

Clean Hydrogen Partnership

Hydrogen skills development

Webinar: Jobs & Skills in Hydrogen
Australian Hydrogen Council
20 September 2022

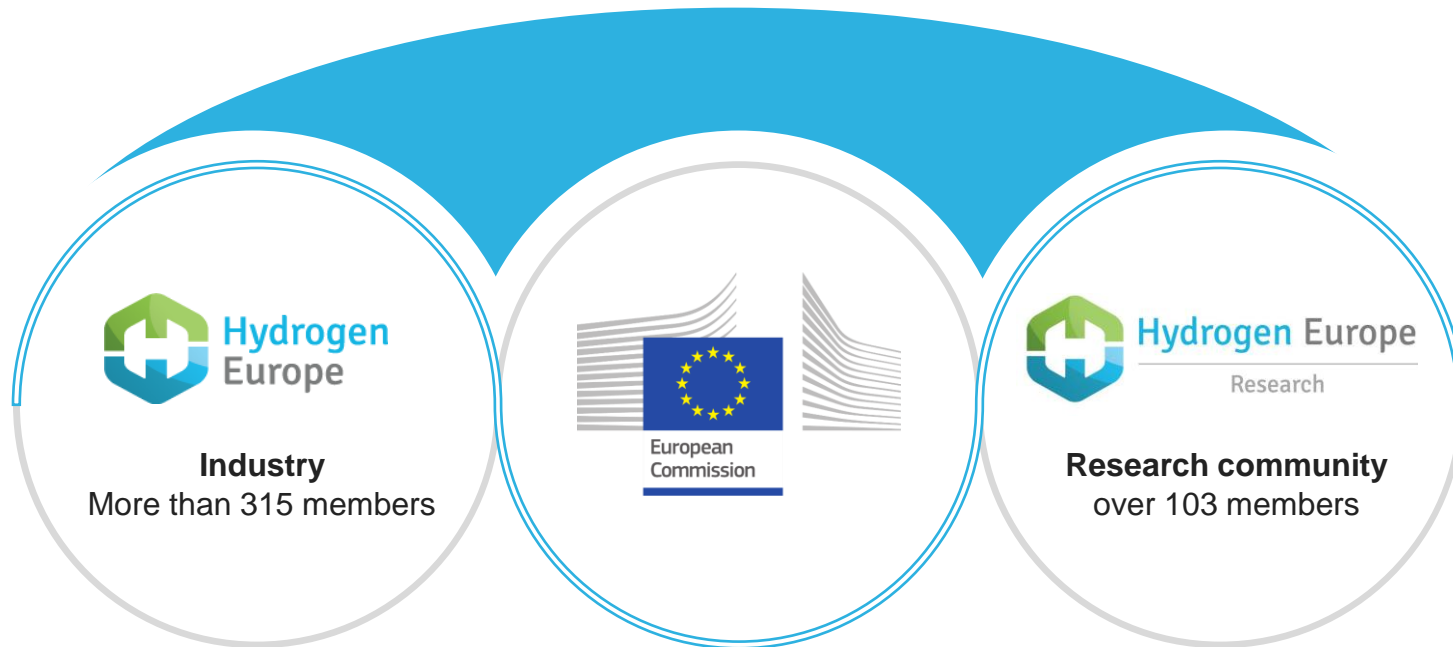
Alberto J. Garcia Hombrados

Project Officer - Clean Hydrogen Joint Undertaking



Clean Hydrogen Partnership Overview

EU Institutional Public-Private Partnership (IPPP)

