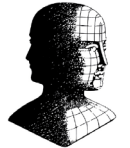


eco-Design OF THE PLANTINS Waste Water treatment PLant in BEYnes - France



JANUS 2014

INDUSTRIAL site, HQE® APPROACH: Water, treatment and PHYTOEPuration

Client	City of Beynes
Location	Beynes
Project	Construction HQE® of a bioclimatic building opened to the public
Mission	Design concept and follow up mission, architecture HQE® and landscaping
Consultant Designer	AR ARCHITECTES, NALDEO
Contractors	Degrémont France Assainissement, ZUB
Area	465 m ² (16460 m ² site area)
Cost	4 500 000 €
Date	2008 - 2013



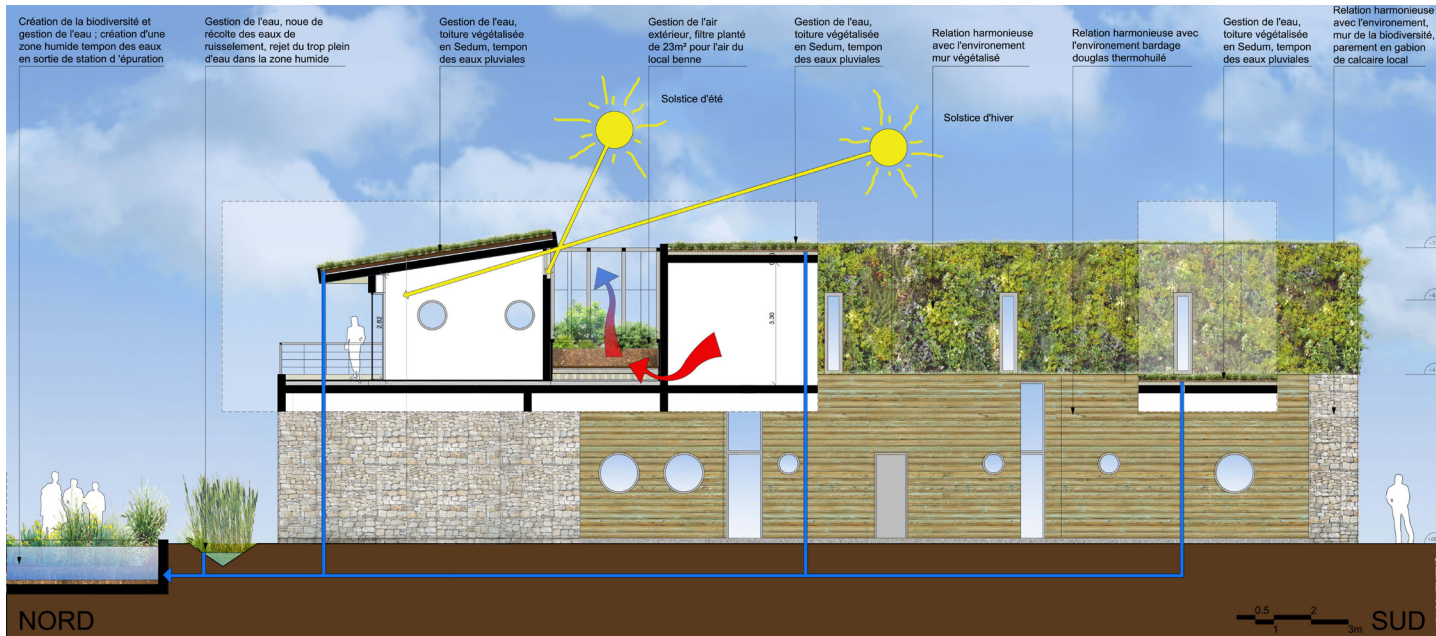
Landscaping perspective



View of the buildings

The plant in Beynes is located in the heart of a remarkable site surrounded by an archaeological area to the South and agricultural fields to the North. The architectural team aims to create a dialogue with the surrounding rural areas while respecting the biological balance in place and giving the development complex, using landscaping and architectural treatment, volumes, heights and coverings to harmonize new constructions with the immediate environment.





Section HQE® - Air treatment (3 500m³/h) by a garden glass house (35m²)



View of the building



View of the building

HQE® targets

Target 1:

- The architectural and landscaping treatment of the building, its volumes, heights and coverings harmonizes the new constructions with the immediate environment. The complex is made of Douglas wood cladding and gabion coverings.

- The bio climate complex, partially opened to public, is a reference for an educational tour of the plant.

Target 4:

- Passive design
- Heating pump
- Thermal solar panels

Target 11:

- Olfactory comfort is ensured by innovative organic bio filter which treats and extracts polluted air

- Mud treatment is done by Reed beds (4 000m²).

Target 8 and 9:

- Thermal and acoustic comfort is ensured with green roofs and insulation is made of eco-friendly materials (hemp and recycled paper foam).

Target 5:

- The building has a water area. The renovating of an old hydraulic retention pond collects rainwater and streaming water thus creating ecological habitats and ensuring an available water reservoir for fire-fighters.

- Circulation areas are equipped with hollow-core green slabs allowing rainwater to drain and guarantees a clean and stable area even when it rains.

