

# Environmental Management



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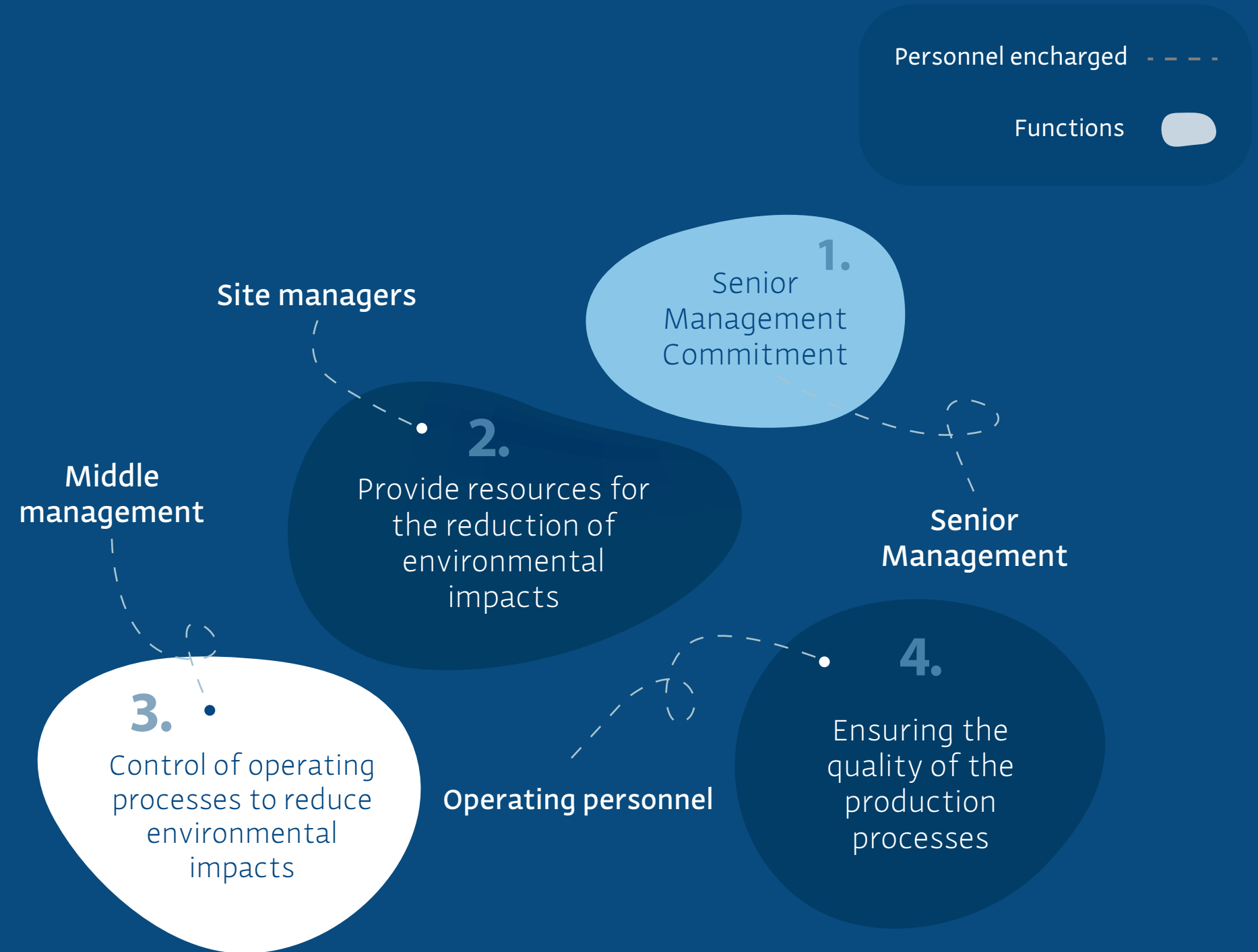
# Environmental Management

DINANT places a very high priority on the protection of the environment and the conservation of the ecosystem.

All of the Company's actions are framed within the principle of sustainable development and are based on compliance with local environmental legislation and other requirements under international regulations to which the company has voluntarily adhered.

