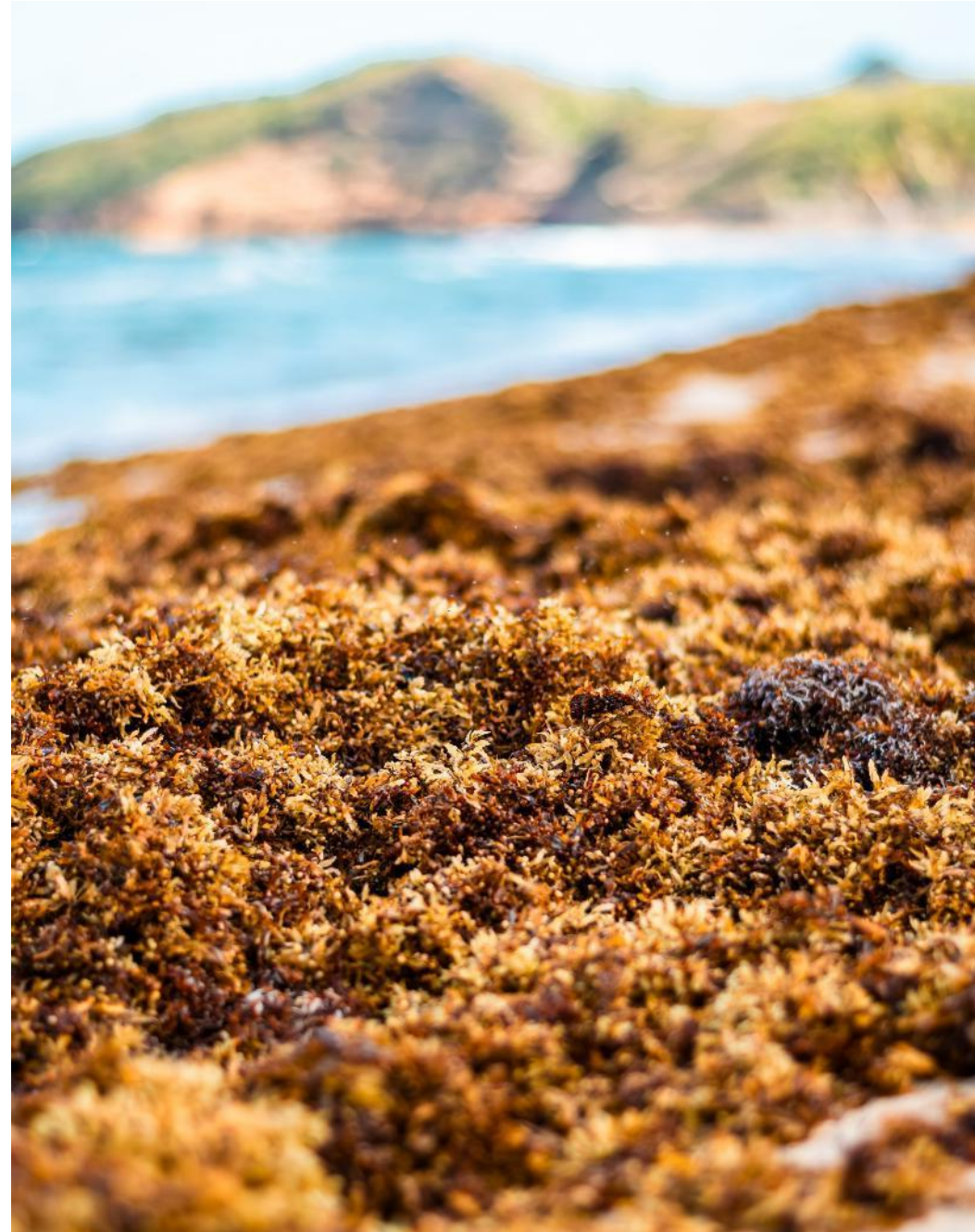




Converting Sargassum into renewable energy and organic fertiliser

September, 2026



Problem

How the Caribbean could turn a plague of seaweed into fuel and fertiliser

The Washington Post

From seaweed to electricity

One company that would like to use Grenadian sargassum is SarGas, a start-up founded in 2023 to turn seaweed into biofuel. The company has set up a small machine, called a digester, that uses bacteria to gobble up sargassum and burp out methane, the main component of natural gas.

