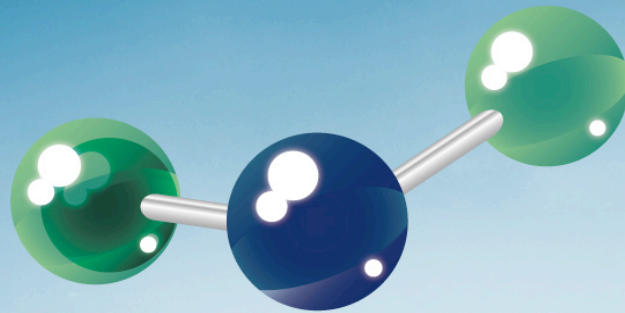




EUROPEAN
COMMISSION
RESEARCH



fuel cells & hydrogen for sustainability



FCH JU

Progress Report

A year
of a public-private partnership

Outline

- Context
- Key Features of the Fuel Cells and Hydrogen Joint Undertaking (FCH JU)
- Progress Report
 - Establishing the FCH JU Structure
 - Executing Core Activities
- 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

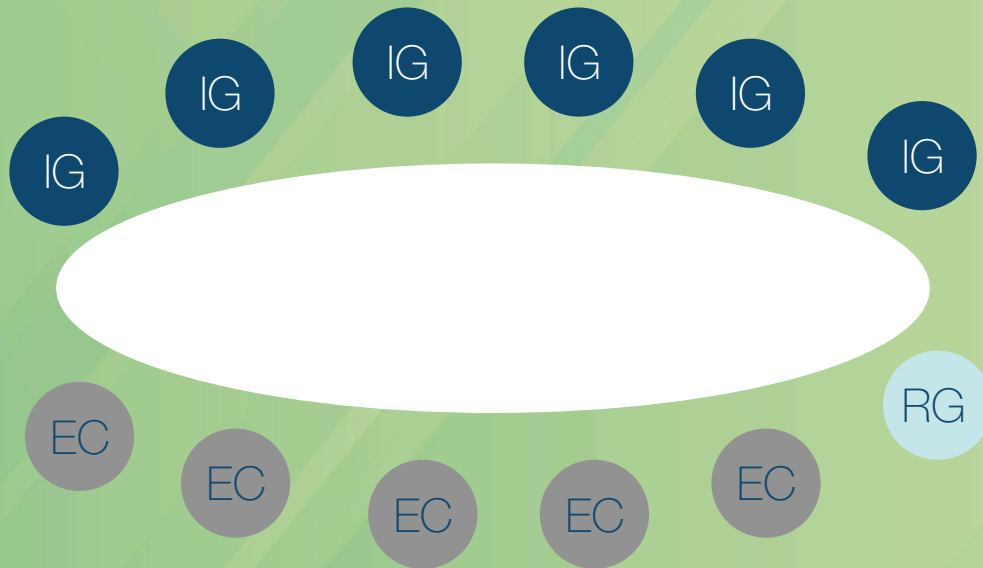
- The European Community represented by the Commission
- European Industry Grouping for the Fuel Cells and Hydrogen Joint Technology Initiative (NEW-IG)
- New European Research Grouping on Fuel Cells and Hydrogen (N.ERGHY)

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



Progress Report: Since SGA 2008...

- 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

Progress Report: 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

Bodies

- States Representatives Group

- Nominations by Member States in autumn 2008
- Establishing meeting in December 2008
- Second meeting in March 2009: Input to AIP 2009 and MAIP
- Chair: *Bernard Frois, France*
- Vice-Chairs: *Axel Mortensgaard, Denmark*
Georg Menzen, Germany

- Scientific Committee

- Adoption of specific criteria and selection process for composition of Scientific Committee
- Appointment of 9 members by Governing Board in 2009
- First meeting in March 2009: Input to AIP 2009 and MAIP
- Chair: xxxx
- Vice-Chair: xxxx