# Structure for Environmental Management

In order to manage this priority efficiently, the company established the following organizational structure for environmental management:



# Consumption data



## Energy

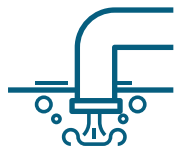
The total production of the organization was favored by increasing during this period; As a consequence of this, an increase in energy consumption equivalent to **13%** was generated.

**51% of the electricity consumed in DINANT comes from its own sources** and will increase in the coming years, displacing the electricity consumption of the National Network, as well as the consumption of fossil sources.



Description of sources	Value (mJ)		Environmental indicator (MJ/Ton)	
	2019	2020	2019	2020
Electricity	100,499,121	106,246,789	101	106
Electricity (own renewable energies)	102,614,318	109,712,077	114	122
Bunker	132,752,006	143,712,311	648	699
Diesel	11,720,849	19,408,966	318	522
Gasoline	516	647	0.0	0
LPG	201,729,069	240,093,383	5,324	6,318
Biomass (Rachis)*	0.0564	0.016	0.0	0
<b>TOTAL</b>	<b>549,315,878</b>		<b>6,504</b>	
	<b>619,174,173</b>		<b>7,767</b>	

\*Does not include biomass by fiber and husk



## Water

During this period, the pattern of water consumption for production and industrial processes reflects a slight raise due to increases in production that also responded to the high demand consumption of sanitizing products as part of COVID-19 emergency.


2019
2020

Description of sources	Value (m <sup>3</sup> )		Environmental indicator (m <sup>3</sup> /Ton)	
Surface water, including the water of wetlands, rivers, lakes and oceans	676,272	723,424	0.75	0.73
Groundwater	668,401	723,324	6.83	7.09
Rainwater collected and stored directly by the organization	170,000	182,321	36.89	39.26
<b>TOTAL</b>	<b>1,514,673</b>		<b>44.47</b>	
	<b>1,629,069</b>		<b>47.08</b>	

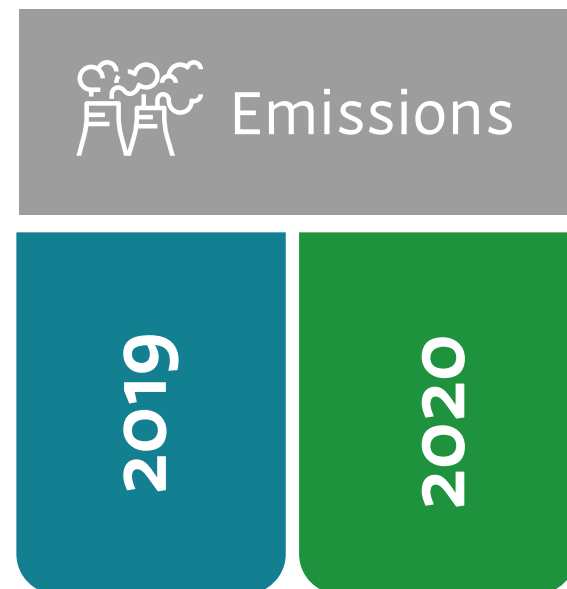
# Effluents and waste

The discharge of wastewater in all facilities is subject to physical, chemical and biological treatment processes for the removal of contamination parameters based on legal regulations, thus achieving compliance established by law thanks to constant follow-up and monitoring.

The final destination of wastewater discharge is the soil, river and palm oil plantations; For the latter, the strengthening of Fertigation systems stands out, with which it has been possible to reuse the water from the treatment lagoons, improving the quality of the crops.

