

# **Beauséjour ecodistrict, Sainte-Marie**

by Vanessa Miquel / 🕔 2016-06-27 16:13:38 / France / 💿 14144 / 🍽 FR



Address 1 - street : 97438 LA MARE, SAINTE-MARIE, LA RéUNION, France

Gross density : 29.49 logt/ha Population : 9 000 hab Starting year of the project : 2006 Delivery year of the project : 2020



78 ha



600 000 000 €

#### ID CARD

#### Beauséjour is a new residential and business district with the ambition of:

Provide an environmentally friendly environment favoring the proximity of services and equipment, limiting the need for travel and favoring soft mobility

Meeting the urbanization needs of Sainte-Marie;

To create a city center for 19 000 inhabitants in the long term by bringing services and proximity to the 11 000 inhabitants of the surrounding suburban towns (essentially school facilities but also services and shops)

Connecting this new neighborhood to the city and surrounding business areas (travel / mobility)

Achieving social mix and integration of new inhabitants for a "Living well together"

Offer a diversified housing offer

#### This district has received several distinctions:

Citizen project 2014 prize for the city of Beauséjour: «Beauséjour is truly exemplary: global consultation, quality of implementation and achievements, innovation ... We were all seduced by this project. "Explains Marie-Françoise Manière, President of UNSFA.

Prix Observer 2010 of the overseas house for the Case Beauséjour, which brings together building principles geared towards sustainable development in coherence with the proposed energy autonomy of La Réunion envisaged for 2030.

Bronze Medal of the 2011 Carbon Scheme for the construction of 208 housing units.

#### Programme

- Housing
- Offices
- Businesses and services
- Public facilities and infrastructure
- Public spaces
- Green spaces

## **Project progress**

- Management phase
- Delivery phase
- Operational phase

### Procedure type

• Urban développement permit

# Key points

- Quality of life
- Economic development
- Mobility
- Biodiversity

### Approaches used

• AEU

### More info

C http://www.cboterritoria.com/fr/beauséjour/le-défi-de-beauséjour

### Data reliability

3rd part certified

#### TERRITORY

# Type of territory

#### L'Île de La Réunion

Area: 2512 km2

Length of the side: 207 km (27 km lagoon)

Highest point: Piton des Neiges (3010 m)

Active volcano: ption de la Fournaise (2632 m)

Biodiversity: 237 endemic plant species

- In La Reunion, French department/region located in the Indian Ocean as attractive as dynamic
- A modern economy, a tourist area, a growing region and a green economy
- In Sainte-Marie directly connected to the main town
- At the heart of an important business area, this neighborhood offers a new way of life

#### City: Sainte-Marie

- Saint-Denis, the administrative center and Sainte-Suzanne form the Cinor (Intermunicipal Community Reunion North)
- Sainte-Marie covers 8900 hectares, and Beauséjour is a flagship project

#### In Belvédère, on major economic activity areas

- Close to major employment and economic areas pools
- Technopole, Business District and ZAE La Mare, airport area, Duparc shopping center,ZIC du Chaudron

# Climate zone

[Af] Tropical Wet. No dry season.

## More info

http://www.cboterritoria.com/

### **KEY FIGURES**

### Neighbourhood paved surfaces

Neighbourhood paved surfaces : 70 200 m<sup>2</sup>

## Built surface on natural or agricultural spaces

Built surface on natural or agricultural spaces : 7,00 ha

### Green areas, roofs included

Green areas, roofs included : 15 000 m<sup>2</sup>

### Public spaces area

Public spaces area : 220 000 m<sup>2</sup>

#### Office floor area

Office floor area : 7 000 m<sup>2</sup>

### Commercial floor area

Commercial floor area : 7 000 m<sup>2</sup>

#### Public facilities floor area

Public facilities floor area : 35 000 m<sup>2</sup>

## Housing floor area

Housing floor area : 200 000  $m^{\scriptscriptstyle 2}$ 

# Number of residential units

Number of residential units : 2 300

### Number of social housing units

Number of social housing units : 700

#### Green spaces /inhabitant

1.67

#### Public spaces/inhabitant

24.44

#### GOVERNANCE

### **Project holder**

Name : CBo Territoria

#### Type : Private company

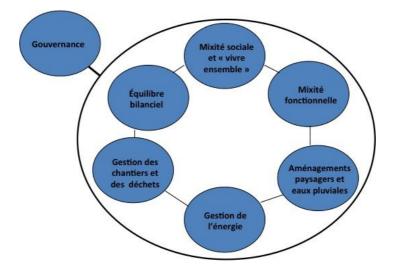
#### General description :

CBo Territoria limited company, is a global player in real estate on the French department La Réunion. In ten years of existence, the Group, has become the key player in residential and professional real estate of La Reunion. Owner of a large reserve of over 3000 hectares on the island, the Group develops properties over nearly 200ha - residential and business.

