

# SH2AMROCK

## SOURCING HYDROGEN FOR ALTERNATIVE MOBILITY, REALISING OPPORTUNITIES AND CREATING KNOW HOW IN IRELAND

SH2AMROCK  
Ireland's Emerald Hydrogen Valley

Project ID	101112039
PRR 2024	Pillar 6 – H <sub>2</sub> valleys
Call topic	HORIZON-JTI-CLEANH2-2022-06-02: Hydrogen valleys (small-scale)
Project total costs	EUR 54 806 601.01
Clean H <sub>2</sub> JU max. contribution	EUR 7 582 467.22
Project period	1.1.2024–31.12.2028
Coordinator	University of Galway, Ireland
Beneficiaries	Acondicionamiento Tarrasense Asociacion, BOC Gases Ireland Limited, Bord Na Mòna Powergen Limited, Chesterfield Special Cylinders Ltd, Colas Teoranta, Córas Iompair Éireann, Dublin City University, E&E MEP Studio LLC, Energy and Hydrogen Alliance, Economic and Social Research Institute LBG, Energy Co-operatives Ireland Ltd, EPRI Europe DAC, European Marine Energy Centre Ltd, Fundación para el Desarrollo de las Nuevas Tecnologías del Hidrógeno en Aragón, Galway Aviation Services Ltd, Galway Harbour Company, Hive Hydrogen (Ireland) Limited, Hydrogen Ireland Natural Resources Association Company LBG, HyEnergy Consultancy (Europe) BV, Institute of Higher Education King Danylo University, IZES gGmbH, Kemijski institut, Noordwes-Universiteit, Politechnika Łódzka, Politecnico di Torino, Private Scientific Institution, Institute for Research in Environment, Civil Engineering and Energy, Skopje, Stichting New Energy Coalition

### PROJECT AND GENERAL OBJECTIVES

- Highlight hydrogen's role to enable deeper decarbonisation of the Irish economy through sector coupling.
- Establish Ireland's first multimodal hydrogen transport hub.
- Enable the creation of a domestic market for green hydrogen value chains.
- Ensure a fair and just transition for Ireland's isolated communities.
- Produce at least 500 t of green hydrogen per year by 2028.
- Use green hydrogen production to realise decarbonisation in multiple end-use applications.
- Create strong connections with existing European hydrogen valleys and associated initiatives to foster strong linkages in the European hydrogen sector.
- Instigate the sustainable economic growth and industrialisation of Ireland.
- Foster all-Ireland hydrogen knowledge sharing, replication activities and cross-border strategy development.
- Introduce hydrogen into the Irish energy mix to increase flexibility, security and resilience.
- Leverage lessons learnt from Sh2amrock to help develop hydrogen valley roadmaps in key replication regions in Ireland and Europe and globally.

### PROJECT TARGETS

Target source	Parameter	Unit	Target	Target achieved?
Project's own objectives	Long-distance coaches	number	10	
	H <sub>2</sub> aircraft	number	1	
	H <sub>2</sub> injection (bitumen plant)	number	1	
	Double-decker city buses	number	3	
	Combined heat and fuel cell	number	1	
	Minibuses and vans	number	4	
	FC HGVs	number	5	
	Pipeline	bar	< 5	
	Mobile tube trailers	number	3	
	Electrolyser	MW	4	
HRS	bar	350		

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