



PEM ELECTROLYSERS FOR OPERATION WITH
OFFGRID RENEWABLE INSTALLATIONS

ELY4OFF Website

Deliverable 7.1



GRANT AGREEMENT
700359



D7.1 ELY4OFF Website

Grant agreement	Fuel Cells and Hydrogen 2 Joint Undertaking
Project no.	700359
Project full title	PEM ElectroLYsers FOR operation with OFFgrid renewable installations
Project acronym	ELY4OFF
Deliverable no.	7.1 (included in Task 7.2)
Title of deliverable	ELY4OFF Website
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Participant(s)	
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Dissemination level (PU/CO/CI)	PU
Type (R/DEM/DEC/OTHER)	DEC
Total number of pages	8

Abstract/Summary:

This deliverable shows the structure of the website of the project, active since 28th September 2016

Website structure

The website of the project has a long home page, and five sections: project, partners, downloads, press, and contact. In the following pages screenshots of these sections are included.

Home page

The logo and the navigation menu are located at the top.

There is a slider showing periodically some pictures provided by the partners, like the photovoltaic panels to be used during demonstration, and others showing PEM electrolyser stack fabrication similar to what will be developed within ELY4OFF. As the project makes progress, the pictures will be updated with more representative ones.

Then it can be found an illustrative diagram of the scope of the project, as well as 4 key messages defining the main characteristics.

The most recent news are shown afterwards. A short text appears when the mouse crosses the image.

The logos of EU and FCH JU (and links to their respective webpages) and the Grant Agreement identification are located next.

Finally, the partners' logos and links to their corporative websites are at the bottom.

Project

A short description of the objectives of the project, partners involved and their contribution are presented in this section.

Partners

Below the logos of the 5 partners involved in the project, a description of each one, relevant experience, main tasks and responsibilities in ELY4OFF, and an introduction of the main people involved are presented.

Downloads

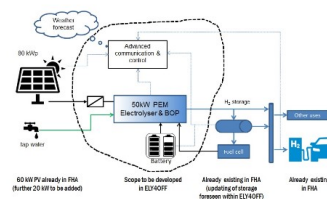
This section will be the repository of all the public reports, presentation or any other material that will be elaborated during the development of the project.

Press

This section will contain all the press news, events, milestones, etc during the development of the project.

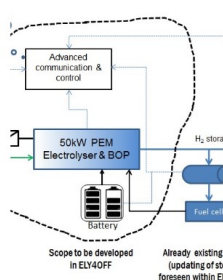
Contact

There is a basic form allowing any visitor of the web to contact FHA for whatever reason.



- ✓ Design and engineering of a robust, flexible, highly efficient and cost-competitive 50 kW PEMWE
- ✓ Direct coupling to photovoltaic generation.
- ✓ Off-grid demonstration in the premises of the Aragon Hydrogen Foundation
- ✓ Business model and exploitation strategy considered

Latest News



This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking under grant agreement No 700359. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and Hydrogen Europe and N.ERGHY. The budget of the project is 2.315.217€

More info: www.fch.europa.eu

Our Partners



Project

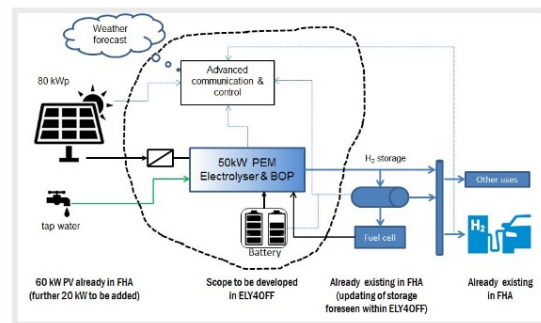


ELY4OFF consortium includes a PEM electrolyser manufacturer (ITM Power), research organizations (CEA, FHA) to develop and integrate the whole installation and develop an appropriate business model and exploitation strategy and two companies including a SME specialized in power electronics and a large company specialized in control and communication systems (INYOOM, EPIC POWER).

This project has received **funding from the Fuel Cells and Hydrogen 2 Joint Undertaking** under grant agreement No 700359. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and Hydrogen Europe and N-ERGHY. The budget of the project is 2,315,217€.

