



# European Union EU-Funded Fuel Cells & Hydrogen Projects

Isabelle Maelcamp  
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## Summary

The objectives of this report are to:

- Encourage U.S. firms' participation in EU projects in the Fuels Cells & Hydrogen sector.
- Invite interested U.S. firms to Brussels for the July 9 launch event of the EU's first Call for Proposals for EU-funded FCH projects.

## Introduction

This report explores opportunities for U.S. companies to participate in EU-funded research on Fuel Cells and Hydrogen through an initiative that is planned to be launched on July 9, 2014 in Brussels.

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) is a public private partnership that supports research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Its aim is to accelerate market introduction of these technologies, realizing their potential as an instrument in achieving a carbon-lean energy system. The FCH'2 JU builds upon the success of the first 2008-2013 program. The JU is the largest EU-funded program for FCH under the 2014-2020 "Horizon 2020" initiative and accounts for approximately 90% of all EU funds in this sector.

## The objectives of the FCH'2 JU

- Reduce production costs of fuel cell systems;
- Increase the electrical efficiency and durability of fuels cells;
- Increase the energy efficiency of production of hydrogen from water electrolysis;
- Demonstrate the feasibility of large scale hydrogen projects supporting the integration of renewable energy sources;

- Reduce the use of Critical Raw Materials as defined by the EU; avoiding the use of rare earth elements, supporting platinum free resources.

### **The Joint Undertaking: €1.3 Billion budget**

The JU is a three-fold partnership gathering the European Commission, the Industry Grouping under the “New Energy World Industry Grouping” and the Research Grouping under “The New European Research Grouping on Fuel Cells and Hydrogen.”

The budget is made up of the various members’ participation including € 665 Million from the EU’s 7-year budget (EC 2014-2020). This is matched by, at least an equivalent level of investment by the industrial and research partners. €19 Million will be used for operational and financial administration of the JU.

### **Industry Participation in the JU: The NEW-IG**

The [NEW-IG](#) (New Energy World Industry Grouping), with over 40 members, is the European industrial association representing a major part of Europe’s hydrogen and fuel cell industry. This association is the private partner in the FCH JU. Based in Brussels, it represents the interests of the European industry members and liaises with key European decision-makers, stakeholders and JU management.

Members of the New-IG are companies established in EU Member States or an associated or candidate country to the EU. Members hold seats in the Governing Board of the JU.

### **Research institutes participating in the JU: New H. ERGY**

The [N.ERGHY](#) association represents the interests of European universities and research institutes in the Fuel Cell and Hydrogen Joint Technology Initiative (FCH JTI). Together with industry and the European Commission, it is responsible for shaping the program of the JTI (called Annual Implementation Plan - AIP, and Multi-Annual Implementation Plan - MAIP). The FCH JTI's objective is to promote, support and accelerate the research and deployment process of fuel cell and hydrogen technology in Europe from the point of view of the research community.

Research institutes from EU countries, Switzerland, Norway, Israel and Turkey are members of the Research Grouping. Their Secretariat is based in Germany.

### **Project funding**

The € 665 Million EC contribution will be divided equally between transport and energy activities. European-based partners may benefit from 100% funding of direct costs and 25% for indirect costs for research projects, while demonstration-type projects will benefit from 70% direct costs and 25% indirect costs coverage. The balance of programs will be 60/40 split between demonstration and research projects.

Projects in the transport sector will focus on: road vehicles, non-road machinery and vehicles, refueling infrastructure, maritime, rail and aviation applications.

Projects in the energy sector will focus on: hydrogen production and distribution, hydrogen storage for renewable energy integration, fuel cells for power and combined heat and power generation.

A number of cross-cutting issues will also be supported such as: standards, consumer awareness, manufacturing methods, etc.

The first JU which ran from 2007-2013 funded approximately 150 different FCH projects throughout the EU, of various size, length and composition, supporting both demonstration type projects (with many industry participants) and research type (mostly with universities) in such areas as: transportation and refueling infrastructure, hydrogen production and distribution, stationary power generation and chip, early markets, safety and education.

