



# FCH JU

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

# Outline

- **Context**
- **Key Features of the Fuel Cells and Hydrogen Joint Undertaking (FCH JU)**
- **State of Play**
- **Main Challenges**
- **Towards Autonomy**



# Context: EU Energy Targets

- **By 2020 – three 20s:**
  - **20% reduction in GHG emissions**
  - **20% reduction in global primary energy consumption**
  - **20% share of renewable energy within total consumption, with 10% share in transport**
- **By 2050: 80% reduction in GHG in industrially developed countries – G8 in Aquila, Italy**

# A Critical Challenge

- **From 80% dependency on fossil fuels to 80% reduction in GHG emissions in 40 years!**
  - **A reinvention of our energy system**
  - **A need to move to a low-carbon economy – not easy, cheap or swift**
  - **Technology and the efficient use of resources are essential for this transition**



# Fuel Cell and Hydrogen Technologies

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



# FCH JU

## Key Features

### Objectives

- Accelerate the development and deployment of fuel cell and hydrogen technologies
- Technology base for commercialisation in timeframe 2015-2020



# 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)**

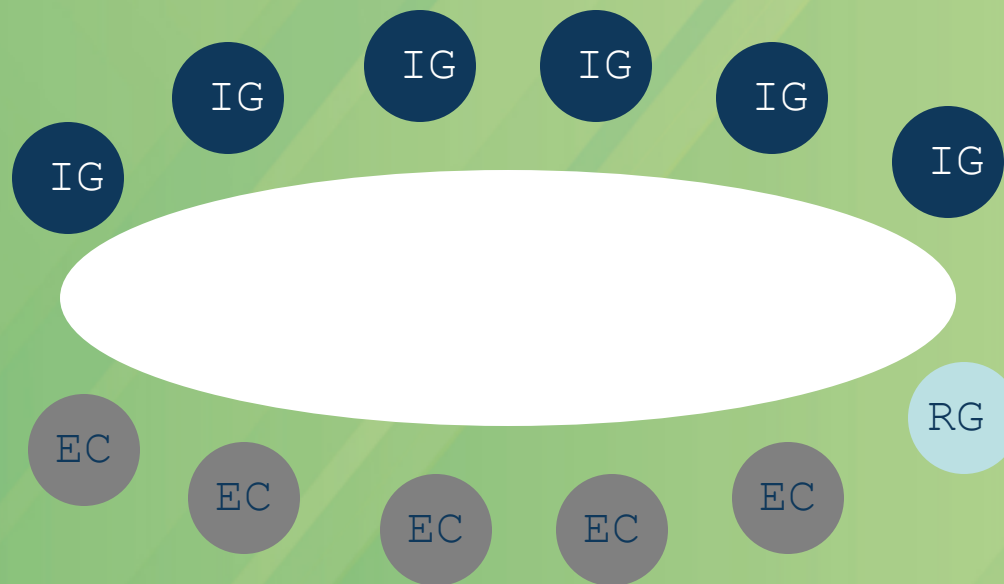
# Bodies

- **Executive Bodies:**
  - **Governing Board**
  - **Executive Director supported by Programme Office**
- **Advisory Bodies:**
  - **FCH States Representatives Group**
  - **Scientific Committee**
  - **Stakeholders' General Assembly (SGA)**



# Governing Board

- Decisions are taken by consensus, or by  $\frac{3}{4}$  majority if consensus is not possible
- 12 Members: 6 IG (including 1 SME), 1 RG, 5 EC



# Funding

- **By launching annual, open and competitive calls for proposals**

- **Budget and cost-sharing:**

**For 2008-2013: EUR 940 million (minimum)**

**EC budget: EUR 467 million (in cash)**

**Industry: EUR 450 million (minimum in kind)  
EUR 20 million (in cash)**

**Research: EUR 3 million (in cash)**

- **50/50 cost-sharing between the Community and industry**

# Budget of Annual Calls



# Currently...

- **The Commission is responsible for the establishment and initial operation of the FCH JU (Art.16)**
  - **Interim Executive Director nominated in November 2008**
  - **Interim Programme Office established within the Commission, supported by other relevant units**
- **Mission**
  - **Establishing the FCH JU structure**
  - **Executing core activities**

