

# CO<sub>2</sub> transport by ship

## Report and Guidance Note

**Transporting CO<sub>2</sub> by ship and by inland waterway will be crucial for large-scale CCS deployment in Europe. It will enable European emitters to connect to safe and permanent CO<sub>2</sub> storage.**

**1.300** million tonnes of CO<sub>2</sub> are emitted by large industrial installations in Europe each year. A significant share could be captured and transported to safe offshore storage.

**AT LEAST 50%** of potential CO<sub>2</sub> storage in Europe is under the North Sea. And whilst there are other storage options across Europe, their long distances from CO<sub>2</sub> emission sources make a pipeline network uneconomic. Moreover, some EU states forbid onshore storage of CO<sub>2</sub>, making the transport of CO<sub>2</sub> to offshore storage sites imperative.

*In order to achieve climate neutrality, a CO<sub>2</sub> shipping market must be developed.*

### Key recommendations

- 1/ Establish common standards for CO<sub>2</sub> temperature, pressure, and composition.**  
This will enhance collaboration across the value-chain and reduce uncertainty.
- 2/ Adapt existing standards and guidelines for the transportation of liquified CO<sub>2</sub> with CCS.**  
This will ensure that current frameworks are able to respond to the high-volume transport flows that we need to decarbonise.
- 3/ Support early CCS projects that need to use shipping to transport CO<sub>2</sub> to the storage site.**  
Guidance documents that accompany legislation must be adapted to reflect the new realities of a fast-developing European carbon capture industry.

This report is the outcome of extensive and inclusive stakeholder consultation within the Zero Emissions Platform, a European Technology and Innovation Platform. [Click here to learn more about how ZEP functions.](#)

