



PEM ELECTROLYSERS FOR OPERATION WITH
OFFGRID RENEWABLE INSTALLATIONS

Final Update on Dissemination Activities and materials

Deliverable 7.5



GRANT AGREEMENT

700359



D7.5 Final Update on Dissemination Activities and materials

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Executive summary

The present document constitutes the revised guide followed by Project partners on any communication activity related to the ELY4OFF project. An assessment of the activities expected to be done at the beginning of the project compared to what finally has been accomplished draws the next balance:

- The website design has served as a quick and valid means for disseminating the project. Its design is suitable for a project like ELY4OFF.
- The graphic material developed during the project has helped to disseminate the project to a wide range of public that has visited the demo-site.
- The networking done during the project has been very effective in circulating the progress of ELY4OFF
- The targets established for scientific papers and in generalist media have been achieved.
- The project has been presented in 15 events mainly at European level, but also abroad (Brazil and Mexico)
- Just one workshop was organized with great success as the demo-site was in operation. On the contrary, two workshops had to be cancelled due to lack of interest.
- Social media dissemination has focused on Likedin mainly. The achieved combined visibility between project's website and LinkedIn has been adequate and abundant,

The goals reached in ELY4OFF are presented below:

Concept	Value
Organisation of Workshops	
Press releases	21
Scientific papers	4
Flyer	1
Social Media	67
Website	1
Participation to a Conference	13
Participation to a Workshop	1
Participation to an Event other than a Conference or a Workshop	1
Video/Film	1
Pitch Event	1
Trade Fair	1
Participation in activities organized jointly with other EU project(s)	1

Content

EXECUTIVE SUMMARY	3
FIGURE INDEX	4
TABLE INDEX	4
1. OBJECTIVES	5
2. DESCRIPTION	6
2.1 IDENTIFICATION OF STAKEHOLDERS AND TARGET AUDIENCES.....	6
2.2 COMMUNICATION TOOLS	7
2.2.1 PROJECT WEBSITE	7
2.2.2 GRAPHIC MATERIALS	12
2.2.3 SOCIAL MEDIA.....	18
2.3 COMMUNICATION ACTIVITIES UPDATE	18
2.3.1 PROJECT COOPERATION	18
2.3.2 PUBLICATIONS	19
2.3.3 CONFERENCES, EVENTS AND FAIRS	22
2.3.4 WORKSHOPS.....	22
2.3.5 NETWORKING	25
3. CONCLUSION	27
I. ANNEX 1.....	28

FIGURE INDEX

Figure 1. Stakeholders and target audiences.....	6
Figure 2. ELY4OFF's website user behaviour.....	8
Figure 3. General statistics of the ELY4OFF website	9
Figure 4. Audience Overview.....	9
Figure 5. Users Acquisition Overview	11
Figure 6. ELY4OFF's website: visits to sections.....	11
Figure 7. ELY4OFF's website: geographical information.....	12
Figure 8. Informative triptych	13
Figure 9. 3 pages article in Science Direct magazine.....	15
Figure 10. 4 pages brochure.....	16
Figure 11. Dissemination materials.....	16
Figure 12. Dissemination materials on-site.....	17
Figure 13. Announcement of the European Workshop Ely4off.	23
Figure 14. Sector of the Workshop participants.	24
Figure 15. Participants of the Workshop next to installation.....	25
Figure 16. European Workshop Ely4off in Walqa, Huesca (Spain).....	25

TABLE INDEX

Table 1. ELY4OFF scientific papers.....	19
Table 2. ELY4OFF generalist media dissemination.....	21
Table 3. Ely4off's presentations	22

1. OBJECTIVES

The Dissemination and Awareness Plan aims to guarantee that the project has an impact at every level. The objective of this Deliverable 7.5 is to present the activities carried out during the whole period of life of the project, from April 2016 to October 2019.

The objectives for the Dissemination and communication plan for the ELY4OFF project were presented in the first version (October 2017) and they can be summarized as it follows:

- Disseminating hydrogen technology and electrolyzers amongst its potential users so that they get acquainted with it, internalize their advantages and cast away any fears, anxiety or reticence they might entertain and that might hold them back.
- Bringing closer together the aforementioned technology and stakeholders through actual demonstrative actions which include devices developed to that aim and whose functioning and characteristics may be ascertained on-site.
- Getting across the message that the project proposes a suitable solution for off-grid power supply installations or those on grid connections in precarious conditions, either by reason of conditions of the grid and installation themselves or by reason of the consumption and supply needs to be met.
- Providing specific examples showing benefits and advantages from this technology: mountain lodges and isolated farms to name but two.
- Illustrating how decisive a contribution hydrogen, fuel cells and electrolyzers can make so as to meet the decarbonisation challenge, a reduction in emissions and energy sustainability fixed as a priority target to be met in the coming years.
- Disseminating existing European legislation on the topic with a view to giving an overview of those hurdles the industries within the project have to overcome when dealing with decision-making and legislative bodies. In addition, this dissemination will enable potential users of this technology to get acquainted with the relevant legislation applicable to their specific case.
- Spotlighting other hydrogen uses not necessarily linked to power generation.
- Forging relationships with other European and research projects with similar goals focused on a sustainable power supply in isolated locations or with a shortage of infrastructures

2. DESCRIPTION

2.1 IDENTIFICATION OF STAKEHOLDERS AND TARGET AUDIENCES

Stakeholders are, from a wider perspective, any group or individual person that may have an impact or be impacted by the attainment of an organization's objective. The Dissemination and Awareness Plan identifies six target groups that we had concreted in this update to ensure to reach them.



Figure 1. Stakeholders and target audiences

The tasks related to communication and dissemination in the project has involved all the members of the Consortium. However FHA, as project coordinator and leader of the Dissemination work package has been the main promoter of the activities, elaborating the main plan for dissemination and updating it during the project, and finally monitoring the actions.

Depending on the target that have been achieved the disseminated messages related to the project aim, activities or results have been different.

The message to policy makers and regulators has been oriented to show the potential markets of hydrogen, as well as to show the benefits and needs of these technologies aiming at casting away their fears, anxiety or reticence they might

entertain and that might hold them back. An evident example of this target is the Aragon Government who has shown its support in the application and development of these technologies in Aragon.

