Condominium 48 rue de Saint Cloud in Nanterre

by Thomas Lemerle / 2019-02-20 10:18:43 / France / 5041 / FR

Renovation

Primary energy need :

102 kWhep/m².an

(Calculation method : RT existant)

ENERGY CONSUMPTION

Economical building — *Building*

< 50	A	
51 à 90	B	
91 à 150	C	C
151 à 230	D	
231 à 330	E	
331 à 450	F	
> 450	G	

Energy-intensive building

Building Type : Collective housing < 50m
Construction Year : 1955
Delivery year : 2019
Address 1 - street : 92000 NANTERRE, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 5 154 m² SHON
Construction/refurbishment cost : 1 929 521 €
Cost/m2 : 374.37 €/m²

Proposed by :

General information

Located in Nanterre, this condominium consists of four buildings and 64 homes was built in 1955. It has not been renovated since and that is why in 2016, the syndicate of condominium has decided to renovate .

Thus, the work that has been done is:

-Low pressure ventilation

-Collective condensing boiler

-Collective heat of sanitary water

-Isolation from the outside of the walls and the roof

This allowed to divide by almost 3 the energy consumption of the condominium from 283 to 102 kWeh / m² / year. The condominium has reached the BBC renovation level in some aspects without validating the certification by a certifying body.

Sustainable development approach of the project owner

The project consists of the overall renovation of the 4 buildings of the condominium. This allowed to reach the level of performance BBC renovation (104 kWhep / m²SHON / year in Île-de-France) and therefore to greatly reduce energy consumption.

In addition, the financial effort was important from the condominium to "embark on energy renovation". Thus, all the inhabitants will be able to benefit from the comfort of this renovation.

Architectural description

The condominium is composed of 64 dwellings spread over 4 buildings in R + 4.

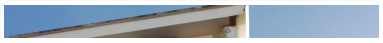
The main architectural modifications of the project are:

- insulation from the outside of walls and roof
- balcony integration
- installation of shutters

Building users opinion

The work related to the improvement of the building made it possible to use the surplus of power for the production of Hot Sanitary Water. Occupants are satisfied with the passage of individual to collective hot water; this avoids multiple subscriptions and maintenance contracts.

See more details about this project



Stakeholders

Contractor

Name : GIERENS IMMOBILIER
Contact : immobilier.gierens.copro@wanadoo.fr

Construction Manager

Name : REANOVA
Contact : haroldhugonenc@reanova.fr
http://www.reanova.fr

Stakeholders

Function : Thermal consultancy agency

POUGET Consultants

jonathan.muller@pouget-consultants.fr

http://www.pouget-consultants.eu/

Function : Environmental consultancy

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 102,00 kWhep/m^2.an

Primary energy need for standard building : 118,00 kWhep/m^2.an

Calculation method : RT existant

Breakdown for energy consumption : Heating: 62%
Domestic hot water: 26%
Lighting: 7%
Auxiliary ventilation: 4%
Auxiliaries for heating and DHW: 2%

Initial consumption : 283,00 kWhep/m^2.an

Envelope performance

Envelope U-Value : 0,80 $W.m^{-2}.K^{-1}$

More information :
- 16 cm of insulation on the walls,
- 25 cm of insulation at roof terraces,
- 25 cm flocking at low floors.

Renewables & systems

Systems

Heating system :
- Condensing gas boiler

Hot water system :
- Condensing gas boiler

Cooling system :
- No cooling system

Ventilation system :
- compensated Air Handling Unit

Renewable systems :
- No renewable energy systems

Environment

Urban environment

Dense and mixed environment: individual dwellings, small collectives and large complexes.

Products

Product

Low pressure ventilation

ACHTYS

Vincent Benard

http://www.acthys-ventilation.fr/

Product category : Génie climatique, électricité / Ventilation, rafraîchissement

Low pressure ventilation to reuse existing individual ducts

For vents and air inlets in the housing; a witness was made so that the occupants could visit it and be informed in advance of the work that will be done in their

home.

