

Smart, decentralized, waste-to-Hydrogen **ecosystems**, for a sustainable, Zero-carbon future

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● Yes, but...

Renewable Hydrogen needs to become part of an integrated energy system with the production of up to 10 million tons in the EU by 2030

Source: 2020 Hydrogen strategy for a climate neutral Europe

Meet market needs and still decarbonize?

Waste to Hydrogen technologies

Promising, but need to be improved

Issues to be addressed

- Environmental impact
- Efficiency
- Energy consumption (process parameters)

Standardized process

but adaptable to local conditions and waste inputs

Hydrogen

A huge substitution market worldwide

2020



9 Mt

2030



2050



- **Waste-to-Hydrogen processes will play a major role in multi-sector decarbonization...**

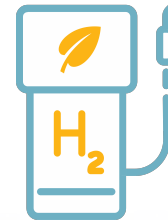


16 kg **carbon based waste** (MSW, biomass, organic, plastics, ww sludge...)

+

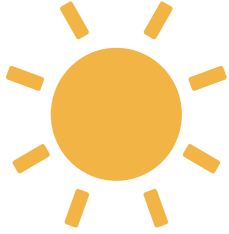


Clean electricity
(15-20% of plant output for **plasma gasification**)



1 kg **clean Hydrogen**

● How do we build sustainable Clean Energy systems ?



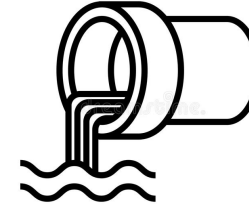
Solar heat
0 kwh electricity

+



16 kg **carbon based waste** (MSW, biomass, organic, plastics, sludges...)

+



9 kg
Wastewater



1 kg **clean Hydrogen**

We solve the Hydrogen equation by removing the need for electricity

● SMO Solar Process is a unique solar-powered Clean Waste-to-Hydrogen technology

One SMO Unit
2 MW



1



Complete Energy autonomy

2



Clean process with a
negative CO2 footprint

3

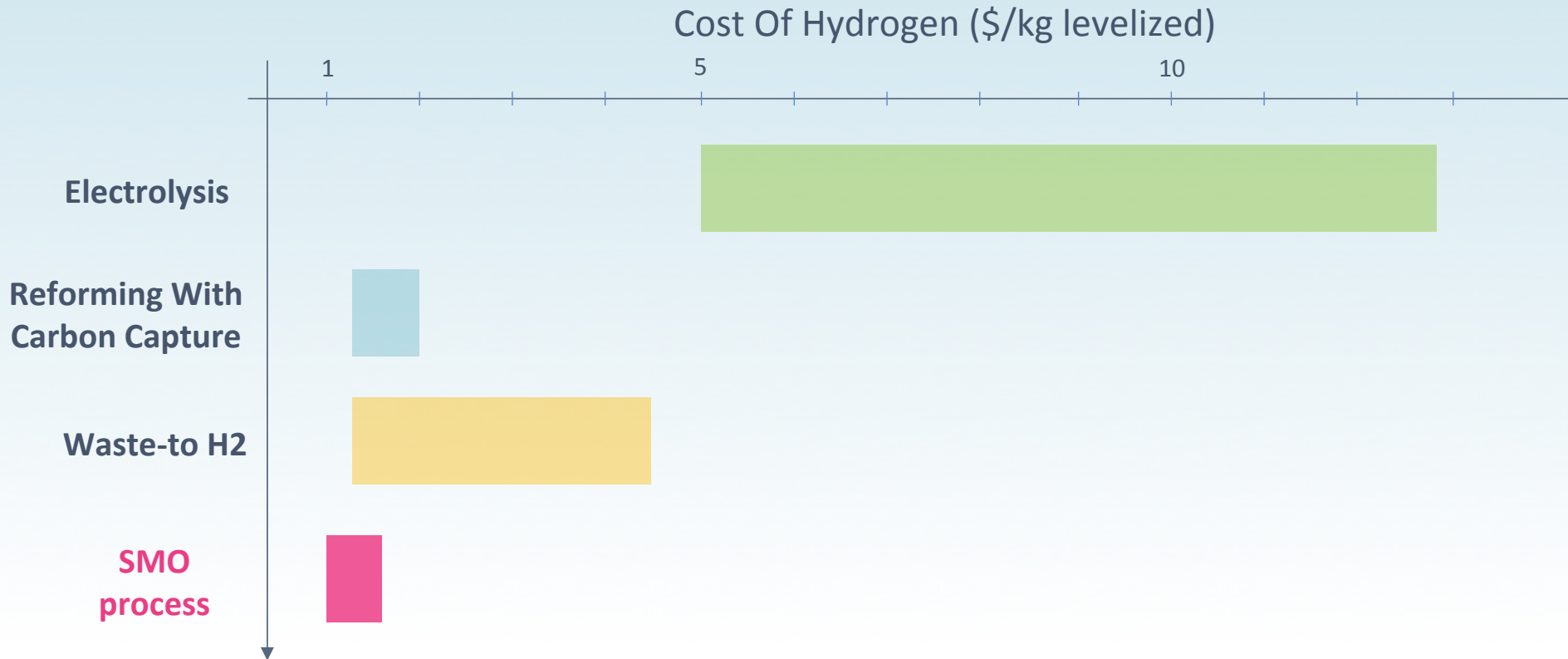


Modular tech → Adaptable
revenue model

Our Mission

Accelerate just energy transition, even in isolated areas, leaving no one behind,
by offering solutions to carbon-intensive sectors

● SMO technology offers drastically cheaper green Hydrogen



Thanks to SMO tech unique features, **we offer affordable clean Hydrogen**

● Cres-Lošinj pilot plant, operating in 2024

Partners:

- Active Solera
- Cres & Lošinj Municipality
- Cres & Lošinj Waste management agency

By 2024, we operate one SMO unit on Cres...



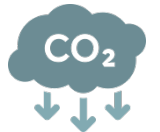
We treat
10 kt/yr
Waste



We produce
800 t/yr
Clean Hydrogen



We produce
1900 t/yr
Carbon black

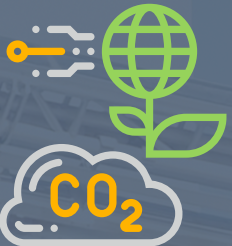


We remove
15 kt/yr
CO₂eq

● Adapting to local conditions for more benefits



Showcase a solution supporting the environment and the circular economy



Use waste in a smart waste-to-energy system and achieve CO2 neutrality



Become energy sufficient and autonomous through clean energy produced on the spot

40_t

Waste
Treatment/day

2.5_t

Clean
Hydrogen/day

20_{years}

Economic life
per plant



Clean electricity, any time

Clean, Green, Profit Machines



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