

# Programme Review Days 2017

Mirela Atanasiu

**PRD 2017** 23-24 November 2017



## **FUEL CELLS AND HYDROGEN** JOINT UNDERTAKING





**PROGRAMME REVIEW DAYS 2017** FUEL CELLS AND HYDROGEN: FROM TECHNOLOGY TO MARKET 23-24 NOVEMBER, BRUSSELS

# THURSDAY, 23 NOVEMBER 2017

08:15 - 08:45 **Registration and coffee** 08:45 - 09:00 **Opening remarks** 

13:30 - 14:30 Lunch break



11:00 - 11:30 Coffee break



FUEL CELLS AND I

## **Atanasiu Mirela,** Head of Unit Operations & Communication FCH JU







## **EU Climate and Energy Framework**

Making energy more secure, affordable and sustainable



President of the European Commission



Union"

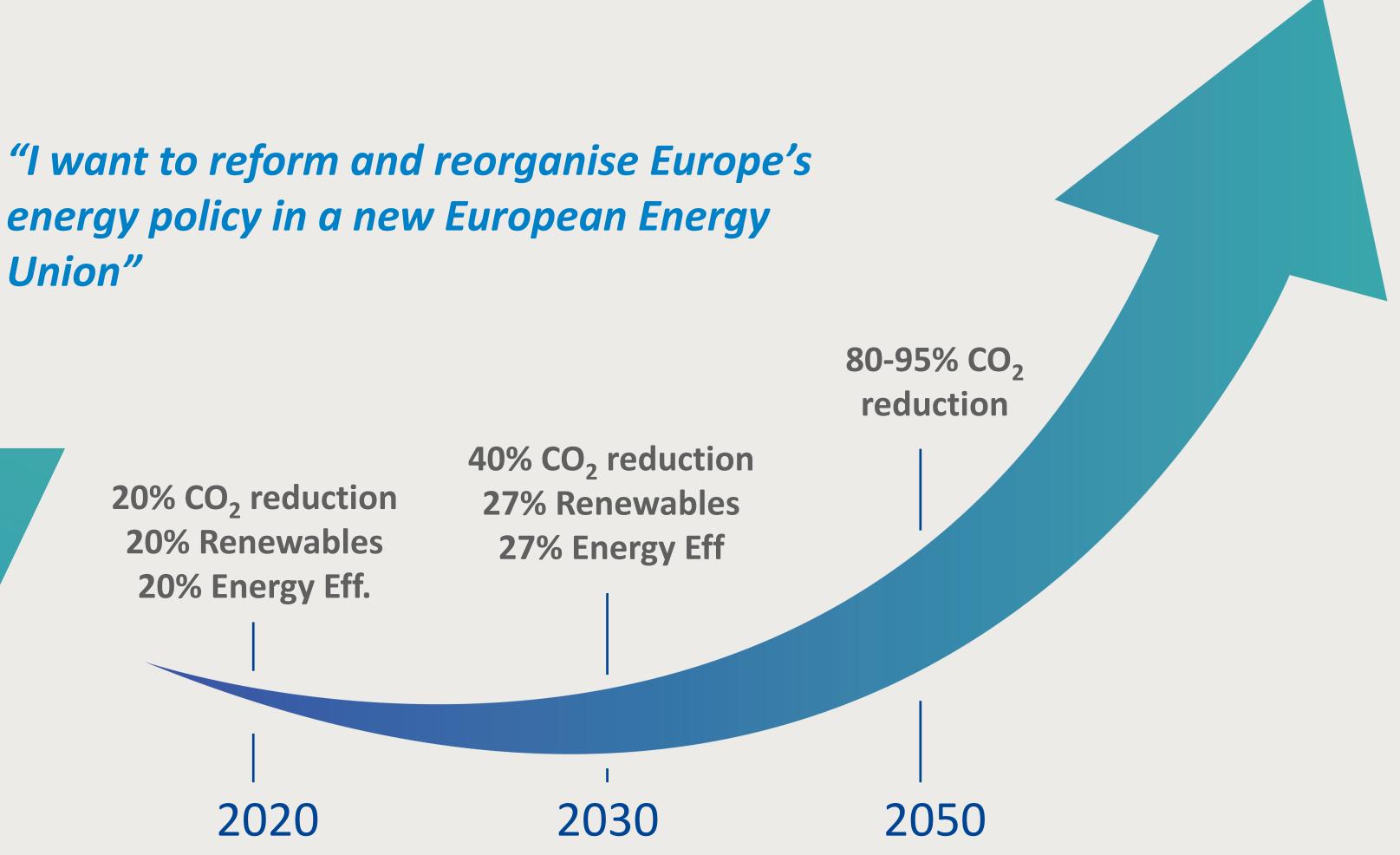
### **Energy Union dimensions**

- Security, solidarity and trust
- Fully-integrated Internal Energy Market
- Energy Efficiency
- *Climate action decarbonising the economy*
- Research, innovation and competitiveness

20% CO<sub>2</sub> reduction **20% Renewables 20% Energy Eff.** 





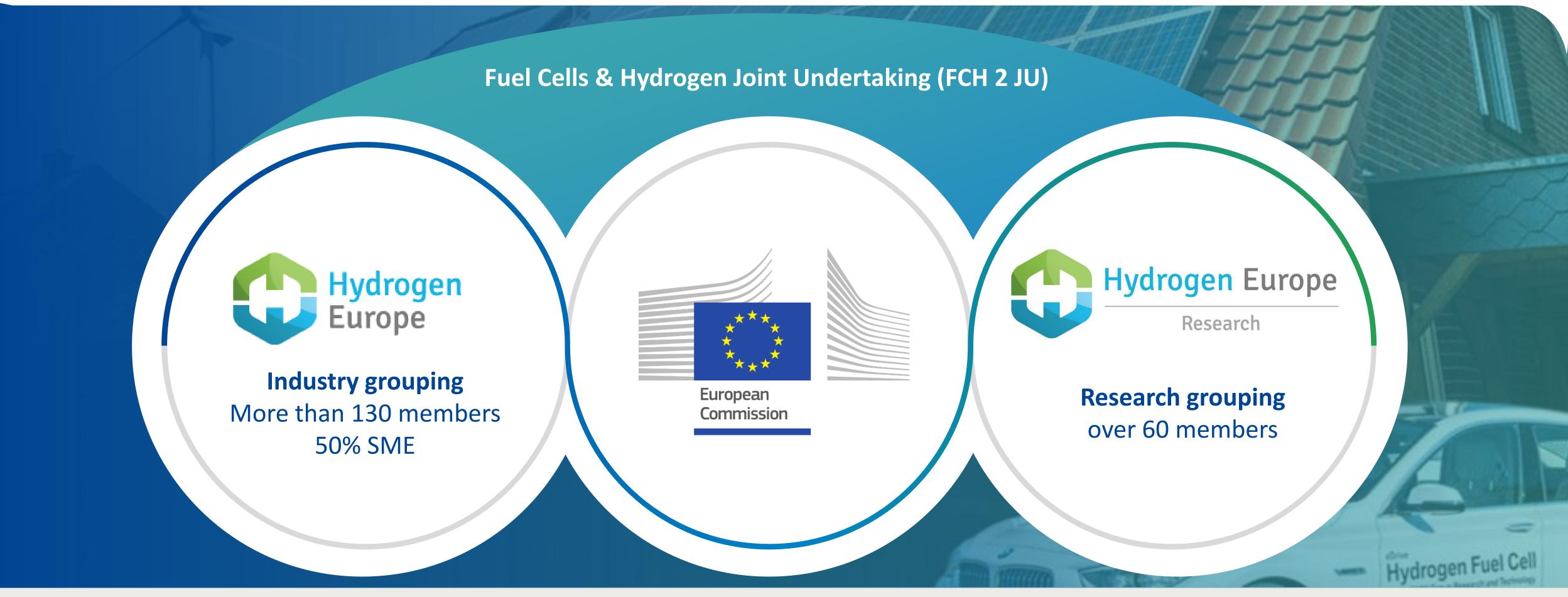






## Strong public-private partnership with a focused objective

EU Institutional Public-Private Partnership (IPPP)



