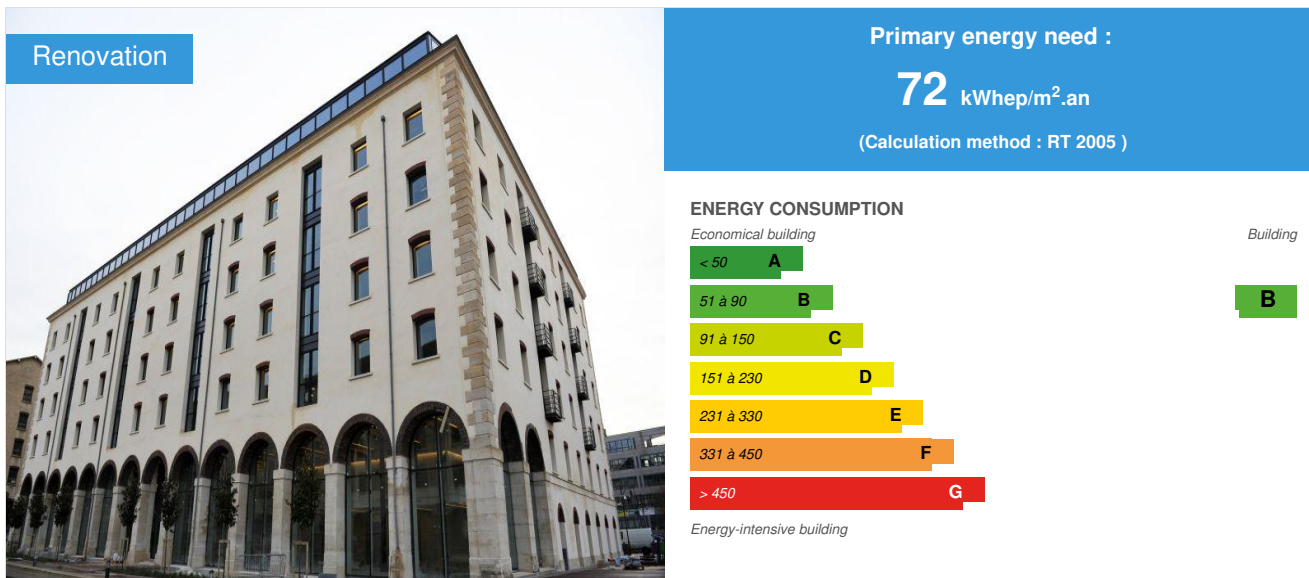


Beauvaisis (Paris, France)

by Alain Guisnel / 2012-03-26 14:15:14 / France / 6520 / FR



Building Type : Office building < 28m
Construction Year : 1830
Delivery year : 2012
Address 1 - street : 11, rue de Cambrai 75019 PARIS, France
Climate zone : [Cfb] Marine Mild Winter, warm summer, no dry season.

Net Floor Area : 13 200 m² SHON
Construction/refurbishment cost : 30 360 000 €
Number of Work station : 950 Work station
Cost/m2 : 2300 €/m²

Certifications :



Proposed by :
CERTİVEA

General information

Rehabilitation of an office building

Sustainable development approach of the project owner

This building has been classified as "Demo" by Icade in July 2009, which involves the following approach: - Enhanced support missions to the owner, with the active support of the Directorate DD, in two complementary areas: one human character and teaching to facilitate the necessary "change management" and another character technique to investigate all possible avenues for improvement to the delivery of the work, - Animation seminars to ensure seamless communication between all stakeholders in the success of the operation, from designers, BET and businesses to future operators and representatives of users, - Animation of a cell "Commissioning" to monitor the performance from the design phase till one year after delivery, including training for maintainers and awareness sessions to users. - To study and implement a platform counting all energy and fluids with the ability to fully control term consumption of very detailed by types of consumption and spatially until half-plate offices (the smaller leasable area). Installation of dynamic screens in 2 halls with access to consumption data user

awareness. Substantial change in several technical aspects at the end of phase "studies" -Reinforced insulation between the walls of origin and the new building (see below) -Connection to heating mode in substitution for electric heating -Establishment of a cold production with high efficiency air conditioners recovery by diffusion (CAP). -Replacement of fan coil with chilled beams. This dynamic has changed the building to a level of consumption forecast RT 110-72 kWh/m²/year, which ultimately did HQE level be "Excellent" and labeled "BBC Effinergie Renovation" with management tools dramatically improved.

Architectural description

The original building dates back to 1860! The decision was taken to make a major renovation in 2008 and at the request of the association of old Paris, it was jointly decided to keep the facades of time. In order to provide the highest standards of time (ceiling height of 2.70 m over subfloor and ceiling), the solution was to demolish all the interior volume and rebuild a body building inside the walls, which can be likened to a "box in box" with a good seal between the two works. A building with 6 trays current 1600 m², with a ceiling height of 2.70 m, divisible into two equal parts (14 lots in total). Two separate reception areas on the ground floor can separate the building into two identical sets. Buildings organized around a large central atrium, all the remaining offices with natural light most of the time. 7 Meeting rooms pooled at R-1. Bicycle parking for 240 M2 of about 100 bikes.

Building users opinion

This building being recently delivered, it is not yet occupied.

If you had to do it again?

The choices are very close: Constructive technique would most likely have been the same: a demolition reconstruction would have a very negative impact in terms of area lost to comply with the rules in force today prospect. We would however probably started the commissioning process at an earlier stage to involve more management teams and operations. The power system of chilled beams in change-over would be replaced by a dual system of regulations to provide for finer areas.

Stakeholders

Stakeholders

Function : Contractor

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Type of market

Realization

Energy

Energy consumption

Primary energy need : 72,00 kWh/m².an

Primary energy need for standard building : 120,00 kWh/m².an

Calculation method : RT 2005

Breakdown for energy consumption : Office equipment 51% Heating consumption: 19% of lighting consumption: 12% consumption breakdown: 11% air consumption: 5% consumption of lifts: 1% consumption ECS: 1%

Initial consumption : 450,00 kWh/m².an

Real final energy consumption

Final Energy : 80,00 kWh/m².an

Envelope performance

More information :

Detail the principle of insulation of the building envelope. The exterior is preserved, the insulation is placed onto the slab to break through total thermal.

Renewables & systems

Systems

Heating system :

- Urban network

Hot water system :

- Individual electric boiler

Cooling system :

- Water chiller

Ventilation system :

- Double flow heat exchanger

Renewable systems :

- Other, specify

Smart Building

BMS :

GTB brand SIEMENS, supplemented by very many counters and fluid spaces, and a hosted platform EMC. This platform acts extractor database and organizes the display of consumption of all energies and fluid

Carbon

GHG emissions

GHG in use : 99 700,00 KgCO₂/m²/an

Methodology used :

The GHG balance concerns exclusively the positions of consumption of the building in operation (excluding work to come, transport users ...)

Building lifetime : 50,00 année(s)