Source	Volume (m <sup>3</sup> )	Indicator (m <sup>3</sup> /Ton)	Destination	
Wastewater discharge	1,034,851	1.04	Receiving body	
Source	Volume (m <sup>3</sup> )	Indicator (m <sup>3</sup> /Ton)	Destination	
Wastewater discharge	1,134,543	1.14	Receiving body	

# Emissions



Description of sources	Value (kg CO <sub>2</sub> eq)		Environmental indicator (kg CO <sub>2</sub> eq/Ton)	
<b>Direct Emissions (Scope 1)</b>				
Fossil fuel consumption	23,120,739	26,806,019	23.226	26.851
Generation of ordinary and industrial wastewater	1,212	1,329	0.0012	0.0013
<b>Indirect Emissions (Scope 2)</b>				
Electricity consumption+	17,098,809	18,076,711	17.177	18.107
<b>TOTAL</b>	<b>40,220,760</b>		<b>40.404</b>	
	<b>44,884,059</b>		<b>44.959</b>	

(+): For electricity consumption in kWh, the calculation factor in kg CO<sub>2</sub>eq, reference factor 0.6125 tCO<sub>2</sub>e / MWh of the Honduran Grid Emission Factor (version 01.0, ASB0042-2019) was used.

# Displacement of Emissions by Source

2019 2020

After a 12% increase in reported emissions between 2019 and 2020, it should be noted that, thanks to the displacement of fossil fuels and other energies, by the use of our own sources, biogas and biomass

we prevent that of the total energy consumed during this period **40%** of CO<sub>2</sub> gases were emitted.

Description of sources	Value (kg CO <sub>2</sub> eq)		Environmental indicator (kg CO <sub>2</sub> eq/Ton)	
	2019	2020	2019	2020
Fossil fuel displacement (biogas, biomass)	11,461,765	11,263,122	25.848	25.327
Owned Renewable Energy Produced	17,458,686	18,666,291	32.139	34.231
TOTAL	28,920,451	29,929,413	57.987	59.558



# Waste by type and disposal method



Dangerous



Ordinary





ORDINARY



DANGEROUS

Total per year	
2019	232,815
2020	251,486

Elimination method	Weight (Tons)	
	2019	2020
Recycling	160,830	172,543
Composting (rachis)	15,945	14,841
Recovery, including energy recovery	53,251	62,213
Incineration (mass burning)	-	5
Landfill	2,772	1,864

Elimination method	Weight (Tons)	
	2019	2020
Recycling	-	-
Composting	-	-
Recovery, including energy recovery	-	-
Incineration (mass burning)	17	20
Landfill	-	-

# Responsible management of the industrial plastic waste project:

## Alliance with Cementos Argos de Honduras.

The final disposal of post-industrial waste generated in some of DINANT's production processes, such as plastics used in the cultivation of vegetables in greenhouses and packaging plastics from food plants, oils and soaps, due to their characteristics, cannot be recycled.

For this reason, DINANT and Cementos Argos de Honduras, cement production company, signed an agreement to implement a project aimed at the responsible management of this industrial plastic waste.

This alliance began with the technical, chemical, and physical evaluation of the company's waste, a necessary step for approval and incorporation into the co-processing in the industrial process of the cement plant.

With the implementation of this alliance, the volume of waste currently sent to the landfill will be reduced, increasing its useful life and mitigating the environmental impact caused by waste management. In addition, it will contribute to preserving production processes that help maintain adequate health conditions in neighboring communities.



