



Third Update of the
Communication, Dissemination and
Awareness Plan
(CDAP)

WP7 Dissemination & Exploitation

DELIVERABLE 7.5

GRANT AGREEMENT 736351

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Maite Imirizaldu Martínez,

Jesús Simón,

Nikolaus Fleischhacker,

Magdalena Schreter,

Ernst Fleischhacker,

Mercedes Sanz,

Paola Lloret

DOCUMENT CHANGE CONTROL

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3.3	25/03/2020	Magdalena Schreter, FEN Systems	Corrections
3.4	06/04/2020	Nikolaus Fleischhacker, FEN Systems	Corrections
3.5	07/04/2020	Mercedes Sanz & Paola Lloret, FHA	Revision
3.6	11/04/2020	Magdalena Schreter, FEN Systems	Corrections
3.7	13/04/2020	Nikolaus Fleischhacker, FEN Systems	Revision
3.8	29/04/2020	Mercedes Sanz & Paola Lloret, FHA	Revision

Table 1. Document Change Control

EXECUTIVE SUMMARY

This is the third update of the Communication Dissemination and Awareness Plan (CDAP) of the Demo4Grid project. It was managed by the Aragon Hydrogen Foundation with the Demo4grid Consortium support and it contains all the communication activities since the 2nd update in July 2019.

This report describes all the actions, activities and improvements on the communication tools and channels developed and used for a successful dissemination since the beginning of the project. The CDAP is also a part of the measures to maximise the Project's impact. It describes the dissemination goals, target audiences and the appropriate channels to provide a regular flow of information. The CDAP has to be updated every year. A final report on all the dissemination activities and materials has to be made at the end of the project.

The current deliverable represents also the monitoring of the dissemination targets (milestones) of the Demo4Grid project.

Within the Demo4Grid Project Europe's largest single stack pressurized electrolysis plant should be set up and tested in Völs near Innsbruck. It should regulate the electricity network of TIWAG (regional electricity supplier) and heat the bakery of MPREIS (regional food producer and trader) with green hydrogen. The Green Energy Center Europe in Innsbruck (owner FEN Systems) is the catalyst and also the regional dissemination point for the project. The protagonists and European project partners are working responsibly together there over a 5 year's project time. Co-working spaces, seminar rooms, Skype rooms, lounges, advertising pylons, hydrogen cars and a generally accessible information point are available now for handling the project management and dissemination tasks for this important European project.

Green hydrogen from regional resources for industrial purposes (heating supply and mobility solutions) is the overall focus of the project.

The major finding of the past two project years was that a diligent stakeholder and shareholder alignment process (both have to influence and fertilize each other) was crucial for preventing a crash of the project. Due to these circumstances extensive post-processing of the project became necessary; leading to a project extension and a budget increase for MPREIS that had to be approved by the board. This led to the need for a new setup of the external dissemination and internal awareness process. As a result, all dissemination and awareness activities had to be rearranged on local (company of MPREIS and municipality of Völs), regional (federal region of Tyrol) and national level, (republic of Austria). This was extremely challenging in order to accomplish to join forces of all project stakeholders.

The ground-breaking ceremony for the project was planned for autumn 2019 (after expected solution of the shareholder-, stakeholder-, landowner and permitting problems). Actually, the ceremony took place – outside of the current reporting period – on March 12th, 2020, on an entirely new plot of land next to the production facility of MPREIS and its Therese Molk bakery in Völs.

The current investment volume for this high-end innovation project, which is also the spearhead of an emerging hydrogen economy in the region, has now reached 13 million euros. The financial support for the project comes from the EU, the Swiss state and recently also from Kommunalkredit Public Consulting (KPC; Austria). Active support for the project is given by the policy of the federal region of Tyrol, the municipality of Völs and from the numerous administrative bodies providing the corresponding permits in the 3 year development process of this absolutely pioneering project.

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OBJECTIVES

The objective of the current Deliverable is to update the information on the activities regarding the development and tracking of the "Communication, Dissemination and Awareness Plan" (CDAP) during the last months of the project. It intends to:

- Disseminate the project results towards the main stakeholders regarding not only the sectors addressed by the proposal but all the interested actors involved (public and private).
- Raise awareness and promote the technology, economic, environmental and social aspects of the demonstrated results and their possible applications with potentially interested parties across several user groups.
- Enhance the awareness on the use of the EC funds to improve the competitiveness of the EU and wellbeing of its population.

1. THE PROJECT

Demo4Grid project – Demonstration of a 3.1 MW Pressurized Alkaline Electrolyser for Grid Balancing Services – is part of the European Horizon 2020 program, the European Framework Programme for Research and Innovation. It was submitted to the FCH 2 JU call “FCH-02-7-2016 Demonstration of large-scale rapid response electrolysis to provide grid balancing services and to supply hydrogen markets”. The main aim of project Demo4Grid is the commercial setup and demonstration of a technical solution utilizing “above state of the art” Pressurized Alkaline Electrolyser (PAE) technology for providing grid balancing services in real operational and market conditions. In order to validate existing significant differences in local markets and grid requirements Demo4Grid has chosen to build a demonstration site in Austria (Völs, near Innsbruck) for demonstration of a business case operation of a large-scale electrolyser adapted to specific local conditions. Hence, Demo4Grid will demonstrate the production of green hydrogen by means of electrolysis using Renewable Energy Sources (RES):

- a technical solution to meet all core requirements for providing grid balancing services with a large scale PAE in direct cooperation with grid operators,
- a market based solution to provide value added services and revenues for the operation strategy to achieve commercial success by providing grid services and those profits obtained also from the hydrogen application.

At the project end, Demo4Grid will assess the replicability and viability of various business cases. Demo4Grid will be the decisive demonstration stage of previous FCH JU projects related to the PAE addressed in this proposal such as ELYGRID (FCHJU project GA number 278824).

ELYGRID has provided promising results on the development of PAE to provide grid services operating under dynamic profiles. Within the Demo4Grid project these conclusions will be validated at real scale in an ambitious demonstrative project.

Within this technical and commercial framework Europe's largest PAE will be built for the Demonstration of Grid Services and the production of Green Hydrogen for the industrial purpose in Völs near Innsbruck. Green hydrogen from regional resources for industrial heating and mobility is the overall focus of the project. The electrolyser will provide green hydrogen for heat supply of the Therese Molk Bakery of the regional food producer and trader MPREIS while contributing to the grid balancing within the electricity network of the regional electricity supplier TIWAG.

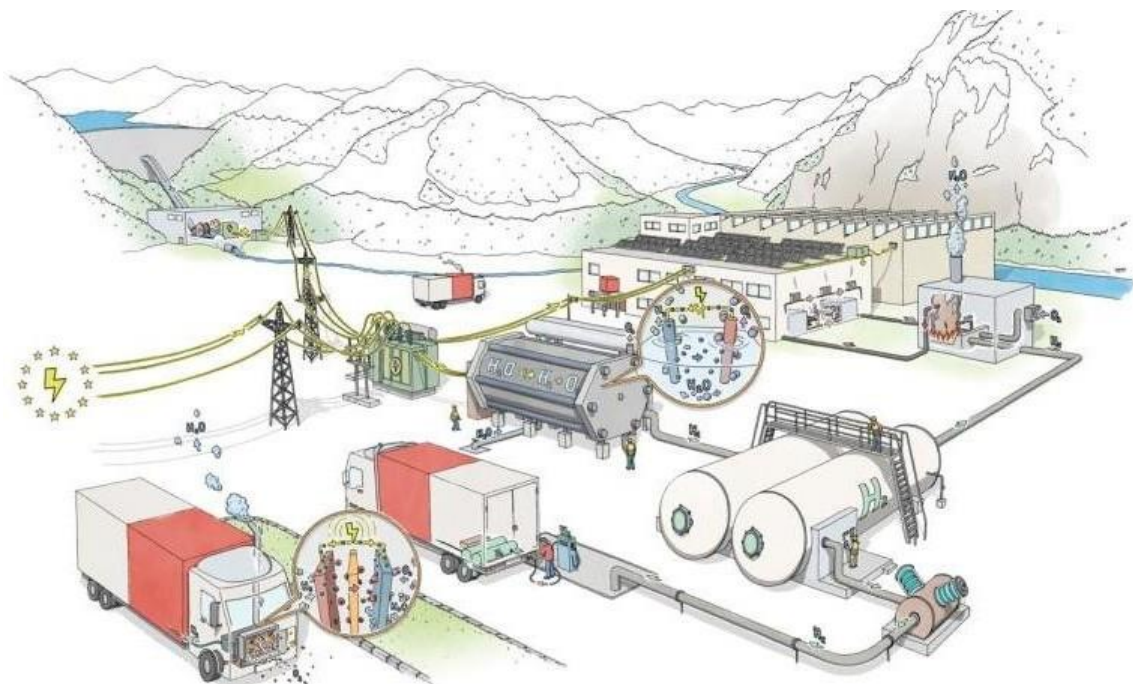


Figure 1. Scheme of the Demo4Grid Site Völs near Innsbruck

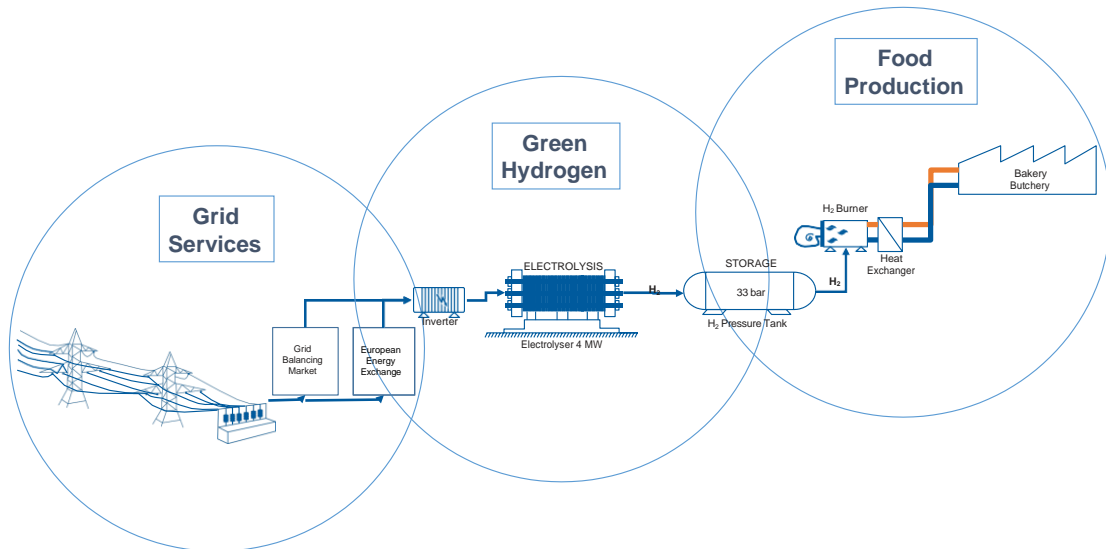


Figure 2. Technical Scheme of the Demo4Grid Project



Figure 2. Final Building Area and Construction Plan

The Green Energy Center Europe in Innsbruck is the catalyst and regional dissemination point for this important project. The protagonists and European project partners are working responsibly together over a 5 years project time.



