

Ras Laffan ethane cracker key milestone in downstream expansion strategy



The \$6bn proposed ethane cracker at Ras Laffan, which is QatarEnergy's largest investment ever in country's petrochemical sector, marks an important milestone in its downstream expansion strategy.

The petrochemical complex will not only facilitate further expansion in Qatar's downstream and petrochemical sectors, but will also reinforce the country's integrated position as a major global player in the upstream, LNG and downstream sectors.

The Ras Laffan Petrochemicals complex, expected to begin production in 2026, consists of an ethane cracker with a capacity of 2.1mn tonnes of ethylene per year.

The 435-acre project site also includes two polyethylene trains with a combined output of 1.7mn tonnes per year (mtpy) of high-density polyethylene (HDPE) polymer products.

This will raise Qatar's overall petrochemical production capacity to almost 14mn tonnes per year, HE the Minister of State for Energy Affairs, Saad bin Sherida al-Kaabi, told Gulf Times.

QatarEnergy has joined hands with Chevron Phillips Chemical Company (CPChem) on the project and created a joint venture, in which QatarEnergy will own a 70% equity share, and CPChem 30% stake.

Together their large and diverse portfolio will not just help meet the world's growing needs for advanced plastics and petrochemicals, but will also enable balanced growth and facilitate human development in a responsible and sustainable manner.

QatarEnergy and Chevron Phillips Chemical Company (CPChem) have taken a Final Investment Decision (FID) on the Golden Triangle Polymers Plant, an \$8.5bn world-scale integrated polymers facility in the Texas Gulf Coast area in the US.

The Ras Laffan petrochemicals complex will help meet the rising global demand for high-density polyethylene from 2026, when the largest ethane cracker in the Middle East and one of the largest in the world begins production.

Polyethylene is used in the production of durable goods like pipe for natural gas and water delivery and recreational products such as kayaks and coolers. It is also used in packaging applications to protect and preserve food and keep medical supplies sterile.

The facility will be constructed with modern, energy-saving technology and use ethane for feedstock, which along with other measures, is expected to result in lower greenhouse gas emissions than similar global facilities.

The integrated olefins and polyethylene facility will be utilising "state-of-the-art design and technology" during its construction and operation to promote energy efficiency.

It is important to stress the unique environmental attributes

of this world-scale complex. It will have lower waste and greenhouse gas emissions, when compared with similar global facilities.

Already, QatarEnergy made significant strides in realising the North Field Expansion by choosing partners this year for both North Field South (NFS) and North Field East (NFE) expansion, which is the global industry's largest ever LNG project.

This unique project is characterised by the highest health, safety, and environmental standards, including carbon capture and sequestration, to reduce the project's overall carbon footprint to the lowest levels possible.

The North Field expansion plan includes six LNG trains that will ramp up Qatar's liquefaction capacity from 77 mtpy to 126 mtpy by 2027.

Four trains will be part of the North Field East and two trains will be part of North Field South project.