eco-sewage treatment plant "La Princetière" in saint-michel-chef-chef
Bioclimatic architecture and urban design - France

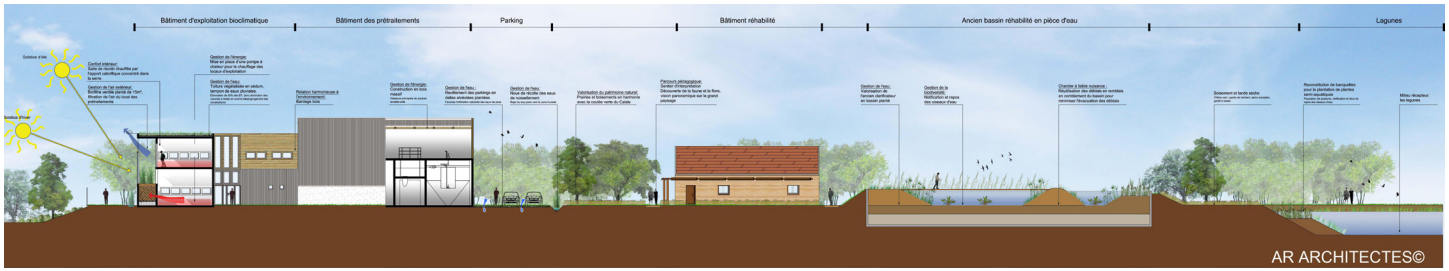
industrial site, HQE® approach : water, treatment and phytoepuration

client	SIVOM Côte de Jade
location	Saint-Michel-Chef-Chef
project	Reconstruction of the sewage treatment plant la Princetière
mission	Design concept and follow up mission, architecture HQE® and landscaping
design and build	AR ARCHITECTES, DFA, EIFFAGE CONSTRUCTION, SAFEGE
area	2595m², plot 20 635 m²
budget	9 700 000 €
date	From 2011 till 2014

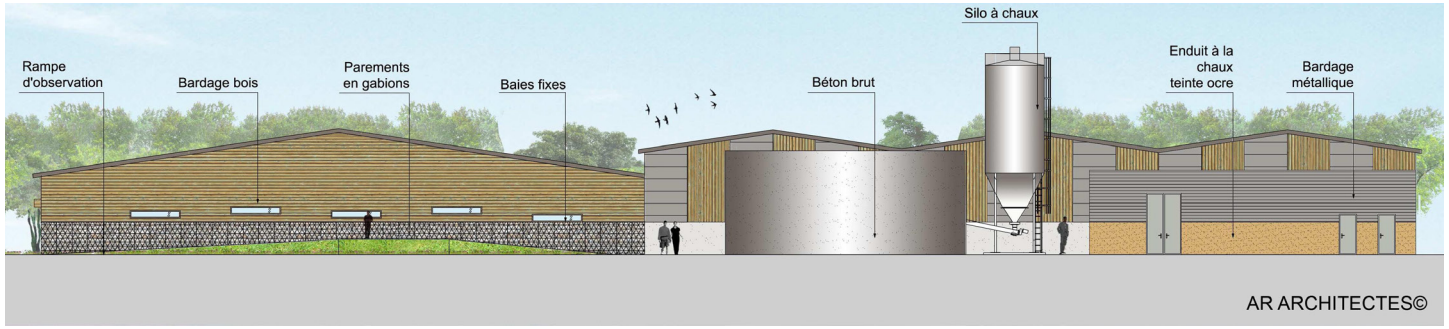
View from the entrance towards the operating bioclimatic building

Perspective view of the plant in its environment

The new buidings are implanted around an **East-west axis**, opening a **perspective** towards gardens. New constructions are grouped together on **half of the site**, **releasing** the West part **of the site valorized by landscaping**, and taking into account a **possible extension** of the plant in continuity with the **surroundings.** The aeration pond is transformed into an **aquatic garden**. The plant is openned to visitors for educational tours.



Section HQE©



North elevation

Landscape master plan

View of the industrial building for mud

HQE® targets

Target 1: Harmonious relationship between the building with its surroundings

• **Recycling principle**: the renovation of the aeration pond becomes the support of a **promenade** through a **reconstituted biotope** visible from dikes and pontoons. Visitors discover the surroundings of the plant and the existing lagoons.
• Visual impact of the existing civil works is reduced by the use of wooden cladding.

Target 2 : Integrated choices for construction

• **Materials**: **laminated wooden frame**, larch wood cladding, and **metal cladding** and **gabion**.
• Cladding are used as substainable and recycled materials.

Target 4: Energy management

• A green house is integrated into the bioclimatic operating building. The greenhouse conmmunicates throught inner windows with first and second level. That participats in heating those levels during winter.

Target 5: Water management

• Rainwater is collected on top green roofs.
• Rainwater on roads and infrastructure is collected through infiltration ditches.