



**FUEL CELLS AND HYDROGEN**  
JOINT UNDERTAKING

**FCH JU**  
**Education and training**  
**activities**  
**Overview**

**Alberto Garcia Hombrados**  
30 November 2020





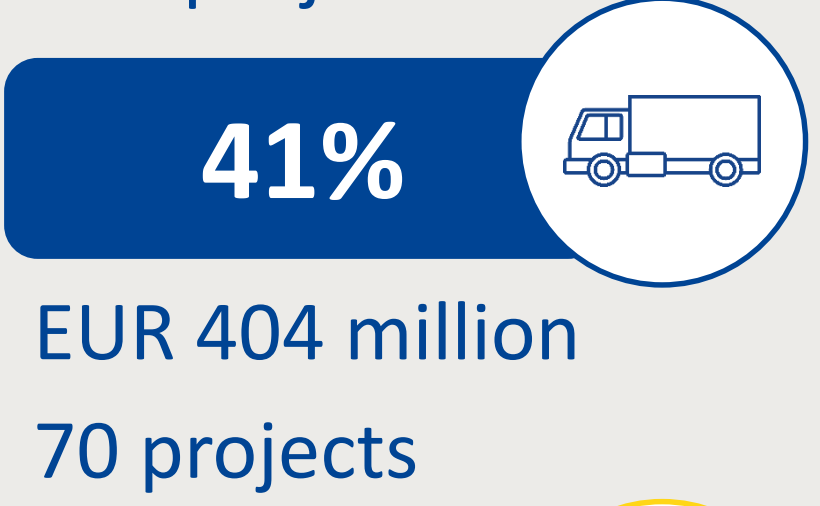
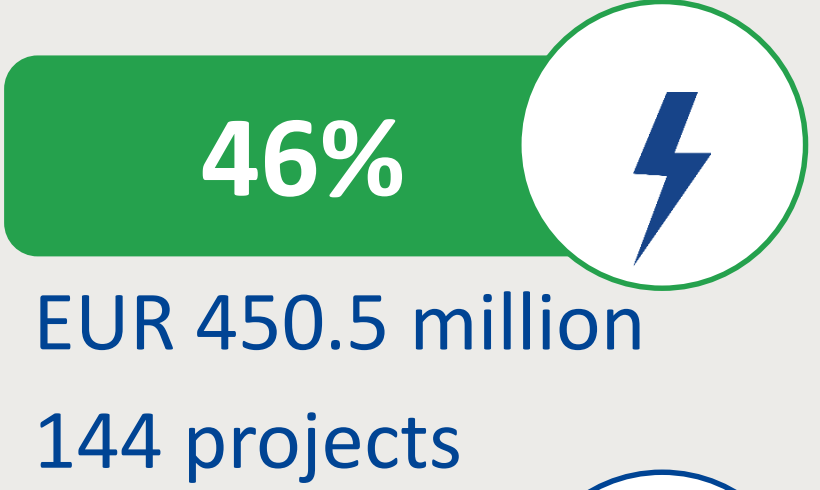
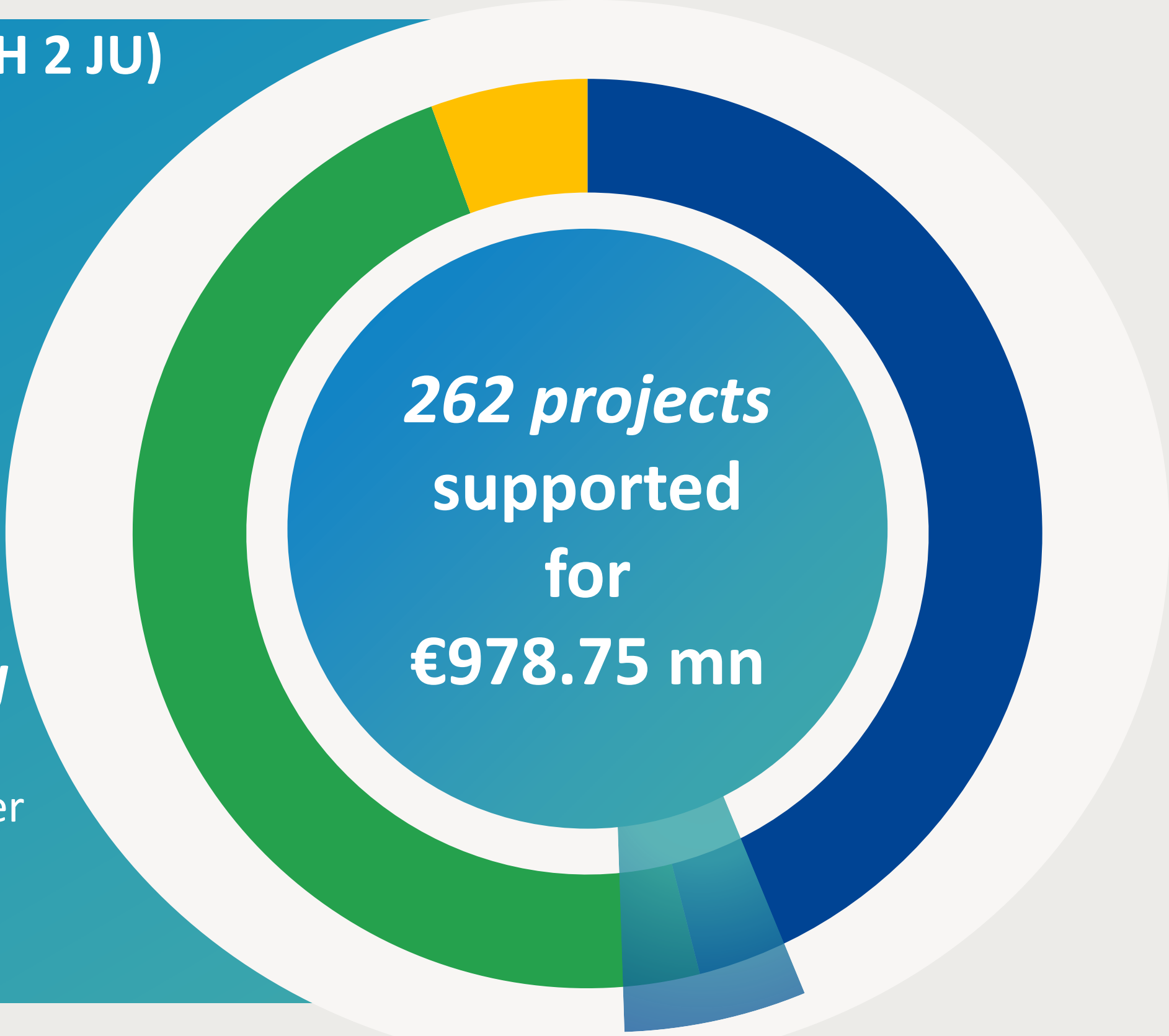
