sakowin GREENenergy

NEW PRODUCTION SECTOR FOR LOW-COST CO_2 FREE HYDROGEN PRODUCTION DIRECTLY ON CUSTOMER SITE

SOUTH BEACH MODULE

Innovative proprietary low-energy CO_2 free methane decomposition process, for the production of gaseous hydrogen and solid carbon

Industrialize and market compact, modular and stackable units for **low-cost, CO_2 free production of hydrogen**

- *South Beach Module 2 kW (30 kg H_2 / day)*
- *South Beach Module 6 kW (90 kg H_2 / day)*
- *South Beach Module 80 kW (1,200 kg H_2 / day)*

Increase tenfold the energy capacity of r**enewable energies**

" A formidable lever for accelerating the energy transition to reach the objective of zero CO_2 emissions by 2050. "

BENEFITS

+ Highly competitive cost : Potential to reach ≤ 1 €/kg H_2 at the place of consumption, thanks to its low energy need, its low CAPEX and the valorization of the solid carbon* resulting from this process. Possibility of a green hydrogen cost lower than that of a grey hydrogen.

+ Accelerates the energy transition : no CO_2 or greenhouse gas emissions, increase tenfold the production of green hydrogen by renewable energies on the same land surface.

+ On-site production as close as possible to consumption : compact, modular and stackable solution that can be installed on an existing natural gas supply. Does not require storage or transport of hydrogen.

+ Numerous accessible customers : producers / distributors of gas and electricity, decarbonation of industrial processes, heating of buildings, land, rail, sea, air and military transport...

**market value of solid carbon between 1 € and 3 € / kg*

COMPLEMENTARY EXPERTISE

+ **G. Gatt,** founder with 30 years of international experience in startup development.

+ **Y. George,** Business Development.

+ **G. Trimboli,** Engineer Technical Design.

+ **PhD A. Martin Ortega,** R&D Engineer Laboratory Prototyping, physics and plasma expertise.

+ **High level CTO** (in recruitment) PhD. in physics, engineer with 30 years of experience in R&D and innovation. Expert in alternative energy solutions.

Exclusive co-development agreement with several experts and research centers in chemistry, physics and plasma for the development of Sakowin's intellectual property around this innovative process.

VALIDATED FEASIBILITY

+ 20 years of expertise on the process developed: patents, pilots, publications in related fields.

+ 1st prototype installed on a test bench at Sakowin's laboratory in the SOUTH region to ensure the developments necessary for industrialization.

MARKET ACCESS

+ 1st targeted application : Hydrogen Recharging Station for land, sea, air or rail mobility.

+ Advanced and positive discussions with first industrial co-development / licensing partners.

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sakowin
GREENenergy

FUNDING NEEDS & MILESTONES

200 k€ PRI
T1 2021
(in progress)

FUNDRAISING 3M€
2nd half of 2021
In equity or quasi-equity support
for BPI France
(application in progress)

Additional funding to be defined
+ Pilot assembly workshop for manufacturing
+ Deployment of the European and global market

Status of
Young innovative company

2020 2021 2022 2023 2024 2025 2030

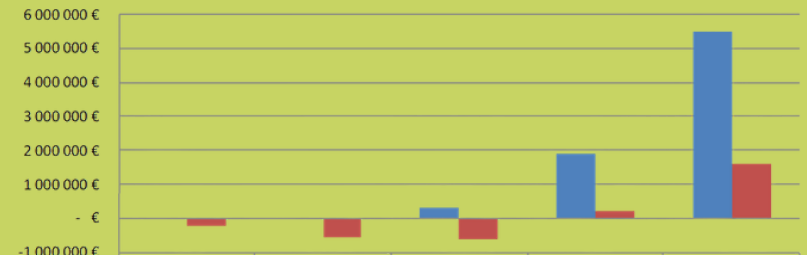
+ **Prototyping laboratory** for the evolution of a TRL 3 to TRL 7
+ **co-development licenses** for the industrialization of application solutions
+ **1st sales of South Beach Modules** in 2024
+ setting up a **network of subcontractors** for industrial production

Reaching a
market share of 8% of hydrogen stations in Europe

+ **Application and technological patents**
+ 393 k€ of capital
+ 500 k€ of cash
+ 250 k€ in R&D revenue

+ Setting up of **a pilot assembly workshop**
+ Launch the expansion of **international markets**
+ **H_2** production cost **between 2€ and 4€/kg** *(without taking into account the value of carbon and industrialization)*

KEY FIGURES



	2021	2022	2023	2024	2025
Revenue	- €	- €	300 000 €	1 900 000 €	5 520 000 €
Profit & Loss	-199 524 €	-548 621 €	-594 488 €	209 721 €	1 614 598 €
# OF EMPLOYEES	3	7	9	11	20

P&L + 2024

GM 76% 2025

REV. 75 M€ 2030

NO DIRECT COMPETITION

INDUSTRIAL AND COMPETITIVE H_2 SECTOR DEVELOPMENT

THEY SUPPORT & HELP US

MTC · Extracthive · bpifrance · Union Européenne · Région Bourgogne Franche Comté · Total Développement Régional · Laplace · Technopôle de l'Environnement Arbois-Méditerranée · Ex Materia · Région Sud Provence Alpes Côte d'Azur · Creusot Montceau Communauté Urbaine