Figure 3. Green Energy Center Europe in Innsbruck, Catalyst and Dissemination Point

2. COMMUNICATION, DISSEMINATION AND AWARENESS PLAN

A detailed CDAP was developed at the beginning of the project and updated in March 2018 and July 2019. The 3rd update includes all the communication activities that are taking place as well as the additional actions from the previous version.

The major finding of the past two project years was that a diligent stakeholder and shareholder alignment process (both have to influence and fertilize each other) was crucial for preventing a

crash of the project. Due to these circumstances extensive post-processing of the project became necessary; leading to a project extension and a budget increase for MPREIS that had to be approved by the board. This led to the need for a new setup of the external dissemination and internal awareness process. As a result, all dissemination and awareness activities had to be rearranged on local (company of MPREIS and municipality of Völs), regional (federal region of Tyrol) and national level, (republic of Austria). This was extremely challenging in order to accomplish to join forces of all project stakeholders.

The past and ongoing tasks to be completed by FEN Systems within WP7 are the following:

Identification and classification of the stakeholders as well as shareholders (decision makers of MPREIS) to be addressed. Characterization of their needs and concerns and design of the most suitable strategy for each of them.

- Communication to the wider public and stakeholders, who have not yet been particularly targeted, in order to get more understanding and positive feedback for the Demo4Grid project of MPREIS. Special activities were carried out to reach the wider public such as additional advertising activities, different media reports about other H2 projects in the connection with Demo4Grid.
- A number of additional dissemination methods, tools and associated activities had to be adapted and developed to achieve the expected impact for solving all the special problems within the shareholder, landowner and permitting process during the last years. To this end, the following steps were implemented:
 - Additional advertising areas were created at the Advertising Pylons of the Green Energy Center Europe for improving the awareness of the Demo4Grid project and a section on Frequently Asked Questions regarding Hydrogen and Hydrogen applications was added.
 - FEN Systems has opened an information point – “Info Corner” – at the Green Energy Center Europe to answer questions of interested people with daily opening hours from 16:00 to 19:00. During this time, an extra consultation room was established. Most of the time an expert of FEN Systems is present to provide detailed information on the Demo4Grid project.
 - The project website www.demo4grid.eu was adapted to the new dissemination demand and linked to the website of the Green Energy Center Europe, offering additional dissemination tools, such as the Advertising Pylons and the Info Corner. These measures should contribute to the stakeholder process by advancing the difficult business plan project.
 - Additional videos were produced to create a link between the Demo4Grid Project to other projects and activities. These videos represent the basis for information flow and are frequently used for the harmonization of the information status among stakeholder, project and shareholder meetings.

- Conferences and workshops were organized by the Green Energy Center Europe in the course of the E-Mobility education program of FEN Systems. In each session the role of the Demo4Grid project for producing Green Hydrogen as an important requirement for building the bridge to green mobility in future is explained (see website of the Green Energy Center)
- Publications in different magazines on the hydrogen-related activities to the Demo4Grid Project were made (see websites).
- Monitoring of the Dissemination procedures according to the Grant- and Consortium Agreements as well as scheduling of the dissemination and training activities among the partners within the project and steering group meetings

All these activities can be found on the website www.demo4grid.eu.

2.1. Methodology, Processes and Tools

The tasks related to communication and dissemination of the project involve all the members of the Consortium, so all the partners should work and contribute to dissemination tasks according to the agreements and the DOA. Nevertheless, FHA is the central body in charge of the dissemination, elaborating and contributing the dissemination plan, promoting the collaboration of all the partners and finally monitoring and compiling the dissemination and communication activities of the project. The draft for the current deliverable was made by FHA based on fact-based input from FEN Systems and the Consortium.

Handling amongst the partners: During the last project months, all partners were asked to report their dissemination activities.

Messages depending on the target to be achieved: It was a big challenge – also during the last project year – to activate and reach the regional and national bodies since the project had to deal with major difficulties regarding the landowners and the authorities involved in the permitting process. In addition to these problems, the shareholder and decision makers process became influenced by budget discussions as a result of the technical detail planning process of the project. To overcome these issues, special dissemination and explanation activities were necessary also to raise awareness within the shareholder committee of MPREIS. Several activities were initiated by FEN Systems to underline the importance of the MPREIS' Demo4Grid project within the framework of the regional hydrogen strategy of Tyrol. A number of conferences, newspaper reports and also two additional videos were produced to show the relationship of the MPREIS Demo4Grid project to the other ongoing hydrogen projects in Tyrol and Austria.

Information flow to policy makers, regulators and other stake- and shareholders: In general, policy makers, regulators and other stake- and shareholders of business plan

orientated hydrogen projects were informed on the possibilities and potential grid connected and off-grid electrolyzers.

Documentation and categorisation on the website: All these activities are documented and categorized on the Demo4Grid website www.demo4grid.eu.

2.2. Website

Demo4Grid website is the main communication tool: The Demo4Grid website was developed at the beginning of the project and shows the ongoing work progress of all project, dissemination and awareness activities and results.

2.3. Videos

The Demo4Grid project has a YouTube channel where all videos are uploaded. Apart from a series of interviews to the project partners during the launch of the project, four videos have been produced:

- 1) **“Green Hydrogen Greening of Industry”** explaining the Demo4Grid project from the perspective of the FCH 2 JU.



Figure 4. Demo4Grid Video “Green Hydrogen Greening of Industry” <https://www.demo4grid.eu/electrolyser-for-power-grid-services/>

- 2) **“Green Hydrogen for MPREIS Tyrol and Europe”** explaining the Demo4Grid project from the perspective of the Demo4Grid Consortium. This video was used for the share-, stakeholder and permitting process in a short and also in a long version.



Figure 5. Demo4Grid Video “Green Hydrogen for MPREIS Tyrol and Europe” <https://www.demo4grid.eu/gruner-wasserstoff-fur-mpreis/>

3) “Zillertalbahnhof 2020+ energy-autonomous with hydrogen“, released in 2019, showing the dependencies between other projects in Tyrol and Austria and the Demo4Grid project in Völs.



Figure 6. Video link “Zillertalbahnhof 2020+ energy-autonomous with hydrogen” to the Demo4Grid project” (<https://www.demo4grid.eu/zillertalbahnhof-2020-energy-autonomous-with-hydrogen/>)

4) “HyWest bundled competence for a green energy future”

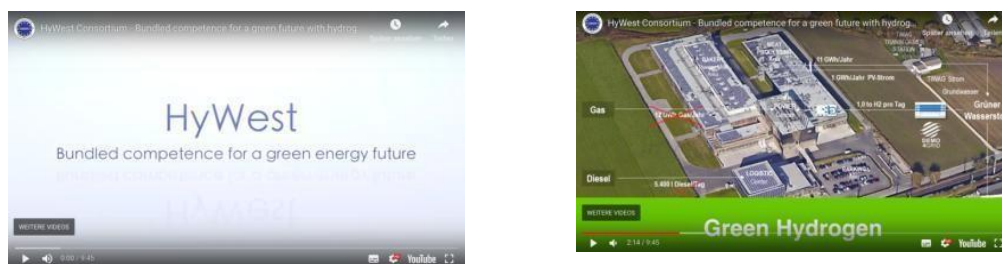


Figure 7. Video link “HyWest bundled competence for a green energy future” to the Demo4Grid project (<https://www.demo4grid.eu/hywest-bundled-competence-for-a-green-energy-future/>)

A **final explanatory video** with the main results, showcases, messages and impacts of Demo4Grid will be released during the final stage of the project. This video will be shared through press release and it will be posted at the project main website. The purpose of the video will be to serve as the global final message of the project, and to provide a general overview about the finished project.

2.4. Info Corner and Advertising Pylons to enhance the awareness

Beside the videos, the Info Corner and Advertising Pylons established at the Green Energy Center Europe in Innsbruck are the most efficient way to explain the Demo4Grid project in the full dimension (scope, content, partners) to the public and the visitors. The Green Energy Center is situated on one of the most frequented traffic places in the western area of Innsbruck and is also close to the MPREIS site in Völs. Two versions for the presentation of the Demo4Grid project on the advertising pylons were made during the past years. Version 1 was made in 2017 for the kick-off meeting and Version 2 in 2018 for the permanent use during the project time (see Annex). In addition to the specific project information, which is printed on 5 Pylons, also frequently asked questions were printed in the neighbourhood to the Demo4Grid presentation areas.



Figure 8. Info Corner at the Green Energy Center Europe, A lot of interested people are visiting the Info Corner for information on the Demo4Grid Project, which can be easily explained together with the advertising pylons.



Figure 9. Advertising Pylon Green Energy Center Europe – “Demo4Grid Project Information” Every day hundreds of people pass the Advertising Pylons situated at a frequented crossing in Innsbruck



A lot of special visitors of the Green Energy Center (schools, universities, participants of meetings, workshops, lectures and special trainings) are informed about the Demo4Grid based on the info pylons. (example

<https://www.demo4grid.eu/two-graduate-classes-from-htl-innsbruck-visited-the-green-energy-center-europe/>
<https://www.facebook.com/Demo4Grid/photos/pcb.1000763833455859/1000756383456604/?type=3&theater>



<https://www.facebook.com/Demo4Grid/photos/pcb.1016227831909459/1016225821909660/?type=3&theater>



Figure 10. Advertising Pylon Green Energy Center Europe – “Demo4Grid Project Information and FAQ”



Figure 11. Advertising Pylon Green Energy Center Europe “Demo4Grid Project Information and FAQ”

In addition to the Demo4Grid information on the advertising pylons, this important EU project is advertised in the seminar and education room of the Green Energy Center Europe.



