



PMI – CHE pipeline

«Clean Hydrogen to Europe» Project of mutual interest

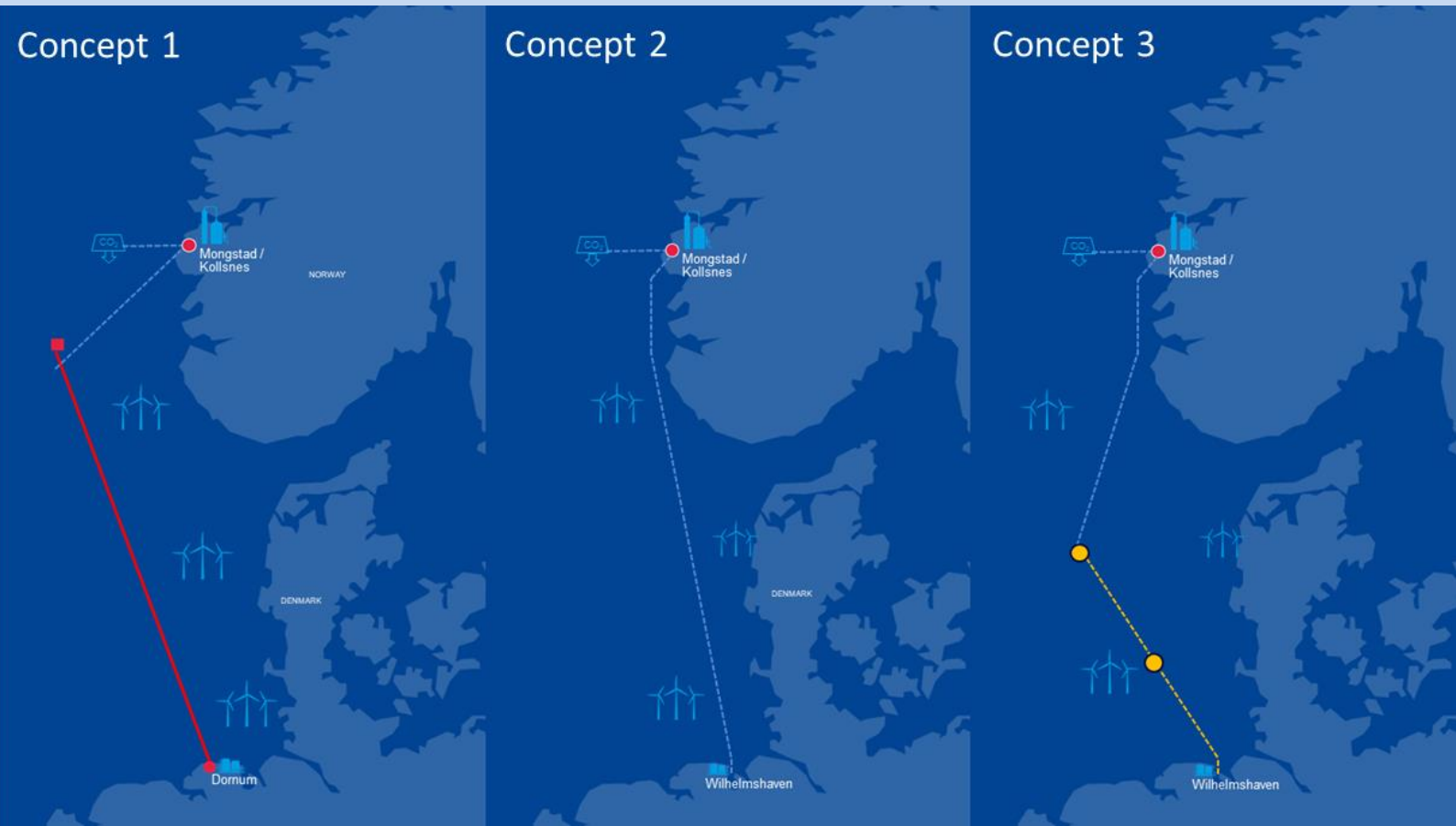
The CHE Pipeline Project aims to build a dedicated open-access high-pressure hydrogen pipeline from the west coast of Norway to northern Germany. The design of the hydrogen transport infrastructure is currently under consideration and will be based on one of the following options: (1) a combination of a newly constructed and repurposed offshore natural gas pipeline, (2) a completely new offshore natural gas pipeline, or (3) a new pipeline connected to the Aquaductus pipeline within the German sector.

In the case of repurposing, a new hydrogen pipeline will be linked to the existing Europipe pipeline through an underwater connection. Currently, three options are being considered for the pipeline section to Germany: (1) repurposing Europipe 1 to Dornum, (2) constructing a new pipeline to Wilhelmshaven (entirely new from the hydrogen facility in Norway to Wilhelmshaven), and (3) connecting to the Aquaductus pipeline.

