



PROJECT FINAL REPORT

("Publishable"
or
"Use and dissemination of foreground"
or
"Societal implications")

FCH JU Grant Agreement number: 245332

Project acronym: PREPAR-H2

Project title: Preparing socio and economic evaluations of future H2 lighthouse projects

Funding Scheme:

Period covered: from 01.01.10 to 30.06.2011

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¹ Usually the contact person of the coordinator as specified in Art. 8.1. of the grant agreement

² The home page of the website should contain the generic European flag and the FCH JU logo which are available in electronic format at the Europa website (logo of the European flag: http://europa.eu/abc/symbols/emblem/index_en.htm; logo of the FCH JU, available at: http://ec.europa.eu/research/fch/index_en.cfm). The area of activity of the project should also be mentioned.

2.1 Final publishable summary report

During the past decade hydrogen technology has been tested and demonstrated throughout Europe. The reason is mainly that people have high hopes for this new energy carrier that can be made from various local feed stocks but hydrogen technology is quite different from carbonated fuels that we are used to so people have come up with innovative ways to put this emerging technology to the test.

In many cases there have been gaps between EU funded projects and the local national goals and objectives. For example, national funded project do not always disseminate results at European level and therefore sometimes it is difficult to get information on what was done, how, results etc. There is sometimes not the same demand from national bodies as the EU. These differences between stakeholders, for example, set an unbalanced stage and prevent all aspects of the project to be successfully accepted at all levels. Although on text this is very general, this issue is extremely problematic and this fragmentation between stakeholders justifies the need for Prepar-H₂, which is to create a systematic social and economic context for hydrogen lighthouse projects thereby ameliorating communication gaps and providing value and insight for future hydrogen related projects. The goal of the Prepar-H₂ project was to identify if gaps appeared regarding social and economic issues by collecting views and information with interviews with key players carrying out hydrogen demonstration projects.

Number of projects have earlier addressed socio-economic settings for hydrogen. The goal for PreparH₂ was to gain insight to experiences of those actually carrying out responsibilities in projects at all levels. Many of these field workers have not been allowed to express themselves in public due to restrictions set by main stakeholders so far. By collecting this feedback recommendations were created for future H₂ light-house projects so that they could better address topics of relevance in the field of project management and socio and economic issues.

The outcome is a list of recommendations which are published along with all other documents at the project web page. The recommendations are meant to help future projects to conduct correct engagement and emphasis on socio-economic issues and also point out key issues which should be incorporated into future demo projects.

Outcome in short:

- Stakeholders identified only a few issues that have not been covered in previous and ongoing EU/national projects. Otherwise research have covered most key issues (identified in Prepar-H₂)
- Prepare presents a comprehensive matrix of social research of key elements are available from former projects but have been upgraded through this project
- Stakeholders (persons actually responsible for carrying out demo projects) complain that they have not been involved in which key topics should be addressed or they are not asked for their opinion
- Most players are very open when asked about views on internal or social issues and are willing to provide their sincere comments and insight
- Official and published material on **economic** issues are more difficult to find
- Stakeholders are more reluctant to provide information on economic issues than social or management issues: Perhaps they do not measure
- Number of issues need to be addressed better in project to get full insight into economic issues affecting projects
 - Unexpected cost is identified in almost all projects and higher than budgeted.
 - Hidden cost seems also to be in most projects. However it is very difficult to quantify as it is difficult to get information

- Regarding hidden and unexpected cost some mentioned that budget's had been laid out to increase the possibility of funding – meaning they had been under budgeted from the beginning
- SME's have been very vulnerable regarding unexpected cost
 - SME's are very sensitive to all changes. In demonstration activities of new technologies many things can change or influence cost. SME's need to plan for a higher unexpected cost than other partners.
 - SME's tend now to look more towards national funded projects as the bureaucracy of the EU is more or less the same for SME's and larger corporations. To fulfil the bureaucracy of the EU is becoming too costly and too complicated and is not encouraging SME's to participate as often national funding is less demanding
- Acceptability of price of fuel seem to be higher than earlier identified (increasing cost of fossil fuel)
- It is important to increase “publishable” studies on economics – specifically now when the road to possible market introduction of hydrogen technologies is getting shorter.

Here above are only some key issues but the main recommendations can be found in a specific publication of the project. However one aspect was always raised in the project and that is the lack of knowledge. Some of the key stakeholders even stated that it “...is useless to ask the public about the new technology as they do not understand the difference between different power-trains, new fuels, batteries vs. FCEV etc....”

- Education, outreach and information to the public seem to lack. Understanding of terminology, different fuels, power-trains, etc. is missing. It is of utmost importance to get correct information out to the public. With this lack of knowledge/understanding it is often difficult to ask the public as they do not understand what is being talked about. Many stakeholders complain that public surveys etc. do not give correct feedback because of this. National/international bodies need to emphasize this much more in projects. Specifically it is important to combine dissemination from different studies with different fuels/cars/power-trains and compare the technology “cross-disciplinary dissemination. Currently most of the information going out via the media is based on non-scientific information or hype's about technology. This is very complex to correct but projects need to keep this in mind at all times and large increase of funding is needed to get the “correct” information out

This is evidently a key point which both industry and public stakeholders need to focus on. A joint public/private partnership needs to support correct messaging. It is important that such messaging does not only focus on one fuel at a time – a cross/disciplinary dissemination needs to be done.

All of the work carried out in the project is public and all documents can be found at: www.newenergy.is/en/preparh2

2.2 Use and dissemination of foreground

The Prepar-H₂ project is a small project with the purpose of creating recommendations for future lighthouse projects regarding which social and economic studies should be performed with lighthouse projects. The results should be used as a tool for new, and possibly ongoing, projects. The main dissemination channel should be via the FCH-JU web page as it should be made accessible for those applying for new projects. Also the web page is frequently visited by key stakeholders working in the field of hydrogen.

The project has a separate web address for the project on the coordinators web page and that will be used for storing material. All the partners in the project are well connected to the hydrogen arena and results of the project will be sent via email to all connected players. Short news will also be sent to all the key hydrogen associations around Europe regarding the finalisations of the project and how the work in the project can be utilised by anyone which wants to incorporate socio-economic research into their demonstration activities. Each partner will also be provided with a poster for use at key hydrogen events which are taking place in the coming months. An example is the Nordic Hydrogen Conference taking place in Malmö October 25-26th 2011 and the Nordic Climate Festival in Aalto Finland in end of August 2011. The coordinator will also make a presentation of the project at the next General Assembly of the FCH-JU in November 2011.