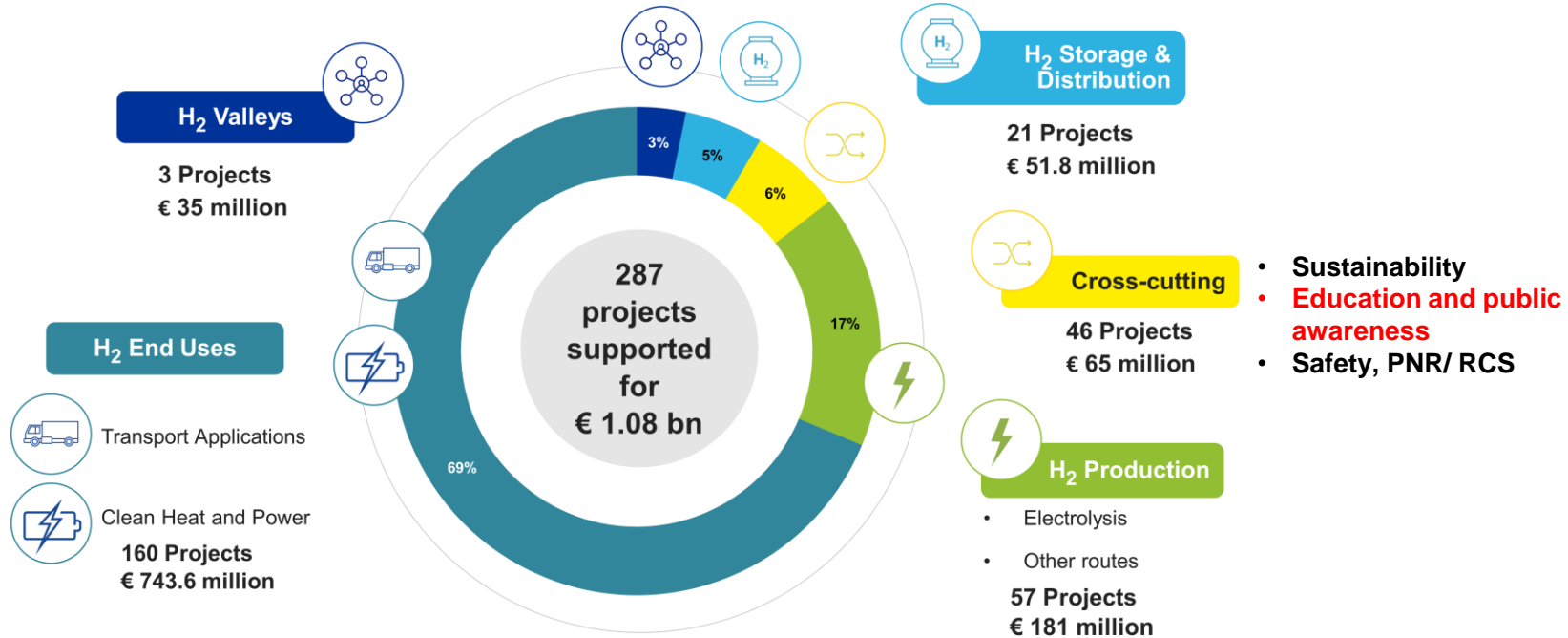


Mission: To facilitate the transition to a greener EU society through the development of hydrogen technologies

Budget: 1 billion EURO from Horizon Europe (to commit until 2027 and implement until 2031)

Clean Hydrogen Partnership - Continuation of the FCH JU Programme implementation (*)

- Clean Hydrogen Partnership (legal name: Clean Hydrogen Joint Undertaking)
- Universal successor of the Fuel Cells and Hydrogen 2 Joint Undertaking (FCH 2 JU) and has taken over its legacy portfolio



(*) Break down according to the Clean Hydrogen JU Programme structure

Clean Hydrogen Partnership Educational activities – Background information



Hydrogen
scaling up

A sustainable pathway for the global energy transition

Hydrogen Council November 2017

“Hydrogen sector could provide sustainable employment for more than 30 million people around the world by 2050”

