EDEN project

Illustrations and communication material

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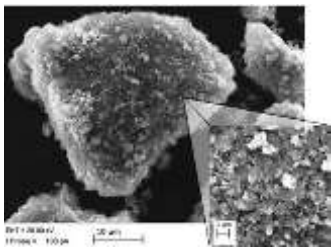
30 June 2016

Project acronym: ***EDEN***
Project full title: High ***E***nergy ***DEN***sity Mg-Based metal hydrides storage system
Grant Agreement no.: *303472*

OBJECTIVES ACHIEVED



Development of H2 storage material in form of Mg-based metal hydrides nano-composites, with high H2 uptake capacity, improved of catalyst layers.

Development of a high reliable storage tank for the specific proposed material.

Integration of additional sub-components for the improvement of the efficiency profile (i.e. heat recovery system through thermal fluid and/or by thermo electric device)

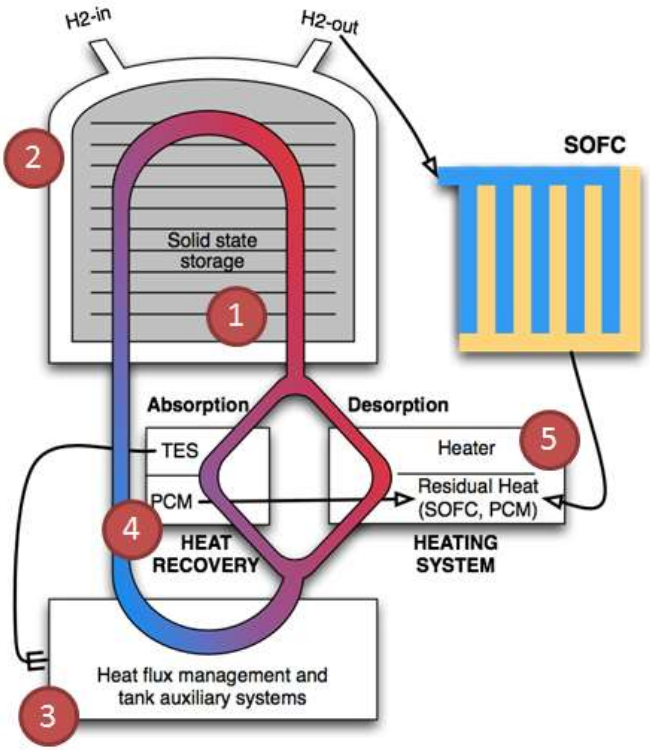
Integration with a SOFC for compatibility with the realized process in order to realize and test an integrated system for stationary, portable and stand-alone applications

Market Deployment Plan for high volume industrial production of units for distributed applications

