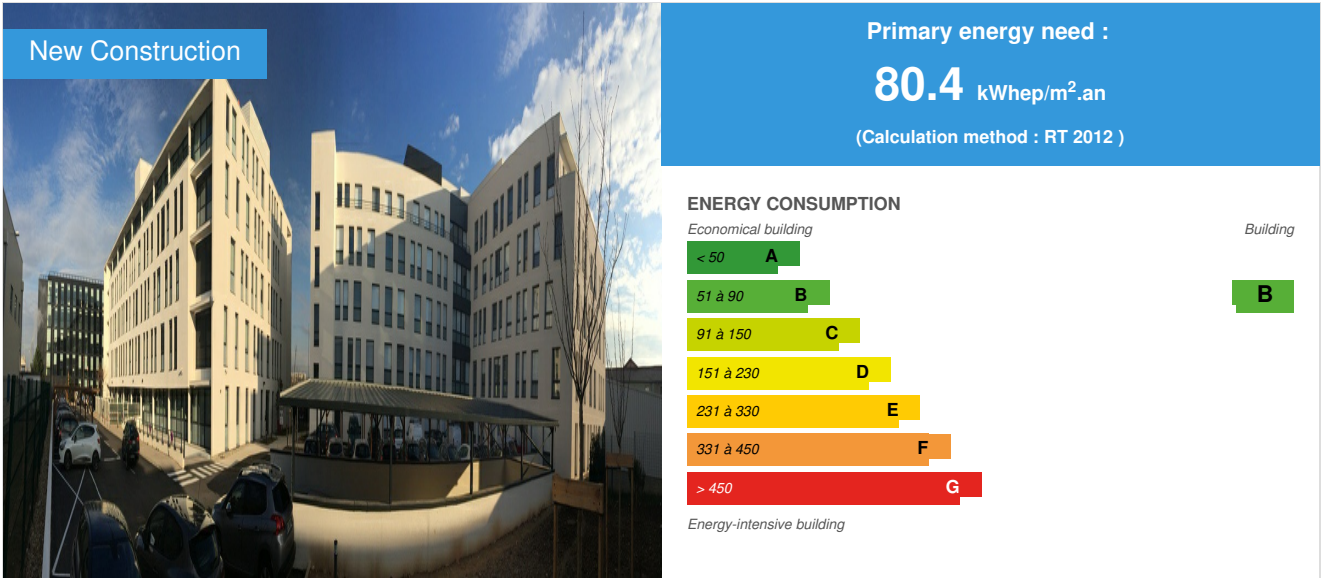


# Echo

by Nathalie MEHU / 2017-05-19 10:50:19 / France / 7411 / FR



**Building Type :** Office building < 28m  
**Construction Year :** 2016  
**Delivery year :** 2016  
**Address 1 - street :** 56 Boulevard Niels Bohr, 69100 VILLEURBANNE, France  
**Climate zone :** [Cfb] Marine Mild Winter, warm summer, no dry season.

**Net Floor Area :** 7 019 m<sup>2</sup>  
**Construction/refurbishment cost :** 9 815 000 €  
**Number of Work station :** 330 Work station  
**Cost/m<sup>2</sup> :** 1398.35 €/m<sup>2</sup>

**Certifications :**



## General information

ECHO comprises 6,630 m<sup>2</sup> of offices and 125 parking spaces for PFO2 (GROUPE PERIAL). It is an R + 5 building of 7,051 m<sup>2</sup>. This project is a property development ADIM Lyon, company of VINCI Construction France

### Sustainable development approach of the project owner

"At VINCI, we believe that there is no economic success without a human project. This is rooted in our culture. We are also convinced that our social, societal and environmental performance is an asset for our development, as it is an increasing expectation of our clients and international investors. That's why we published our Manifesto in 2012, in which we make eight intangible and universal commitments. It is a common framework that all VINCI entities must appropriate according to their businesses and markets. I personally oversee the mobilization of all Group managers." Xavier Huillard Commitment N° 3 - Together for Green Growth!

We participate in the prospective reflection on the city and sustainable mobility. Our innovations, resulting from eco-design, enable us to improve the energy and environmental performance of our infrastructures. We are committed to reducing our greenhouse gas emissions by 30% by 2020, supporting our customers in their search for better energy efficiency and encouraging them to adopt eco-responsible behavior. Each project is imagined by ensuring its integration into its environment, as well as the quality of the living environment it offers. VINCI Construction France created Blue Fabric, its vision to build responsibly, and thus meet the four challenges of the sustainable city. Competitiveness: to give the city seductive assets, by building buildings and equipment with high functionality, economically efficient, sustainable, accessible, affordable, with loads optimized. Creativity: to accompany the designers and their vision, by providing them with innovative solutions and proven techniques. Conviviality: reflect on the scale of the neighborhood and the diversity of its activities, mixing housing, offices, shops and attractive public spaces to promote the meeting. Consensus: working collaboratively and transparently with all project stakeholders - investors, customers, architects, public authorities, network managers - but also local residents and associations.