# **Project** management

#### **Description**:

- Sainte-Marie initiated the development of this area: close and continuous partnership
- In the beginning: trip to Freiburg in 2007, eco-neighborhoods experiences
- 2008: AUE approach with ADEME (Environmental Approach of Urbanism) and TEKHNE
- 2008: International Seminar with INTA and the Region (SR21), especially on issues of project governance
- Monitoring Committee: city, developer, DEAL, ADEME, CAUE, ARER
- Enhanced project management: environmental, sociological, management assistance in project management work
- Periodic meetings with elected officials on specific themes: housing, economic activities, public facilities, living environment (handicaps), employment ...



# **Project stakeholders**

TEKHNE

Function : Construction manager

Chief Urban Planner

Tekhnê Architecture 43 rue des Hérideaux 69008 Lyon T 04 78 75 66 66

Construction21 company page :



More info : data/sources/users/4678/dp-beausejour-xs.pdf

# SOLUTIONS

Company :

# QUALITY OF LIFE

# Quality of life / density

• Net density: 56 apartments / off-street surface and public green spaces

# Net density

-0.01

## Culture and heritage

- Islet where sugarcane plants have been reintroduced (initial use of this sector)
- Reintroduction of green spaces of native and endemic plants

# Social diversity

#### Beauséjour fulfills an ambition: to build sustainable cities in the tropics

- Integration of a nursery, a medico-educational institute, senior résidence project, social and private residences with identical architectural features, housing typology extent in private and in social
- Developing a multi-worship area
- School group
- Workplaces offering surrounding public spaces and proximity of facilities, shops and services (nursery, catering, banking, insurance, transportation, parking, public spaces equipped, walking areas vegetated ...)

#### The plural city

• The Beauséjour project is plural, consisting of neighborhoods in contrasting moods. Quiet residential areas, animation au-round schools, users of public facilities and offices, routes for walkers, parks and gardens. This is life in the city diverse and varied urban situations.

# Social inclusion and safety

*"To each his project":* a comprehensive selection of properties with individual housing (land, house) and or collective. For sale and for rent, with the possibility of residential courses.

- Properties for professionals: shops, offices, services, facilities ...
- Workshops for associations, hospitality, counseling and family support (drawing workshops, parent-child Home, Peri-school, public service writers, Shared Kitchen gardens ...)
- Near the intercommunal music school complex and sports facilities ...
- Predominance of green spaces
- Kiosk facilities and playgrounds

*Public spaces accessible to all* pedestrians, bicycles, public transport ... but also to the car (public parking)

- Protection against natural elements: wind, rain or shine
- Importance of materials for the treatment of these spaces
- Closely with police services and industry policy

### Ambient air quality and health

- All accommodations respect the TSR DOM building standards
- The through natural ventilation, the predominance of natural lighting, the integration of air to replace the air conditioning brewers are all committed and effective approaches
- Management soundscape / CO2 level control system inside buildings

#### ECONOMIC DEVELOPMENT

# Local development

- Cooperation between associations (the district party organization, flea market, garage sale, mass)
- Shared gardens project with associations and social landlord
- · Maintenance of green spaces by recruiting local actors

- Integration of a sports complex
- 19% of green spaces (150,000 m2)
- 28% of public spaces (220,000 m2 of floor area)
- 1% of office space (7000 m<sup>2</sup> of floor space)
- 1% of retail space (7000 m<sup>2</sup> of retail floor space)
- Rapid introduction of future traders in the ephemeral shopping village (before construction of their permanent premises) to meet the needs of the first residents
- Associations active members recruitment

# **Functional diversity**

• Creating a health center, diversity of activities: draft supermarket, shops, services, transport equipment, office ...

#### % of public spaces

28

#### % of office area

1

#### % of commercial area

1

#### TRANSPORT

## Mobility strategy

#### Transport mixing "Making of Beauséjour a destination and not a place of passage"

- Public transport under construction linking the coast to Beausejour
- Accessibility to public transport 500 meters from housing nuits
- Soft transport. Mixed routes combining:
  - a lane for motor rate-limiting (zone 20 or 30)
  - Pedestrian paths along the tracks and the green corridors
  - bike paths with charging stations for electric bicycle
- A service of urban centrality: shops, downtown offices and services by a welcoming

urban avenue, pedestrian and bicycle traffic and longitudinal parking allowing kiosks implantation

- Overall reflection on the sharing of parking with spaces between housing and commercial use
- Privileged parking under the building and parking silo centrality
- Soft travel policy enhanced with many walking areas, recreation, public spaces, spaces and playgrounds
- Electrical terminals refills for electric vehicles in the multi-service station (cars and bikes)

# SOLUTIONS

- Soft transportation
- Parking management

#### SMART CITY

# Smart City strategy

Reflection on digital and enhance the approach proximité services:

- The 21st century rimes with "online services" which led to design compatible networks with the deployment of fiber optics
- Many reflections on the topic of Smart Cities that "today emerges a **conviction," we must strive towards a maximum low tech "**
- Beauséjour first joint North Island connected to the optical fiber!