Programme Office Staff

- Staff Policy Plan adopted in May 2009
- Publication of 18 vacancies in 2009, including that of Executive Director
- More than 800 candidacies received
- Selection by panels, including representatives of all FCH JU members
- Recruitment well advanced: First recruits to start in December 2009, all staff in place by March 2010
- Staff Implementing Rules ready for adoption

Financial Structure

- Modification of the Commission's budget structure (from 2010 budget onwards)
- Preparation of a budget scenario for running costs until 2017
- Preparation of General Financing Agreement – Approved by the European Commission in September 2009
- Accounting system ready for implementation in December 2009: ABAC

Infrastructure and Services 1/2

- Housing

- Temporary housing at EC's Covent Garden building
- Permanent housing: market procedure ongoing

- IT infrastructure

- Procurement of hardware and network services together with other JTIs finalised in October 2009
- Configuration of existing IT tools for FCH JU needs

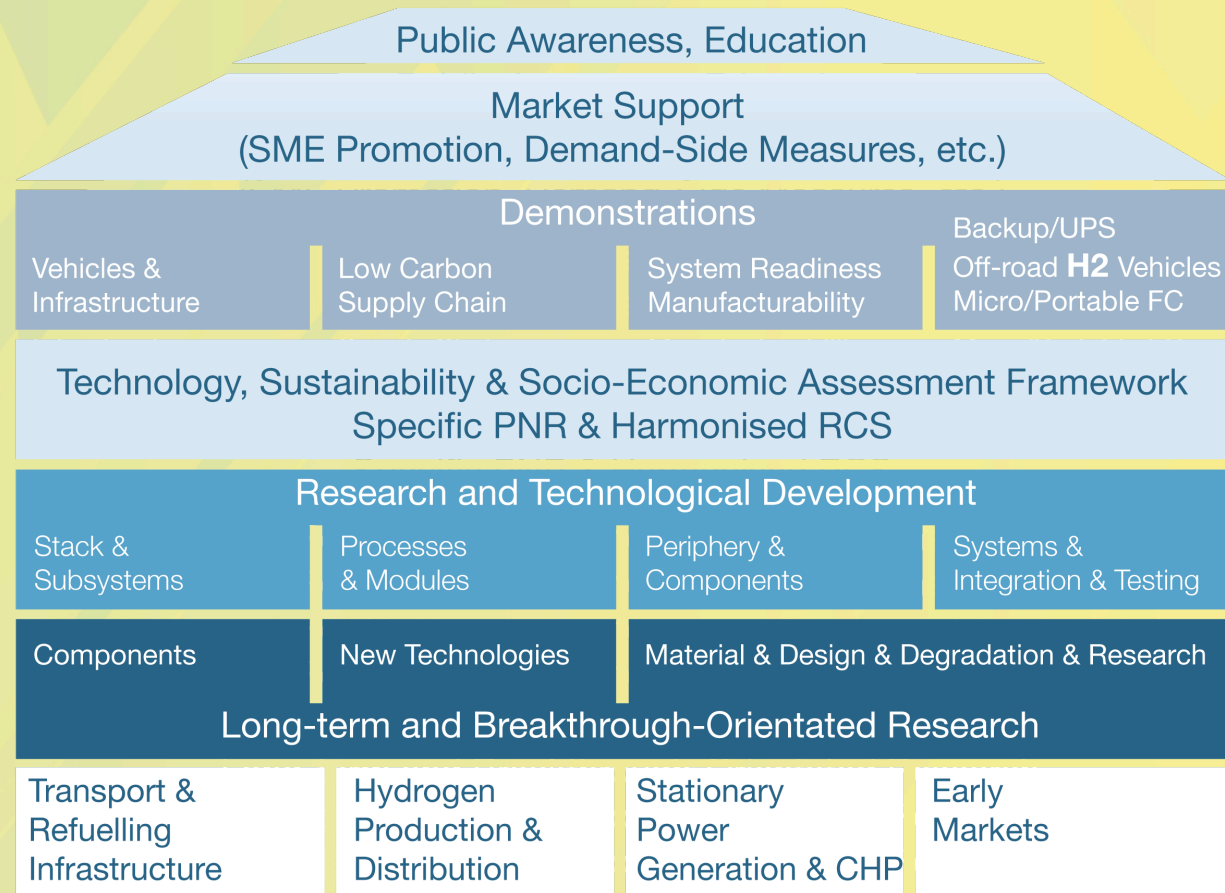
Infrastructure and Services 2/2

- Service-level agreements concluded with EC services
 - Salaries
 - Medical service
 - Training
 - FP7 IT tools
- Framework Agreement concluded with the Joint Research Centre
 - Contribution to pre-normative research
 - Provision of services as reference laboratory
 - Support for formulation of FCH JU strategy

Progress Report: Executing Core Activities

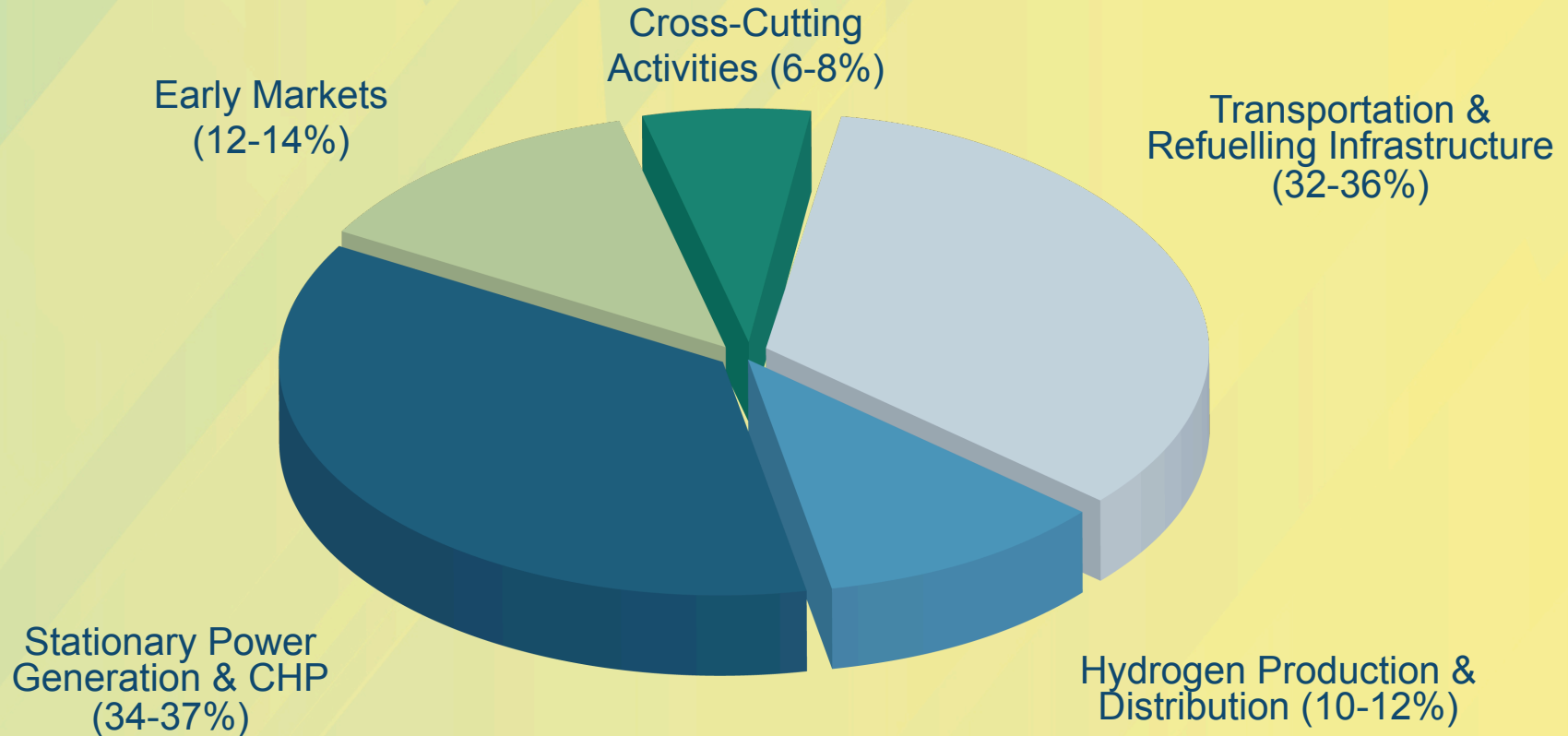
- Multi-Annual Implementation Plan (MAIP)
- Annual Implementation Plan (AIP) 2009
- Call for proposals 2008 (EUR 28.1 million)
- Call for proposals 2009 (EUR 71.3 million)
- Communication activities

