

# Annelinn, Tartu

## Energy Improvement District (EID) at a glance



© Antti Roose

Location:	Tartu, Lõuna-Eesti, EE
Area:	0.2 km <sup>2</sup> (Kalda EID)
Inhabitants:	3,000 residents, 700 people studying or working in the area
Buildings:	13 apartment buildings (3 nine-floor buildings and 10 five-floor buildings), 1 underground garage, 1 school, 1 kindergarten, 1 shop
Ownership:	15 privately owned buildings, 2 public buildings (school and kindergarten)

## Vision and goals

“Conscious consumers will be living in buildings refurbished to meet 21st century requirements and needs”

- to decrease energy consumption by 5 GWh per year from 20 to 15 GWh in the EID.
- to decrease emissions and improve indoor climate for residents.

## EID Potentials

To achieve these results, potentials can be exploited from a stakeholder perspective and from a technical perspective.

1. Consumer play a crucial role, as “Buildings don’t use energy, people do”. So it is crucial to raise awareness of residents and building owners. This could be done by changing their energy consumption behaviour and know-how on the use of technical systems that help save energy.
2. Refurbishment can also contribute to the improvement of indoor climates, energy efficiency and reduced CO<sub>2</sub> emissions. For stakeholders it is

## Expected results

The measures introduced here contribute to realizing the objectives of the Action Plan for Sustainable Energy Management 2015-2020 for the City of Tartu. The specific city-level targets supported by the Energy Improvement District represent a 20% reduction in energy consumption for the housing sector and a target value of 10% for consumers to use renewable energy.

important to train designers and constructors to adapt buildings to improved requirements.

3. CO<sub>2</sub> emissions reduction could be achieved especially with a greater use of electricity from renewable energy sources. As a concrete step in this direction, on-site renewable energy production will be realized through PV panels. If installed on the roofs of the buildings in the EID, the area can be a producer and generate between 750 and 1,100 MWh of clean energy per year. From an economic perspective, PV panels represent the most profitable and dynamic option for an on-site energy production.