





Members of Fuel Cells and Hydrogen 2 Joint Undertaking Declare Final Additional Activities for the Second Reporting Period January – December 2016

Introduction

Within the European innovation framework Horizon 2020, the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU) is the second generation of the European public-private partnership comprising the Industry Grouping (Hydrogen Europe), the Research Grouping (N.ERGHY) and the European Union represented by the European Commission. The partnership will mobilize up to €1.33 billion over the period 2014-2024 to bring to market a portfolio of Fuel Cells and Hydrogen solutions in the fields of energy and transport.

In line with the FCH 2 JU Regulation¹ laying down the foundation for the partnership, all FCH 2 JU beneficiaries need to report additional R&D and deployment investments ("In-Kind Additional Activities" or "IKAA") made outside the FCH 2 JU in order to demonstrate the leverage effect of the programme and the growth of the sector.

The Additional Activities (IKAA) are defined as actions in Europe contributing to the FCH 2 JU's objectives but undertaken outside its work plan by Hydrogen Europe and NERGHY members. The latter and their affiliate entities are required to jointly deliver IKAA of at least €285 million across the life span of the FCH 2 JU of 2014-2024.

The underlying purpose of the IKAA exercise is hence to demonstrate private investments in the sector and ensure a balanced contribution made by the private and public entities in the context of the partnership.

¹ Council Regulation (EU) No 559/2014of 6 May 2014 establishing the Fuel Cells and Hydrogen 2 Joint Undertaking

The IKAA will be complemented by In-Kind Contributions through participation in Projects (IKOP) as part of the calls for proposals issued by the FCH 2 JU.

Analysis of 2016 IKAA Final Report

Hydrogen Europe and N.ERGHY members reported their final certified investment figures for the reporting period 1 January 2016 to 31 December 2016 to the FCH 2 JU Governing Board in June 2017.

In order to be included in this 2016 IKAA Final Report, the figures of the activities had to be part of the submitted IKAA 2016 Plan and certified by an external auditor (or an independent public officer in case of research organizations) in line with established terms of reference or be exempted from the certification. Members whose cumulated contributions during that period were below the threshold of €325.000 (mostly SMEs and small research organizations) were therefore encouraged to report while the obligation to certify was waived for them.

A table below presents overall final IKAA for all additional activities in 2016 (certified activities and activities below the certification threshold):

Industry or Research / Submissions: January –December 2016					
Sector	# of members	Value of IKAA (M€)			
Industry (Hydrogen Europe)	30	96,29			
Research (N.ERGHY)	22	46,97			
Total	52	143,26*			

^{*} Out of 143,26 M €, an amount of 2.91 M € was not subject to certification since below the threshold

For the period of January – December 2016, a total of 52 research and industry organizations reported their investments for a cumulative total amount of €143,26 million. 31 out of 52 organizations certified the activities for a total amount of €140,35 million, while the residual amount of







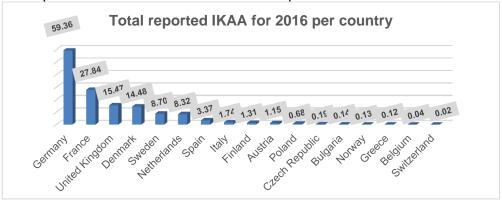
€2,91 million was attributed to 21 organizations who reported activities below €325,000 threshold.

With a 42-58% split between research and industry submissions in terms of number of entities (corresponding to a 33-67% split in terms of values), the sector is manifesting a clear intention to invest, develop, and commercialize innovative technologies, both on the side of industry and research.

That being said, one Hydrogen Europe member didn't meet the 2016 IKAA Plan submission deadline. However an audit certificate for an amount of €14,8 million was received from that same member for the 2016 reporting period. In order to ensure compliance with the adopted 2016 IKAA Plan, this audited certificate has not been included in the 2016 IKAA Final Report amount. In order for the certificate to be accepted, an amendment to the adopted 2016 IKAA Plan would be needed to ensure strict consistency between 2016 IKAA Plan 2016 and 2016 IKAA Final Report.

Geographical Distribution

The submissions came from 17 different EU Member States and Associated Countries (see graph below), with organizations from Germany, France and United Kingdom providing the most sizable investments but also showing participation from Central and Eastern European States as well as Southern European Countries.



SME Participations

For Industry members, we observed a high rate of SME participations in 2016, representing 36% of the overall Industry IKAA values and majority (53%) in terms of number of organizations (see table below).

Size of Company of Industry Members: January –December 2016					
Туре	# of members	Value of IKAA (M€)			
Large	14	60,11			
SME	16	36,18			
Total	30	96,29			

With 16 contributing SMEs of which some are start-ups the IKAA final report shows that the FCH 2 JU is clearly spurring innovation, economic growth and job creation in the European Union.

Application Areas

The activities undertaken under the **Energy Pillar** (106 out of 162 reported activities, 49% of reported amounts) comprised of:

- heat and power equipment(distributed power generation Fuel Cell applications, self-sufficient household systems, back-up systems, manufacturing facilities);
- hydrogen production and storage ((large scale green hydrogen production via electrolysis, hydrogen purification, power-to-hydrogen and storage of renewables).

The activities within the **Transport Pillar** (49 out of 162 reported activities, 50% of reported amounts) included:

- transportation (FC cars, FC buses, FC range extenders, material handling vehicles, Auxiliary Power Units for aviation and trucks);
- transport infrastructure (hydrogen refuelling infrastructure, including on-site green H2 production).

Finally, a number of activities (6 out of 162 reported activities) dealt with







regulations, standards and codes, education, as well as transitions solutions (energy storage roadmaps, including dissemination activities and awareness, commercialisation strategies, patents), as indicated in the table below.

Energy /Transport Distribution: January – December 2016							
Application	# of Activities	%	Value of IKAA (M€)	%			
Transportation	37	23%	51,10	36%			
Heat and Power equipment	54	33%	39,01	27%			
Hydrogen Production	52	32%	31,97	22%			
Transport Infrastructure	13	8%	19,99	14%			
Regulations, Standards and Education	3	2%	1,08	1%			
Transition Solutions	3	2%	0,11	0%			
Total	162	100%	143,26	100%			

Conclusions and Next Steps

During the same certification exercise, in addition, a few members provided certificates for the period 2014-2015 for a total of €31,14 million, leading to an increase of the total IKAA amount to €219,71 million for the period 2014 - 2015 (€188,57 million reported in the prior year).

We would like to highlight that the final reported figures for the first two reporting periods amounting to a cumulative reported amount of €362,97 million demonstrate a strong commitment of the FCH sector as a whole.

Indeed, the FCH 2 JU Regulation sets a minimum IKAA amount of €285 million for the period from 2014 to 2024. Thus, for its first and second reporting period 2014-2015 and 2016, the FCH sector has actually exceeded the set minimum certified amount till 2024 by 27%.

In addition, the sector is determined to continue on the same path by doing its utmost to produce strong figures for the next 2017 reporting period.

For any questions regarding IKAA do not hesitate to contact both FCH 2 JU Members using details below:

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