



**FUEL CELLS AND HYDROGEN**  
JOINT UNDERTAKING

# Introduction to FCH 2 JU and call 2020

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*Head of Unit*

Brussel, 27/01/2020



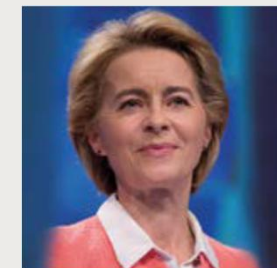
# European Green Deal

Improving the well-being of people by making Europe climate-neutral and protecting our natural habitat



*“The European Green Deal is our new growth strategy. It will help us cut emissions while creating jobs.”*

*Ursula von der Leyen, President of the European Commission*



*“We propose a green and inclusive transition to help improve people’s well-being and secure a healthy planet for generations to come.”*

*Frans Timmermans, Executive Vice-President of the European Commission*



# European Green Deal

European Commission Communication and Roadmap (December 2019)



*EU industry needs ‘climate and resource frontrunners’ to develop the first commercial applications of breakthrough technologies in key industrial sectors by 2030. Priority areas include clean hydrogen, fuel cells and other alternative fuels, energy storage.*

*Partnerships with industry & Member States will support research & innovation on transport, including batteries, **clean hydrogen**, low-carbon steel making, circular bio-based sectors and the built environment.*

*The regulatory framework for energy infrastructure should **foster the deployment of innovative technologies and infrastructure**, such as smart grids, **hydrogen networks** or carbon capture, storage and utilisation, energy storage, also enabling **sectorial integration**.*



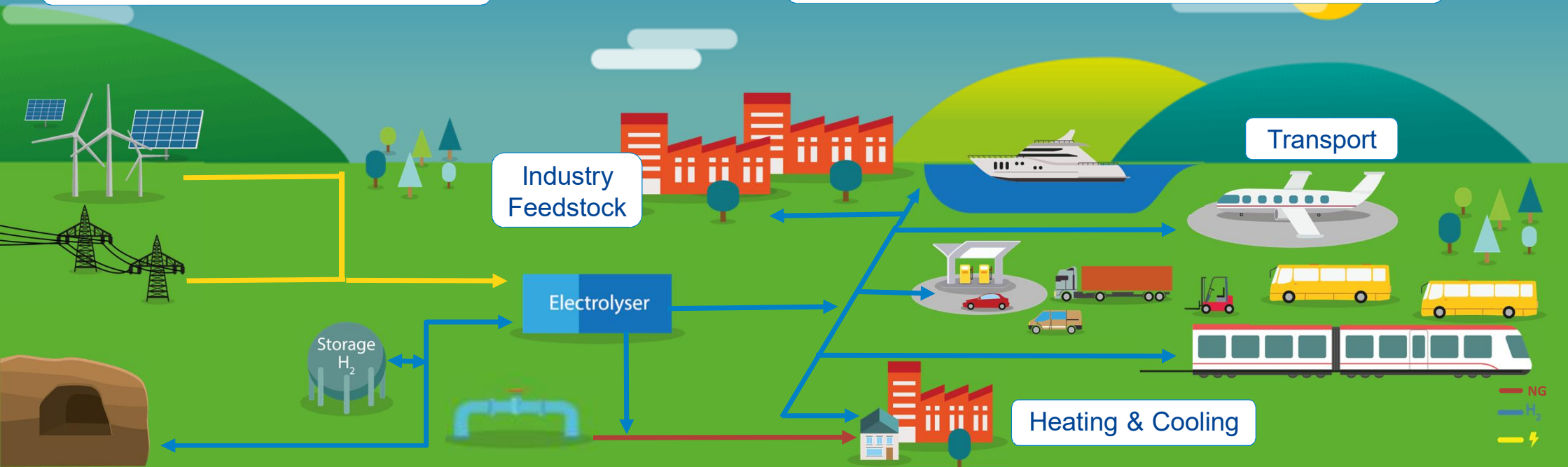
# The role of hydrogen in our society & economy

Hydrogen allows more renewables in the energy system through storage and enables sectoral integration



## STORAGE (seasonal)

## SECTORAL INTEGRATION



# Strong public-private partnership with a focused objective

EU Institutional Public-Private Partnership (IPPP)



