Introduction to the Hydrogen TCP
In a nutshell

**Members**
- 25 Member Countries
- + European Commission
- 8 Sponsors

**Tasks**
- 7 Open
- 40 Finished
- ≥ 5 in definition

**Experts involved**
- In collaborative research on hydrogen and hydrogen technologies

- 33 Members
- 40+ Tasks
- 250+ Experts involved
Tasks

Main Hydrogen TCP activities
Task portfolio status

October 2023

H₂ for Marine Applications + Ports

H₂ in Islands

H₂ in the Mining, Mineral Processing, and Resource Sectors

Natural H₂

Roadmaps for the use of H₂ in Industry

Innovation for H₂ transport

International H₂ Supply Chains – models and cost analysis

H₂ LCA, societal and environmental impact

Preliminary Idea

Project Definition Phase

Kick-off

Active

Closing Steps

End

Task 37 – H₂ Safety

Task 38 – PtH & HtX

Task 39 – H₂ in the Maritime

Task 40 – Energy Storage and Conversion

Task 42 – Underground H₂ Storage

Task 43 – Safety and RCS of Large-Scale H₂ Energy Applications

Task 44 – HYNE

Task 45 – Renewable H₂ Production

Task 46 – Off-shore H₂ Production

Task 47 – H₂ Certification

Task 41 – Analysis and Modelling of H₂ Technologies

H₂ LCA, societal and environmental impact

H₂ for Marine Applications + Ports

H₂ in Islands

H₂ in the Mining, Mineral Processing, and Resource Sectors

Natural H₂

Roadmaps for the use of H₂ in Industry

Innovation for H₂ transport

International H₂ Supply Chains – models and cost analysis

H₂ LCA, societal and environmental impact
Collaboration

Joint activities with entities within the IEA Network and external
Collaboration within the IEA Network
Collaboration with other organizations

IRENA
International Renewable Energy Agency

Hydrogen Council

IPHE

WORLD ECONOMIC FORUM

International Transport Forum

Hydrogen TCP

CLEAN ENERGY MINISTERIAL
Accelerating the Global Clean Energy Transition
Some examples of our collaboration: workshops and events
Strategic Activities
TRL Assessment on H$_2$ technologies

IEA is updating its Clean Energy Technology Guide (CETG). TRL Assessment is critical, IEA wants to contrast estimated TRL values, description of technologies and current projects, with experts worldwide to be able to achieve the most accurate result. They have asked the Hydrogen TCP for advice/help regarding their TRL assessment activities in new emerging H$_2$ technologies. Hydrogen TCP has proposed to transform this IEA-TCP's collaboration into a strategic activity.

Objectives (general)

- Strengthen our collaboration with IEA
- Strengthen our collaboration with synergic TCPs
- Position the Hydrogen TCP as a reference for technical knowledge

Analysis

Hydrogen TCP Technical Secretariat has analyzed IEA's CETG hydrogen-related technologies (94): 30 TRL GROUPS have been identified.

40+ technologies assessed
30+ experts mobilized

Next steps
Thank You!

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