Instead of letting the methane escape and warm the planet — as it would if the sargassum rotted on the shore or in a landfill — SarGas collects the gas and uses it to fuel the oven at a local bakery. Now the start-up is applying for a permit to build a bigger digester that would supply a biogas-fueled generator to make electricity for the Grenadian power grid.

Generating electricity this way would be cheaper and cleaner than the status quo, said SarGas CEO Benjamin Nestorovic. Almost all Grenadian electricity is made from generators running on imported diesel, which causes pollution and forces Grenadians to pay some of the highest electricity rates on Earth.

That's starting to change as Grenada installs solar panels — but Nestorovic said biogas pairs well with solar, because the sargassum-based fuel can generate electricity overnight. "We complement each other," he said.

How the Caribbean could turn a plague of seaweed into fuel and fertilizer

Sargassum seaweed is a problem throughout the Caribbean. But scientists are exploring the opportunity

April 9, 2025

8 min



Support the Guardian

News Opinion Sport Culture Lifestyle

Print subscribe Search Sign in

The Guardian

This article is more than 1 month old

From foul to fuel: how a seaweed problem could power the Caribbean

As the climate heats up, Grenada's beaches have become swamped with rotting sargassum. But biotech can turn it into fuel, fertilizer and plastic

Photographs by Haron Forteau

By **Natricia Duncan** and **Abigail McIntyre** in St George's

It is hard to describe the putrid stench of the decaying sargassum seaweed blanketing miles of shoreline in Soubise, a fishing village in Grenada. The pungent odour wafts into passing vehicles, persisting long after they have left the Caribbean island's coasts, where the ocean has deposited masses of the seaweed, which turns red then black as it rots.

Many residents of Soubise, one of the areas worst affected, say they have learned to live with the problem, which has plagued the island, and others like it, for years. Last week scientists in Florida said they thought they had identified a weather phenomenon in 2009 as the "tipping point" of the problem, which they said is caused by shifting winds churning up the ocean and bringing deepwater nutrient concentrations to the surface.

Every day, Lindon Marat, 30, feels the ill effects of the sargassum invasion when he goes out to fish. "It gets caught in the boat's propeller," he says. "Then we can't pass through the water because it stops the propeller from accelerating."

Some hotels in Grenada are already using sargassum as a clean energy source. Benjamin Nestorovic and Renatta Fielden, from the Grenada-based bioremediation company SarGas, have proved the technology works and have installed a biogas digester, which uses micro-organisms to break down the seaweed into biogas and fertilizer, to fuel the ovens at the True Blue Bay Resort's House of Chocolate bakery in St George's.

"You can eat chocolate with a good conscience," Nestorovic says. "Our process produces clean energy and digestate — a valuable organic fertilizer — giving us two products in one."

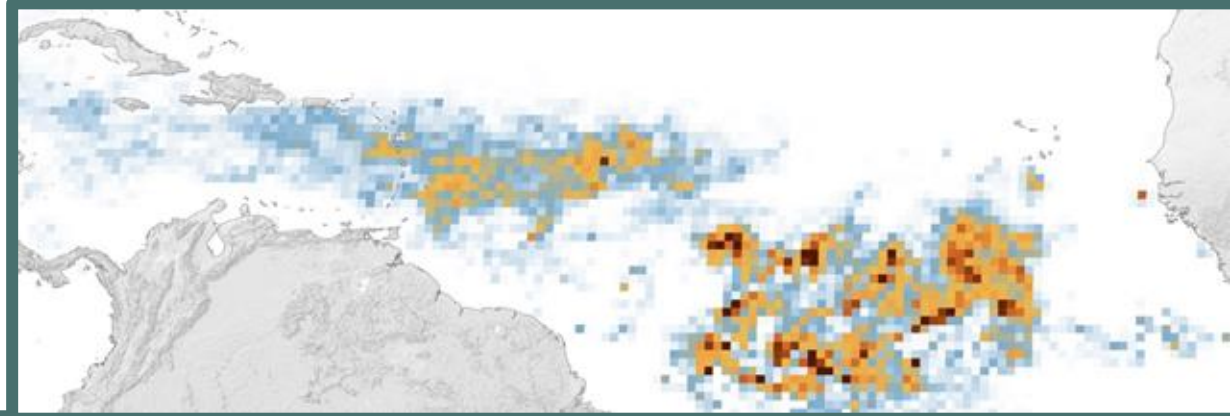


Problem

Sargassum is a major threat for the Caribbean environment and economy

2025 was a record year for Sargassum blooms. In July alone, over 40 million tons of Sargassum was sighted in Caribbean basin using satellite data.