Multi-Annual Implementation Plan

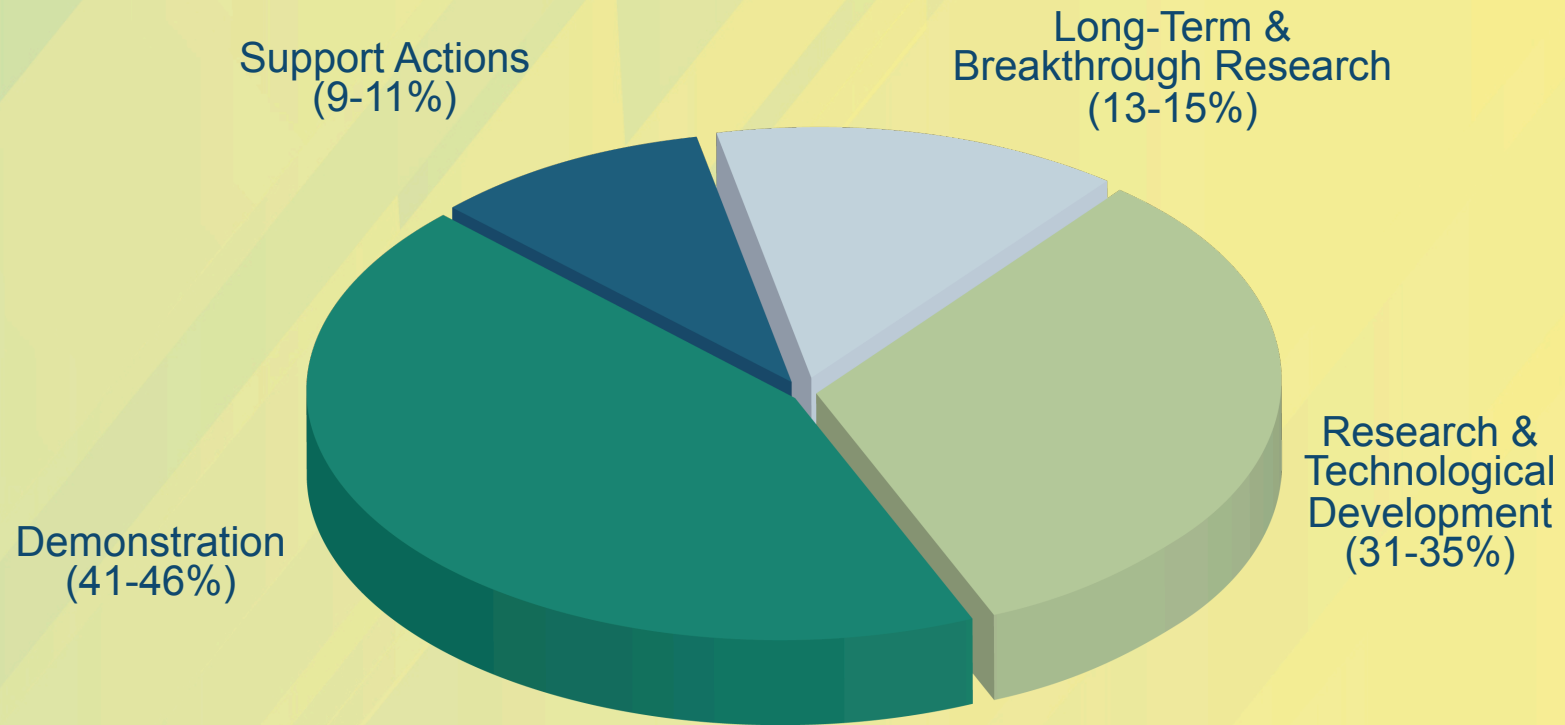


Adopted in
May 2009

Budget Breakdown by Application Area



Budget Breakdown by Action Category



Preparing Calls for Proposals

- In line with the MAIP
- AIPs including
 - Call topics
 - Budget
 - Upper funding limits and other call provisions
- Rules for submission of proposals;
the related evaluation and award procedure
- Guide for Applicants
- Grant Agreement

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)
- XX Proposals received: Evaluation 16-20 November 2009

Communication