# Establishing the FCH JU Structure

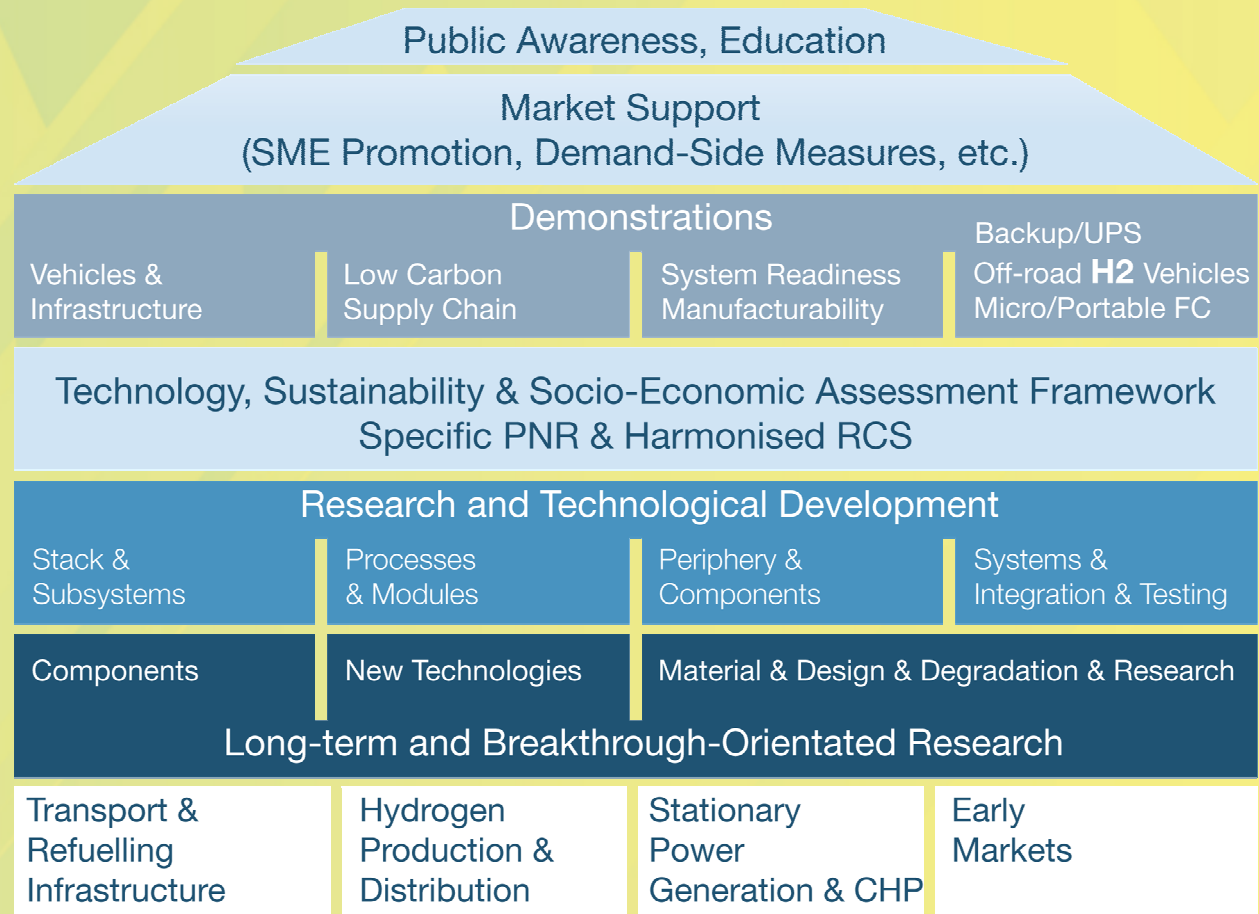
- All bodies established and active
- Recruitment of 20 staff well advanced
- Legal and financial framework in place
- Infrastructure in place by end of year