2026 is projected to be a new record year.



- ! Harmful methane emissions
- ! Sanitary problems and effects on human health
- ! Disturbance of marine ecosystems
- ! Negative effects for tourism and fisheries

Problem

Livelihoods are affected, and the government is taking action



*"Some people say you get accustomed to the smell, but **you can never get accustomed** to it"*

Mark Need – Fisherman
Soubise, Grenada



*"**We can't pass through the water** because it stops the propeller from accelerating"*

Lindon Marast – Fisherman
Soubise, Grenada



*"Grenada stands ready – to lead, to learn, and to **turn sargassum into a sustainable opportunity**"*

Hon. Dickon Mitchell –
Prime minister of Grenada

Problem

The Caribbean energy and agriculture sectors rely heavily on fossil fuels

>95%

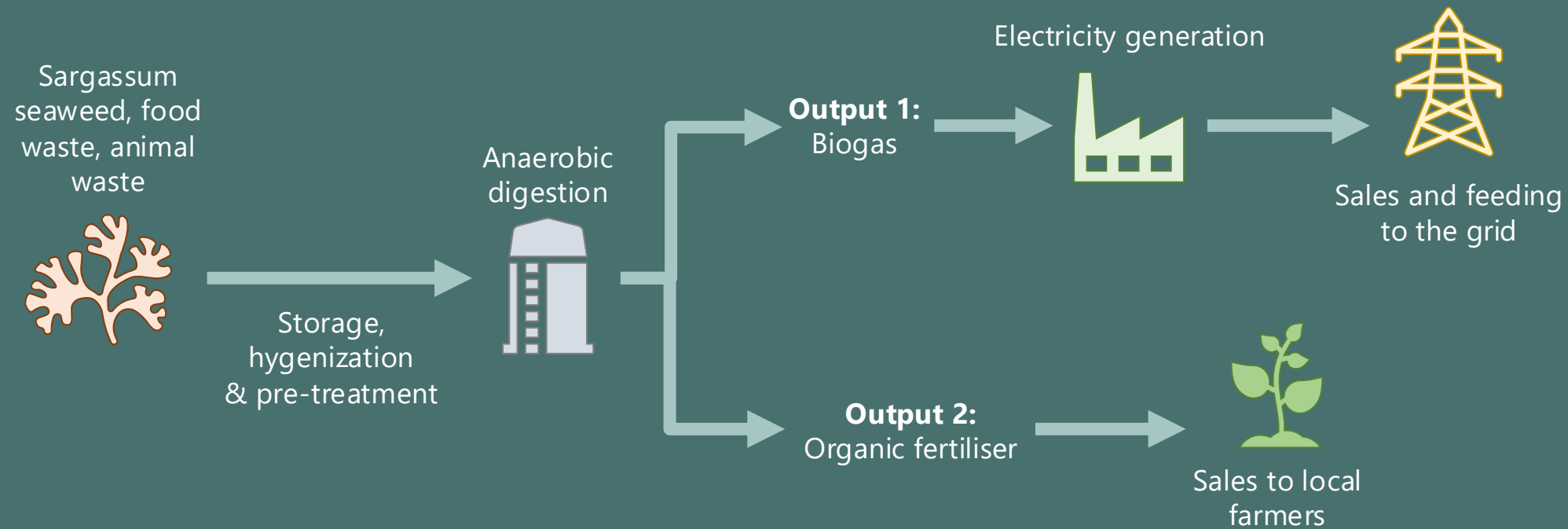
of **electricity generation** in Grenada is based on diesel

