

### Welcome

Our plans to install carbon capture and storage (CCS) technology at our Padeswood site to establish the UK's first net zero cement works have been selected for government funding.

We are holding this statutory consultation event to present our updated proposals for the Padeswood CCS project to you. Our team is here today to answer any questions you may have about the project and our proposals.

You can find further information and details of the project's proposals at padeswoodccs.co.uk



You can also get in touch with us using the details below:

Email us: padeswoodccs@uk.heidelbergmaterials.com

Call us: 0800 046 9642

Write to us: Freepost PADESWOOD CCS





### Aboutus

Padeswood cement works is owned by Castle Cement Limited, part of the Heidelberg Materials group of companies, and operates under the trading name of Heidelberg Materials UK.

Heidelberg Materials is one of the world's largest integrated manufacturers of building materials. In the UK, we employ over 4,000 people across 300 sites.

We are a leading supplier of lower carbon heavy building materials to the construction industry, and we are committed to achieving net zero by 2050.

When we last consulted you on our plans for Padeswood CCS in early 2023, Padeswood cement works was operating under the name 'Hanson'. As of October 2023, Hanson aligned its identity to its parent company, Heidelberg Materials.

For more information about Heidelberg Materials, please visit our website at heidelbergmaterials.co.uk







## Our vision for Padeswood cement works

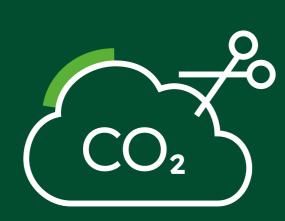
Padeswood CCS will help the UK achieve its net zero goals by:



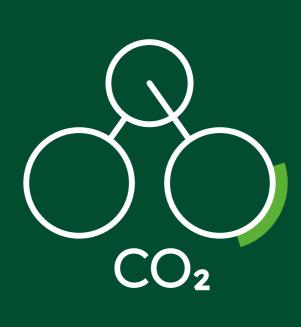
Capturing up to 800,000 tonnes of CO<sub>2</sub> a year



Enabling the production of carbon-neutral building materials, supporting the construction industry's transition to net zero



Creating the first net zero cement works in the UK and demonstrating the pathway to a net zero cement industry



Playing an integral role in HyNet North West, the UK's leading industrial decarbonisation project



Helping to secure a sustainable future for 2,500 people employed in the UK cement industry, 15,000 indirect jobs, and 2.5 million jobs in the construction industry

### The project will support the local economy by:



Creating 54 new full-time high skilled jobs at Padeswood, and up to 350 jobs during construction



Protecting 222 direct and indirect jobs



Providing additional supply chain opportunities



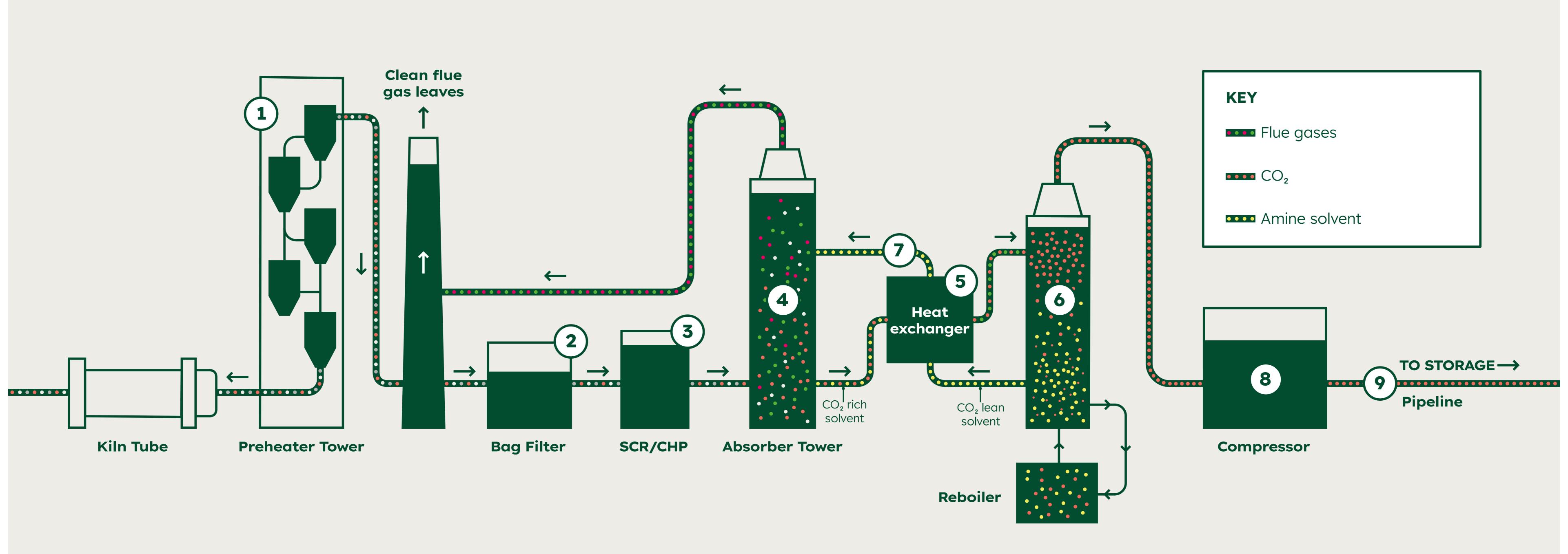
Upskilling local people so they can contribute to this exciting new sector