## Architectural description

This project is located in the urban area in harmony with the neighboring headquarters previously realized by Xanadu. Building on two levels of buried basement, its construction rises on 4 floors. The circulations, fluids, privilege the comfort of use. The three entrances of the building guarantee the versatility of functions and entities. The use of a concrete load-bearing structure and the "Green light" laminates optimize energy consumption. The outdoor spaces give pride of place to the vegetation.

## See more details about this project

<http://www.vinci-construction.fr/oxygen>

## Stakeholders

### Stakeholders

Function : Designer

XANADU Architectes

Hôtel de l'Octroi, 58 bis rue Sala, 69002 Lyon

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

Function : Other consultancy agency

EODD

Guillaume PARIZOT

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

Design office Environment / fluids / thermal

Function : Certification company

CERTIVEA

Benedicte CARDON : benedicte.cardon@certivea.fr

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

Function : Contractor

ADIM Lyon

Laurent PUTZU : laurent.putzu@vinci-construction.fr

[http://www.adim.fr/france/adim/adim.nsf/web/entreprise\\_adim\\_lyon.htm&noprehome=1ADIM%20Ile-de-France/](http://www.adim.fr/france/adim/adim.nsf/web/entreprise_adim_lyon.htm&noprehome=1ADIM%20Ile-de-France/)

## Energy

### Energy consumption

Primary energy need : 80,40 kWhep/m<sup>2</sup>.an

Primary energy need for standard building : 107,70 kWhep/m<sup>2</sup>.an

Calculation method : RT 2012

## Renewables & systems

## Systems

### Heating system :

- Heat pump
- Fan coil
- Others

### Hot water system :

- Other hot water system

### Cooling system :

- Reversible heat pump
- Fan coil

### Ventilation system :

- Double flow heat exchanger

### Renewable systems :

- Heat pump

## Environment

### Urban environment

ECHO is very well served by public transport. Indeed, the proximity of the line T3 of the tram allows to be at 3 stations of the Station Part Dieu, the airport is at 20 min by Rhônes Express, in addition the line A of the metro and many buses are easy to get to, Access and the device is 800m. Restaurants are nearby.

## Products

### Product

Reversible air / water pump

Carrier

19 rue Alexis de Tocqueville, 92182 Anthony Cedex

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

Product category : HVAC, électricité / heating, hot water

The reversible air / water heat pump is installed in roof terrace of the building and will operate in change over. It has the following characteristics: CARRIER brand Aquasnap type 30 RQ 0462, refrigerant R410 A, 2 independent refrigerant circuits, SCROLL compressors, low noise helical fans, aluminum microchannel heat exchanger, condenser coil Open angle V, Eurovent certification, a general isolator, a set of spring-loaded anti-vibration studs.



## Costs

## Carbon

### GHG emissions

GHG in use : 2,80 KgCO<sub>2</sub>/m<sup>2</sup>/an

Methodology used :

Calculation BBCE Elodie

GHG before use : 0,24 KgCO<sub>2</sub> /m<sup>2</sup>

Building lifetime : 50,00 année(s)

, ie xx in use years : 0.09

GHG Cradle to Grave : 750,00 KgCO<sub>2</sub> /m<sup>2</sup>

Calculation BBCE Elodie

## Reasons for participating in the competition(s)

Le bâtiment Echo a obtenu le label Bâtiment Bas Carbone (BBCA) en phase de réalisation, une première en France. Et oui l'écho est bien un bâtiment tout en béton.

Ce bâtiment modulaire s'adaptant aux besoins des locataires a été développée par ADIM Lyon.

Cette réalisation emploie des systèmes performants : une structure façade porteuse et dalles en béton armé offrant une forte inertie, une pompe à chaleur réversible air/eau avec contrôle et régulation du chauffage et du rafraîchissement par lot, un éclairage des bureaux par des mâts sur détection de présence, une gradation en fonction de la luminosité ambiante etc...

*(La structure béton, poteaux dalle, permet de réduire la quantité de matière première utilisée pour la construction.)*

L'Echo a également reçu la certification BREEAM.

## Building candidate in the category



Bas Carbone



Coup de Cœur des Internautes

