M1 IATEUR - CLASS WORK

HOPE VILLAGE

Eco-district in Guadeloupe.

UNIVERSITE DE REIMS CHAMPAGNE-ARDENNE

ESIReims

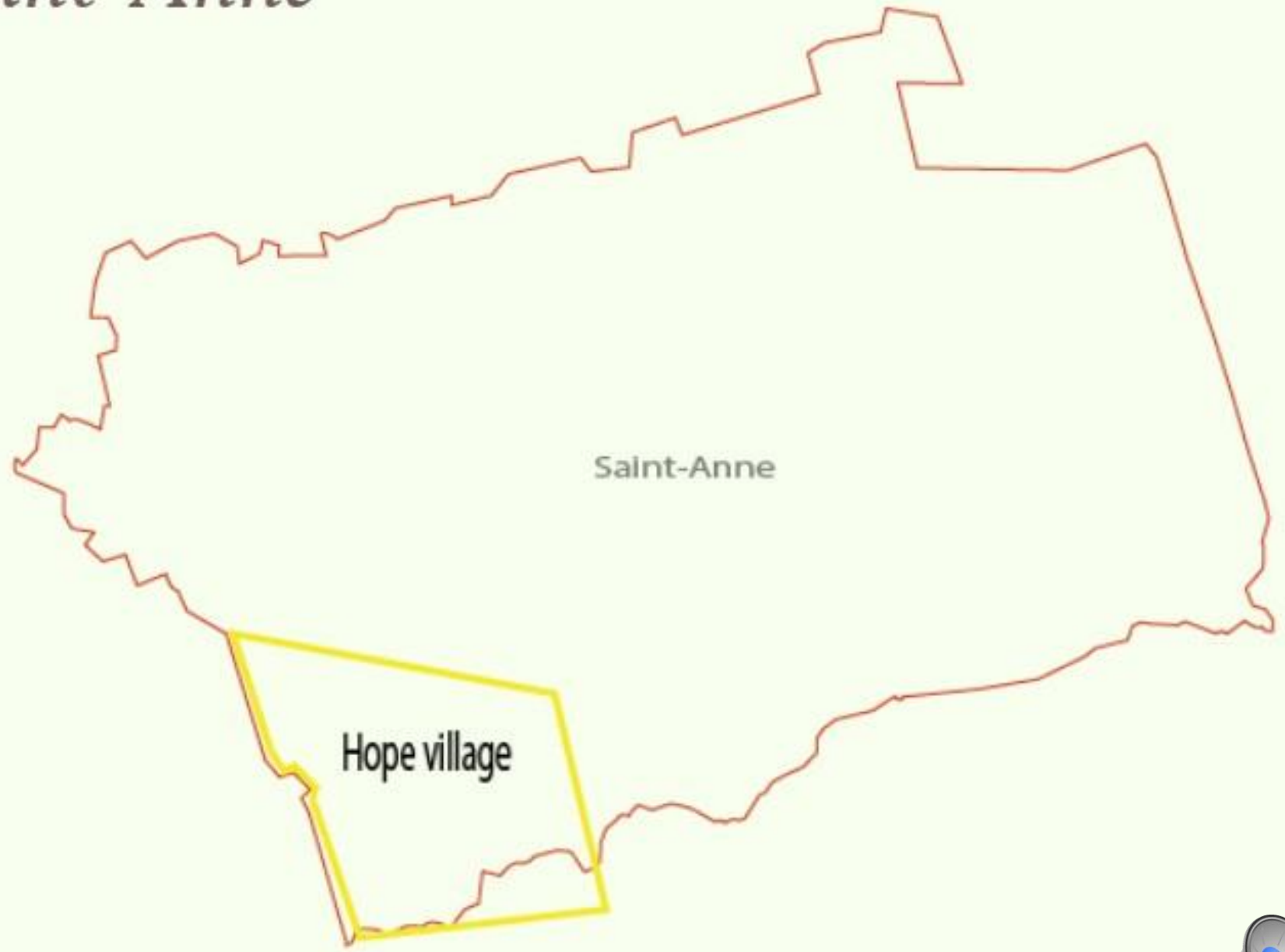
iateur

Localisation of Saint-Anne

in Guadalupe

An area of 80 Km²

An approximate population of 23,675 inhabitants



Hope village planning representation

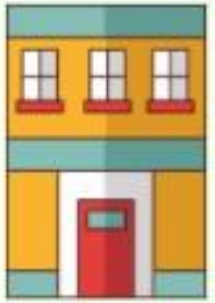
ECO DISTRICT

HOPE VILLAGE

BUDGET AND CONSTRUCTION AREA

4 970 dwellings