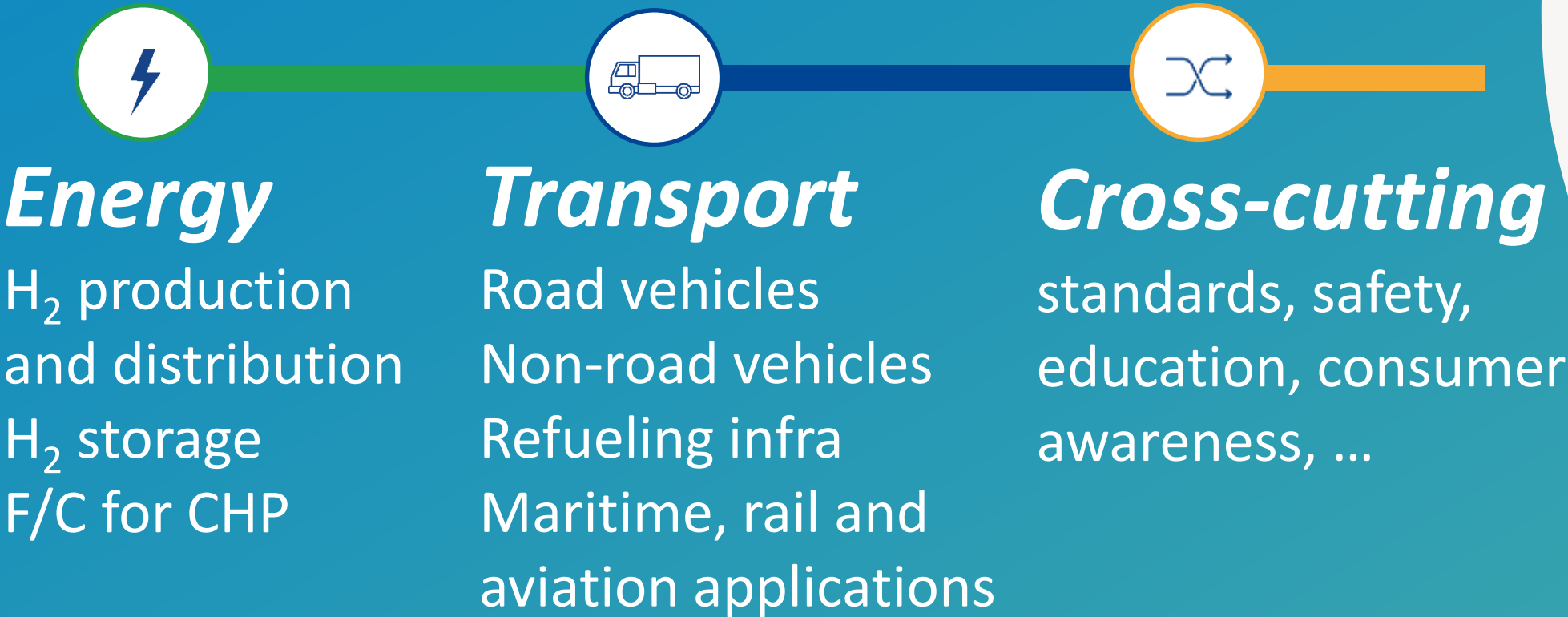
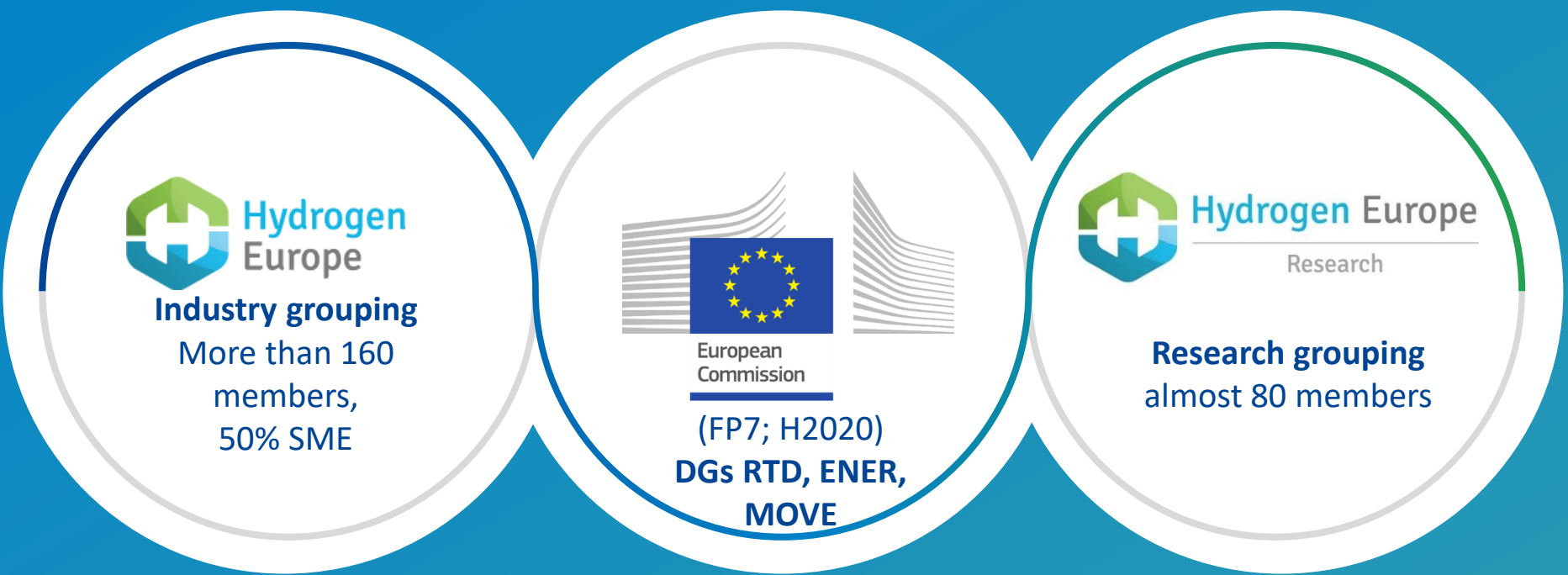
# Strong public-private partnership with a focused objective

