

HyBont Green Hydrogen Project.

**Marubeni
Europower**

Marubeni Europower is bringing forward proposals for the development of a green hydrogen production, storage and refuelling facility located on land in Brynmenyn Industrial Estate, Bridgend. The proposals include a solar farm at nearby Bryncethin, which will provide renewable energy to help power the green hydrogen production.



Why do we need green hydrogen?

To tackle the climate emergency, green hydrogen will have an important role to play in helping reduce our carbon footprint. This includes uses as a low carbon fuel for transport, heating buildings as well as replacing natural gas within industrial processes.

Green hydrogen projects are now a feature of many cities across the world and the UK government intends for 10 gigawatts (GW) of green hydrogen to be in production by 2030.

Fleets of hydrogen vehicles (such as buses) are already operating in cities such as Aberdeen, Birmingham and London.

What is green hydrogen?

Hydrogen is an element that is found in many compounds such as water. It can be used in hydrogen fuel cells to power vehicles such as buses.

Hydrogen can be produced using both renewable and non-renewable methods. The Marubeni HyBont proposals use electricity from renewable energy sources - from local wind power offsite (via the grid) and solar panels located at nearby Bryncethin - to produce hydrogen using electrolysis.

The hydrogen can then be used to fuel vehicles and heat local buildings. This helps to address the climate crisis by providing a transportable energy source that is not produced using fossil fuels. It also reduces air pollution as the only exhaust fume from hydrogen fuel celled vehicles is water.

Why has this location been chosen?

The Brynmenyn site (for the hydrogen facility) is within the industrial estate and has been identified by Bridgend County Borough Council as being suitable for development in the Local Development Plan.

The transport of hydrogen is expensive and therefore producing it close to where it will be used helps reduce the cost for end users.

It is close to the proposed Ynysawdre heat network (schools and leisure facilities), which could be a significant customer for the green hydrogen, directly providing local benefits.

The site is also well located for other local users such as for Bridgend County Borough Council's fleet, as well as potentially public buses, as organisations look to convert their heavy fleets to green hydrogen fuel cells.