Figure 12. Seminar Room Green Energy Center Europe “Demo4Grid Project Partnership”

2.5. Analysis of the project awareness

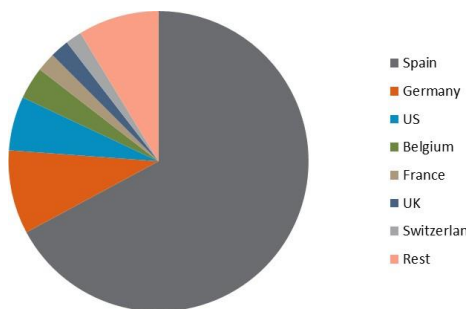
3.6.1 Website

Demo4Grid's website was launched by the end of February 2016. The information regarding access and user behaviour has been analysed and compared between the 1st project year (Mar 2017 to Feb 2018), the 2nd project year (Mar 2019 to Feb 2019) and the third year (Feb 2019 to Feb 2020).

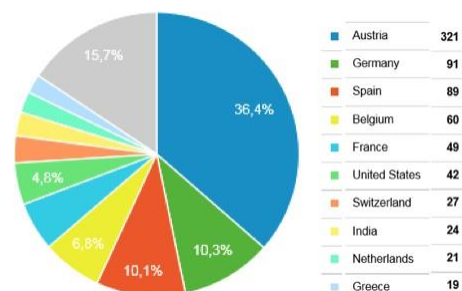
Due to problems related to the communication of the homepage with the Google Analytics tool, some meaningful comparisons could not be made. Nevertheless, the following comparisons confirm the efforts regarding the strategic dissemination of the Demo4Grid project as described before.

	1 st year	2 nd year	3 rd year
Unique users	356	743	2.088

Since the beginning of the project the number of users has increased by factor 6 (586 %). This figure has to be put into perspective due to 346 users from the United States with an average session time of only 15 seconds (see table). Disregarding the latter, the project website records approx. 1750 users. This is approximately 5 times more compared to the 1st project year. Users from all over the world are visiting the website. Most of the users are concentrated in the target area Europe (see map).



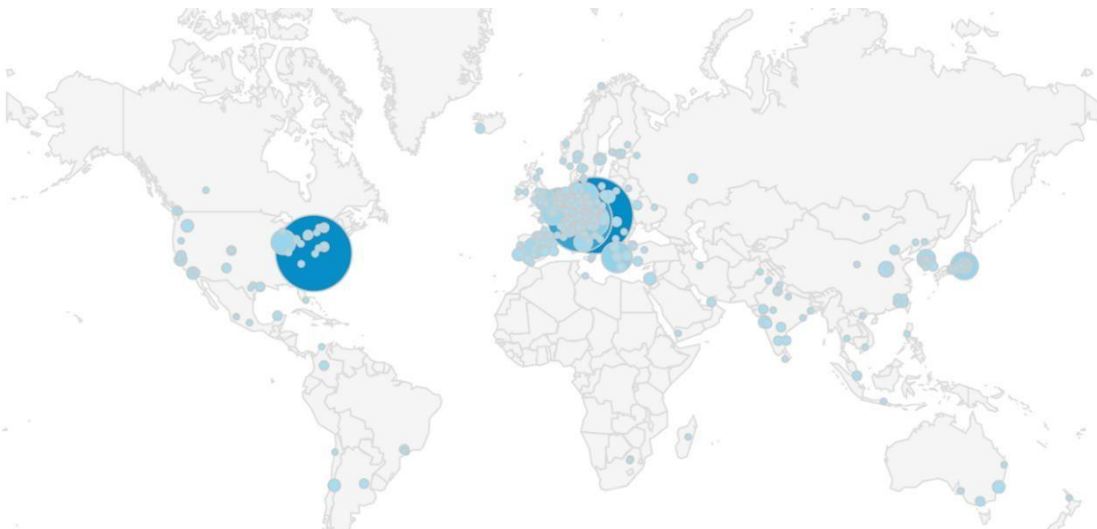
Mar 2017 to Feb 2018 (356 users = 100%)



Mar 2019 to Feb 2020 (743 users + 208 %)

Land	Akquisition			Verhalten		
	Nutzer	Neue Nutzer	Sitzungen	Absprungrate	Seiten/Sitzung	Durchschnittl. Sitzungsdauer
	2.088 % des Gesamtwerts: 100,00 % (2.088)	2.050 % des Gesamtwerts: 100,00 % (2.050)	2.817 % des Gesamtwerts: 100,00 % (2.817)	31,95 % Durchn. für Datenansicht: 31,95 % (0,00 %)	2,54 Durchn. für Datenansicht: 2,54 (0,00 %)	00:03:20 Durchn. für Datenansicht: 00:03:20 (0,00 %)
1. Austria	644 (30,54 %)	613 (29,90 %)	1.050 (37,27 %)	20,38 %	3,17	00:04:56
2. United States	346 (16,41 %)	345 (16,83 %)	353 (12,53 %)	92,92 %	1,12	00:00:15
3. Germany	244 (11,57 %)	239 (11,66 %)	323 (11,47 %)	23,22 %	2,44	00:02:36
4. Japan	85 (4,03 %)	84 (4,10 %)	99 (3,51 %)	42,42 %	1,98	00:03:11
5. Spain	79 (3,75 %)	76 (3,71 %)	118 (4,19 %)	12,71 %	2,94	00:03:28
6. Belgium	72 (3,41 %)	69 (3,37 %)	94 (3,34 %)	13,83 %	2,81	00:03:40
7. Netherlands	71 (3,37 %)	70 (3,41 %)	94 (3,34 %)	19,15 %	2,44	00:04:03
8. Italy	61 (2,89 %)	60 (2,93 %)	70 (2,48 %)	34,29 %	2,60	00:02:36
9. France	60 (2,84 %)	59 (2,88 %)	74 (2,63 %)	33,78 %	2,47	00:03:24
10. Greece	59 (2,80 %)	59 (2,88 %)	83 (2,95 %)	14,46 %	3,08	00:03:54

Mar 2019 to Feb 2020 (2.088 users + 586%)



Kontinent	Akquisition			Verhalten		
	Nutzer	Neue Nutzer	Sitzungen	Absprungrate	Seiten/Sitzung	Durchschnittl. Sitzungsdauer
	2.088 % des Gesamtwerts: 100,00 % (2.088)	2.050 % des Gesamtwerts: 100,00 % (2.050)	2.817 % des Gesamtwerts: 100,00 % (2.817)	31,95 % Durchn. für Datenansicht: 31,95 % (0,00 %)	2,54 Durchn. für Datenansicht: 2,54 (0,00 %)	00:03:20 Durchn. für Datenansicht: 00:03:20 (0,00 %)
1. Europe	1.459 (69,64 %)	1.424 (69,46 %)	2.128 (75,54 %)	21,48 %	2,87	00:03:57
2. Americas	391 (18,66 %)	389 (18,98 %)	410 (14,55 %)	84,88 %	1,29	00:00:36
3. Asia	216 (10,31 %)	210 (10,24 %)	246 (8,73 %)	34,96 %	1,93	00:02:49
4. Oceania	12 (0,57 %)	12 (0,59 %)	16 (0,57 %)	18,75 %	2,06	00:02:25
5. (not set)	11 (0,53 %)	10 (0,49 %)	11 (0,39 %)	36,36 %	1,55	00:01:11
6. Africa	6 (0,29 %)	5 (0,24 %)	6 (0,21 %)	33,33 %	1,50	00:00:50

Figure 1. Analysis of project awareness: "Geographical information Mar '17 - Feb '18 (left), Mar '18-Feb '19 (right)

It can be seen that visits to the website come from all over the world (US, India), so it clearly indicates the importance of maintaining the website actively in order to maximise the impact of the project.

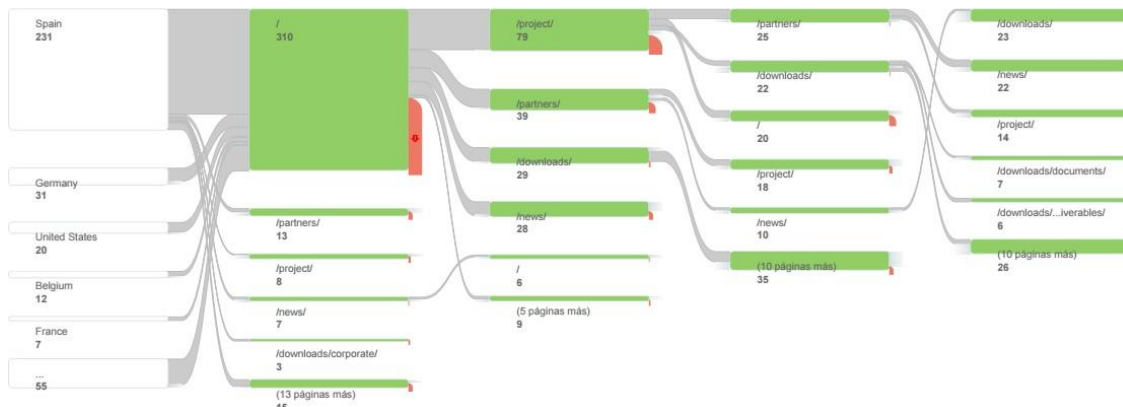
It can be seen that the visits from the website come from all over the world (US, India), so it clearly indicates the importance of maintaining the website in order to maximise the impact of the project. This was done during the last two years mainly through FEN Systems in Austria. During the next period it is important improve the website through more involvement of the partners in order to maximise the geographical impact, especially throughout Europe.

To enhance local, regional and national awareness of the project the Demo4Grid information was shared with the website of the Green Energy Center Europe. It is quite interesting to see and to use the synergies of this process. The traffic on the website of the Green Energy Center is 10 times higher than the one on the Demo4Grid homepage. Hence, it was very important to publish the content on both websites. At the same time, Demo4Grid information was also shared within the website of FEN Systems. This way, the awareness of the project is channelled through three different platforms, all referring to the same content.

The increasing number of website users reflects the success of this concept: acquisition of users through cross-linking from the websites fch.europa.eu, fen-systems.com, green-energy-center.com and the relating Facebook pages (see table “acquisition”). Further synergies are expected through cross-linking and sharing of information on the project partners’ websites.

