

# Scaling CCS

Hanne Rolén

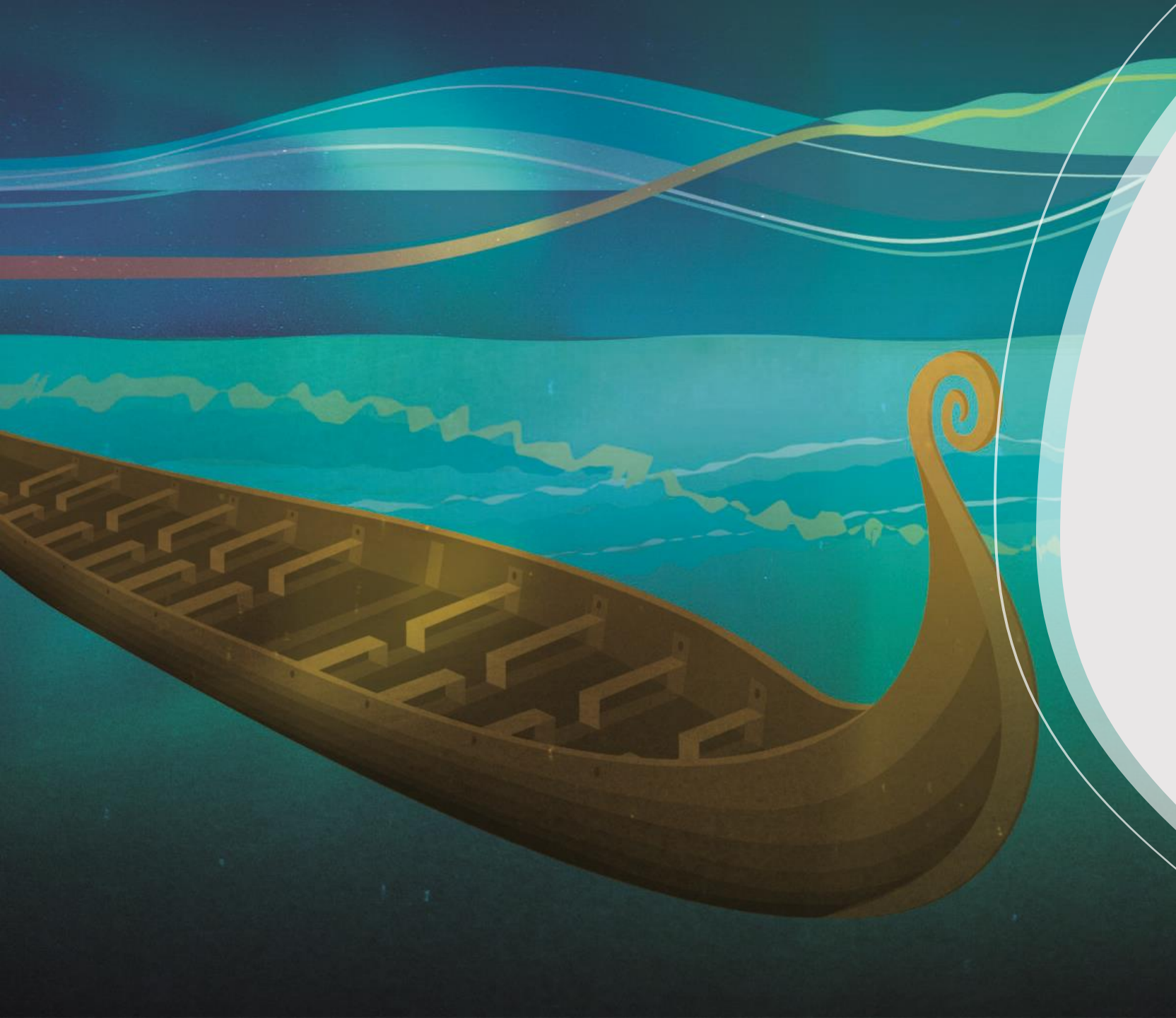
President Norwegian CO2 Association



## About us

“Actively contribute to promoting the understanding and importance of the potential for capture and storage of CO<sub>2</sub> in Norway and Europe through the sharing of knowledge and information, including the entire value chain of the Longship project to promote scaling.”