# Executing Core Activities

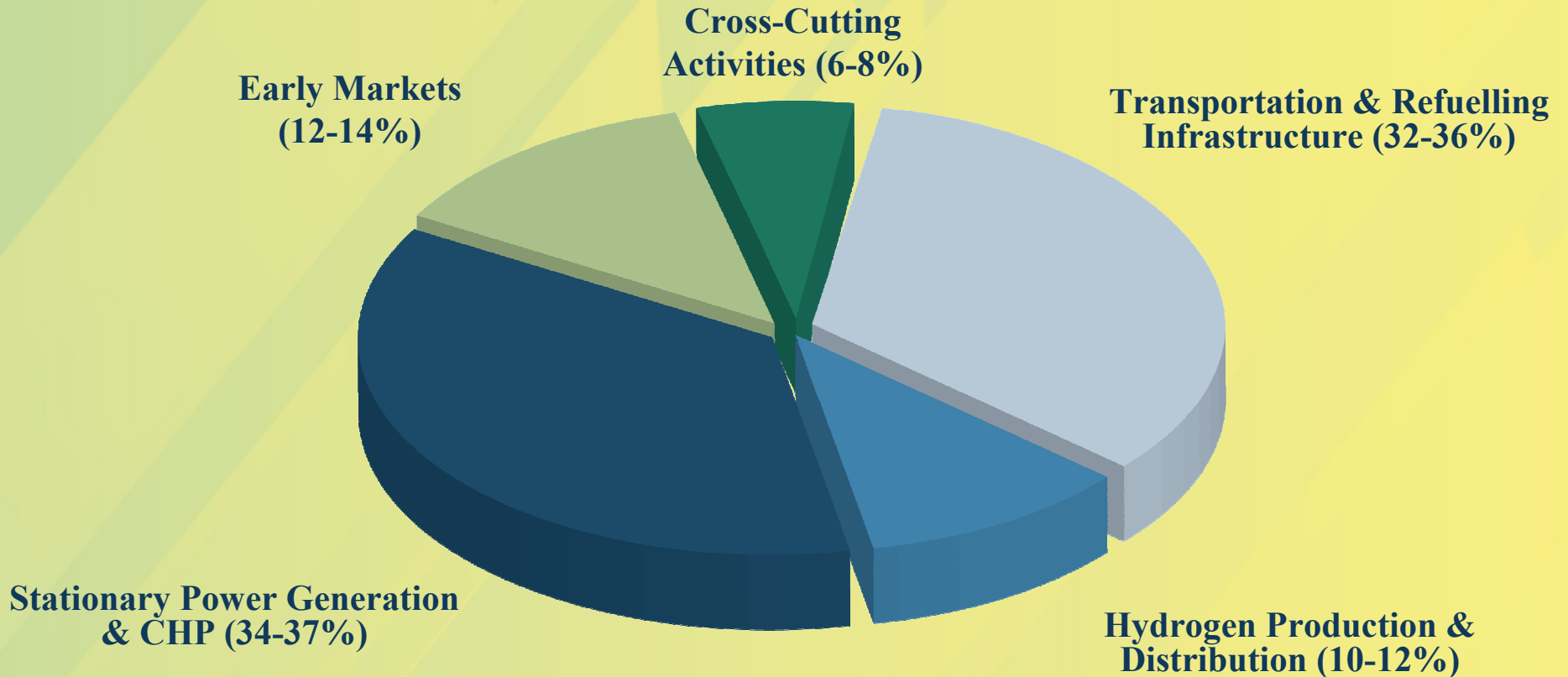
- **Multi-Annual Implementation Plan (MAIP)**
- **Annual Implementation Plan (AIP) 2009**
- **Call for proposals 2008 (EUR 28.1 million)**
- **Call for proposals 2009 (EUR 71.3 million)**
- **Cooperation with Member States and Regions**
- **Communication activities**

