

Fuel Cells and Hydrogen Joint Undertaking

A new way to implement
research, technological development and demonstration
for Fuel Cell and Hydrogen technologies in the EU

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EU Energy Policy Context: Policy Challenges

- Sustainable development
- Security of supply
- Competitiveness

AN ENERGY POLICY FOR EUROPE



energy for a changing world

EU Energy Policy Context: Fuel Cell and Hydrogen Technologies

- High potential to contribute to Community policies, in particular:
 - Energy
 - Environment
 - Transport
 - Industrial competitiveness
- Through market growth, most importantly, longer-term contribution to 2050 goal of 80% reduction in GHG



Joint Undertaking - Key Features: Rationale and Objective

- Bring resources together under a cohesive, long-term strategy
- Ensure commercial focus by matching RTD activities to industry's needs and expectations
- Scale-up and intensify links between Industry and the Research Community



To accelerate the development of technology to establish the technology base for commercialisation from 2015 onwards

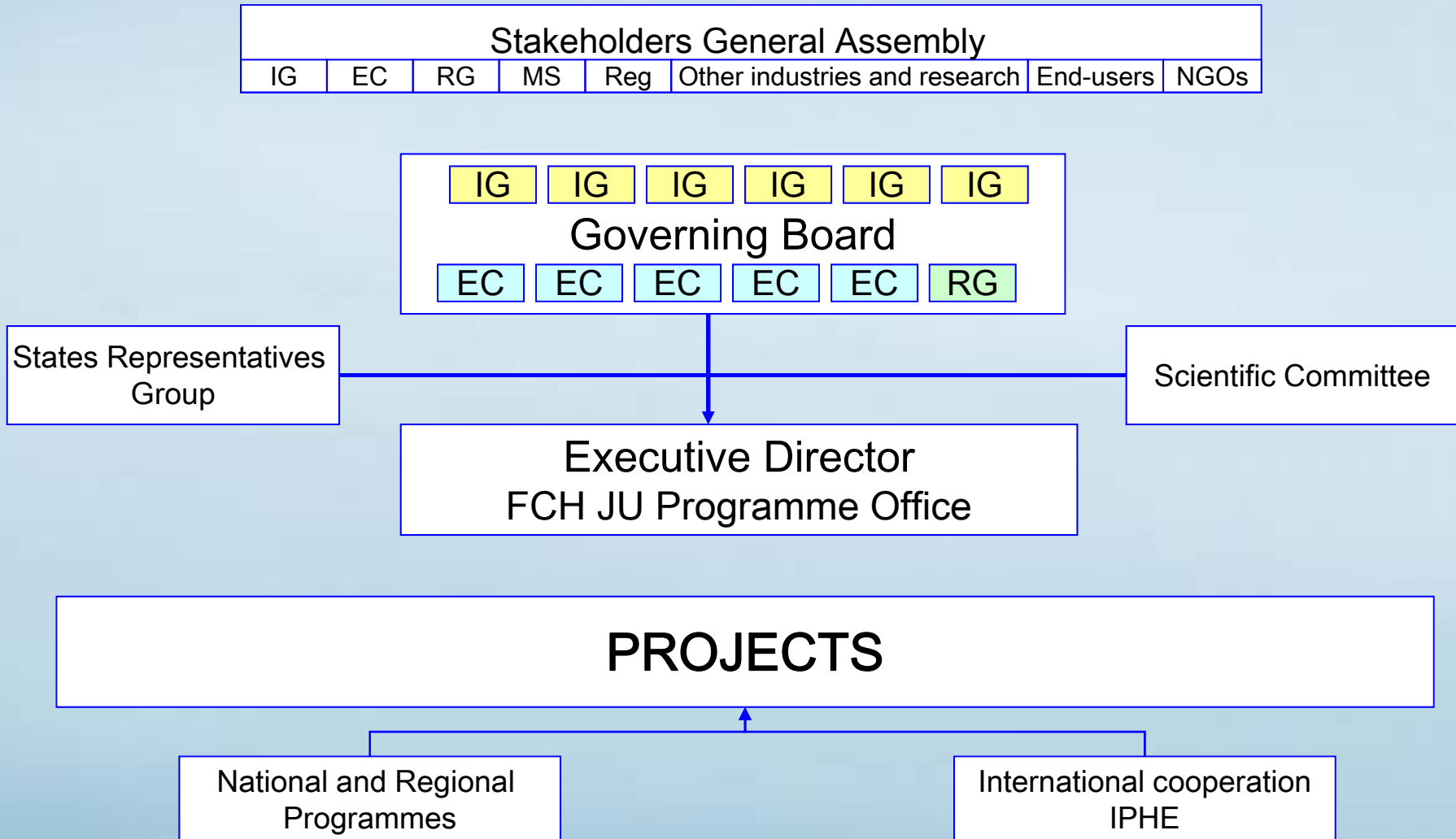
Joint Undertaking - Key Features: A Public-Private Partnership



