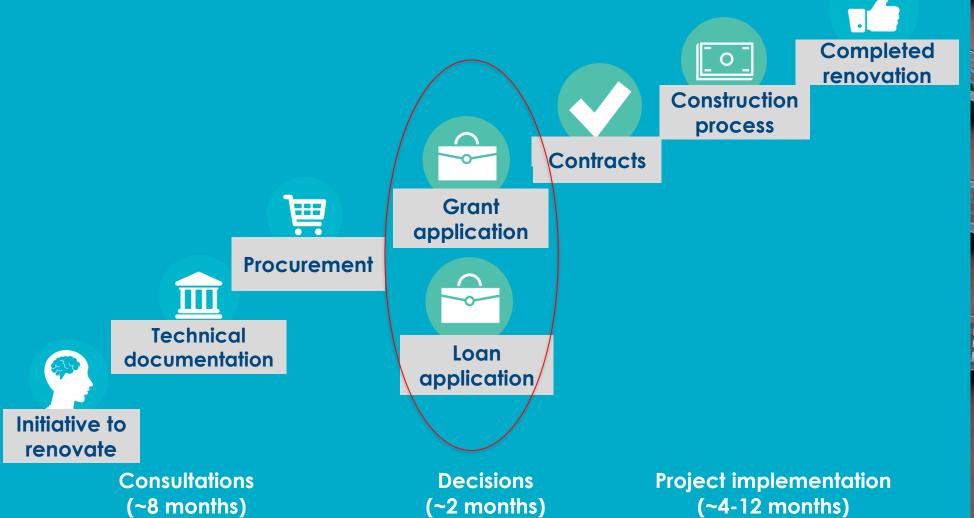
Energy consumption for heating after renovation <90 \* kWh / m2 per year





Max 10% late payments in previous 12 months (for utilities)

#### PROJECT LIFE CYCLE





#### Grant (financial) corrections

Joint procurement for technical project development and author supervision services

**Unjustified amendments in Renovation contract**, e.g., prolongation of renovation deadlines.

Late submission of Construction guarantee / insurance policy

#### **Lessons learned**

Complex grant disbursement model

Complex state aid treatment - on apartment owners' level

Complex payback period calculation (it would be easier to fix max. project cost per m<sup>2</sup>)

Banks refuse projects in less-developed areas or small projects

Improvement of awareness level and motivation of apartment owners to implement renovation projects

#### **RESULTS**

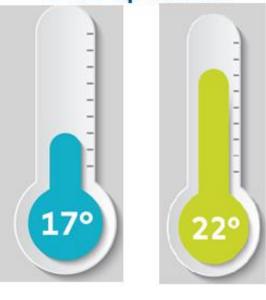
**Energy savings** 

58%

79 kWh/m<sup>2</sup>



Average temperature of the apartment



Before After

**Heating costs** 

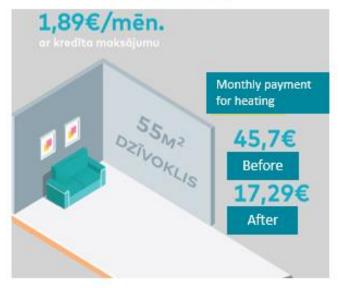


Before



After

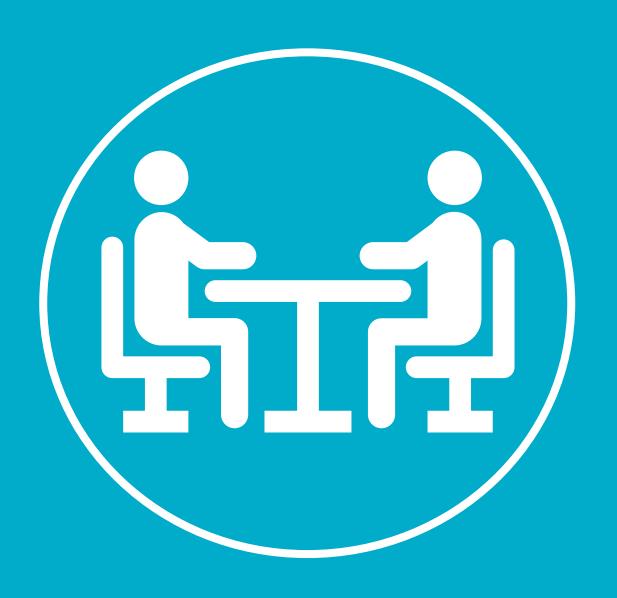
Payment changes (example)





