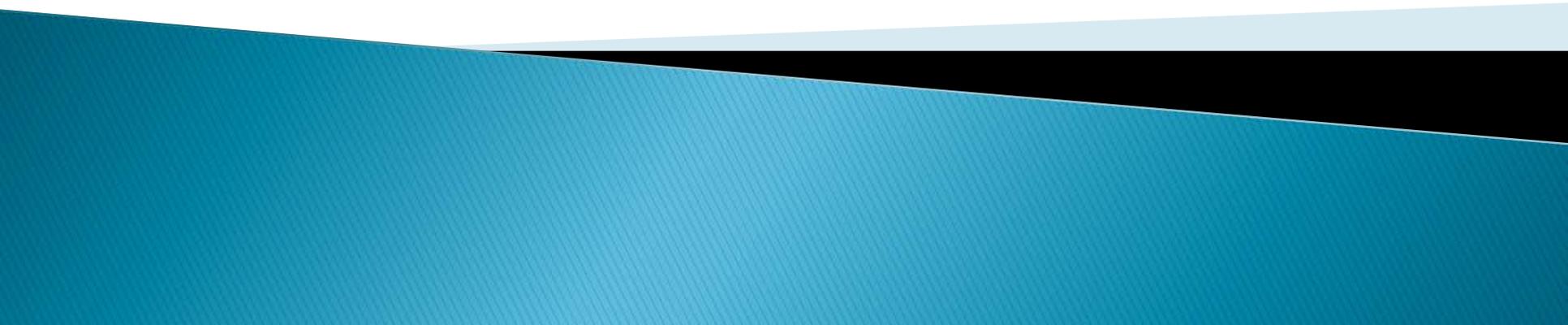


SeaView Resort and Golf

Creating urban future in Point Noire



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SeaView Resort and Golf

SeaView Resort and golf will be the first step in establishing a new kind of urban development, where sustainability and economic development go in hand in hand with urban living.

Pointe Noir Group aims to develop the SeaView Resort and Golf in a first step in developing a whole new city next to Pointe Noir .

City of Pointe-Noire



- ▶ Located in department Pointe-Noire in the Republic of the Congo.
- ▶ Second largest city next to the head city Brazzaville
- ▶ Situated at the coast
- ▶ Major Harbor for import/export
- ▶ Centre of Oil exploitation
- ▶ Large fishing community
- ▶ Home to Agostinho Neto Airport
- ▶ Excellent Railway connexions

Situating SeaView



- ▶ SeaView site is located North of Pointe-Noire, along the coast line
- ▶ approximately 9,5 km from the city centre
- ▶ Approximately 15 km from the Agostinho Neto Airport
- ▶ Site has direct access to the beach and is connected by secondary roads to N5 to Pointe-Noir and Langoa

Infrastructure elements needed

- ▶ Philosophy
 - ▶ Access
 - ▶ Energy
 - ▶ Waste-Management
 - ▶ Buildings and phases of development
- 

Philosophy

- ▶ A new kind of urban development is needed to reach for the future.
 - Learning from past mistakes in urban development and implementing current and proven technologies.
 - Adapted to local needs and challenges and combining all basic requirements of the people living in this urban development into a self sustaining environment.

SeaView will become a showcase and a viable investment in real estate development.

Access

Because of the secluded nature of the site location restriction of access is both a problem and an opportunity.

On one hand the site has restrictions into terms of road access during the construction phase and for delivery of goods and labor force during the exploitation phase

On the other hand the secluded nature of the site gives added benefits that access can be strictly controlled and the further development of the urban area can be regulated and steered so that growth of inhabitants and needs of these are met in the same ratio.

Transportation categories

Access and transportation can be divided in 3 categories each giving their opportunities.

- Road access
- Air access
- Water access

Transportation : Road access



Road access to the two nearest city's of importance has to be connected to the N5 route this will mean that additional road will need to be built to the site.

This restriction in road access has the consequence that all construction work and the needed delivery of labor force and materials during the construction phase need to be organized on an 'need to built' planning from the design phase on.

