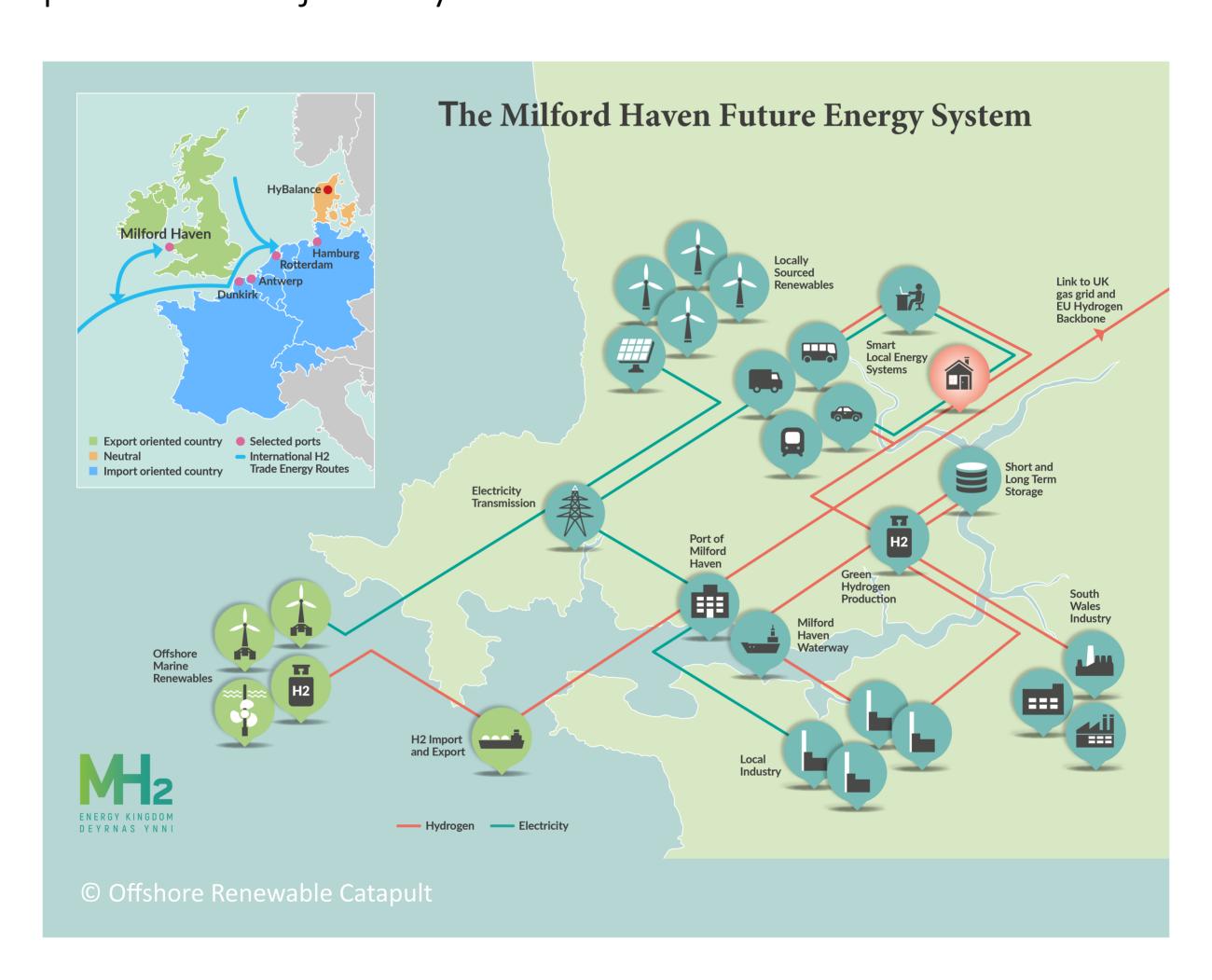
