ESSAR ENERGY TRANSITION

Welcome
Have your say

Essar Energy Transition Hydrogen-Ready Combined Heat and Power Project > Phase 2

Thank you for attending our consultation on the proposed Hydrogen-Ready Combined Heat and Power (CHP) Project – Phase 2 ('the Proposed Development') at Stanlow Manufacturing Complex ('the refinery').

The Proposed Development forms part of wider plans to support the refinery's transition to low carbon energy production and transform the site into a leading energy transition hub.

Through this consultation, we are seeking views from local communities and other stakeholders before preparing and submitting our Development Consent Order application.

We encourage everyone with an interest in the Proposed Development to review the information presented, ask questions and provide consultation feedback.

At a glance

- **Proposed Hydrogen-Ready CHP facility**
- **Located at the refinery**
- **Providing electricity and steam for the refinery and supporting other future industrial uses**
- **Part of our wider roadmap to decarbonisation**
- **Development Consent Order (DCO) application**
- **The consultation is open from 20 October to 18 November 2026**

Project timeline

01	02	03	04
Oct-Nov 2026	Quarter 2 2027	Quarter 4 2027	Quarter 4 2028
Public consultation	Submit DCO application	Examination	Decision



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About Essar Energy Transition and the refinery

Supporting the UK's energy transition

EET Fuels, the trading name of Essar Oil (UK) Limited (company number 15928581), part of Essar Energy Transition, owns and operates the refinery, which plays an important role in the UK's energy infrastructure supplying the fuels and energy products that help keep people and businesses moving. Today, the refinery supplies 18% of the UK's transport fuel and 12.5% of the nation's aviation fuel.

It is also an important part of the local and regional economy, supporting over 3,800 direct and indirect jobs, along with 110 apprentices and graduates. The refinery contributed an estimated £336 million to the UK economy in 2025, including £118 million to the regional economy.

Our vision is to be a leading producer of low carbon fuels and establish a major energy transition hub in the North West of England. Essar Energy Transition has an investment pipeline of £4.3 billion to develop a range of low carbon energy transition projects in the UK through to 2035.

Through our investment programme we will play a key role in accelerating the UK's low carbon transformation, supporting the government's decarbonisation policy and creating over 9,500 direct and indirect highly skilled employment opportunities in Ellesmere Port and the wider North West by 2035.[1]

[1] ***Source:*** Jobs figures include direct + indirect + induced figures quoted from Essar Energy Transition GVA report produced by Nexant 2026.

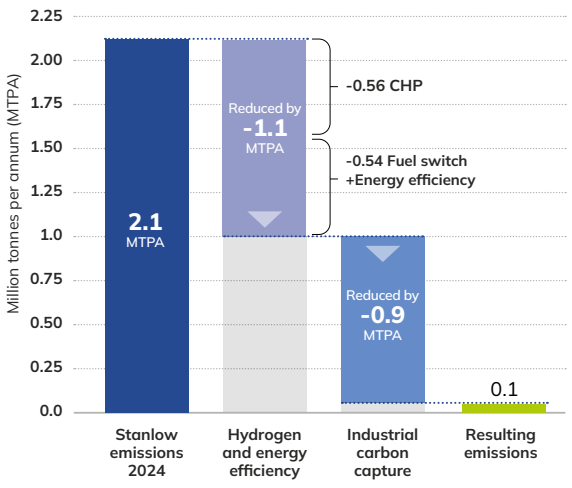
Why is the refinery a suitable location?