The strategic goal of the ELY4OFF is the **design and engineering** of a robust, flexible, highly efficient and cost-competitive PEMWE. This will be automatically controlled using cutting-edge operational capabilities under highly dynamic power supplies required for **direct coupling to RES generation**. The final design of the **PEMWE** will be achieved on the basis of the development, validation and demonstration of a PEMWE **industrial prototype of 50 kW** comprising: cylindrical stack (to be able to produce hydrogen under high pressure) consisting of industrial size elementary cells, balance of plant (BOP), power electronics, advanced communication & control system, and peripheral equipment and end applications.

Mentioned validation and **demonstration will be held in the premises of the Aragon Hydrogen Foundation**, which will be tailored to fit the project requirements as solar power and isolation from the mains, so that the results obtained are representative.



Partners



Fundación para el desarrollo de las nuevas tecnologías del hidrógeno en Aragón

— Brief description:

The Foundation for the Development of New Hydrogen Technologies in Aragón is a **private non – profit organization** promoted by the Regional Government, other public bodies and private companies. Currently the Board of the Foundation is formed by sixty-six stakeholders belonging to all the economy sectors: automotive, chemistry, power generation, financial, educational, engineering, research and development centres and real estate. Its team of young professionals performs R&D as well as consultancy projects, in cooperation or assisting local and national companies. Over the last ten years, FHA has been supporting the regional strategy for the uptake of H2 and FC technologies, publishing the Hydrogen Master Plan in Aragón (2007-2010 and 2011-2015), and **showcasing the whole hydrogen chain** (production, management and efficient use), obtaining the primary energy **from renewable sources** by means of processes currently available (photovoltaic and wind). The facilities include hydrogen production means (PEM as well as alkaline electrolyzers), storage, dispensing and final use in fuel cells, including vehicles (BEV and FCEV). More than 1.000 people visit yearly the FHA premises, mainly from schools and universities, hence contributing to the wider awareness and dissemination to the society. Toggle content goes here, click edit button to change this text.

+ Relevant network and experience in National and European projects:

+ Main tasks and responsibilities within ELY4OFF:

+ Principal team members involved in ELY4OFF:

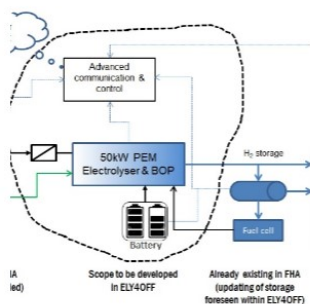
ITM Power

— Brief description:

ITM Power is a dynamic, **innovative company committed to clean sustainable energy solutions** based on **water electrolysis** using Polymer-Electrolyte-Membrane (**PEM**) technologies. ITM has grown from its original platform of novel hydrophilic polymeric electrolytes (for water electrolysis and hydrogen fuel cells) to that of a technology provider. ITM now has both a strong base of intellectual property and engineering expertise for providing hydrogen solutions. ITM was established in 2002 and has undergone the transition from research to commercialisation.

ITM has grown from three key staff in 2002 to 70 staff in 2015, with over 500 man years' experience in the hydrogen sector. ITM has two dedicated research and development facilities in **Sheffield, UK**. The first facility is dedicated to fundamental research, including membrane and catalyst development and testing, and has 24/7 testing capability with 140 electrolyser test stations and a dedicated fuel cell laboratory. The production / scale up facility has engineering capabilities including CNC machinery, stack manufacture room and testing facilities capable of testing stacks up to 33kg/day capacity.

News



DISCOVER FCH JU PROJECT ELY4OFF: DEVELOPMENT OF ELECTROLYSERS FOR OFF-GRID RENEWABLE ENERGY INSTALLATIONS

While off-grid electricity generators based on traditional fossil fuels can be turned on and off according to demand, stand-alone renewable energy facilities require to be coupled to an energy storage system in view of balancing the variable electricity supply with the demand. Electrolysers, coupled with tanks, a fuel cell and a control system, offer the [...]

[Read more](#)




El proyecto europeo ELY4OFF celebra su kick off meeting en las instalaciones de la Fundación Hidrógeno de Aragón

El proyecto europeo ELY4OFF coordinado por la Fundación para el Desarrollo de las Nuevas Tecnologías del Hidrógeno en Aragón (FHa), ha celebrado la reunión de comienzo de proyecto (Kick off Meeting) en las instalaciones de la propia Fundación situadas en el Parque Tecnológico Walqa. Esta reunión tenía como objetivo lanzar el proyecto de manera oficial [...]

[Read more](#)

Contact

Name * 

Email *

Subject

Message

SEND MESSAGE

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