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

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



Similar leverage of other sources of funding: 1 b€



# Cross-cutting Activity Area

Activity Areas



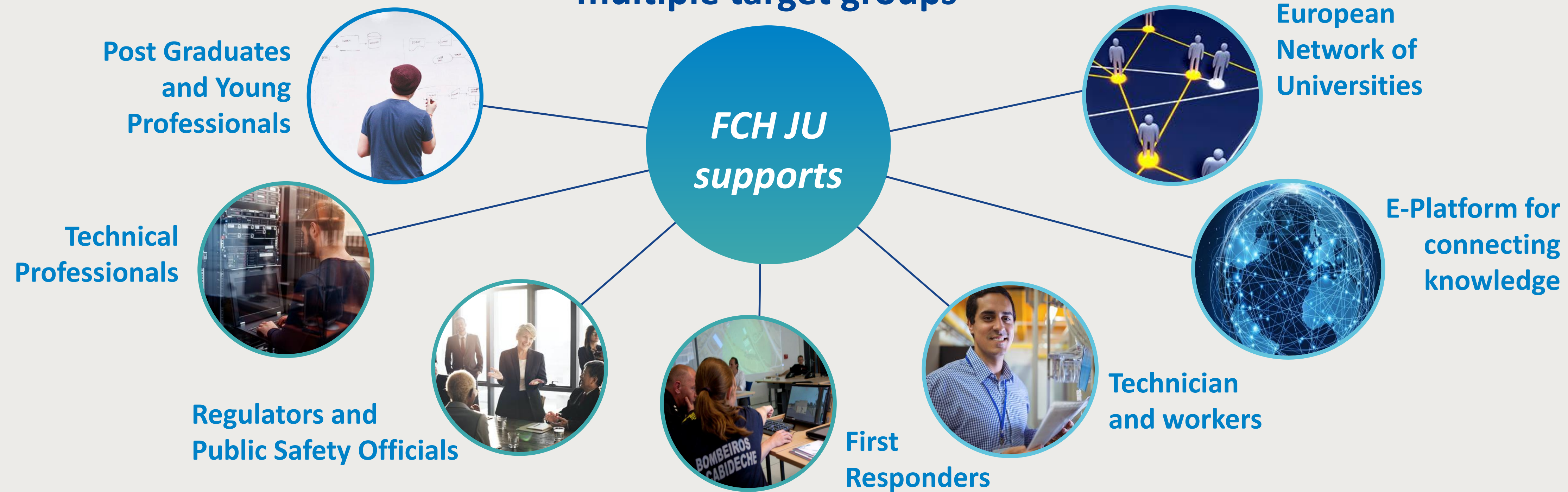


# Educational Activities – Overview

Promoting the excellence in education and training, preparing the European workforce



## Educational and training programs tailored to multiple target groups



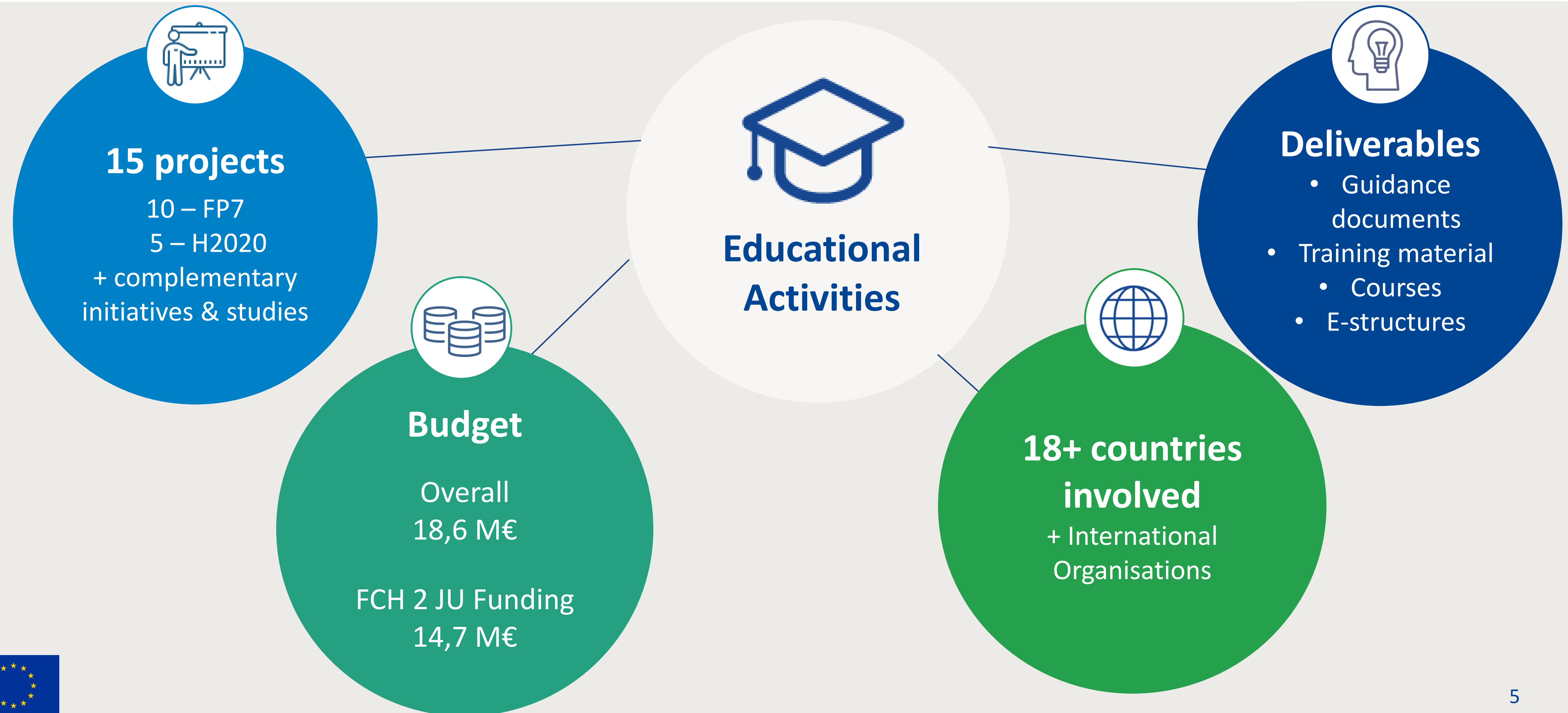
Multiple levels and types of education, learning formats, features...