A technological project like ELY4OFF has required an active and continuous effort to share the different elements of the system developed, the reasons behind the designs devised, and the final applications where ELY4OFF may be a solution. The participation in the communication events and activities promoted at national and European level has played a key role to reach hydrogen stakeholders, technology providers, industry, clusters and final users.

Despite of the many years that FHA is sharing the features of hydrogen technologies, the perception is that the general public still needs education in these technologies, so it has been a key target group to focus during the whole development of the project.

2.2 COMMUNICATION TOOLS

2.2.1 PROJECT WEBSITE

The project website (www.ely4off.eu) has been the central place for the diffusion of all the information related to the project. It has a long home page, and five sections: project, partners, downloads, press, and contact. In the following pages screenshots of these sections are included.

ELY4OFF's website was launched at the end of October 2016, so it has been online during 3 years when this deliverable was prepared. The information regarding traffic, access and user behaviour during the visits to the site has been analysed and it is presented in this section.

In the following image we can see a map that represents the behaviour of the users from the moment they enter until they leave the ELY4OFF website: why they have accessed, why they have continued browsing and why they have left the web.

In one hand, most of the users start the visit to the website in the "home" section, which is logical taking into account that most of the links in news and presentation send the user to the homepage. It also appoints to the use of search engine optimization systems (SEO) for the project webpage. Unfortunately, there are still a large percentage of users or at least, more than desired, that does not continue navigating the site.

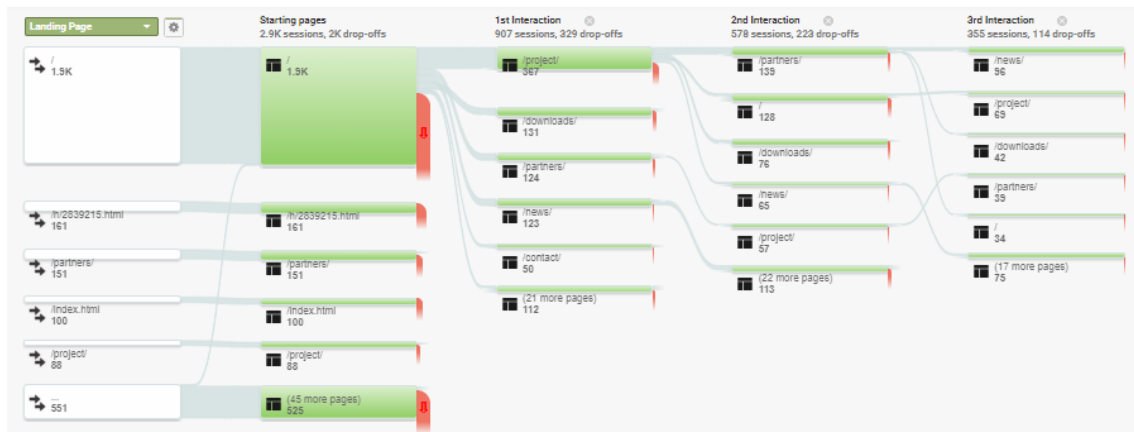


Figure 2. ELY4OFF's website user behaviour

Most users start to navigate on the home page, however many others start directly through the "the project" or "Partners"

The traffic once the user visited the homepage is usually toward the "project" section, where the user can find the links to the partners webpages and a brief description of them and their role in this project. Another important amount of users selects instead of "partner" the "project" section to continue the navigation of the website. So, it is logical that most of the visits and users seem to be interested on the project and partners contributing to the development. On the other hand, the section "downloads" is also one of the preferred among the visitors of the webpage, so it appoints that the users are interested in consulting the project's results and documents.

In the last 36 months the website of the ELY4OFF project has visited a total of 2700 users according to the google analytics. This increase in visits may be due to the increase in the updates published on the web in this last period.

89.1% of the sessions were made by users who visited our website for the first time and that 10.9% of the sessions were made by users who already knew us beforehand.

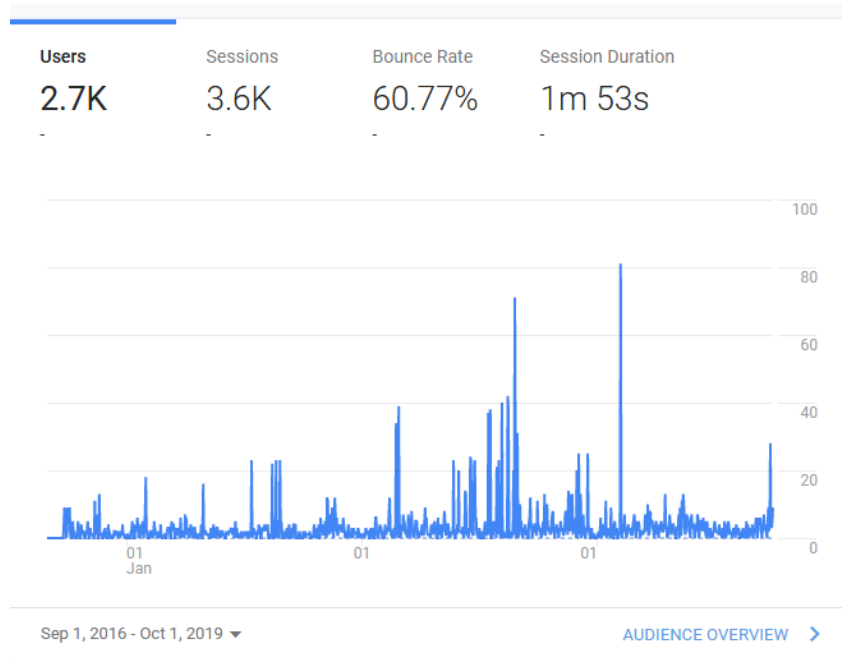


Figure 3. General statistics of the ELY4OFF website

When analysing the report "New vs. recurring visitors" we must take into account other particularities such as a new user can be really recurrent. This is caused by the dependence of Google Analytics on Cookies. Cookies are associated with each browser and device, so two different browsers, although used by the same person for Google Analytics, always represent two different users.

