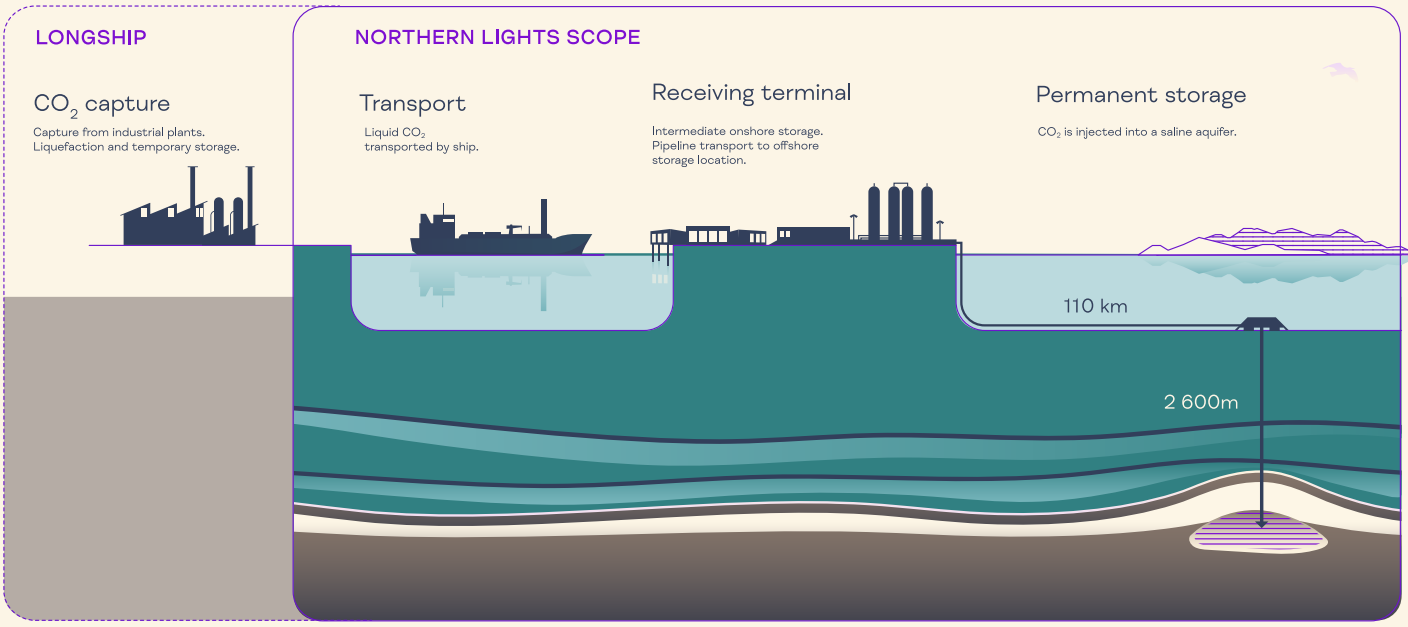
Carbon footprint of the Northern Lights JV CO2 transport and storage value chain

Northern Lights



CARBON FOOTPRINT OF THE VALUE CHAIN

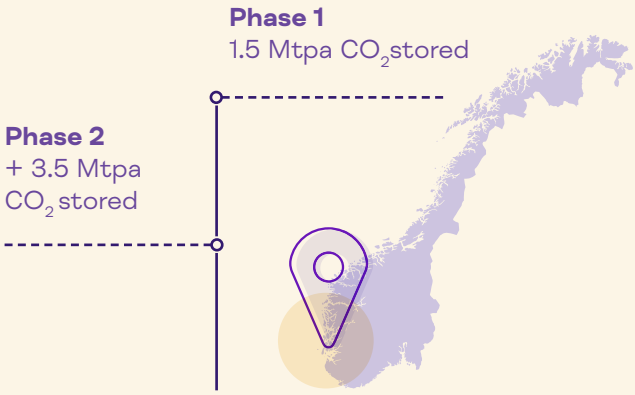
127.8
Mt CO_2
Stored over project lifetime

