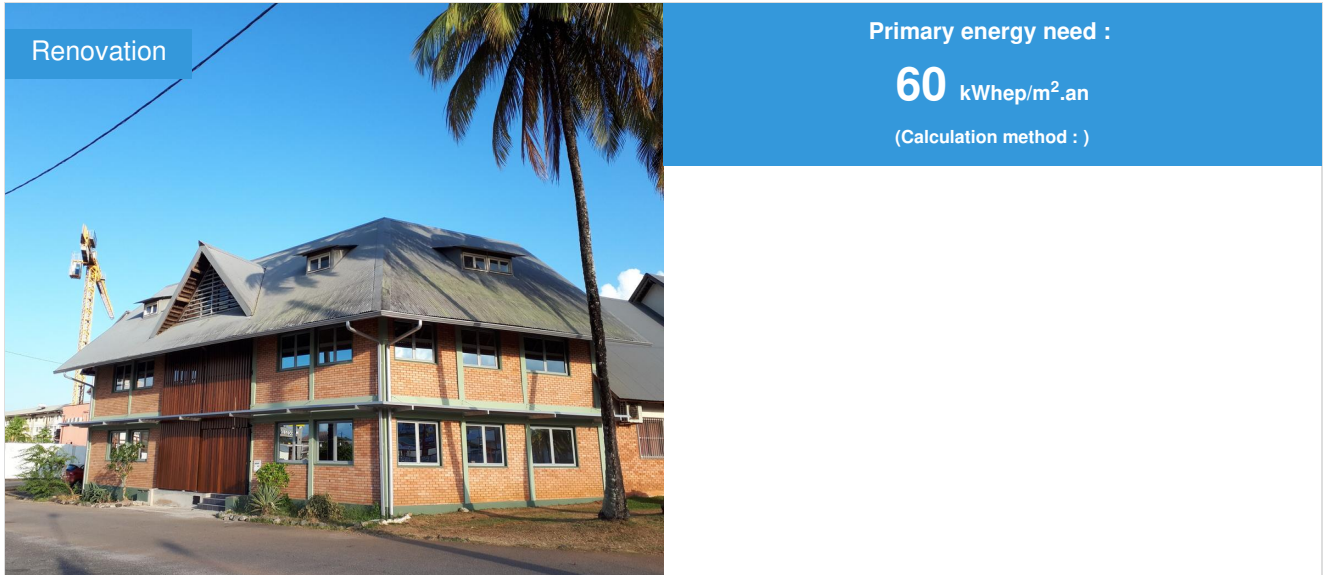


AUDEG (Agency of Urbanism and Development of Guyana)

by Jérémy FERNANDEZ-BILBAO / 2019-05-10 19:41:47 / France / 4483 / FR



Renovation

Primary energy need :

60 kWhep/m².an

(Calculation method :)

Building Type : Office building < 28m
Construction Year : 1985
Delivery year : 2018
Address 1 - street : Rond point mirza 97300 CAYENNE, France
Climate zone : [Aw] Tropical Wet & Dry with dry winter.

Net Floor Area : 467 m²
Construction/refurbishment cost : 360 000 €
Cost/m2 : 770.88 €/m²

General information

Rehabilitation of the building of the headquarters of the Urbanism and Development Agency of Guyana (AUDEG)

This project has two main objectives:

- 1- Review the interior distribution of the building to increase the surface area of the Audeg offices by recovering the now empty rental spaces.
- 2- Improve the thermal protection of the building and the efficiency of the equipment in order to limit the electricity consumption.

Concerning the interior distribution, openings were created between offices and circulations in order to offer transparencies and perspectives on the different spaces.

Sustainable development approach of the project owner

Approach "Environmental Quality Amazonian" (Ademe Guyana)

An energy diagnostic financed by Ademe and carried out by Ingeko has shown the weakness of the building and make improvements to ensure good thermal protection.

Architectural description

Originally, the building was already exemplary in the use of local materials (bricks fired on the front wall and wooden shingles on the roof and awning, and it also had numerous openings in the façades and its plan allowed for through spaces.

The project focused on the envelope to improve solar protection and insulation, and on indoor distribution. The awning in damaged shingle was replaced by a broad horizontal sun breeze. Insulation was installed in the attic. The joinery has been replaced by more watertight ones with antelio glazing. At the indoor level, high-performance electrical equipment has replaced the old ones, with efficient air-conditioning and air brewers. Glazed windows between offices and circulations have been created to increase the impression of space and to open up perspectives, on the outside.

Building users opinion

The occupants are very satisfied with the rehabilitation which has brought them more comfort at the same time thermal but also acoustic and visual

If you had to do it again?

