

European Green Hydrogen Acceleration Center (EGHAC)

March 2021





EIT InnoEnergy Objectives

- Ensure security and safety of supply
- Reduce costs in the energy value chain
- Reduce CO₂ emissions
- Improve European competitiveness
- Remove barriers to innovation
- Encourage sustainable growth
- Create jobs

European & US coverage



EIT InnoEnergy Activities



Human Capital: Master Programs and professional learning



Incubation: Investing in early-stage start-ups and scale-ups



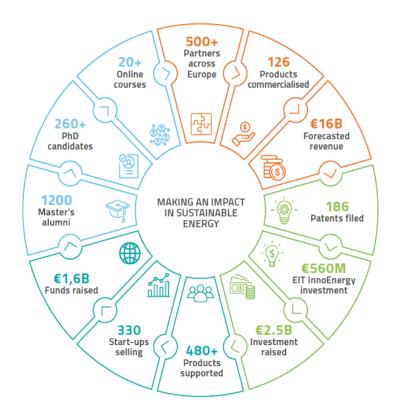
Innovation: Investing in product development

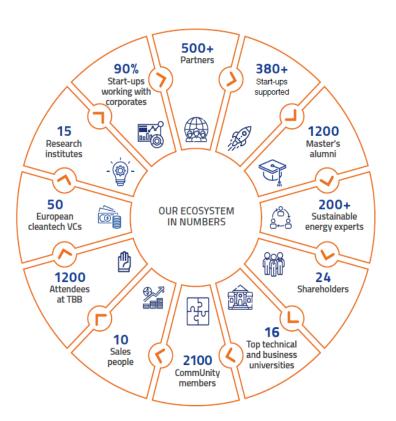


Setting up Industrial value chains: European Battery Alliance (EBA), European Green Hydrogen Acceleration Center (EGHAC), European Solar Initiative (ESI)



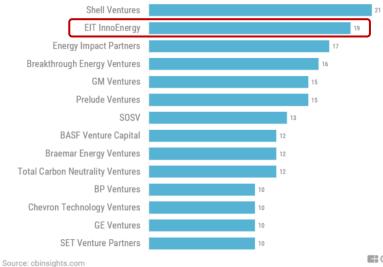
Key Statistics





Top investors in renewable energy tech

By unique deals, 2016 - 2020 YTD (12/8/20)



CBINSIGHTS





EBA250

This cooperative ecosystem gathers the European Commission, interested EU countries, investment institutions and key industrial, innovation and academia stakeholders

EIT InnoEnergy has been trusted by the European Commission to drive forward and promote EBA250 activities, acting as network manager and project facilitator





EU positioning

- 1. Top Political buy in
- 2. Becoming family across services
- 3. European Batt Alliance membership

Market/Customers

- 1. Intel feed, info search ...
- 2. Market info SuperCap, Electric bus, Industrial etc.
- 3. Franchise bus. model



Access to Finance

- 1. 3XX M€ inv., ease cash flow
- 2. Brokerage EIB/EFSI
- 3. InnovFin EDP
- 4. Soft Bank, BIP, ..
- 5. Vinnova/Swedish Energy Agency



Build/manage Adhoc Ecosystem

- 1. EBA
- 2. Brand Synergies (ABB, Uppsala, KTH,.)



northvolt



Access to Human Capital

- 1. Marie F.
- 2. "Agreement manager"



Technology enhancement

- 1. Freedom To Operate
- 2. ESS tech and market req
- 3. IP strategy
- 4. Re-Volt



Enrich Value Chain

- 1. Cobalt brokerage
- 2. Li supply chain
- 3. European Battery Alliance

Governance Strategy

- 1. Advisory Board (2 members)
- 2. I-Project guidance, structure, planning

EGHAC: European Green Acceleration center (1/6)

Fundamentals





Why Green Hydrogen?

- Step change in decarbonisation of industry
- Enabling sector coupling
- Create new economy

Why now?

- Essential to reach climate neutrality by 2050
- Business cases in the money
- Enabling framework (e.g. Green Deal)

Approach & scope

- Capitalize on European Battery Alliance
- Value chain approach
 - Steel, Cement, Shipping, HGV, Fertilizers
 - Replicable industrial projects
- End-customer/off-taker driven
 - Pull to make end products CO2 free
 - E.g. Car manufacturer Green Steel

Industry led



with impact

1200TWh Energy

500,000 Extra Jobs

€100 billion Investments





Value chain focus and customer pull are enablers for change

Traditional model: supplier and off-taker optimize their margins in individual transactions, leading to uncertainties, additional risks and **sub-optimal** outcomes. Final products are **"pushed"** to end consumer.











