



# Connah's Quay Low Carbon Power Project Newsletter

February 2024

Welcome to the first community newsletter for Uniper's Connah's Quay Low Carbon Power (CQLCP) project. Over the coming months, we will be sending you regular newsletters to keep you updated on our progress and make you aware of any important upcoming milestones.

At our existing power station site in Connah's Quay, we are proposing to develop a new combined cycle gas turbine power station with carbon capture technology. This would help ensure we continue to provide flexible and reliable electricity generation, whilst capturing carbon emissions and supporting the UK's transition to a low carbon energy system.

As a local resident, we want to hear your views on our early stage proposals at our upcoming public non-statutory consultation, which will run **from Monday 26 February 2024 to Monday 25 March 2024**. This newsletter provides an introduction to the project, a summary of our proposals, details of upcoming consultation events and information on how you can get involved.

"At Uniper we are pleased to announce this project, which could play an important role in both supporting the country's transition to low carbon energy and meeting the growing need for electricity, whenever it is required."

**Helen Rogers,**  
Uniper Project Manager

The UK Government has committed to decarbonise the UK electricity system by 2035, subject to security of supply. CQLCP would have a key role to play in achieving this goal, supporting the UK's wider transition to a net zero future. It would provide reliable, flexible and efficient power generation, with carbon capture technology to capture CO<sub>2</sub> emissions. The captured CO<sub>2</sub> would then be transported to permanent offshore storage facilities in repurposed, depleted offshore gas fields.



Mae'r ddogfen yma hefyd ar gael yn  
Gymraeg ar ein gwefan yma.

## About Uniper

Uniper is an international energy company with activities in more than 40 countries and has roughly 7,000 employees worldwide. In the UK, Uniper owns and operates a flexible generation portfolio of seven power stations, a fast-cycle gas storage facility and two high-pressure gas pipelines.

Uniper intends to be completely carbon-neutral by 2040 and aims for its installed power generation capacity to be more than 80% zero-carbon by 2030. To achieve that goal, it has committed to invest €8 billion into growth and transformation projects between now and the end of the decade. This includes decarbonising its existing power plants and facilities and investing in new flexible, dispatchable power-generating units.

## Key facts about our proposals



**CQLCP could support the decarbonisation of the National Grid**, providing power when there is insufficient generation from wind and solar



When fully operational, CQLCP could generate **enough low carbon electricity to power the equivalent of up to 2.8 million homes** per year



Our Connah's Quay site is the **ideal location for a new low carbon power station**, having had energy generation on site since the 1950s



When fully operational, and at maximum output, **CQLCP could capture and store up to 3.7 Mt of CO<sub>2</sub> per year**, contributing to the UK's transition to net zero



**Critical infrastructure needed for energy generation is already in place**, including connections to the national electricity grid and a pipeline that can be repurposed and used to transport captured CO<sub>2</sub>



