

Cross-cutting Activity Area

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FUEL CELLS AND HYDROGEN JOINT UNDERTAKING



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

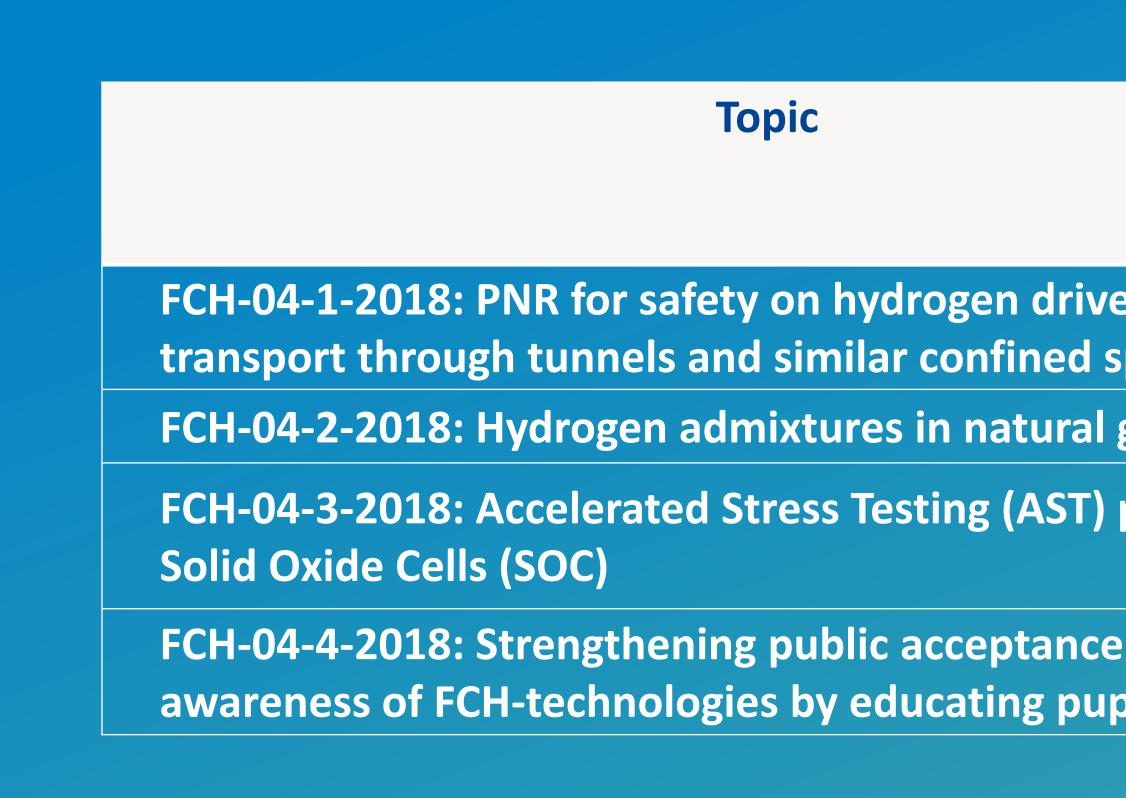






Cross-cutting Activity Area

4 Topics - 8.75 M€







	Type of Action	Ind. FCH Contribution (M€)
ven vehicles and spaces	RIA	
l gas grid	RIA	
) protocols for	RIA	
e and apils 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

- - 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



- 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





- Revision of the SoA, identification of knowledge gaps, experimental program, etc.





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)



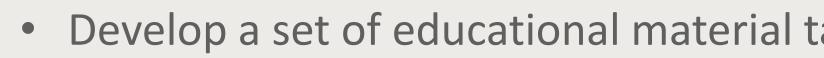
Develop ASTs protocols to shorten the development time of new materials



- 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

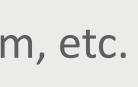


- Build local networks and novel channels to raise awareness and acceptance
- Create a long-lasting and replicable educational programme delivery model





- Develop a set of educational material targeting primary and secondary education, web-based platform, etc.





Additional requirements across the entire call



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



JRC - Harmonisation and validation activities

harmonisation and validation activities



FCH 2 JU Knowledge Management - Technology monitoring

structured parameter templates







• 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, formely known as HIAD)

• Collaboration mechanisms need to be developed with JRC, in relation to the ongoing EU protocol

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



QUESTIONS & ANSWERS SESSION

Ask your questions:

- on twitter, using the hashtag: #FCHJU_infoday18

- via email: <u>fch-projects@fch.europa.eu</u>