To implement an *optimal research and innovation programme* to bring FCH technologies to the point of market readiness by 2020

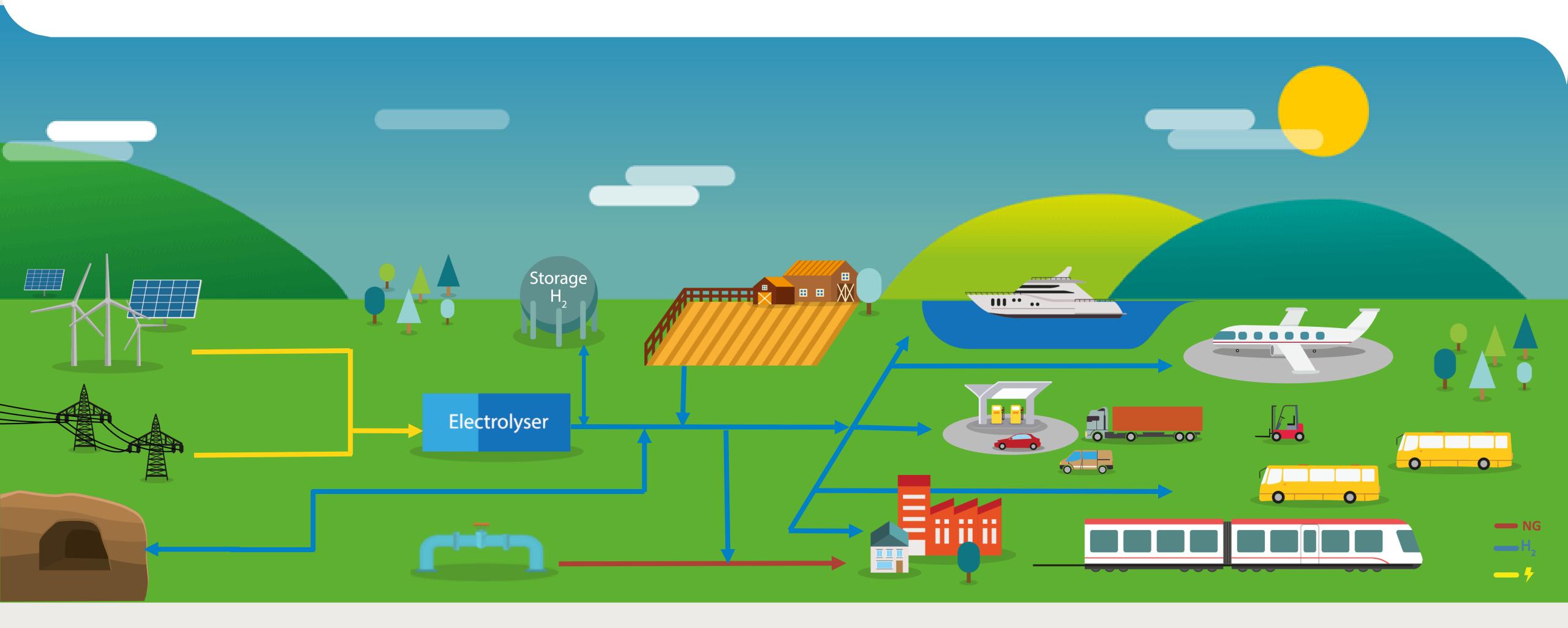






### The hydrogen economy

Fuel cells, as an efficient conversion technology & Hydrogen, as a clean energy carrier









### FCH 2 JU Objectives

#### Market readiness of a portfolio of clean, efficient and affordable solutions for our energy and transport systems/

### Clean

#### Transport

Reduce fuel cell system costs for transport applications



### production

Increase efficiency and reduce costs of hydrogen production, mainly from water electrolysis and renewables