# Multi-Annual Implementation Plan

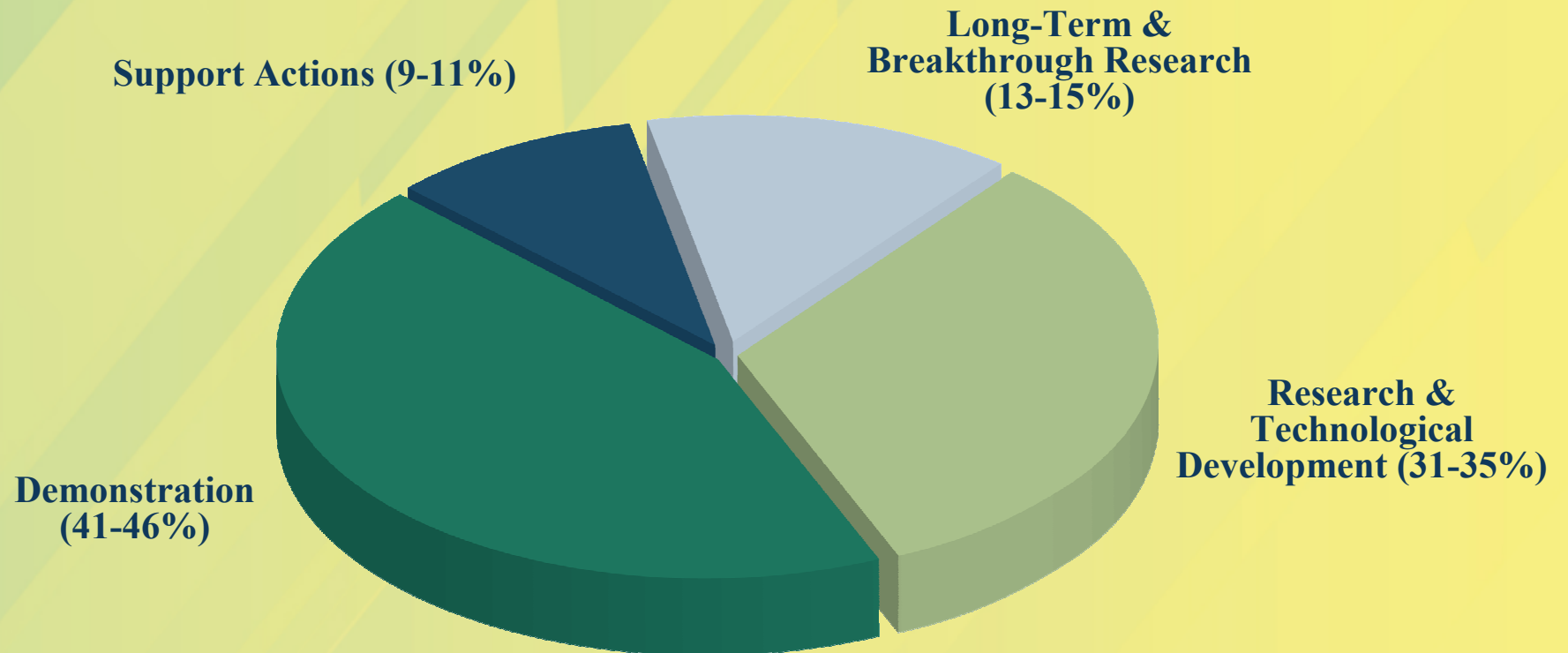


**Adopted in  
May 2009**

# Budget Breakdown by Application Area



# Budget Breakdown by Action Category



# Call 2008 Overview

- **Publication date: 8 October 2008**
- **Deadline: 15 January 2009**
- **Budget: EUR 28.1 million**
- **Topics in areas:**
  - **Transportation and refuelling infrastructure (EUR 8.9 million)**
  - **Hydrogen production & distribution (EUR 2.9 million)**
  - **Stationary power generation & CHP (EUR 12 million)**
  - **Early markets (EUR 2.6 million)**
  - **Cross-cutting issues (EUR 1.7 million)**
- **16 projects selected for negotiations which started in early June;  
15 almost concluded**



# Call 2009

## Overview

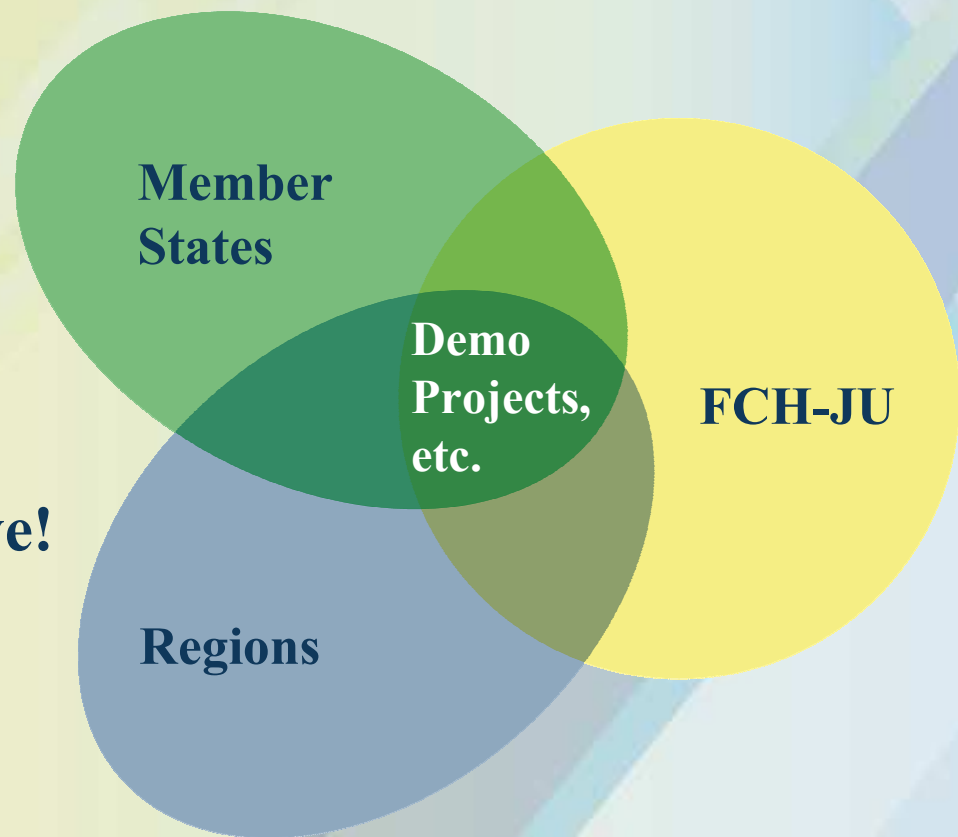
- **Publication date: 2 July 2009**
- **Deadline: 15 October 2009**
- **Budget: EUR 71.3 million**
- **Topics in areas:**
  - **Transportation and refuelling infrastructure (EUR 26.4 million)**
  - **Hydrogen production & distribution (EUR 5.7 million)**
  - **Stationary power generation & CHP (EUR 25.9 million)**
  - **Early markets (EUR 10.3 million)**
  - **Cross-cutting issues (EUR 3.0 million)**
- **50 Proposals received: Evaluation 16-20 November 2009**