Sigulda, Instituta Street 10 103.type, Year 1979 66 flats, 4618,4 m2

Total cost of project: **EUR 778 480**Consumption before: **159 kWh/m²**Planed consumption after: **52 kWh/m²** 



#### **SMEs AND ESCOs**

#### **FUNDING**

- ▶ 20 MEUR green bonds
- ▶ 18 MEUR EIB PF4EE funding
- ► 1 MEUR ELENA funding

#### **SUPPORT:**

- ► Technical assistance
- Direct loan

## ELIGIBLE SEGMENTS AND PROJECTS

#### 1.ENERGY EFFICIENCY

- District heating based on renewables
- Energy recovery projects
- Energy efficient technologies / manufacturing process
- Energy consumption reduction
- Minor renovations of buildings

#### 2.RENEWABLE ENERGY

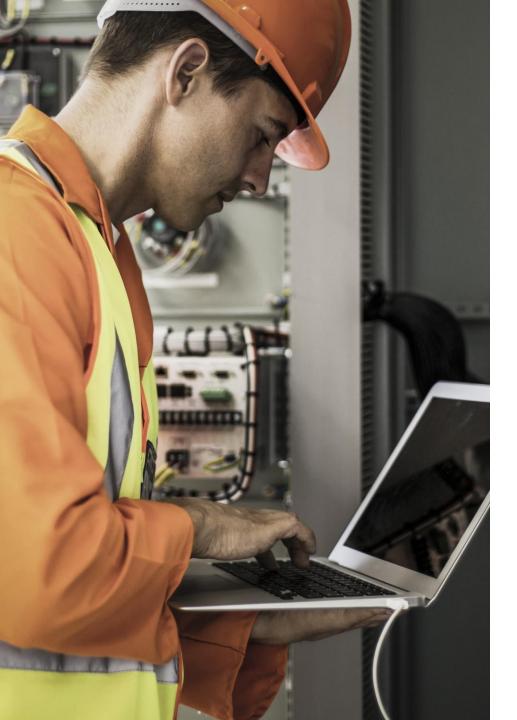
- Wind
- Solar
- Bio energy

#### 3.SUSTAINABLE TRANSPORTATION

 Solutions / systems based on non-fossil fuel and supporting infrastructure

#### **4.GREEN BUILDINGS**

- Energy use of nearly zero energy buildings
- Major renovations leading to reduced energy use for heating per year of at least 35 %



#### LOAN PARAMETERS

Maturity	Up to <b>15 years</b>
Loan amout	Up to EUR 2 850 000
Co-financing	From 10 %
Collateral	No additional collateral required
Grace period	Up to <b>9 months</b> (capex period)
Repayment	From reduced energy bill => no additional burden on cash flow
Interest Rate p.a.	4.8 - 6.5%

### ELENA GRANT FOR THE TECHNICAL DOCUMENTATION OF ENERGY EFFICIENCY PROJECTS

Improvement of heating, ventilation and cooling systems

Lighting modernization

Renewable energy integration in the enterprise infrastructure

Renovation or construction of central heating systems



Installation of smart energy resource management systems

Effectivization of technological processes



The enterprise completes an application in the homepage



ALTUM assesses the compliance



Works, costs are being coordinated and contracts are being concluded



The enterprise covers 15% of the involvement from the total costs



ALTUM organizes the work performance



ALTUM passes the work results to the enterprise



The enterprise invests in energy efficiency until the end of 2021

## THANK YOU!