Due to the reasons of agreement- and permitting- problems the increasing number of Austrian Visitors (50 %) – influenced by the promotion on websites of FEN Systems and Green Energy Center Europe – was important for supporting the regional and local stakeholder process.

Navigation Flow Demo 4 Grid Website Mar. '17 – Feb. '18 (356 users)



Navigation Flow Green Energy Center Europe Website Mar. '18 – Feb. '19



Navigation Flow Demo4Grid Website Mar. '19 – Feb. '20 (2.088 users)



Quelle ?	Akquisition		
	Nutzer ? ↓	Neue Nutzer ?	Sitzungen ?
	282 % des Gesamtwerts: 13,51 % (2.088)	242 % des Gesamtwerts: 11,80 % (2.050)	437 % des Gesamtwerts: 15,51 % (2.817)
1. fch.europa.eu	75 (25,86 %)	60 (24,79 %)	94 (21,51 %)
2. fen-systems.com	33 (11,38 %)	22 (9,09 %)	78 (17,85 %)
3. green-energy-center.com	33 (11,38 %)	27 (11,16 %)	68 (15,56 %)
4. m.facebook.com	26 (8,97 %)	26 (10,74 %)	26 (5,95 %)
5. tirol.info	26 (8,97 %)	20 (8,26 %)	27 (6,18 %)
6. facebook.com	23 (7,93 %)	19 (7,85 %)	37 (8,47 %)
7. baidu.com	12 (4,14 %)	12 (4,96 %)	12 (2,75 %)
8. hidrogenoaragon.org	9 (3,10 %)	9 (3,72 %)	10 (2,29 %)
9. youtube.com	8 (2,76 %)	8 (3,31 %)	9 (2,06 %)
10. cordis.europa.eu	5 (1,72 %)	5 (2,07 %)	5 (1,14 %)

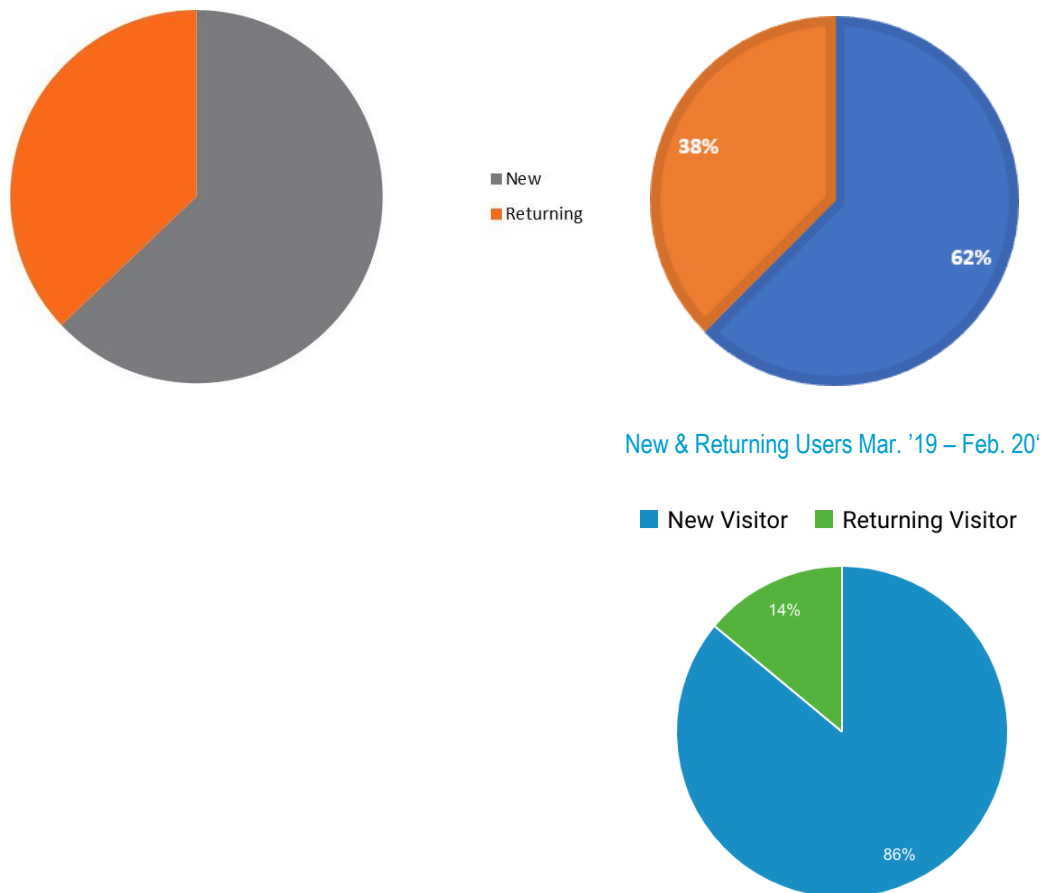
Figure 2. Analysis of project awareness “Comparison Demo4Grid 2017 and Green Energy Center 2018”

Most of the users start the visit to the websites in the “home” section, since most of the links in news and presentation send the user to this page. Unfortunately, there is still a percentage of users that does not continue navigating the site. This has to be improved.

The next analytics show that more than half of the visits are from new visitors. The objective was to increase not only the total visits to the website but also the number of users that return to obtain updated information of the project. This should be achieved by steady actualisation of the sections “NEWS”, “REPORT” and “ABOUT DEMO4GRD”. In other words, the content of the page has to be updated and the visitors of the partner websites - especially the visitors of the Green Energy Center Europe website - have to be redirected, in order to get a high number of returning visitors.

These goals were not achieved in the project year 2019/20 (see graphics – lower number of returning visitors), because the project was practically “on hold” due to the reasons of agreement and permit matters. Only a small number of Demo4Grid specific news have been reported on the Demo4Grid Website (see Reports, News-Social Media). One reason for the high number of “New Visitors” are also the above mentioned 346 “Users” of the United States which had an average session duration of only 15 seconds.

New & Returning Users Mar. '17 – Feb. '18 New & Returning Users Mar. '18 – Feb. '19



New & Returning Users Mar. '19 – Feb. 20'

Figure 3. Analysis of project awareness – New and Returning Users

The following section includes the total amount of the target audiences that should be influenced by the results of the development of the project during the next project years. For each of them it has been specified a series of key messages within the CDAP that should be addressed during the development of the project.

Policy makers, regulators, public bodies: The evaluation of potential markets, along with the analysis of the European standards and national regulations will be the main input for these organisms. In the same way, this will be accompanied by an analysis of the potential of water electrolysis to enable a successful introduction of RE resources at low costs.

Technology providers, manufacturers, fuel cell and hydrogen stakeholders: Once the consortium has approved which information and results are susceptible to be public regarding market potential and framework to successfully deploy electrolyzers as grid service, they will be shared in selected forums with FCH stakeholders. Besides, sharing public information of the main achievements of the project would be one of the main ways to increase the exploitation impact of the project.

Renewable energy stakeholders, distribution and transmission system operators: For the main stakeholders on the renewable energy industrial sector, as well as TSOs and DSOs, the key messages to be transmitted involve the benefits that the MW HP AWE technology can introduce to new business models related to the RE sector. Additionally, demonstration tests' results will be shared among these groups in order to prove the feasibility of the connection of electrolyzers to the grid, and performance specifications for grid-connected electrolyzers will be validated with grid operators to ensure their adequacy.

General public: The communication efforts towards the general public will be focused on showing the benefits of RE introduction with hydrogen to reduce environmental impacts, employment generation, increasing European competitiveness and reducing external dependency. The additional goal at this point is to reduce the existing resistance to these new technologies and motivating early adopters.

Results from additional tasks of the project, related to the assessment of the market potential and identification and analysis of business cases will serve as additional input to detect new target groups or stakeholders or to focus better the dissemination efforts to reach the target groups.

Furthermore, the information obtained through the continuous monitoring of the external projects will also serve as feedback to define specific stakeholders from the different groups.

The participation in the communication events and activities promoted by the FCH 2 JU will be of key importance to reach these stakeholders.

3.6.3 Events

Two main events have taken place since the last update of the CDAP:

- **FCH JU Review Days:** The project was presented during the FCH JU Review Days in Brussels, in November 2019. The FCH JU published a tweet on the project (see figure 14).
- **Ground Breaking Ceremony** at the production facility of MPREIS in Völs on March 12th (outside current reporting period)

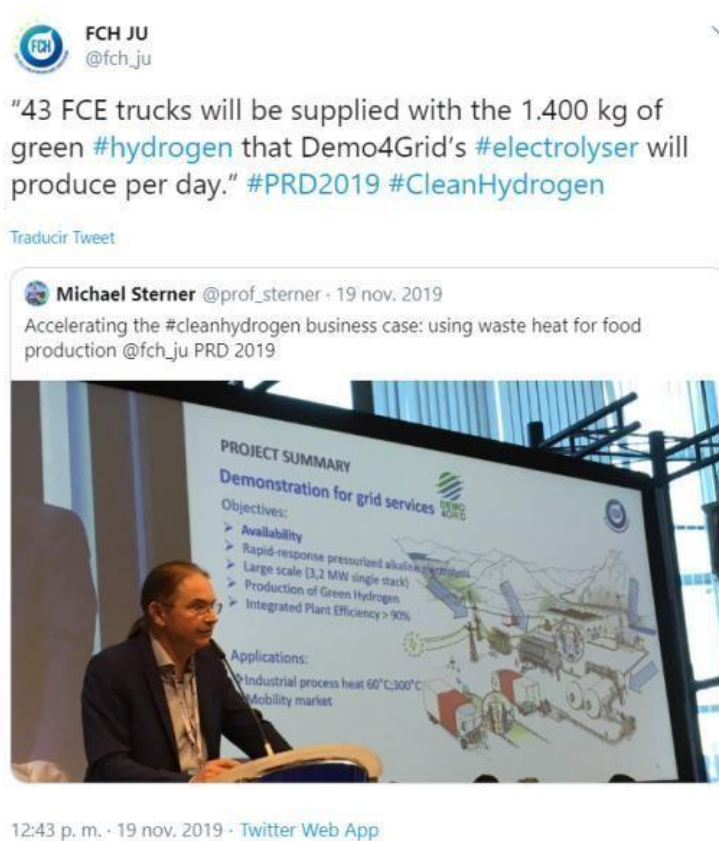


Figure 14. FCH JU tweet about Demo4grid

3.6.4 Target groups

The following section includes the total amount of the target audiences that should be influenced by the results of the development of the project during the next project years. For each of them it has been specified a series of key messages within the CDAP that should be addressed during the development of the project.

