



Informing and enabling communities – The Community Hydrogen Forum (CH2F)

1 July 2020

Introduction

- Do renewables spark joy?
- Hydrogen's role and record
- Learn, enhance, improve...
- The Community Hydrogen Forum
- How CH2F can help you
- Where to find us



Renewables: Do they spark joy?



- Many recent initiatives to change energy policy have been led by the efforts of individuals and pressure from communities
- Renewables are now at the forefront of EU policy
- Individuals are educating themselves on actions which could be taken to avoid climate change
- Communities are developing projects to supply energy locally to enable greater sourcing control
- They rapidly recognise that energy needs are wider than just electrical power



Sustainability enabled by hydrogen

- Hydrogen offers community projects greater flexibility on how to use their renewable energy
- It enables energy storage and opens decarbonisation of heat and additional mobility options
- Coupling these other sectors to renewables allows expansion of renewable investment
- The integration of hydrogen production and use in the energy value chain is now possible – increasing reduction in carbon emissions...



Hydrogen enhances a community's energy transition potential

Tried, tested and available...

- This integration of renewables with hydrogen has been used in many projects to date all over the globe
- The technology is proven commercially or is at a high TLR level, ready to be deployed for projects
- An example of the equipment and knowhow available:
 - Full integration with renewable energies
 - Electrolysers
 - Compressors
 - Lightweight storage
 - Refuelling stations
 - Hydrogen cars, buses, trucks, trains and boats
 - Hydrogen ready boilers



Learn, enhance, improve....

- In order to progress to reach current climate goals, co-operation is a must
- The ideas used in projects currently being deployed can be used as inspiration for other local communities
- Follow-on and replication projects will increase hydrogen knowhow and penetration
- Integration of such projects leads to regional and national change



Knowledge and experience sharing is key to creating successful hydrogen communities

The Community Hydrogen Forum



Where hydrogen experts and communities come together...



Goal 1

Raise community
hydrogen awareness

Goal 5

Aid the development
of long term H2
strategies

Goal 2

Hydrogen Discussion
Forum – Sharing
information;
experiences and best
practice



Goal 4

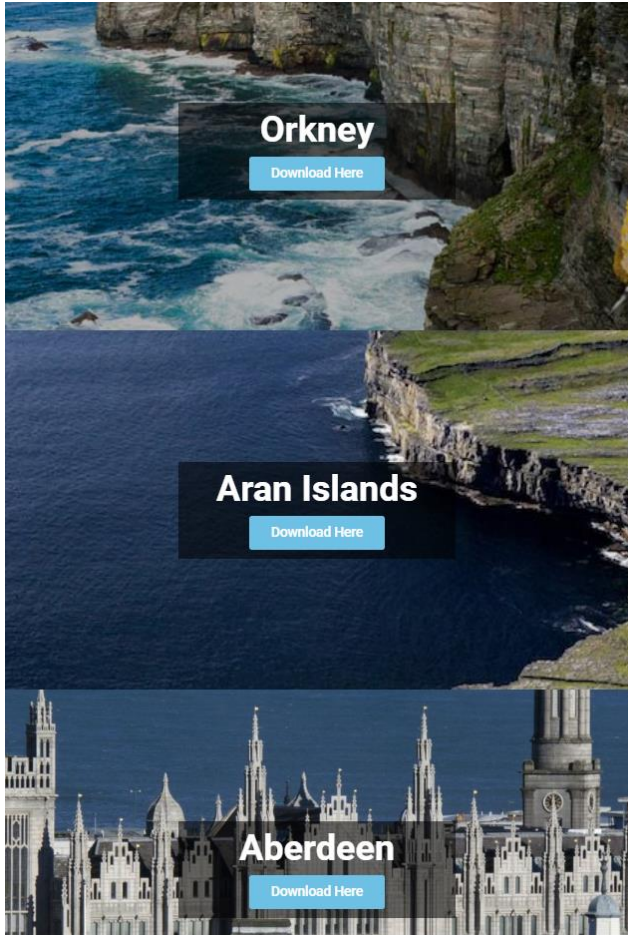
Decision Support
Tool to assist in the
evaluation of H2
technologies.