#### RESOURCES

## % Paved surfaces

9

## Water management

#### The blue frame

• Maintains the flow of runoff water, open collection, scenic valleys and estates of small retention basins

# Waste management

- Efficient plumbing fixtures on all housing
- Recovery of organic waste

# SOLUTIONS

#### Family gardens

#### **Description**:

- Familiy gardens in public spaces
- A study is conducted in private spaces
- Place of sharing and exchange between residents
- 1st stage, 2nd project will be launched in 2017 in permaculture
- Water management
- Soil management



#### Company :



#### **CBo** Territoria

Cour de l'Usine, La Mare BP 105 97438 Sainte-Marie France http://www.cboterritoria.com/fr/

## BIODIVERSITY

## Biodiversity and natural areas

#### The green frame

- Ecological continuity are based on several elements of the landscape:
  - o city park: better integration of the operation in the mid-slopes
  - 3 northbound green corridors crisscrossing troughs corresponding to the site
- The sanitation facilities are decomposed into multiple pools and terraces of sizes and

shapes

- These basins hinder water densely planted rains, marked by low walls and riprap
- Urban park, pathway space, green areas, combine the ecological, economic and social
- Integration of local sectors in order to promote the economy of Reunion of Works and limit imports (basalt, endemic plants ...)
- Choice primarily basalt (covering, wall) produces locally for public spaces (courts of CAF, squares, pedestrian crossings ...)
- The Beauséjour landscape project is based on the geography of the site, with the water as a conductor pattern wire
- Valuation of endemic and indigenous flora along the walking areas and paths:
  - For opaque: 14,000 endemic / native and exotic 14000
  - For trees and shrubs: 13,000 endemic / native and 500 exotic

### SOLUTIONS

• Management of natural areas

#### ENERGY/CLIMATE

# Climate adaptation, resources conservation, GHG emissions

- Integrating ventilators instead of air conditioning
- Solar hot water
- An electric bike for free by acquiring a residence
- Screen shade on the most exposed facades
- Use of Trespa and ondulite sheet on the facades to ensure a comfortable temperature
- External joinery to privilege natural ventilation

# Energy sobriety

- The choice of LED on all project to control consumption
- Restrictions on range of street lighting furniture in Beauséjour: meets the environmental objectives of the project, higher optical performance to 70%, less than 5% of the luminous flux directed towards the upper hemisphere (ULOR)
- Variation in intensity and color during the night

# SOLUTIONS

• Urban Lighting

### BUILDINGS

# **Buildings**

#### Built to bioclimatic principles:

- Buildings are vegetated surroundings, providing shade and freshness.
- Sun protection (roofs, facades and windows) and natural ventilation shutters (or classic opening) front.
- Façades exposed to strong winds of trade winds (East and Southeast) have a wind shield

#### Energy management :

- No air conditioning. The projects have many openings to the outside in order to promote natural, cross ventilation and natural lighting.
- Artificial lighting will be achieved by efficient lighting (compact fluorescent lamps, fluorescent, LED), the number and distribution of lighting will be optimized to minimize power consumption while maintaining satisfactory illumination of premises.
- Use of solar energy for hot water.
- Energy-saving lamps in public areas

#### Water Management :

- Car parking lots are arranged primarily within buildings and internal service channels are downmixed to limit the outer surfaces waterproofed
- Prioritize specific mechanisms of infiltration and delay stormwater (ditches, swales, riprap) are arranged to facilitate the penetration of rainwater into the soil of the plot.

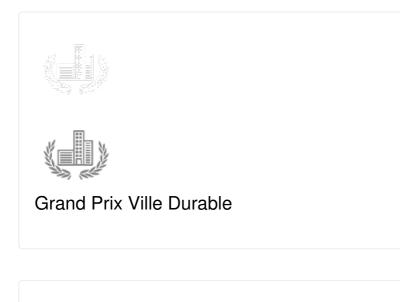
#### Choice of construction processes and products:

- Riprap, infiltration devices and rubble walls will be carried out primarily with the rock cuttings from the site excavations and earthworks.
- Use of wood for structural reported structures (walkways, roofs, poles) for decks and sun protection is preferred.
- Protection of exposed cladding facades
- Some elements of protection to the wind and sun (double skin facade East, West facade sliding panels) will be made of PVC coated polyester fabrics of micro-perforated
- Integration across all markets award to respect a "clean worksite charter"

#### Establishment of an environmental coordination of work

# **Reasons for participating in the competition(s)**

# Building candidate in the category



Coup de Cœur des Internautes



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