

Kollsnes

Processing Plant

The Kollsnes Processing Plant plays a key role in the transport of large quantities of gas from fields in the Norwegian sector of the North Sea to customers in Europe. Gas from Kollsnes accounts for around 40 per cent of all Norwegian gas deliveries. It all started with the enormous quantities of gas in the Troll field.



Troll is the very cornerstone of Norwegian gas production. When the field was declared commercially viable in 1983, the question then arose as to the safest way to get the enormous quantities of gas to the customers. The solution was a receiving plant at Kollsnes in Øygarden municipality, north-west of Bergen.

Today, Kollsnes Processing Plant is a processing centre for gas from the Troll, Fram, Visund and Kvitebjørn fields. At Kollsnes, the gas is cleaned, dried and compressed, before being transported as dry gas to Europe through export pipes. In addition, some gas is transported in separate pipes to Naturgassparken Vest in Øygarden, where Gassnor treats and distributes gas for domestic use. Condensate, or natural gas liquids, the heavier components in the gas, is piped to Mongstad (Vestprosess). Here, the product undergoes further treatment and is fractioned into propane, butane and naphtha.

The processing plant itself consists primarily of three dew point control (DPC) systems. In the dew point control facilities, the condensate is separated from the gas. There is also a separate system for the production of natural gas liquids (NGL).

Dry gas from the DPC plants and the NGL plant is pressurised using the six export compressors and sent into the transport system via the export pipelines Zeepipe IIA and IIB.

40%

Gas from Kollsnes accounts for around 40 per cent of all Norwegian gas deliveries

How gas came to Kollsnes

The plant was originally part of Troll Gass. Troll Gass originally also consisted of the Troll A platform and the two pipelines between the platform and the onshore facility.

The decision to build a processing plant for the gas from Troll at Kollsnes was made after the Troll partners decided to move the processing plant to an onshore location.

Shell was the development operator for the processing plant at Kollsnes, while Equinor took over operator responsibility when the plant started operations in 1996. At that time, gas treatment capacity was 84 million standard cubic metres per day (Sm³/d). Shortly after, Troll B, C and later Fram were connected to this system. In 2004 and 2005 respectively, Kvitebjørn and Visund were also linked via a separate pipe to Kollsnes. A facility for the production of natural gas liquids was also built and put into operation in 2004, to treat gas from Kvitebjørn and Visund.

144,5 million

standard cubic metres per day (Sm³/d).

Plenty of capacity

Having a capacity of 144.5 million standard cubic metres per day (Sm³/d), the plant's capacity is optimally utilised.

The gas that is processed at Kollsnes accounts for almost 40 per cent of Norway's total gas deliveries to Europe and meets the energy needs of households and businesses in several European countries. After the gas leaves the processing plant, Gassco's transport control centre on Karmøy manages its transportation to receiving terminals for Norwegian gas on the Continent and in the UK.

The Kollsnes site covers an area of 200 hectares, of which 70 hectares have been levelled, meaning there is plenty of room for expansion. The plant is subject to ongoing technological upgrades in order to maintain safe operation and high gas deliveries. The plant runs on electric power, supplied via the region's main grid. This ensures Kollsnes has minimal emissions to air and sea. The area is under constant environmental monitoring.

The Kollsnes Processing Plant is a 24-hour site – a machine that can operate all day and all night. There is also a 24-hour focus on safety. Kollsnes shall be a safe workplace for everyone who works at the plant, and risk management, risk control and prevention of accidents are the top priority in the work on health, safety and the environment.

A processing plant for gas should also be a good, welcome neighbour.

The company regularly provides information about the plant's activities and is in constant contact with the local authorities and representatives of the local community.

Cornerstone enterprise in western Norway

Some 350 people work at Kollsnes on a daily basis. In addition to the functions performed by permanent Equinor employees, modification and maintenance services, ISS disciplines (Insulation, Scaffolding, Surface protection), security services, cleaning, catering and camp operation are provided by external service suppliers. The occupations represented at Kollsnes include engineers and skilled workers such as process operators, electricians, mechanics and laboratory

personnel, as well as commercial and administrative personnel. The gas processing plant at Kollsnes is a cornerstone enterprise in Øygarden municipality and the Bergen region. It provides employment for 350 full-time equivalents, creating considerable ripple effects for local businesses in the form of jobs and income and property tax. Different development projects and day-to-day operations provide welcome assignments for industrial companies and firms both locally and at a national level. Kollsnes

processing plant is owned by Gassled, a partnership consisting of several oil and gas companies and investment companies that operate on the Norwegian continental shelf. Gassled also owns the pipeline network that transports Norwegian gas to Europe.

Gassco took over operator responsibility at Kollsnes on behalf of Gassled in 2004. Equinor is responsible for the day-to-day operation of the plant on the basis of an operating agreement with Gassco.





The processing plant lighting up the coastal landscape
in Øygarden one late summer evening

Facts

Production:

Treats gas from Troll, Fram, Visund and Kvitebjørn

Development clearance:

1990

Production start:

October 1996

Operator:

Gassco

Technical service provider:

Equinor

Daily capacity:

144.5 million standard cubic metres (Sm³) of gas and 9,000 Sm³, or 57,000 barrels, of condensate

Full-time equivalents:

350

Area:

200 hectares

Gassled:

Established in 2003, Gassled is a partnership owned by oil and gas companies and investment companies. Gassled is the formal owner of the infrastructure for gas transport from the Norwegian continental shelf. The partnership has no employees and is organised through various committees with specific tasks.

Gassled's owners (per September 2019):

Petoro AS

CapeOmega

Solveig Gas Norway AS

Silex Gas Norway AS

Equinor Energy AS

