

Lahti

Renovation site

Takojantie 2-4, Nastola



Renovation measure
Air-to-water heat pump

LAHDENTALOT



Basic information

Building type

4 townhouses

Number of residential apartments

18

Year of construction

1991

Contractor/supplier

Lämpöjokeri Ky

Renovation time

The beginning of 2021

Measures implemented with project funding

Installing an air-to-water heat pump next to an oil boiler

Other measures

Renewing the oil boiler and burner, renewing windows and exterior doors, balancing of the heating network

Initial situation

Calculatory emissions tCO₂/year

45,6

Energy consumption, heating MWh/year

179,3

Energy consumption, electricity MWh/year

17,1

Energy efficiency class

F

Impact

Calculatory emission reduction tCO₂/year

36,6

Change in energy consumption, heating MWh/year

- 173,4

Change in electricity consumption, electricity MWh/year

62,5

Energy efficiency class after

C

Realized emission reduction 09/2022–08/2023

34,0 tCO₂/year

Costs

Project measures

Contract and equipment costs

17 395 €

Change in calculatory energy costs per year

- 11 893 €

Calculatory emission reduction costs

556 €/tCO₂

All measures

Contract and equipment costs

146 905 €

Change in calculatory energy costs per year

- 17 834 €

Change in realized energy costs per year
09/2022–08/2023

- 21 171 €

Calculatory emission reduction costs

4 010 €/tCO₂

Realized emission reduction costs
09/2022–08/2023

4 321 €/tCO₂

Calculatory payback period

1,2 years

Alongside the existing oil heating system, the air-to-water heat pump significantly saves heating energy

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