Heat & electricity production

Increase fuel cell efficiency and lifetime





### H<sub>2</sub> storage for grid balancing

Η

Demonstrate on a largescale hydrogen's capacity to harness power from renewables and support its integration into the energy system

### Minimal use of critical raw materials

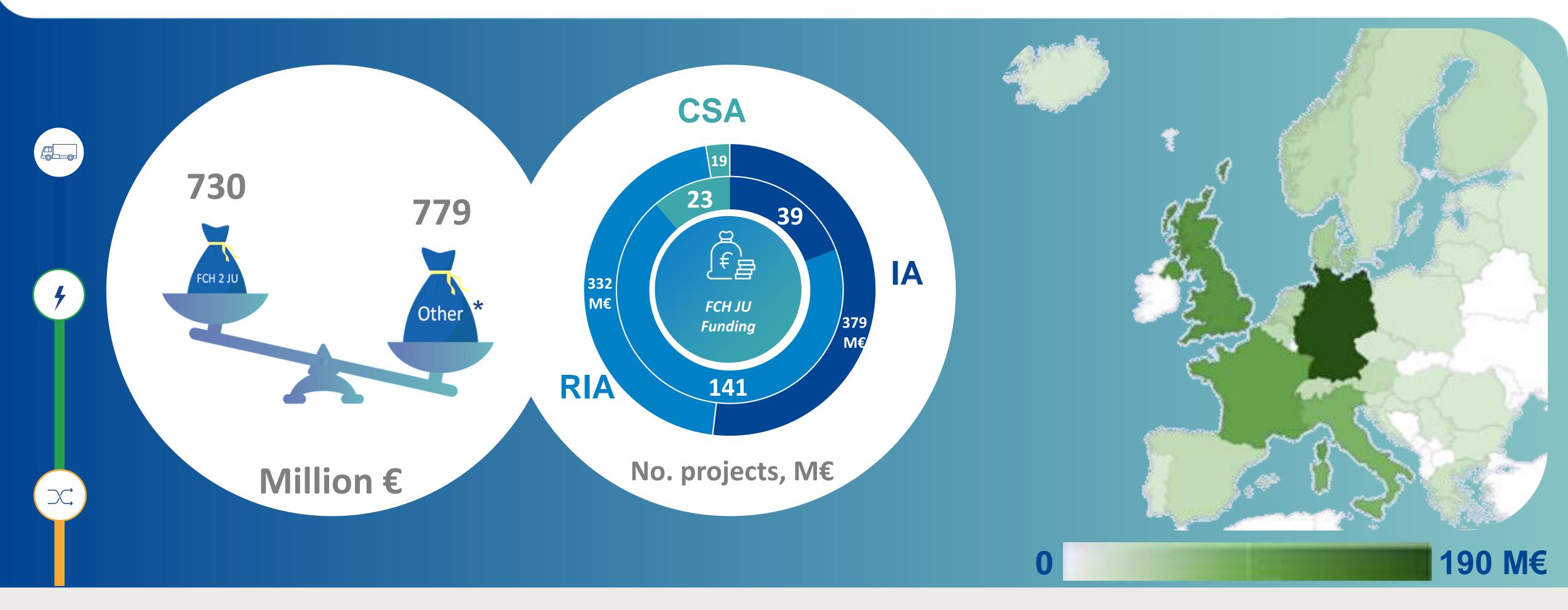
Reduce platinum loading







### Attracting investment from industry and research 203 projects, 730 M€ public support, on both research and innovation activities



