



ATENA

FUTURE TECHNOLOGY

## PROTOSTACK

# *Tubular proton conducting ceramic stacks for pressurized hydrogen production*

### *Title*

Tubular proton conducting ceramic stacks for pressurized hydrogen production

### *Project*

PROTOSTACK will create a radically new, compact and modular PCCEL stack design with integrated hot-box for operation and delivery of hydrogen up to 30 bar. The stack will be demonstrated at 5 kW and provide a pathway for further scale-up to systems of hundreds of kW. These achievements will be an important proof of technological feasibility that will attest to the advancement of PCCEL technology from TRL 2 to TRL 4. To achieve its ambitious goals, the project consortium gathers research and industry partners that are world-leading within proton ceramic technologies, with recognized expertise relevant to the research and development of electrolyzers, membrane-reactors, materials, electrochemistry, and process engineering. The overall consortium will engage in wide communication and dissemination activities to ensure maximum impact of the project's outcomes and the industry partners have high ambition for business exploitation and commercialisation of the PROTOSTACK technology.

### *Info:*

*Type of action:* RIA

*Timing:* 36 months

*Website:* to be defined

*Budget:* 2,497,014.00

### *Call:*

HORIZON-JTI-CLEANH2-2022-1

### *Funding*



Cofinanziato dal meccanismo per collegare l'Europa dell'Unione europea

### *Coordinator*

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