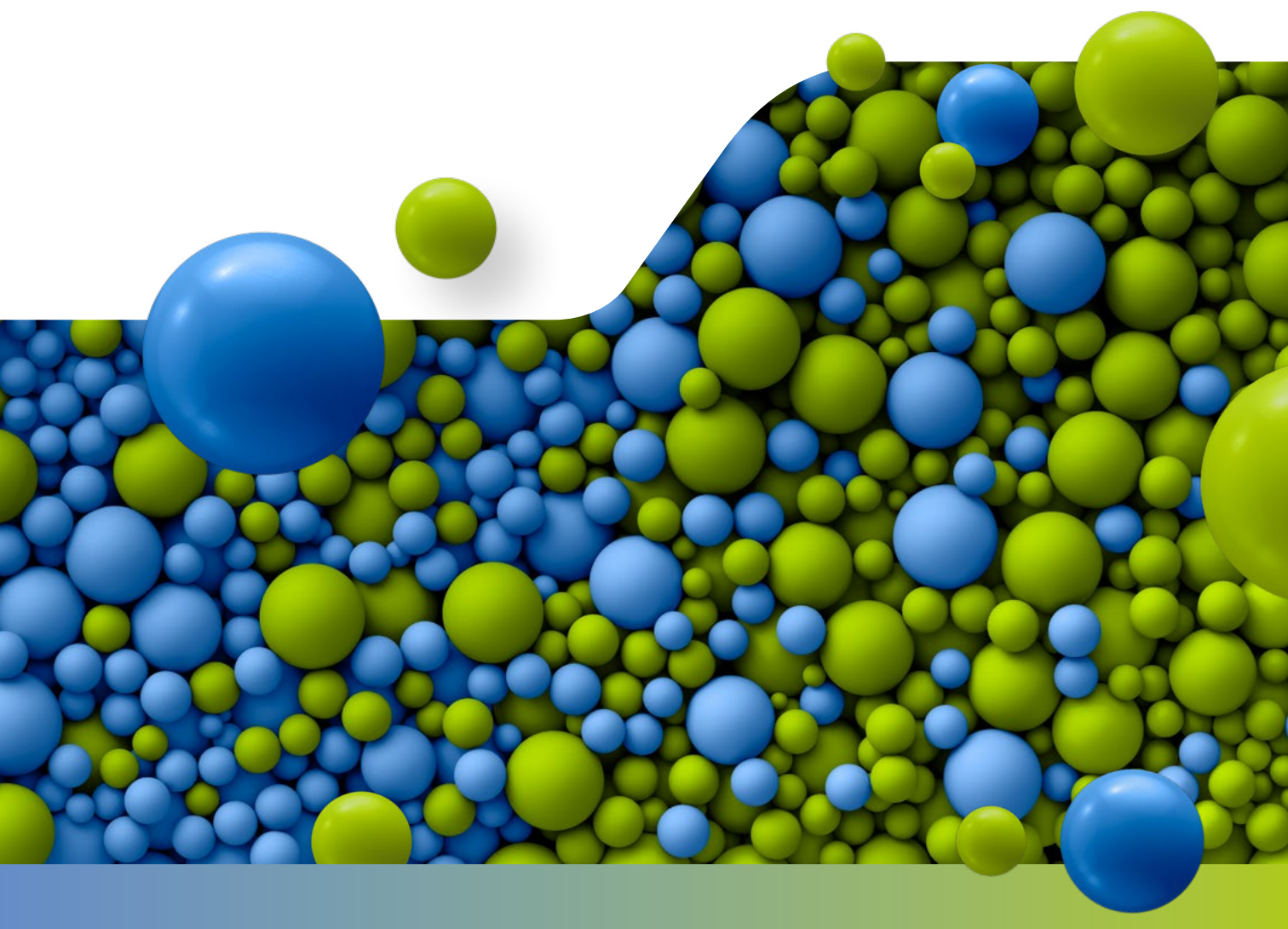
- **Long-established energy and industrial site**
- **Existing energy infrastructure and expertise that can support the Proposed Development**
- **Moving towards hydrogen-ready technology could help reduce greenhouse gas emissions associated with the refinery's operations, when fired with low carbon hydrogen, supporting Essar Energy Transition's wider decarbonisation ambitions.**

Essar Energy Transition's plans for decarbonisation

The image below showcases our plan for reducing carbon emissions.

Carbon emissions reduction plan from 2.1 MTPA to 0.1 MTPA





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Why is the project needed?

The Proposed Development is an important part of Essar Energy Transition's wider investment programme and our plans for the future of the refinery. It would provide reliable power and steam for the refinery, replacing ageing infrastructure and improving resilience of the refinery's energy supply. It would also provide additional generating capacity and flexibility needed to support the future development of the wider refinery operations and other nearby industrial users.

