Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 Joint Undertaking)

2013/0245(NLE) - 10/07/2013 - Legislative proposal

PURPOSE: to prolong the Joint Undertaking (JU) in the field of Fuel Cells and Hydrogen (the FCH 2 JU).

PROPOSED ACT: Council Regulation.

ROLE OF THE EUROPEAN PARLIAMENT: the Council adopts the act after consulting the European Parliament but without being obliged to follow its opinion.

BACKGROUND: the framework programme for research and innovation Horizon 2020 encourages **public-private partnerships** (PPP) in research and innovation with a view to tackling the major challenges facing Europe.

This proposal provides for a prolongation of the Joint Undertaking in the field of Fuel Cells and Hydrogen launched under the Seventh Framework Programme (2007-2013). Since its establishment, **the FCH 2 JU has demonstrated the potential of hydrogen** as an energy carrier, and of fuel cells as energy converters, to offer a pathway for clean systems that reduce emissions, enhance energy security, and stimulate the economy. The interim evaluation of the FCH JU has shown that the JU has served as a platform for creating of a solid partnership, for leveraging public and private funding and for the strong involvement of industry, in particular SMEs.

Although the FCH sector has reached an advanced stage of innovation it is still **a premature and vulnerable one**. The existence of a joint undertaking in the field of fuel cells and hydrogen is needed in order to:

- address two key challenges for the EU - to ensure the energy security of supply and to boost /maintain competitiveness;
- tackle a series of obstacles to effective research and innovation in this area; industry on its own cannot invest in view of these obstacles, and hence public support is needed;
- counteract the fragmentation of the Member States programmes and achieve the coordinated, long-term, large-scale, transnational, cross-sectoral effort required;
- help industry to set a long-term research and innovation agenda, create the necessary critical mass, leverage private investment, provide stable funding, facilitate knowledge sharing, reduce risk, lower costs and reduce time to market.

IMPACT ASSESSMENT: the proposal is accompanied by a summary of the impact assessment.

LEGAL BASIS: Articles 187 and Article 188 (first paragraph) of the Treaty on the Functioning of the European Union (TFEU).

CONTENT: the proposal seeks to create a **joint undertaking in the field of Fuel Cells and Hydrogen 2 (the FCH 2 JU) for a period running from 1 January 2014 to 31 December 2024**. The FCH 2 JU replaces and succeeds the previous FCH JU launched under the seventh framework programme.

The general objective of the proposed continuation of the Fuel Cells and Hydrogen (FCH) JU in Horizon 2020 is to contribute to implementing an optimal research and innovation programme at EU level and to develop a strong, sustainable and globally competitive fuel cells and hydrogen sector in the Union, in particular to:

- reduce the production cost of fuel cell systems to be used in transport applications, while increasing their lifetime to levels competitive with conventional technologies;
- increase the electrical efficiency and the durability of the different fuel cells used for power production, while reducing costs, to levels competitive with conventional technologies;
- increase the energy efficiency of production of hydrogen from water electrolysis while reducing capital costs, so that the combination of the hydrogen and the fuel cell system is competitive with the alternatives available in the marketplace;
- demonstrate on a large scale the feasibility of using hydrogen as a competitive energy storage medium for electricity produced from renewable energy sources.

BUDGETARY IMPLICATION: the EU budget, totalling up to **EUR 700 million at current prices** (including EFTA), will come from the ‘Secure, clean and efficient energy’ and the ‘Smart, green and integrated transport’ Horizon 2020 societal challenges budget.

The administrative costs of the FCH 2 Joint Undertaking shall not exceed EUR 40 million and shall be covered in cash, on an annual basis, divided equally between the Union and the Members other than the Union. The Union shall contribute with 50%, the Industry Grouping with 43% and the Research Grouping with 7%.