



*Thinking Energy*







# INDOX AT A GLANCE

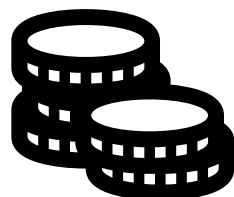


**SOLUTIONS TO TRANSPORT,  
DISTRIBUTION AND STORAGE OF FUELS,  
LIQUEFIED GASES AND AIR GASES**



**MORE THAN 150 WORKERS  
> 25 ENGINEERS**

**3 FACILITIES  
>40.000 m<sup>2</sup>**



**FACTURACIÓN > 25 M€  
CAGR > 10 %**

**DELEGATION IN 7 COUNTRIES  
EXPORT TO MORE THAN 50 COUNTRIES**





# BUSINESS AREA





# PRODUCTS

## KEY FACTS IN OUR HISTORY



**8 March 1967**  
**INDOX**



**2016**  
**NEW INDOX.**



**2018: New Facilities**  
**in Fonolleras**



**2022: Delivery more**  
**than 200 tanks**

**1996:**  
**First Cryogenic Trailer**



**2017:**  
**CRYOGENIC TANK MULTILAYER**



**2019: New Facilities**  
**for O&M**





# PROCESS ENGINEERING KEY FACTS IN OUR HISTORY



**8 March 1967**  
**INDOX**



**1999-CESPA BCN:**  
First LNG Station to fill 25 MAN Trucks daily without pumps.



