

SYNOPSIS

- Refurbishment of 84 apartments and 10 studios to new standards.
- Construction of 58 new energy efficient dwellings and a vertical PV system.
- Step by step infrared quality control during the building process.

BACKGROUND



During the next 10 years, a large scale upgrading of the Poptahof area in Delft will take place to prevent the neighbourhood from falling in social decline. At present about 2,800 inhabitants

of 30 nationalities, live in this area and this number will rise by adding new dwellings. The upgrading is in co-operation mainly among owners, the Woonbron housing association, the Municipality of Delft and to some extent the owner of the Van Der Vorm adherent shopping centre.

OBJECTIVES

- Refurbish 94 eco-building apartments to reach national building regulation standards for new dwellings.
- Install a 10 kWp PV system on the southern façade of one refurbished apartment building.
- Build 58 new dwellings having a final energy demand for space heating of 51 kWh/m².
- Extend, upgrade and modify the heat distribution system and connect it to the refurbished apartments and the new eco-buildings.
- Connect the modified neighbourhood district heating systems to the central district heating infrastructure based on residual heat.



PROJECT DESCRIPTION

The renovation of 800 dwellings in 8 high-rise apartment buildings includes energy savings in



the building envelope, together with installations and measures to stimulate energy efficient behaviour. Replacing open tap water boilers with a connection to

district heating increases both safety and indoor air quality. New dwellings replace medium size buildings and single-family dwellings for a greater social diversification and more space for elderly people. The total number of dwellings within Poptahof increases from 300 to 1,300. The dwellings are mixed by about 40% low-rent social housing, 20% private owned social housing and 40% private owned housing.

RESULTS

Daily energy use of the tenants is available through specific individual metering both for heating and electricity. The monitoring and evaluation is done by EREA, the local energy agency. Feedback for the tenants is being developed.

NEXT STEPS

Pictures and information on the next steps in the Poptahof are available on www.poptahof.nl.

RECOMMENDATIONS

Specific quality control on energy efficiency measures during the building process is necessary to reach the desired results, especially in refurbishment.

FURTHER INFORMATION

- Name: Peter van Hemmen
- Position: Manager
- Organisation: Woonbron
- Tel. : +31 15 888 0500
- e-mail: pvhemmen@woonbron.nl