



The CCS Opportunity at Parc Adfer

30 October 2023



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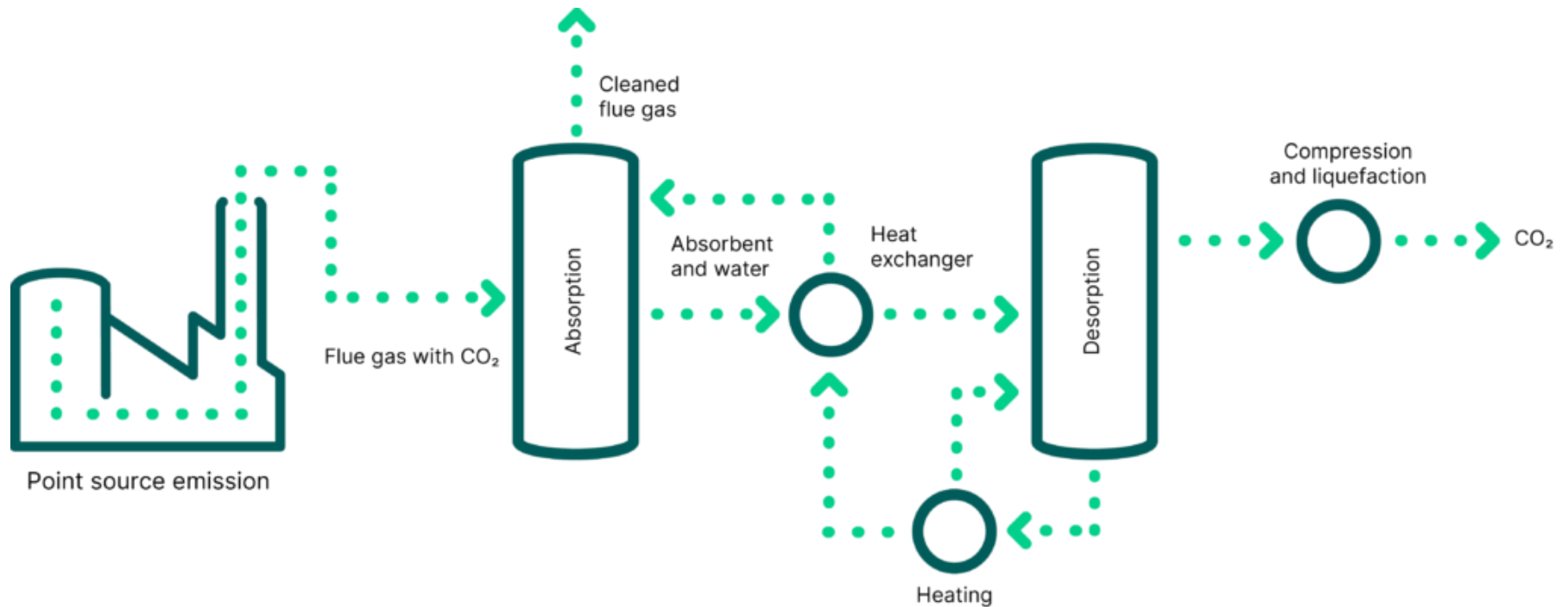


By installing carbon capture technology at Parc Adfer, we could:

- **Decarbonise unrecyclable waste** produced across North Wales, both now and in the future.
- Support **economic growth, skills and employment in the green economy** both during the construction phase and the operational phase of the project.
- Generate **carbon negative power** that can support the Welsh Government's ambition to have 100% zero carbon power by 2035.
- Produce **~100,000 tonnes of 'carbon removals' or 'negative emissions' per year** from our captured biogenic CO₂, offsetting emissions elsewhere in Flintshire.

- For more than a year, enfinium has been exploring the potential to install carbon capture and storage (CCS) technology at Parc Adfer.
- Installing CCS at Parc Adfer would enable us to capture at least 90% of the carbon dioxide (CO₂) the facility currently produces when transforming unrecyclable waste into energy.
- Once captured, the CO₂ would be safely transported via pipeline to Liverpool Bay for permanent storage under the sea.
- The capital investment and operational costs associated with building and running the carbon capture equipment could be supported by the UK Government.
- The next round for projects to bid into the UK Government's CCS project selection programme is set to open up in November/December 2023 and close in March 2024.
- **Based on our work to date we believe a CCS project at Parc Adfer would be very competitive from a bidding perspective, highly deliverable and would transform the waste sector in North Wales.**

What is Carbon Capture and Storage?