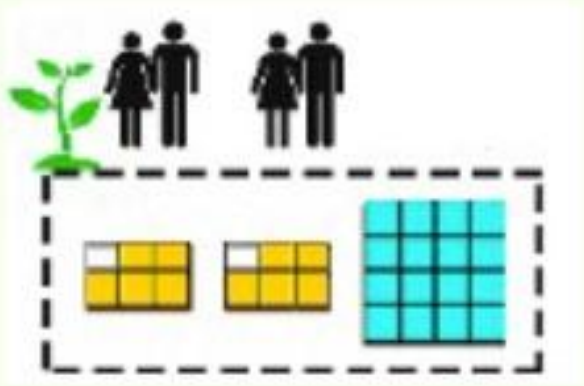
10 000 family

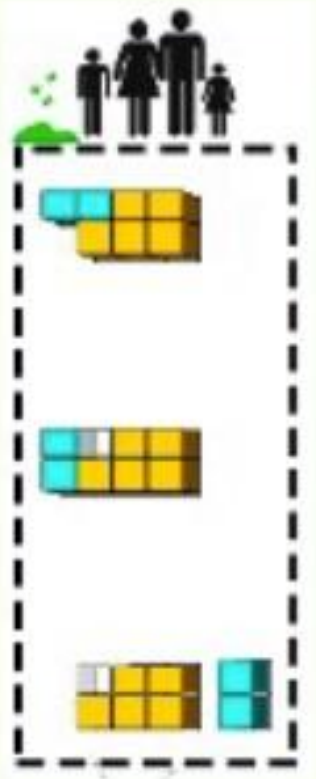


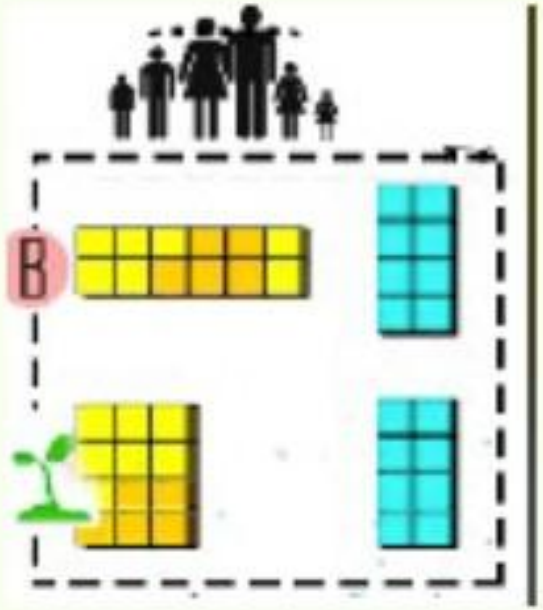
828 buildings

124 250 000€

Plaining representation of dawallings







PRESENTATION OF A TYPICAL RESIDENCE

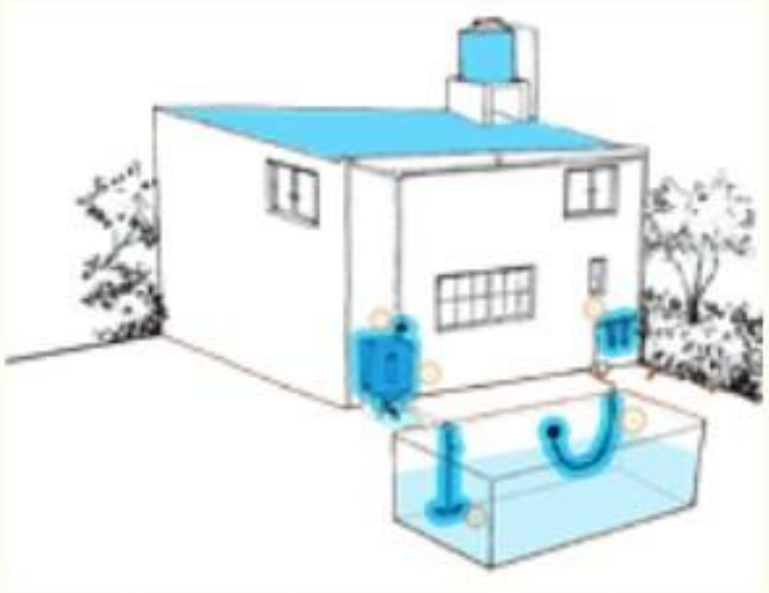
- **The modular residence:** Houses can have two to five rooms, depending on the needs of the household.
- **Materiality:** The modules are made from recycled materials.