- Communication strategy prepared – adoption by Governing Board pending
- Website: <http://ec.europa.eu/research/fch>
- Preparation of Stakeholders' General Assembly 2009
- Inputs to media on request



Main Challenges

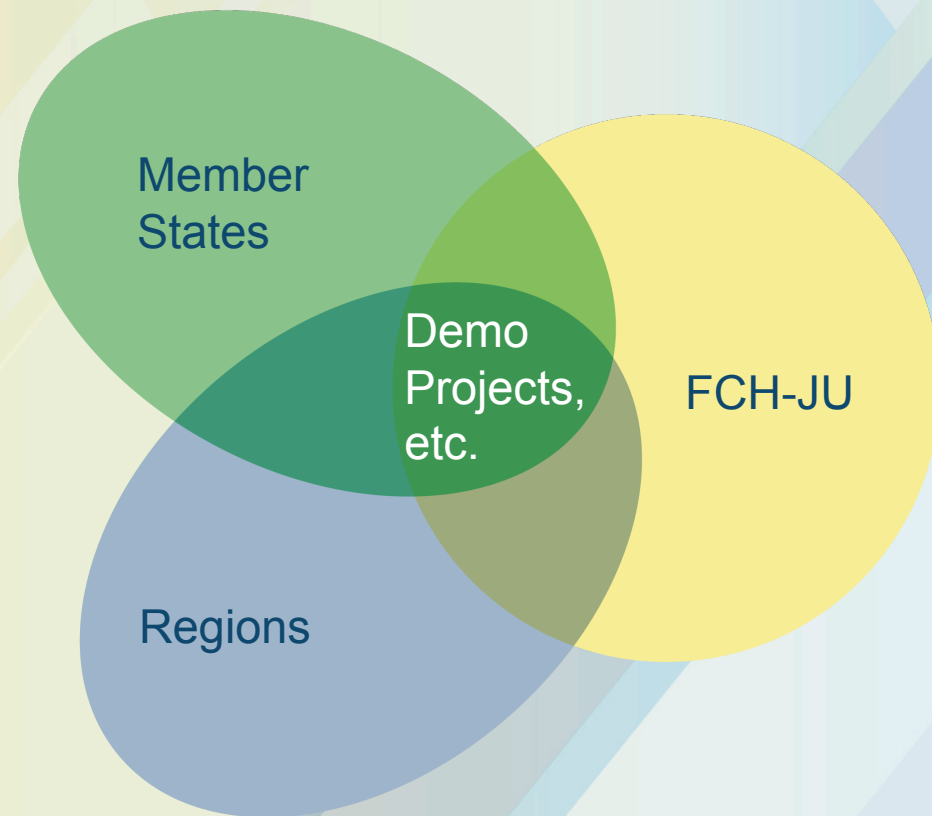
- Funding rules – matching of FCH JU's contribution by industry
- Cooperation with Member States and regions
- Regulations, Codes and Standards
- Targets and milestones
- Strategy for implementing large demonstration projects
- Modalities for interface with other EU policies
- International cooperation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

