

ESSAR TO BUILD UK'S FIRST REFINERY-BASED HYDROGEN FURNACE IN £45 MILLION INVESTMENT

- **£45 million investment to install the UK's first refinery furnace capable of running on 100% hydrogen fuel source**
- **In line with EOUK's stated commitment to becoming the UK's first low carbon refinery**
- **Will reduce Stanlow's carbon emissions through improved energy efficiency of the design, saving 16,600 tonnes of CO2 per annum**
- **Will further reduce Stanlow's CO2 emissions by 11% once running on hydrogen (from 2026)**
- **Follows launch of Essar-led joint venture last month – Vertex Hydrogen – as part of the HyNet North West decarbonisation cluster, which will initially develop two hydrogen production plants at Stanlow**

Stanlow, 09 February 2022 – Essar Oil UK ('EOUK'), the leading UK-focused downstream energy company, announces plans to install a new £45 million furnace at Stanlow that's capable of using hydrogen as its fuel source - a UK first.

This marks another significant milestone in Essar's continued commitment to becoming the UK's first low carbon refinery. It follows the launch of Vertex Hydrogen last month, a new Essar-led joint venture, in which the company will invest £1 billion over the next five years to drive down emissions, including the development of new hydrogen production plants at Stanlow, forming a central part of the HyNet North West decarbonisation cluster.

The scheme (which is subject to planning approval) comprises the decommissioning of three existing furnaces (which include a chimney of approximately 140m in height) and their replacement with a single, highly efficient furnace, which includes a chimney of approximately 71m in height.

The scheme will provide a number of improvements that will lead to benefits for Stanlow and the surrounding area, including lower carbon emissions due to gas-only firing and new burners that emit lower levels of Nitrogen Oxide (NOx) and futureproofing to enable the use of sustainable fuel types in the future such as hydrogen. The furnace is currently being fabricated in Thailand. The largest single module is 26.5 metres long, by 18.5 metres tall, by 14.5 metres and the furnace will be delivered on site almost fully constructed.

With an investment of £45 million, the new furnace forms a key part of the company's strategy to reduce its own carbon emissions. The furnace is unique in that it will have the capability to run entirely off hydrogen, becoming the first of its kind based at a UK refinery. It has an improved energy efficiency of 4% compared to existing furnaces, which will save 16,600 tonnes of CO2 per annum, as well as reducing ongoing maintenance costs.

Set to be installed in 2022, the furnace will become fully operational next year. From 2026 onwards it will be fuelled by hydrogen produced at Stanlow as part of the HyNet North West decarbonisation cluster. Essar's new joint venture, Vertex Hydrogen, will develop the world's first and largest blue hydrogen production plant at Stanlow. Hydrogen will be used at the site and will be distributed to industrial businesses in the region to support their own transition to low carbon.

Deepak Maheshwari, Chief Executive Officer at Essar Oil UK, commented:

"We have hugely ambitious plans for Stanlow and are committed to making it the UK's first low carbon refinery. By affecting a significant and rapid transition to hydrogen, we are securing the long term future of this vitally important national asset whilst also playing a key role in supporting the UK's plans for building the low carbon economy of tomorrow. We would like to thank our community for its ongoing support of our refinery at Stanlow."

Essar's Stanlow refinery – which supplies 16% of the UK's road transport fuels – sits at the heart of HyNet North West. The initiative was designated as a Track 1 Industry Cluster by Government in October 2021 and plans to produce 1GW per year of hydrogen - the equivalent to the domestic heating energy used by a major British city, for example the Liverpool City Region. As well as being used by Essar, the hydrogen will be supplied to a wide range of businesses across the North West, including Tata Chemicals Europe, Encirc, and InterGen.

ENDS

FURTHER INFORMATION

Michelle Lewis, Corporate Affairs Director, Essar: michelle.lewis@essaroil.co.uk / 07805 854169

Peter Ogden, Luke Thompson, Powerscourt: luke.thompson@powerscourt-group.com / 07704 220116

NOTES TO EDITORS

- As well as HyNet, Essar is working with Fulcrum BioEnergy to develop a new facility to convert non-recyclable household waste into sustainable aviation fuel (SAF) for use by airlines operating at UK airports. The facility will convert several hundred thousand tonnes of pre-processed waste, otherwise destined for incineration or landfill, into approximately 100 million litres of low carbon SAF annually.

About Essar in the UK

Essar Oil (UK) Ltd is committed to playing a key role in the decarbonisation of the UK economy, with ambitious plans to build a green energy industrial cluster at Stanlow. These include the construction of two new low carbon hydrogen production units on site as part of the HyNet consortium, with a planned total investment of £1 billion to deliver the hydrogen production hubs. Follow on capacity growth is planned to reach 80% of the UK Government's new target of 5GW of low carbon hydrogen for power, transport, industry and homes by 2030.

Essar is a leading UK-focused downstream energy company whose main asset is the Stanlow Manufacturing Complex, one of the most advanced refineries in Europe situated close to the major cities of Liverpool and Manchester. Stanlow has 800 employees, and is a key strategic national asset, annually producing over 16% of the UK's road transport fuels, while playing a key role in Britain's broader petrochemical industry.

Since acquiring Stanlow in 2011, Essar has invested \$1 billion in margin improvement and other efficiency initiatives to ensure the refinery remains competitive in a rapidly changing market. The company is a major supplier in the North West and beyond with customers including most of the major retail brands operated by international oil companies and supermarkets, Manchester Airport, leading commercial airlines and the region's trains and buses.

Fulcrum BioEnergy has announced a £600 million project to create a new facility at Essar's Stanlow site, to convert several hundred thousand tonnes of non-recyclable household waste each year into sustainable aviation fuel (SAF) for use by airlines operating at UK airports.

www.essar.co.uk

Ends

About Essar in the UK

Essar Oil UK is a leading UK-focused downstream energy company whose main asset is the Stanlow Manufacturing Complex, one of the most advanced refineries in Europe situated close to the major cities of Liverpool and Manchester. Stanlow has 800 employees, and is a key strategic national asset, annually producing over 16% of the UK's road transport fuels, while playing a key role in Britain's broader petrochemical industry. Since acquiring Stanlow in 2011, Essar has invested \$1 billion in margin improvement and other efficiency initiatives to ensure the refinery remains competitive in a rapidly changing market.

The company is a major supplier in the North West and beyond with customers including most of the major retail brands operated by international oil companies and supermarkets, Manchester Airport, leading commercial airlines and the region's trains and buses.

Essar is committed to playing a key role in the decarbonisation of the UK economy, with ambitious plans to build a green energy industrial cluster at Stanlow. These include the construction of two new low carbon hydrogen production units on site as part of the HyNet consortium, with a planned total investment of approximately £750m to deliver the hydrogen production hubs. Follow on capacity growth is planned to reach 80% of the UK Government's new target of 5GW of low carbon hydrogen for power, transport, industry and homes by 2030.

The company is also working with Fulcrum BioEnergy on a £600 million project to create a new facility to convert several hundred thousand tonnes of non-recyclable household waste each year into sustainable aviation fuel (SAF) for use by airlines operating at UK airports.

www.essar.co.uk

Media contact:

Michelle Lewis, Head of Communications
07805 854169 michelle.lewis@essaroil.co.uk