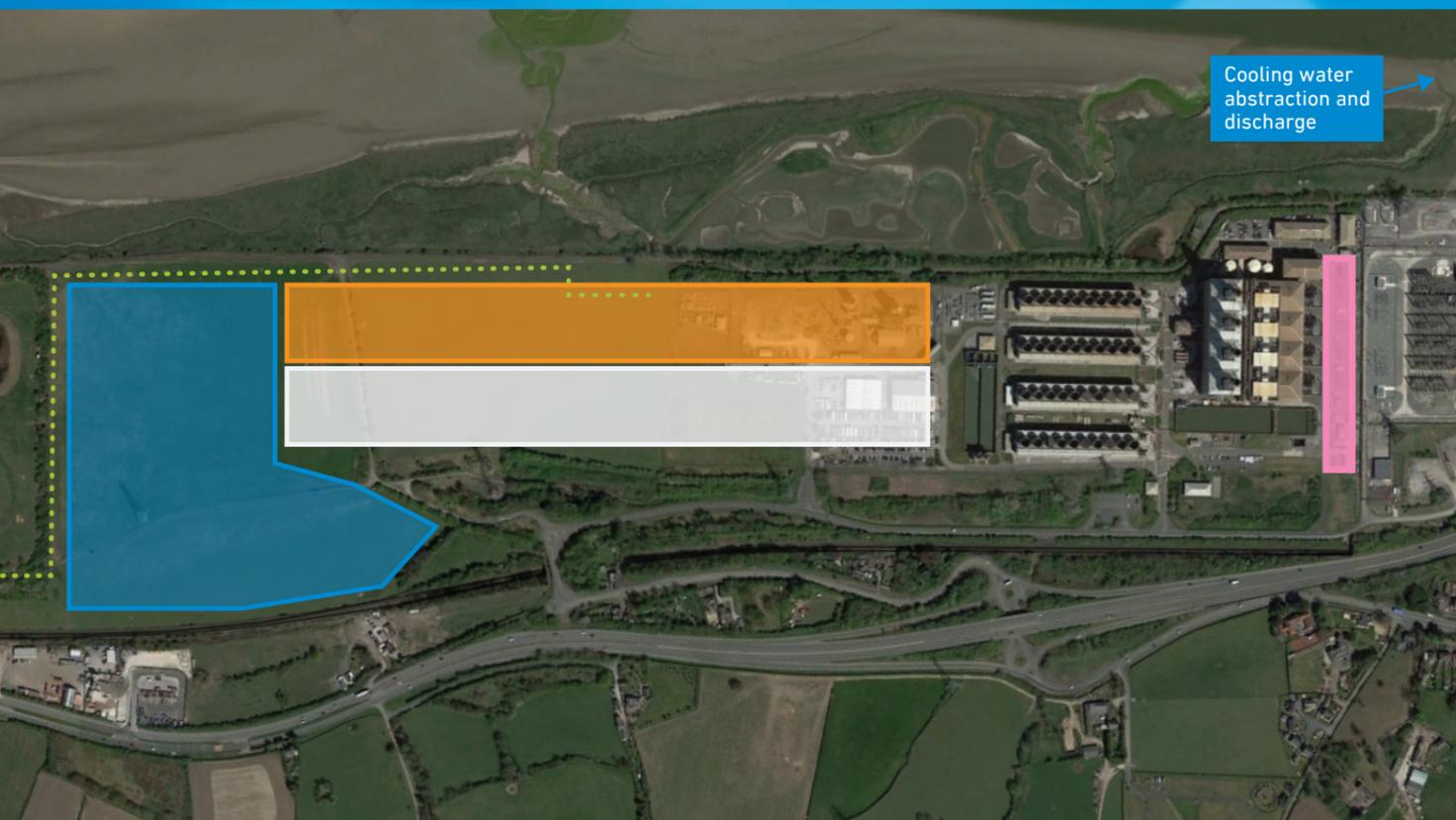
CQLCP could contribute to economic growth, **protecting skilled technical jobs and creating new opportunities during construction**

## Our indicative site map

The map below provides indicative locations for the infrastructure that would be built on our site for CQLCP. Please note that these plans are still in an early stage of development and are subject to change following feedback and consultation with national statutory bodies, local authorities and the local community.



You can find further information and details of our progress with CQLCP at [www.uniper.energy/connahs-quay-low-carbon-power](http://www.uniper.energy/connahs-quay-low-carbon-power)  
Please scan the QR code to be directed to our website



### Key:

- Laydown area
- Train 1 CCGT and carbon capture plant
- Train 2 CCGT and carbon capture plant
- Grid connection
- Repurposed pipeline

This map is for illustrative purposes only

## Our plans for Connah's Quay

### What is the Connah's Quay Low Carbon Power project

Connah's Quay has been home to a power station since the 1950s and is an ideal location for energy generation. It is close to carbon capture infrastructure being developed to serve local industrial decarbonisation efforts, has essential energy infrastructure already in place and benefits from the on-hand expertise of the existing highly skilled workforce.

The project includes plans to develop a new combined-cycle gas turbine power station on Uniper's land at its Connah's Quay site. The new power station would be fitted with carbon capture technology to capture CO<sub>2</sub> emissions. The captured CO<sub>2</sub> would then be transported via an existing pipeline to permanent offshore storage facilities in repurposed, depleted offshore gas fields.

Existing infrastructure on the site, including connections to the national electricity grid and repurposed gas pipeline makes Connah's Quay the ideal location for a new low carbon power station.

If consented, the new power station is expected to be developed in two phases; with an initial capacity of around 550MW of low carbon power, and later expansion to around 1.1GW. Phase one could potentially be operational by 2030.

The project is at an early stage and final capacity will be determined following completion of Front End Engineering Design, which is due to commence later in 2024. Each individual phase of the new power station has a potential maximum capacity of up to 690MW, providing a maximum of 1.38GW of low carbon power in total.