Goal 3

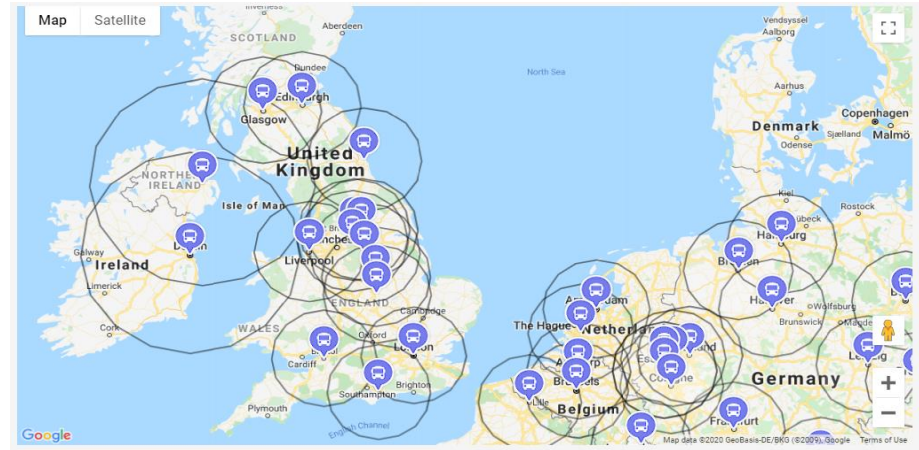
Up to date
Hydrogen
Information

A developing resource....

Case Studies



Decision Support Tool



Latest News



Hydrogen: Getting the Green Light, Driving Europe's Green Recovery

Key features at your fingertips...

Hydrogen Insights

- Hydrogen introductory materials
- Written by academics and leading hydrogen sector members

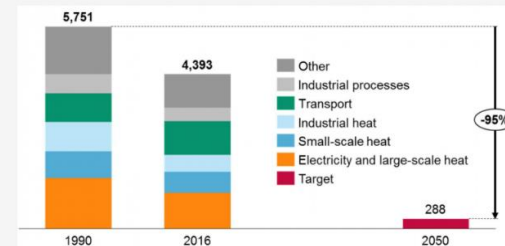
Hydrogen Discussion Forum

- Register on Communityh2.eu
- Ask your questions in the Hydrogen Discussion Forum
- Get answers from like-minded communities and our pool of experts.

Europe's Decarbonisation Challenge

A published study by Pöry, an international consulting and engineering company, shows pathways towards decarbonisation in Europe. The study investigates the key question: "How can a fully decarbonised energy sector be achieved and what are the risks of precluding options in favour of certain technologies?". Pöry has developed an analytical framework for the power, heat and transport sectors to quantify the risk in not allowing some technologies to participate in the decarbonisation challenge, through implicit or explicit policy actions. It compares a balanced 'Zero Carbon Gas' pathway where hydrogen, biomethane and carbon capture and storage (CCS) compete with renewables, biomass and nuclear in all sectors to a forced 'All-Electric' pathway where gas infrastructure and gas technologies are excluded.

This is a model serves as just one example of how the future could play out. There are many other studies which offer variations on this theme. What it does, is serve as an example of the work that is underway around the world to anticipate and plan how our energy systems will change.



The scale of Europe's decarbonisation challenge - emissions by sector (MTCO2e)

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Hydrogen Discussion Forum

Recent Presentations and Background Materials

- [Caen Gencomm Open Meeting Materials](#)
[Recent Topics](#)
 - Slides from Open Meeting 10/12/2019
- [Community Hydrogen Forum Launch Materials](#)
[Recent Topics](#)
 - Slides from The Launch 21/10/19

Ask the expert

- [General](#)
[Recent Topics](#)
 - GenComm H2 Community Meeting

More information...



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