Policy makers, regulators, public bodies: The evaluation of potential markets, along with the analysis of the European standards and national regulations will be the main input for these organisms. In the same way, this will be accompanied by an analysis of the potential of water electrolysis to enable a successful introduction of RE resources at low costs.

Technology providers, manufacturers, fuel cell and hydrogen stakeholders: Once the consortium has approved which information and results are susceptible to be public regarding market potential and framework to successfully deploy electrolyzers as grid service, they will be shared in selected forums with FCH stakeholders. Besides, sharing public information of the main achievements of the project would be one of the main ways to increase the exploitation impact of the project.

Renewable energy stakeholders, distribution and transmission system operators: For the main stakeholders on the renewable energy industrial sector, as well as TSOs and DSOs, the

key messages to be transmitted involve the benefits that the MW HP AWE technology can introduce to new business models related to the RE sector. Additionally, demonstration tests' results will be shared among these groups in order to prove the feasibility of the connection of electrolyzers to the grid, and performance specifications for grid-connected electrolyzers will be validated with grid operators to ensure their adequacy.

General public: The communication efforts towards the general public will be focused on showing the benefits of RE introduction with hydrogen to reduce environmental impacts, employment generation, increasing European competitiveness and reducing external dependency. The additional goal at this point is to reduce the existing resistance to these new technologies and motivating early adopters.

Results from additional tasks of the project, related to the assessment of the market potential and identification and analysis of business cases will serve as additional input to detect new target groups or stakeholders or to focus better the dissemination efforts to reach the target groups.

Furthermore, the information obtained through the continuous monitoring of the external projects will also serve as feedback to define specific stakeholders from the different groups.

The participation in the communication events and activities promoted by the FCH 2 JU will be of key importance to reach these stakeholders.

2.6. Social and professional networks

The use of social media and social and professional networks is a key communication tool to disseminate information about the project, events and project results. Partners will use their own accounts in the social/professional networks to contribute to the project dissemination and to create open debates and detect future industrial investors from other cities in Europe. social media considered for the dissemination of the project communications and recommendations on how to use each of them according to their unique characteristics are detailed below:

- **YouTube:** A project channel was created. This is useful to make a better diffusion of the promotional videos made during the development of the project (like the final video regarding the results obtained) as well as of any appearances of the partners on television. The profile has 2 subscribers.
<https://www.youtube.com/channel/UCyemgrnyHSt3bwRFRh1Staw/videos>
- **Facebook:** A Facebook page has been created for the project. Same use as the LinkedIn account. Every partner will be able to post a template, available under the 'Project' section on their profiles, linking it to the other members of their teams. The page has 30 followers.
https://www.facebook.com/Demo4Grid/?sw_fnr_id=926174830&fnr_t=0

- **Twitter:** There is no Twitter channel, as a dedicated hashtag (#Demo4Grid) has been considered more effective and easy-to-user by Consortium members. Several tweets have been posted since the last CDAP update:

https://twitter.com/search?q=%23Demo4grid&src=typed_query&f=live

Moreover, following the utility of being featured in third-parties websites and FHA's contact with Hydrogen Europe Research, information about Demo4grid has been published in their website: <https://hydrogeneurope.eu/project/demo4grid>

2.7. Identification of other projects for coordination

Possible paths of collaboration in public workshops and seminars will be explored by the Consortium when it is considered suitable and of interest for the project and the partners. The upcoming events considered are:

Event Date	Organiser	Event	Location
June 2021 (tbc)	IPHE WHTC2021	WHTC 2019 -World Hydrogen Technologies Convention	Montreal, Canada
June 2021 (tbc)	BIG HIT	Final BIG HIT project meeting and conference	Malta
Sep-21	ICHS2021	Biennial conference on hydrogen safety.	Edinburgh. TBC
June 2022 (tbc)	WHEC 2022	World Hydrogen Energy Conference	Istanbul, Turkey

Table 2. Identification of Conference, Events and Fairs

2.8. Workshops

Four workshops are planned to be carried out during the project period. Dates for the workshops 2, 3 and 4 are still to be determined depending on the progress of the construction works and the global situation. As of 20th March 2020, the last building permits for the Demo4Grid implementation site were received. However, the recent worldwide Coronavirus COVID-19 crisis will inevitably affect the implementation of Demo4Grid. The Consortium will evaluate and try to anticipate the impact, thus adapting workshop dates to a new implementation schedule that is currently elaborated.

- WS1: **[Celebrated on 12th March 2020]**. General workshop directed to all public targets, and especially to the Tyrolean community, the region in which the demonstration project is located. It was based on a launch event showing the final deployment of the FCH technologies in the project and the beginning of the project operation.

- WS2: General workshop directed towards the scientific/technical community in the framework of the FCH2-JU. The goal will be to explain the progress, main results and try to analyse the outputs of the technical project progress.
- WS3: Technical workshop directed exclusively to end users/customers (TSO/DSO, utilities, grid operators, etc). Workshop for alignment with stakeholders to ensure replication (RE generators, large consumers, chemical industry, utilities...) and policy makers. The goal will be to explain the progress, main results and try to attract them for the last months of the project which are crucial for the success of the exploitation and future commercialization. This workshop could be also complemented by bilateral meetings with potential end-user/customers if difficulties with the organization of a workshop with the main stakeholders and customers (agenda issues, confidentiality, etc) arise.
- WS4: Final workshop to close the project. It could be co-organized together with other FCH2-JU projects, conferences, events, etc. Workshop directed to the whole community and partners interested to explain the main results.

	OBJECTIVE	PLACE
1st Workshop	Launch Event	Innsbruck
2nd Workshop	General workshop for the scientific/technical community and the FCH2 JU	To be confirmed
3rd Workshop	Workshop for alignment with stakeholders to ensure replication (RE generators, large consumers, chemical industry, utilities...) and policy makers	To be confirmed
4th Workshop	Final Workshop	Innsbruck

Table 3. Demo4Grid Workshops proposal.

3. CONCLUSIONS

The present document represents the main guideline to be followed by any communication activity related to the Demo4Grid 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.

The main target groups identified are the public regulator bodies, the hydrogen technology providers and manufacturers, the renewable energy stakeholders, DSOs, TSOs and of course the general public too. The ways of reaching these audiences are different for each of them, but in any case, the website of the project is meant to be the central point of information related to the project, as it will contain all the public documents generated during the project, as well as a 'News' section to gather all the important updates on the project.

During the time of execution of the project, the partners will have to make use of their institutional accounts in social networks (Twitter, Facebook, LinkedIn, etc.) to promote the work performed in the project.

Due to major problems encountered during the project implementation causing explained significant delays, the consortium has elaborated crisis communication steps in order to prevent a project crash regarding the project communication:

- The Consortium will work on increasing awareness about the importance of the project in Innsbruck, Tyrol, Austria and Europe (in that order).
- Improve involvement of partners to increase awareness about the importance of the project in their home countries and regions (through their social media profiles, in the events they participate in, etc).
- Prepare a list of FAQ about the project.
- Agree on a coordinated message for all project partners in case of a communication crisis.

In the event of a greater delay in the development of the project, project partners would:

- Officially inform the Project Officer and FCH JU.
- Send a conjoint press release explaining the problems faced by the project.
- The consortium would create a dedicated space in the project website in order to explain the delays and the measures undertaken.
- The project coordinator and the WP leader will be the designated spokespeople for any media requirements.
- Identify third-party "friends" for potential endorsement or to multiply Demo4Grid key messages and information.

- Evaluate why the crisis occurred and how to avoid any other crisis in the future by studying and updating the project's original SWOT.