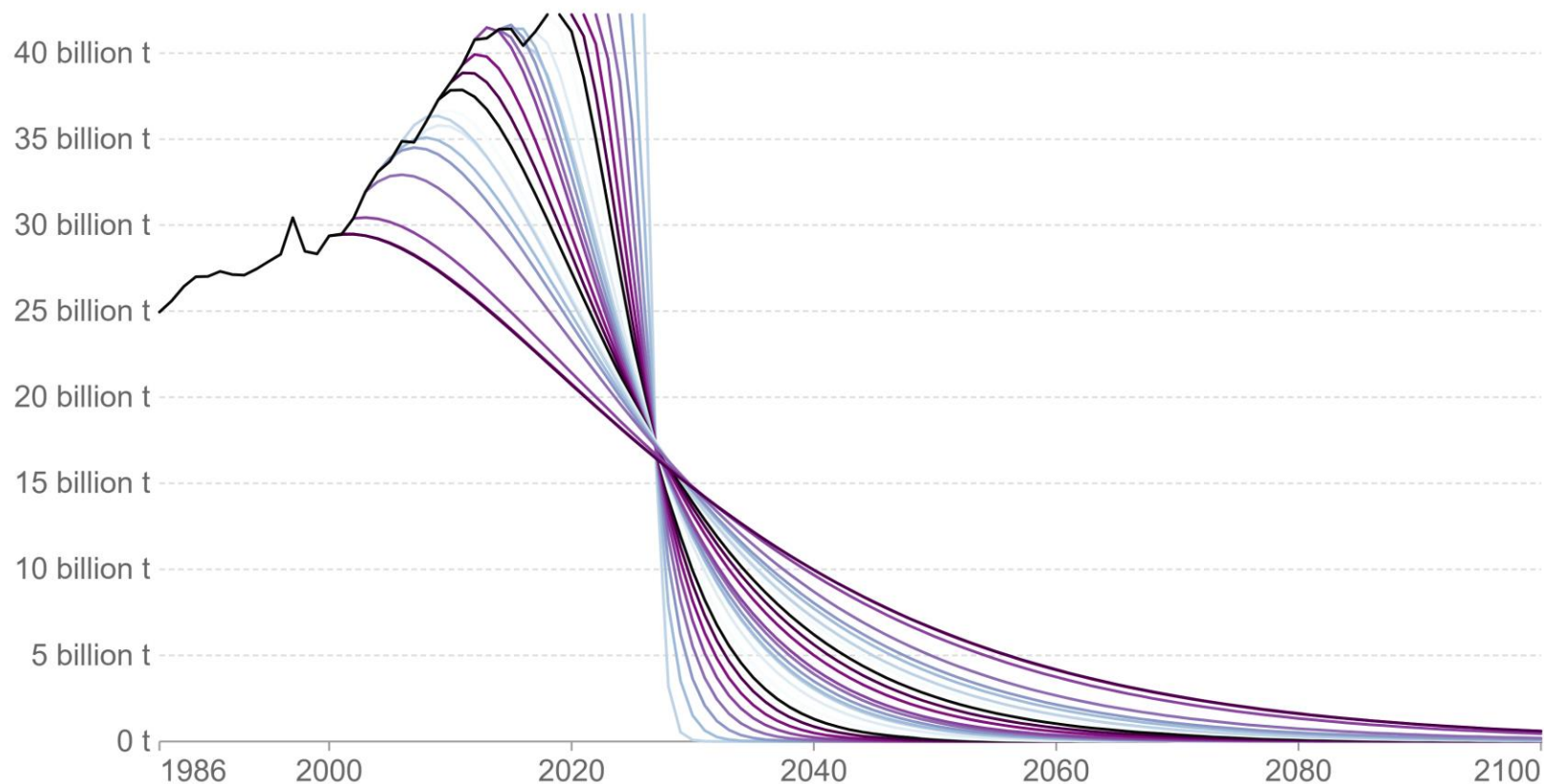
# Longship Norwegian full- scale CCS project

- Capturing CO<sub>2</sub> at Norcem HeidelbergCement, Brevik, and at Celsio W2E, Oslo
- Transport by vessel
- Permanent storage under the seabed
- Full value chain in operation mid 2024

## CO<sub>2</sub> reductions needed to keep global temperature rise below 1.5°C

Annual emissions of carbon dioxide under various mitigation scenarios to keep global average temperature rise below 1.5°C. Scenarios are based on the CO<sub>2</sub> reductions necessary if mitigation had started – with global emissions peaking and quickly reducing – in the given year.

