ESSAR ENERGY TRANSITION

Consultation

Frequently Asked Questions

1. What is CHP Phase 2 ('the Proposed Development')?

The Proposed Development is a Hydrogen-Ready Combined Heat and Power facility at the refinery. It would involve the construction and operation of new gas turbines, steam turbines, and heat recovery steam generators and is expected to generate 200MW of firm operating power with up to 560MW of installed generating capacity. The facility would be capable of providing low carbon power and steam to support operations at the site while helping the refinery move towards a lower carbon future.

2. What does hydrogen-ready mean?

Hydrogen-ready means the proposed facility is being designed so that it can support hydrogen-powered operations in the future. The new generating infrastructure would be capable of using 100% hydrogen. This flexibility will help support the refinery's transition towards low carbon energy production.

3. Why Stanlow Manufacturing Complex ('the refinery')?

The refinery already hosts the infrastructure, industrial facilities and energy networks needed to support a project of this scale. The main power generation equipment would be located within the existing refinery. Some of the associated utilities infrastructure would extend beyond the refinery, including onto neighbouring land. Locating the facility within the refinery allows it to connect efficiently with existing operations and support wider energy transition projects across the site.

4. What is a Development Consent Order (DCO)?

A Development Consent Order (DCO) is a type of planning consent used for Nationally Significant Infrastructure Projects (NSIPs) in England. The process includes preparation of a detailed application, including Environmental Assessment and associated documents, independent examination and a final decision by the Secretary of State.

5. How will environmental impacts be assessed and understood?

An Environmental Impact Assessment (EIA) will be undertaken to identify and assess the likely environmental effects of the Proposed Development. This is likely to include topics such as noise, traffic and transport, landscape and visual effects, air quality, ecology and climate change.

The final environmental assessment will be presented in an Environmental Statement, which will accompany the DCO application.

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6. What will the facility look like?

The designs for the proposed facility are being developed. Visualisations and other supporting information will be provided as the project develops and considerations related to landscape and visual amenity will form part of the environmental assessment process.

7. Will there be construction activity on the site?

Yes. Subject to development consent being granted, construction activity would be required on site to deliver the Proposed Development. Temporary construction compounds, welfare facilities and laydown areas would be required during the construction phase – these will be developed as part of the preparation of the DCO application. Further details on the construction programme will be provided as the project develops.

8. How is the Proposed Development different from CHP Phase 1?

CHP Phase 1 and the Proposed Development are separate developments capable of operating independently, with different generating capacities and therefore different consenting requirements.

CHP Phase 1 comprises a smaller 49.5 megawatt (MW) hydrogen-ready facility and is being progressed separately through the Town and Country Planning Act 1990 (TCPA) process.

The Proposed Development is a larger development with a generating capacity which exceeds the 50MW threshold for a TCPA application. This means that the development is considered a Nationally Significant Infrastructure Project (NSIP) which requires an application for a Development Consent Order (DCO) to the Planning Inspectorate (PINS).

9. How is the Proposed Development helping support industrial decarbonisation?

The Proposed Development would be a key part of the refinery's transition to low carbon energy production, with the new generating infrastructure capable of using 100% hydrogen in the future. Designed to support hydrogen-powered operations, the project would help reduce emissions from energy-intensive industrial processes while maintaining the reliable energy supply needed to support ongoing operations and future decarbonisation projects.

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10. Will the Proposed Development help support the UK's energy transition?

Hydrogen-powered energy generation has an important role to play in helping industry reduce emissions and supporting the UK's energy transition. The Proposed Development would be capable of producing low carbon power, helping to decarbonise industrial energy use while helping develop the infrastructure needed to support the UK's transition to low carbon energy production.

11. How does the Proposed Development fit into other projects taking place at the refinery?

The Proposed Development forms part of wider plans to transform the refinery into a leading energy transition hub. Alongside hydrogen production, carbon capture and other low carbon technologies, the project would help support future investment, innovation, industrial decarbonisation and employment opportunities across the North West.

12. How will consultation feedback be used?

All feedback received during the consultation will be reviewed and considered alongside technical, environmental and engineering assessments. Feedback will help inform the ongoing development of the proposals before the application is submitted.

13. What happens after the consultation closes?

Once the consultation has closed, feedback will be reviewed and considered as the proposals continue to develop. A consultation summary report will be prepared and the information gathered through consultation will help inform the DCO application before it is submitted.

14. Does CHP Phase 2 have any links to other projects in the area?

Hydrogen Production Plant 1 (HPP1) – yes, HPP1 is a project being developed by EET Hydrogen. It will produce low carbon hydrogen for use at the refinery and by other local industrial businesses in the area.

Hydrogen Village – no, CHP Phase 2 is not connected to the Hydrogen Village project. The Hydrogen Village was developed by Cadent and sits outside EET's projects. CHP Phase 2 is focused solely on providing power and steam for industrial use at the refinery.

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