

MicrobeBio®

**MICROBEBIO
SARGASSUM
BIOECONOMY HUB**



LOCATION: COASTAL FREE TRADE ZONE, DOMINICAN REPUBLIC

PROPOSED BY: MICROBEBIO

PROJECT TYPE: PUBLIC-PRIVATE PARTNERSHIP

TOTAL CAPITAL INVESTMENT: \$25 MILLION USD *(INCLUDES 20% CONTINGENCY)*





PROJECT OVERVIEW

MicrobeBio proposes the development of a 15-hectare coastal industrial hub dedicated to the collection, storage, and transformation of sargassum into environmentally valuable and economically beneficial products. This facility will offer a sustainable, long-term response to the growing volumes of sargassum affecting Dominican beaches and coastal ecosystems.

PROJECT OBJECTIVES



Mitigate the annual impact of over 450,000 tons of invasive sargassum

Improve coastal water quality, preserve coral reefs, and protect tourism infrastructure

Convert sargassum into four environmentally friendly outputs:

Organic Fertilizer for national agriculture

Biogas for clean energy and industrial heat

Biochar for soil remediation and carbon sequestration

Eco-construction materials such as bricks and panels for affordable housing

CAPITAL BUDGET SUMMARY (USD)



COMPONENT	COST (USD)
Harvesting, transport, washing	\$3,000,000
Drying and biomass storage	\$2,500,000
Composting & fertilizer production	\$3,500,000
Anaerobic digestion & gas handling	\$4,000,000
Biochar production system	\$3,500,000
Eco-brick production system	\$2,000,000
Site vehicles & logistics equipment	\$1,500,000
Laboratory, QA/QC & utilities	\$750,000
Site infrastructure & admin setup	\$2,250,000
Training, R&D, permitting reserve	\$2,000,000
Total Capital Cost	\$25,000,000



GOVERNMENT PARTNERSHIP REQUEST

MicrobeBio respectfully seeks the following forms of support from the Dominican Government:

- A 50-year free lease of a 15-hectare coastal site designated for sargassum collection and processing
- Inclusion in the Free Trade Zone (FTZ) system to enable import duty, VAT, and income tax exemptions
- A government service fee of \$25 per ton of collected and processed sargassum to help stabilize operational costs
- Support in securing climate and resilience grants from the World Bank, Green Climate Fund (GCF), and Caribbean Development Bank (CDB)
- Interagency coordination to facilitate expedited permitting and environmental licensing



BENEFITS TO THE DOMINICAN REPUBLIC

ENVIRONMENTAL BENEFITS

- Annual removal of over **450,000 metric tons** of decaying sargassum from Dominican waters
- Reduction of toxic gases, eutrophication, and marine habitat loss along coastal zones
- Production of **biochar**, contributing to **carbon sequestration and soil regeneration**
- Preservation of coral reef ecosystems and reduction of coastal erosion risks

PUBLIC & ECONOMIC BENEFITS

- Protection and enhancement of the **tourism sector**, which contributes significantly to GDP
- Creation of over **150 direct green jobs** and **400+ indirect jobs** in rural and coastal communities
- Boost to **local agriculture** through access to affordable, organic soil inputs
- Generation of **sustainable construction materials** to support housing and infrastructure
- Strengthening of **national climate leadership** through scalable circular economy practices



This project presents a comprehensive, low-risk, and high-impact solution to one of the Dominican Republic's most pressing coastal challenges. With government partnership, MicrobeBio will deploy proven technologies and create an integrated processing hub that transforms environmental waste into national value—while preserving the natural beauty and biodiversity of the Dominican coast for future generations.

We welcome the opportunity to collaborate with your agencies to bring this vision to life.



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www.microbebio.com
info@microbebio.com

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