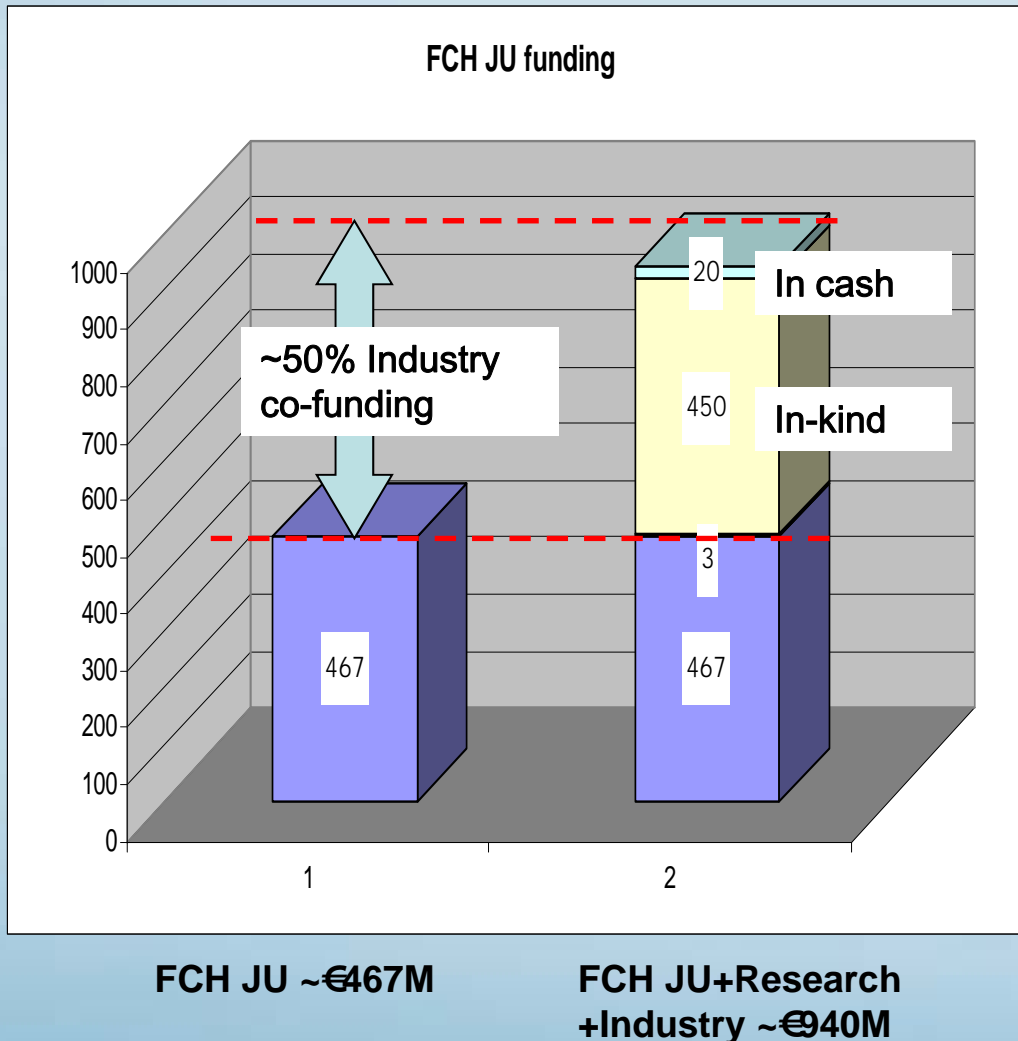
- The European Community represented by the Commission
- European Industry Grouping for the Fuel Cells and Hydrogen Joint Technology Initiative (NEW-IG)
- New European Research Grouping on Fuel Cells and Hydrogen (N.ERGHY)