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

# Educational Activities – Overview

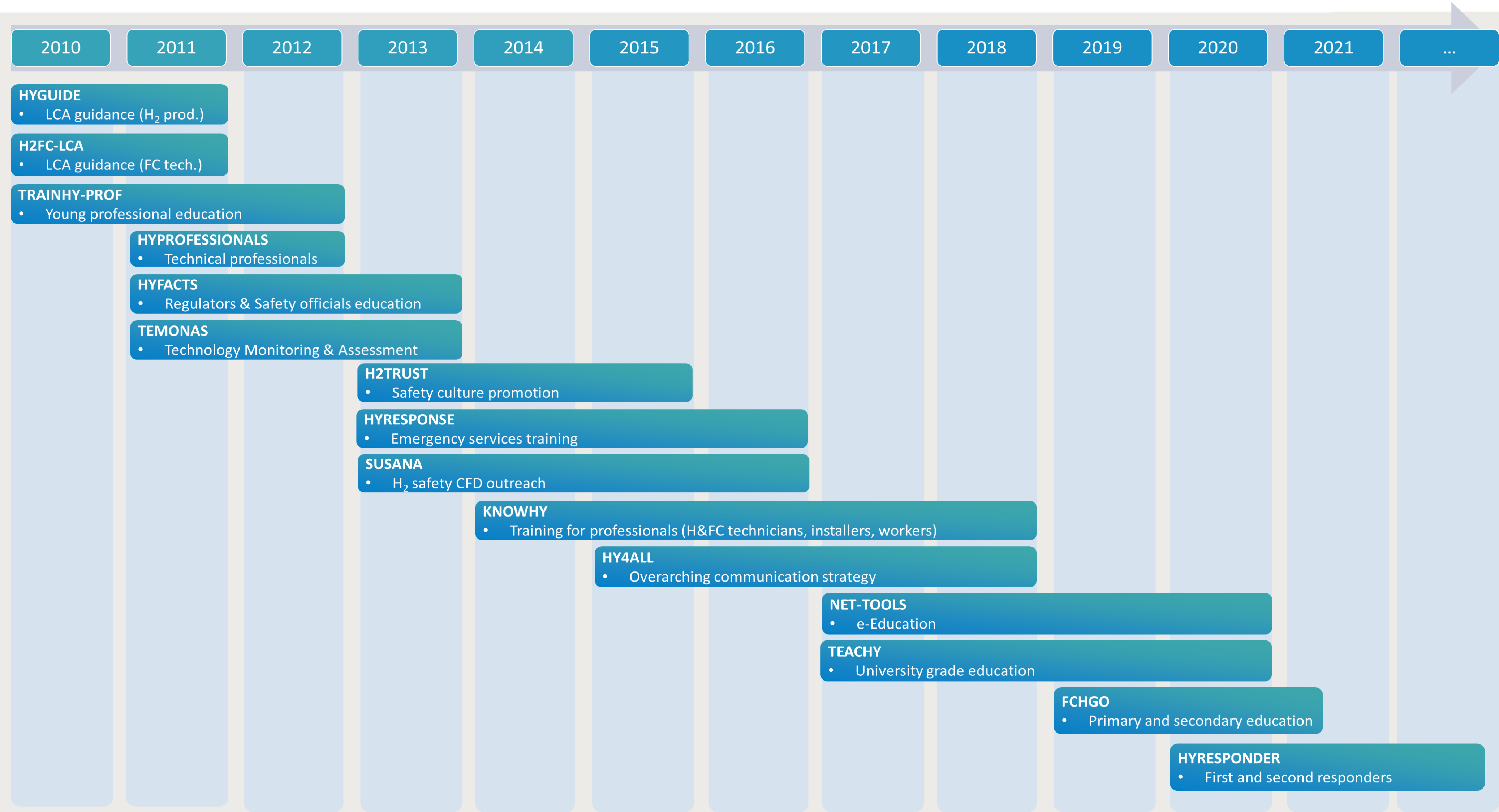
Preparing the European workforce, promoting excellence in education and training on FCH technologies