**2011-TLF:**  
First TLF in South America to supply the biggest PSR: 25.000 Nm<sup>3</sup>/h at 70 bar

**1998-PSR:**  
More than 1,400 plants, to use for cogeneration power plants



**2000-ARGONON:**  
First inland barge on dual fuel



**2015-Liquefaction:**  
First plant 200 Tn/day in Equador



# NEW ENERGY VISION



***Fuels: Energy of  
the past.***

***LNG: Energy of  
the transition  
and of the  
present.***

***SOLAR: Present,  
Future.***

- ***INDOX ENERGY  
SOLAR***

***HYDROGEN:  
Future Energy***

- ***INDOX ENERGY H2***



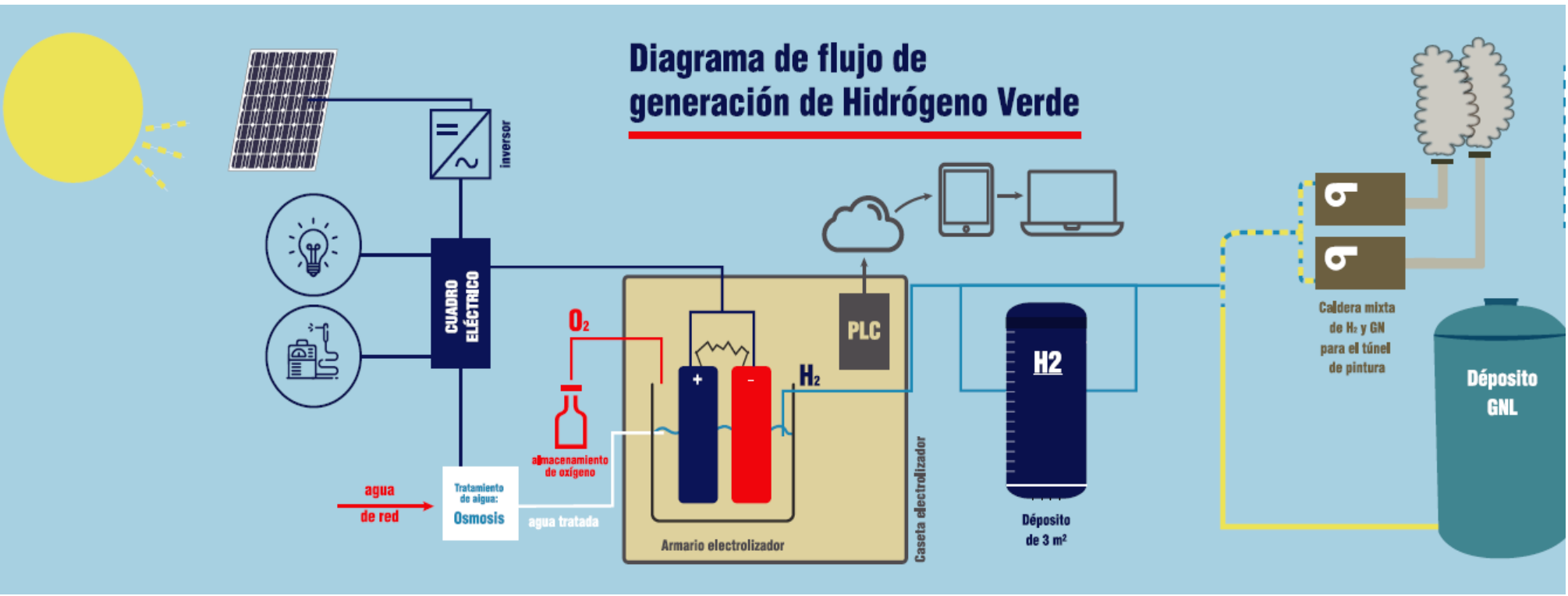
# WE BELIVE IN HIDROGEN



FIRST SME IN CATALONIA TO PRODUCE  
HYDROGEN FOR SELFCONSUMPTION



# HOW IT WORKS





# KEY FACTS OF OUR H2 PLANT



**Experimental  
Plant**



**Electrolizer 5kW  
H2 1 m3/h**



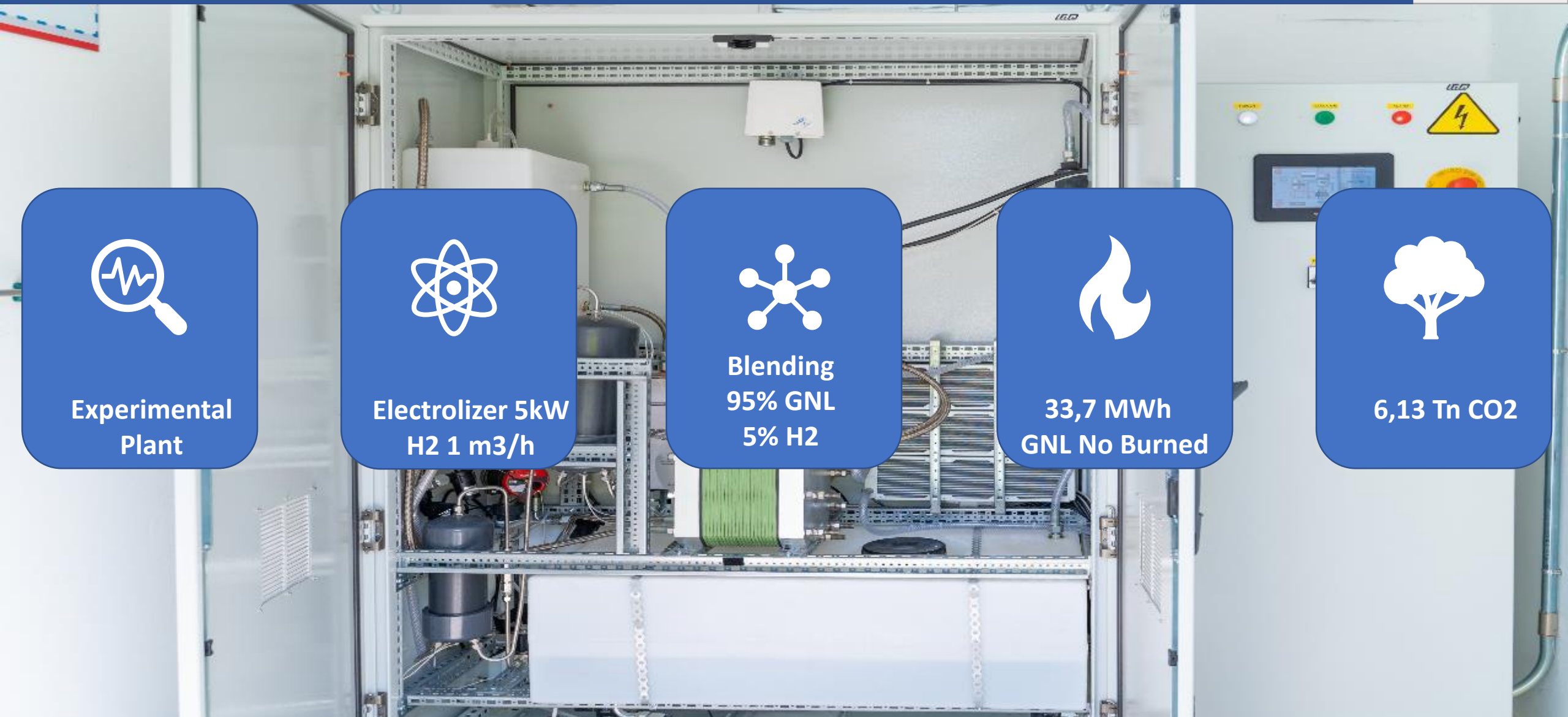
**Blending  
95% GNL  
5% H2**



**33,7 MWh  
GNL No Burned**



**6,13 Tn CO2**





# THE STORAGE DILEMMA?



Where you can storage more H2 energy?

