



# Creating highly valuable outputs from sargassum with SMO Solar Process

● Sargassum is a biohazardous seaweed that cost the Caribbean \$120M to clean up in 2018



It's bad for people's health



It's bad for tourism



It's bad for sea life



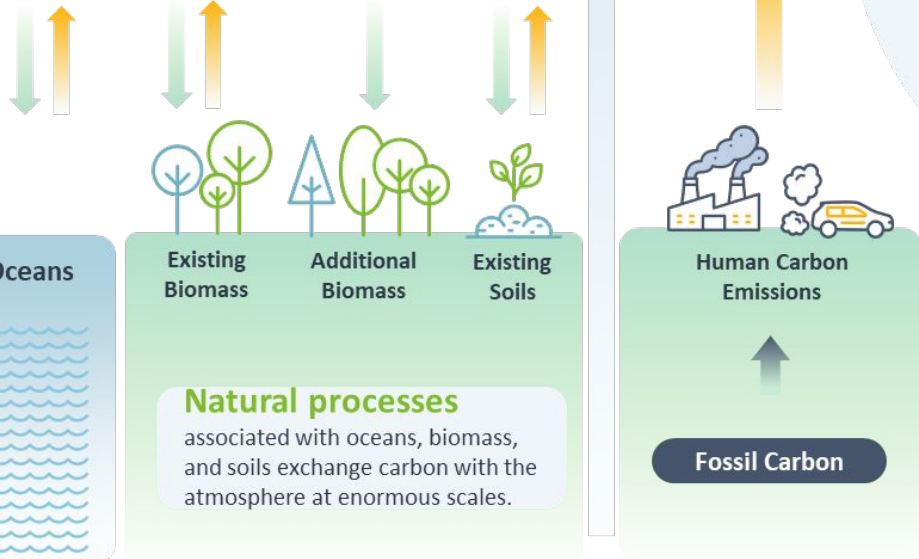
- This toxic macro-algae blooms from March to October.
- Climate change makes it worse every year.
- Guadeloupe will spend €4M+ to find ways to remove it from beaches within 48 hours.

**SMO will build a plant in Guadeloupe to transform Sargassum from a cost into a major opportunity**

# The Race to Zero is "On"

## The Problem

Human activities such as fossil fuel use release additional carbon into the atmosphere, creating a carbon imbalance.



Offering dynamic carbon sinks

Through BECCU Technology

Reducing CO<sub>2</sub> concentration from the atmosphere  
 1Mt CO<sub>2</sub> ... in 1 year

Operating

**75**

SMO<sup>®</sup> lines

Up to

**0,8TWh**

Of Energy

## BioEnergies to avoid new CO<sub>2</sub>



Green Hydrogen



Stable Green Electricity

Decentralized, circular economy-based, modular systems to produce competitive, Zero-Carbon energy.