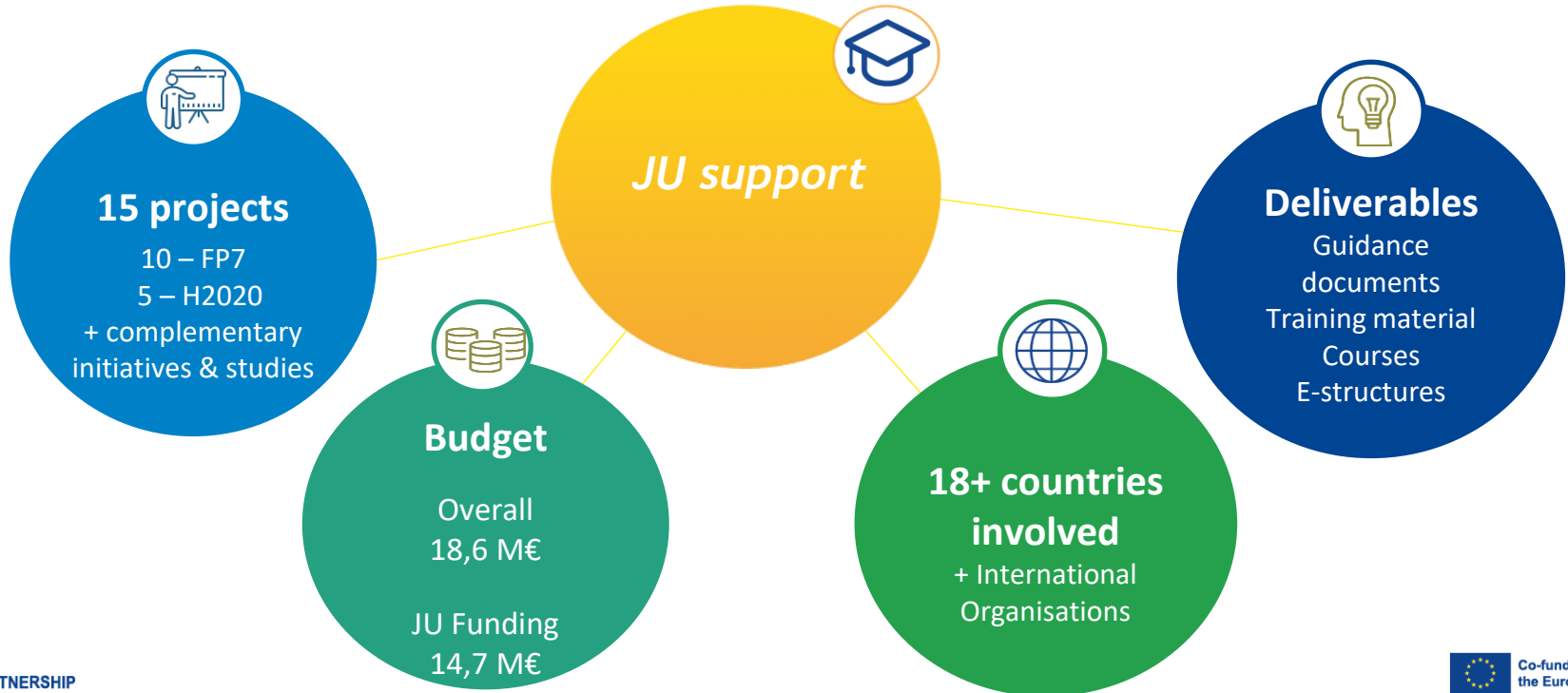


“Hydrogen can account for a total of 5.4 million direct jobs created by the European industry in 2050 (‘ambitious’ scenario)”

To unlock opportunities for more and better jobs, the training of a new skilled workforce as the upskill or reskill of the actual workforce in declining industries is crucial to succeeding in the needed scaling-up of this emerging industry in Europe (and worldwide), underpinning sustainable growth

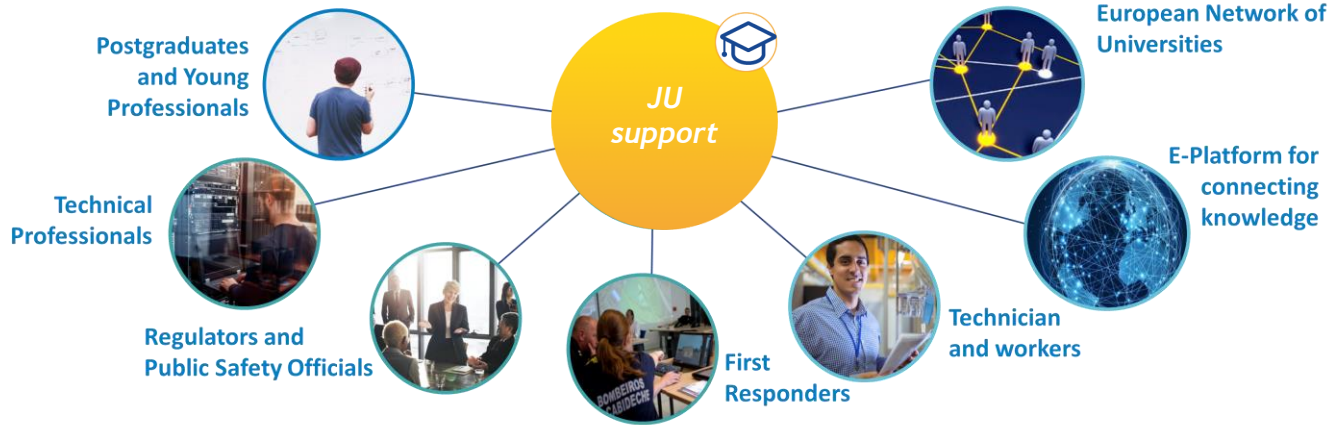
Clean Hydrogen Partnership Educational Activities – Overview

- A 14 years journey of the Fuel Cells and Hydrogen JU (FCH JU, FCH 2 JU)