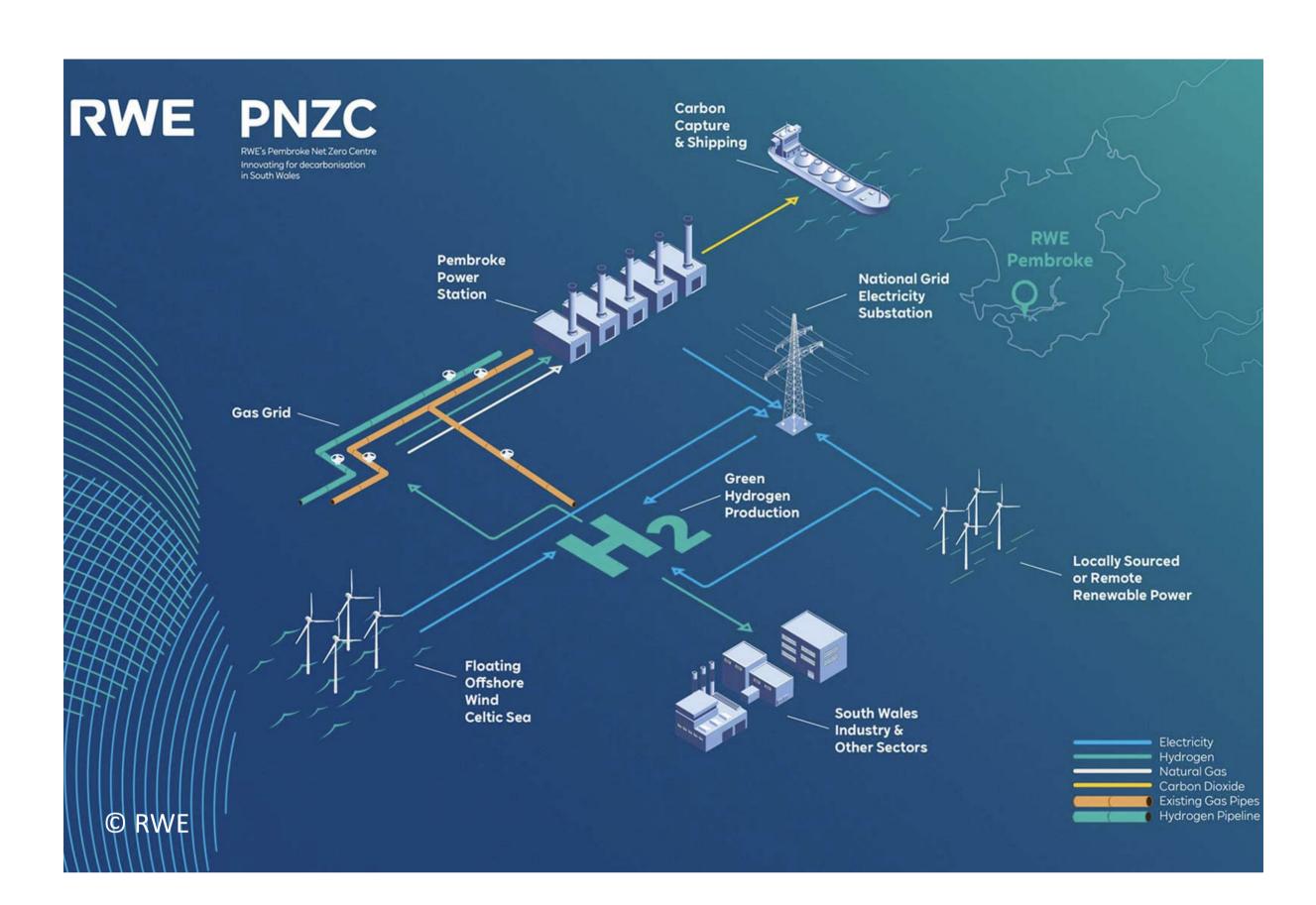


