

Interreg
Caraïbes



CARNET'ADAPT



Encouraging local sourcing and adapting to inter-seasonality



DENEL

Presentation of the structure

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General presentation

The activities of the DENEL structure

The 60-hectare site is located in the commune of Gros Morne,
Martinique

It was founded in 1908 as a
Pineapple Canning Factory

2000: creation of the SAS DENEL (Simplified joint-stock company)
50 employees



- **The site is subject to authorisation for installations classified for environmental protection (ICPE)**
- **It follows HACCP procedures and is ISO 50 001 certified**

General presentation

The activities of the DENEL structure

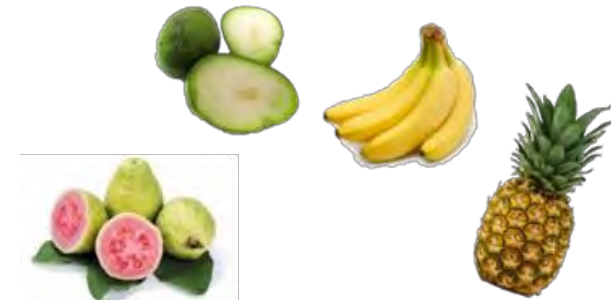
The company has two main activities:

- A primary processing activity consisting of the transformation of fruit into pulp (1,500 tonnes per year)
- A secondary processing activity consisting of the production of juices (7,500 tonnes per year) and jams (460 tonnes per year) from tropical fruit pulp and imported pulp.

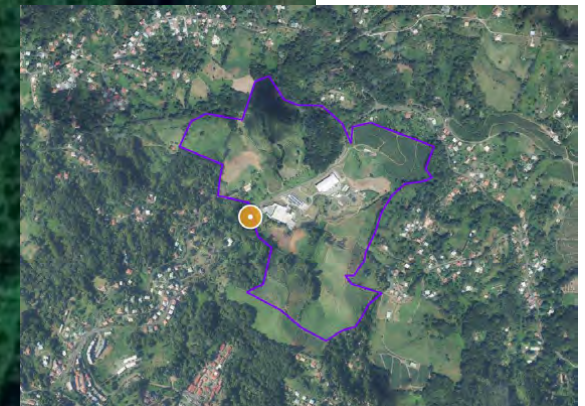


A secondary activity consisting of the DOMAGRO farm:

Organic and HEV fruit growing (UAA=30ha)



Infrastructure: 10,726 m² floor area



Storage

- **1080m² positive and negative cold room space:**

- Storage of raw materials for packaging, sugar, flavouring, etc.
- Storage of fruit pulp drums
- Storage of fruit



- **Warehouse: at ambient temperature with roof insulation**

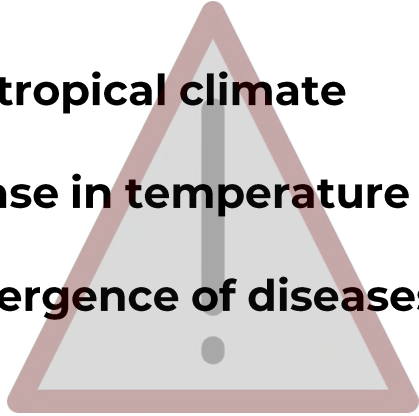
- Packaging
- Finished products (juices, jams and aseptic fruit pulps) awaiting departure for local or export markets (15% West Indies and mainland)
- Waste (contracts with waste disposal companies)

Climate issues:

