

## **Call title: FCH JU Call for Proposals 2011 Part 1**

**Call identifier:** FCH-JU-2011-1

**Publication date:** 03 May 2011

**Indicative deadline:** 18 August 2011 at 17.00 hours (Brussels local time)

**Indicative budget<sup>1</sup>:** EUR 109 million from the FCH JU 2011 budget<sup>2</sup>.

The final budget awarded to this call, following the evaluation of projects, may vary by up to 10% of the total value of the call.

All budgetary figures given in this call are indicative. The repartition of the sub-budgets awarded within this call, following the evaluation of proposals, may vary by up to 10% of the total value of the call. The attention of the applicants is called on the fact that the awarding of grants is subject to the approval by the European Commission of a financing decision allowing the transfer of the related funds to the FCH Joint Undertaking.

### **Topics called:**

<b>Area/ Topics called</b>	<b>Funding Schemes</b>	<b>Indicative FCH JU Funding Million €</b>
<b>Area SP1-JTI-FCH.1: Transportation &amp; Refuelling Infrastructure</b>		<b>36.0</b>
SP1-JTI-FCH.2011.1.1 Large-scale demonstration of road vehicles and refuelling infrastructure IV	Collaborative Project	
SP1-JTI-FCH.2011.1.2 In-situ characterization and diagnostic techniques for optimisation of water management and state of health determination of PEMFC	Collaborative Project	
SP1-JTI-FCH.2011.1.3 Improvement of PEMFC performance and durability through multi-scale modelling and numerical simulation	Collaborative Project	
SP1-JTI-FCH.2011.1.4 Periphery – FC-System Components	Collaborative Project	
SP1-JTI-FCH.2011.1.5 Next generation European MEAs for transportation applications	Collaborative Project	

<sup>1</sup> A reserve list will be constituted if there are a sufficient number of good quality proposals.

<sup>2</sup> The funding includes the FCH JU's own budget only. The final total funding for projects is expected to be increased by EFTA contributions (up to 2.3 M€).

Area/ Topics called	Funding Schemes	Indicative FCH JU Funding Million €
SP1-JTI-FCH.2011.1.6 Investigation of degradation phenomena	Collaborative Project	
SP1-JTI-FCH.2011.1.7 Research & development on Bipolar Plates	Collaborative Project	
SP1-JTI-FCH.2011.1.8 Research & Development of 700 bar refuelling concepts & technologies	Collaborative Project	
SP1-JTI-FCH.2011.1.9 Fuel cell systems for airborne application	Collaborative Project	
SP1-JTI-FCH.2011.1.10 Pre-normative research on fast refuelling	Collaborative Project	
<b>Area SP1-JTI-FCH.2: Hydrogen Production &amp; Distribution</b>		<b>16.0</b>
SP1-JTI-FCH.2011.2.1 Demonstration of MW capacity hydrogen production and storage for balancing the grid and supply to a hydrogen refuelling station	Collaborative Project	
SP1-JTI-FCH.2011.2.2 Demonstration of hydrogen production from biogas for supply to a hydrogen refuelling station	Collaborative Project	
SP1-JTI-FCH.2011.2.3 Biomass-to-hydrogen (BTH) thermal conversion process	Collaborative Project	
SP1-JTI-FCH.2011.2.4 Novel H2 storage materials for stationary and portable applications	Collaborative Project	
SP1-JTI-FCH.2011.2.5 New generation of high temperature electrolyser	Collaborative Project	
SP1-JTI-FCH.2011.2.6 Low-temperature H2 production processes	Collaborative Project	
SP1-JTI-FCH.2011.2.7 Innovative Materials and Components for PEM electrolysers	Collaborative Project	
SP1-JTI-FCH.2011.2.8 Pre-normative research on design and testing requirements for metallic components exposed to H2 enhanced fatigue	Collaborative Project	
SP1-JTI-FCH.2011.2.9 Measurement of the quantity of hydrogen delivered to a vehicle	Collaborative Project	