- ▶ Use of on site available materials for construction
- ▶ Use of alternate ways of delivery (see transportation : water access)
- ▶ Use of temporary housing for labor force during construction

Alternate as the road access will be constructed solely for the access of the site, controlling access will be possible

- ▶ No access for non-related parties
 - Minimizing overhead costs during construction phase from theft and vandalism
 - Guarding the privacy of inhabitants
 - Controlling development by controlling land use and assignment
- ▶ Control over use of land and development
 - Controlling growth by ownership
 - Putting development of urban structures at the same rate as development of infrastructure and secondary infrastructure (such as waste management and energy management)
 - Sustaining environmental aspects as parks, 'green infrastructure' and nature area's
- ▶ Controlled 'wear and tear' of infrastructure
 - Sustained growth of road infrastructure and adapting this to the future needs step by step
 - Sustained growth of energy infrastructure and production of 100% renewable sources
 - Sustained growth of waste management both on sewage disposal and recycling of garbage

A Shuttle service will be implemented connecting SeaView with Pointe-Noir and in a later stage Loango for both labor force and inhabitants. This will be with hydrogen driven vehicles. The hydrogen will be produced on site as a product of energy production (see Energy)

Transportation : air acces

A shuttle service with hydrogen driven vehicles will be established between Agostinho Neto Airport and the SeaView resort.

- Developing international tourism
- Developing regional access for long term residents

A local heliport will be constructed on site

- Off road connection to Agostinho Airport
 - Site to site transport for offshore communities
 - Rapid response in case off emergency
- 

Transportation : water access



As the Seaview project is adjacent to the Ocean water access can play a key role in developing the site both during construction as during exploitation.

Local Hub harbor

- ▶ Transportation of all building materials from the Pointe-Noire harbor to the site by small freight vessels
- ▶ Supplying the Seaview site on long term during exploitation
- ▶ Connection via water shuttle to adjacent villages and city's

Transportation : water access

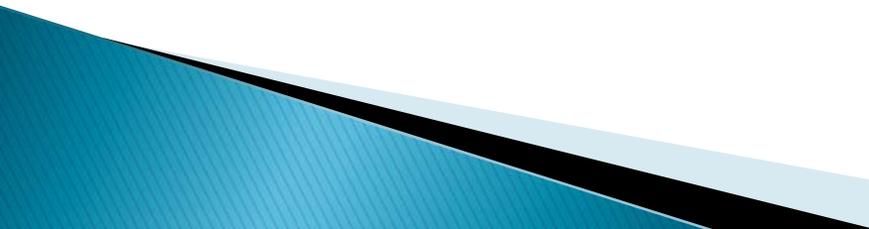
Yacht harbor for residents and guests

- ▶ Connecting to the offshore communities
- ▶ Allowing sail ships and Yachts access for short term stays
- ▶ Creating a secondary hub for cruise tourism

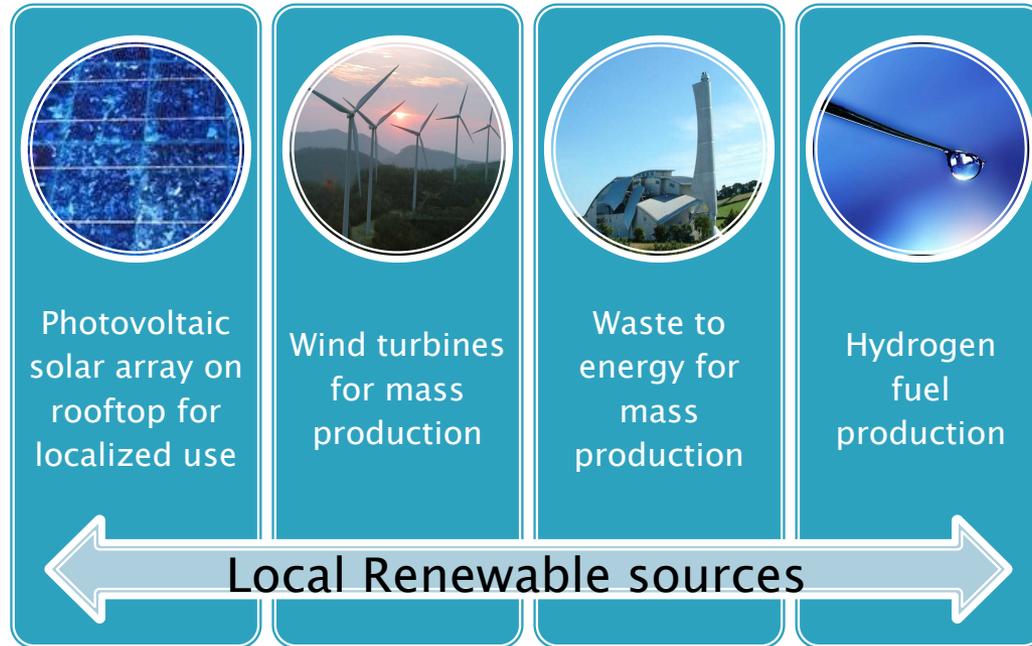
Creating an exclusive setting for world class tourism