Humid tropical climate

+ increase in temperature

- **→ Emergence of diseases**



Les sargasses



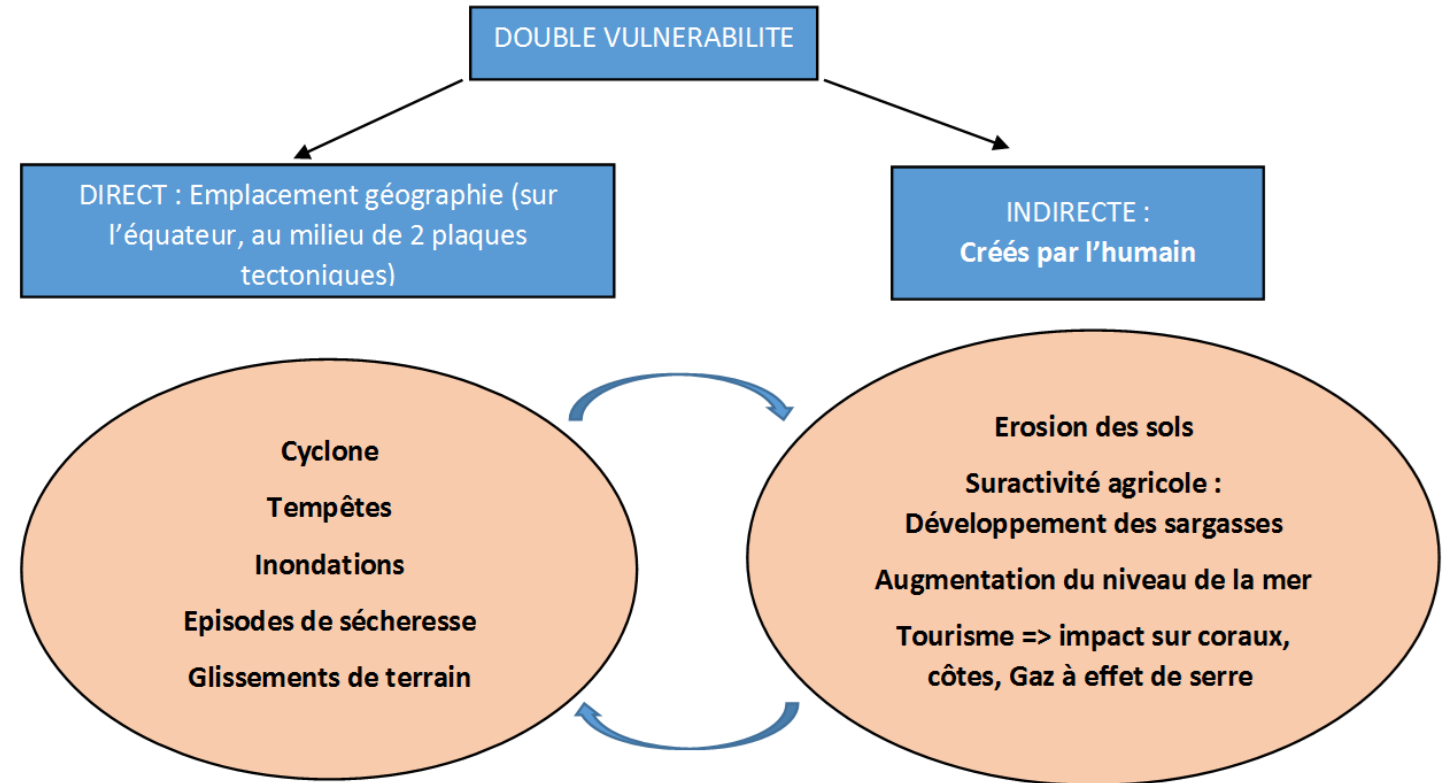
Les ouragans



La disparition de la biodiversité



Elévation du niveau de la mer : Mangroves menacées (rôle important pour la lutte contre l'érosion, et autres)

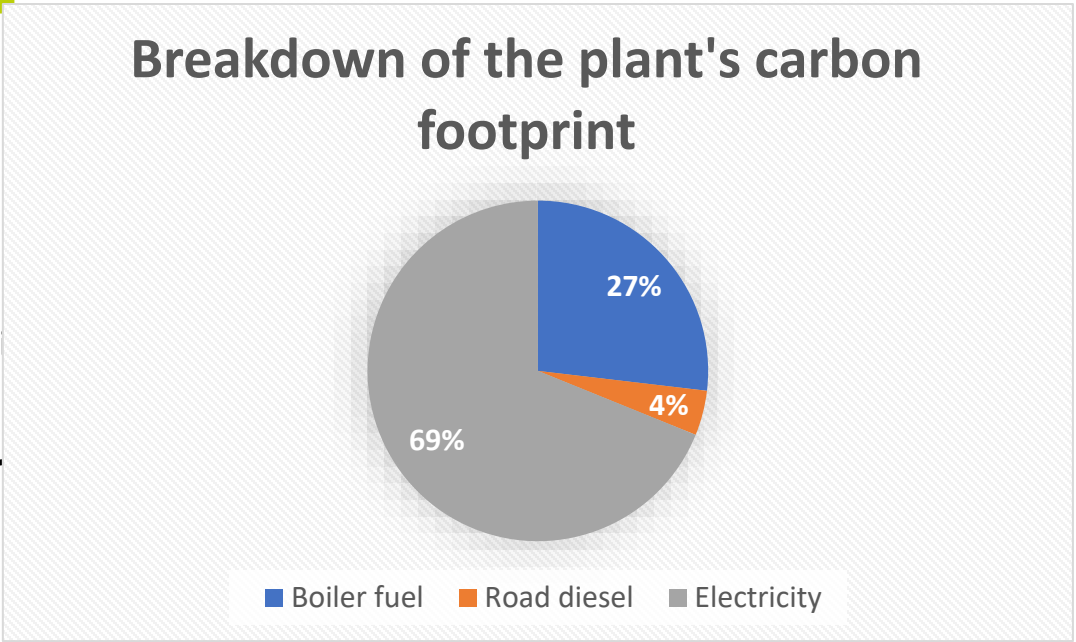
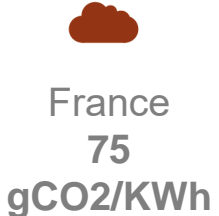


