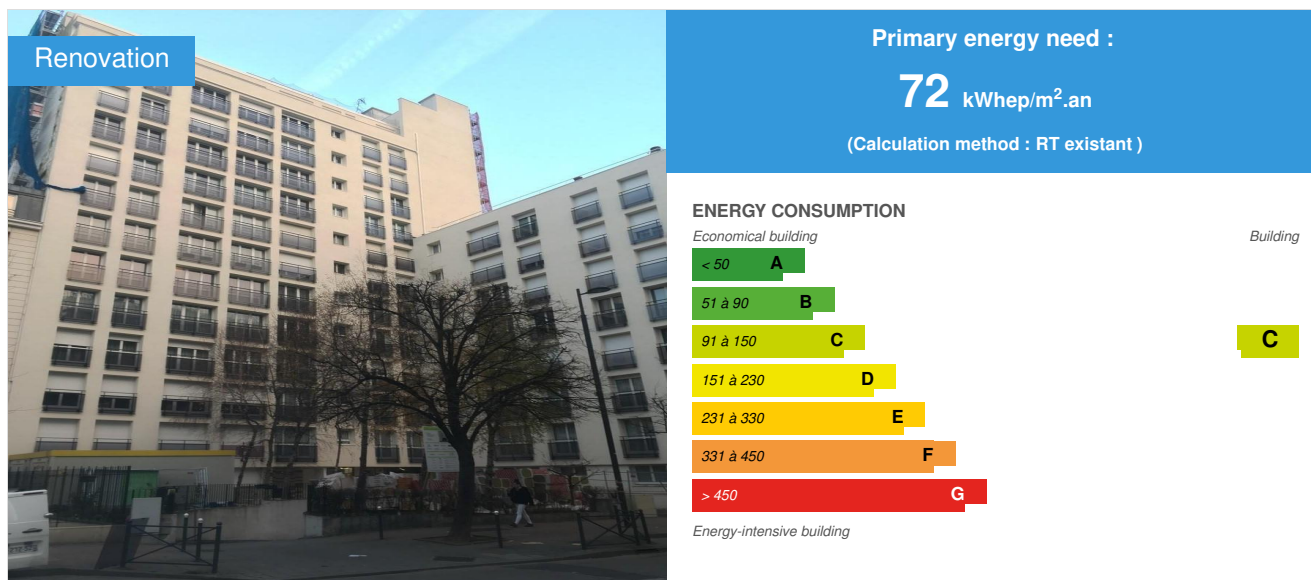


# Condominium Les Vignes

by Benjamin Le Guennec / 2019-02-21 14:26:41 / France / 4720 / 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
- 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 work 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 end.

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 / m<sup>2</sup> / year. in Ile de France. The result should eventually reach 97 kWh / m<sup>2</sup> / 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

<https://www.arctce.fr/offline/>

Lot facades

Function : Company

Norba

<https://www.norba-menuiserie.com/>

Lot joineries

Function : Company

Engie

<http://www.engie.fr/>

Heating batch

Function : Company

AIRTEC

Lot ventilation

## Contracting method

Separate batches

## Type of market

Global performance contract

## Energy

### Energy consumption

Primary energy need : 72,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Primary energy need for standard building : 93,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

Calculation method : RT existant

Breakdown for energy consumption : Heating: 59%

Domestic hot water: 36%

Cooling: 0%

Lighting of the common parts: 2%

Auxiliaries: 3%

Initial consumption : 222,00 kWh<sub>ep</sub>/m<sup>2</sup>.an

### Real final energy consumption

Final Energy : 85,00 kWh<sub>ef</sub>/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

## Environment

## Urban environment

Dense urban environment.

### Products

#### Product

Joinery

TRYBA

**Product category :** Finishing work / Exterior joinery - Doors and Windows

Joinery PVC double glazing



ECOROCK DUO insulation

ROCKWOOL

**Product category :** Structural work / Structure - Masonry - Facade

Rockwool



Ventilation

ALDES

**Product category :** HVAC, électricité / ventilation, cooling

vmc hygro B BAHIA



Heating Production

ATLANTIC GUILLOT

**Product category :** HVAC, électricité / heating, hot water

gas boiler with condensation



Heating regulation

DANFOSS

**Product category :** HVAC, électricité / heating, hot water  
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)

Il s'agit d'un projet de rénovation globale et ambitieuse, avec isolation thermique du bâtiment (murs extérieurs, plancher, fenêtres) mais également une rénovation des systèmes (chaufferie, régulation terminale, ventilation). C'est travaux permettent de réaliser jusqu'à 58 % d'économies d'énergie.

La démarche entamée par la copropriété est aussi exemplaire. De l'audit énergétique jusqu'au travaux. Une démarche réfléchie et cohérente du début à la fin.

## Building candidate in the category



Energie & Climats Tempérés



Prix du public



Prix des Etudiants



Date Export : 20230507195928