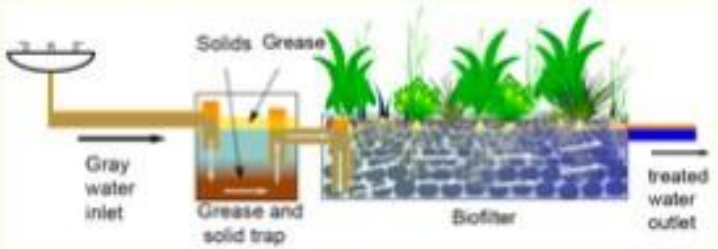
RENEWABLE ENERGIES

The buildings are equipped with solar panels on the roof and an electricity storage system in each dwelling.

RAINWATER HARVESTING

It is a collection system through canals and pipes that lead to an underground storage tank.





PRESENTATION OF A TYPICAL HOME

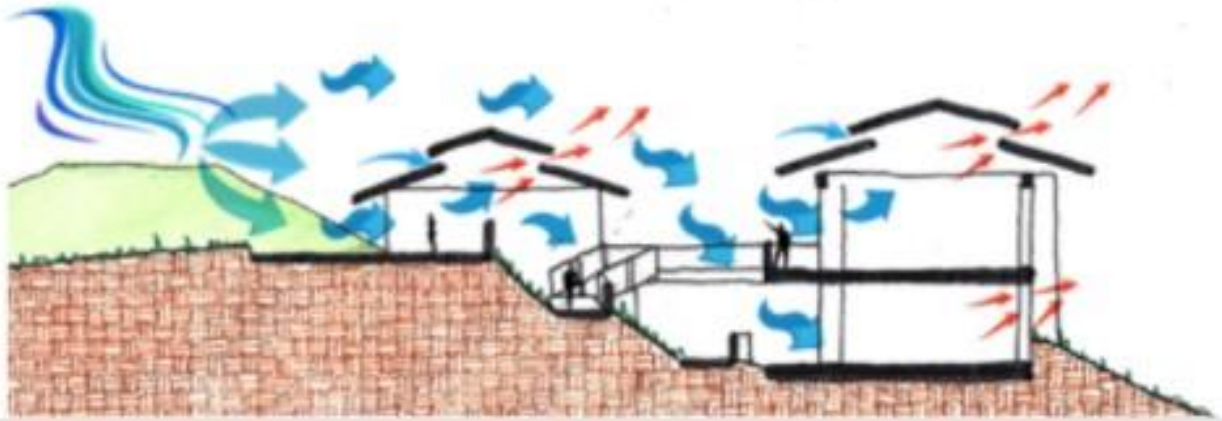
CONSTRUCTION METHODS

- **structure**: The natural wood will be used for the foudation and to make the constructions flexible. The foundations are built on piles to adapt to the natural relief of the land. Recycled tyres filled with concrete are also used to make the construction bases.
- **Baregue system**: the straw will be used as natural thermal insolation for the house. The insolation will be complit with earth
- **Roof**: Natural clay tile. The solar panels will supply the house with electricity.
- **Floor:** natural wood and tile
- **N°floor**: Modular house built on 2 floors from T2 to individual house T5

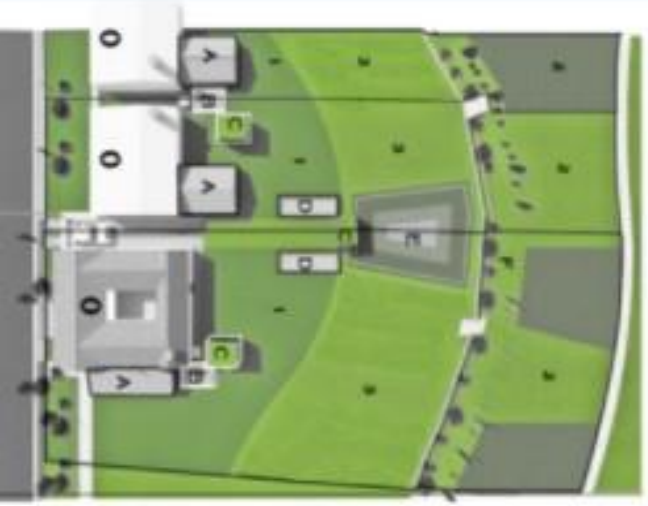
TYPICAL EXAMPLE OF A T3 OF 87M2

-One level
- Two bedrooms
- A bathroom with shower and WC
- A living room with an open kitchen in the centre of the flat
- An outdoor foldable greenhouse attached to the flat

The North side of the houses: ventiltion system



The south side of the houses: isolation plant



GREEN SPACES

The green spaces of the village **will be highlighted.**

Practical use of the spaces the gardens will be at the center.