>90%

of **agricultural fertilisers** in Grenada are fossil or mineral based

Solution

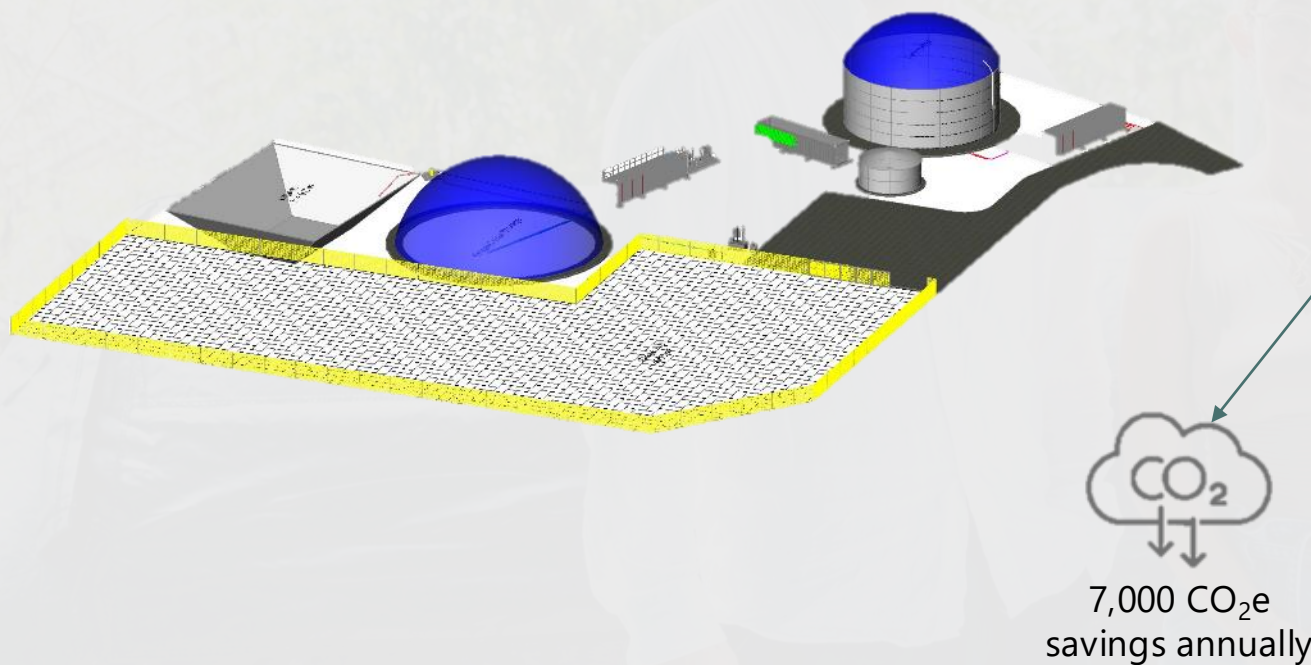
SarGas converts Sargassum into renewable biogas and organic fertiliser



Solution

We are moving from pilot to scale with the project SarGas ONE

Site selected and site drawings completed



Facility parameters (annual)

10,000 tons of
sargassum, food
waste, animal
waste



160 kW power
(1.3 GWh electricity)



1,000 tons solid
organic fertiliser



Solution

We are scaling regionally through a phased approach



● Shortlisted in tender ● Open tender ● Local partnerships established

Traction

Current traction and partnerships puts SarGas in a pole position

Customer validation & IP

Successful pilot with hotel



IP developed with KTH



Partners and off-takers

MOU signed for waste collection



Electric utility approval



Shortlisted in Grenadian EOI



Pre-selected for IPP status



Government



EU Global Gateway support



Biogas expertise and TA



International support



Traction

The remaining pieces...

**Finalizing
permitting for
the IPP License**



**Financing for
procurement
and installation**

Business model

Our core revenue streams come from electricity and fertiliser sales

40 %

lower electricity price
than the average

- ✓ Electricity sold under long-term Power Purchase Agreements (PPAs), covering the 25-year project lifetime.
- ✓ Potential offtakers include utilities, electricity distribution companies and large energy-intensive industries.