Leverage ecosystem to de-risk, boost and speed-up business cases through six dimensions, plus Business Investment Platform

Social & individual

Provide independent, fact based information to all relevant stakeholders



Supply Chain

Enable the access to all players of the enabling supply chain elements



Access to Finance th

Access to finance through: **Business Investment Platform** process

Technology

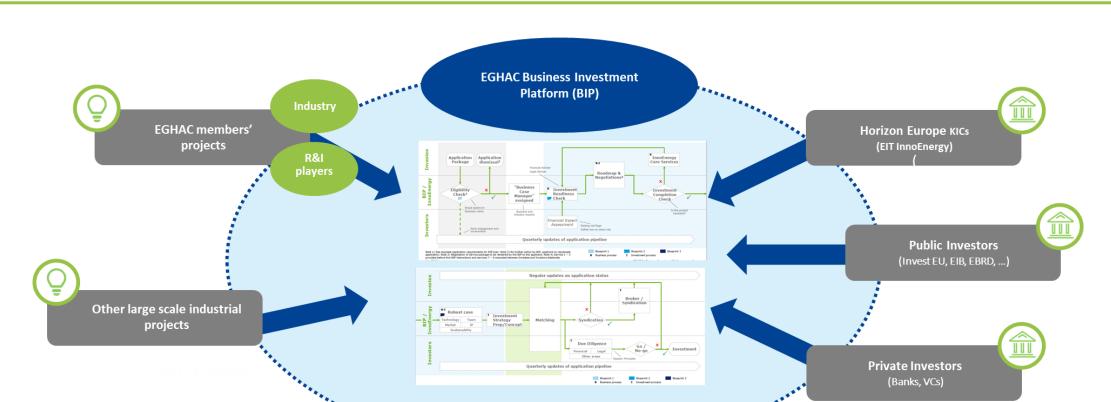
Monitor and drive innovation across the entire value chain

Value Chain / Market / Business Model

Develop value chains regarded as strategic and economically viable at European level



Set-up & steer the development of programs on all levels of education



- Co-creation of consortia across value chain
- Added value services for reaching a bankable business case:
 - Offtakers, Investors (equity, debt, ..), Eq. Suppliers
- Leverage InnoEnergy ecosystem to de-risk, reduce time-to-market and scale-up

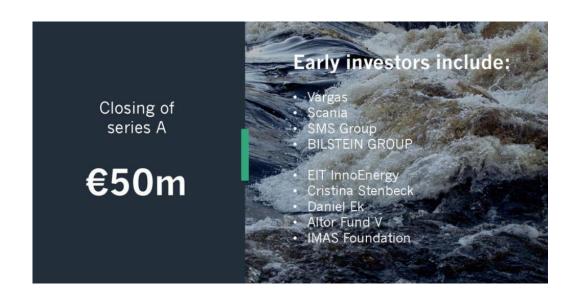
Download BIP form on EGHAC.com

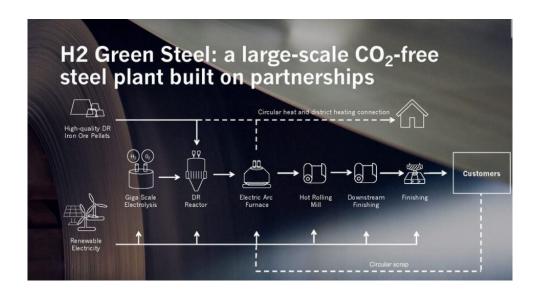




5 Mio tonnes of CO2 free steel, 2.5B€ investments and 10.000 direct and indirect jobs

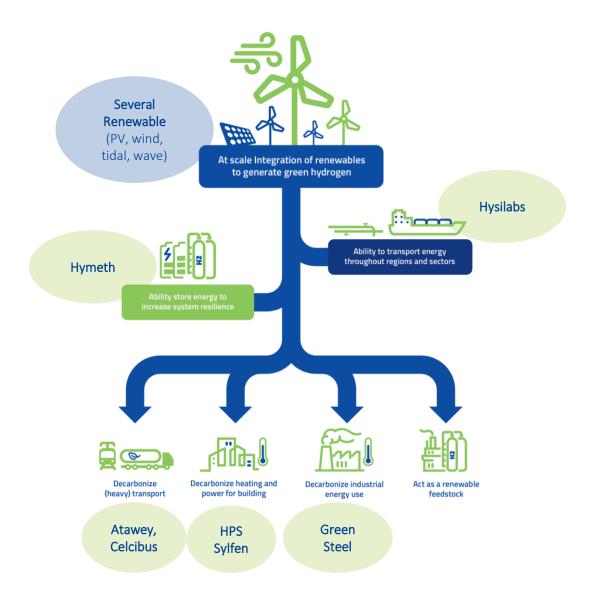
- Greenfield, fully electrified and using Green Hydrogen
- Value Chain approach, including off-taker
- EIT InnoEnergy among initial strategic investors in series-A financing
- Inspiration and possible blueprint for replication to other industries







Well positioned to built upon experience



EIT InnoEnergy has invested in 15+ H2 related innovations across the value chain in recent years, in different stages of maturity. A sample, with their operation/commercialization (industrial scale) date, are:

Hymeth: Electromagnetic electrolysis (2022)

Hysilabs: Transport dissolved in liquid (2025)

Atawey: H2 infrastructure for mobility (2017)

Sylfen: Long term storage for (residential) buildings (2018)

HPS: Home Heat & Power for premium segment (2018)

Liquid Wind: Decarbonizing industry & maritime transport (NH4) (2023)

Celcibus: Membranes for fuel cells (2022)

And some 20+ innovations and products in massive renewable generation:

Off-shore: PPI floating off-shore, 3*8MW (picture below) (2019)

Tidal: Minesto (2019)
Wave: CorPower (2023)

PV: NexWafe (2019)







Please refer to **InnoEnergy.com** for details on the assets

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www.InnoEnergy.com









