Lahti

Renovation site

Lehtiojantie, Lahti

Renovation measure

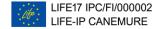
Wastewater heat recovery system











Basic information

Building type

Assisted living apartment building"

Number of residential apartments

190

Year of construction

2014

Contractor/supplier

Nastolan LVI-ala Oy, Ecopal Oy

Renovation time

The end of 2020

Measures implemented with project funding

Installed wastewater heat recovery system, which serves as an additional heat source for the geothermal heat pump

Other measures

Renewing the geothermal heat pumps

Initial situation

Calculatory emissions tCO₂/year

241,0

Energy consumption, heating MWh/year

291,0

Energy consumption, electricity MWh/year

1538,4

Energy efficiency class

B

Impact

Calculatory emission reduction tCO₂/year

28,8

Calculatory change in energy consumption, heating MWh/year

- 106,5

Calculatory change in energy consumption, electricity MWh/year

- 63,6

Energy efficiency class after

B

Realized emission reduction 09/2022–08/2023

47,7 tCO₂/year

Realized emission reduction 09/2023–08/2024

40,2 tCO₂/year

Costs

Project measures

Contract and equipment costs

60 000 €

All measures

Contract and equipment costs

207 950 €

Change in calculatory energy costs per year

- 12 288 €

Change in realized energy costs per year

09/2022-08/2023

09/2023-08/2024

- 9 164 €

- 8 558 €

Calculatory emission reduction costs

7 229 €/tCO₂

Realized emission reduction costs

09/2022-08/2023

09/2023-08/2024

4 362 €/tCO₂ 5 174 €/tCO₂

Calculatory payback period

16,9 years

Energy is recovered from domestic hot water, which would otherwise end up in the sewer system along with the wastewater

This report has been carried out with the financial contribution of the LIFE Programme of the European Union. The report reflects only the CANEMURE project's view, and the CINEA/European Commission is not responsible for any use that may be made of the information it contains.