

# Lahti

Renovation site

# Lehtiojantie, Lahti



**Renovation measure**

Wastewater heat recovery system

**LAHDENTALOT**



## 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 tCO<sub>2</sub>/year

**241,0**

Energy consumption, heating MWh/year

**291,0**

Energy consumption, electricity MWh/year

**1 538,4**

Energy efficiency class

**B**

## Impact

Calculatory emission reduction tCO<sub>2</sub>/year

**28,8**

Change in energy consumption, heating MWh/year

**- 106,5**

Change in electricity consumption, electricity MWh/year

**- 63,6**

Energy efficiency class after

**B**

Realized emission reduction 09/2022–08/2023

**47,7 tCO<sub>2</sub>/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

**- 9 164 €**

Calculatory emission reduction costs

**7 229 €/tCO<sub>2</sub>**

Realized emission reduction costs  
09/2022–08/2023

**4 362 €/tCO<sub>2</sub>**

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.