

# Programme Review Days 2016

Panel 6: Cross-cutting

Moderator: Alberto GARCIA HOMBRADOS, FCH JU Project Officer Co-moderator: Eden MAMUT, ET Innovative Solutions



# In the agenda

15:35	17:35	CROSS-CUTTING: Pre-normative research, safety issues, education & training, socio-economic & benchmarking (Panel 6) – Moderated by Alberto GARCIA HOMBRADOS and Eden MAMUT
15:35	15:45	Portfolio presentation
15:45	16:00	FIRECOMP
16:00	16:15	HYCORA
16:15	16:30	HYSEA
16:30	16:40	Q&A
16:40	16:55	CERTIFHY
16:55	17:10	HYACINTH
17:10	17:25	HYRESPONSE
17:25	17:35	Q&A



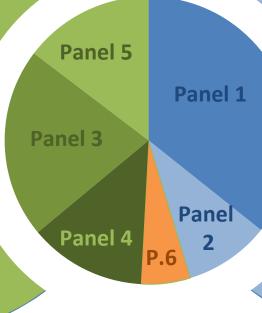
#### FCH JU portfolio 2008-2015: 185 projects, 638 M€

#### **ENERGY**

- Hydrogen production and distribution
- Hydrogen storage for renewable energy integration
  - Fuel cells for power & combined heat & power generation

#### **TRANSPORT**

- Road vehicles
  - Non-road vehicles and machinery
  - Refuelling infrastructure
- Maritime, rail and aviation applications



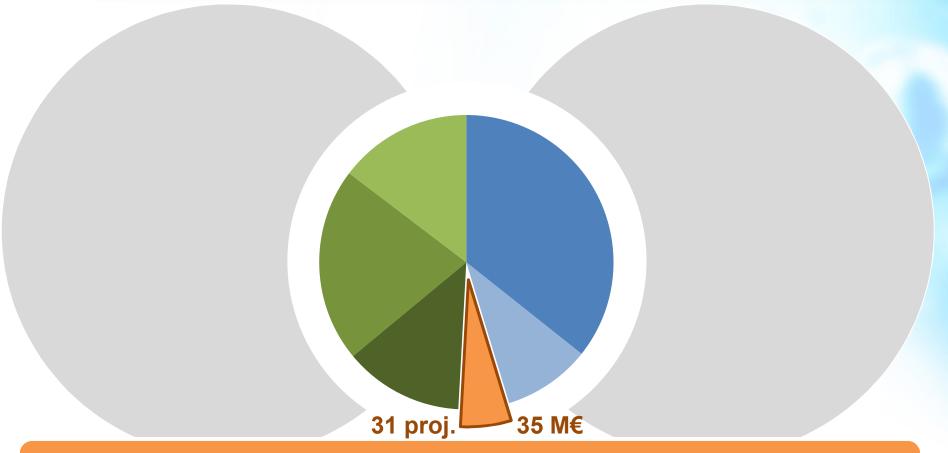
#### **Cross-cutting**

(e.g. standards, safety, education, consumer awareness, ...)



Panel 1 – Transport validation Panel 2 – Transport research Panel 3 – Stationary validation Panel 4 – Stationary research Panel 5 – H2 prod, distrib., storage Panel 6 – Cross-cutting

## Panel 6: Cross-cutting



#### **Cross-cutting**

(e.g. standards, safety, education, consumer awareness, ...)



#### **Panel 6: Cross-cutting**

- Increase the efficiency and the durability of fuel cells ...
- Demonstrate on a largescale H2's capacity
   to harness power from renewables ...
  - Increase efficiency and reduce costs of H2 Production...

Related FCH JU objectives

- Reduce fuel cell
  system costs for transport
  applications while
  increasing lifetime and
  availability
  - Reduce use of critical raw materials

31 proj. 35 M€

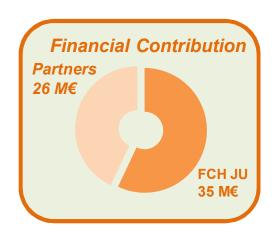
#### **Cross-cutting**

(e.g. standards, safety, education, consumer awareness, ...)