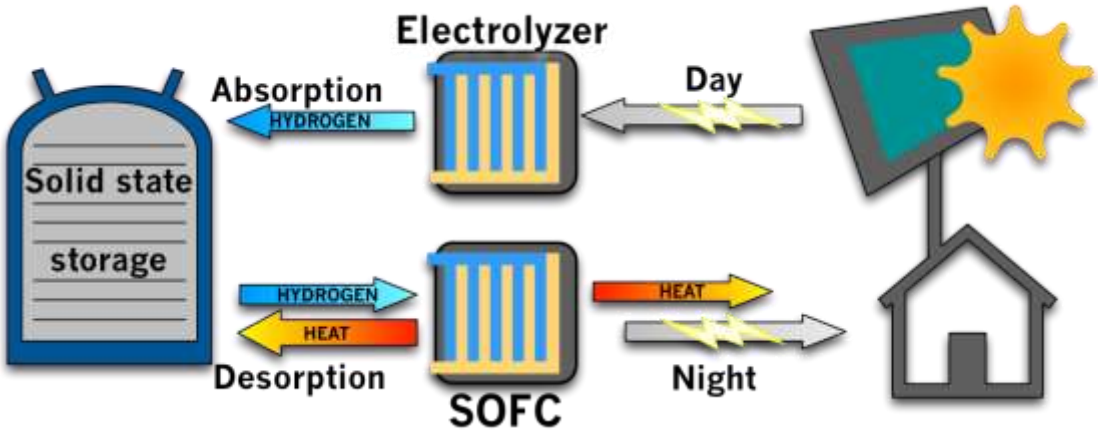
EDEN logo identity

The EDEN logo has been designed having in mind the European flag: 28 small hydrogen molecules coloured in yellow like the stars in the EU flag represent the 28 EU member state, while the main color of the EDEN lettering is in blue. Moreover the ED letter of the logo has been designed to refigure the absorbing material, stacked in planar layer and confined in the EDEN tank. The hydrogen molecules outside the ED recall the position of the stars in the flag, while the hydrogen molecules within the ED recall the action of store hydrogen in a medium.

EDEN concept

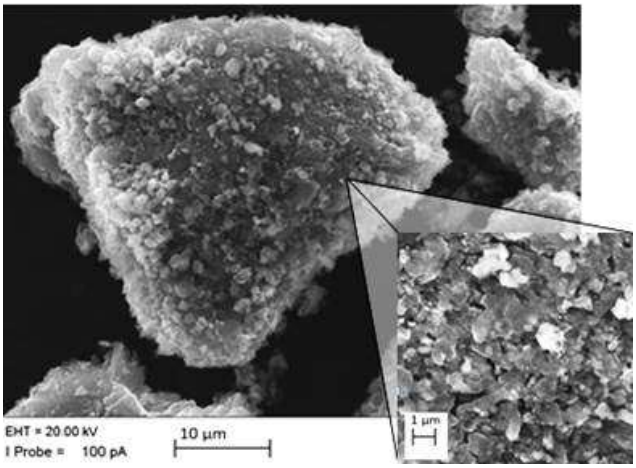


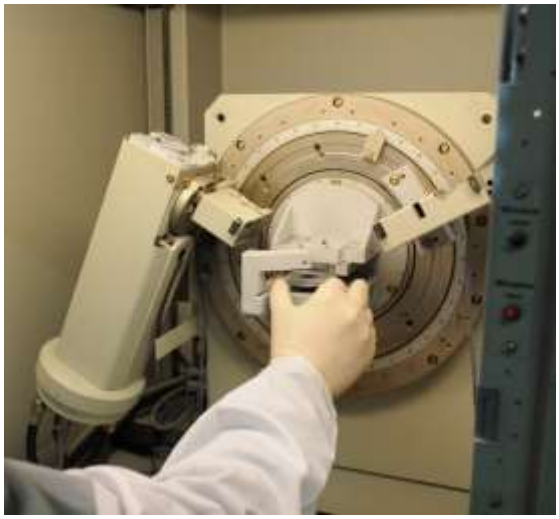
EDEN realizes a full scale prototype composed by a storage tank, a SOC operating in reversible mode and an overall integrated system provided of fuel and thermal management in a full P2P energy system.
The system architecture will combine five main sub-systems:
1) The storage material, compacted in pellet with specific design
2) A light, thermal insulated tank
3) The heat flow managing system, heat carrier and pumps
4) The heat recovery system, equipped by TES and PCM (active during hydrogen absorption)
5) The heating system (active during hydrogen desorption) connected with the SOFC