Joint Undertaking - Key Features: Organisational Structure

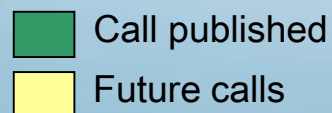


Joint Undertaking - Key Features: Operational budget



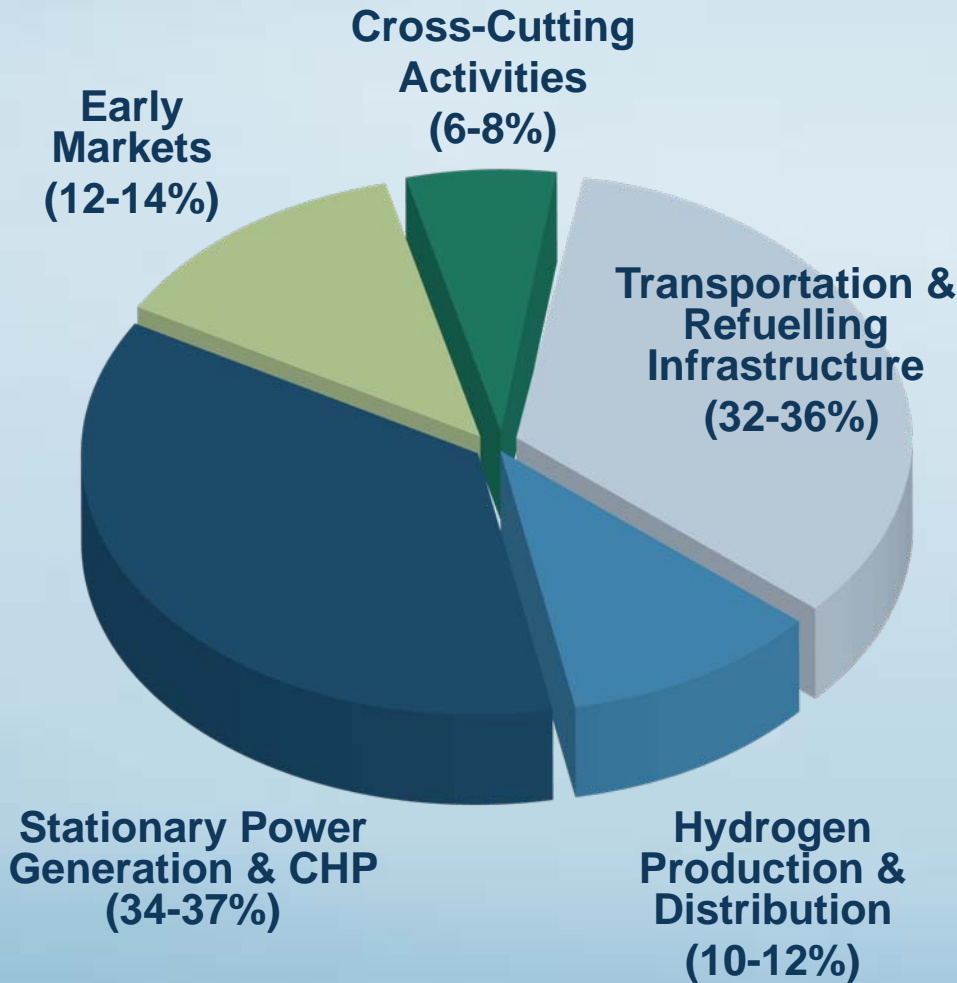
- To launch annual, open and competitive calls for proposals
- Budget and cost-sharing:
 Total 2008-2013: EUR 940 M (min.)
 EC budget: EUR 467 M (in cash)
 Industry: EUR 450 M (min. in kind)
 EUR 20 million (in cash)
 Research: EUR 3 million (in cash)
- ~50/50 cost-sharing between the Community and Industry