The gardens will serve as the **common space**

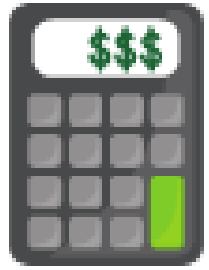
A **shared greenhouse** will bededicated to **traditional agriculture**

Public Spaces and Energy

Central square near the town hall

- Large space
- Organize events throughout the year
- Permeable place
- Green and mineral space

Budget : Public square



Public square	Price (€)	Quantity	Total (€)
Draining paving stones	25€ / m²	2 500 m²	62 500
Vegetation (flowers, trees)	100€/tree flowers	12 trees a lot of	2 000
Bench	500	4	2 000
TOTAL			**66 500**

Park in the back of the town hall

A space devoted to sport and play

A space of tranquility

A space for teenagers

RELAX

Second park : the culture and the rest

Book box

Hammocks

Cultural signs

Exhibitions of local artists

Third Park : Biodiversity and social cohesion

Shared educational garden

Insect hotel and birdhouses

A pool

Budget : Park's equipments

Park's equipments	Price (€)	Quantity	Total (€)
Field	2M / hectare	10 hectare	20M
Playground	10 000	2	20 000
Ping pong table	800-900	3	2 700
Park bench	500	40	20 000
Insect hotel	100	1	100
Hammock	100	10	1 000
Wooden decks chairs	300	10	3 000
Bookshelf	300	3	900
Swing set	1500	3	4500
Vegetations (flowers, trees)	trees + flowers	a lot of	16 500
TOTAL			20 068 700