Our World  
in Data

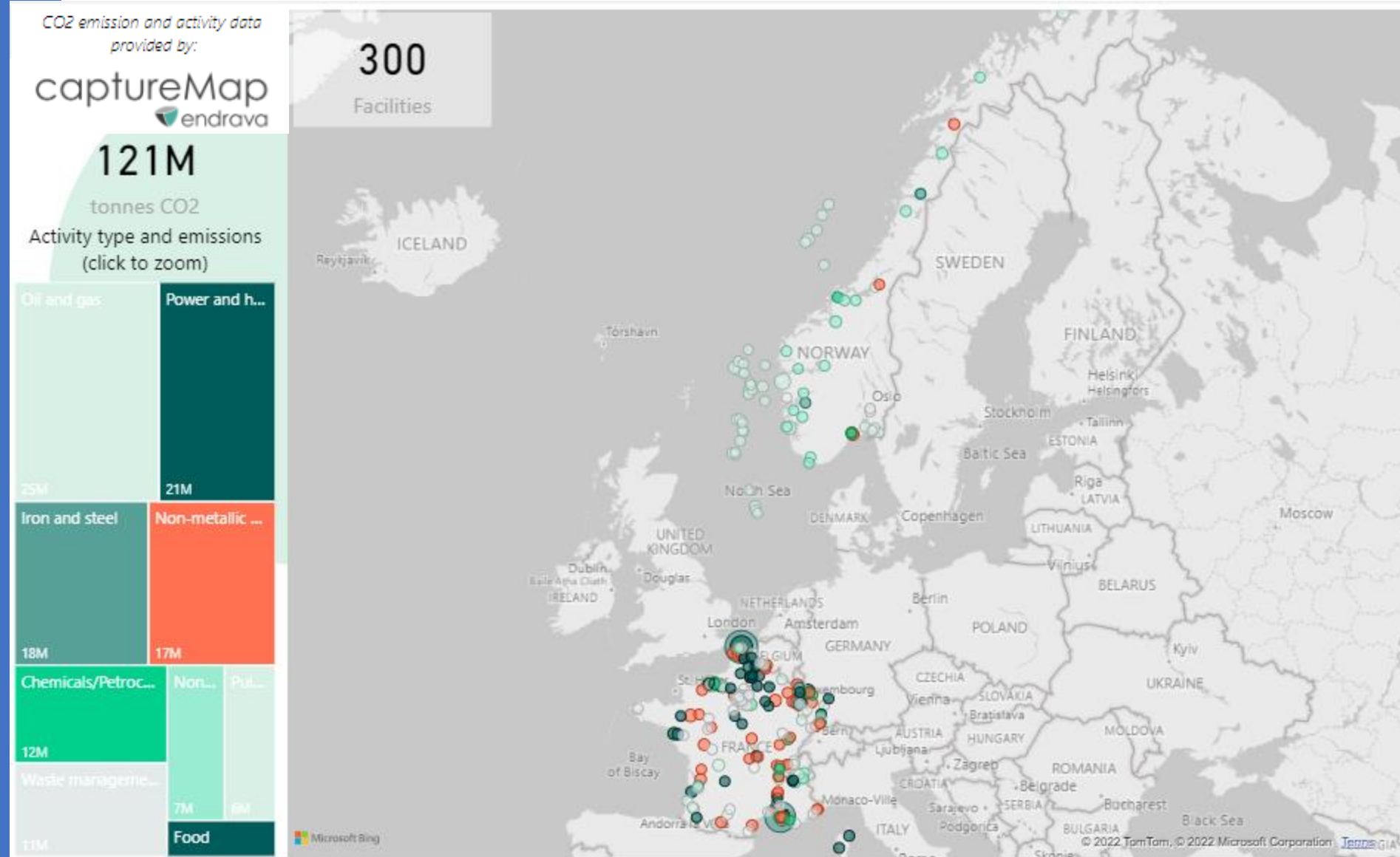


Source: Robbie Andrews (2019); based on Global Carbon Project & IPCC SR15