### **Participation of U.S. companies in the JU's annual Calls for Proposals**

There will be calls for proposals each year in the amount of € 100 Million, with the first one expected to be published on July 9, 2014 (these calls will appear on [www.fch-ju.eu](http://www.fch-ju.eu)). While U.S. companies are not eligible to receive EU funding directly, they are eligible to join consortia. A consortium may be made up of various European Industry Grouping (IG) members and research organizations and receives EU funding if its proposal is accepted. In order to become a potential partner of a consortium, U.S. companies are encouraged to engage with members of the IG.

The first call for proposal on FCH will be published by the JU on July 9, 2014 and will close on November 6, 2014. Consortia will then have 3 months to submit proposals for review. U.S. companies interested in engaging with consortia members and exploring opportunities to participate in project proposals are encouraged to submit their expression of interest to the Secretariat of the New IG either directly or via the Commercial Service in Brussels. Once the information is received, the New IG will then forward information about your company's skills and expertise to its industry members to determine interest.

On July 9, 2014, a high-level conference in Brussels will officially launch a number of research programs in various sectors, in addition to the FCH. Additionally, a public "Information Day" on the FCH call for proposals will be organized by the JU on July 10, 2014 in Brussels. U.S. companies are encouraged to attend.

For more information and registration, please visit:

<http://www.fch-ju.eu/news/fch-ju-info-day-10th-july-2014-registration-open>

U.S. companies interested in attending are asked to inform the Commercial Service in Brussels of their intent to participate. Please contact Commercial Specialist [Isabelle.Maelcamp@trade.gov](mailto:Isabelle.Maelcamp@trade.gov) or Commercial Attaché [Iлона.Shtrom@trade.gov](mailto:Iлона.Shtrom@trade.gov) if your company intends to participate.

### **Rules for Participation**

The Rules of Participation and Dissemination of Horizon 2020 apply to the JU.

In principle, all calls for proposals are open to any participant, including non-European companies. Only European companies are eligible for funding from the JU budget. This is a considerable difference compared to FP-7, where EU funds were sometimes granted to U.S. firms. All participants

will be required to sign a Grant and Consortium Agreement. In terms of IPR, the consortium remains in principle the owner of the research product. For the list of companies who are members of the New Industry Grouping, please visit: <http://www.new-ig.eu/members>

Companies may only participate as partner in a consortium. Calls generally require that consortia are formed with at least three participants from three EU Member States. On average, the number varies between 5 and 15 participants.

EU Regulation 1290/2013 lays down the Rules for participation, in addition to the specific rules that will govern each call for proposal.

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0081:0103:EN:PDF>

EC Guide to Participation of non-EU countries

[http://ec.europa.eu/research/participants/data/ref/h2020/grants\\_manual/hi/3cpart/h2020-hi-3cpart\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-3cpart_en.pdf)

EC Research on Fuel Cells and Hydrogen

[http://ec.europa.eu/research/energy/eu/index\\_en.cfm?pg=research-fch](http://ec.europa.eu/research/energy/eu/index_en.cfm?pg=research-fch)

For more information:

Contact: Isabelle Maelcamp, Commercial Specialist

[Isabelle.Maelcamp@trade.gov](mailto:Isabelle.Maelcamp@trade.gov)

Tel: +322 811 5276

The U.S. Commercial Service at the U.S. Mission to the European Union is located at Boulevard du Regent 27, Brussels BE-1000, Belgium and can be contacted via e-mail at: [brussels.ec.office.box@trade.gov](mailto:brussels.ec.office.box@trade.gov); or by visiting the website: <http://export.gov/europeanunion/>. One can locate the nearest U.S. Export Assistance Center or Commercial Service offices throughout Europe by visiting [www.export.gov](http://www.export.gov)

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