IBERIAN RESEARCH CENTRE ON ENERGY STORAGE

"Hydrogen: The missing piece of the puzzle for climate neutrality?"

March 21st, 2023

Irene Palomino

Delegate of Fundecyt-Pctex and Supporting entity of the Iberian Centre for Research in Energy Storage (CIIAE) Spain & Portugal









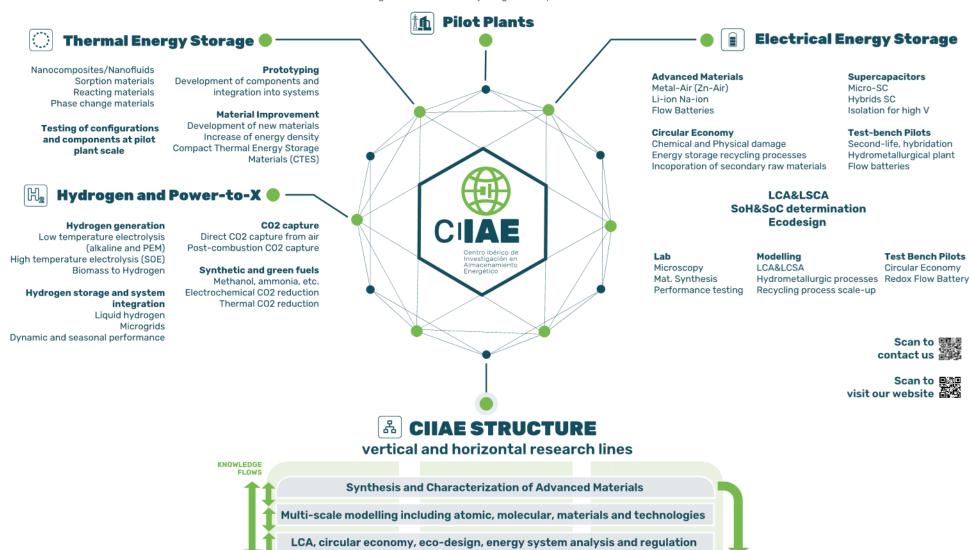






On the MW scale Testing and validation of systems and components Plants designed to be flexible and fully controllable

Dedicated building with 2000 m2 and adjoining workshops and outdoor facilities









Pilot Plants:
Hydrogen and Power-to-X, flow battery, thermal storage, circular economy and test bed



4th November 2022 was a key date

https://scholar.google.com

Ministerio Estrategias y planes

Convocatorias Investigar Innovar Servicios





Research structure and strategy

Pilot plants: Flow battery, Hydrogen & Power-to-X, thermal storage, circular economy and microgrid

LCA, circular economy, techno-economic analysis, energy system analysis and regulation

Multi-scale modelling including atomic, materials and CFD

Synthesis and characterization of advanced materials & prototyping

Electricity Storage

Hydrogen and power-to-X

Thermal storage





Pilot plants

- Testing and validation at high TRLs
- Public-private collaboration
- Own and third party developments

Dedicated building with 2,000 m2 and attached workshops and outdoor facilities



PILOT

Plants designed to be flexible and fully controllable

Testing and validation of systems and components



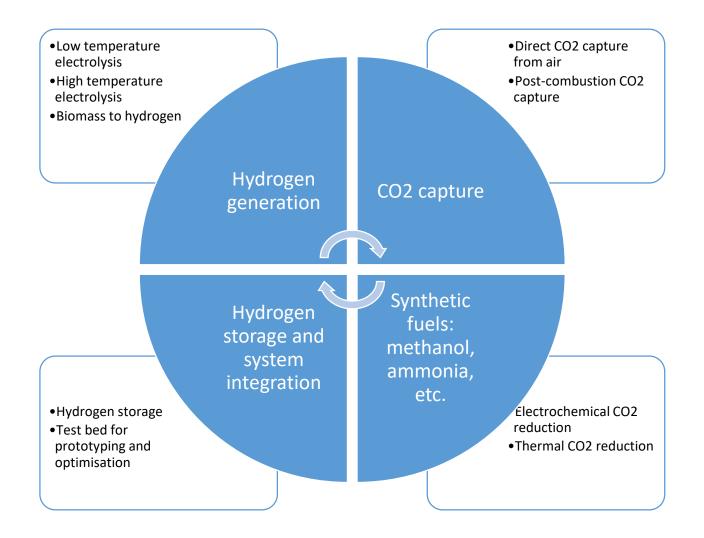
PLANTS



On the MW scale



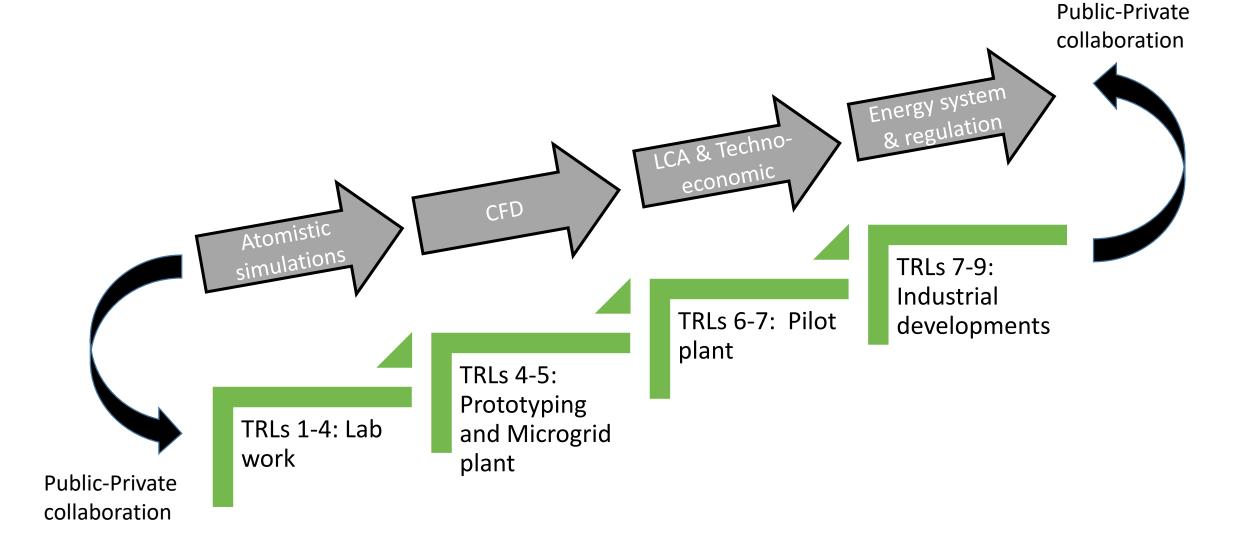
Hydrogen & Power-to-X department



Lab work & simulations (atomistic, CFD, LCA, energy system analysis)



Scaling strategy





Thank you!!!

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