The energetic renovation being a major stake for the fight against global warming, these projects are indispensable and must be multiplied.

Photo credit

DISSI, AUDEG

Stakeholders

Contractor

Name : Agence d'Urbanisme et de Développement de la Guyane (AUDeG)

Contact : Juliette Guirado (Directrice)

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

Construction Manager

Name : Boa Architecture

Contact : Jérémy Fernandez Bilbao

<https://www.architectes-pour-tous.fr/architectes-pour-tous/boa-architecture>

Stakeholders

Function : Other consultancy agency

ATTA

Olivier Tuaud

<https://www.atta-ingenierie.com/>

Fluid lot (high current and low current electricity, plumbing and air conditioning)

Function : Thermal consultancy agency

Ingeko

Pierre Perrot

<http://ingeko-energies.fr/>

Energy diagnosis and prescription

Contracting method

Separate batches

Type of market

Global performance contract

Energy

Energy consumption

Primary energy need : 60,00 kWh/m².an

Primary energy need for standard building : 400,00 kWh/m².an

CEEB : 0.0009

Initial consumption : 90,00 kWh/m².an

Real final energy consumption

Final Energy : 30,00 kWh/m².an

Environment

Urban environment

Land plot area : 290,00 m²

Built-up area : 198,00 %

Green space : 92,00

The project is located in a relatively dense neighborhood with many collective dwellings and shops.

The building is located at an angle overlooking two major roads and a roundabout.

Products

Product

Air brewer

Fanelite

<https://fanelite.com>

Product category : HVAC, électricité / ventilation, cooling

DC air blower with led lighting included, more efficient and quieter

Allows reversibility by removing air conditioning and opening windows.

Lowers the air conditioning when operating with the air blower.

Costs

Construction and exploitation costs

Cost of studies : 35 650 €

Total cost of the building : 400 000 €

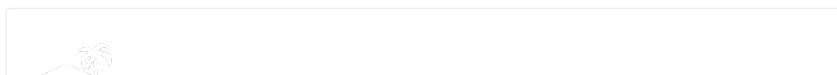
Subsidies : 3 136 €

Contest

Reasons for participating in the competition(s)

La protection thermique a été améliorée grâce à la rénovation des façades et leur modification (remplacement de l'auvent en bardeau de Wapa par un brise soleil en aluminium, déplacement et protection des climatiseurs par une résille en bois local, remplacement des fenêtres par des vitrages antelio, ajout d'un auvent en tôle à l'étage du pignon à l'ouest, ajout d'un pare-soleil vertical en bois local sur l'entrée). De plus une isolation a été posée sous les plancher bois afin d'assurer un meilleur confort thermique et acoustique. Des climatiseurs A++ ont remplacé les anciens appareils moins efficaces et des brasseurs d'air ont été installé dans tous les bureaux afin de permettre une réversibilité des locaux.

Building candidate in the category





Energie & Climats Chauds

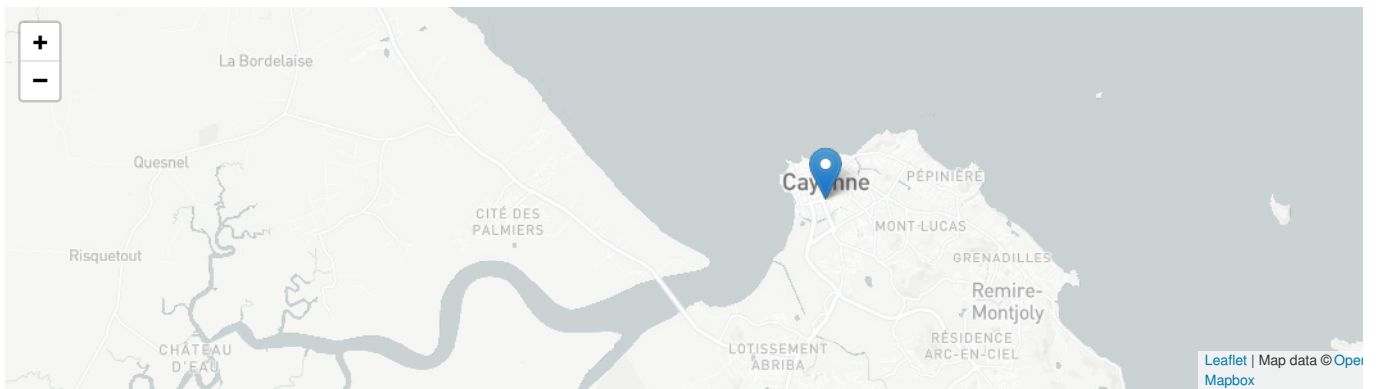
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Prix du public



Prix des Etudiants



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