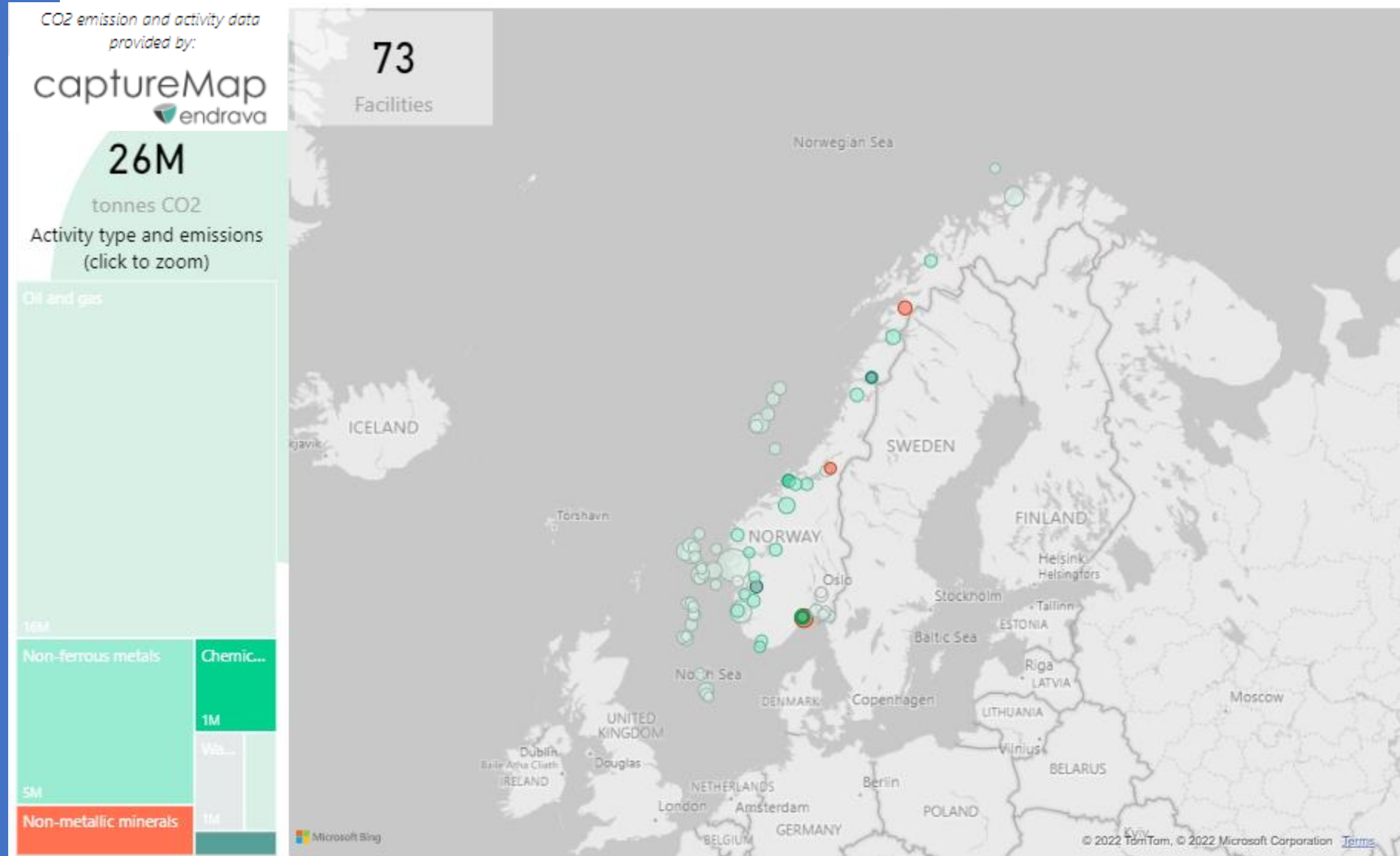
Note: Carbon budgets are based on a >66% chance of staying below 1.5°C from the IPCC's SR15 Report.

OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

# Others to follow



# Others to follow - Norway







# From 'why' to 'how'

Building on Longship

# Enabling scaling



Targets and  
Predictability



Business Case



Voluntary market for  
carbon removals



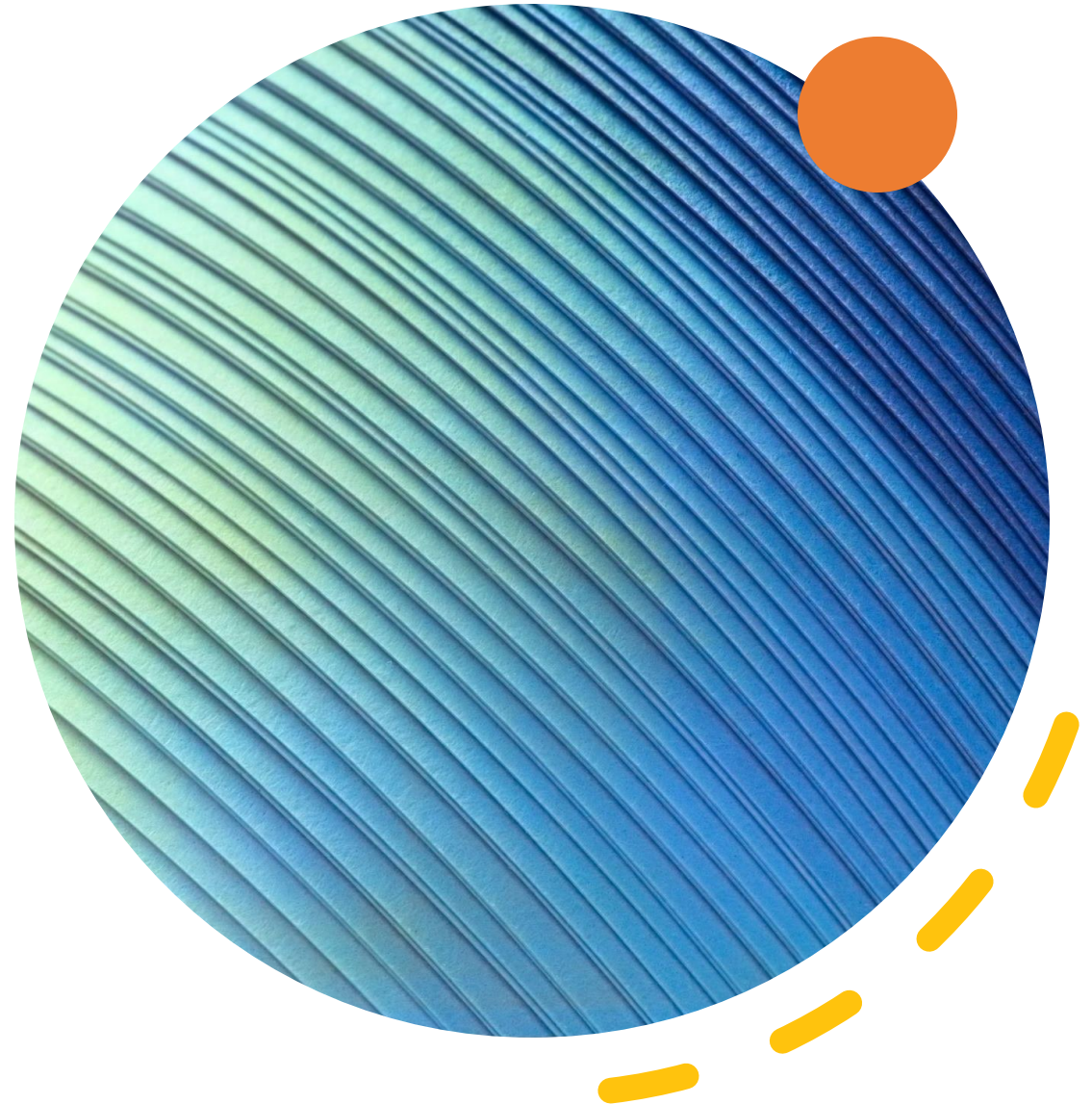
Regulations and  
Permitting



Infrastructure



Support mechanisms







Thank you!