# WASTE TO ENERGY PLANT

## CHALLENGE

Renewable energy and responsible consumption

#### DESCRIPTION

Cartagena produces about 400,000 tons of waste per year. On average, each citizen generates 1.15 kilograms of waste per day. More than 60% of solid waste is disposed of in open landfills without any protection to the environment or the public. Large volumes of waste are reaching rivers, water channels, and ultimately the ocean, directly affecting communities and wildlife.

This project seeks to establish an MSW (municipal solid waste) energy plant, using solid waste from Cartagena and surrounding cities.

Instead of being burned, the waste is gasified, and the produced gases are refined, once cooled and cleaned, the gas can be used to generate electricity through special generators coupled to turbines. Cartagena currently has a landfill that represents a major threat to citizens and the environment. This project will allow to empty and clean the area.

STRATEGIES Sustainability

#### KEY PERFORMANCE INDICATORS

- Energy intensity moves to 90%
- 50M dollars in revenue per year for the city

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No landfills

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## **PROJECT LEADER**

**General Secretary** 

## CLIMATE EMERGENCY



## BENCHMARK PROJECT (FOR REFERENCE)

Bellwether Recuperative Gasification Plant, Anxin, China. This plant can process 2,500 tons of municipal solid waste (MSW) per month.

https://bwrgas.wixsite.com/bellwether/projects



### SUSTAINABLE DEVELOPMENT GOAL IMPACTED





Ensure access to affordable, reliable, sustainable and modern energy

Build resilient infrastructure, promote sustainable industrialization, and foster innovation



Ensure sustainable consumption and production patterns



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