Funding Rules

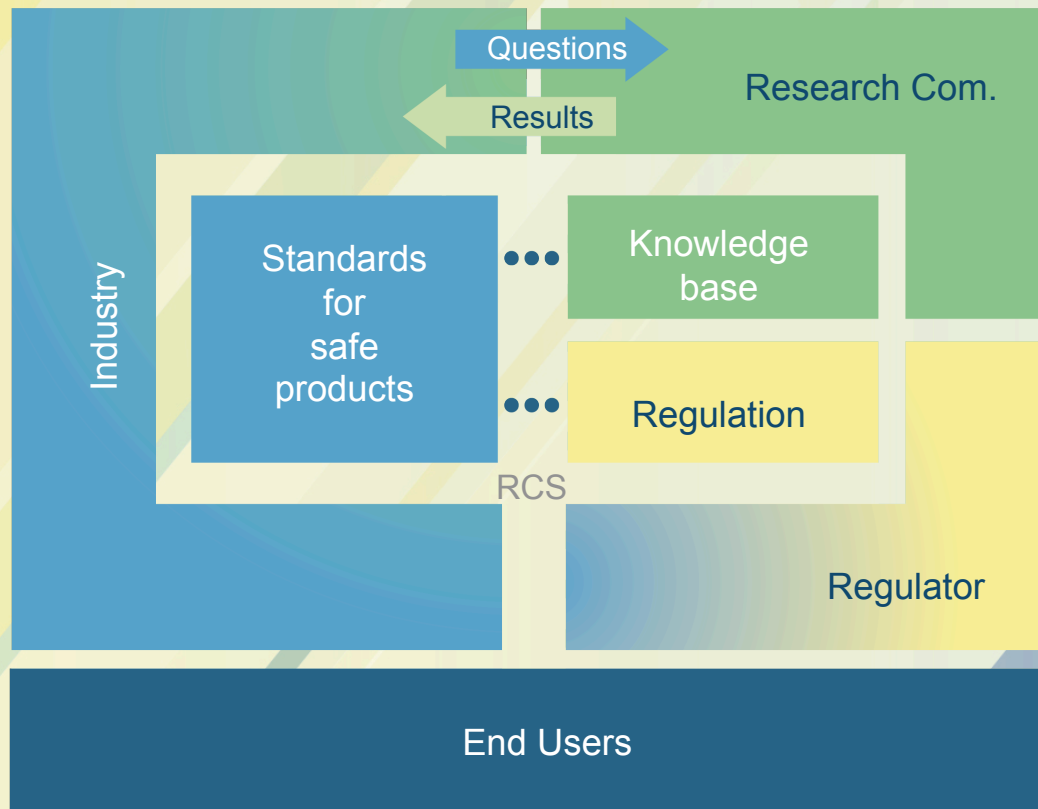
- Statutes of the FCH JU:
 - Art. 12(3): 'The industry [in-kind] contribution shall at least match the Community's contribution'
 - Art.15(3): 'In case lower levels of funding will be necessary to comply with the matching principles referred to in Article 12(3), the decreases shall be fair and balanced proportionally'
- To approach a balance in industry matching in the 2008 Call, real funding rates for direct eligible costs had to be reduced by a factor of ~ 0.67 to approximately:
 - 33% of total direct costs for large industrial participants
 - 50% for SMEs, non-profit public bodies, universities, higher education establishments and non-profit research organisations

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>
(forthcoming)





Thank you
for your attention

P. Vannson, Stuttgart Sept 2009

P. Vannson, SGA 2009

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