General information

The project involves the realization of BMCE Academy, located bouskoura. This project consists of a set of training rooms, a reception center, an amphitheater, a restaurant, a bank branch and finally a Data Center.

See more details about this project


Data reliability

3rd part certified
Stakeholders

Function: Contractor
BMCE Bank

Owner approach of sustainability

BMCE Bank is a company committed to sustainable development, with an environmental policy and a system certified ISO 14001 and ISO 9001. The choice of the HQE certification to the International for its project will translate the performance of its project following an international unit of measure and demonstrate compliance commitments by a third party. BMCE BANK wants to set an example. The orientation HQE (phase test) will allow taking into account economic, social and environmental characteristics of Morocco, that in order to encourage innovation, corporate social responsibility and green economy with common sense and in a continuous improvement process.

Architectural description

As part of the development of its educational activities and to meet its computing needs, BMCE BANK provides the realization of a TRAINING CENTER with OFFICES & WORKSHOPS. The new project under the BMCE Bank responds to the desire to provide quality services at international academic standards in terms of operational and managerial training. As equipment collective public interest, the TRAINING CENTRE is strategically located on the most visible part of the land. Easily accessible, it is next to a green area of sports fields and parking areas. Due to the accessibility TRAINING CENTER therefore benefits both to the people of Bouskoura that the population of the city of Casablanca and its visitors. In addition, all equipment that includes this project should generate over 70 permanent jobs and several contractors and jobs is part of the development of Nouacer Prefecture and the city of Casablanca.

Energy

Energy consumption

Primary energy need: 132,00 kWhep/m2.an
Primary energy need for standard building: 181,00 kWhep/m2.an
Calculation method: Other
CEEB: 0.0003

Envelope performance

Envelope U-Value: 0.40 W.m².K⁻¹

Renewables & systems

Systems

Heating system:
- Heat pump

Hot water system:
- Individual electric boiler
- Solar Thermal

Cooling system:
- VRV Syst. (Variable refrigerant Volume)

Smart Building

BMS:
Yes

Products
Product

CFD - Computational Fluid Dynamic modeling fluid dynamics

Design Builder Software

designbuilder.maroc@gmail.com

http://www.designbuildermaroc.com/

Product category : Management / Others

The CFD analysis (Computational Fluid Dynamic) allows you to study the distribution of temperature, pressure, comfort, the air velocity of an inner area and the winds and pressure fields outside a building. CFD means Computational Fluid Dynamics. It includes all the methods of numerical calculations to predict the temperature of the air, its speed, its direction in an open space or封闭。Répondre questions such as: What effect my (my) building (s) has or do they have on the wind? What is the temperature distribution in a room of high ceilings? How effective air diffusers according to their placement, the air speed? radiators peuvent-they be better positioned to maximize comfort? the CFD Module DesignBuilder 3DesignBuilder designed to offer users an airflow prediction tool and temperature distributions inside and outside of a building of the same so that the dedicated software but at competitive prices and without the need for assistance from a specialist. Usage current CFD software turns greedy time and requires special attention to establish correct geometries and boundary conditions. Using CFD module DesignBuilder drastically reduces these tasks by automatically providing the geometry and conditions limits. Let us mention the following key points: - The development strategy for Greater Casablanca, which aims to improve the economy of the region, Morocco occupies the locomotive status for more than a century, both economically and culturally. - The strong urbanization facing the metropolis. - Encouraging dedensification through the opening 25 000 ha to urbanization by 2030. - The pipeline, structuring and control of urban development of the city Bouskoura; - The role of vocational training in promoting economic and social activity.

Construction costs

Total cost of the building : 18 000 000 €

Urban environment

The project site is located south of Casablanca, in the town of Bouskoura, which falls within the province of Nouacér. The project field is limited by the Bouskoura forest southeast, north-west by the future high-speed line (LGV), and northeast through Sidi Massoud (Casa-Mediouna link). The metropolis of Greater Casablanca is justified taking into account the following key points: - The development strategy for Greater Casablanca, which aims to improve the economy of the region. Morocco occupies the locomotive status for more than a century, both economically and culturally. - The strong urbanization facing the metropolis. Indeed, the registered urban growth is 700 to 1000 hectares per year - Encouraging dedensification through the opening 25 000 ha to urbanization by 2030. - The economic dynamics that knows the axis Casablanca-Nouacér. - The pipeline, structuring and control of urban development of the city Bouskoura; - The role of vocational training in promoting economic and social activity.

Land plot area

Land plot area : 50 000,00 m²

Built-up area

Built-up area : 60,00 %

Green space
Green space: 20,000.00

Building Environmental Quality

- Building flexibility
- Indoor air quality and health
- Biodiversity
- Works (including waste management)
- Acoustics
- Comfort (visual, olfactory, thermal)
- Waste management (related to activity)
- Water management
- Energy efficiency
- Renewable energies
- Maintenance
- Integration in the land
- Mobility
- Products and materials

Contest

Reasons for participating in the competition(s)
Dans le cadre du développement de ses activités éducationnelles et afin de satisfaire à ses besoins informatiques, la BMCE BANK prévoit la réalisation d’un CENTRE DE FORMATION et d’un DATA CENTER avec des BUREAUX & ATELIERS DE FORMATION.

Le nouveau projet prévu par la BMCE BANK répond à la volonté d’offrir une qualité de prestations au niveau des standards universitaires internationaux en terme de formation opérationnelle et managérielle.

En tant qu’équipement collectif d’intérêt général, le CENTRE DE FORMATION est stratégiquement implanté sur la partie la plus visible du terrain. Facilement accessible, il est à proximité d’un espace vert de terrains de sport et des aires de stationnement.

De part son accessibilité le CENTRE DE FORMATION profite donc aussi bien à la population de Bouskoura qu’à la population de la ville de Casablanca et ses visiteurs.

Par ailleurs, l’ensemble des équipements que regroupe ce projet doit générer plus de 70 emplois permanents et plusieurs emplois vacataires et s’inscrit dans le développement de la Préfecture de Nouacer et de la ville de Casablanca.

Building candidate in the category

- Energie & Climats Chauds
- Bâtiment Intelligent