Close partnership and collaboration with the regional plans such as SWIC, RWE PZNC, Blue Gem Wind, the Future Haven Waterway Clean Energy Cluster Group and ERM to develop a roadmap for decarbonisation of the Pembrokeshire energy system by 2050 is recommended.

A fully integrated roadmap will enable the implementation of the short-term no regret steps with a view of integrating those with longer term local and regional plans on the journey to decarbonisation.







### RWE

RWE is a key industrial player on the Haven waterway, owning and operating the Pembroke natural gas-fired power station. To transition to carbon neutrality, RWE is looking at wide-scale investment in decarbonisation technologies which includes transforming the Pembroke power station to the Pembrokeshire Net Zero Centre (PNZC) — a decarbonisation hub linking innovative low carbon technologies such as hydrogen production, CCUS and floating offshore wind.

Feasibility studies for the decarbonisation of the Pembroke power station with CCS and hydrogen production have commenced and RWE have now started FEED (Front End Engineering Design) study for a green hydrogen production project using a 100-110 MW electrolyser. RWE has plans to scale hydrogen production to the Gigawatt (GW) scale in the longer term and develop floating offshore wind farms in the Celtic sea.

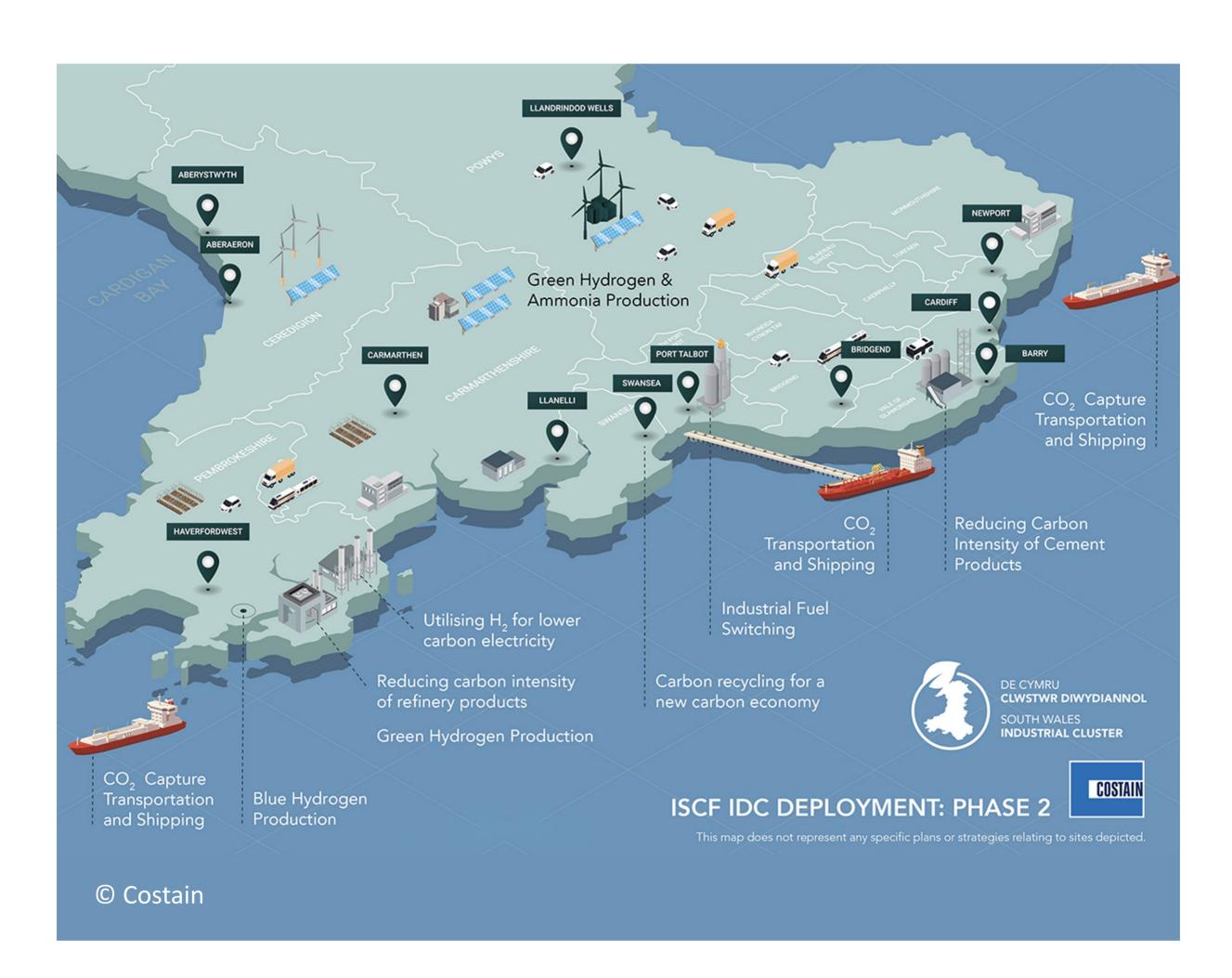
RWE sees the PNZC as an enabler to unlock the route to net zero in South Wales and is working with the MH:EK project and the SWIC projects to further understand decarbonisation plans and ensure projects and plans are aligned.