15 %

lower fertiliser price
than the cheapest

- ✓ Organic fertilizer sold through medium- to long-term offtake agreements with agreed volumes and pricing.
- ✓ Potential customers include large commercial farms, agricultural distributors and farmer cooperatives.

Additional revenue is generated through the sale of carbon credits.

Business model

SarGas ONE has a payback-time of ~6 years and a project IRR of 21%



Initial investment

\$2.9 MUSD



Annual revenue

\$640 kUSD



Payback time

6 years



Project IRR

21%

Strong project economics driven by stable revenue and long asset lifetime

Competition

We stand out from competition in both solution and product

Sargassum solution competitors*

	End products	High-volume Sargassum processing	Established product infrastructure	Low production cost	Community impact
 SARGAS	Electricity & fertiliser	✓	✓	✓	✓
 RUM & SARGASSUM	Vehicle fuel & fertiliser	✓	✗	✗	✓
 ORIGIN BY OCEAN	Biorefinery, skin organics	✗	✓	✗	✗
 CARBONWAVE	Biostimulants, biomaterials	✗	✓	✗	✗

Product competitors

	End products	Renewable technology	Cost effective	Reliable supply	Locally sourced and produced
 SARGAS	Electricity & fertiliser	✓	✓	✓	✓
 grenlec	Electricity	✗	✗	✓	✗
<i>Solar energy</i>	Electricity	✓	✓	✗	✓
<i>fertiliser producers</i>	Fossil fertiliser	✗	✗	✗	✗

*Main competitors in the Caribbean – currently no established competitors in Grenada

Team

Our multi-disciplinary team blends Swedish engineering expertise with Caribbean entrepreneurship and regional market insight



Benjamin Nestorovic
CEO & Co-founder
MSc energy systems engineer with over eight years experience from entrepreneurship in the Sargassum and energy industry.



Erik Östling
CTO & Co-founder
MSc chemical energy engineer with over eight years of technical experience of working with biogas, hydrogen and Sargassum.



Dr. Angus Friday, MBA
Chairman & Co-founder
Experienced entrepreneur and former Grenadian ambassador to the UN and the US, and the ocean's representative in the World Bank.



Renatta Fielden
Sales & Marketing Director
Degree in environmental policy with experience as marketing director and biogas and Sargassum projects in Grenada.



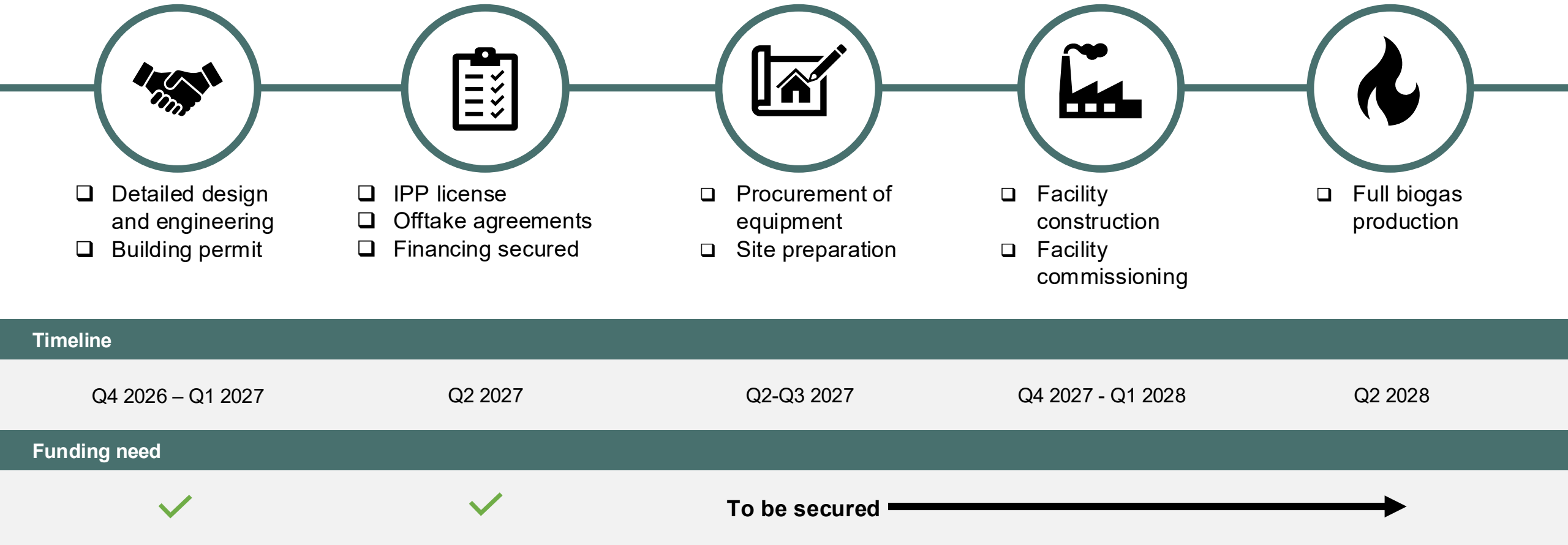
Karsten Inde
Director
Serial entrepreneur and international investor with deep experience in green tech and energy projects. Advisor on business strategy and global scale-up.



