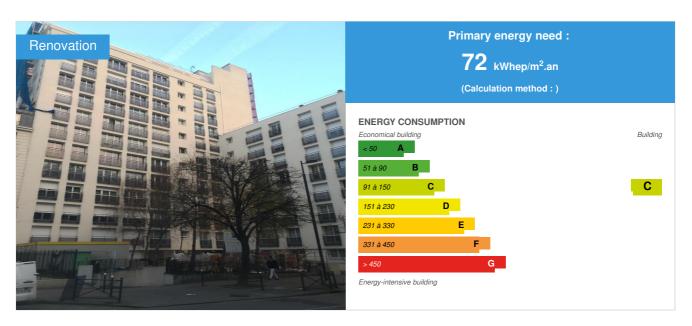


# **Condominium Les Vignes**

by Benjamin Le Guennec / ( 2019-02-21 14:26:41 / Frankreich / ⊚ 4840 / ▶ FR



**Building Type**: Collective housing < 50m

Construction Year : 1973 Delivery year : 2019

Address 1 - street: 51 rue Jean Bleuzen 92170 VANVES, France

Climate zone: [Cfc] Marine Cool Winter & summer- Mild with no dry season.

Net Floor Area: 5 282 m<sup>2</sup>

Construction/refurbishment cost : 1 436 270 €

Number of Dwelling : 59 Dwelling

Cost/m2: 271.92 €/m<sup>2</sup>

## General information

In 2014, aware of the renovation work to be done on their building, the union council decided to carry out an energy audit. Oriented by GPSO, he is moving towards a global audit of their residence.

Following this audit by Reanova, the condominium decided to carry out a design mission for one of the scenarios.

This scenario includes:

- the thermal insulation of the facades from the outside
- insulation of low floors
- $\bullet\;$  the establishment of a humidity-sensitive type B ventilation
- the passage of fuel oil to gas
- the installation of thermostatic faucets
- the replacement of the original private joinery
- lighting common areas

With an energy gain of 58%.

After the design, the condominium voted the completion of the work in 2017.

It is a **global and ambitious renovation project**, with thermal insulation of the building (external walls, floor, windows) but also a renovation of the systems (boiler room, terminal regulation, ventilation). This works can achieve up to **58% energy savings**.

The approach initiated by the condominium is also exemplary. From the energy audit to the works. A thoughtful and coherent approach from the beginning to the

Consult the map of renovated condominiums on the Paris metropolis https://paris.coachcopro.com/pages/carte-des-coproprietes-renovees

### Sustainable development approach of the project owner

For many years, the condominium complained of problems of air leakage around windows and difficult heat regulation. As part of the energy and architectural audit of the condominium, a survey of the occupants was carried out in 2014, identifying the precise expectations of the condominium on the renovation of their building. It confirmed the strong expectations concerning the improvement of the thermal comfort, but also the control of the consumptions of energy.

In October 2015, an extraordinary general assembly voted on the design mission and retained the most ambitious scenario proposed following the energy audit, to reach the **BBC renovation** (building low energy consumption) level, set at 104 kWh / m² / year. in Ile de France. The result should eventually reach 97 kWh / m² / year, which makes the condominium class E to class C, allowing a saving of nearly 60% on energy consumption.

### Architectural description

The condominium Les Vignes is composed of a building (R + 13) and 58 dwellings. It dates from 1963.

The works carried out are:

- Thermal insulation from the outside with 14 cm of rockwool
- Insulation of low floor with flocking of 12 cm mineral wool
- Replacement of joinery in single glazing by double glazed PVC joinery
- Installation of a gas condensing boiler instead of a fuel boiler
- Installation of a humidity-controlled type B ventilation
- Modernization of the lighting of common areas (LED + detectors)

## See more details about this project

☑ https://gpsoe.coachcopro.com/fiche-de-site/7063eda7-f49c-45de-a11a-b152a83bef40

## Stakeholders

#### Contractor

Name : Copropriété Les Vignes

### Construction Manager

Name: Reanova

Contact : Benjamin Le Guennec

http://www.reanova.fr/

#### Stakeholders

Function: Thermal consultancy agency

Pouget consultant

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

Function: Company

ARCTCE

Lot facades

Function: Company

Norba

☑ https://www.norba-menuiserie.com/

Lot joineries

Function: Company

#### 

Heating batch

Function: Company

AIRTEC

Lot ventilation

## Contracting method

Separate batches

# Type of market

Table 'c21\_germany.rex\_market\_type' doesn't exist

# Energy

# **Energy consumption**

Primary energy need: 72,00 kWhep/m<sup>2</sup>.an

Primary energy need for standard building : 93,00 kWhep/m².an

Calculation method:

Breakdown for energy consumption: Heating: 59%

Domestic hot water: 36%

Cooling: 0%

Lighting of the common parts: 2%

Auxiliaries: 3%

Initial consumption: 222,00 kWhep/m².an

## Real final energy consumption

Final Energy: 85,00 kWhef/m<sup>2</sup>.an

## Envelope performance

Envelope U-Value: 0,84 W.m<sup>-2</sup>.K<sup>-1</sup>

Indicator: n50

## Renewables & systems

# **Systems**

#### Heating system:

Condensing gas boiler

#### Hot water system :

Condensing gas boiler

### Cooling system:

No cooling system

#### Ventilation system:

Humidity sensitive Air Handling Unit (Hygro B

## Renewable systems :

No renewable energy systems

## Urban environment

Dense urban environment.

### **Products**

### **Product**

Joinery

TRYBA

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '10'

Joinery PVC double glazing



#### ECOROCK DUO insulation

#### ROCKWOOL

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '6'

Rockwool



#### Ventilation

#### ALDES

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '19'

vmc hygro B BAHIA



Heating Prduction

ATLANTIC GUILLOT

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '18' gas boiler with condesation



#### Heating regulation

#### DANFOSS

Product category: Table 'c21\_germany.innov\_category' doesn't exist SELECT one.innov\_category AS current,two.innov\_category AS parentFROM innov\_category AS oneINNER JOIN innov\_category AS two ON one.parent\_id = two.idWHERE one.state=1AND one.id = '18' thermostatic faucets



#### Costs

# Construction and exploitation costs

Cost of studies : 63 841 €

Total cost of the building : 1 428 530 €

Subsidies : 260 119 €

## Health and comfort

### Comfort

## Health & comfort :

Work on the insulation of walls and joinery has, among other things, increase the thermal comfort of occupants by eliminating the phenomenon of cold walls in winter and limiting overheating in summer. In addition, the improvement of the ventilation makes it possible to ensure a renewal of air all the year, that further improves the comfort of use of the building.

### Carbon

## **GHG** emissions

GHG in use: 23,00 KgCO<sub>2</sub>/m<sup>2</sup>/an

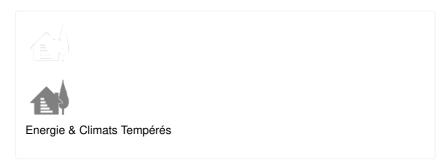
#### Contest

# Reasons for participating in the competition(s)

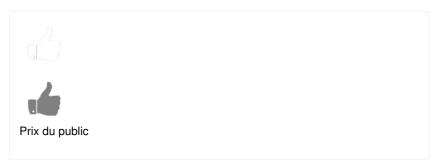
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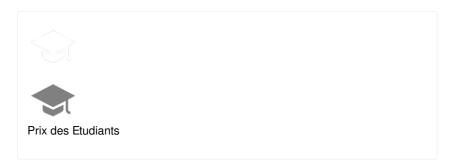
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# **Building candidate in the category**











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