The project also involves an onshore receiving terminal at the pipeline's connecting point in all scenarios, except for the Aquaductus option, where the terminal will fall under the Aquaductus scope. The transport capacity of a newly built hydrogen pipeline is estimated at up to 18 GW (4 Mt/y of hydrogen). This new infrastructure will facilitate the direct connection of low-carbon and renewable hydrogen produced in the North Sea and Norwegian Sea Basin to the transport pipeline.

Transport concepts

Three concepts are currently under consideration for the project:



Concept 1

A new 360 km, 40-inch offshore pipeline, with an expected maximum capacity of 9 GW, will be constructed from the west coast of Norway to Draupner. The new pipeline will be connected to the existing Europipe pipeline, which will be decommissioned from the natural gas network and repurposed for hydrogen transport. Europipe will also be disconnected from the current receiving terminal in Dornum and connected to a new hydrogen receiving terminal in the same area. Europipe is approximately 600 km long and 40 inches in diameter. The capacity of this concept is pending confirmation from DNV due to ongoing evaluations of Europipe, however, the capacity is expected to range from 8 to 18 GW.

Concept 2

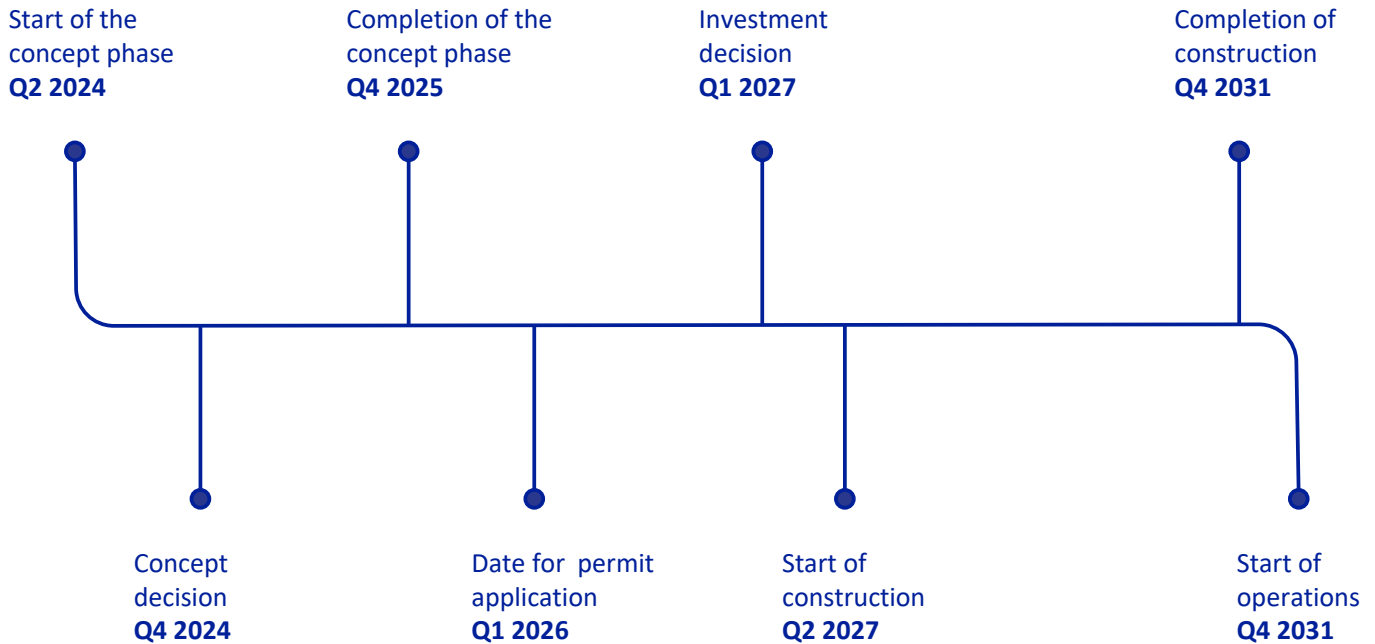
A new 937 km long, 40-inch offshore pipeline will be constructed from the west coast of Norway to a newly built receiving terminal in the Wilhelmshaven area. The capacity of this concept is 18 GW.

Concept 3

A new 600 km long, 40-inch offshore pipeline will be constructed from the west coast of Norway to a tie-in point with Aquaductus at the entrance to the German EEZ (Aquaductus Phase 2). From this point, hydrogen will be transported to a newly built receiving terminal in the Wilhelmshaven area. The capacity of the pipeline from Norway to the Aquaductus tie-in point is 18 GW.

Project timeline

The CHE Pipeline Project is progressing according to the following timeline:



Contact information

Equinor: Julian Phillipp Hauk, juhau@equinor.com

Gassco: Svein-Erik Losnegård, sel@gassco.no



The CHE Pipeline Project is listed as '9.25 Offshore hydrogen pipeline Norway – Germany [currently known as CHE Pipeline]' in [new list of EU energy Projects of Common and Mutual Interest \(europa.eu\)](#) and is also a part of the CH2-4EU PRJ group, which is included in TYNDP 2022 published by ENTSOG.

This document was last updated: 30/05/2024