H2 Liquid  
Density= 70,8kg/m<sup>3</sup>

H2 GAS  
Density= 0,09 kg/m<sup>3</sup>



# HIDROGENO VS GAS NATURAL

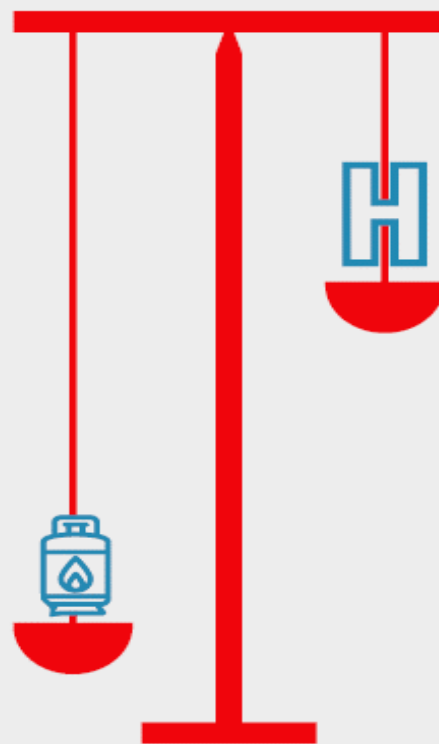


El Hidrógeno precisa  
**3 veces**  
el volumen que  
el Gas Natural



para conseguir  
el mismo calor

El Hidrógeno es  
**10 veces**  
menos denso

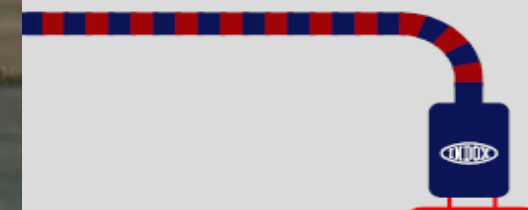


que el Gas Natural

El Hidrógeno tiene  