What is the difference between CHP Phase 1 and the Proposed Development?

CHP Phase 1 comprises a 49.5 MW hydrogen-ready CHP plant, which is being progressed separately through the Town and Country Planning Act 1990 process. The Proposed Development is a substantially larger, standalone hydrogen-ready CHP development for which consent is being sought through the DCO process.

The two phases, though capable of operating independently, form part of our wider strategy to progressively decarbonise power and steam generation at the refinery. Both phases contribute to the same strategic objective of replacing ageing fossil fuelled infrastructure with modern equipment capable of operating on 100% hydrogen, supporting future industrial growth and investment towards our ambition of creating a world-leading energy transition hub.

The project would:

Enable industrial decarbonisation

The hydrogen-ready facility would support the transition from fossil fuels and reduce industrial emissions when fired with low carbon hydrogen.

Support energy resilience

Modern energy infrastructure would provide a more reliable and flexible energy supply for the refinery and other potential users.

Replace ageing infrastructure

Parts of the refinery's ageing energy infrastructure would be replaced and upgraded with new infrastructure capable of using 100% hydrogen, therefore supporting the transition to lower carbon energy production.

Provide reliable energy

The Proposed Development would provide dependable energy to maintain existing site operations, while supporting future decarbonisation projects.



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What is being proposed?

The Proposed Development would comprise up to 560MW of installed generating equipment. This is the maximum combined capacity of the individual generating units. The facility is expected to provide around 200MW of firm operating power.

The main power generation equipment would be located within the existing refinery. Some of the associated utilities infrastructure would extend beyond the refinery site.

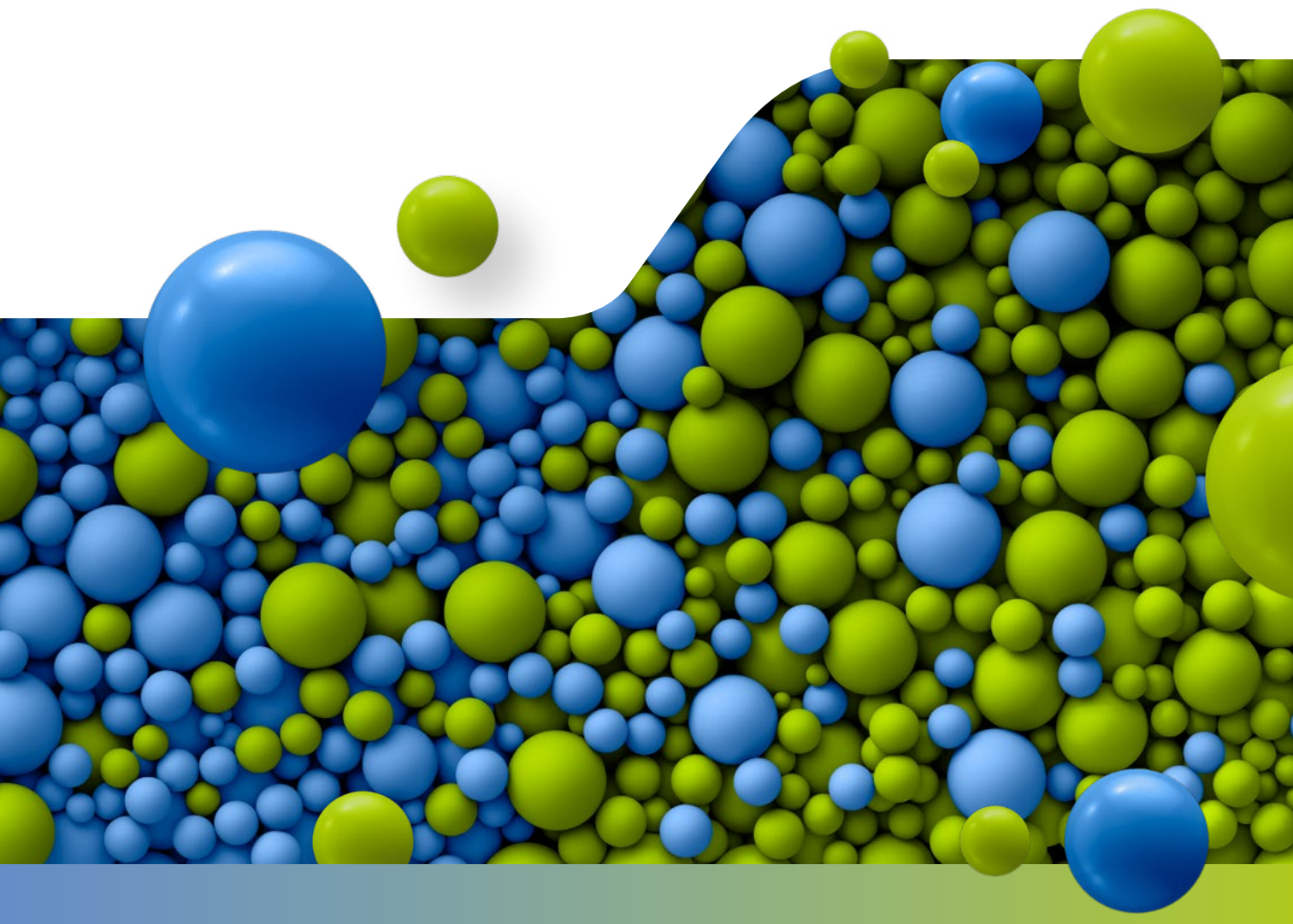
Key Infrastructure Locations (Plans are under development and may be subject to change)