4. ANNEXES

4.1. Annex Conferences, Fairs, Workshops 2nd project year

Conference, congress, etc.	Name of the contribution	Date of issue	Place	Author(s)	Target	Scope	No. People attending	Brief description
Generalversammlung	Generalversammlung der Codex Group des Green Energy Center Europe	15/05/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS and Partners of Green Energy Center Europe	Dissemination, Stakeholder alignment	Management, Dissemination Demo4Grid Targets	10	https://www.green-energy-center.com/ausserordentliche-generalversammlung-im-green-energy-center-europe/
GSV-Forum of Austria	EU-Project Demo4Grid means also Business Case for MPREIS-Logistic	24/05/2018	SWARCO Traffic World in Tirol Wattens	MPREIS, Ewald Perwög	Dissemination, Stakeholder alignment	Presentation of the Demo4Grid Business Case	50	https://www.green-energy-center.com/eu-project-demo4grid-means-also-green-hydrogen-for-mpreis-tyrol-and-europe/
European Sustainable Energy week, FCH JU Session on "Hydrogen and fuel cells greening European industry"	Demo4Grid Presentation of Ewald Perwög at the Sustainable Energy Week in Brussels	07/06/2018	Brussels	MPREIS, Ewald Perwög	Dissemination, Stakeholder alignment	Interface to EU decision makers FCH 2 JU Presentation of the Demo4Grid Project		https://www.green-energy-center.com/eu-sustainable-energy-week-demo4grid-presentation-from-ewald-perwog/
Austrian Gas Experts	Austrian gas experts are interested on the running hydrogen projects	27/06/2018	Heiterwang/ Tyrol.	FEN-SYSTEMS Nikolaus Fleischhacker	Dissemination, Stakeholder alignment	Stakeholder information, Demo4Grid Project	20	https://www.green-energy-center.com/gasfachleute/
Canadian Urban Transit Research & Innovation Consortium meets Green Energy Center Europe	Canadian Urban Transit Research & Innovation Consortium meets Green Energy Center Europe	27/07/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS, Nikolaus Fleischhacker, MPREIS Ewald Perwög	Dissemination, Stakeholder alignment	Interface to international H2 Projects, Demo4Grid Project Informations	8	https://www.green-energy-center.com/canadian-urban-transit-research-innovation-consortium-meets-green-energy-center-europe/
Austrians Hydrogen Initiative (WIVA P&G)	Working Visit of Austrians Hydrogen Initiative (WIVA P&G) at the Green Energy Center Europe	24/08/2018	Green Energy Center Europe in	FEN-SYSTEMS Ernst Fleischhacker - Green Energy Center Europe	Dissemination, Stakeholder alignment	Interface to other H2 projects Demo4Grid Business Case	5	https://www.green-energy-center.com/hydrogen-initiative-wiva-pg-austrians-model-region-energy-meets-green-energy-center-europe/
IAA Hannover	Hyundai Fuel Cell Electric Trucks for projects of the Green Energy Center Europe	05/10/2018	Hannover	FEN-SYSTEMS Ernst Fleischhacker - Green Energy Center Europe	Dissemination, Stakeholder alignment	Interface Hydrogen Applications for the Demo4Grid Business Case	8	https://www.green-energy-center.com/hyundai-fuel-cell-electric-trucks-for-the-ongoing-projects-of-the-green-energy-center-europe/
Hyundai Nexo FCEV Launch in Innsbruck	Hyundai NEXO FCEV launched with HyWest at the Green Energy Center Europe	06/10/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS, MPREIS Nikolaus Fleischhacker, Ernst Fleischhacker, Partners of Green Energy Center Europe	Dissemination, Stakeholder alignment	Interface Hydrogen Highway, Green Hydrogen, Hydrogen Family, Demo4Grid Business Case	70	https://www.green-energy-center.com/hydrogen-center-hywest-launches-together-with-the-hyundai-nexo-fcev-in-austria/
Hyundai Nexo FCEV Roadshow in Linz/Wels	Hyundai und HyWest präsentieren NEXO FCEV an der Fronius H2-Fillstation in Thalheim bei Wels	12/10/2018	Fronius Wels	FEN-SYSTEMS Ernst Fleischhacker (Green Energy Center Europe)	Dissemination, Stakeholder alignment	Interface Hydrogen Highway, Green Hydrogen, Hydrogen Family, Demo4Grid Business Case	70	http://hyundai.yumm.at/filp/Hyundai-NEXO-Roadshow.html
Hyundai Nexo FCEV Roadshow in Graz	Hyundai und HyWest präsentieren NEXO FCEV am HyCentA an der TU Graz	17/10/2018	TU Graz	FEN-SYSTEMS Ernst Fleischhacker (Green Energy Center Europe)	Dissemination, Stakeholder alignment	Interface Hydrogen Highway, Green Hydrogen, Hydrogen Family, Demo4Grid Business Case	70	https://www.green-energy-center.com/hyundai-und-arge-hywest-praesentieren-nexo-fcev-am-hycenta-an-der-tu-graz/
Conference Mobility.now 2017 of WEKA Industriemedia	EU-Project Demo4Grid means also Business Case for MPREIS-Logistic	08/11/2018	Schönbrunn Palace in Vienna	MPREIS, Mag. Ewald Perwög	Dissemination, Stakeholder alignment	Demo4Grid Business Case	150	https://www.demo4grid.eu/wasserstoff-elektromobilitaet-im-lebensmittel-guter-verkehr-vortrag-mag-ewald-perwog/
Roadshow	Politik informiert sich über den Bau der Brücke in die grüne Mobilitätszukunft	16/11/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS, MPREIS Ernst, Nikolaus Fleischhacker (Green Energy Center Europe)	Dissemination, Stakeholder alignment	Interface to Target group public bodies and regulators	5	https://www.green-energy-center.com/politik-informiert-sich-ueber-den-bau-der-bruecke-in-die-gruene-mobilitaetszukunft/
Opening Info Corner Green Energy Center Europe	Eröffnung Info Corner des Green Energy Centers Europe	16/11/2018	Green Energy Center Europe in	FEN-SYSTEMS, MPREIS, Partners of Green Energy Center Europe	Dissemination, Stakeholder alignment	Public audience, Interface to the citizens of Innsbruck	50	https://www.green-energy-center.com/info-corner-des-green-energy-centers-europe-eroffnet/
EMob Event Sparer	Autohaus Sparer in St.Johann in Tirol ist neuer Codex Partner des Green Energy Centers Europe	17/11/2018	St. Johann in Tirol	FEN-SYSTEMS, MPREIS Ernst Fleischhacker (Green Energy Center Europe)	Dissemination, Stakeholder alignment	Interface public, communication activity related also to the Demo4Grid project	100	https://www.green-energy-center.com/autohaus-sparer-in-st-johann-in-tirol-ist-neuer-codex-partner/
Expert Roundtable Standortagentur Tirol	Expert Roundtable über "Sorglos Laden in der Zukunft"	20/11/2018	Green Energy Center Europe in Innsbruck	MPREIS Ewald Perwög, FEN-SYSTEMS Ernst & Nikolaus Fleischhacker	Dissemination, Stakeholder alignment	Interface to hydrogen technology providers, manufacturers, and renewable energy stakeholders	23	https://www.green-energy-center.com/expert-roundtable-sorglos-laden-in-der-zukunft/
Expert Meeting Green Energy Center	Erfahrungsaustausch mit ElektroMobilitätsClub Österreich am Green Energy Center Europe.	22/11/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS Ernst & Nikolaus Fleischhacker	Dissemination, Stakeholder alignment	Interface to hydrogen to he renewable energy stakeholders	6	https://www.green-energy-center.com/erfahrungsaustausch-mit-elektromobilitaetsclub-osterreich-am-green-energy-center-europe/
Management Conference Linz AG	Wasserstoff Problemlöser der Zukunft, Vortrag Linz AG	30/11/2018	Linz AG	FEN-SYSTEMS Ernst Fleischhacker, Lorenz Köll	Dissemination, Stakeholder alignment	Interface to the staff of a public energy service company and renewable energy provider	125	https://www.green-energy-center.com/vortrag-fur-die-fuhrungskraefte-der-linz-ag/
SWECO Management Conference	SWECO aus Schweden besucht das Green Energy Center Europe	07/12/2018	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS Ernst & Nikolaus Fleischhacker	Dissemination, Stakeholder alignment	Interface to hydrogen technology providers and manufacturers, renewable energy stakeholders	15	https://www.green-energy-center.com/7705-2/
CNL Congress, High Level Logistic Event	Batterie- und Wasserstoff-LKW's sind kein Widerspruch	13/12/2018	University of Natural Resources and Applied Life Sciences in Vienna	FEN-SYSTEMS Ernst & Nikolaus Fleischhacker, MPREIS Ewald Perwög	Dissemination, Stakeholder alignment	Interface to hydrogen technology providers and manufacturers and logistic companies interested on holistic hydrogen solutions	45	https://www.green-energy-center.com/elektro-lkws-mit-batterie-und-wasserstoff-ergaenzungstechnologien-fur-den-gruenen-schwerverkehr/
Info Event Hydrogen Train	Zillertalbahn fährt künftig mit grünem Wasserstoff, Infoabend in Mayrhofen	15/02/2019	Congress Mayrhofen	FEN-SYSTEMS Nikolaus Fleischhacker	Dissemination, Stakeholder alignment	Interface to public regulator, bodies, public, hydrogen technology providers and manufacturers,	70	https://www.green-energy-center.com/infoabend-zillertalbahn-fahrt-kuenftig-mit-gruenem-wasserstoff/
E-Mobility, Hydrogen Education Programme	Berufsfeuerwehr Innsbruck absolvierte die erste Ausbildungstufe Elektromobilität	22/02/2019	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS Nikolaus & Ernst Fleischhacker	Dissemination, Stakeholder alignment	Interface to stakeholders of public security	110	https://www.green-energy-center.com/zweiter-turnus-der-berufsfeuerwehr-innsbruck-absolvierte-die-erste-ausbildungsstufe-zur-elektromobilitaet/
E-Mobility, Hydrogen Education Programme	Info Workshop "E-Mobilität", Donnerstag 28. Februar 2019 um 19:00 Uhr im Green Energy Center Europe	28/02/2019	Green Energy Center Europe in Innsbruck	FEN-SYSTEMS Nikolaus & Ernst Fleischhacker	Dissemination, Stakeholder alignment	Interface to public and renewable energy stakeholders	20	https://www.green-energy-center.com/info-workshop-e-mobilitaet-28-februar-2019-19-uhr/
ÖVG Congress voestalpine Stahlwelt Linz	Wasserstoff, der Stoff in dem die Chancen der Zukunft liegen	07/03/2019	voestalpine Stahlwelt Linz	FEN-SYSTEMS Ernst Fleischhacker	Dissemination, Stakeholder alignment	Interface to public regulator bodies, hydrogen technology providers and manufacturers and logistic companies interested on holistic hydrogen solutions	120	https://www.green-energy-center.com/wp-content/uploads/2019/03/10-03-07-0%CC%88VG-Vortrag-Demo4Grid.pdf

