EUROPEAN COMMISSION
Community Research

Roads2 HyCom

Roads2HyCom

www.roads2hy.com

Research co-Ordination, Assessment, Deployment and Support to Hydrogen Communities

Objectives

Roads2HyCom is a project to assess and monitor Hydrogen and Fuel Cell technologies for stationary and mobile energy application against current and future infrastructures, and the needs of communities which may be early adopters of the technology, in order to support the Commission and stakeholders in planning future activities. Road2HyCom will:

- Assess the capability of technologies against the availability of infrastructure and the needs of users based on an objective methodology
- Analyse evolutionary pathways by which current mainstream technologies can evolve towards the needs of a sustainable future
- Identify gaps and opportunities in technologies and infrastructure, and related economic issues
- Contribute to the engagement and planning of early-adopting Hydrogen Communities (HYCOM) to promote technology development and creation

Roads2HyCom is structured to run alongside the linked HyLights co-ordination action which addresses Transport demonstration projects. They will use strategic and technical outputs of other EC funded projects, and the strategic activities of the Hydrogen & Fuel Cell Technology Platform, to support this work. In addition, key stakeholders are invited to contribute to the project via "reference groups". Further information will be made available on our website, www.roads2hy.com

Contact	If you believe you can assist by providing a technology, infrastructure or community input to the project please contact the appropriate Work Package Leader or visit the website www.roads2hy.com You are invited to register as a potential member of the Roads2HyCOM reference groups, which will assist the project by you providing a technology, infrastructure or community input to the project and in return will receive information and support from the project
Coordinator	Nick Owen, Ricardo coordinator@roads2hy.com Matthew Keenan, Ricardo
Partners	Ricardo, Airbus Deutschland, Air Liquide, Air Products, AVL, College de Europe, Coretec Ventures, Cortes, CRES, Centro Ricerche Fiat, DaimlerChrysler, ECN, EC-JRC, Element Energy, ET GmbH, FEV, Gaz de France, Hydro, Icelandic New Energy, Institut Francais du Petrole, INERIS, Institute of Energy, Intelligent Energy, JBRC, NTDA, PLANET, Riso, RWTH Aachen/ika, TNO, Volvo Technology
Acknowledgement	This Integrated Project is co-funded by the European Commission under Framework Programme 6, Priority 6.1 "Sustainable Development, Global Change and Ecosystems"

Helping with our Assessment Process

The project philosophy is to determine a generic set of "metrics", which will be used to characterise the State of the Art in Technologies, capability of Infrastructure and needs of Communities. The Roads2HyCom team will be opening a dialogue with the research community to gather information on these "metrics". We welcome your support in conducting our analysis - and your support will enable us to work with the Commission and Technology Platform in developing future plans

Technology **Infrastructure** **Communities**	Efficiency, Safety, Cost, Public Acceptance, Greenhouse Gas Impact, Environmental Impacts, Commercial Potential, Political Will, Energy Security and Sustainability, Availability, Readiness

Project Structure

WP0: Program Leadership & Management (Ricardo)

The objective of Roads2HyCOM is to assess and monitor current and future Hydrogen and Fuel Cell technologies for stationary and mobile energy generation against current and future applications requirements, and the needs of communities which may adopt these technologies, in order to support the Commission and stakeholders, particularly the HFP, in planning future activities

WP0@roads2hy.com

WP1: Monitor & Mapping of Research Activities (IKA)

To monitor and map EU RTD into H_2 related technologies, and map at overview level comparable activities in the rest of the world

WP1@roads2hy.com

WP2: Mapping of Hydrogen resources and infrastructure (PLANET)

To map existing and future H_2 resources and infrastructure, including industrially manufactured H_2, renewable and low carbon energy resources, existing and potential future distribution networks

WP2@roads2hy.com

WP3: Mapping of Community Types (JRC)

To map existing and potential H_2 community sites and categorise them with generic profiles

Assess the identified H_2 community sites against a set of metrics

WP3@roads2hy.com

WP4: Development of Technology Pathways (IFP)

To identify evolutionary pathways by which current mainstream technologies can evolve in a low risk manner towards the needs of a sustainable future

WP4@roads2hy.com

WP5: Gap & Opportunity Analysis for Technology & Infrastructure (AL)

To identify gaps and opportunities in technologies and infrastructure, and related economic issues, on the basis of the current state of the art, current and likely future resources, H_2 community profiles, and evolutionary pathways for mainstream usage; embracing lessons from ongoing demonstration projects

WP5@roads2hy.com

WP6: Develop strategy for future RTD Activities (CRES)

To define required R&D and related activities or measures to support HyCom, and their financing and governance, based on technical and socio-economic analysis in previous work packages, and engaging stakeholders through Reference Groups and Workshops

WP6@roads2hy.com

WP7: Engaging and planning Hydrogen Communities (CoE)

To contribute to the engagement and planning of H_2 Communities, and the creation of a "H_2 Communities Manual" to guide planning information on financial incentives for business development, and Public Private Partnerships etc.

WP7@roads2hy.com

WP8: Reporting, Communication and Dissemination (Ricardo)

To promote widespread understanding of H_2 technology, H_2 Communities, and the H_2 Economy, by bringing together diverse areas of expertise in the project itself; engagement of stakeholders in project processes; dissemination and training activity aimed at expert, semi-expert and marginal stakeholders (including those who are doubtful over the H_2 economy); and provision of Internet-based data including project material and a technology watch

WP8@roads2hy.com