"RWE is looking to deliver 2GW of hydrogen projects by 2030, including a green hydrogen project in Pembrokeshire. Key to this is the economic viability of projects producing hydrogen for use across a wide variety of sectors such as transport, power and industry. RWE welcomes the work of MH:EK in helping to make the storage, use and distribution of hydrogen cost effective."

Jeremy Smith, RWE

For more information, contact: Jeremy Smith, RWE (Jeremy.Smith@rwe.com)





### **SWIC (South Wales Industrial Cluster)**

SWIC is a partnership between Welsh Industry, energy suppliers, infrastructure providers, academia, legal sector, service providers and public sector organisations, working to map what is needed to support South Wales in becoming a net zero carbon region by 2040. The project is jointly funded by the project partners and UKRI. The project entered its deployment phase in February 2021 and over a period of 26 months aims to create pathways and opportunities to promote Wales as a leading global player in decarbonised industrial and economic growth, with a goal of net zero carbon by 2040.

The project brings together various industries such as energy, oil refining, paper, nickel, chemicals, LNG import, steel and cement to research, investigate and develop solutions and a plan to decarbonise the industrial sector in South Wales. Topics or options being investigated include the development of the circular economy, resource and energy efficiency, blue hydrogen production, Carbon Capture and Utilisation, Carbon Capture and Storage, carbon dioxide transportation and shipping, and mass green hydrogen production. The MH: EK project has engaged with the SWIC team to form an understanding of their project objectives and plans which fed into the MH:EK longer-term pathways.

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For more information, contact: Dr. Chris Williams, SWIC (cwilliams@industrywales.com)







#### **Blue Gem Wind**

Blue Gem Wind is a partnership between Simply Blue Energy and TotalEnergies to develop floating wind projects in the Celtic Sea. Their 'Erebus' 96MW project is currently the only project with an agreed Crown Estate lease. Blue Gem Wind will initially focus on the Erebus demonstration project which is 45 km offshore. Delivering the Celtic Sea's first offshore floating wind project will provide green energy to 90,000 homes per year and will utilise Principle Power's Windfloat technology as the foundation. Blue Gem Wind also plan the development of the commercial scale 300MW Valorous project, which will be sited 50km off the south-west coast of Pembrokeshire by 2029

For more information, contact: David Jones (David.jones@bluegemwind.com)

### Other offshore wind generation projects

DP Energy and EDF Renewables are scoping floating offshore wind and Green H2 opportunities in Pembrokeshire and the Celtic Sea. DP Energy is using its 30-year project development expertise across wind, solar and ocean energy worldwide and have partnered with EDF to deliver up to 1 GW floating wind farm in the Celtic Sea.

#### **Local vision and plans**

It is PCC's and PoMH's vision for Pembrokeshire to be the home to a vibrant clean energy cluster, the bedrock for the UK's hydrogen economy, supported by Offshore Renewable Energy Catapult (OREC). The 'Future Haven Waterway Clean Energy Cluster Group' has been established to position Pembrokeshire as the UKs clean energy and hydrogen hub. Representation includes but is not limited to: PoMH, PCC, Stephen Crabb MP, Blue Gem Wind, Industry Wales, SWIC, Valero, South Hook LNG, OREC, RWE, Prosperity Energy, ERM, Marine Energy Wales, Cambrian Offshore, Dragon LNG.

In addition to the large-scale hydrogen production plans by SWIC and RWE, there are local plans to develop sites for large scale hydrogen production. An upcoming North Pembrokeshire hydrogen project, part of the Haven Waterway Enterprise zone will aim to help decarbonise the Pembrokeshire region, in particular transport applications. The planned developments could include a 50MW solar farm with battery storage and 15 MW electrolysed green hydrogen production for road and rail transport by 2025.

For more information on the Future Haven Waterway Clean Energy Cluster Group, contact Anna Malloy (anna.malloy@mhpa.co.uk)