



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

Cross-cutting Activity Area

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Cross-cutting Activity Area Overview

Supporting and enabling activities, facilitating the transition to market



Main Focus

- Regulations, Codes and Standards through Pre-Normative Research (PNR)
 - 1 topic addressing safety—related aspects
 - 1 topic focus on hydrogen admixtures in the natural gas grid
 - 1 topic focus on performance and durability of fuel cells
- Public awareness and social acceptance through education and training

What is new

- PNR focused on traffic infrastructures
- PNR and techno-economic assessment to accelerate the EU-wide adoption of H2NG blends
- PNR to develop advanced AST protocols for Solid Oxide Cells
- Building networks to educate at schools and to raise public awareness and social acceptance



Cross-cutting Activity Area

4 Topics - 8.75 M€



Topic	Type of Action	Ind. FCH Contribution (M€)
FCH-04-1-2018: PNR for safety on hydrogen driven vehicles and transport through tunnels and similar confined spaces	RIA	8.75
FCH-04-2-2018: Hydrogen admixtures in natural gas grid	RIA	
FCH-04-3-2018: Accelerated Stress Testing (AST) protocols for Solid Oxide Cells (SOC)	RIA	
FCH-04-4-2018: Strengthening public acceptance and awareness of FCH-technologies by educating pupils at schools	CSA	



Cross-cutting Activity Area Topics Overview

Research and Innovation Action - RIA



FCH-04-1-2018: PNR for safety on hydrogen driven vehicles and transport through tunnels and similar confined spaces



Support improved safety assessments in traffic infrastructures



- Revision of the SoA, identification of knowledge gaps, experimental program, etc.
- Provide improved prevention and mitigation strategies and engineering tools, recommendations, etc.
- The results should contribute to related standards, leading to a more harmonized normative framework

FCH-04-2-2018: Hydrogen admixtures in natural gas grid



Assessment of H2NG blends and impact assessment



- PNR on critical issues related to end-users applications
- Techno-economic assessment and analysis of policy options/ regulatory barriers for a wide adoption
- Improved knowledge, recommendations to related standards – scientifically solid & sound!
- National regulations mapping / policies -> EU level roadmap to increase H2 concentration in the NG



Cross-cutting Activity Area Topics Overview

Research and Innovation Action – RIA
Coordination and Support Action - CSA



FCH-04-3-2018: Accelerated Stress Testing (AST) protocols for Solid Oxide Cells (SOC)



Develop ASTs protocols to shorten the development time of new materials



- Identification of degradation mechanisms, development of advanced characterization techniques, etc.
- Develop AST test methods, evaluation criteria and validation methodology
- The results should contribute to related standards

FCH-04-4-2018: Strengthening public acceptance and awareness of FCH-technologies by educating pupils at schools



Raise public acceptance and social awareness



- Develop a set of educational material targeting primary and secondary education, web-based platform, etc.
- Build local networks and novel channels to raise awareness and acceptance
- Create a long-lasting and replicable educational programme delivery model



Additional requirements across the entire call



JRC- Reporting to HIAD (JRC-PTT-H2SAFETY@ec.europa.eu)

- Any safety-related event that may occur during execution of the project shall be reported to JRC, which manages the European hydrogen safety reference database (HELLEN, formerly known as HIAD)

JRC - Harmonisation and validation activities

- Collaboration mechanisms need to be developed with JRC, in relation to the ongoing EU protocol harmonisation and validation activities

FCH 2 JU Knowledge Management - Technology monitoring

- All FCH 2 JU projects have the obligation to provide every year (April- May) technical information using structured parameter templates



QUESTIONS & ANSWERS SESSION

Ask your questions:

- on twitter, using the hashtag: [#FCHJU_infoday18](https://twitter.com/FCHJU_infoday18)
- via email: fch-projects@fch.europa.eu