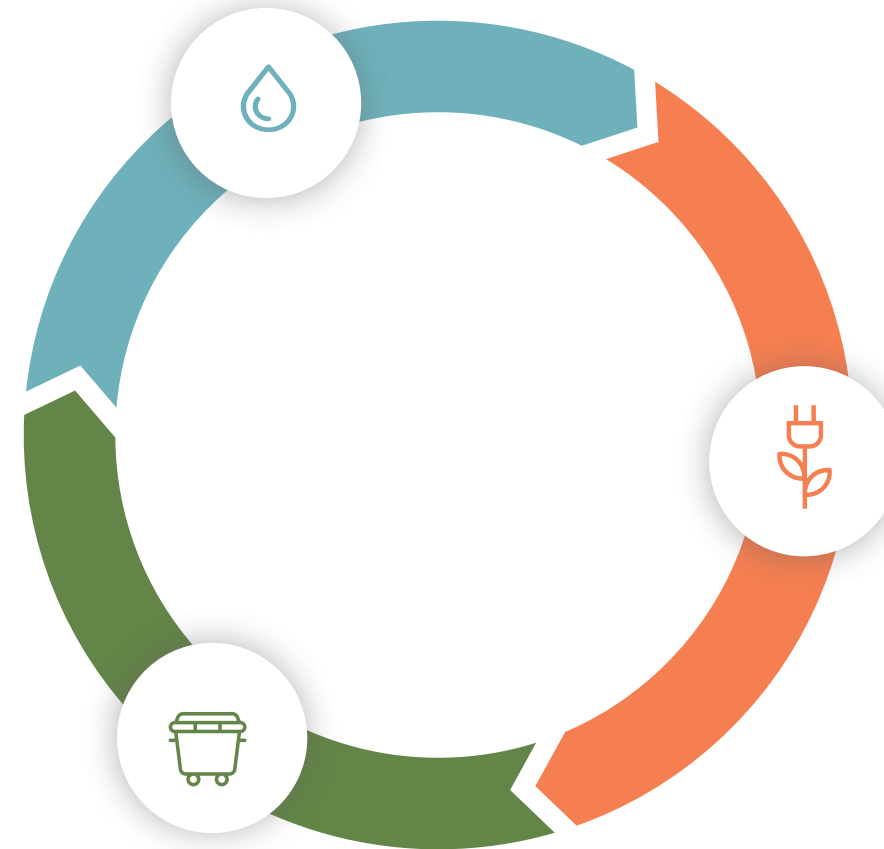
# Environmental actions carried out

## Water

- › Water saving programs in manufacturing plants
- › Water reuse programs in oil palm extraction plants
- › Pilot tests of dry toilets in greenhouses