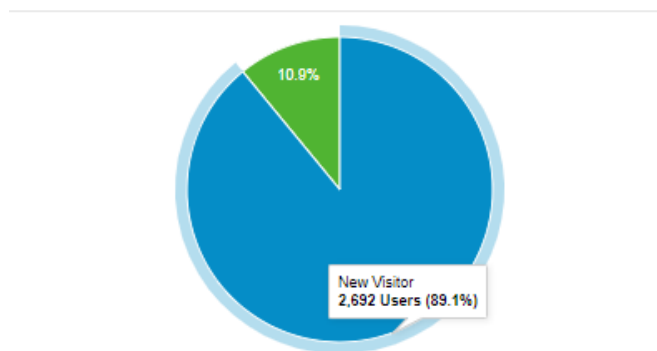


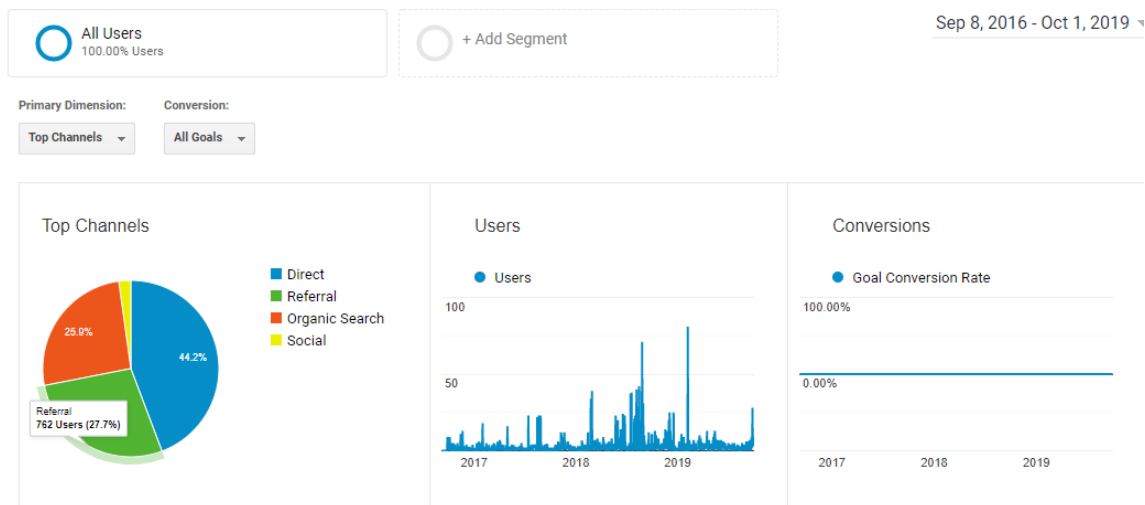
Figure 4. Audience Overview

Another parameter of interest is the acquisition of users, that is, the analysis of how users arrive at the ELY4OFF website. Thanks to this data it can be determined which channels generate more traffic on the website. There are different main channels:

- **Direct:** is the direct traffic that visits the web page, that is, when users type the main URL. In the case of the ELY4OFF it is of 44.2% which indicates that the partners are doing a good job of dissemination through presentations,

distribution of triptychs, etc. where they share the address of the website at all times.

- **Organic search:** is the traffic that accesses the web through search engines. 25.9% of users have written some of the keywords in a search engine by finding the project website. This means that the job of positioning in search engines that has been done is giving results in comparison with the previous period; this does not mean that they do not have to continue making improvements in this area.
- **Referral:** it is the traffic that visits the web page through links in other webs. This assumes that the project is not having enough impact in other specialized media, especially in the web field since only 27.7% They have reached our website through an external link. As an improvement proposal to increase this figure will be the direct delivery of new content on the ELY4OFF website to a distribution list or the creation of a project newsletter.
- **Social:** are the users who come to the web through social networks. This figure, the lowest of all indicates that the project partners have to improve the promotion of the project in their own social networks.



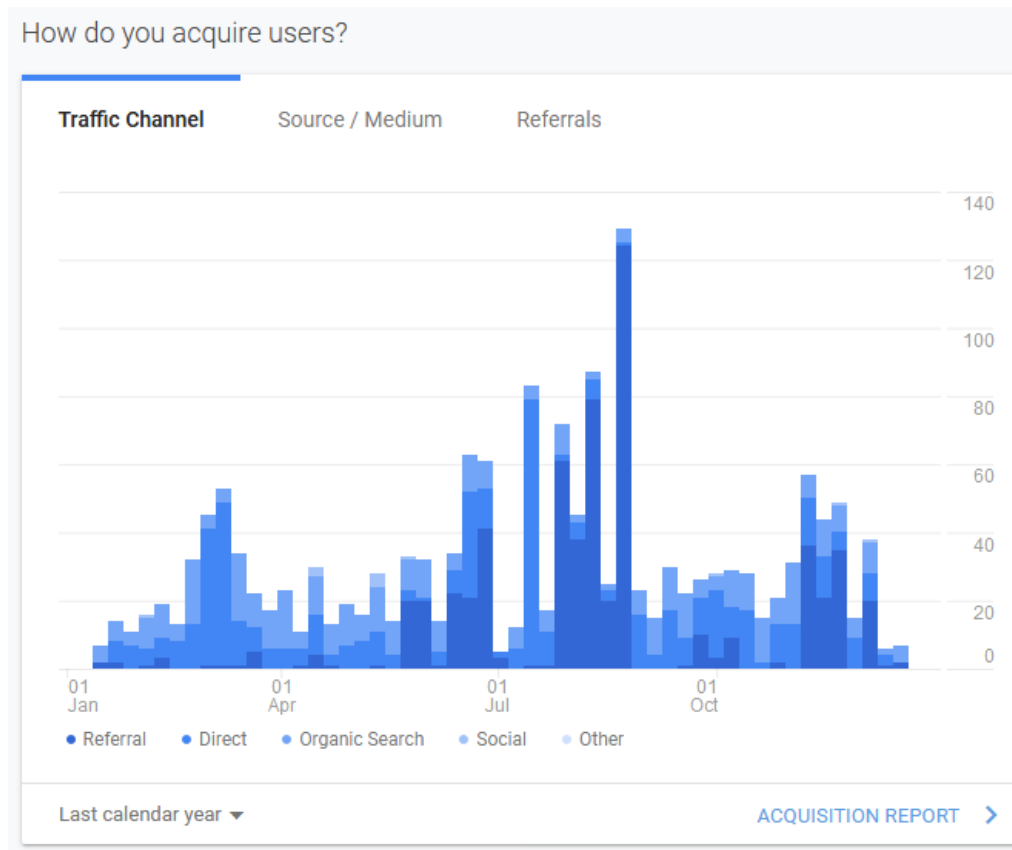


Figure 5. Users Acquisition Overview

The following graphic shows the visualizations of each specific page of the ELY4OFF project website. The first six lines are nothing out of the ordinary since they are the main pages of the project website.