Energy

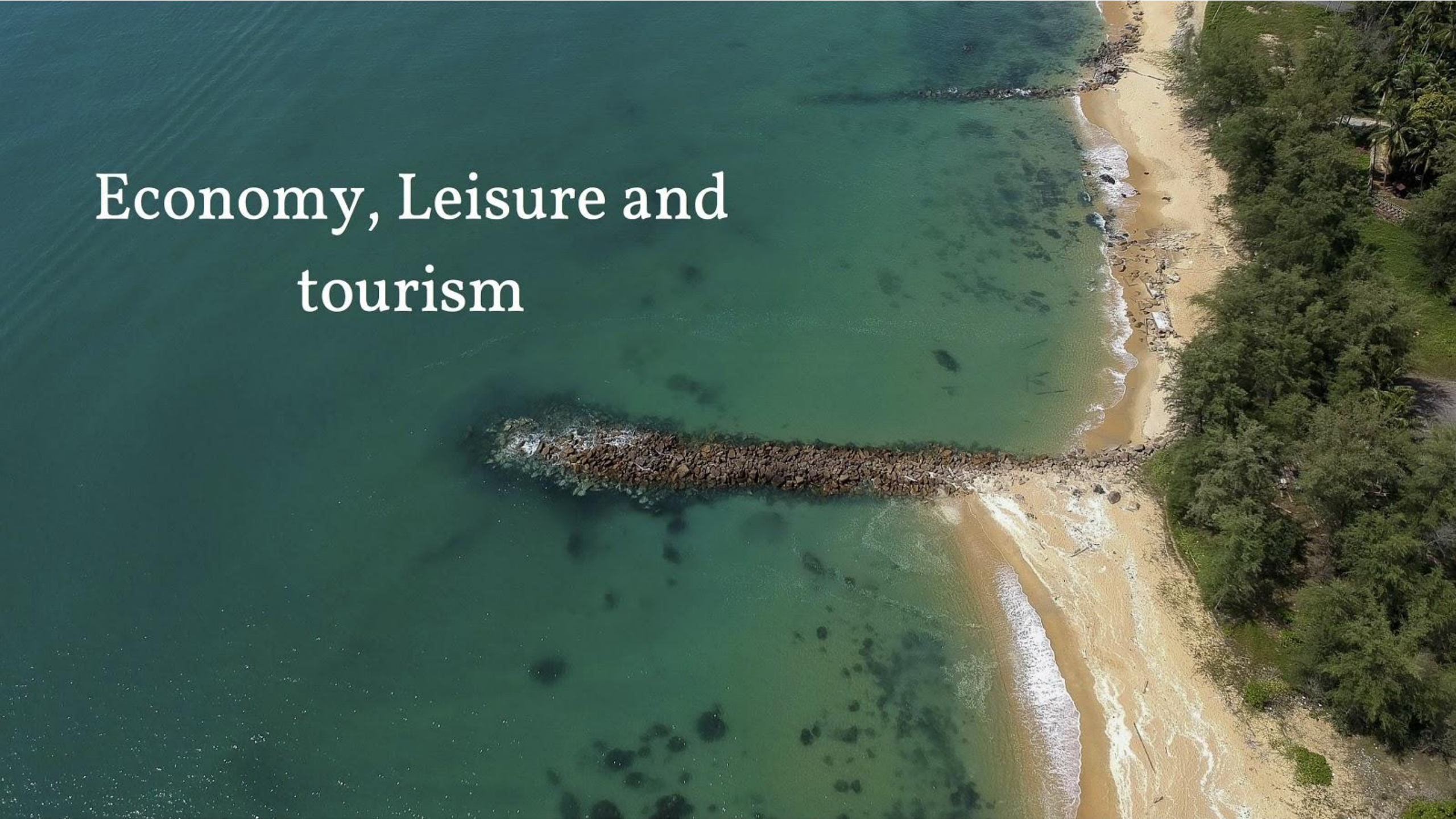
Solar farm

Stuck up rainwater

Wind turbine

Budget : Energy

Energy's equipments	Price (€)	Quantity	Total (€)
Solar farm	430 000	1	430 000
Wind turbine	1M	2	2M
Stock up rainwater	2 000	10	20 000
TOTAL			**2 450 000**


Economy, Leisure and
tourism

Brief presentation

- Building an eco-friendly village
- Being sustainable (social, economy and environment)

Location of the site

Objectives

- The eco-neighborhood project is located in Guadeloupe, close to the main city (Pointe-à-pitre).
- Making the link between tourism and sustainable development
- The beach as an economic driver for the neighborhood

Building an ambitious museum

An eco-museum

- Promoting local gastronomic patrimony
- A multicultural identity
- Create a cultural strength

A guadeloupean Louvres museum

- Import a couple of major work of art
- Give a voice to local artists
- Create a landmark

A double purpose museum

Short-circuit

Fresh SEA-Food

Market Halls

fresh land products

- *Democratize these nearby circuits*
- *Do without intermediaries*
- *Contact with fresh products*
- *Connect as much as possible fresh seafood and fresh land products*
- *Make it as easy as possible for residents to buy fresh*
- *Short circuit to catering outlets for our children*

activities

Assessment activity

I

Activities nautic

II

Removable sprot equipement

III

Food seller

traditional festival activity

July in Sainte-Anne

music festival

the patronal feast

Cottages

Local attractiveness

Circular economy

Tourism

Local culture

Sustainable transport

"Trans'soukwé" transport company

WE WANTED TO HAVE A STYLISH AND ENVIRONMENT-FRIENDLY MODE OF TRANSPORT.

Sustainable transport proposal

Create pedestrian areas

Offer low-cost transports cards

Create carpool parking lots

Offer cars by carsharing

Promote river transports and bicycles cargo for
delivery

Use more eco-friendly materials to build cars and bike

Create green and secure bicycle paths

THE CHALLENGENCES OF SUSTAINABLE TRANSPORT

Limit carbon footprint

Promote biofuel

Limit noise pollution and atmospheric pollution

Promote walking

Limite the use of individual car

Favour public transport

CREATION OF MEMBERSHIP CARD

- **LOW PRICE**

  Price for one-years : 300 euros
  Reduced price for students,
  unemployed and retired person

- **POSSIBILITIES TO GAIN POINTS ON THE CARD WITHOUT PAYING**

  THANKS TO :
  -DRIVE PEOPLE FOR FREE
  -ASSOCIATION

- **ALL KINDS OF TRANSPORT**

  Bike
  Public transport : buses
  Fluvial shuttle
  Car sharing

- **ECONOMICAL**

  35% cheaper than daily car use

Reduce home-work journey

Transport company for the employees, who work in another village

Bus shuttle

50 trips round trip

Focus on the sea rather than the road

Avoid taking the car to go work

Using biofuel for boat

Technology and carsharing

- Creation of a car-sharing and carpooling service
- Service is fully managed via the "Auto-Guadeloupe"application
- Vehicle geolocation near us. Just use your phone to lock / unlock the car
- Setting up a car-sharing system for additional trips
- These cars will be electric. Installation of charging stations all over the city