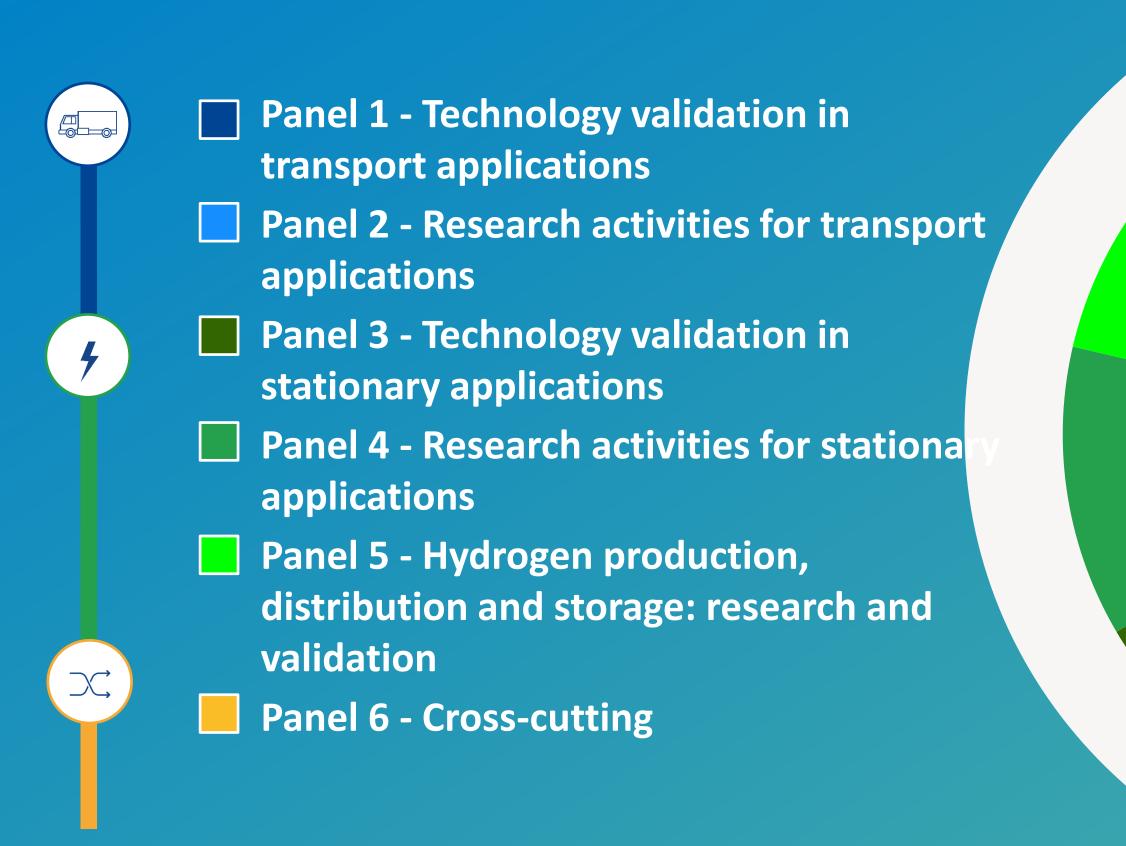


\* Other resources including private and national/regional funding RIA=Research and Innovation action IA=Innovation actions CSA=Coordination and Support action





### **Complex portfolio of projects** From research to validation and field demonstration











### **Annual Programme Review 2017**

**Exceptional effort of a team of more than 100 projects consortia, JRC and Programme Office** 

- Performed on the basis of the projects funded by the programme and carried out by external experts (by JRC as of 2017);
- Analysis of a selected portfolio of projects, mainly those ongoing during June-October of the previous year (2016) against targets and Key Performance Indicators set by the Multi-Annual Work-Plan (MAWP) and Annual Work-Plans (AWPs);
- Collection of annual input from projects, in addition to contractual documents and project reports; parallel exercise of annual data collection (dedicated templates in internal database TRUST); project posters also in exhibition;
- Important effort of team of project officers and knowledge management to validate, clean and analyse/extract data for publication; however, substantial amount of data still confidential;
- Great support from JRC colleagues in reviewing the portfolio and provide state-of-art data; HIAD database renamed;
- Final report (around February 2018)













#### Mirela Atanasiu

Head of Unit – Operations and Communication Mirela.Atanasiu@fch.europa.eu

#### **For further information**

www.fch.europa.eu www.hydrogeneurope.eu www.nerghy.eu



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