## Fuel Cells & Hydrogen Joint Undertaking (FCH 2 JU)



**Industry grouping**  
More than 145 members  
50% SME



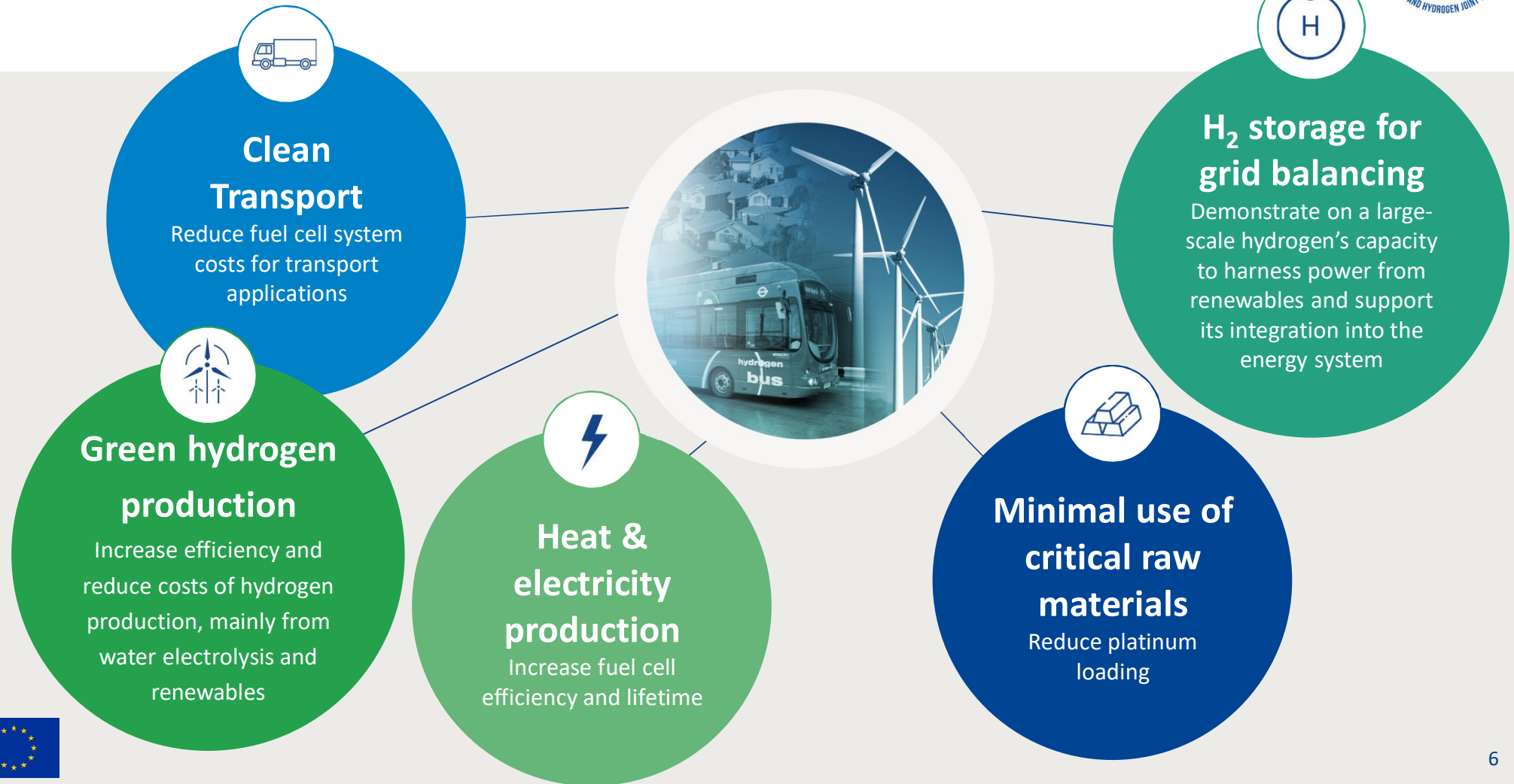
**Research grouping**  
over 80 members

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



# FCH 2 JU Objectives

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





# FCH 2 JU Programme structure



## ENERGY

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



## CROSS-CUTTING

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



## TRANSPORT

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

**FCH 2 JU:**

**Total Budget:** at least 1.3 bill.€

**EU contribution:** 665 mill.€



# FCH JU programme implementation (2008-2019)



## Energy

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



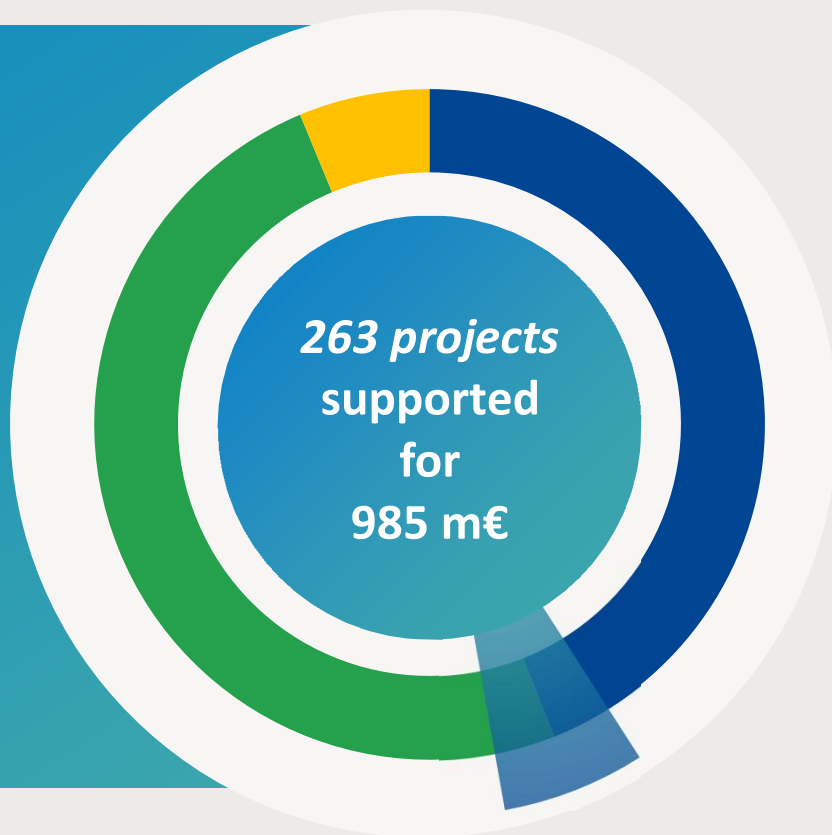
## Transport

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



## Cross-cutting

- E.g. standards, safety, education, consumer awareness ...



46 %



457 million euros  
145 projects

41 %



404 million euros  
70 projects

6 %



58 million euros  
43 projects

7 %



66 million euros  
5 projects

Similar leverage of other sources of funding: 1 b€





# Call 2020 overview

Reflects the industry and research partners' assessment of the state of the technological maturity of the applications and their estimated importance to achieve critical objectives of the FCH 2 JU



Call identifier: H2020-JTI-FCH-2020-1

Total budget: EUR 93 million

Opening date: 14 of January 2020

Estimated deadline: 21 of April 2020

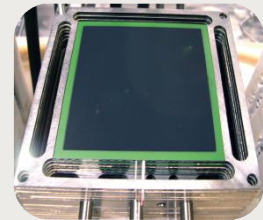
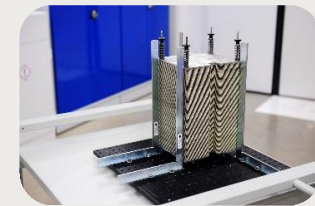
Content (24 topics in different sub-budget lists):

Transport activities: 5 IA and 3 RIA for EUR 41 million

Energy activities: 3 IA and 6 RIA for EUR 30 million

Overarching activities: 1 IA and 1 RIA for EUR 13 million

Cross-cutting activities: 4 RIA and 1 CSA for EUR 9 million



# International cooperation

Renewable and Clean Hydrogen Challenge under Mission Innovation



## H2020 is open to the world - All topics are opened to international cooperation

In particular **international cooperation is strongly encouraged** with Mission Innovation countries and for the 11 topics identified with icons