Source: Aker Carbon Capture

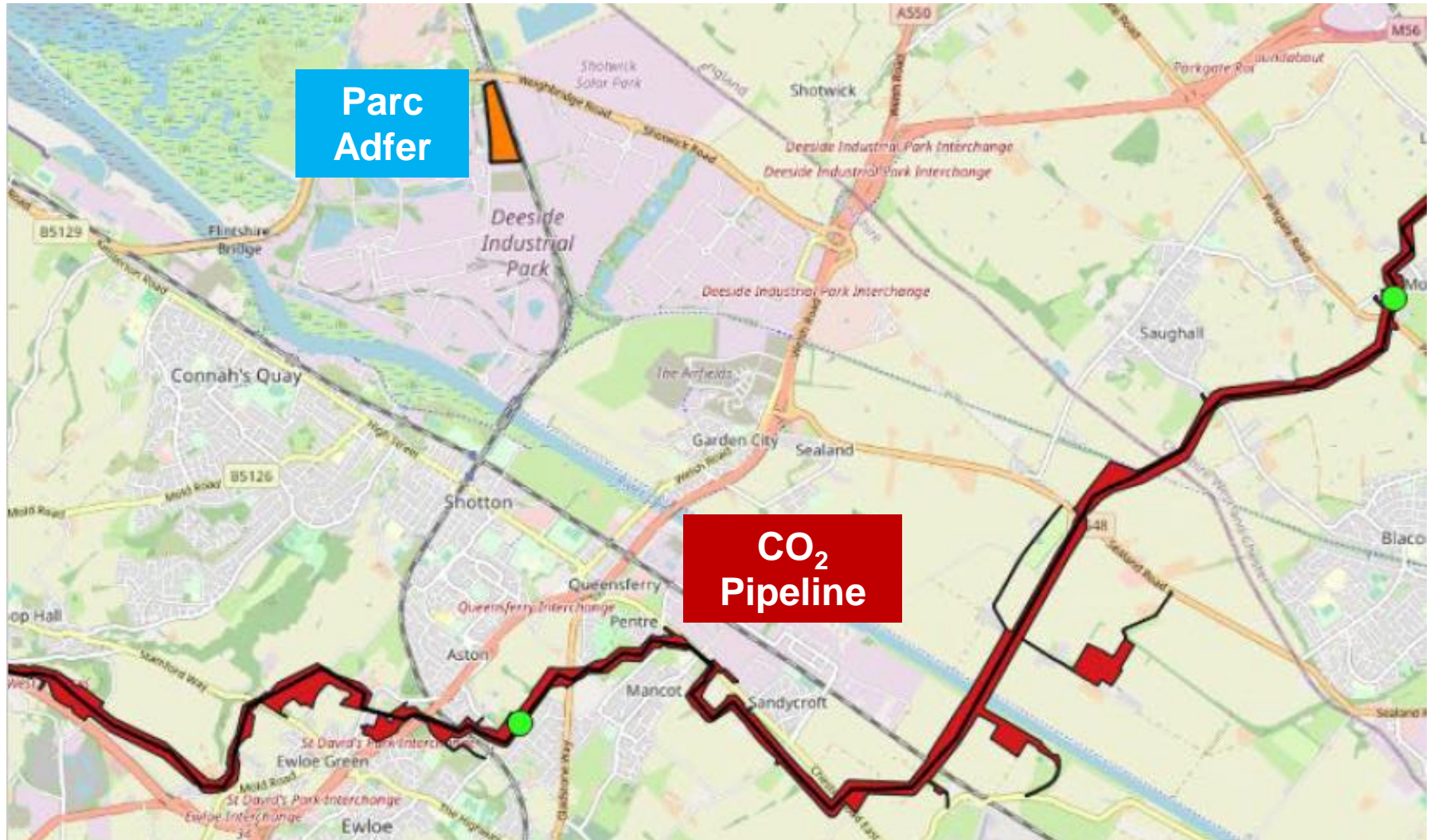
Integrating North Wales into the HyNet CCS cluster