## Waste

- › Compliance with the boiler maintenance plan



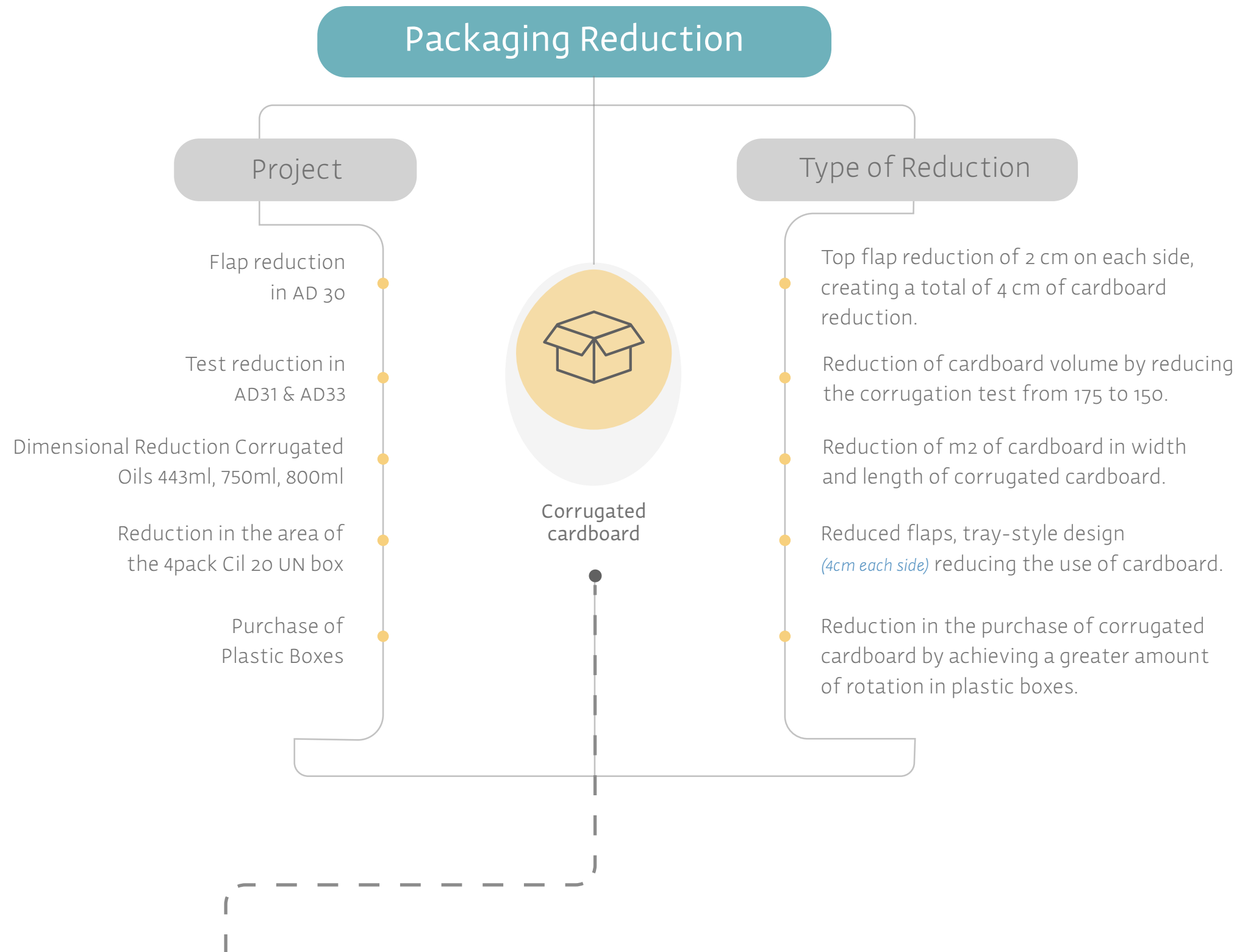
## Energy & emissions

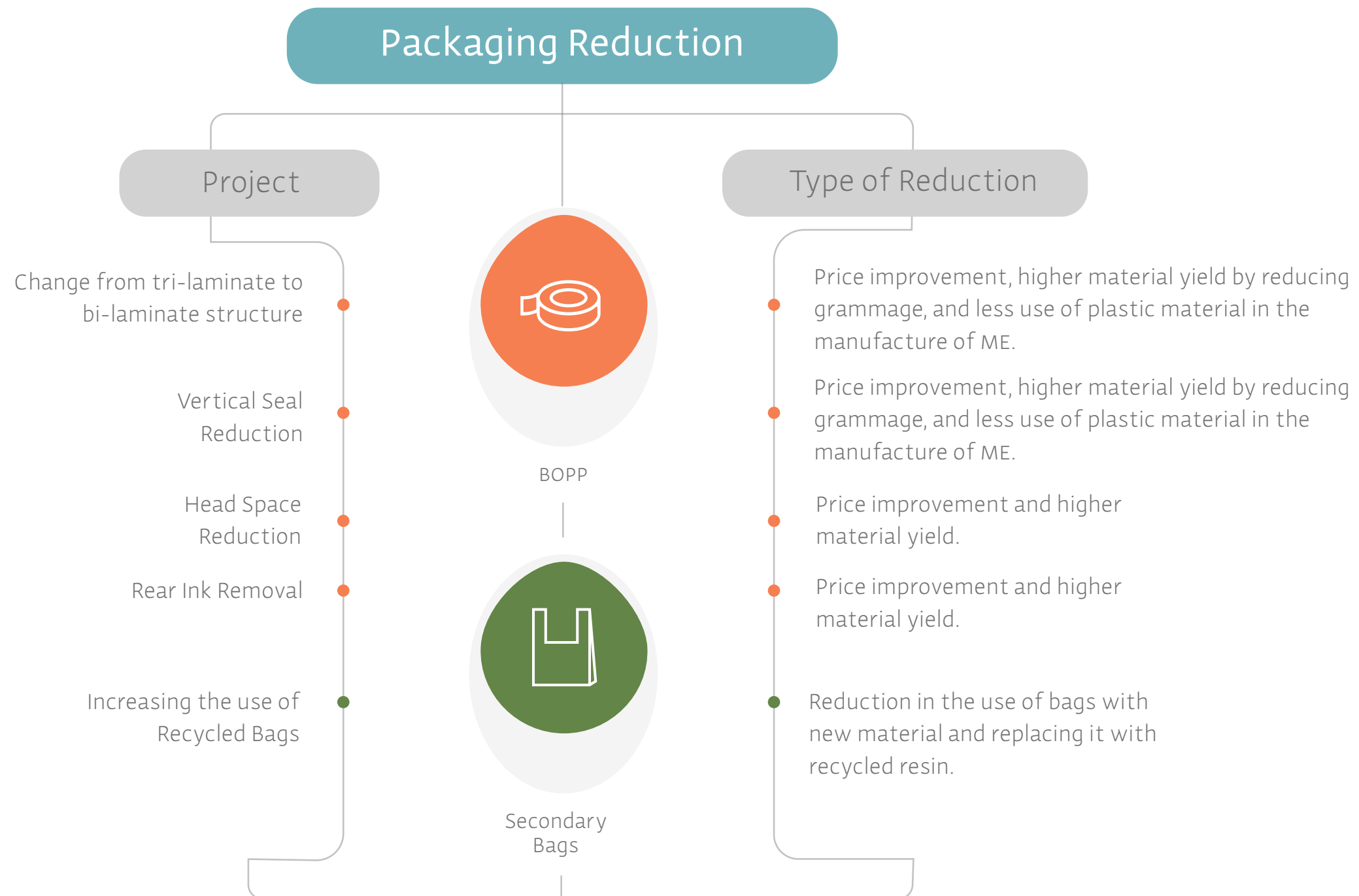
- › Change of luminaires to LED
- › Use of rachis as biomass for boilers
- › Strengthening biogas projects for power generation