What pages do your users visit?

Page	Pageviews
/	3,208
/project/	942
/partners/	662
/downloads/	581
/news/	574
/contact/	274
/h/2839215.html	161
/index.html	100
/ely4off-achieves-the...m-renewable-sources/	78
/ely4off-first-business-development-plan/	61

Oct 1, 2016 - Oct 1, 2019 ▼ [PAGES](#)

Figure 6. ELY4OFF's website: visits to sections

There are still some areas of improvement regarding the website. The content of the page has to be updated and the visitors redirected, in order to keep a high number of returning visitors to the website.

Regarding the geographical data, there is clearly an opportunity for improvement. Most of the traffic to the website comes from Spain and France. Comparing with the previous report (D7.4, April 2018) the amount of visitors from Spain has increased much more than from other countries (in that report the majority of visitors had come from France)

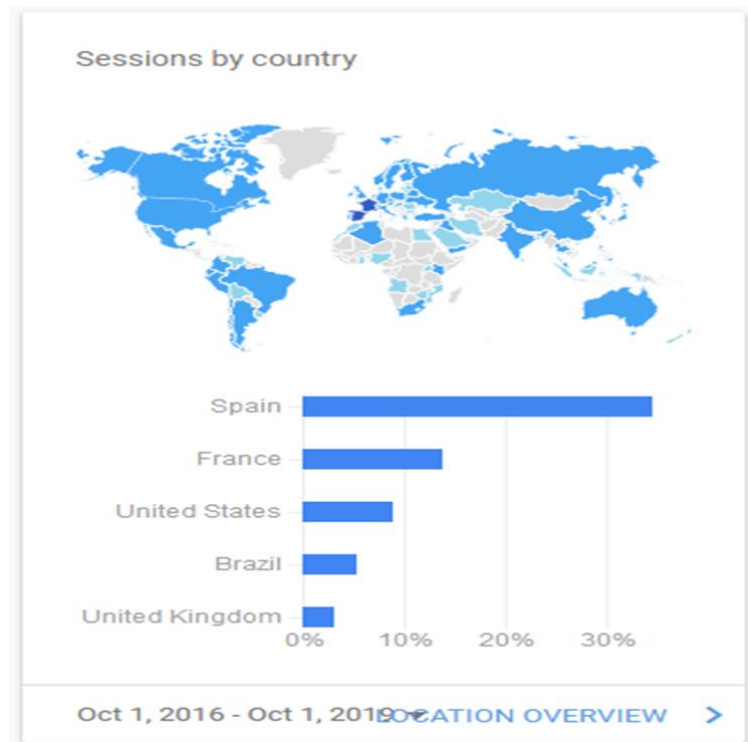


Figure 7. ELY4OFF's website: geographical information

2.2.2 GRAPHIC MATERIALS

Different graphic materials were developed for the project and have been used throughout the project, including the logotype, selection of fonts, templates for documents and presentations. The graphic material is available also for everyone in the section “downloads/corporate” of the webpage. It will be also updated during the project.

In order to help partners in the elaboration of their press releases and communications to magazines, a press kit was developed and distributed among them. The press kit is also available in the webpage, including photos, general description of the project and the concepts related to it (Q&A document). This resource allows homogenizing the style of all the communications and promoting the chosen project image.

Additionally an informative triptych (500 units) was developed to facilitate the dissemination of the project. This material was used mainly during the central part of the project while the system was being fabricated.



Figure 8. Informative triptych

In September 2018 a brochure and an article were developed (Science Impact). The content of these materials was:

- One page interview with Project Coordinator and partners, to include head & shoulders photo.
- Three pages article.
- 25 printed copies of the final publication.
- 4 page dissemination brochure.
- 50 printed copies of 4 page brochure.
- Electronic/ pdf version of the article and brochure with unrestricted use.

In the following pictures the printed article and the brochure are shown. They are currently available at the entrance hall at FHa's main offices in Huesca.

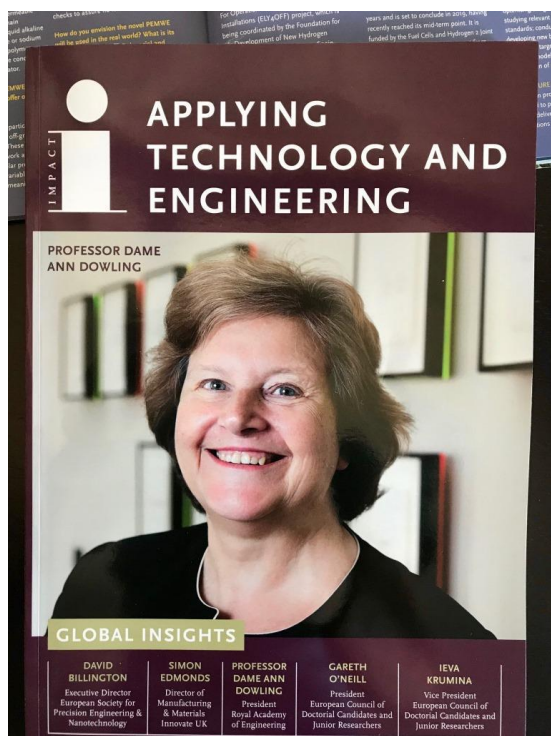




Figure 9.3 pages article in Science Direct magazine





Figure 10. 4 pages brochure

Some merchandising was ordered inked to the organization of the workshop held in Huesca in May 2019, consisting on pens and power banks with the logos of FCH, FHA, ELY4OFF and the 15th Anniversary of FHa.

