



Brussels, 30 September 2013
FCH JU 2013 D

NOTE TO THE GOVERNING BOARD OF THE FCH JU

Subject: Negotiation results - Selection decision for Call FCH-JU-2012-1

The fifth Call for Proposals (FCH-JU-2012-1) of the Fuel Cell and Hydrogen Joint Undertaking (FCH JU) was published in the Official Journal of the European Union on 17 January 2012¹ and closed on 24 May 2012.

The indicative budget for the Call is 77,500,000 € to which will be added the EFTA contributions and the reactivated appropriations for an amount of 2,289,344 €. The total budget is 79,789,344 € as presented to the Governing Board on 11 October 2012.

The Council Regulation (EC) 521/2008² provides in its Article 5.2 (n) of its statutes that the Governing Board is "to approve the list of project proposals selected for funding".

On 11 October 2012 you approved the list of proposals with which negotiations were to open and the reserve lists for each application area. The negotiations for the approved 28 proposals started on 17 October 2012.

The negotiations on the **eighth batch** of the projects were finalised on 26 September 2013 (1 project). This eighth batch and the results of the negotiations are presented in the Annex hereunder.

Following Article 6.5 (h) of the statutes of the Regulation (EC) 521/2008, I hereby submit for the approval of the Governing Board the list of Grant Agreements to be concluded and kindly ask for your approval within the given deadline for response

Yours sincerely

A handwritten signature in black ink, appearing to read "Bert de Colvenaer", is written over a large, loopy, handwritten signature line.

Bert de Colvenaer
FCH JU Executive Director

Annex: FCH JU 2012 call closed negotiation proposals list – eighth batch

¹ OJ C104 of 17/01/2012

² Council Regulation (EC) No 521/2008 of 30 May 2008 setting up the Fuel Cells and Hydrogen Joint Undertaking

Annex: FCH-JU-2012 call for proposals funding lists – 8th batch (1 proposal)

Area: Transportation & Refuelling Infrastructure N/A

Area: Hydrogen Production and Distribution N/A

Area: Stationary Power Generation & CHP N/A

Area: Early Markets

Coordinator		Proposal				Financial details				
Organisation	Nationality	Number	Funding scheme	Duration (months)	Acronym	Title	Total eligible costs after negotiation €	Requested in the proposal	Stated in the Negotiation Mandate	Requested after negotiation
Air Liquide Hydrogen Energy	FR	325381	CP	36	HAWL	Large scale demonstration of substitution of battery electric forklifts by hydrogen fuel cell forklifts in logistics warehouses	8,623,185.00	6,833,840.00	5,646,132.00	4,278,555.00
Sub-total							8,623,185.00	6,833,840.00	5,646,132.00	4,278,555.00

Area: Cross-cutting Issues N/A

TOTAL 8th batch	8,623,185.00	6,833,840.00	5,646,132.00	4,278,555.00
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TOTAL call 2012	109,768,418.39	72,878,767.00	61,815,165.00	59,731,929.60
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Brussels, 30/09/2013

NOTE TO THE GOVERNING BOARD – 8th Batch

Subject: Eligibility for funding of a US-based company affiliated to an EU company

Article 15.1.(c) provides that legal entities from third countries shall be eligible for funding, *provided that the Governing Board considers their participation to be of particular benefit to the project.*

The purpose of this note is to explain the benefit of the participation of the US-based company Plug Power so that the Governing Board can make its own judgement.

Background:

During the negotiation process of the proposal 325381 HAWL, it was detected that HyPulsion, the partner in charge of developing, manufacturing and marketing the fuel cells systems for the forklifts, was planning to subcontract the adjustment of existing fuel cell system for the needs of the forklift use according to European requirements. This was judged as a core task of the project, and thus not viable to be subcontracted. The coordinator was asked to include the corresponding subcontractor as a partner or third party to a partner. The selected company to perform this task is Plug Power, one of the main shareholders of HyPulsion, which would therefore act as a third party to this partner.

Legal aspects:

The beneficiary HyPulsion is a French company. It is a joint venture between Axane, a French company part of the Air Liquide group, and Plug Power a US company. Plug Power is therefore an affiliate of HyPulsion and in this project it is foreseen that Plug Power would be a third party under special clause 11.

Financial aspects:

The FCH JU contribution to Plug Power represents 288,000.00€. This must be compared with a FCH JU contribution to HyPulsion of 1,304,164.00€ and a total FCH JU contribution of 4,278,555.00€ (=6,7%). This contribution will only cover personnel costs.

Operational importance of the participation of Plug Power:

This projects aims at deploying and demonstrating six models of FC forklifts as from 2014.

Material handling is regarded as a promising early market for FCH technologies. The deployment of FC forklifts is already well-advanced in the US. The potential for FC forklift in Europe is as large as in the US: same level of productivity in warehouse and similar emission norms which favoured the replacement of ICE forklifts by battery forklifts and now a substitution market for replacing lead-acid batteries by FC forklifts.



Plug Power developed a solution of “identical substitution” where the fuel cell systems are conceived to have the same dimensions, weight, (battery or fuel cell act as counter-weight to the forklift load), voltage and power as the battery they will substitute in each forklift model.

The fastest way for Europe to catch up, is for European companies to build on the US technology and to adapt it to the European context. This is a major work because the EU standards are different from the US ones (the dimensions of the battery are smaller) and because the requirements of the CE certification have not been taken into account in the US fuel cell systems.

This is precisely the mission of HyPulsion.

HyPulsion has to develop products adapted to the EU market, i.e. conceiving systems with dimension, voltage and power which differ from the US ones and using components that correspond to the CE certification.

Due to the costs of an H2 refueling infrastructure a partial replacement of the forklift fleet makes no economic sense. In order to convince a client to convert its battery fleet into a FC fleet there is a need to have large range of forklift types. That is the reason why in HAWL, not one but six different forklifts will be developed and certified, making the adaptation of the fuel cell system a crucial and very demanding task of the project.

HyPulsion has been created as a joint venture between Axane and Plug Power with an agreement to transfer its existing intellectual property and to provide technical support. The new intellectual property created in the project HAWL will belong to HyPulsion, a European company. The systems used in the project will be manufactured in Europe and Plug Power will only aid HyPulsion in the adaptation of the systems to the requirements of the European specifications.

With respect to the possibility to use a European partner for the same task:

- There is a limited amount of European enterprises with the capacity to supply six fuel cell systems to fit the needs of the project (including time constrains).
- The adaptation of existing fuel cell systems will allow reducing the required efforts and time. Since the HyPulsion will use a Plug Power system for this project, it makes it hard for any other enterprise to take upon the role to adapt that system to the specificities of its use in this application.
- Since HyPulsion will retain the IP rights generated in the project, it will be in a position to use this knowledge for future adaptations of any other fuel cell system they might use in the future. Thus, the main beneficiary of this collaboration will anyhow be HyPulsion, a European enterprise.

The consortium and the Programme Office believe that the participation of Plug Power in the project in the form of a technical support to HyPulsion is essential to accelerate the rapid development and deployment of European products and would put HyPulsion in a very competitive position in this market.