# Packaging

DINANT recognizes its responsibility related to packaging. The company is committed to promoting sustainability and making this commitment a reality through the reduction of packaging to include materials from more sustainable sources and the use of intelligent designs for the benefit of people and the planet.

The following are the packaging projects implemented during 2019 and 2020:





# Wildlife Conservation Centers

“ DINANT maintains Wildlife Conservation Centers (CCVS for its acronym in Spanish); the Conservation Center in the Atlantic region of Honduras, located in the Municipality of Limón, in Colón department, and the Zacate Grande Conservation Center, located in the Municipality of Amapala, Department of Valle. ”

In both centers a series of actions are carried out that are oriented not only to the conservation of natural resources and biodiversity of the area, but also to environmental education and scientific research. The actions carried out and the results obtained during 2019 and 2020 are presented below.





## Actions

Support, monitoring and conservation of the jaguar, the largest feline in the Americas.

## Results

Identification of 13 different jaguar species and 6 litters of cubs in a study conducted between 2010 and 2020.



Ex situ management and conservation of the tapir, the largest terrestrial mammal in Mesoamerica.

Successful ex situ reproduction of tapirs.





Management and conservation of white-tailed deer, Honduras' national mammal.

Implementation of the conservation program for the red guara and green iguana in the Gulf of Fonseca.

Reproduction and release of more than 20 thousand green iguanas, 100 red guaras and 3 thousand white-tailed deer.



Management of wildlife conservation centers for biodiversity conservation, forest protection and stimulation of natural forest regeneration.

Conservation of biodiversity, creation of feeding and reproductive niches for wildlife and creation of wildlife connectivity corridors.

Reduction of forest fires, production of oxygen, increase of aquifers, reduction of erosion, etc.



**Protection and constant monitoring of biodiversity within African oil palm plantations.**

Identification of predators in oil palm plantations (jaguars, pumas, ocelots, otters, lizards,, snakes, owls, hawks, etc.), biological indicators that indicate health and balance in the ecosystems and food chain.

Identification of more than 80 different species of wildlife living within African oil palm plantations, indicating that a well-managed plantation can stimulate and favor biodiversity despite being a monoculture.

# Environmental achievements

1.

## Efficiency in water consumption

- › Increased consumption of rainwater collected and stored by the organization, as a renewable natural resource that has low pollution rates.
- › Reduction in the consumption of surface water, so it can be said that the pressure on surface sources was reduced.



2.

## Water Use

### Effluents

- › Reduction of wastewater pollution through major investment works.
- › Satisfactory compliance with environmental legal requirements.



3.

## Waste

### Contribution to the circular economy and pollution reduction.

- › Increase in waste sent for recycling (significant increase).
- › Increased composting and recovery.
- › Decrease in the amount sent to the landfill site.



4.

## Emissions

- › Reduction of emissions from the consumption of fossil fuels, by using energy from own sources of biogas and biomass.
- › Satisfactory compliance with environmental legal requirements.