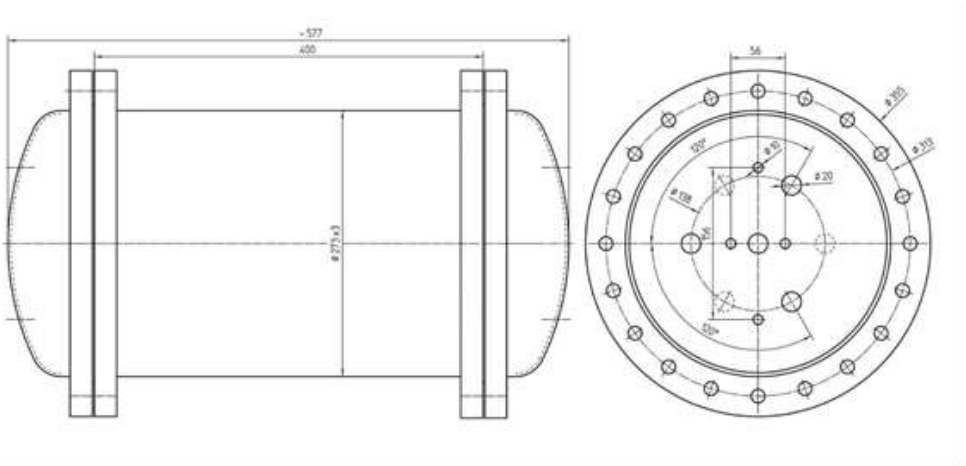
EDEN photos

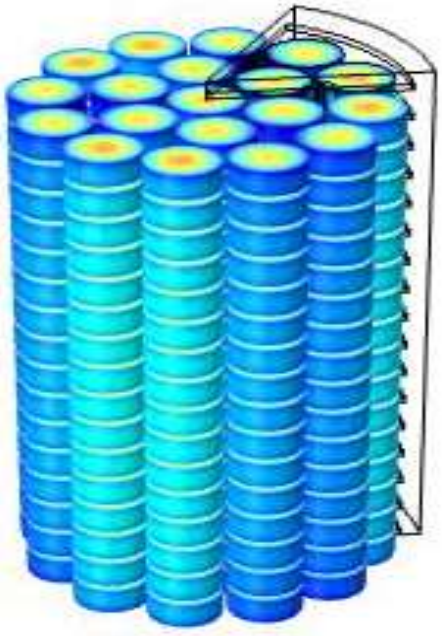
<u>Mg based storage material</u>

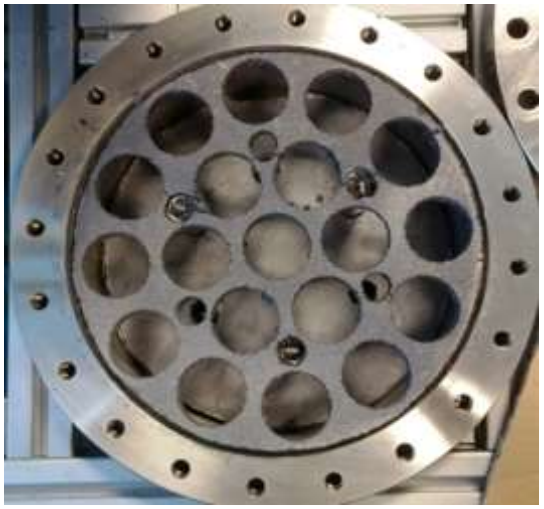


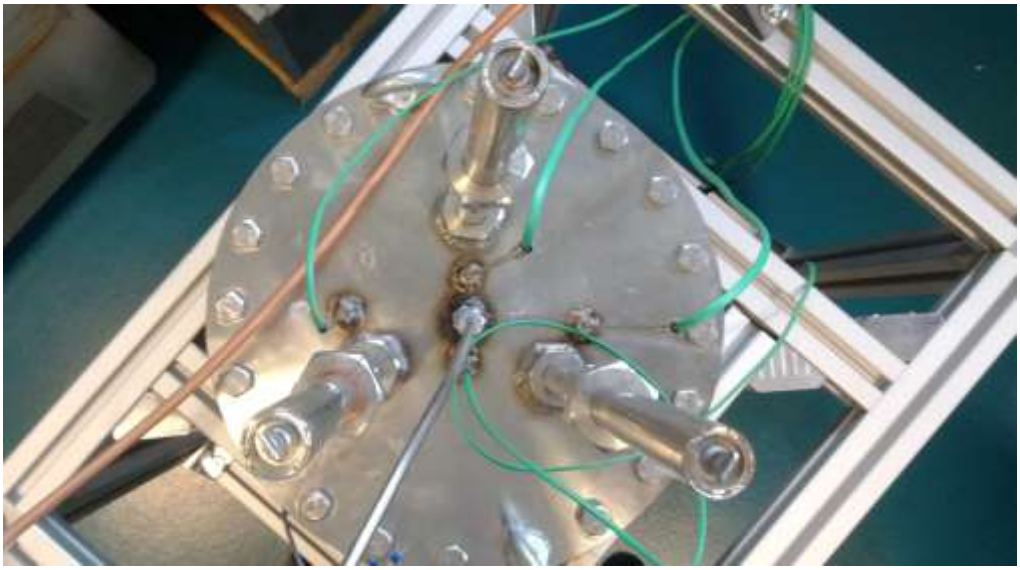


EDEN tank

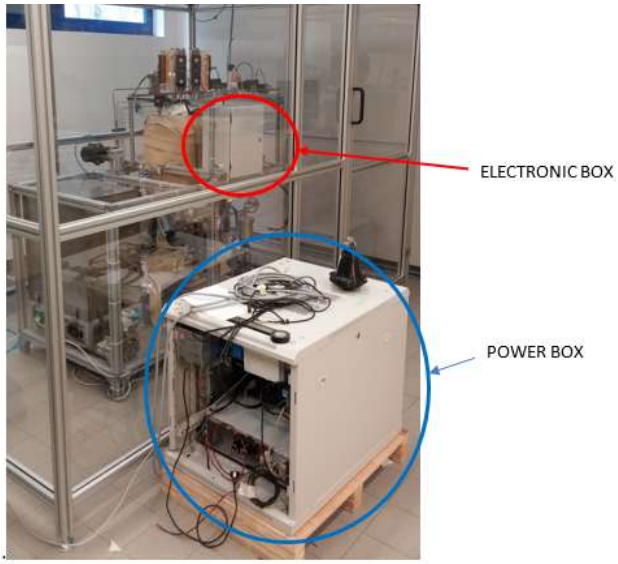


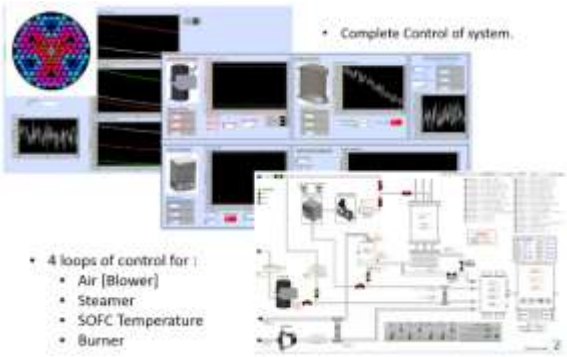






P2P system prototype





Dissemination Events

EDEN media

TV show “Dedalo” on Ada Channel: https://www.youtube.com/watch?v=TdLuMaMxEtE

TV reportage on Italian National Television (RAI)
http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-eb022fa3-45a6-4e2...

TV reportage on Italian National Television RAI – TGR Trentino – Alto Adige
http://www.rainews.it/dl/rainews/TGR/basic/PublishingBlock-5a42b960-0dad-41fe-b247-d807b49a470f.html

TV reportage on Italian Regional Television RTTR – TG
http://www.radioetv.it/rttr/programmi/item/29-rttr-notizie#monitor

Full updated list available on EDEN official website

PROJECT BROCHURES AND BRANDING

Technical Leaflet

Project Brochure

Dissemination Postcards

EDEN WEBSITES

http://www.h2eden.eu/ **EDEN OFFICIAL WEBSITE** The website of the EDEN project was published in *M3* and shows: ▪ A general introduction to the project, the objectives, the expected results, the milestones, the detailed description of the consortium, etc; ▪ Description of the possible application of the developed technology; ▪ A networking platform to get in touch with project partners in order to involve all the possible stakeholder in the project; ▪ Description of the consortium and FCH JU initiative; ▪ Downloadable material. The website will remain available online until end 2017	
http://hydrogen.fbk.eu/ **EDEN FINAL DISSEMINATION EVENT WEBSITE**	

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