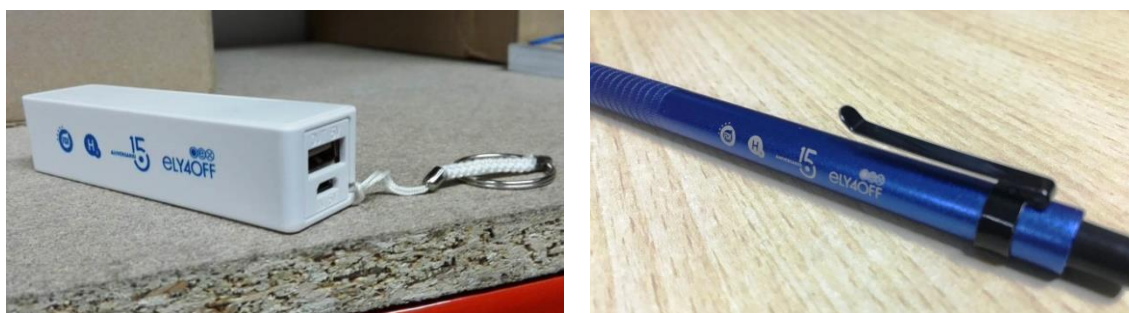


Figure 11. Dissemination materials

The demo-site also shows very visible the name of the Project, the funding programme, the partners and basic information is placed on-site: in the electrolyser and in the micro-grid cabinet. Below some pictures are included:



Figure 12. Dissemination materials on-site.

Finally, a video is being composed and will be launched at the beginning of November 2019. The video will describe the final design of the system being demonstrated, the results achieved and in general the relevance of H2 in the EU energetic transition.

2.2.3 SOCIAL MEDIA

For this project we considered that the setting up of social media accounts like Facebook or Twitter was not required. However LinkedIn has been a channel used frequently to disseminate the progress of the project, using the general account of FHA and also the personal accounts of the team involved.

Some examples of the activity published on social networks are showed in ANNEX 1.

2.3 COMMUNICATION ACTIVITIES UPDATE

2.3.1 PROJECT COOPERATION

The participation in workshops, seminars or other kinds of collaboration has been explored by the Consortium during the development of the project. Projects with clear links on the technology used, potential applications, partners involved or scope of the event were considered in their selection.

A project with clear links to ELY4OFF is HPEM2GAS, as they started at the same time and with the same duration, the electrolyser provider is ITM, and both deal with renewable energy sources. The cooperation consisted on sharing projects website links, and participation in the workshops organized by each project: 12 Feb 2019 organized in Emden by HPEM2GAS, and 23 May 2019 in Huesca organized by FHA.

The ELY4OFF project also collaborated with the FCHJU European Project ELYNTEGRATION in the organization of the mentioned workshop in Huesca on 23 May 2019.

Other projects with some kind of collaboration were:

- i) HYLAW (FCH JU): the assessment done in ELY4OFF (WP2 mainly) has been shared with this project
- ii) H2PiYR (funded by INTERREG POCTEFA), where an HRS corridor between south of France, Andorra and Spain is being developed, has used part of the green hydrogen produced during the demonstration.
- iii) HYAWARE (Interreg Europe) KOM was organized in Huesca and the ELY4OFF project was described and the site was visited.
- iv) REMOTE (FCH JU). Similar concept to ELY4OFF at different scale, source of energy and specific locations. There was an interesting discussion between the

coordinators during a Workshop organized in LIFE SUSTAINHUTS project (May 2018). REMOTE's coordinator was invited to the Workshop organized in Huesca but he could not finally participate.

2.3.2 PUBLICATIONS

The criteria established on the Dissemination and Awareness Plan was to have for the projects life was at least: 4 publications in scientific media and 10 publications in generalist media.

Scientific papers

At the time of elaboration of this report, 4 scientific papers and proceedings have been accepted for publication and 3 of them are available on-line (open access).

Date	Publication	Format	Name of publication
Oct 17	Iberconappice	Proceedings	Sistema Híbrido de Almacenamiento (H2 y baterías) para instalación aislada <i>Lorién Gracia (FHa), Pedro Casero (FHa)</i> https://appice.es/Congresos/APP-Iberconappice2017.pdf Pages 227 – 231
Mar 18	EHEC 18	Proceedings	Use of hydrogen in off-grid installations. A techno-economic assessment
Ago 18	CSMH 18	Proceedings	Sustainable and efficient off-grid production of Hydrogen. Demo Project on-going in Spain <i>Rubén Gálvez (EPIC POWER), Logan López (EPIC POWER), Estanis Oyarbide (EPIC POWER), Lorién Gracia (FHa), Pedro Casero (FHa), Edgar Bueno (FHa)</i> http://hidrogeno.org.mx/wp-content/uploads/2017/07/ISSN-2448-71202018.pdf
Nov 18	Energies	Special Issue	Use of hydrogen in off-grid locations. A techno-economic assessment <i>Lorién Gracia (FHa), Pedro Casero (FHa), Cyril Bourasseau (CEA) and Alexandre Chabert (CEA)</i> https://www.mdpi.com/1996-1073/11/11/3141

Table 1. ELY4OFF scientific papers

In addition, one more scientific publication is accepted and will be published (ELSEVIER) in the coming months in a journal produced in the frame of “ANQUE-ICCE International Congress of Chemical Engineering 2019”. The name of the publication is “*Life Cycle Assessment of Isolated Green Hydrogen Production: A Real Case Study*”

The paper published in Energies been cited 4 times, text viewed 1006 times, and downloaded 860 times up to 11 October 2019.

Generalist media

In the following table it is included a list of all communication and dissemination activities carried out during the development of the project in reverse chronological order.