LES ANTILLES SONT TRES FORTEMENT TOUCHÉES PAR LES EFFETS DU CHANGEMENT CLIMATIQUE : PRENONS EN CONSCIENCE ET PARTICIPONS A SON RALENTISSEMENT

What is DENEL's environmental impact?



Martinique's electric is highly polluting



2,800 tonnes of CO₂ per year

⇒ DENEL's annual CO₂ emissions are equivalent to **150 Fort de France - Paris Orly flights per employee per year**



What is DENEL's environmental impact?



- ⇒ DENEL uses 200,000 litres of water per day
- Each DENEL employee generates 4,000 litres of water per day

Inhabitants of Martinique consume an average of 200 litres per day

- ⇒ **DENEL's activities directly generate 1,200 tonnes of waste per year, or 24,000 kg per employee**

- ⇒ **The average for Martinique is: 500 kg of waste per inhabitant/year**

Of these 1,200 tonnes:

- **430 tonnes** of waste is passed on to the consumer (jars, tetrapaks, etc.)

- **260 tonnes** of other waste (cardboard, plastic, etc.) of which 130 tonnes are recycled, i.e. 50% of this waste

- **500 tonnes** of organic waste, recycled as compost for the fields



DENEL's compactor
=> landfill waste



Plastic press



Dependence on pulp imports:



Sourcing is partly local:

- 25% of the pulp comes from partnerships with 42 local farmers in the north and south of MARTINIQUE (90% of the fruit) and the DOMAGRO farm (10% of the fruit), who are members of OPs (producer organisations).
 - 75% imported pulp
- raw material supply problems (world orange crisis, maracudja (passion fruit), etc.)

DOMAGRO: 30 ha of UAA

The site has pineapple fields classified as HEV Agriculture (flower induction) and organic plots of mammee apple (*abricot peyi*), guava (main crop), and ambarella plum (*prune de cythère*)

High value-added activities: cocoa, coffee, vanilla, mangosteen

Respecting the land and increasing the area: acquisition of agricultural plots by 2025 (group resources) - Securing internal supplies

(management commitment - FEADER - ODEADOM funding)

ENVIRONMENT: Waste management

- Treatment of factory effluent => WWTP (2010)

Two 800 m³ ponds with **four planted filter basins: birds of paradise (2021)**

Respect for the quality of the water which is returned to the environment (+ used by the

FEADER and ODE funding - COTRAM partnership



- Treatment of organic matter from the factory and farm waste:
composting area (responsible farming)

Compost used on organic fields
Reduced dependence on inputs



- Company in the process of decarbonisation **(group assessment and approach)**

- Reflection in-house on deposits on containers (glass) and modification of juice production lines for tethered caps

Utilities management: Energy - electricity and fuel oil

- Efficient boiler (high efficiency and heat recovery from the flue gases)
 - **Photovoltaic panels on the roof: 15% autonomy**
 - **+ 45% increase in photovoltaic installation with an ALBIOMA -CTM partnership (2023 - 2024)**



- **Insulation of the warehouse roof (heating): CEE (energy saving certificate) funding**

- **Project to increase fuel oil autonomy (45%): solar thermal fields under pressure (CTM -ADEME)**

→ 117,000 litres of fuel oil / year OR: 325 t eq CO2 / year



Utilities management: water

- Spring and groundwater catchment project on the property
Reduction of dependence on the drinking water network
(geophysical study in progress and ODE and BRGM partnership)
- Linking of networks: recovery of water from the WWTP for the farm



Thank you for your attention!