Costs

Carbon

GHG emissions

GHG in use : 31,00 $KgCO_2/m^2/an$

GHG emissions before renovation: 52 KgCO2 / m2 / year

Contest

Reasons for participating in the competition(s)

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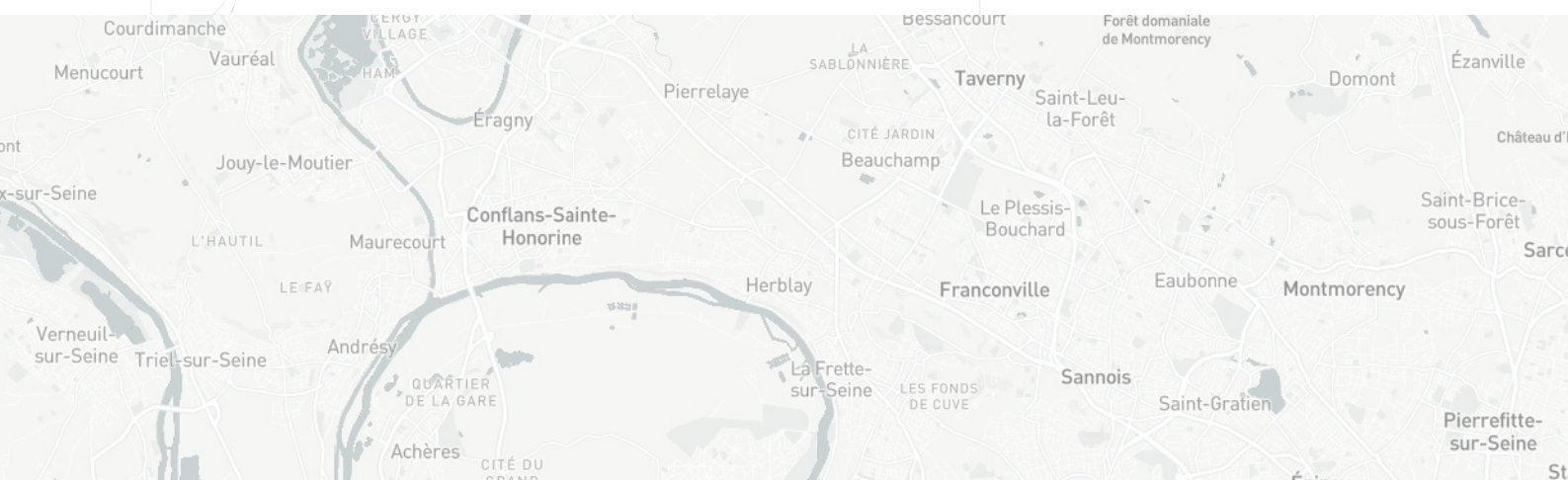
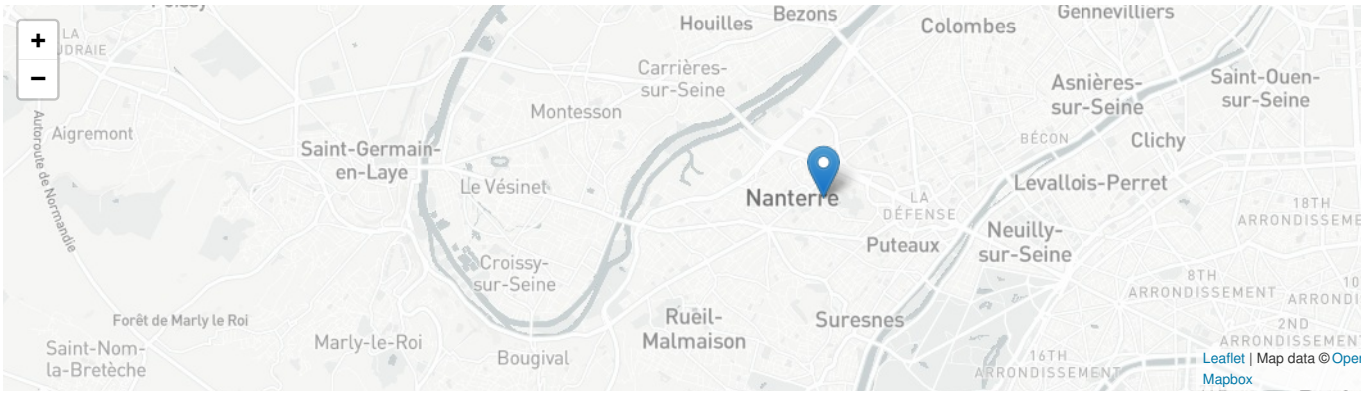
Building candidate in the category

Energie & Climats Tempérés



Prix des Etudiants



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