

Call fiche for call FCH-JU-2013-1

## *Fuel Cell & Hydrogen Joint Undertaking*

### *Fuel Cell & Hydrogen Projects*



Update: 21.01.2013

#### **What funds will be available?**

FP7-ENERGY-2012-2: 68.5 M€ approx.

#### **When do you have to apply?**

22.05.13 at the latest.

Evaluation : June 2013. Results in July 2013.

Complete call info here: [Participant Portal](http://ec.europa.eu/research/participants/portal/) (<http://ec.europa.eu/research/participants/portal/>)

See our advice for making applications at [www.euresearch.ch/how](http://www.euresearch.ch/how)

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#### **Transportation & Refuelling Infrastructure (23M€)**

1. Large-scale demonstration of road vehicles and refuelling infrastructure VI
2. Research & development on bipolar plates for PEM fuel cells
3. Research & Development of periphery components for hydrogen refuelling stations
4. Field demonstration of auxiliary power units for transport applications
5. Fuel quality assurance for hydrogen refuelling stations

#### **Hydrogen Production & Distribution (7.5M€)**

6. Development of improved road H2 distribution
7. Diagnosis and monitoring of electrolyser performance
8. Large capacity PEM electrolyser stack design
9. New generation of high temperature electrolyser
10. Validation of photoelectrochemical hydrogen production processes

#### **Stationary Power Generation & CHP (24M€)**

11. Improving understanding of cell & stack degradation mechanisms using advanced testing techniques, and developments to achieve cost reduction and lifetime enhancements for stationary FC & CHP
12. Improved cell and stack design and manufacturability for application-specific requirements for stationary fuel cell power and CHP systems
13. Stationary power and CHP fuel cell system improvement using improved balance of plant components/sub-systems and/or advanced control and diagnostics systems
14. Proof of concept and validation of whole fuel cell systems for stationary power and CHP applications at a representative scale
15. Field demonstration of large scale stationary power and CHP fuel cell systems
16. Field demonstration of small scale stationary power and CHP fuel cell systems
17. Development of fuel cell serial production techniques and equipment for stationary fuel cell power and CHP systems

#### **Early Markets (9M€)**

18. Demonstration of fuel cell-powered material handling vehicles (MHV) including infrastructure
19. Demonstration of portable generators, back-up power and uninterruptible power systems
20. Development of portable fuel cell systems for early market applications
21. Development of 1-30kW fuel cell systems and hydrogen supply for early market applications

#### **Cross-cutting Issues (5M€)**

22. European curriculum on H2&FC technologies: implementation of educational and dtudy material
23. Training on H2&FC technologies for operation & maintenance
24. Social acceptance of FCH technologies throughout Europe
25. Development of industry wide uniform performance test schemes for SOFC/SOEC cells & stacks
26. Development of a European framework for the generation of guarantees of origin for green H2
27. Pre-normative research on resistance to mechanical impact of pressure vessels in composite materials

Interested? Get more information on the above European R&D projects

- If your company/organisation is based in Switzerland: Dr. Julian Randall: [julian.randall@euresearch.ch](mailto:julian.randall@euresearch.ch) and **save the date of the Euresearch FCH JU 2013 applicants workshop Monday 29th April 2013 in Bern**
- If you are based outside Switzerland find your local contact here: [http://cordis.europa.eu/fp7/ncp\\_en.html](http://cordis.europa.eu/fp7/ncp_en.html)