4.2. Annex Partners Media 2nd project year

Date of issue	Author(s)	Brief description	Link
01/03/2018	FEN-SYSTEMS	Green Energy Center Europe: "Der Stille Klang der Zukunft"	https://www.green-energy-center.com/green-energy-der-stille-klang-der-zukunft/
19/03/2017	FEN-SYSTEMS	Demo4Grid Website	https://www.demo4grid.eu/
22/03/2018	FEN-SYSTEMS	Zillertaltrain 2020+, Energy-Autonomous with Hydrogen	https://www.green-energy-center.com/zillertaltrain-2020-energy-autonomous-with-hydrogen/
01/04/2018	FEN-SYSTEMS	Zillertaltrain 2020+ energieautonom mit Wasserstoff	https://www.youtube.com/watch?v=17MKOq-ozdw&t=5s
15/05/2018	FEN-SYSTEMS	Generalversammlung der Codex Group des Green Energy Center Europe	https://www.green-energy-center.com/ausserordentliche-generalversammlung-im-green-energy-center-europe/
23/05/2018	FEN-SYSTEMS	Green Hydrogen for MPREIS, Tirol and Europe, easy explanation of the System from Ewald Perwög (© MPREIS).	https://www.green-energy-center.com/green-hydrogen-for-mpreis-tirol-and-europe-easy-explanation-of-the-system-from-ewald-perwog-mpreis/
24/05/2018	FEN-SYSTEMS	EU-Project Demo4Grid means also Business Case for MPREIS-Logistic	https://www.green-energy-center.com/eu-project-demo4grid-means-also-green-hydrogen-for-mpreis-tyrol-and-europe/
07/06/2018	FEN-SYSTEMS	Demo4Grid Presentation of Ewald Perwög at the Sustainable Energy Week in Brussels	https://www.green-energy-center.com/eu-sustainable-energy-week-demo4grid-presentation-from-ewald-pwewog/
27/06/2018	FEN-SYSTEMS	Austrian gas experts are interested on the running hydrogen projects	https://www.green-energy-center.com/gasfachleute/
30/06/2018	FEN-SYSTEMS	The European hydrogen highway has reached Norway	https://www.green-energy-center.com/kronenzeitung-per-wasserstoff-nach-norwegen/
10/07/2018	FEN-SYSTEMS	Europas größte Single-Stack-Elektrolyseanlage in Völs	https://www.demo4grid.eu/wp-content/uploads/2018/07/S22C-6e18071013090.pdf
10/07/2018	FEN-SYSTEMS	Europas größte Single-Stack-Wasserstoff-Elektrolyseanlage in Völs mit ILF Consulting Engineers	https://www.green-energy-center.com/wp-content/uploads/2018/07/S22C-6e18071013090.pdf
27/07/2018	FEN-SYSTEMS	Canadian Urban Transit Research & Innovation Consortium meets Green Energy Center Europe	https://www.green-energy-center.com/canadian-urban-transit-research-innovation-consortium-meets-green-energy-center-europe/
24/08/2018	FEN-SYSTEMS	Working Visit of Austrians Hydrogen Initiative (WIVA P&G) at the Green Energy Center Europe	https://www.green-energy-center.com/hydrogen-initiative-wiva-pg-austrians-model-region-energy-meets-green-energy-center-europe/
17/09/2018	FEN-SYSTEMS	HyWest Consortium: Bundled competence for a green future with hydrogen	https://www.green-energy-center.com/hywest-bundled-competence-for-a-green-energy-future/
05/10/2018	FEN-SYSTEMS	Hyundai Fuel Cell Electric Trucks for projects of the Green Energy Center Europe	https://www.green-energy-center.com/hyundai-fuel-cell-electric-trucks-for-the-ongoing-projects-of-the-green-energy-center-europe/
06/10/2018	FEN-SYSTEMS	Hyundai NEXO FCEV launched with HyWest at the Green Energy Center Europe	https://www.green-energy-center.com/hydrogen-center-hywest-launches-together-with-the-hyundai-nexo-fcev-in-austria/
17/10/2018	FEN-SYSTEMS	Hyundai und HyWest präsentieren NEXO FCEV am HyCentA an der TU Graz	https://www.green-energy-center.com/hyundai-und-arge-hywest-praesentieren-nexo-fcev-am-hycenta-an-der-tu-graz/
18/10/2018	FEN-SYSTEMS	Hyundai NEXO Roadshows in Innsbruck, Linz/Wels und Graz	http://hyundai.yumm.at/flip/Hyundai-NEXO-Roadshow.html
16/11/2018	FEN-SYSTEMS	Politik informiert sich über den Bau der Brücke in die grüne Mobilitätszukunft	https://www.green-energy-center.com/politik-informiert-sich-uber-den-bau-der-bruecke-in-die-gruene-mobilitaetszukunft/
16/11/2018	FEN-SYSTEMS	Eröffnung Info Corner des Green Energy Centers Europe	https://www.green-energy-center.com/info-corner-des-green-energy-centers-europe-eroeffnet/
17/11/2018	FEN-SYSTEMS	Autohaus Sparer in St.Johann in Tirol ist neuer Codex Partner des Green Energy Centers Europe	https://www.green-energy-center.com/autohaus-sparer-in-st-johann-in-tirol-ist-neuer-codex-partner/
20/11/2018	FEN-SYSTEMS	Expert Roundtable über "Sorglos Laden in der Zukunft"	https://www.green-energy-center.com/expert-roundtable-sorglos-laden-in-der-zukunft/
22/11/2018	FEN-SYSTEMS	Erfahrungsaustausch mit ElektromobilitätsClub Österreich am Green Energy Center Europe.	https://www.green-energy-center.com/erfahrungsaustausch-mit-elektromobilitaetsclub-osterreich-am-green-energy-center-europe/
30/11/2018	FEN-SYSTEMS	Wasserstoff Problemlöser der Zukunft, Vortrag Linz AG	https://www.green-energy-center.com/vortrag-fur-die-fuhrungskraefte-der-linz-ag/
07/12/2018	FEN-SYSTEMS	SWECO aus Schweden besucht das Green Energy Center Europe	https://www.green-energy-center.com/7705-2/
13/12/2018	FEN-SYSTEMS	Batterie- und Wasserstoff-LKW's sind kein Widerspruch	https://www.green-energy-center.com/elektro-lkws-mit-batterie-und-wasserstoff-ergaenzungstechnologien-fur-den-grunen-schwerverkehr/
29/12/2018	FEN-SYSTEMS	Wasserstoffzentrum: Auf dieses Projekt in Tirol „schaut ganz Europa“ krone.at	https://www.green-energy-center.com/wasserstoffzentrum-auf-dieses-projekt-in-tirol-schaut-ganz-europa-krone.at
15/02/2019	FEN-SYSTEMS	Zillertaltrain fährt künftig mit grünem Wasserstoff, Infoabend in Mayrhofen	https://www.green-energy-center.com/infoabend-zillertaltrain-fahrt-kuenftig-mit-gruenem-wasserstoff/
22/02/2019	FEN-SYSTEMS	Zweiter Turnus der Berufsfeuerwehr Innsbruck absolvierte die erste Ausbildungsstufe zur Elektromobilität	https://www.green-energy-center.com/zweiter-turnus-der-berufsfeuerwehr-innsbruck-absolvierte-die-erste-ausbildungsstufe-zur-elektromobilitaet/
28/02/2019	FEN-SYSTEMS	Info Workshop "E-Mobilität", Donnerstag 28. Februar 2019 um 19:00 Uhr im Green Energy Center Europe	https://www.green-energy-center.com/info-workshop-e-mobilitaet-28-februar-2019-19-uhr/
07/03/2019	FEN-SYSTEMS	Wasserstoff, der Stoff in dem die Chancen der Zukunft liegen	https://www.green-energy-center.com/wp-content/uploads/2019/03/10-03-07-0%CC%88VG-Vortrag-Demo4Grid.pdf
10/03/2019	FEN-SYSTEMS	Zillertal's Hydrogen-Powered Narrow-Gauge Railway Receives Ö3 Transport Award	https://fuelcellworks.com/news/zillertals-hydrogen-powered-narrow-gauge-railway-receives-o3-transport-award/

4.3. Annex Publications 1st and 2nd project year

Magazine Name	Date of issue	Author(s)	Target	Scope	Brief description	Link
YOUTUBE	01/03/2017	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen, Demo4Grid	Grüner Wasserstoff für Mpreis, Tirol und Europa	https://www.youtube.com/watch?time_continue=7&v=kcoqPsqdzKY
H2-International	06/03/2017	H2-International	Dissemination	Demo4Grid and H2 Future	Hydrogen as Baking Industry's Bread-and-Butter: Demo4Grid is an FCH JU project in the vein of H2Future. It was likewise launched in Austria, in March 2017, and just as H2Future, it has been focusing on green hydrogen. The main differences are the test system, now a 4-megawatt high-pressure alkaline electrolyzer, and the location, this time near Therese Mölk, an industrial bakery in Völs.	https://www.h2-international.com/2017/09/01/hydrogen-as-baking-industrys-bread-and-butter/
AUTOMAGAZIN	17/03/2017	FEN-SYSTEMS	Dissemination	Green Hydrogen, Demo4Grid, H2 Busses	„Wasserstoff-Offensive“ Tirol – Land will mit EU-Hilfe H2-Busse installieren	https://www.automagazin.at/wasserstoff-offensive-tirol-land-will-mit-eu-hilfe-h2-busse-installieren/
YOUTUBE	15/07/2017	FEN-SYSTEMS	Dissemination	Green Hydrogen, Demo4Grid	Video: "FCH JU Project Demo4Grid": Europe's largest Single-Stack-Electrolyser for regulating the electricity grid and producing green hydrogen for the food retailer	https://www.demo4grid.eu/gruner-wasserstoff-fur-mpreis-tirol-und-europa/
YOUTUBE	15/11/2017	FEN-SYSTEMS	Dissemination	Green Hydrogen, Demo4Grid	Video German: "Grüner Wasserstoff für MPREIS, Tirol und Europa" as an important tool for getting permits from the authorities	https://www.demo4grid.eu/gruner-wasserstoff-fur-mpreis-tirol-und-europa/
YOUTUBE	20/12/2017	FEN-SYSTEMS	Dissemination	Green Hydrogen, Demo4Grid	Video English: "Green Hydrogen for MPREIS, Tyrol and Europe" as an important tool for getting permits from the authorities	https://www.demo4grid.eu/gruner-wasserstoff-fur-mpreis/
eCar and Bike	04/01/2018	FEN-SYSTEMS, HYUNDAI	Dissemination	Green Hydrogen, Demo4Grid	Future: diesel, gasoline, synthetic fuels, electric and hydrogen cars - all just fog grenades? How about a nationwide supply network? And which drive does the future belong to? really? We have visited the	
eCar and Bikee	04/01/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen Projects	Der Grüne Stoff, Interview Zeitschrift eCar and Bike	https://www.green-energy-center.com/interview-diesel-benzin-synthetische-kraftstoffe-elektro-und-wasserstoffautos/
Kronenzeitung	01/03/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen Projects	Green Energy Center Europe: "Der Stille Klang der Zukunft"	https://www.green-energy-center.com/green-energy-der-stille-klang-der-zukunft/
YOUTUBE	22/03/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen Projects	Zillertaltrain 2020+, Energy-Autonomous with Hydrogen	https://www.green-energy-center.com/zillertalbahn-2020-energy-autonomous-with-hydrogen/
THERESE MÖLK	30/03/2018	MPREIS	Dissemination	Green Hydrogen, Demo4Grid, H2 Busses	Von Öl, Kohle und Gas hin zu Sonne, Wind und Wasser. MPREIS und die Bäckerei Therese Mölk unterstützen das Projekt „Demo4Grid“. Das heißt: In Zukunft werden unsere Backöfen mit grüner Energie beheizt.	
Kronenzeitung	30/06/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Hydrogen Highway	The European hydrogen highway has reached Norway	https://www.green-energy-center.com/kronenzeitung-per-wasserstoff-nach-norwegen/
Reading	10/07/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen, Demo4Grid	Europas größte Single-Stack-Wasserstoff-Elektrolyseanlage in Völs mit ILF Consulting Engineers	https://www.green-energy-center.com/wp-content/uploads/2018/07/S22C-6e18071013090.pdf
YOUTUBE	17/09/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen, Consortium	HyWest Consortium: Bundled competence for a green future with hydrogen	https://www.green-energy-center.com/hywest-bundled-competence-for-a-green-energy-future/
Kronenzeitung	29/12/2018	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen, Projects	Wasserstoffzentrum: Auf dieses Projekt in Tirol „schaut ganz Europa“ krone.at	Wasserstoffzentrum: Auf dieses Projekt in Tirol „schaut ganz Europa“ krone.at
OTS	10/03/2019	FEN-SYSTEMS	Dissemination, Stakeholder alignment	Green Hydrogen, Hydrogen Projects	Zillertal's Hydrogen-Powered Narrow-Gauge Railway Receives Ö3 Transport Award	https://fuelcellworks.com/news/zillertals-hydrogen-powered-narrow-gauge-railway-receives-o3-transport-award/