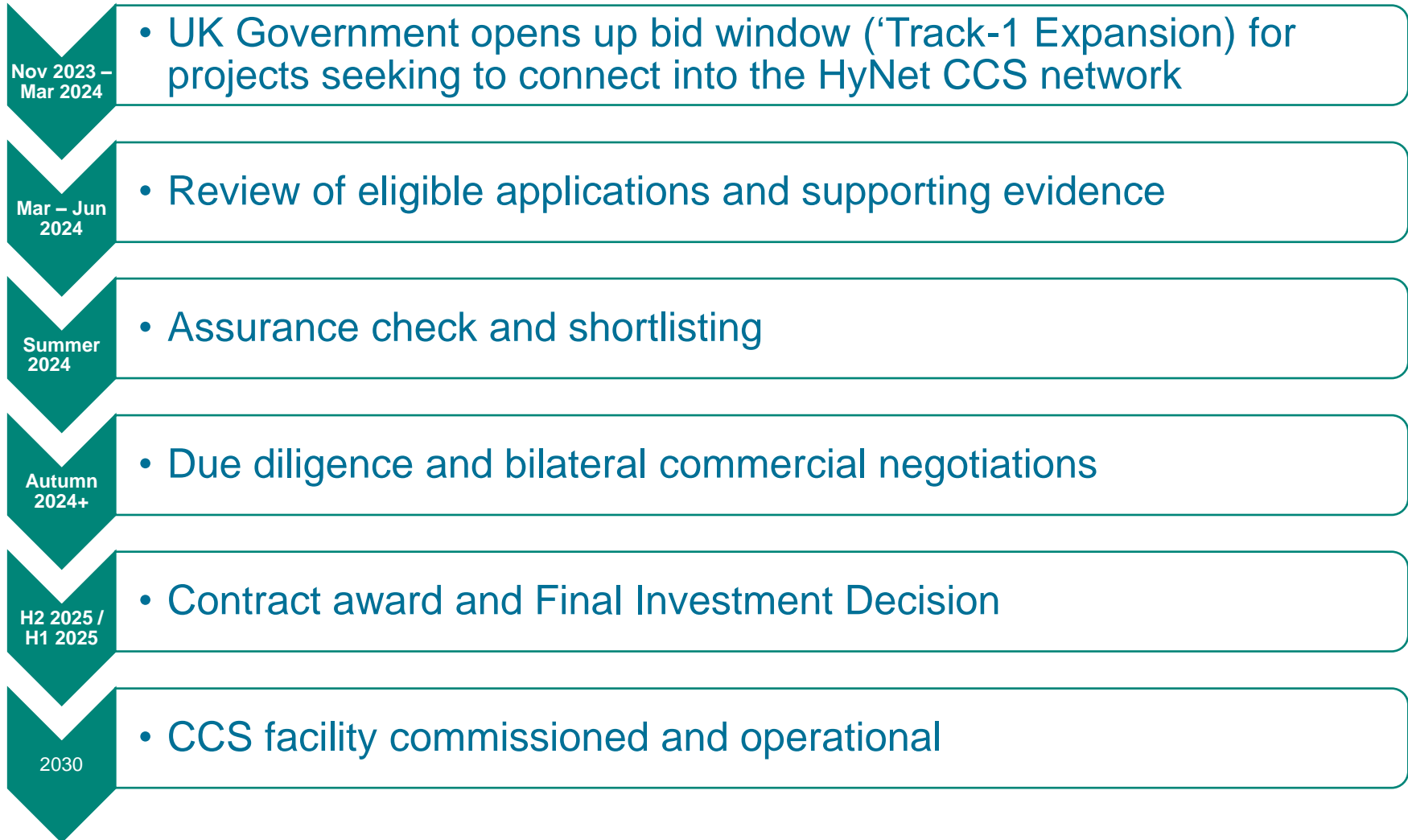
KEY

- INITIAL PHASES OF CADENT'S H₂ PIPELINE
- FUTURE PHASES OF CADENT'S H₂ PIPELINE
- CO₂ TRANSPORTATION AND STORAGE SYSTEM
- FUTURE CO₂ PIPELINE CONNECTIONS
- INDUSTRIAL CO₂ CAPTURE
- CO₂ STORAGE
- LOW CARBON H₂ PRODUCTION
- UNDERGROUND H₂ STORAGE
- INDUSTRIAL H₂ USER
- FLEXIBLE H₂ POWER GENERATION
- CO₂ SHIPPING
- H₂ BLENDING FOR HOMES AND BUSINESS
- H₂ FUELLING FOR TRANSPORT
- H₂ FROM OFFSHORE WIND
- H₂ FROM SOLAR AND WIND

Parc Adfer is located a short distance from the planned HyNet CO₂ pipeline



Pathway for UK Government support for Parc Adfer at CCS



**Timetable based on DESNZ market update on 25 September 2023 and subject to change*

In summary



- Installing CCS at Parc Adfer could **support the delivery of a number of Welsh Government policy goals** on energy, environment and climate change.
- It would also **support the joint authorities** achieving their own climate change strategies, targets and ambitions.
- It would contribute towards **economic growth, skills and employment in the green economy** in North Wales.
- The upcoming Track-1 Expansion allocation round represents **a significant window of opportunity** to secure UK Government support for the project.



THANK YOU