The CO<sub>2</sub> captured depends on the amount of electricity generated, which will vary to match demand needs. Based on our current modelling, we expect to capture up to 1.2Mt per year for a 550MW single unit and up to 2.4Mt for 1.1GW capacity overall. At maximum output, for a 1.1GW power station the figure could be as high as 3.7Mt per year.

### The role of gas in the energy transition

The biggest challenge in the energy transition is balancing out the fluctuations in power supply from the increasing amount of weather dependent renewable sources of generation. A new combined cycle gas turbine power station with carbon capture technology at Connah's Quay, would play a crucial role in the future energy system, as it can help ensure that energy is available at times when it is needed most, and when power from renewable sources can't meet demand.

Uniper aims to accelerate the energy transition and at the same time meet the challenge of a reliable decarbonised electricity supply. And so we are investing, both to decarbonise our existing power stations and to develop new, flexible low carbon generation capability.

### The role of carbon capture

Carbon capture and storage technology is an integral element of the CQLCP project. The proposed power station would use established technology to capture the CO<sub>2</sub> that the power station emits. The captured CO<sub>2</sub> would then be transported to permanent offshore storage facilities in repurposed, depleted offshore gas fields.

CCS technology is recognised as crucially important in the energy transition. To meet the increasing demand for electricity and achieve the UK's decarbonisation goals, a range of different technologies, including gas with CCS, will be needed to maintain a secure and stable supply of electricity.

### Our environmental commitments

Uniper is proud of the role we play in protecting the local environment at Connah's Quay power station. We already work with Natural Resources Wales and local groups to maintain a site of special scientific interest (SSSI) on our land on the Dee Estuary. This includes the provision and maintenance of a field study centre, hides and observatory, as well as a land management plan to optimise ecological diversity.

As part of the planning process we will undertake a full Environmental Impact Assessment to identify any potential environmental impacts. Throughout the pre-application phase of the project, we will work with our local stakeholders to understand any concerns and take steps to protect existing habitats and enhance biodiversity.

### What will the project bring locally?

At Connah's Quay, we are determined to continue to be a good neighbour and to make a positive contribution to the local area. Connah's Quay power station has been an important employer in the local area for decades. The CQLCP project could help to maintain economic prosperity in Deeside, by protecting highly skilled jobs and creating new opportunities during construction and through the wider supply chain.

The education centre at Connah's Quay is currently being redeveloped and could play an important role in our plans to help local schools to deliver science, technology, engineering and maths lessons.



# Consultation and next steps

Proposals to develop a new low carbon power station at Connah's Quay are at a very early stage. Although we have initial plans for the project, we are starting a process of consultation and engagement with a wide range of stakeholders, including statutory bodies, local authorities, businesses, community groups and local residents. We will undertake a programme of consultation starting later this month and continuing until we submit our application to the Planning Inspectorate, which we expect to complete later in 2024.

The views expressed by all stakeholders, along with the outcomes of environmental assessments and technical studies, will be carefully considered and where possible will inform our plans for the project.



## In-person events:

**Saturday 2 March 2024**

**Connah's Quay Cricket Club** CH5 4DZ  
13:00 - 17:00

**Monday 4 March 2024**

**Flint Town Hall** CH6 5NW  
16:00 - 20:00

**Wednesday 6 March 2024**

**Conference centre, Coleg Cambria Deeside**  
CH5 4BR  
13:00 - 17:00

## Online webinars:

**Wednesday 28th February 2024**

18:00 - 19:00

**Tuesday 5th March 2024**

13:00 - 14:00



Please scan the QR code to register for our webinars.

## Where to find out more



To find out more about our project please visit [www.uniper.energy/connahs-quay-low-carbon-power](http://www.uniper.energy/connahs-quay-low-carbon-power) or scan the QR code to be directed to our website.

We are committed to ensuring our consultation is accessible to all. Our website and all key project materials, including this newsletter, will be made available in Welsh. We can also provide our materials in alternative formats such as large print and braille upon request. If you require any of our materials in an alternative format, please contact us using the information provided below.

## Contact us

If you would like to talk to us about the project, you can contact our Community Relations Team using the following contact information:

Email us at [info@connahsquaylcp.co.uk](mailto:info@connahsquaylcp.co.uk) | Call us on **0800 0129156** | Write to us at **Freeport CQLCP**