CHP Phase-2 Draft Order Limits
Indicative CHP Development Zone
Indicative Construction Laydowns & Compounds
Indicative Backup Generation Zones 1, 2 & 3
Indicative utilities and pipe rack corridors

The proposed development includes

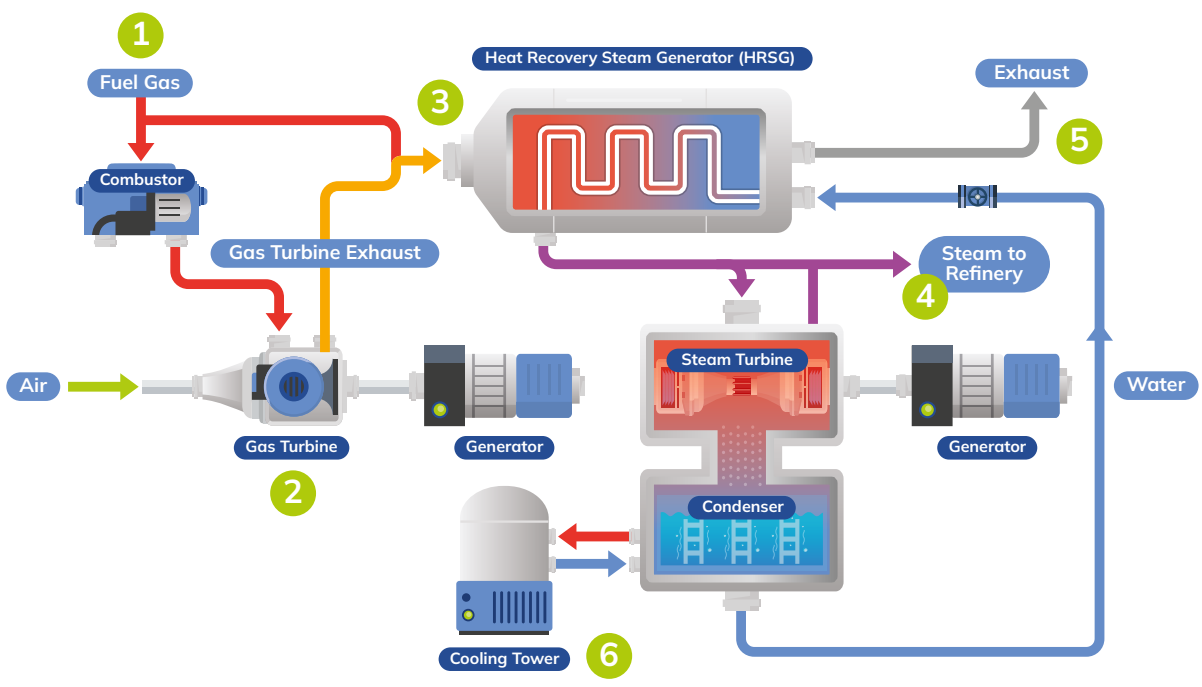
- Up to **five** hydrogen-ready gas turbine modules
- Up to **five** Heat Recovery Steam Generators (HRSGs)
- Up to **six** steam turbine generators
- Up to **120MW** of supporting generation capacity
- Up to **100MW** of battery storage
- Other ancillary infrastructure required to facilitate construction and operation
- **Three** multi-fuel boilers
- A hybrid cooling tower
- Electrical infrastructure and connections
- Pipework and associated infrastructure
- Temporary construction compounds and welfare facilities
- Up to **two** HRSG stacks



