Pitch of project ideas

Part 2: Technical / Content

Please send part 1 (company information, separate document) and part 2 to: eureka-green-hydrogen(at)dlr.de (until 30th September 2021)

Country of your company/institution	
Potential target country/countries (if known)	☐Belgium (Flanders) ☐Canada ☐Finland ☒Germany
	☐ Ireland ☐ The Netherlands ☐ Portugal ☐ Spain
	⊠Open
Type of your company/institution	
	Technology Institute □University □Other:
Type of partner sought	
	Technology Institute ⊠University □Other:
Which competences or knowledge	Technology/Pilot Project at any part of H₂ value chain,
should the partner bring in?	directed to housing, SME sectors.
What is his role or what are his tasks in the envisaged project?	Technology development/proof of concept on Pilot
	Projects. Special interest in Power to Power and Power to
	mobility applications.
Does a consortium exist already?	No
Technical Area Keywords of your project idea (multiple selection possible)	
N.B.: For entities from Germany, please consult <u>Call for proposals for cooperation projects on</u>	
green hydrogen with EUREKA countries - BMBF for details.	
☐ Material ☐ Infrastructure ☐ Sensors ☐ Logistics ☐ Monitoring, control ☐ Efficiency	
□Safety ☑Integration □AI □Digital control □Grid □Interface □Storage	
☐ Transport routes, analysis ☐ Certification ☐ Economic aspects ☐ Regulatory frameworks	
☐ Market models ☐ Acceptance ☒ Value chain ☒ Processes ☒ Manufacturing ☒ Usage	
☑Design ☐Other:	
Non-German entities (multiple selection possible)	
☑ Other (please specify): Mobility	
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The Pitch: What do you want to do? (1200 characters max.) Please briefly describe:

- the objectives of the proposal and how they will be achieved,
- the product and degree of technological innovation/novelty/market etc. need,
- market potential (e.g. IPRs etc.)

At H2Vector we aim to supply efficient and affordable clean tech for energy applications.

We develop products that can be integrated around the H₂ chain value. Our proposal, the **Vector Series** is a green Hydrogen Energy Management System "HEMS" that works around the whole hydrogen cycle. The application is a *Power to Power* system that can be allocated at all renewable sources.

Our first prototype, the *Vector 10*, produces green hydrogen through electrolysis when the system has energy surpluses. The hydrogen is storage outside of the equipment to be use later on stationary and mobile applications.

For stationary applications, the equipment delivers electricity and heat at the facility. For mobile applications, the equipment delivers electricity and hydrogen that can be allocated into electrical applications (battery and/or fuel cell driven).

Our **Vector Series** are developed for housing, businesses and SME users that seek for maximizing the facility renewables potential and that looks for a solution to ensure a safe and sustainable energy source. With our Vectors, we seek to provide an overall solution for end users main necessities: power – heat – mobility.

At H2Vector we are developing R&D projects to tackle hydrogen main issue: storage. We are also developing FCV and mobile enabler technologies that can be installed in houses and SME's.

Market size around the globe in 2022: 150 M USD / 2023: 300 M USD.