# Educational Activities – Overview

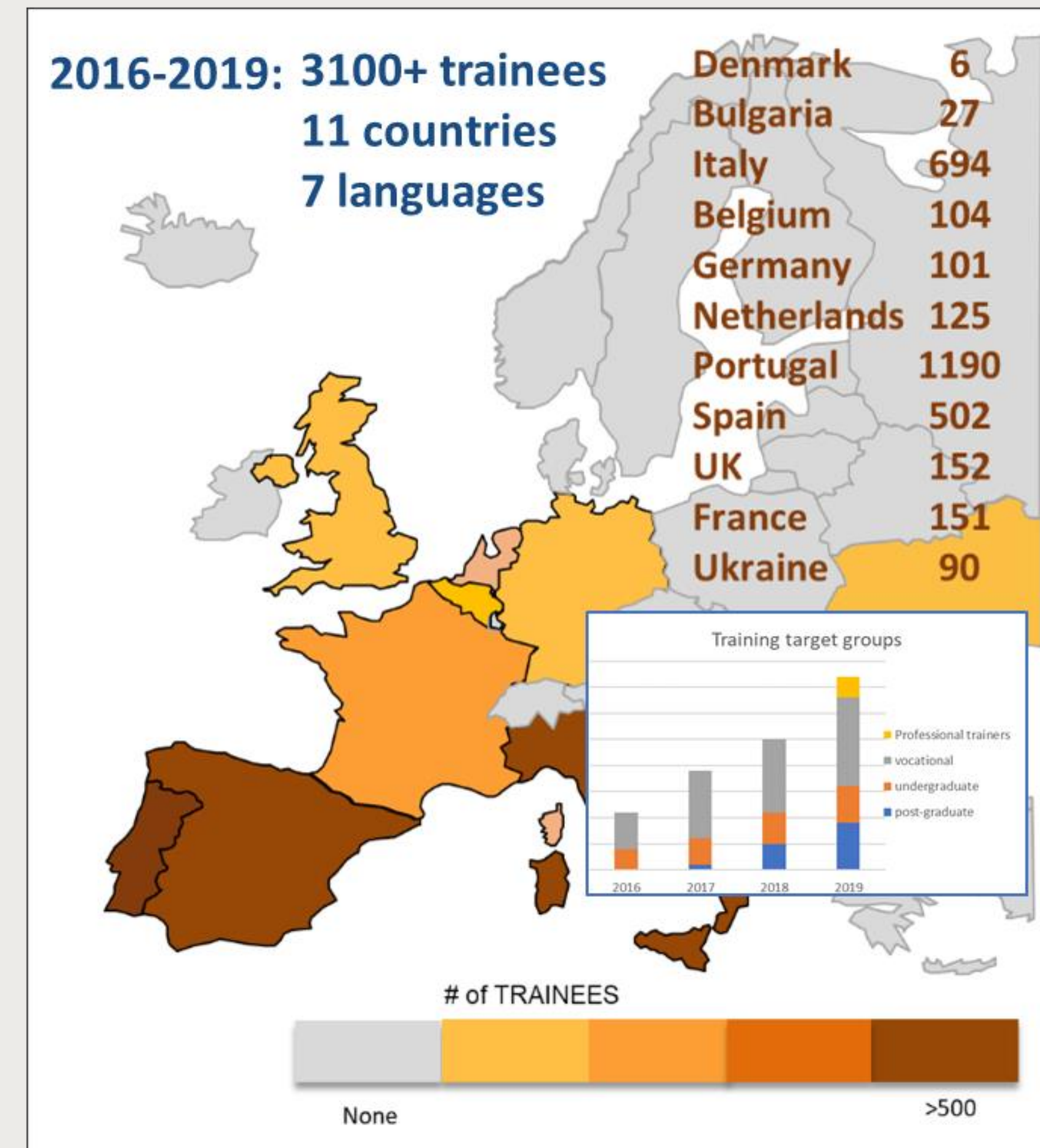
