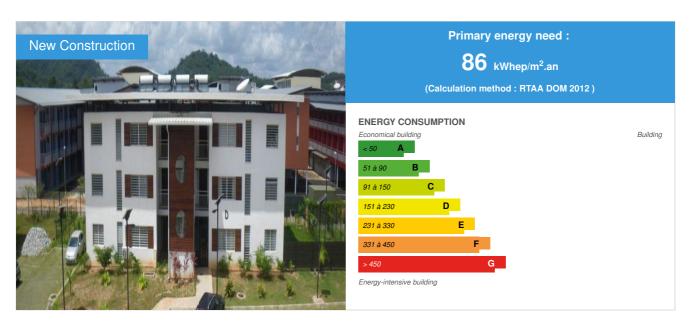


# **Residence Les Universiades**

by Laurent CLAUDOT / (1) 2017-03-11 01:13:59 / Frankreich / ⊚ 9220 / ▶ FR



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

Construction Year : 2013 Delivery year : 2014

Address 1 - street: 97300 CAYENNE, GUYANE, France Climate zone: [Aw] Tropical Wet & Dry with dry winter.

Net Floor Area: 4 963 m<sup>2</sup>

Construction/refurbishment cost : 8 500 000 €

Number of Dwelling : 148 Dwelling

Cost/m2: 1712.67 €/m<sup>2</sup>

# General information

RESIDENCE LES UNIVERSIADES - Set of 5 buildings R + 2 for a total of 148 collective dwellings located close to the university campus in the Hibiscus ZAC, in the commune of Cayenne

## Sustainable development approach of the project owner

Quality approach, respect of the RTAA DOM, use of solar energy (hot water and lighting)

# Architectural description

Construction pole beam reinforced concrete, masonry filling, roofing roofing bituminous waterproofing and steel battens, aluminum joinery, structural elements and wooden cladding Parking and road traffic in concrete and / or vegetated slabs to reduce the impermeability of the site (by constraint of the ZAC regulation and voluntarism of OCEANIC IMMOBILIER) Elements compatible with DOM thermal regulations: clear cover with 6cm thermal insulation of expanded polystyrene or ventilated roof, solar protection by large roof edges, loggias or corridors, ventilated wood cladding, natural ventilation through slatted blinds with clear glass Delivered without air conditioning, autonomous solar lighting outside, solar hot water by centralized installation or individual solar water heater, automatic laundromat fed with solar hot water, lighting of gangways on presence detection Sports facilities, closed outdoor bike room

# Building users opinion

Good to very good opinions (study AQUAA 2015) although some evoke the problems of acoustics related to natural ventilation and heat in some rooms (according to exhibitions)

# If you had to do it again?

Operation globally successful despite density. Passage to the bank. Constraint of the solar DHW which led to the creation of technical rooms in roofing.

### Stakeholders

### Stakeholders

Function: Contractor
OCEANIC PROMOTION

Pierre Lagillier pierre.lagillier@groupeoceanic.com

Administrative and technical coordination of the project

Function: Designer

JPL

Jean-Pierre Lasalarié

Architect

Function: Thermal consultancy agency

MDE Conseil

Laurent Claudot

Solar hot water supplier

# Contracting method

Off-plan

# Energy

# **Energy consumption**

Primary energy need: 86,00 kWhep/m<sup>2</sup>.an

Primary energy need for standard building: 94,00 kWhep/m².an

Calculation method: RTAA DOM 2012

Breakdown for energy consumption: Household and common consumption (lighting, solar hot water, laundry)

# Real final energy consumption

Final Energy: 48,00 kWhef/m<sup>2</sup>.an

Real final energy consumption/m2: 48,00 kWhef/m².an

Real final energy consumption/functional unit : 1 610,00 kWhef/m $^2$ .an

Year of the real energy consumption: 2 015

### More information

Data measured during the AQUAA 2015 study

Renewables & systems

## **Systems**

## Heating system :

No heating system

### Hot water system:

o Other hot water system

#### Cooling system:

No cooling system

### Ventilation system :

Natural ventilation

#### Renewable systems:

Solar Thermal

Renewable energy production: 25,00 %

83 MWh / year thermal energy produced by solar thermal

#### **Environment**

## Urban environment

Land plot area : 7 080,00 m<sup>2</sup> Built-up area : 70,00 %

In the immediate vicinity of the university campus, the bus network, green areas of the Hibiscus Zac including a sports course, on the outskirts of the city center of Cayenne

## **Products**

### **Product**

Parking lot

GIGABLOC

ZI COLLERY 4 97300 CAYENNE Tel 0594312700

## ☑ https://www.pagesjaunes.fr/pros/06868663

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 = '23'

The product is a concrete profile that allows the lawn to be integrated into the car parks without risk of erosion. It reduces soil waterproofing in urban areas.

Good grassing, good behavior, however, a relatively intermittent parking is required to maintain optimal vegetation (need in light and water).

☑ Ce produit existe en mtropole sous la forme de profile en PEHD.

Laundromat powered by solar hot water

electrolux

ELECTROLUX FRANCE 60300 SENLIS

## 

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'

The laundry is powered by solar hot water produced by a centralized roof installation. The washing machines are double entry EF / EC.

Satisfactory but the economy has not been evaluated.





Stand-alone solar lamps

### Energie Douce

ZAC des Bois Rochefort, Bâtiment C5, 21 rue Georges Méliès à Cormeilles-en-Parisis 95240

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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 = '17'

Independent solar lamps (batteries and LED lighting): no other parking lights.

Satisfactory in terms of service but evaluation will have to be confirmed in the long term according to the life of the product.



### Costs

## Health and comfort

# Water management

Consumption from water network : 5 460,00  $\,\mathrm{m}^3$ 

Water Consumption/m2: 1.1
Water Consumption/Dwelling: 36.89

# Indoor Air quality

Not applicable (natural ventilation)

## Carbon

# **GHG** emissions

GHG in use: 41,00 KgCO<sub>2</sub>/m<sup>2</sup>/an

## Life Cycle Analysis

Eco-design material: WOOD OF GUYANA

### Contest

# **Building candidate in the category**





Coup de Cœur des Internautes





La Bordelaise



Date Export : 20230513000447