Providing capital investment of over £600 million



# Carbon capture and storage process flow diagram



- Preheater tower cement raw materials heated to 900°C.
- 2 Bag filter dust from the kiln system removed from the gas flow.
- Flue gases from the kiln are cleaned in the selective catalytic reduction plant (SCR). Heat and electricity needed to operate the capture plant is produced in the combined heat and power plant (CHP).
- 4 CO<sub>2</sub> is collected from the flue gases as it reacts with the amine solvent.
- 5 Heat exchanger.
- 6 CO<sub>2</sub> is stripped from the rich amine solvent in the regenerator tower.
- Dean amine solvent is returned to absorber tower.
- 8 CO<sub>2</sub> is then compressed.
- 2 CO<sub>2</sub> is sent to the transport pipeline for storage.



## What will Padeswood CCS involve?

In summary, the project will comprise the following new on-site infrastructure:



### Heat recovery system

Fitted to collect heat and improve energy efficiency



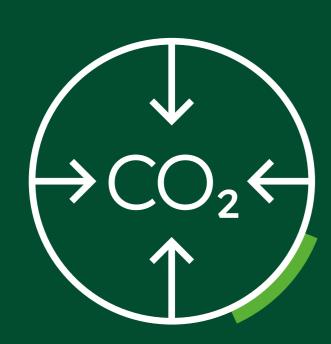
### Gas cleaning system

To remove unwanted contaminants and reduce emissions



### Combined heat and power plant (CHP)

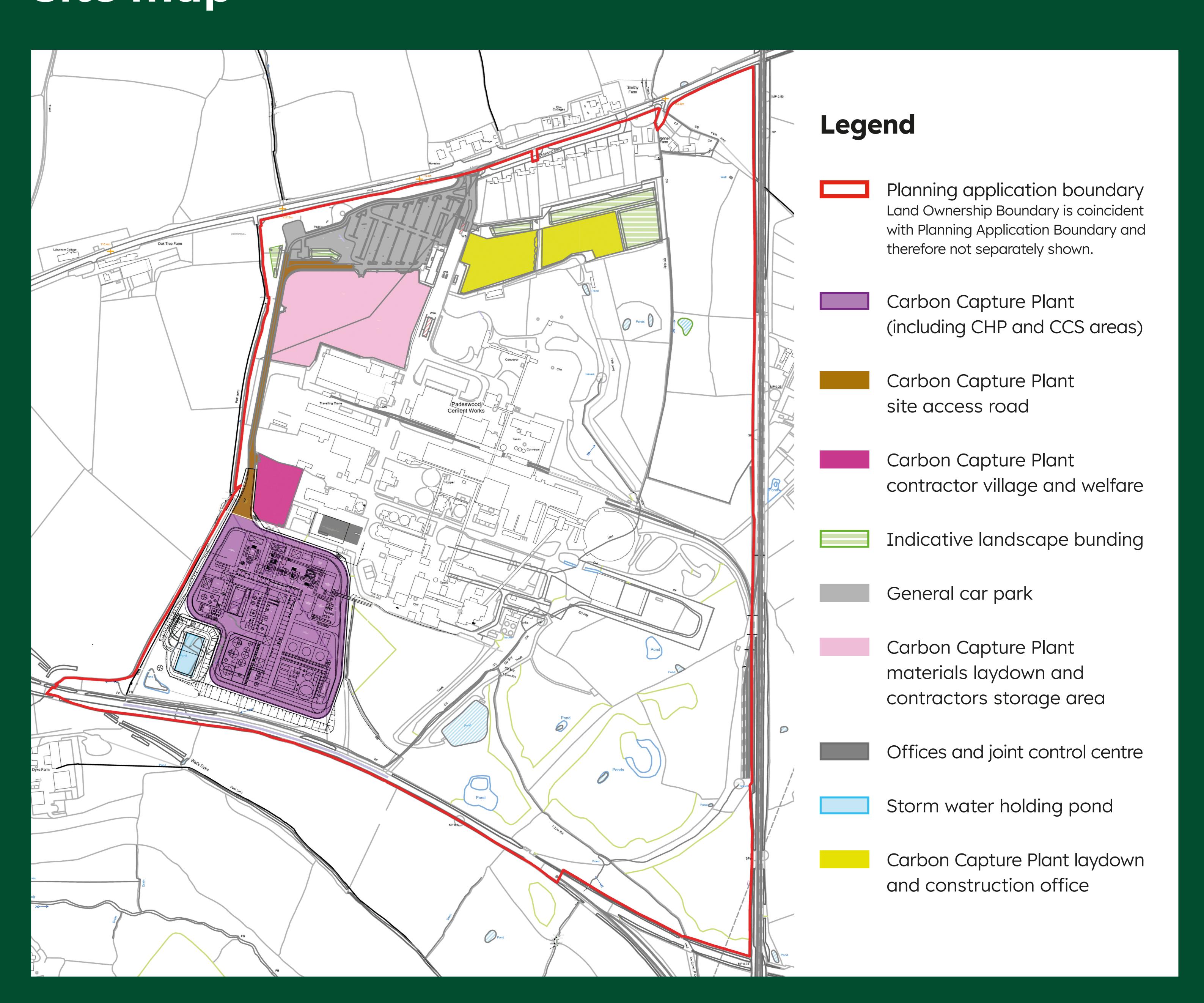
To produce electricity and heat to power the carbon capture equipment