Dissemination method	Title	Location	Form	Date	Partner
Press media	400 kg of green H2 produced during the Final Meeting	ELY4OFF WEB	Website	27-09-19	FHA
Press media	ELY4OFF Final Workshop – Solution for off-grid Green H2 production	ELY4OFF WEB	Website	05-09-19	FHA
Press media	247 kilograms of renewable hydrogen produced by now during demonstration phase	ELY4OFF WEB	Website	01-08-19	FHA
Press media	Producción eficiente y segura de hidrógeno verde en instalaciones aisladas. Proyecto ELY4OFF	PRESS COGITIAR	Newspaper	01-07-19	FHA
Press media	Ely4Off project organizes its first workshop in Huesca	ELY4OFF WEB	Website	28-05-19	FHA
Scientific media	Inyección de hidrógeno a la red de gas natural	Ingeniería Química	Publication	01-10-18	FHA CEA
Press media	ELY4OFF achieves the first hydrogen production from renewable sources	ELY4OFF WEB	Website	19-09-18	FHA
Press media	ELY4Off is published in the world's largest resource for scholarly publications	ELY4OFF WEB	Website	07-09-18	FHA
Scientific media	Towards a cleaner future	SCIENCE DIRECT	Magazine	04-09-18	FHA
Press media	ELY4OFF reaches the second year of development and the assembly and commissioning are about to start	ELY4OFF WEB	Website	09-05-18	FHA
Press media	Bruselas elogia cinco proyectos de la FHA	El periódico de Aragón	Newspaper	27-11-17	FHA
Press media	La CE alaba cinco proyectos aragoneses de hidrógeno	Diario del Alto Aragón	Newspaper	27-11-17	FHA
Press media	La CE destaca 5 proyectos de la FHA en un foro del sector	Diario de Teruel	Newspaper	27-11-17	FHA
Press media	Europa pone como modelo cinco proyectos de la FHA	Aragon Digital	Newspaper Online	26-11-17	FHA
Press media	Ely4Off works out its first Business Development Plan with the support of the European Commission	ELY4OFF WEB	Website	20-11-17	FHA
Press media	Ely4Off is presented in Iberconappice 2017, the congress that brings together the main technological advances of hydrogen and fuel cells	ELY4OFF WEB	Website	14-11-17	FHA
Press media	IBERCONNAPICE	ELY4OFF WEB	Website	13-11-17	FHA
Press media	Key meeting to design the integration of the different components in the ELYOFF system	ELY4OFF WEB	Website	09-11-17	FHA
Press media	A new photovoltaic field has been built in the Foundation of Hydrogen in Aragon	ELY4OFF WEB	Website	09-11-17	FHA
Press media	FINALIZADO EL MONTAJE DE UNA INSTALACIÓN FOTOVOLTAICA AISLADA EN LA FUNDACIÓN HIDRÓGENO ARAGÓN	FHA WEB	Website	27-10-17	FHA
Press media	ELY4OFF: COMIENZAN LOS TRABAJOS DE ACONDICIONAMIENTO DEL TERRENO	FHA WEB	Website	16-09-17	FHA
Press media	ELY4OFF Project celebrates its first follow-up meeting	ELY4OFF WEB	Website	20-06-17	FHA
Press media	Inycom presente en la misión comercial entre empresas y clústers de hidrógeno Aragón-Escocia en Walqa	INYCOM Website	Website	17-02-17	FHA
Press media	Walqa avanza en el proyecto europeo	Actualidad de las empresas	Newspaper Online	15-02-17	FHA
Press media	Press Kit	FHA WEB	Website	06-02-17	FHA

Press media	Walqa demuestra las ventajas de una red eléctrica más eficiente	El periódico de Aragón	Newspaper	22-01-17	FHA
Press media	Walqa avanza en el proyecto europeo	Aragon Digital	Newspaper Online	21-01-17	FHA
Press media	DISCOVER FCH JU PROJECT ELY4OFF: DEVELOPMENT OF ELECTROLYSERS FOR OFF-GRID RENEWABLE ENERGY INSTALLATIONS	ELY4OFF WEB	Website	27-09-16	FHA
Press media	El proyecto europeo ELY4OFF celebra su kick off meeting en las instalaciones de la Fundación Hidrógeno de Aragón	ELY4OFF WEB	Website	17-09-16	FHA
Press media	¿Cómo aprovechar la energía solar o la de las mareas para fabricar hidrógeno limpio?	Energías Renovables	Newspaper Online	26-08-16	FHA
Press media	La Fundación del Hidrógeno coordina proyectos europeos de más de 17 millones de euros	El Economista	Newspaper Online	16-08-16	FHA
Press media	La Fundación del Hidrógeno inicia su proyecto Europeo	Heraldo de Aragón	Newspaper	05-07-16	FHA
Press media	Solar fotovoltaica para el electrizador europeo ELY4OFF	Energías Renovables	Newspaper Online	04-07-16	FHA
Press media	El proyecto europeo ELY4OFF celebra su kick off meeting en las instalaciones de la Fundación Hidrógeno de Aragón	Website	Website	04-07-16	INYCOM
Press media	Ely4Off echa a andar en la Fundación del Hidrógeno	Diario del Alto Aragón	Newspaper	03-07-16	FHA
Press media	Primera reunión del proyecto Ely4Off	Heraldo de Aragón	Newspaper	03-07-16	FHA
Press media	El proyecto europeo Ely4Off empieza con una reunión en la FHA	Europa press	Newspaper Online	02-07-16	FHA
Press media	Echa a andar proyecto E4O para hacer un electrolizador aislado de la red	ABC	Newspaper Online	02-07-16	FHA
Press media	Echa a andar proyecto E4O para hacer un electrolizador aislado de la red	El Periódico de Aragón	Newspaper Online	02-07-16	FHA
Press media	El proyecto europeo ELY4OFF celebra su reunión de comienzo en las instalaciones de la Fundación Hidrógeno de Aragón	Aragón_hoy	Newspaper Online	02-07-16	FHA
Press media	El proyecto europeo ELY4OFF celebra su reunión de comienzo en las instalaciones de la Fundación Hidrógeno de Aragón	20 minutos	Newspaper Online	02-07-16	FHA
Press media	El proyecto europeo Ely4off se reúne en la Fundación Hidrógeno de Aragón	Aragon Digital	Newspaper Online	02-07-16	FHA
Press media	ELY4OFF echa a andar en la Fundación del Hidrógeno	Diario del Alto Aragón	Newspaper Online	02-07-16	FHA
Press media	EL PROYECTO EUROPEO ELY4OFF CELEBRA SU REUNIÓN DE COMIENZO EN LAS INSTALACIONES DE LA FUNDACIÓN HIDRÓGENO DE ARAGÓN	FHA WEB	Website	02-07-16	FHA
Press media	Inycom visita la Oficina de Aragón en Bruselas para potenciar alianzas y proyectos europeos	INYCOM Website	Website	27-05-16	INYCOM

