Project ID	DIP052		
Long Title	HyHouse		
Short Title			
Location (Town, Region, Country)	Sanqhuar	Dumfries & Galloway	Scotland
Latitude and Longitude	55.34N	4.00W	
OSGB code	NS 729 071		
Status	Complete		
Start Date	2013		
End Date	2015		
Description	Kiwa Gastec was charged with evaluating the risks associated with using hydrogen in a domestic setting. This 'HyHouse' project took place in a two storey, three-bedroom farmhouse in Scotland provided by SSE. Gas leaks are rare but do occur from time to time from sources as diverse as a defective gas appliance to DIY accidents. The project was designed to prove whether accidental leaks from a pure hydrogen or hydrogen and natural gas mixture supply would have more or less risk attached than a leak from a natural gas supply. The study involved simulating realistic leaks using five test gases (100% hydrogen, 100% natural gas, and three different mixtures of the two). These gas leak tests were conducted at various rates, and distribution of those gases throughout the house was measured, at three levels of air tightness (to simulate different ages of construction).		
Sectors	Domestic		
Funding Sources	DECC Energy Storage Competition		
Budget £	£400,000		
Partners	SSE, KIWA Gastec, AMEC, SGN, Atkins, National Grid, Air Liquide, BCGA, HSE, IGEM, UK Fuel Cell Assoc.		
Energy vectors	Heat		
Scale (lab/site/ small/community/region/national)	Site		
Technologies demonstrated	Alternative grid fuels		
Economic models demonstrated	Hydrogen economy development		
Other concepts demonstrated	Fuel generation from constrained renewables		
Industry engagement			
Consumer engagement			
Project Reports (incl. links)	https://www.kiwa.co.uk/uploadedFiles/About_Us/GaC/Hy%20House%20Report.pdf		
Datasets (incl. links)			
Website/social media	http://sse.com/newsandviews/allarticles/2013/11/hy-house-project-		

	to-explore-hydrogen-safety-risks/ https://services.kiwa.co.uk/energy-carbon-advice/hydrogen/hy-house-kiwa-gastec
Information sources	https://www.gov.uk/government/news/5-million-boost-for-energy-storage-innovation?utm_source=rss&utm_medium=rss&utm_campaign=press-release-5-million-boost-for-energy-storage-innovation