## CCU to store old CO<sub>2</sub>



Biochar



Activated Carbon



Carbon Black

Ecological products for existing ecological needs

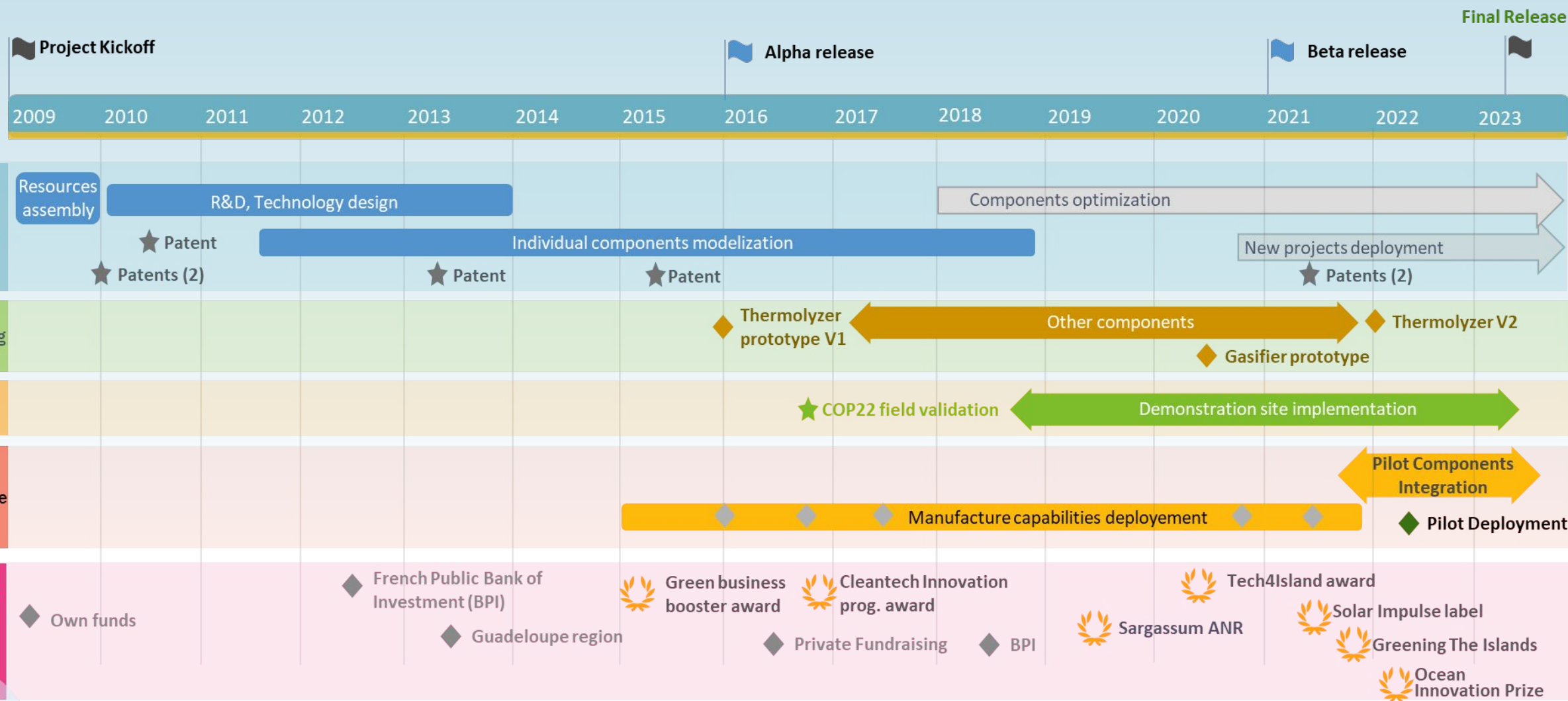
● We build SMO plants: autonomous, profitable, decentralized systems

- 1 Energy autonomy
- 2 Ecologic value
- 3 Economic value
- 4 Modular / Adaptable



**Bottom line:** SMO® helps remote territories in need of resilience rationalize their investments and maximize value creation by taking everything from waste

# From Inception to Setting up the first Commercial Pilots: a 10-year journey with visible results



# Use Cases :

## Feedstock:



Biochar



Activated Carbon



...waiting out the H2 market:

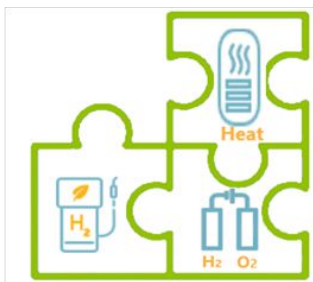
...in a French Island:

Food Security  
Affordable local feedstock  
Profit margin: **30%**  
CO2: **- 20 Kt /yr**

**Revenues**

*Not included:*  
Carbon credits  
Green energies  
Carbon black

## Electricity + Enhanced Energy Efficiency



...jump starting the H2 market:

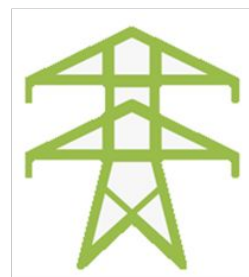
...in a French Island:

Energy autonomy and efficiency for public housing  
@Public electricity price  
*Part of a larger project*

**Revenues**

Electricity @Public price  
*Not included:*  
Tipping fee (waste)

## Electricity for Grid injection:



...entering the H2 market:

...in a Croatian Island:

Decentralized, Dispatchable  
Clean Electricity  
Profit margin: **19%**  
**Green H2 @ \$1.5/kg**  
CO2: **- 16 Kt /yr**

**Revenues**

Electricity @Public price  
Tipping fee (waste)  
Carbon credits @ \$35/t  
*Not included:*  
Carbon Black

# From sargassum to leading on energy transition?

- Limited space, no economies of scale
- Dependence on fuel imports
- Insufficient transportation networks
- Inefficient waste and wastewater management
- Electricity costs 2 to 10x mainland costs