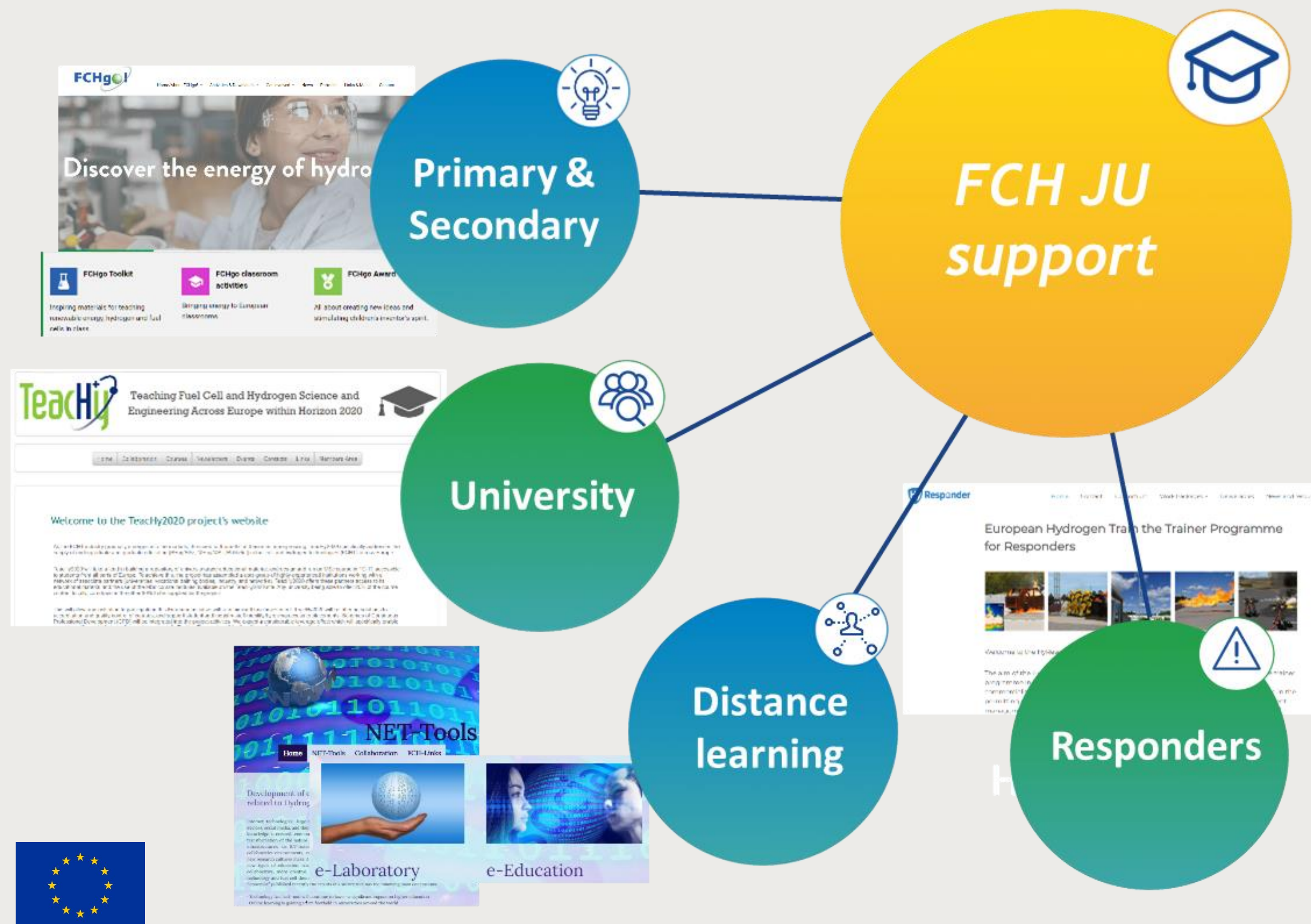
Continuous support throughout the FCHJU programme lifetime





