

2.2 Norwegian Gas Infrastructure to Europe Energy Security

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Securing Energy Supply to Europe

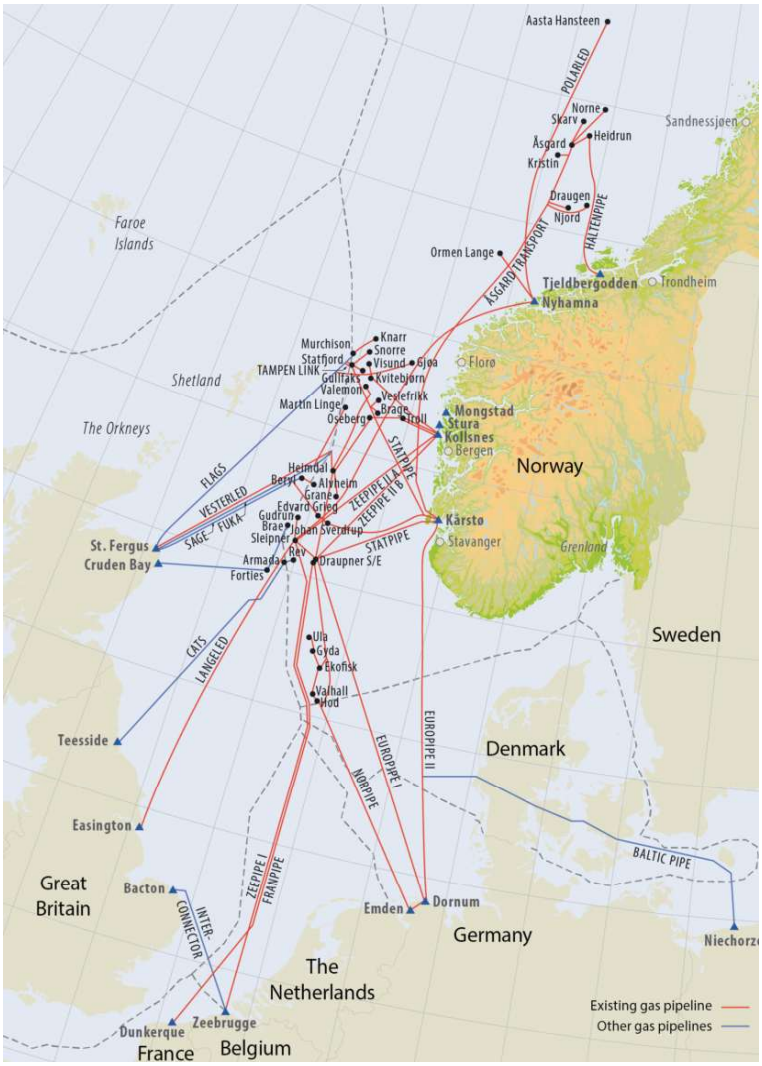
The pipeline system is vital for enhancing energy security, supporting the transition to cleaner energy, and maintaining stable supply chains in Europe. Norway is one of the largest natural gas suppliers to Europe, providing an alternative to Russian gas. This diversity in supply sources enhances energy security for European countries, reducing dependence on a single supplier. The extensive gas pipeline network delivers directly to key European markets, including the UK, Germany, Netherlands, France, and plans to connect Polen. This connectivity facilitates efficient transportation and distribution of gas across Europe.

Pipeline system

The Norwegian gas infrastructure is owned by the partnership Gassled, while the state-owned company Gassco serves as the operator since 2001. Gassco is responsible for safe and efficient operation of the network. It also serves as the architect for ensuring integrated further development of this infrastructure. An extensive transport system has been crucial for Norway's position as one of the world's largest exporters of natural gas. The Norwegian gas pipeline system is one of the world's most efficient gas infrastructure systems with about 9000 km pipelines, connecting gas and oil fields, riser/compressor platforms offshore blending gas from different sources, six process plants along the west Norwegian coast, and six different receiving terminals in Europe.

Pipeline history

Following the discovery of the Ekofisk field, Norpipe was completed in 1977 to Emden, Germany. This marked Norway's debut as a major exporter to mainland Europe. To connect fields in the North Sea, such as Statfjord, Statpipe was constructed during the 1980s. This system landed gas at Kårstø in Norway for processing before sending it onward to the continent. Major pipelines like Zeepipe to Belgium and Europipe I and II to Germany were laid during 1990s to meet the growing demand for cleaner energy in Europe. In 2006 Langeled was completed, connecting gas from Ormen Lange to Nyhamna in Norway over to Easington in England.



Stable and flexible Production

Norway has a stable and reliable production capacity due to its well-established and technologically advanced gas reservoir management, including reservoir flexibilities, and the integration between gas and oil reservoirs. This stability improved by flexibility, ensures a consistent supply of gas to European markets. Continuous investments in upgrading and expanding the gas pipeline infrastructure enhance capacity and efficiency, enabling Norway to meet growing energy demands in Europe.

Geopolitical Stability

Norway's political stability and commitment to upholding international agreements contribute to a reliable supply chain, which is essential for European countries that seek to mitigate geopolitical risks associated with energy imports.

Support for Energy Transition

As Europe aims to transition to cleaner energy sources, natural gas serves as a bridge fuel. The availability of Norwegian gas can help meet transitional energy needs while renewable sources are further developed.