Energy

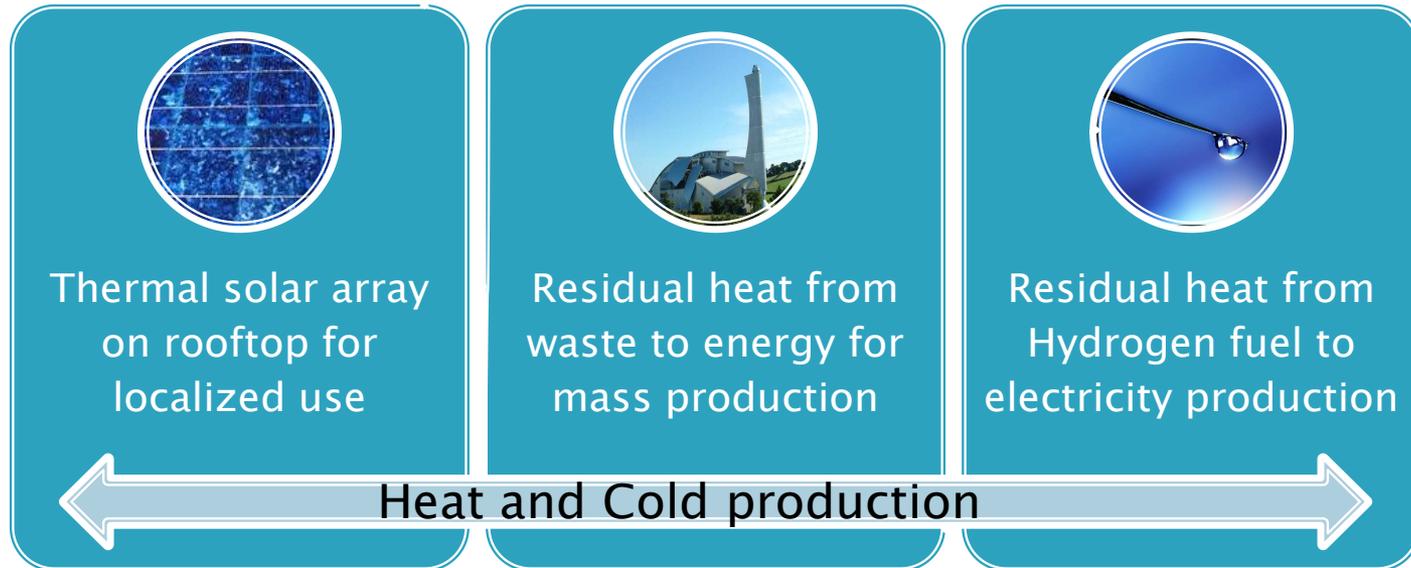
- ▶ All energy required for the SeaView site will be produced on-site by renewable sources.
 - ▶ Energy is divided in three categories
 - Electricity
 - Heat and cold
 - Fuel
- 

Energy : Electricity



All means of renewable production will be exploited using on-site technology in parallel production and using overhead production for fuel production.