# Main Challenges

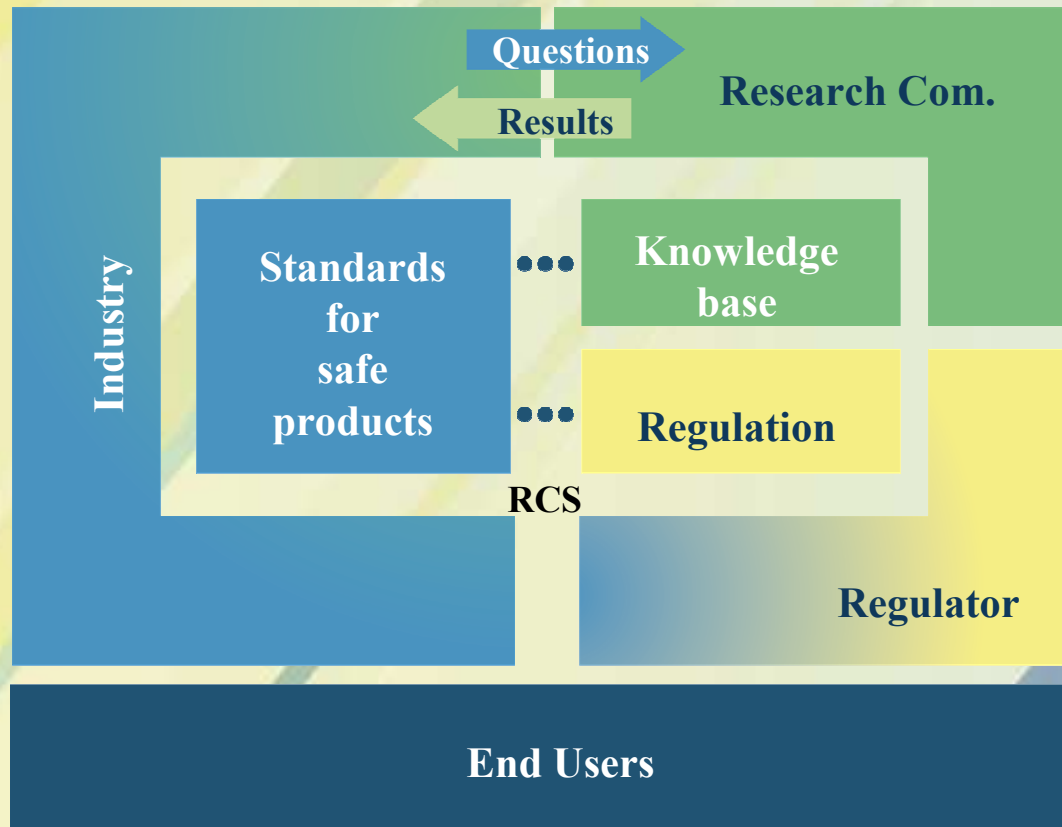
- **Funding rules – matching of FCH JU's contribution by industry**
- **Cooperation with Member States and Regions**
- **Regulations, Codes and Standards**
- **Targets and milestones**
- **Strategy for implementing large demonstration projects**
- **Modalities for interface with other EU policies**
- **International cooperation strategy**

# Cooperation with Member States and Regions

**Need to cooperate  
to optimise use of resources  
- Forward planning imperative!**



# Regulations, Codes and Standards



**Working together  
to bring FCH  
technologies safely  
to market**

Courtesy of Mr F. Barth of AirLiquide.

# Towards Autonomy

- **Capacity to implement the budget autonomously, including:**
  - **All bodies established**
  - **Executive Director or Interim**
  - **Accounting Officer and other key staff**
  - **Accounting system**
  - **Internal control framework**
  - **Budget available**
  - **Bank account**
- **Goal: Autonomy by 15 March 2010**



# 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

P. Vannson, November 2009