Our Carbon Footprint

ECO-FRIENDLY MATERIAL USE IN OUR BIKES AND CAR

Wood and corn strach for dashboard
Green tyres without inner tube
Seat in vegetable leather : linen, hemp or coconut fiber
Convert car engines to electric or biofuel car
Convert a class bike to an electric bike

GREEN CARGO SHIP FOR THE TRANSPORT OF FOODSTUFFS/ BIKE

Green cargo ship with sails

Low Emission Zone (ZFE)

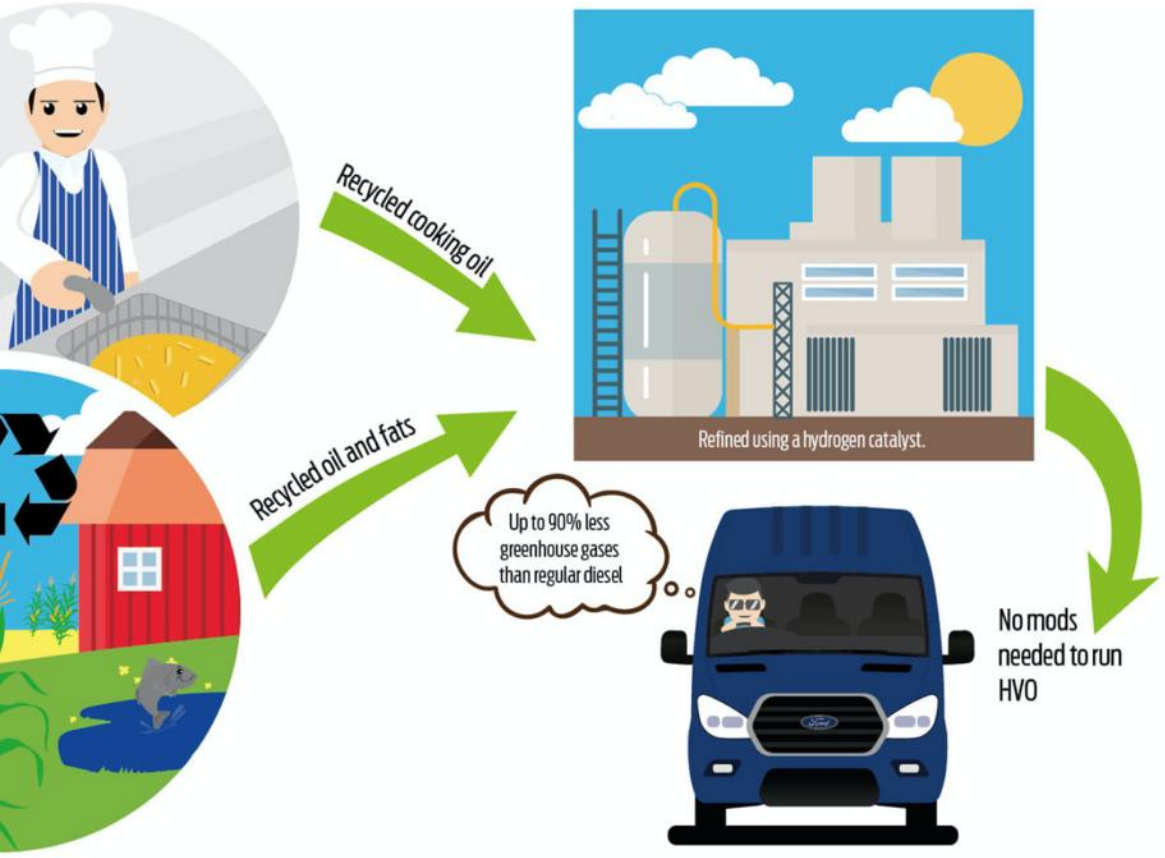
More ecofriendly than classic cargo ship

Cargo bike

Avoid delivery trucks

Limit air pollution

Better for health



BIOFUELS

Recycled oil and fats

Recyled cooking oil

Use biofuel from sugar, fiber like straw

BIO-REFINERY

Transform agricultural and plant production into biofuel

The Advantages of sustainable transport

Reduced traffic congestion
Reduced greenhouse gas emissions

Reduced air pollution and related riks such as asthma

Increased physical activity : walk, bike

Increased social interaction: car sharing
Support for local buisnesses and vibrant economy

Thank You