RTD Activities: Budget of Annual Calls 2008-2013

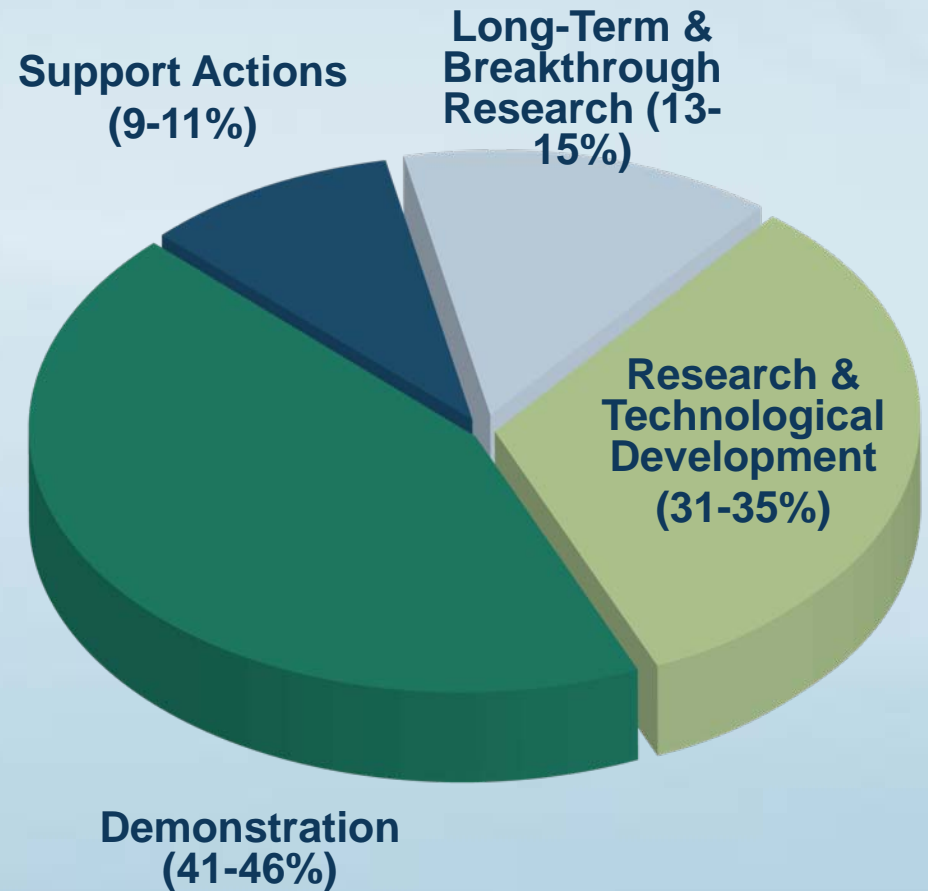


RTD Activities: Budget Breakdown 2008-2013

By Application Area

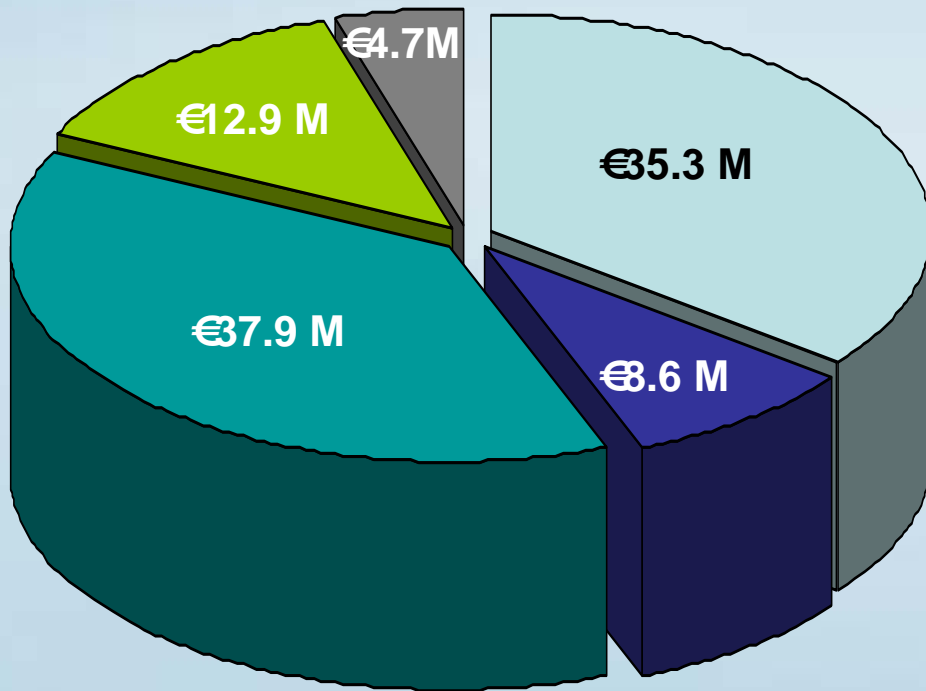


By Activity Type



RTD Activities: Calls for Proposals to Date

Budget division to date
by application area



Transport	H2 Production	Stationary
Early Markets	Cross cutting	

Call 2008:

- Budget: EUR 28.1 million
- Publication date: 8 October 2008
- Deadline: 15 January 2009
- 16 projects were granted funding in December 2009

Call 2009:

- Budget: EUR 71.3 million
- Publication date: 2 July 2009
- Deadline: 15 October 2009
- 50 Proposals received
- 26 proposals into negotiations in April 2010

RTD Activities: Hydrail Topics

Topic#	Title	Scope	Indicative FCH JU funding
T12	Rail Propulsion	Proof of concept demonstration for fuel cell propulsion systems in commuter trains, rail cars and city trains to reduce local emissions, drastically cutting the cost of infrastructure for new routes and thus increasing the flexibility of the commuter system	5.0 M€
T14	Auxiliary Power Units (APU) for rail and maritime application	Proof of concept demonstration of APUs for onboard power generation in maritime applications to substantially enhance efficiency, reduce fuel consumption and local CO2 emissions including a preparation study for extended demonstration with next-generation technology, including 20% R&TD on dedicated systems and components with focus on fuel processing.	5.0 M€

From: Priority Research, Technological Development and Demonstration Topics 2008-2013, available at http://ec.europa.eu/research/fch/index_en.cfm?pg=documents

For More Information: Stakeholders General Assembly 2010

- Brussels, 9-10 November 2010
- Focus on
 - Commercialisation road map
 - Policy for commercialisation
 - International developments
 - Update on the FCH Joint Undertaking and projects



More information

FCH JU official website:
<http://ec.europa.eu/research/fch>

European Industry Grouping
for a FCH-JTI (NEW-IG):
<http://www.fchindustry-jti.eu>

New European Research Grouping
on FCH (N.ERGHY):
<http://www.nerghy.eu>





Thank you
for your attention

Philippe Vannson 2010