### Carbon capture and compression

To extract CO<sub>2</sub> from the kiln and CHP waste gases and compress for transport and storage

### Site map





# Environmental Impact Assessment (EIA)

The project is a Development of National Significance (DNS), meaning that the planning decision will be issued by Welsh Government instead of Flintshire County Council. The DNS process is administered on behalf of the Welsh Government by Planning and Environment Decisions Wales (PEDW).

As part of the DNS application, we are required to conduct an Environmental Impact Assessment (EIA) which is a tool used to identify, assess and determine the environmental, social, and economic effects of a project.

The findings of the EIA are documented in an Environmental Statement (ES). At this stage of the project, we have developed a draft ES, which we are asking for your feedback on during this statutory consultation.

The draft ES can be found in the room today and on our project website: **padeswoodccs.co.uk**. A summary of the EIA findings can also be found in our consultation brochure, and a non-technical summary (NTS) can be found on our website.







# Landscape and visual impact

With the help of Flintshire County Council and Planning and Environment Decisions Wales (PEDW), we have produced visualisations from 14 viewpoints in the surrounding area to show what the site may look like when it is completed. A selection of viewpoints can be found below and all 14 viewpoints can be viewed in our draft Environmental Statement.

### A5118 (north-west) and PRoW Buckley



### Junction of A5104 and Padeswood Lake Road and PRoW Leeswood



#### Viewpoint from Bannel Lane, Spon Green



- 1 Present day
- 2 Initial visualisation of the proposed development



## Community benefit

We are proud of the role we play in contributing to the community and are committed to making a positive impact with the development of this project.

### As part of our plans for the future of our Padeswood site, we will:

- Protect 222 direct and indirect jobs.
- Create 54 new full-time jobs at Padeswood, and up to 350 additional jobs during construction of the capture plant.
- Bring over £600 million investment into the project and region.
- Continue our support for local communities and charity support groups across Flintshire through donation of materials and funding.
- Continue our community liaison group, which meets regularly to ensure clear communication between the cement works and the local community, to discuss local community issues and to develop our ongoing community support.
- Maintain our support for local community initiatives such as volunteer groups to increase a sense of community in the local area.

We will continue to work with our stakeholders and the community to understand how we can best benefit the local area. Our plans for community benefit are still very much in development and as a result, we are encouraging feedback on community benefit opportunities as part of this statutory consultation.





# Consultation and next steps

### Have your say

Our statutory consultation is open from Tuesday 02 July 2024 to 11:59pm on Monday 12 August 2024.

We want to hear from you. Your feedback is important and can help shape our proposals before we submit our DNS application to PEDW later this year. All of our supporting materials are available on our website at **padeswoodccs.co.uk** 

You can provide your feedback by:

- Accessing our website at **padeswoodccs.co.uk**, to complete an online version of the feedback form.
- Emailing us your completed form, or written feedback, at padeswoodccs@uk.heidelbergmaterials.com
- Returning your completed form free of charge by writing to Freepost PADESWOOD CCS (no stamp required).

Scan this QR code to be taken directly to our feedback form:



### Next steps

Following this formal round of consultation, we expect to submit our application to PEDW in summer 2024 with commercial operation by 2029, subject to planning permission. Our expected project timeline is detailed below. Please note that this is subject to change.



Statutory consultation – July to August 2024



**DNS Planning Application –** summer 2024 to spring 2025



**Engineering, Procurement and Construction –** autumn 2025 to winter 2028