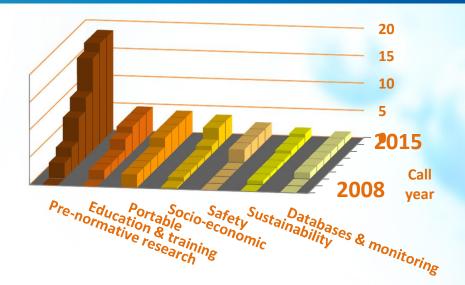


#### **Cross-Cutting Projects Overview**

31projects 35 M€



Cumulative Funding, M€





Providing new knowledge to develop and improve regulations, codes and standards

Preparing the European workforce



Increasing public awareness and social acceptance



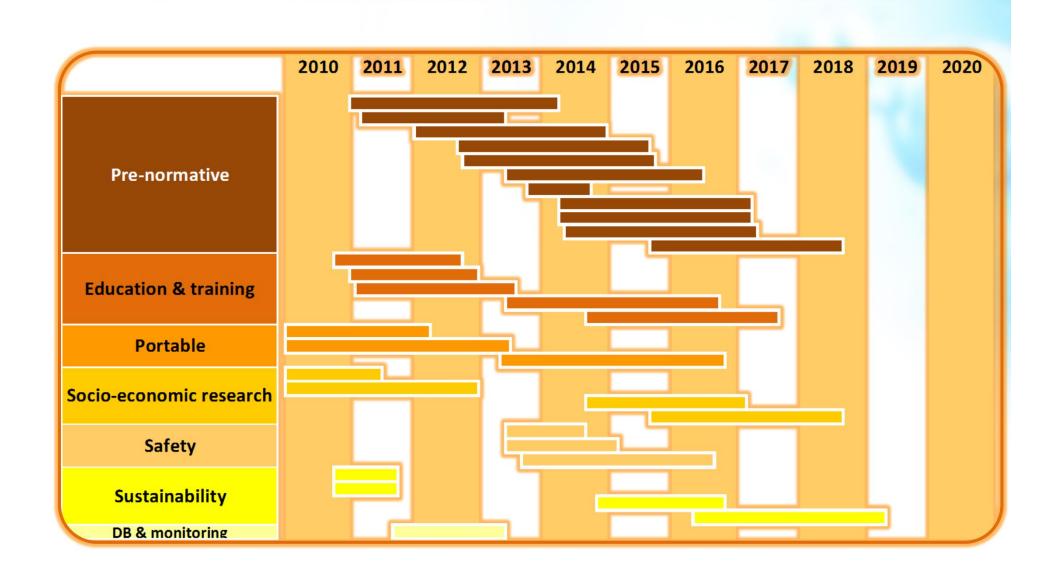
Ensuring FCH tecnologies are environmentally sustainable



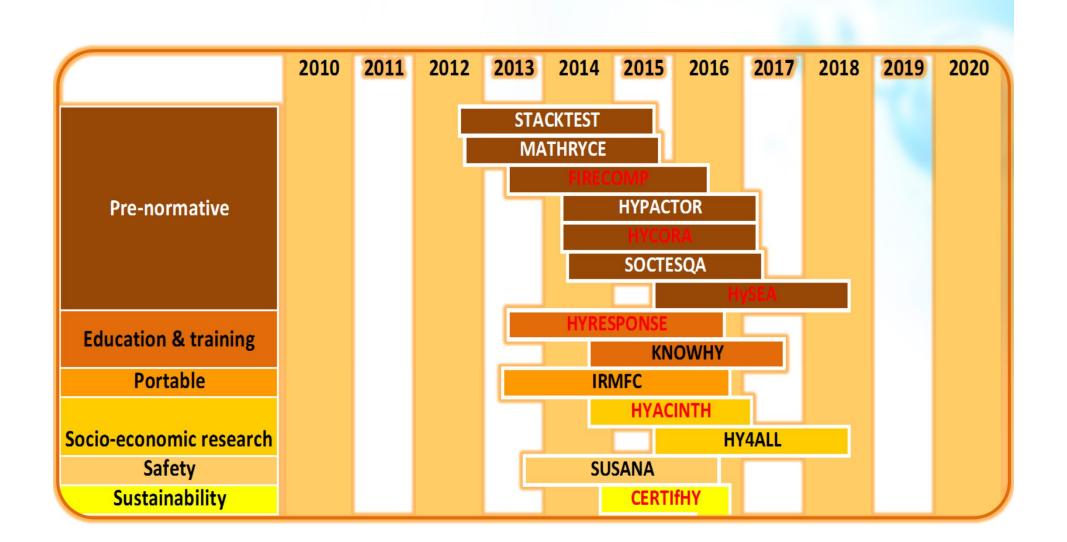
Addressing safety issues from multiple perpectives



## **Continued Support over time**



## 14 projects/22 MEUR in the 2016 programme review



#### Some achievements at a glance

#### **PNR** projects

provide solid information to improve and develop standards at international level, contributing to develop an adequate regulatory framework





**=**HyCoRA

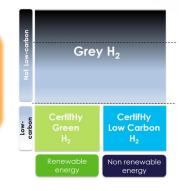


Exporting technology to train first responders outside of Europe



Carrying out the biggest exercise ever to gain a deeper understanding of the social acceptance of hydrogen technologies across Europe

Europe is becoming a reference worldwide and is pioneer in designing a GoO scheme for green hydrogen to inform about the renewable content of the hydrogen





## **Complementary cross-cutting activities**

# REGULATIONS, CODES AND STANDARDS STRATEGY COORDINATION GROUP (RCS SCG)

- Set of priority areas
- Set of topics proposed for annual calls for proposals



#### JRC – FCH 2 JU FRAMEWORK CONTRACT



- ANNUAL ROLLING PLANS: Activities set out
- RCS SCG, Harmonization, Safety, etc.

#### **STUDIES**

- Socio-economic impact of the FCH 2 JU
- Supply chain for FCH technologies in Europe





## **Summary**



#### Successful project outcomes bringing multiple benefits

e.g. green hydrogen certificates, first responders, contribution to regulations through PNR



**Strong international collaboration** 



**Complementary activities for FCH community interest** 

Activities contributing to the essential FCH 2 JU spirit

# Thank you for your attention

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#### Further info:

- FCH JU: <a href="http://www.fch.europa.eu/">http://www.fch.europa.eu/</a>
- HYDROGEN EUROPE : <a href="http://hydrogeneurope.eu/">http://hydrogeneurope.eu/</a>
- N.ERGHY: http://www.nerghy.eu

## **Session overview**

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