## Most vulnerable, yet not leading the charge!

**Small Island Developing States** 58 SIDS in total



**SIDS**

**European  
Island territories**

**US  
Island territories**

**Population**

**65 M**

**20 M**

**5 M**

**2030 RES Targets**

**8 805 MW**

**3 000 MW**

**3 700 MW**

**\$4.0 Bn**

**\$0.9 Bn**

**\$1.7 Bn**

# Clean Green Profit Machines

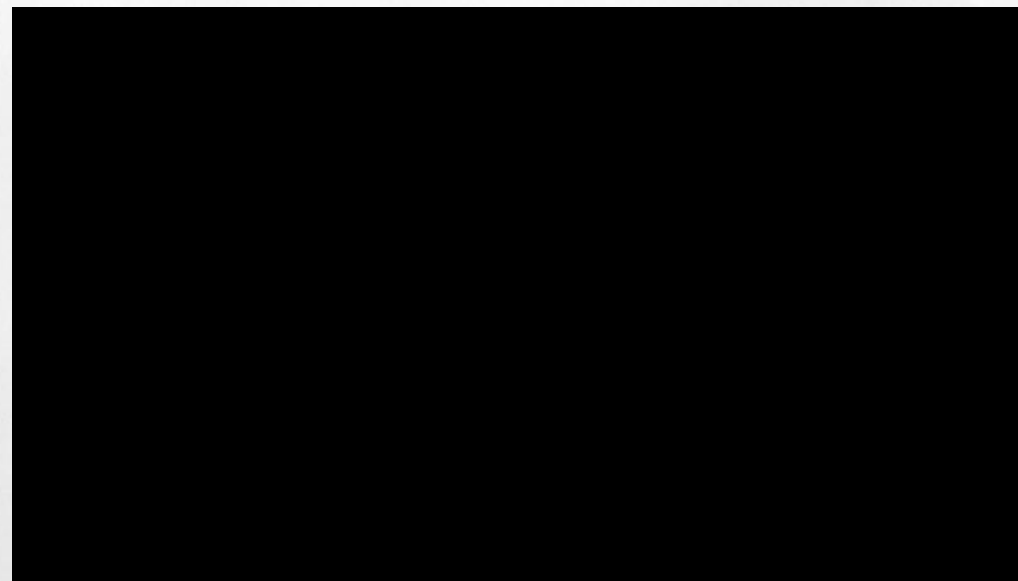


## Contact

y.encelade@smosolarprocess.com



● Solutions around the World



[www.smosolarprocess.com](http://www.smosolarprocess.com)



# Clean Green Profit Machines

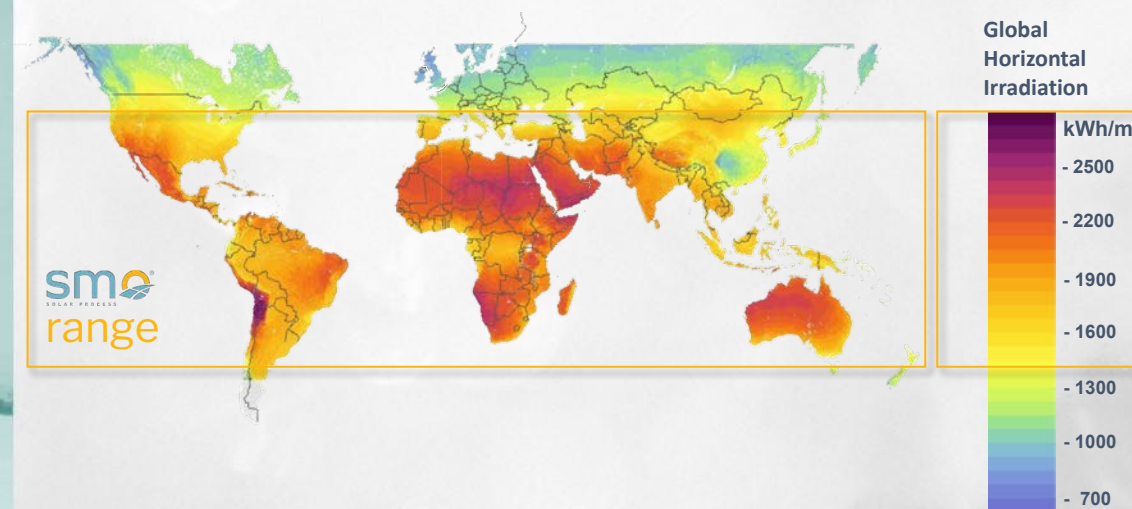


## Contact

y.encelade@smosolarprocess.com



## Solutions around the World



[www.smosolarprocess.com](http://www.smosolarprocess.com)