3.3
Mt CO_2
Lifecycle emissions of the value chain

97.4%
Net abatement potential

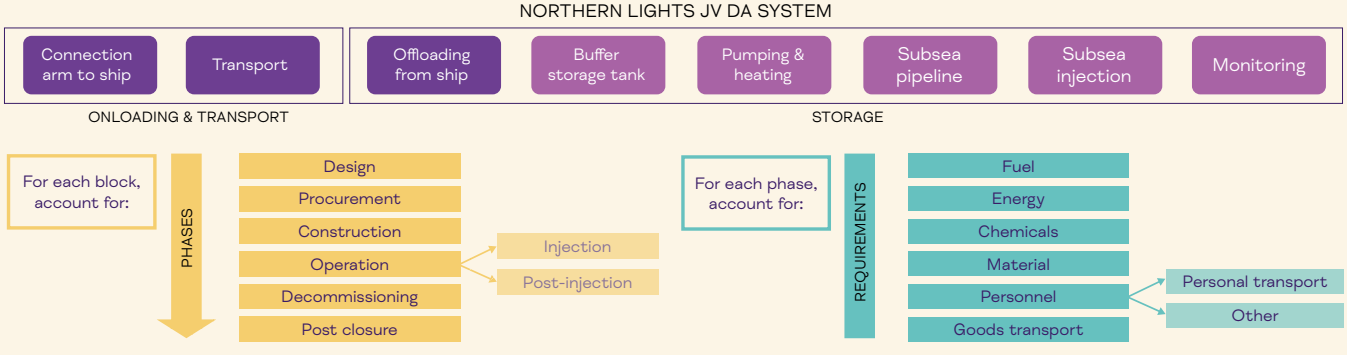
About the project

In December 2020 the Norwegian government committed funding to the development of a full-scale CCS project named Longship, which aims to capture CO_2 from industrial sources in the Oslo-fjord region, transport it to Øygarden onshore terminal, and inject for permanent storage in a deep saline aquifer in the North Sea. Northern Lights JV was established to oversee the transport and storage part of the value chain. Northern Lights JV will deliver CO_2 transport and storage services to other companies across Europe.



About the methodology

The study was performed according to the ISO standards 14040 and 14044, accounting for all the emissions of greenhouse gases induced directly or indirectly during the entire lifecycle of Northern Lights activities. For each activity, the design, procurement, construction, operation, decommissioning, postinjection and post closure phases are assessed.



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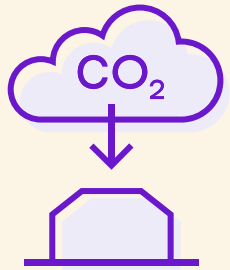
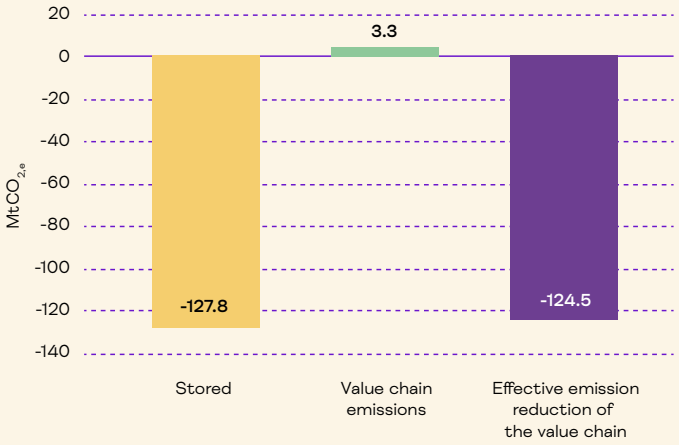
Northern Lights

Value chain assessment

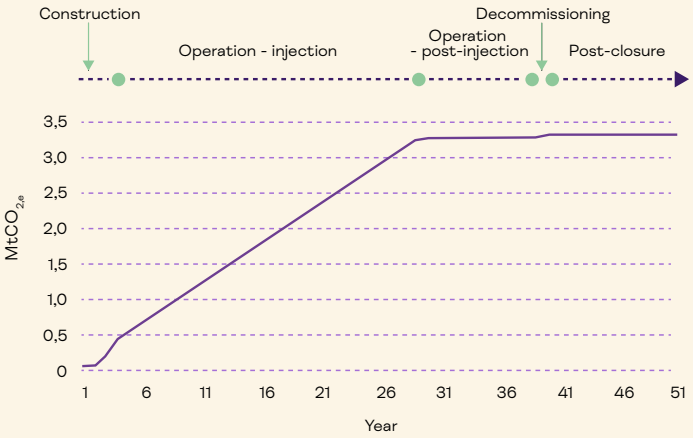


The Northern Lights CCS value chain is a viable concept effectively contributing to GHG emissions mitigation

GHG emissions from implementation and operation of the Northern Lights value chain vs the amount of CO_2 stored

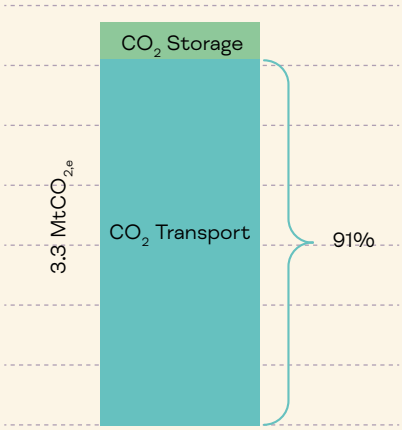


Total cumulative lifecycle GHG emissions from implementation and operation of the Northern Lights value chain

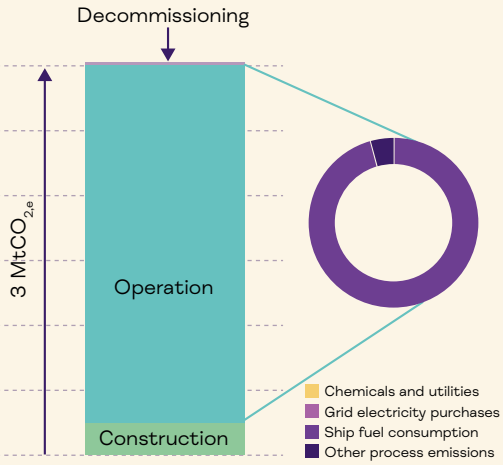


Carbon footprint

Total lifecycle GHG emissions from the whole value chain (Phase 1 & 2)



Total TRANSPORT emissions (Phase 1 & 2)



Total STORAGE emissions (Phase 1 & 2)