



UK: World-first low carbon hydrogen projects win £13m Government backing

The UK Government's Department for Business, Energy and Industrial Strategy (BEIS) has awarded £13m to fund two world-first hydrogen projects led by the HyNet consortium in the North West.

The first is the UK's leading low carbon hydrogen project, involving Johnson Matthey as technology provider, SNC-Lavalin as project delivery specialists and Essar Oil UK as owner and operator. The second project, to conduct live trials of hydrogen fuelling, includes regional businesses Unilever, Essar Oil UK and Pilkington. Both HyNet projects are led by developer Progressive Energy.

The project to develop the UK's first Low Carbon Hydrogen Plant at Essar Oil UK's Stanlow refinery in Ellesmere Port, has been awarded £7.5m. The plant will produce 3TWh of low carbon hydrogen – double the UK's total current production of biomethane – which will be provided to industrial and eventually domestic customers in the region. The facility will deliver low cost, low carbon hydrogen at scale and high efficiency, and with a very high carbon capture rate – over 95% of the carbon used in the process will be captured and stored, thanks to the pioneering carbon capture technology. When operational, the facility will capture 600,000 tonnes of CO₂ per annum - the equivalent of taking over 250,000 cars off the road.

"We are excited to be part of this initiative and believe we have the facilities and technological skills to help deliver the project. The construction of the hydrogen facility at Stanlow is the first stage in becoming a carbon neutral site and will support our long term ambition of remaining a key national supplier of energy to the UK as we move towards a zero carbon world," says Mark Wilson, Chief Executive Officer, Essar Oil UK.

Hydrogen will be distributed by way of a new pipeline network under development by Cadent, which will also provide the pathway for renewable hydrogen once costs come down in the future. The funding will also deliver the Front-End Engineering Design (FEED) of the plant, providing a reference design for the facility to be replicated across the UK and internationally.

The projects will aim to demonstrate that hydrogen can be used as a substitute fuel for natural gas in manufacturing processes, according to the companies involved.