Sherwin Sandy
Biogas technician
GIZ trained technician within biogas systems with experience of operating and servicing biogas units in Grenada.

Timeline

Funding secured for the first phases of implementation



Investment opportunity

The ask: \$2.9 MUSD

Timeline: Q2 2027

Blended financing structure



Grants: 45-65%



Debt: 20-40%



Equity: 15-35%

The offer:

Non-dilutive grants: 45% secured, 65% potential

Project debt (tenor: 5-7 years): LOI for 20%

Equity investment in SarGas Holdco

Join our \$2.9 MUSD funding round and secure access to reinvest in the next phases

Vision

From global headlines to local real-world impact – and this is just the beginning

The Washington Post

How the Caribbean could turn a plague of seaweed into fuel and fertilizer

Sargassum seaweed is a problem throughout the Caribbean. But scientists are exploring the opportunity.

April 9, 2023

From seaweed to electricity

Our company that would like to use Grenadian sargassum is SargGas, a start-up founded in 2023 to turn seaweed into biofuel. The company has set up a small machine, called a digester, that uses bacteria to gobble up sargassum and pump out methane, the main component of natural gas.

Instead of letting the methane escape and warm the planet — as it would if the sargassum rotted on the shore or in a landfill — SargGas collects the gas and uses it to fuel the oven at a local bakery. Now the start-up is applying for a permit to build a bigger digester that would supply a biogas-fueled generator to make electricity for the Grenadian power grid.

Generating electricity this way would be cheaper and cleaner than the status quo, said SargGas CEO Benjamin Nestorovic. Almost all Grenadian electricity is made from generators running on imported diesel, which causes pollution and forces Grenadians to pay some of the highest electricity rates on Earth.

That's starting to change as Grenada installs solar panels — but Nestorovic said biogas pairs well with solar, because the sargassum-based fuel can generate electricity overnight. "We complement each other," he said.



The Guardian

From foul to fuel: how a seaweed problem could power the Caribbean

As the climate heats up, Grenada's beaches have become swamped with rotting sargassum. But biotech can turn it into fuel, fertilizer and plastic

Photographs by Hamn Fortson

By Natrixa Duncan and Abigail McIntyre in St George's

This article is more than 1 month old

It is hard to describe the putrid stench of the decaying sargassum seaweed blanketing miles of shoreline on St. John, a fishing village in Grenada. The pungent odor wafts into passing vehicles, persisting long after they have left the Caribbean island's coast, where the ocean has deposited tonnes of the seaweed, which rots and then bleeds out toxic oils.

Many residents of St. John, one of the zone worst affected, say they have learned to live with the problem, which has plagued the island and others for 10 years. Last week scientists in Florida said they thought they had identified a satellite phenomenon in 2023 as the "biggest point" of the problem, which they said is caused by shifting winds churning up the coast and bringing deep water nutrient concentrations to the surface.

Every day, Lincoln Marshall, 38, feels the ill effects of the sargassum invasion when he goes out to fish. "It gets caught in the boat's propeller," he says. "Then we can't pass through the water because it stops the propeller from accelerating."



THANK YOU