Table 2. ELY4OFF generalist media dissemination

2.3.3 CONFERENCES, EVENTS AND FAIRS

The project has been presented in many events like seminars, congresses, workshops, etc (see next table)

Dissemination method	Title	Location	Date	Partner
Workshop (HYAWARE)	PEM Electrolyser for operation with off-grid Renewable Installations. ELY4OFF Project	Huesca	26-09-19	FHA
Workshop	"Jornada Técnica: Producción eficiente y segura de hidrógeno verde en instalaciones aisladas Proyecto ELY4OFF"	Zaragoza (COGITAR)	28-05-19	FHA
Workshop	Electrolysis: features, capabilities and projections	Huesca	23-05-19	FHA
Seminar	"Energía distribuida: instalaciones para autoconsumo basadas en Renovables, Hidrógeno y Pilas de Combustible"	Madrid (Spain)	27-03-19	FHA
Presentation European Space Agency	PEM Electrolyser for operation with off-grid Renewable Installations. ELY4OFF Project	Cologne (Germany)	21-02-19	FHA
Workshop (HPEM2GAS)	PEM Electrolyser for operation with off-grid Renewable Installations. ELY4OFF Project	Emden (Germany)	12-02-19	FHA
International Congress of Hydrogen Mexican Society	Sustainable and efficient off-grid production of Hydrogen. Demo Project on-going in Spain	Mexico D.F.	18-09-18	FHA y EPIC POWER
Congress ISENEC 2018	Innovative back-up System for a 50 kW off-grid electrolyser directly linked to PV (A)	Nürnberg (Germany)	17-07-18	FHA
Congress WHEC 2018	PEM Electrolysers for Operation with Off-grid Renewable Installations (ELY4OFF)	Brazil	19-06-18	FHA
Hydrogen Innovation Festival	Efficient and reliable production of hydrogen in off-grid installations. ELY4OFF Project	Tomar (Portugal) on-line	29-05-18	FHA
Congress EHEC 2018	Use of hydrogen in off-grid installations. A techno-economic assessment.	Málaga (Spain)	15-03-18	INCOM
Workshop VUELTAH	Producción hidrógeno removable. Proyecto ELY4OFF	Huesca (Spain)	26-02-18	FHA
Seminar University of Zaragoza	Producción hidrógeno removable. Proyecto ELY4OFF	Zaragoza (Spain)	07-11-17	FHA
Congress Iberconnapice 2017	Sistema Híbrido de Almacenamiento (H ₂ y baterías) para instalación aislada	Huesca (Spain)	16-10-17	FHA
Congress EUROPEAN FUEL CELL FORUM 2017	Demonstration of a 50 kW off-grid PEM electrolyzer (Project ELY4OFF)	Lucerne (Switzerland)	01-01-17	ITM

Table 3. Ely4off's presentations

2.3.4 WORKSHOPS

Three workshops were foreseen in the Grant Agreement.

- The first one was organized on the last week of Feb 2018 (M23) in Huesca but it had to be cancelled due to lack of registered participants. The internal evaluation of this issue concluded to improve three aspects: i) to start the organization of the next event earlier, ii) to identify a more attractive date and venue, and iii) to elaborate a more appealing content.

- The second one was organized jointly with ELYNTEGRATION Project, in Huesca on 23 May 2019. This one is described later in more detail
- The third one was scheduled on 18th September 2019 to be held in FCH JU's premises in Brussels, coinciding with the end of the execution period of the project. As happened with the first one, it had to be cancelled due to lack of interest. The focus on this event was to share the results of the on-going demonstration period, together with the work done in the different business cases that were elaborated based on the design of the system developed in the project. We consider that the main reason for the lack of interest was a deficient promotion campaign (strongly affected by the summer period) and because the previous workshop was very recent.

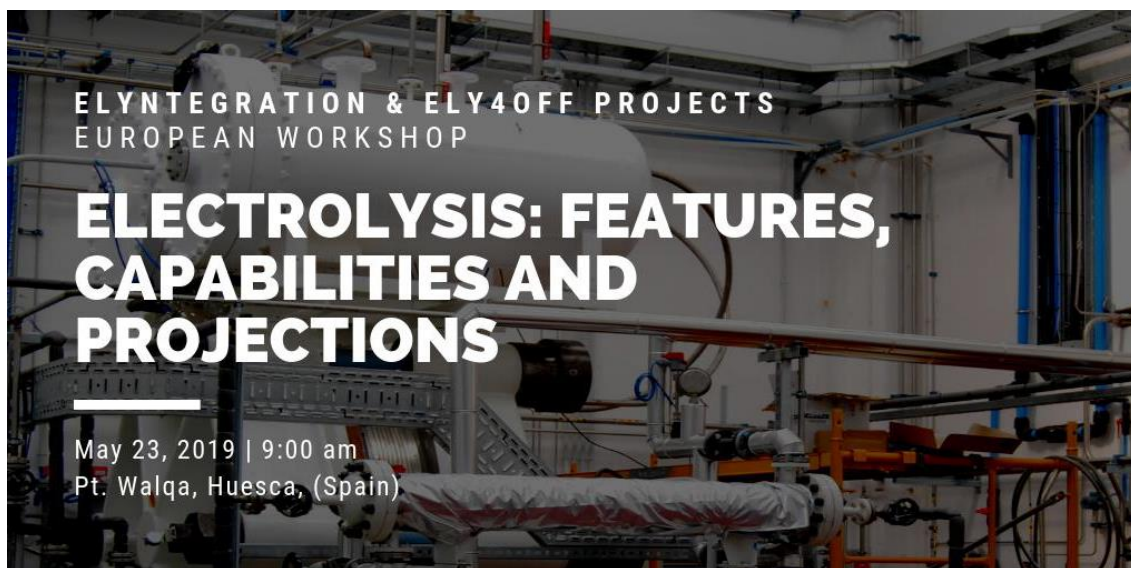


Figure 13. Announcement of the European Workshop Ely4off.