Mission Innovation

## Mission Innovation

- Launched in May 2018
- 16 countries
- **Objective:** *"To accelerate the development of a global hydrogen market by identifying & overcoming key technology barriers to the production, distribution, storage, and use of hydrogen at GW scale"*
- **Scope:**
  - focused multinational research & large scale demonstration efforts
  - from both public & private sectors
  - industry-directed breakthroughs within the next 3 years
  - renewable & clean hydrogen
  - 4 activity streams: making, sharing, using hydrogen & cross-cutting issues

→ Australia, EU & Germany as co-lead countries



**CEM9/MI-3**  
COPENHAGEN  MALMÖ





## Event's practicalities/Logistics

09:35 – 10:30 Call topics presentations

*10:30 – 11:00 Networking coffee*

11:00 – 13:00 Rules, legal & financial aspects, lessons learned, NCP and HE

*13:00 – 14:00 Lunch*

**14:00 – 16:00 Brokerage event**

*16:00 – 18:00 Networking cocktail*

Twitter  
#FCH\_infoday

**Web Streamed online during morning plenary session** (recordings accessible for free on our website after the event): <https://fch.webex.com/join/BFCH2JU>

Questions?

Take your smartphone; go to [www.sli.do](http://www.sli.do) and insert the code **#FCHJU**

Answers will be provided during the two Q&A sessions on the day



# Brokerage



## Networking

Organisation Type



Info Day 2020

First Name

**Family Name**

Organisation name

SME

-  Transport
-  Energy
-  Overarching
-  Cross - Cutting

## Brokerage

**3 Brokerage parallel sessions (moderated by Project Officers)** - follow signs and paper guidance

Following interest in your registration form

### Participation to the brokerage sessions

Short presentation with slides? Please make sure you are present 15 minutes before your brokerage session starts in order to upload your presentation in advance. No upload will be possible once the session has started.





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### **For further information**

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[www.hydrogeneurope.eu/research](http://www.hydrogeneurope.eu/research)



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