**-253° C**  
de punto de licuación

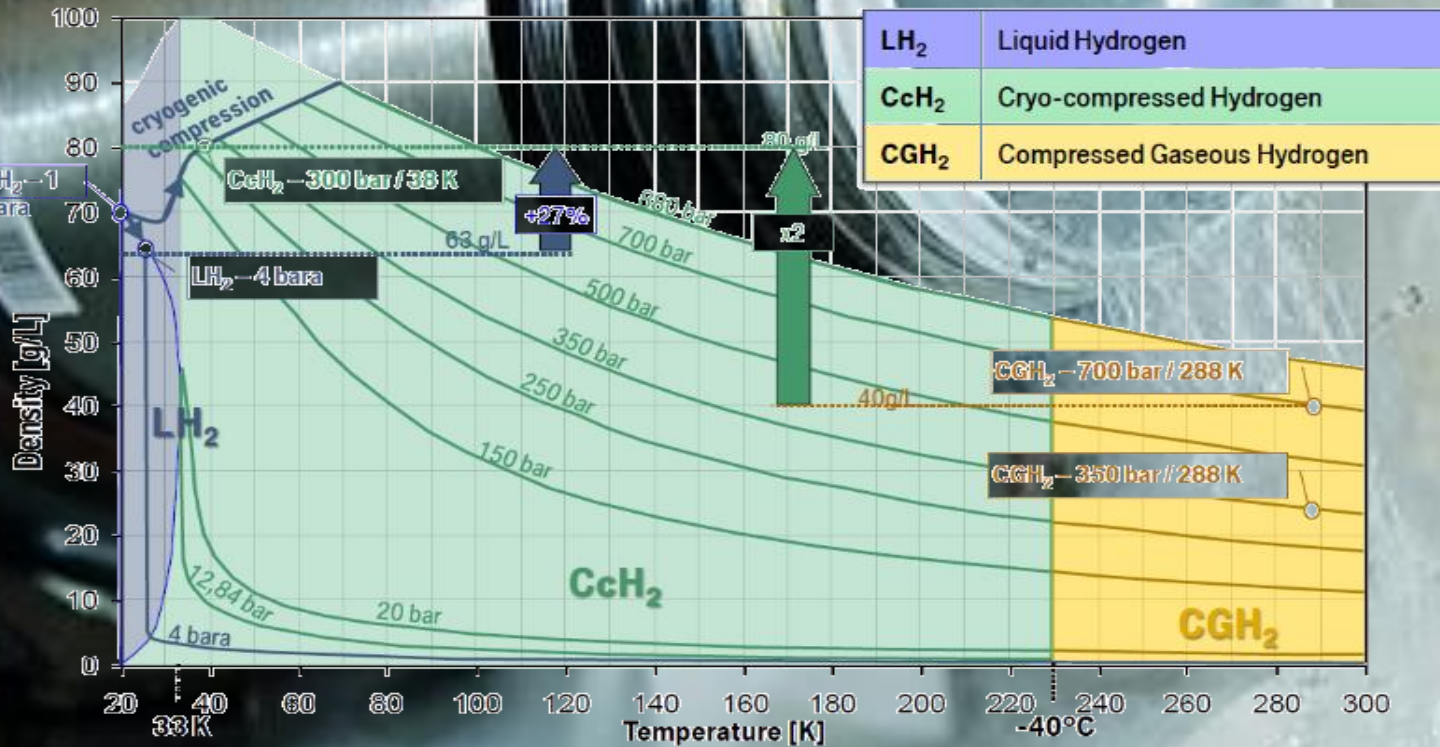


El GNL a  
**-162° C**



El reto es  
el almacenamiento

# INOVATION: OPTIMIZATION CONDITIONS H2



- Optimize storage/transport conditions
- Cryogenic H<sub>2</sub>? At -250°?
- Compression at 100 bars + up to -190°. ?
- University/reference centers agreements
- Let's be pioneers....again



