# The Lifelong Learning University in Velenje

- Location: Velenje, Slovenia
- Use of the building: educational
- Built: 1980
- Heated gross floor area: 816,77 m<sup>2</sup>
- Heated net floor area: 689,77 m<sup>2</sup>
- Primary energy before renovation:
  - Heating energy: 148,3 kWh/m2 (NFA)
  - Electricity: 33,4 kWh/m2 (NFA)
- CO2 emissions before renovation: 48.125 kg/a

### **Description of the pilot project:**

- An educational building for lifelong learning for all generations.
- High costs of electrical and heating energy, high CO<sub>2</sub> emissions,
- EE measures implemented: roof insulation, partial replacement of oudoor and indoor joinery, modernization of indoor lighting,
- RES reasures: installation of solar power plant on the roof of the building

# **Quick summary**



### Main work-steps/milestones:

- Feasibility study
- Peer review workshop
- Development of Main design for building renovation
- Crowdfunding process
- Renovation and commissioning
- Monitoring, verification and promotion

#### **Documentation needed:**

- Energy audit
- Inventory of works, materials, required approvals for renovation





### Stakeholder involvement:

- Leading: Own resources
- Other: crowdfunding

### **Investment and financial model:**

Investment cost: 114.831,44 EUR

Financial model: crowdfunding + own

resources



# **Results:**

- Expected savings: 3.245
  EUR anually.
- Primary energy savings:65 kWh/m2
- Emissions: 41,1 % CO2 annually
- Return on investment (ROI): 25 years

# Lessons learnt



## **Biggest milestones:**

- Feasibility study
- Crowdfunding process
- Renovation and commissioning

### **Biggest obstacles:**

- Lack of crowdfunding platforms and experience with this method of financing – a pioneer project in Slovenia
- Legislation barriers for public authorities





# What could've been done different?

For such financial approach, it is necessary to adapt the legislation, which as a municipality we cannot do but will lobby for it to happen on national level



# What would we recommend?

In particular, we would advise other public authorities to explore the legislation barriers before they start the campaign and to consult with Slovenian platform operators on how to plan and conduct their campaigns

For more info: http://lepicenter.velenje.si/en/