4.4. Annex Press Releases 1st and 2nd project year

Date of issue	Author(s)	Target	Scope	Brief description
18.03.17	FEN-SYSTEMS	Dissemination	Kick-off Meeting in Innsbruck	https://www.ots.at/presseaussendung/OTS_20170318_OT0011/europas-groesster-elektrolyseur-zur-regelung-des-stromnetzes-und-erzeugung-von-gruenem-wasserstoff-fuer-mpreis-bild
17.06.07	Demo4Grid Project	Dissemination	Final PR Demo4Grid Kick-Off.docx	https://www.demo4grid.eu/europes-largest-single-stack-electrolyser-for-regulating-the-electricity-grid-and-producing-green-hydrogen-for-the-food-retailer-2/

4.5. Scientific papers in progress

Name	Topic	Date of issue	Author(s)	Brief description	Link
Permitting Process of the Demo4Grid project	Legal aspects to the permitting process (FEN Systems, MPreis & Co)	in progress	Filip Boban, Nikolaus Fleischhacker, Ewald Perwög, Ernst Fleischhacker	Based on a Mater Thesis of Filip Boban, supported by FEN Systems	FEN Systems, Mpreis
Site Preparation Process of Demo4Grid	Technical aspects for the Site Preparation				Innycom, IHT & Co
Technical Results of Demo4Grid	Technical Results of the Project				IHT, MPreis & Co
Economical Results of Demo4Grid	Economical Results of the Project				Diadikasia, FEN Systems, MPreis

4.6. Magazines to be addressed

Magazine	Public	Focus, (message to send)
	target	
http://www.tecnicaindustrial.es/	SP	Engineers, (technology)
http://www.empresason.com	SP	Innovation, SME, (Business Models)
http://futureenviro.es/	SP	Environment, smartcities (technology, business models)
	EN	
http://futureenergyweb.es/	SP	Renewable energy, (Business Models)
	EN	
www.renewableenergymagazine.com (REM)	EN	Renewable energy (Business Models)
http://www.ciudad sostenible.eu/	SP	IT, Smart cities, energy (technology, business models)
http://www.evwind.es/	bilingual news website ES	Wind Energy, RE (Business Models)
http://www.innovaspain.com/	SP	Innovation, (technology)
http://www.elmundoecologico.es/	SP	Batteries, environment (technology)
http://www.energetica21.com/	SP	Efficiency and energy production (technology, business models)
http://tdworld.com/	EN	transmission, distribution, electric power industry (business models)
http://www.powermag.com	EN	Energy, energy production, coal, gas, renewables (technology, business models)
http://www.electricity-today.com/	EN (US)	TSO, DSOs high-voltage T&D consulting engineers (technology, business models)
http://www.intelligent-power-today.com/	EN	smart electrical power technology driving industrial, commercial, and institutional power systems (technology, business models)
https://www.energyworldmag.com/	EU	Oil, gas, electricity, renewables South east europe and east med (technology, business models)
	(south east)	
	EN/GR	
http://elperiodicodelaenergia.com/	ES	Innovation, energies (technology, business models)
http://www.aragoninvestiga.org/	Aragón, ES	Innovation (technology)
http://www.heraldo.es/suplementos/tercer-milenio/portada/	Aragón, ES	Innovation (technology)
http://www.publish-industry.net/en/products/energy-2-0/	EN	Markets, energy, strategies, technologies (technology, business models)
http://www.industr.com/Energy20-Magazin/de_DE	DE	
http://www.energate.de/unternehmen/ueber-uns/	DE	Energie- und Wirtschaftsunternehmen (technology, business models)
http://www.energate.de/e21digital/		
http://www.emw-online.com/home/		
http://www.hydrogeit.de/	DE	Hydrogen news (technology, H2 stakeholders)
http://www.rechargenews.com/news/	EN	Energy, electricity production, renewables, gas, oil (business models)
http://www.cleanenergy-project.de/	DE	Energy, innovation (technology, business models)
http://www.ingenieur.de/UmweltMagazin	DE	Environment, energy (technology, business models)
http://www.ingenieur.de/BWK		
http://www.ingeniuerbueros.at	DE	EnineerlNG, featuring, infomlNG, meetlNG, intrestlNG

4.7. Events to be attended

Event Date	Organiser	Event	Location	Events Comments
23-27 April 2017	Tobias Renz	Hydrogen + Fuel Cells + Batteries, within Hannover Messe 2018	Hannover, Germany	www.h2fc-fair.com/
25-26 April 2017	ESReDA	54st ESReDA Seminar	Nantes, France	https://www.esreda.org/event/54th-esreda-seminar/
4-5 April 2018		Hyvolution	Paris, France	http://www.hyvolution-event.com/en
30 April – 2 May 2018	CIRP	25th Conference on Life Cycle Engineering	Copenhagen	http://www.lce2018.dk/
2-3 May 2018	Reed Exhibitions	All-Energy 2018	Glasgow	Very popular, 7,500+ delegates attended in 2017. www.all-energy.co.uk/
15 May 2018	3PPP	Low Carbon Scotland 2018	Dynamic Earth, Edinburgh	http://www.low-carbon-scotland.scot/
16 May 2018	BIG HIT	Shapinsay visit and Hydrogen Territories	Kirkwall, Orkney Islands	https://www.bighit.eu/
4-8 June 2018	EU	EU Sustainable Energy Week	All EU locations possible	http://www.eusew.eu/
17-22 June 2018	WHEC 2018	World Hydrogen Energy Conference	Rio De Janeiro, Brazil	www.whec2018.com/
3-6 July 2018	EFCF	European SOFC & SOE Forum	Lucerne	www.efcf.com
24-27 July 2018	HYPOTHESIS XIII		Singapore	www.hypothesis.ws
6-12 Sept 2018	OISF	Orkney International Science Festival	Kirkwall	Discussion ongoing with Howie Firth about talks and participation
12-13 Sept 2018	CENEX	LCV 2018	Millbrook, UK	www.cenex-lcv.co.uk
26-27 Sept 2018	IET	RPG™ 2018: The 7th International Conference on Renewable Power Generation	DTU, Lyngby, Copenhagen, Denmark	www.theiet.org/rpg
19-21 Oct 2018		Arctic Circle Assembly	Reykjavík, Iceland.	http://www.arcticcircle.org/assembly/2018/proposals
30-31 Oct 2018		Ocean Energy Europe Conference & Exhibition	Edinburgh International Convention Centre	https://www.oceanenergy-europe.eu/event/ocean-energy-europe-2018/
14-nov-18	FCH-JU	11th Stakeholder Forum	Brussels	www.fch.europa.eu
15-16 Nov 2018	FCH-JU	Programme Review Days	Brussels	www.fch.europa.eu
2-5 July 2019	EFCF	Low temp FC, electrolyzers & H2 processing forum	Lucerne	www.efcf.com/2019
2-5 July 2019	WHEC 2020	World Hydrogen Energy Conference	Iceland	
2-5 July 2019	BIG HIT	Final project meeting / conference	Malta	Hold during EU Sustainable Energy Week?
2-5 July 2019	WHEC 2022	World Hydrogen Energy Conference	Copenhagen	

4.8. Advertising Pylons at the Green Energy Center Europe



Green Energy Center

Demo4Grid

European Commission

FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

H₂ for Tyrol

Hauptziel des Projekts Demo4Grid ist die kommerzielle Errichtung und Demonstration eines Alkali-Druck-Elektrolyseurs (PAE) über dem Stand der Technik als Technologie zur Bereitstellung von Regelenergie in realen Betriebs- und Marktbedingungen

DIADIKASIA S.A. Business Consultants

MPREIS

ihT INDUSTRIE HAUTE TECHNOLOGIE

(fen) systems

FUNDACIÓN PARA EL DESARROLLO DE LAS NUEVAS TECNOLOGÍAS DEL HIDRÓGENO EN ARAGÓN

Version 2017 (Project start)



Green Energy Center

European Commission

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Eidgenössisches Departement für Wirtschaft, Bildung und Forschung WBF
Staatssekretariat für Bildung, Forschung und Innovation SBF

FUEL CELLS AND HYDROGEN JOINT UNDERTAKING

Demo4Grid

This project is supported by the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH2 JU) of the European Commission under grant agreement N° 736351 and the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 17.00002

Mit dem "Demo4Grid" Projekt wird bei der Großbäckerei MPREIS in Völs eine 4 MW Elektrolyseanlage zur Stromnetzregelung errichtet. Mit Wasser (H₂O) und sauberem Strom aus Wasserkraft werden dort pro Tag 1,8 Tonnen grüner Wasserstoff (H₂) erzeugt. Mit Wasserstoff als Brennstoff wird zunächst die MPREIS Großbäckerei betrieben. Zukünftig wird dann die gesamte LKW-Lieferflotte auf Wasserstoff als Treibstoff umgerüstet. Allein diese Umstellungen entsprechen einer Reduktion an Schadstoffen von 20t CO₂.

Rezept: Wasser + Wasserkraft = Wasserstoff
Resultat: Wärme für Großbäckerei + Treibstoff für LKW-Fuhrpark
übrig bleibt: Wasserdampf für den Wasserkreislauf

www.demo4grid.eu

(fen) systems

MPREIS

DIADIKASIA S.A. Business Consultants

ihT INDUSTRIE HAUTE TECHNOLOGIE

Inycom innovation technologies

Version 2018 (Project awareness)

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