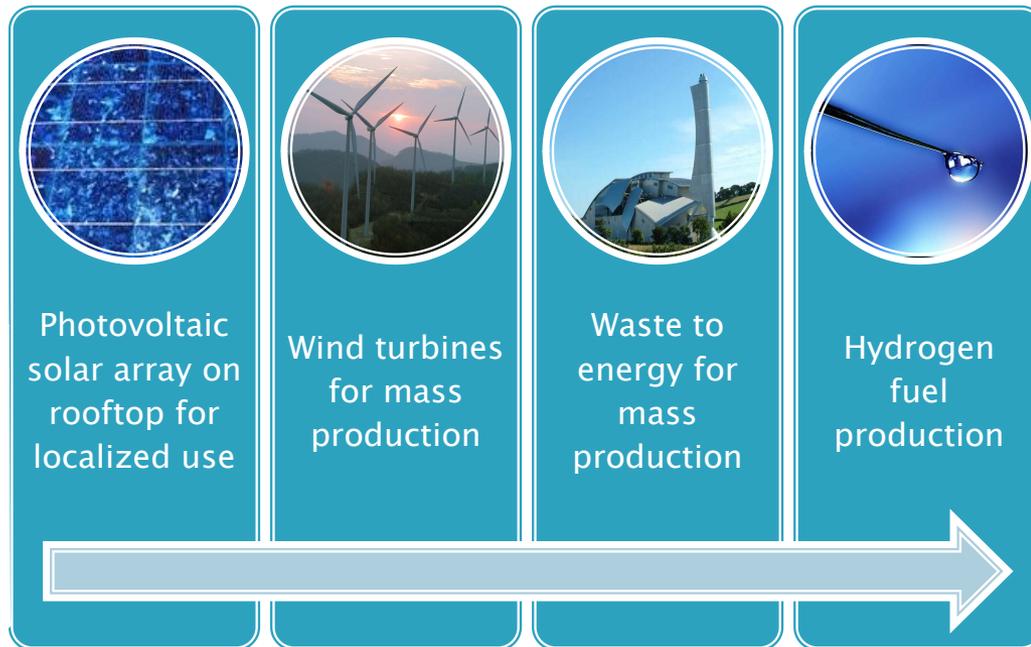
Energy : Heat and cold



For residential use and production of warm water thermal Solar arrays are the most direct way of production.

Residual heat from mass production units will be converted to cold to be used in air conditioning all over the site.

Energy : fuel



- ▶ Fuel for vehicles such as the water shuttle and the hydrogen driven shuttle busses for road transportation the overhead of energy production from the renewable sources can be converted
- ▶ The same hydrogen fuel will be used as backup to cover production lapses within the production profile of the renewable sources
- ▶ Byproduct of the hydrogen to Electricity is water witch can be introduced in the water cycle of the site.

Waste management

- ▶ Every society needs to take care not to sink into their own waste.
- ▶ Waste management can be divided into two distinct groups
 - Sewage
 - Garbage
- ▶ Both kinds of waste will be treated to obtain both energy and viable byproducts

Waste Management :Sewage

- ▶ All sewage needs to be treated both for sanitary reasons as for ecological impact
- ▶ As a result of treatment there are two byproducts
 - Water
 - Sludge
- ▶ Water can be recycled for non-potable use
 - Irrigation
 - Grey water use (toilets)
- ▶ Sludge can be used within the waste to energy systems

As such the need of importing drinkable water and extensive water production units will be minimal.

Waste management : Garbage

It is the goal to recycle all garbage from the site

- ▶ Organic garbage will be combined with the residual sludge of the sewage treatment into a biomass production unit.
 - Byproduct can be used in agriculture and will be transported off site
 - Production of methane gas
 - Conversion into electricity
 - Residual heat can be converted to cold

- ▶ Non-ferro materials will be converted into energy in a combustion installation.
 - Byproduct can be used in agriculture and will be transported off site
 - Production of methane gas
 - Conversion into electricity
 - Residual heat can be converted to cold

- ▶ Ferro materials will be transported off site

Buildings and phases of development

When designing the individual structures which make up the SeaView project the philosophy of the development will be maintained.

- ▶ Sustainability in choice of material
 - Selecting local materials and building techniques
 - Preferable materials that can be recycled or are a result of recycling
- ▶ Isolation and orientation
 - Selecting corresponding orientation of structures that reflect maximal use of airflows and solar orientation to create a good living habitat within the structures
 - Isolating the structure so that heat and humidity have a minimal impact on the structure and its inhabitants

Phases of development

Primary infrastructure

- Road access
- Hub harbor
- Living quarters labor forces

Hotel and golf

- Hotel infrastructure
- Golf terrain
- Extending Hub harbor into yacht marina
- Implementing local energy production units and windpark
- Implementing shuttle services and infrastructure

Resort and entertainment centre

- Building seaside resort village for long term living
- Extending the yacht marina with a sea side entertainment quarter
- Extending energy and waste-management infrastructure
- Connecting hotel and resort to Marina complex
- Construction of Heliport

Phases of development : Primary infrastructure



- Road access
- Hub harbor
- Living quarters labor forces

Phases of development : Hotel and golf



- Hotel
- 18 hole Golf
- Extending Hub harbor into yacht marina
- Implementing local energy production units and windpark
- Implementing shuttle services and infrastructure

Phases of development : Resort and entertainment centre



- Building seaside resort village for long term living
- Extending the yacht marina with a sea side entertainment quarter
- Extending energy and waste-management infrastructure
- Connecting hotel and resort to Marina complex
- Construction of Heliport

Benifits of the site

- ▶ Exclusive setting
 - ▶ Beautiful beach setting
 - ▶ Control over access to and from site
 - ▶ Controlled development
 - ▶ Natural rescources to develop production of renewable energy
- 

About Pointe Noir Group

The Pointe Noir Group consists of local and international partners committed to the SeaView Project. The cover activities such as development, construction, financing and exploitation of the SeaView project and/or its components.

Contact :	Mister R. Hendrickx
Adress :	Hector Henneulaan 105 Zaventem B-1930 Belgium
Cell Phone:	+32 475 42 52 60
Email :	rudi.hendrickx@pmadvice.eu