# Education and training

Projects ongoing in 2020





# FCH Observatory

Resource for all things Fuel Cells & Hydrogen




## 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


**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.

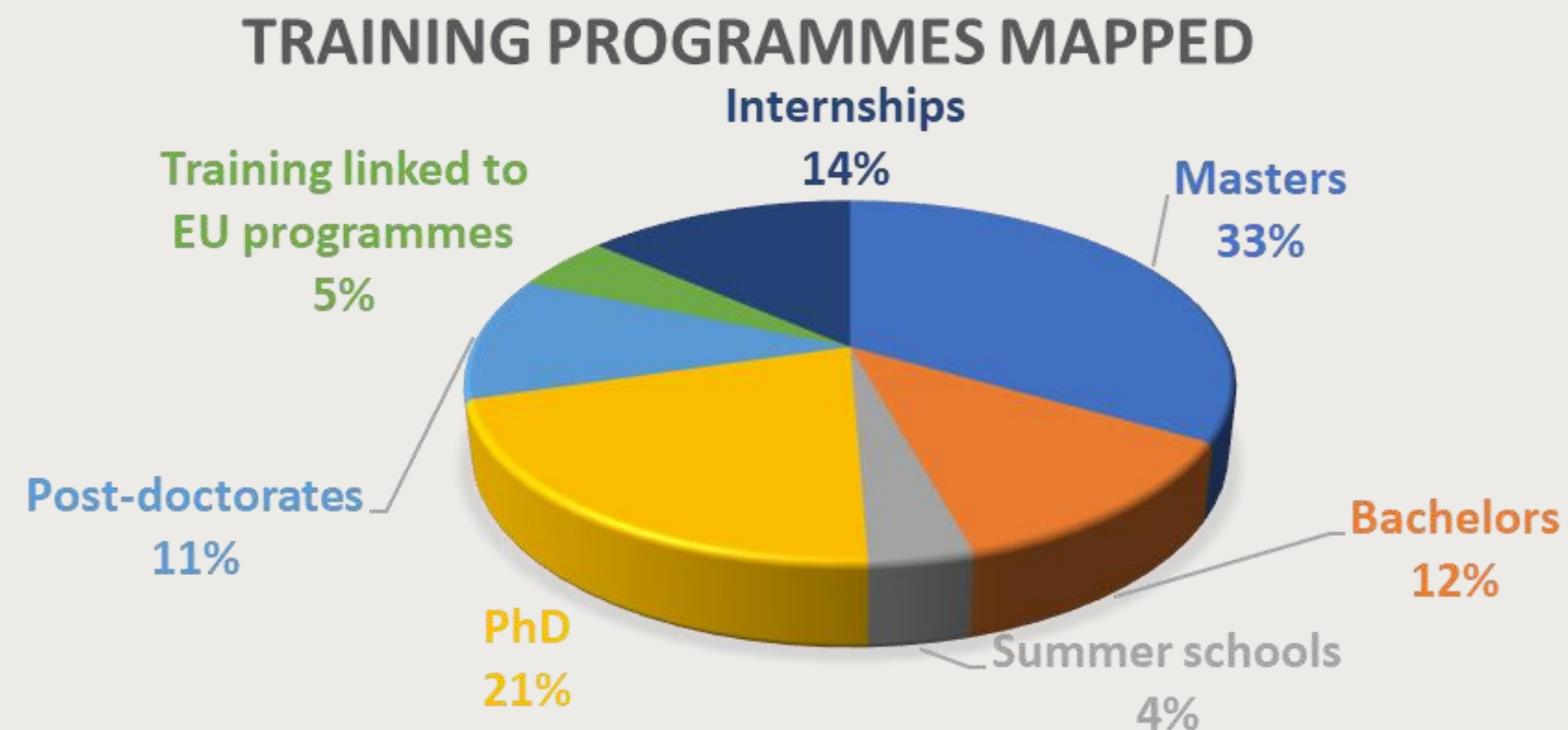
[See more](#)





### Training programmes

- To date, **86 training programmes and courses** are listed in the FCHO.
- The data has been collected by responses to a questionnaire sent to all Hydrogen Europe Research membership covering universities and research organisations.



### Training programmes

With this map, training programmes and courses are displayed according to their location. You can explore the data by selecting the type of training you are interested in. The categories refer to different levels of education: Bachelor, Master, Doctorate and Post-Doctorate programmes. Off-curricula trainings are also listed, such as summer schools, workshops, or internships. A language filter is available to refine your search according to your needs.

Free search (e.g. training institution, location, etc.)

Training programme

Language

- Any -

- Any -

Apply







## 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.*

### 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	<a href="#">Link</a>

### 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.

Free search (e.g. course title, type of materials, etc.)

ISCED

- Any -

Technology

- Any -

Language

- Any -

Apply

COURSE TITLE ^	TYPE OF MATERIALS	FCH PROJECT	
Accumulo energetico	slides	HySchools	<a href="#">view</a>
Activité d'apprentissage - Distribution de l'hydrogène	Exercise	HySchools	<a href="#">view</a>
Alternative Fahrzeugkonzepte	Slides	H2 Training	<a href="#">view</a>
Alternative fuels	Slides	H2 Training	<a href="#">view</a>







**FUEL CELLS AND HYDROGEN**  
JOINT UNDERTAKING

**Alberto J. Garcia Hombrados**

Project officer

[Alberto.GarciaHombrados@fch.europa.eu](mailto:Alberto.GarciaHombrados@fch.europa.eu)

---

**For further information**

[www.fch.europa.eu](http://www.fch.europa.eu)



@fch\_ju



[Fch-ju@fch.europa.eu](mailto:Fch-ju@fch.europa.eu)



FCH JU