This workshop was celebrated in Huesca, Spain the 23 of May. It was organized in collaboration with the FCHJU ELY4OFF project.

The main objective of the workshop is to promote and facilitate a first exchange of views about the integration of Renewable Electricity through applications of WE technology. The joint event will bring together key industry stakeholders, potential end-users and technology developers for knowledge sharing.

The event provided a forum to discuss the latest technological innovations. Key discussions were involved sharing challenges and opportunities related to hydrogen production from water electrolysis. The workshop also provided the best platform to explore potential collaborations. The key topics at the workshop were:

- Optimization of H₂ production cost based on electricity source (PV, wind, grid)
- How off-grid affects to standard on-grid configuration from control perspective
- Current regulation barriers and recommendations to overcome them

- Power to H2: elements of value (values to the power grid, values to the gas grid, values to decarbonized industry, values to the UE Economy, etc...)
- R&D needs: demonstration at MW scale, reliability, durability, cost reduction, efficiency, mixing technology (and regulations)
- Harmonization testing protocols: grid balancing vs. off-grid

Around 50 participants attended the workshop, who gave a very positive feedback.

Most of the attendees to the Workshop were end users (60%) mostly from the renewable & environment industry (34,5%)

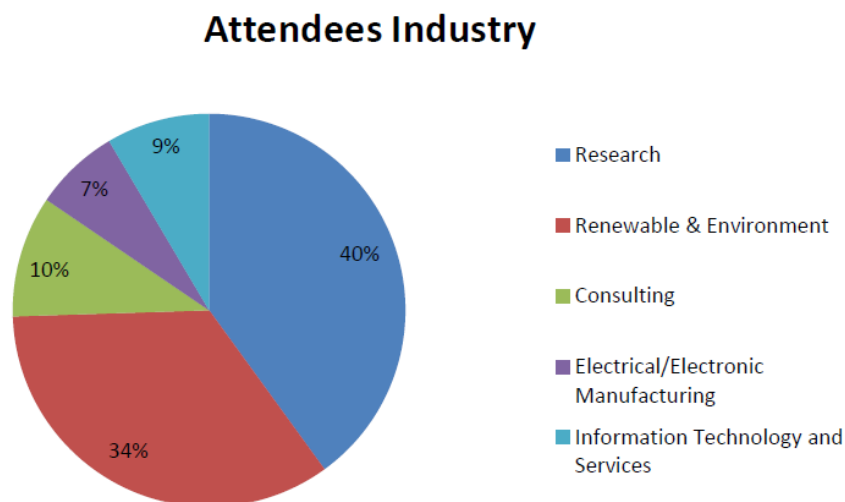


Figure 14. Sector of the Workshop participants.

Apart from ELYNTEGAYTION, 3 other FCH JU's projects were invited (HYLAW, HPEM2GAS and H2FUTURE). Representatives from IEA HIA, JRC and European Space Agency showed their vision on the electrolysis sector. Furthermore, a representative from CEA involved in the development of the Energy Observer shared interesting details on this singular catamaran. The structure of the workshop was: a Plenary Session in the morning followed by a visit to the demo-sites, and 3 roundtables in the afternoon. This arrangement allowed the attendants to participate actively in the discussions. The presentations are available in the website (links are provided in the 'News' section, <http://ely4off.eu/ely4off-project-organizes-its-first-workshop-in-huesca/>). Some pictures of the event are included below.



Figure 15. Participants of the Workshop next to installation.



Figure 16. European Workshop Ely4off in Walqa, Huesca (Spain).

2.3.5 NETWORKING

All the partners of the project have shared the progress of the project within their sphere of influence, and after the start of the demonstration period, the interest in the project has greatly increased. This high interest together with the usual rate of visitors that an entity like FHA receives makes that during last year a total of more than 200 persons have seen the demo-site and have learnt about ELY4OFF.

Some of the entities that have visited the demo-site are:

- Utilities and distribution companies: REPSOL, ENAGAS, REDEXIS.
- Technology providers: Calvera Maquinaria, CLANTECH, Schneider, SMA.
- Engineering companies: Ingesol, Dhamma Energy, Sunstroom.

- Research institutions: CSIC, INTA, CNH2, Novia University of Applied Science, University of Zaragoza.

On the other hand, the project participated in BePOSITIVE (Lyon, February 2019), the French exhibition of the energy Transition in buildings and regions, showing why ELY4OFF can be an alternative to current diesel-based solutions for isolated buildings.

Finally the project was invited to participate in a “Pitch Event” organized during 'FCH JU Programme Review Days 2018'. Three of the partners accepted the invitation: Pilar Molina (EPIC POWER), Guillermo Matute (INYCOM) and Pedro Casero (FHa).

3. CONCLUSION

The present document constitutes the revised guide followed by Project partners on any communication activity related to the ELY4OFF project. It contains all the necessary information in relation to the target groups, how to reach them and which are the necessary tools to perform these tasks, as well as a selection of potential partners within Europe and conferences, congress and fairs that are suitable for the dissemination of the results of the project.

An assessment of the activities expected to be done at the beginning of the project compared to what finally has been accomplished draws the next conclusions:

- The website design has served as a quick and valid means for disseminating the project. Its design is suitable for a project like ELY4OFF.
- The graphic material developed during the project has helped to disseminate the project to a wide range of public that has visited the demo-site.
- The networking done during the project has been very effective in circulating the progress of ELY4OFF
- The targets established for scientific papers and in generalist media have been achieved.
- The project has been presented in 15 events mainly at European level, but also abroad (Brazil and Mexico)
- Just one workshop was organized with great success as the demo-site was in operation. On the contrary, two workshops had to be cancelled due to lack of interest.
- Social media dissemination has focused on Likedin mainly. The achieved combined visibility between project's website and Linkedln has been adequate and abundant,

I. ANNEX 1.

The following screenshots shows the activity of the Ely4off project on social media during the time the project has lasted.