Clean Hydrogen Partnership Educational Activities – Overview

Educational and training programs tailored to multiple target groups



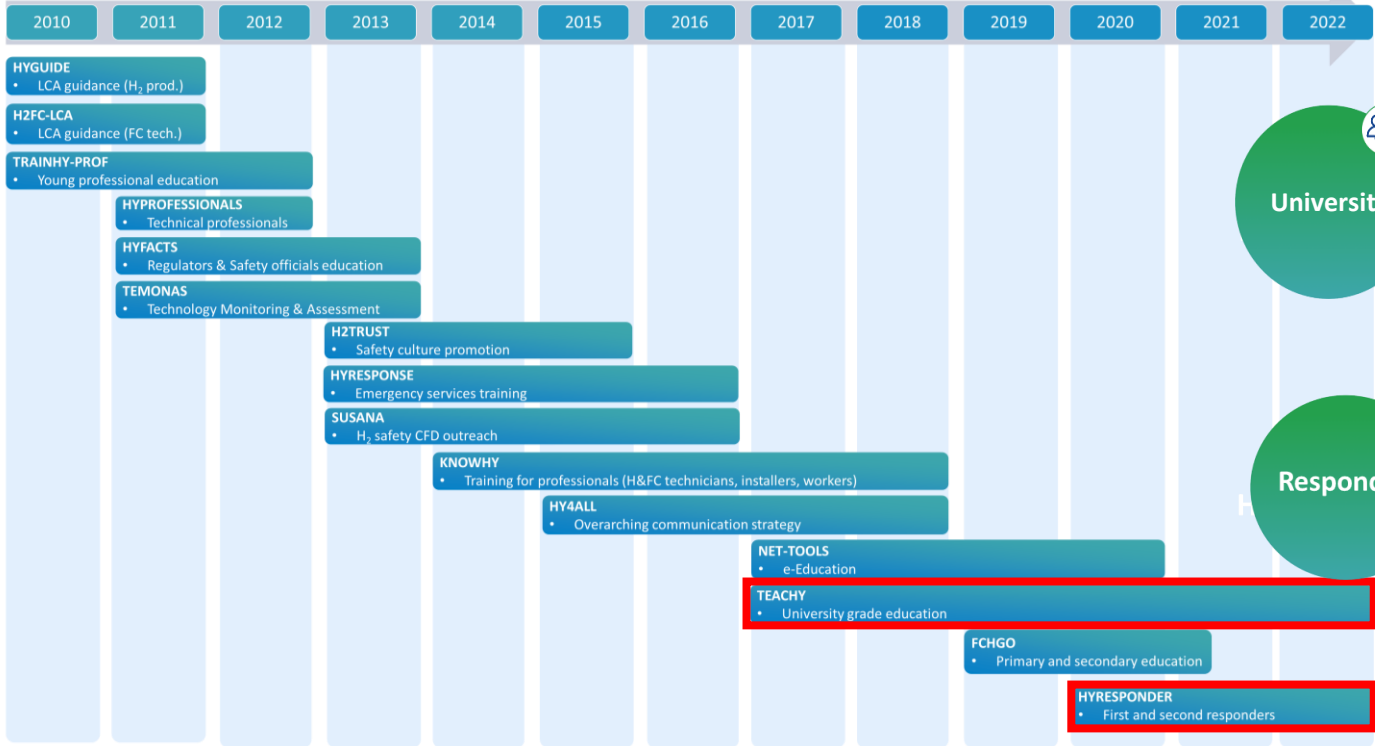
Multiple levels and types of education, learning formats, features...

Graduate Undergraduate ... In person training ... Serious games Mock-up installations
 Vocational Compulsory ... e-learning blended ... Virtual reality