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How the CHP facility would work

CHP produces electricity and useful heat from the same process. At the refinery, the useful heat would be recovered to produce steam, which is required by manufacturing operations across the site.



The process works in six main stages:

1 Fuel enters the facility

The gas turbines would be capable of using a range of fuels, including low carbon hydrogen.

2 Electricity is generated

Fuel would power the gas turbines, which would drive generators to produce electricity.

3 Heat is recovered

Hot exhaust gases from the turbines would pass through heat recovery steam generators. Instead of allowing this heat to go to waste, it would be used to heat water and produce steam.

4 Steam is used

Steam would be supplied to our operations. Some would also pass through steam turbines to generate additional electricity.

5 Emissions are cleaned

Before being released, exhaust gases would pass through specialist treatment equipment that helps reduce emissions. This helps to minimise the refinery's impact on local air quality and operate efficiently.

6 Remaining heat is removed

After useful heat has been recovered for steam production, any remaining heat would be removed through the cooling system. Hybrid cooling towers would be designed to minimise visible water vapour except during very cold conditions.



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Environmental considerations

As part of the DCO process, an Environmental Impact Assessment (EIA) is being carried out to assess the likely significant effects that the Proposed Development may have on the surrounding environment as well as socio-economic and local community impacts.

We are currently carrying out a range of environmental surveys and technical studies on and around the refinery in relation to the Proposed Development. This work will form our understanding of the 'baseline' environment on and surrounding the site, and it will enable us to predict the impacts of the Proposed Development. Additionally, along with feedback from this consultation, the baseline work will help to further inform the design of the Proposed Development. This includes identifying measures where possible to avoid, reduce, mitigate or offset any likely significant effects that are identified as a result of the EIA.

The assessments are focused on the places and features that matter most locally. This includes nearby communities such as Elton, Ince and Thornton-le-Moors, views of the refinery from the surrounding area, local roads and environmentally important sites such as Gowy Meadows and the Mersey Estuary.

It is expected that the EIA will cover the following topic areas:

- Air quality
- Biodiversity
- Climate change
- Cultural heritage
- Cumulative effects
- Ground conditions and soils
- Landscape and visual
- Major accidents and disasters
- Materials and waste
- Noise and vibration
- Population and human health
- Socio-economics
- Traffic and transport
- Water environment

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

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How to have your say

Thank you for taking the time to learn more about the Proposed Development.

All feedback received during the consultation period will be carefully reviewed and considered as the proposals develop.

You can provide feedback by completing the online feedback form, available via the project website or QR code.

Alternatively, you can request a hard copy feedback form and submit your response using the freepost address: Freepost CHP2

If you require any consultation materials in an alternative format, please contact the project team using the details provided below.

Phone number: 0151 350 4000
Email address: H2Power@eetfuels.com

Consultation closes at
23:59 on 18th November 2026

You can share your feedback by completing the online form available on our website:
eethydrogenpower.com/engage/chp2planning

Scan the QR code to view the full GDPR/Privacy Statement:
https://eethydrogenpower.com/wp-content/uploads/2026/10/GDPR-and-Privacy-Statement-CHP-Project-2026.pdf

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