Area/ Topics called	Funding Schemes	Indicative FCH JU Funding Million €
<b>Area SP1-JTI-FCH.3: Stationary Power Generation &amp; CHP</b>		<b>38.0</b>
SP1-JTI-FCH.2011.3.1 Next generation stack and cell design	Collaborative Project	
SP1-JTI-FCH.2011.3.2 Advanced control for stationary power applications	Collaborative Project	
SP1-JTI-FCH.2011.3.3 Component improvement for stationary power applications	Collaborative Project	
SP1-JTI-FCH.2011.3.4 Proof-of-concept fuel cell systems	Collaborative Project	
SP1-JTI-FCH.2011.3.5 Validation of integrated fuel cell system readiness	Collaborative Project	
SP1-JTI-FCH.2011.3.6 Field demonstration of large stationary fuel cell systems for distributed generation and other relevant commercial or industrial applications	Collaborative Project	
SP1-JTI-FCH.2011.3.7 Field demonstration of small stationary fuel cell systems for residential and commercial applications	Collaborative Project	
SP1-JTI-FCH.2011.3.8 Pre-normative research on power grid integration and management of fuel cells for small residential, commercial and industrial applications	Collaborative Project	
<b>Area SP1-JTI-FCH.4: Early Markets</b>		<b>15.0</b>
SP1-JTI-FCH.2011.4.1 Demonstration of fuel cell-powered Material Handling vehicles including infrastructure	Collaborative Project	
SP1-JTI-FCH.2011.4.2 Demonstration of application readiness of Back-Up Power and Uninterruptible Power Systems	Collaborative Project	
SP1-JTI-FCH.2011.4.3 Research and development of 1-10kW fuel cell systems and hydrogen supply for early market applications	Collaborative Project	
SP1-JTI-FCH.2011.4.4 Research, development and demonstration of new portable Fuel Cell systems	Collaborative Project	

Area/ Topics called	Funding Schemes	Indicative FCH JU Funding Million €
SP1-JTI-FCH.2011.4.5 Research and development of Balance of Plant items for small portable and other fuel cell devices	Collaborative Project	
<b>Area SP1-JTI-FCH.5: Cross-cutting Issues</b>		<b>4.0</b>
SP1-JTI-FCH.2011.5.1 Assessment of benefits of H2 for energy storage and integration in energy markets	Coordination and Support Actions (Supporting Action)	
SP1-JTI-FCH.2011.5.2 Study of Financing Options to accelerate commercialisation of hydrogen and fuel cell technologies	Coordination and Support Actions (Supporting Action)	
SP1-JTI-FCH.2011.5.3 First responder educational and practical hydrogen safety training	Coordination and Support Actions (Supporting Action)	
SP1-JTI-FCH.2011.5.4 Development of EU-wide uniform performance test schemes for PEM fuel cell stacks	Collaborative Project	
<b>Total indicative FCH JU Funding</b>		<b>109.0</b>

Call for Proposals will be selective. There will be competition, based on quality and excellence, between proposals primarily, but not exclusively, within activity areas, which may result in some topics not being supported in a given call.

Ranked lists of proposals will be established for each area. At the Panel stage, proposals from different topics with equal overall scores will be prioritised according to the overall FCH JU Annual Implementation Plan coverage. If they are still tied, they will be prioritised according to their scores for the S/T Quality criterion, then by their scores for the Impact criterion, and then by their scores for the Implementation criterion. If they continue to be tied, other characteristics agreed by the Panel members should be taken into account.

Proposals from the same topic with equal overall scores will be prioritised according to their scores for the S/T Quality criterion. If they are still tied, they will be prioritised according to their scores for the Impact criterion, and then by their scores for the Implementation criterion. If they continue to be tied, other characteristics agreed by the Panel member should be taken into account.

A reserve list will be constituted if there are a sufficient number of good quality proposals. It will be used if extra budget becomes available.