Clean Hydrogen Partnership Educational Activities – Overview

- 2 Projects ongoing in 2022

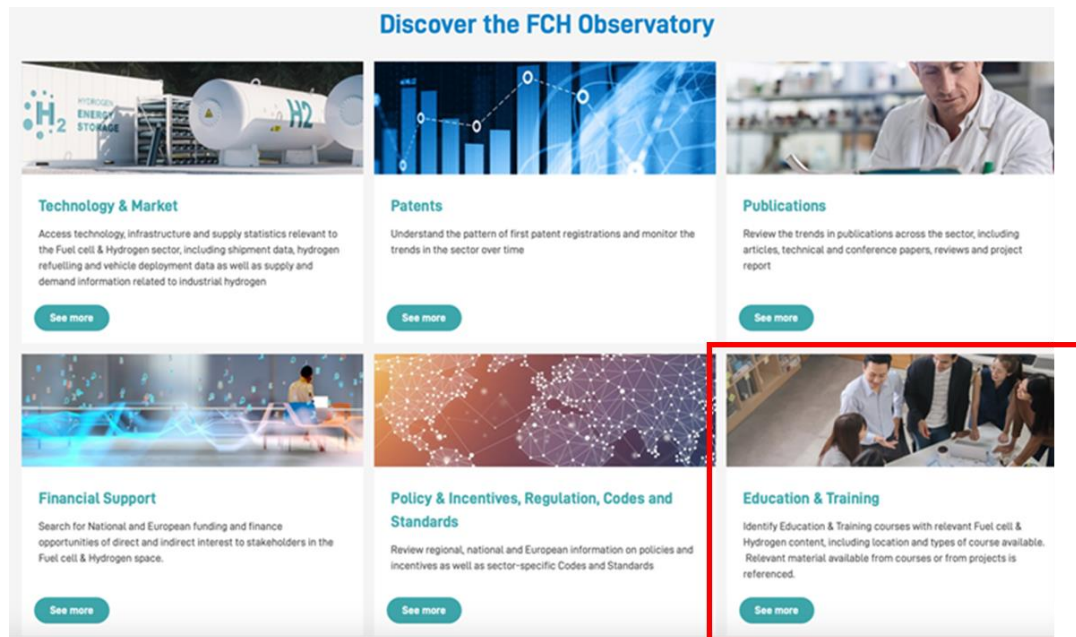


University

Responders



- Fuel Cells & Hydrogen Observatory (FCHO)



Discover the FCH Observatory

Technology & Market
Access technology, infrastructure and supply statistics relevant to the Fuel cell & Hydrogen sector, including shipment data, hydrogen refuelling and vehicle deployment data as well as supply and demand information related to industrial hydrogen
[See more](#)

Patents
Understand the pattern of first patent registrations and monitor the trends in the sector over time
[See more](#)

Publications
Review the trends in publications across the sector, including articles, technical and conference papers, reviews and project report
[See more](#)

Financial Support
Search for National and European funding and finance opportunities of direct and indirect interest to stakeholders in the Fuel cell & Hydrogen space.
[See more](#)

Policy & Incentives, Regulation, Codes and Standards
Review regional, national and European information on policies and incentives as well as sector-specific Codes and Standards
[See more](#)

Education & Training
Identify Education & Training courses with relevant Fuel cell & Hydrogen content, including location and types of course available. Relevant material available from courses or from projects is referenced.
[See more](#)

What is the FCHO?

- Global resource
- User friendly and reliable output
- Charts, graphs and data downloads
- Insight reports

Includes chapters on

- Technology & Market
- Policies & regulation
- Codes & Standards
- Patents & Publications
- Funding
- Education & Training

- Education and training chapter – ca. 300 different training courses
- Education materials publicly accessible for learners and students interested in the field of FCH

Education materials

- Thanks to different selectors, materials can be retrieved:
 - by ISCED level
 - by course focus
 - by language

ISCED is the reference international classification for organising education programmes and related qualifications by levels and fields.

Education materials

Education materials publicly accessible online can be found in this subsection. Materials can be retrieved by 'level', as classified by the International Standard Classification of Education (ISCED), by course focus, by language or by source of material. You can use the different selectors to refine your search.

ISCED
 - Any -

Technology
 - Any -

Language
 - Any -

COURSE TITLE ^	TYPE OF MATERIALS	FCH PROJECT	
Accumulo energetico	slides	HySchools	view
Activité d'apprentissage - Distribution de l'hydrogène	Exercice	HySchools	view
Alternative Fahrzeugkonzepte	Slides	H2 Training	view
Alternative fuels	Slides	H2 Training	view

- FCHO reports on Education and training!



Production de l'hydrogène

COURSE FOCUSED ON	TYPE OF MATERIALS	AUTHOR	LANGUAGE
H2 Production	Slides	HySchools	French
FCH PROJECT	YEAR	LAST UPDATE	WEBSITE/WEBLINK
HySchools	2019	Mon, 11/04/2019 - 12:00	Link

Clean Hydrogen Partnership Educational Activities – a few findings/ lessons learned




- Educational activities increase public awareness and trust, supporting the market uptake
- Industry engagement is essential - what industry needs?
- CPD courses foster interaction and collaboration between industry and the academic world
- Solid and long-lasting business models for the continuity of activities after the end of the projects are still challenging


For further information

<https://www.clean-hydrogen.europa.eu/>



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