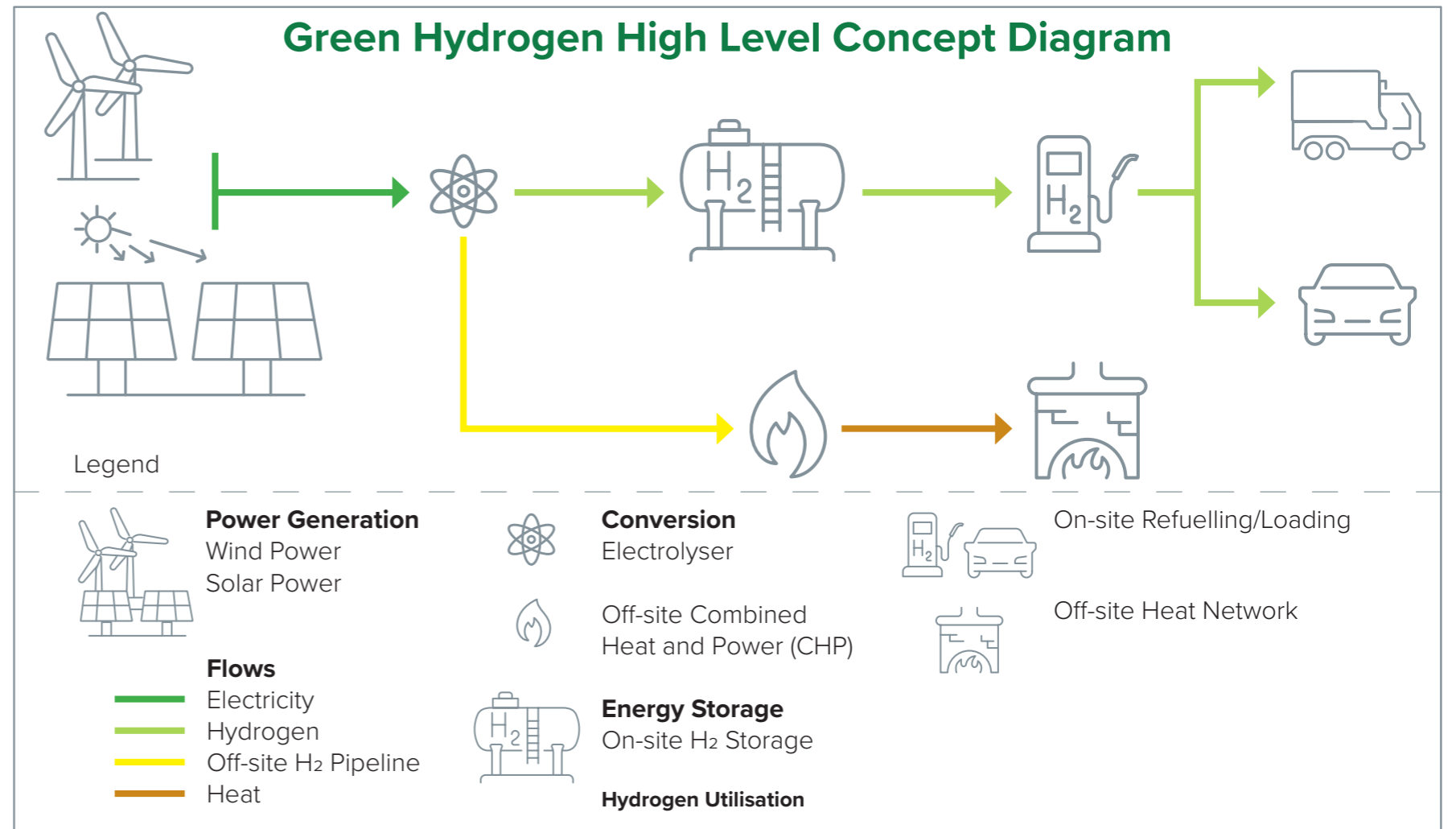
The Bryncethin site was chosen for the solar farm due to its close proximity, enabling a direct connection to the electrolyser.

Is it safe?

Hydrogen is non-toxic and non-poisonous, meaning that it does not have many of the safety and environmental concerns of petrol, diesel or conventional natural gas.

Safety will be of paramount importance both in terms of the design and operation of the hydrogen production facility in line with a range of strict regulations.

Hydrogen has been used within the UK for a range of purposes for decades, and the UK has a strong track record in the safe distribution and storage of combustion gases.



Have your say.

We are currently undertaking our pre-application consultation process and want to hear your comments before we finalise our plans ahead of submission to the Bridgend County Borough Council.

Please take the time to feedback in the following ways:

Events

Talk to us or complete the form available at the public drop in events (**13 & 14 December 2022**)

Freepost

Freepost GRASSHOPPER CONSULT
(no stamp or further address required)

Website

Visit the **Your Views** section of our website

Please submit your comments by
Friday 6 January 2023

Next steps

Over the next couple of months, the team will be reviewing comments received during the consultation and carrying out further site investigations, including ground conditions, visual impact and ecology. The feedback from the consultation and the results from these investigations will help inform the final proposals.

We anticipate submitting a planning application to Bridgend County Borough Council early next year. Further consultation will take place then.

Subject to planning permission being granted, it will take 22 months to construct, and could be producing green hydrogen by Autumn 2025.

You can view all the background information and plans for the project online (including the full draft planning application) by visiting: www.hybont.co.uk



About us

Marubeni Europower is a leading investor in renewable energy, developing and operating power projects worldwide.

Operating in Europe for more than 50 years, we have invested more than £1.5bn in renewable energy projects and employ over 2,000 people in the UK.

Marubeni is committed to contributing to the transition towards a low-carbon society by delivering a mix of renewables projects, including hydrogen.

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