# CHALLENGE



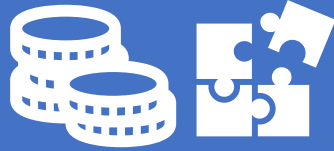
OFF TAKERS



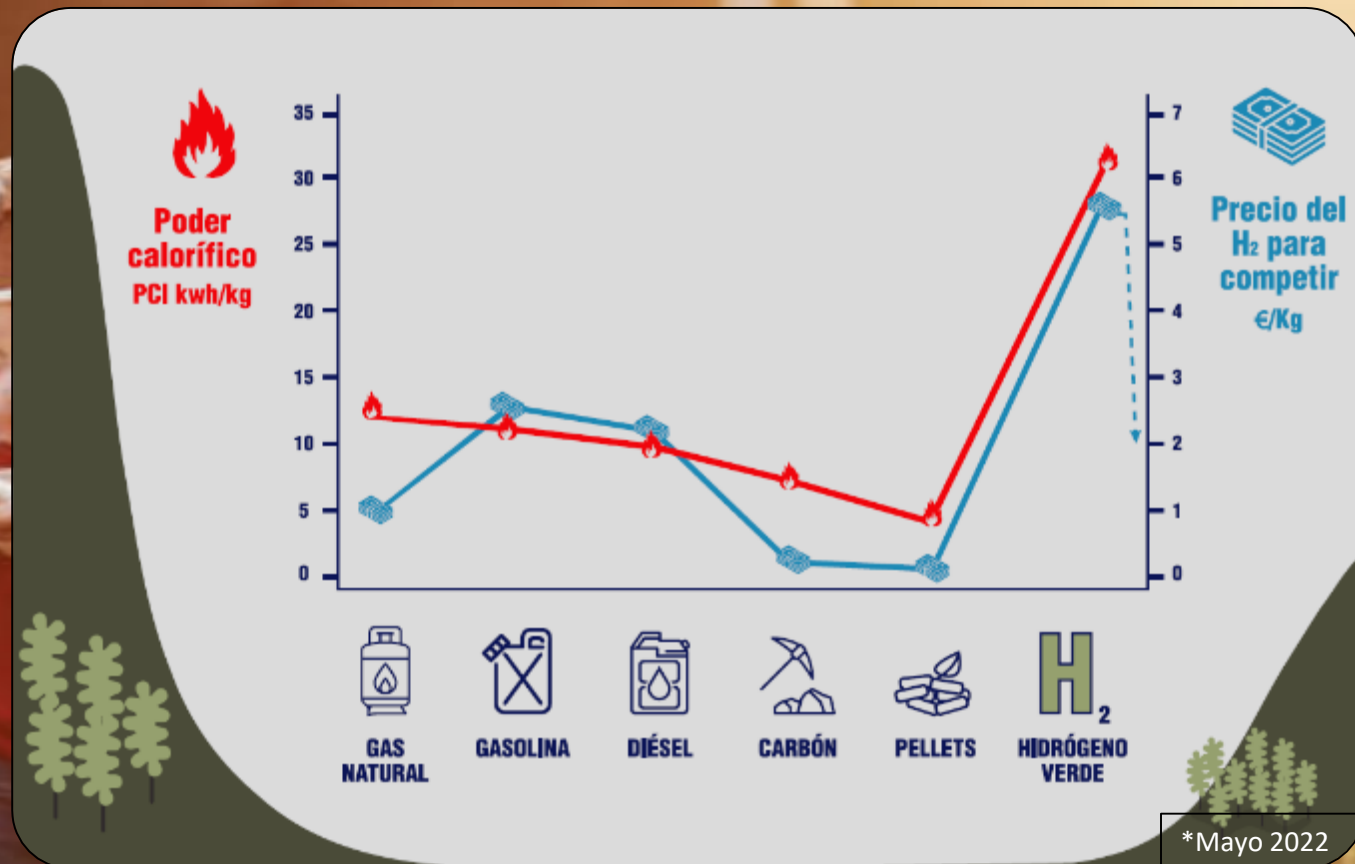
TECHNOLGY  
OFFER



KNOWLEDGE &  
TALENT



PRICING



\*Mayo 2022

# NUESTRA PLANTA DE FONOLLERES



*Thinking*  
Energy





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