



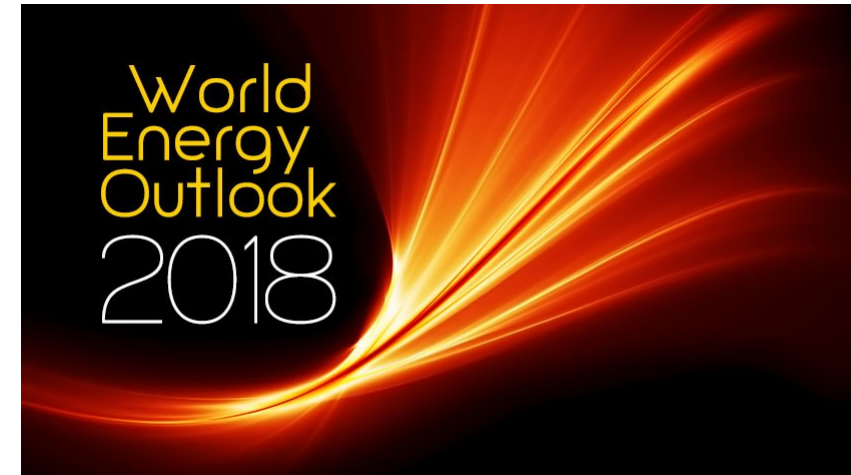
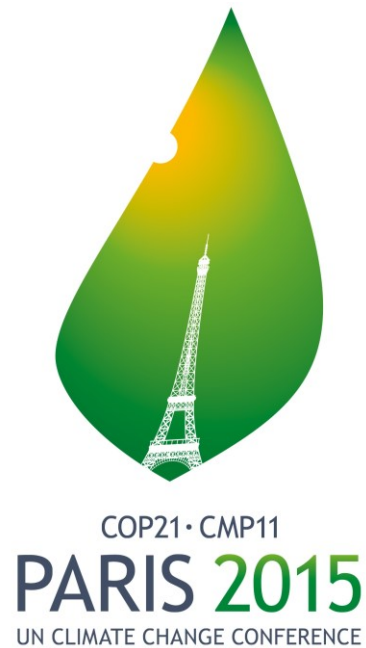
Norwegian Ministry
of Petroleum and Energy

Carbon Capture and Storage in Norway and international cooperation

Tallinn, 23 October 2019, Baltic Carbon Forum



CCS is a necessary part of the solution



Norwegian CCS-strategy – a broad approach

FoU

DEMO

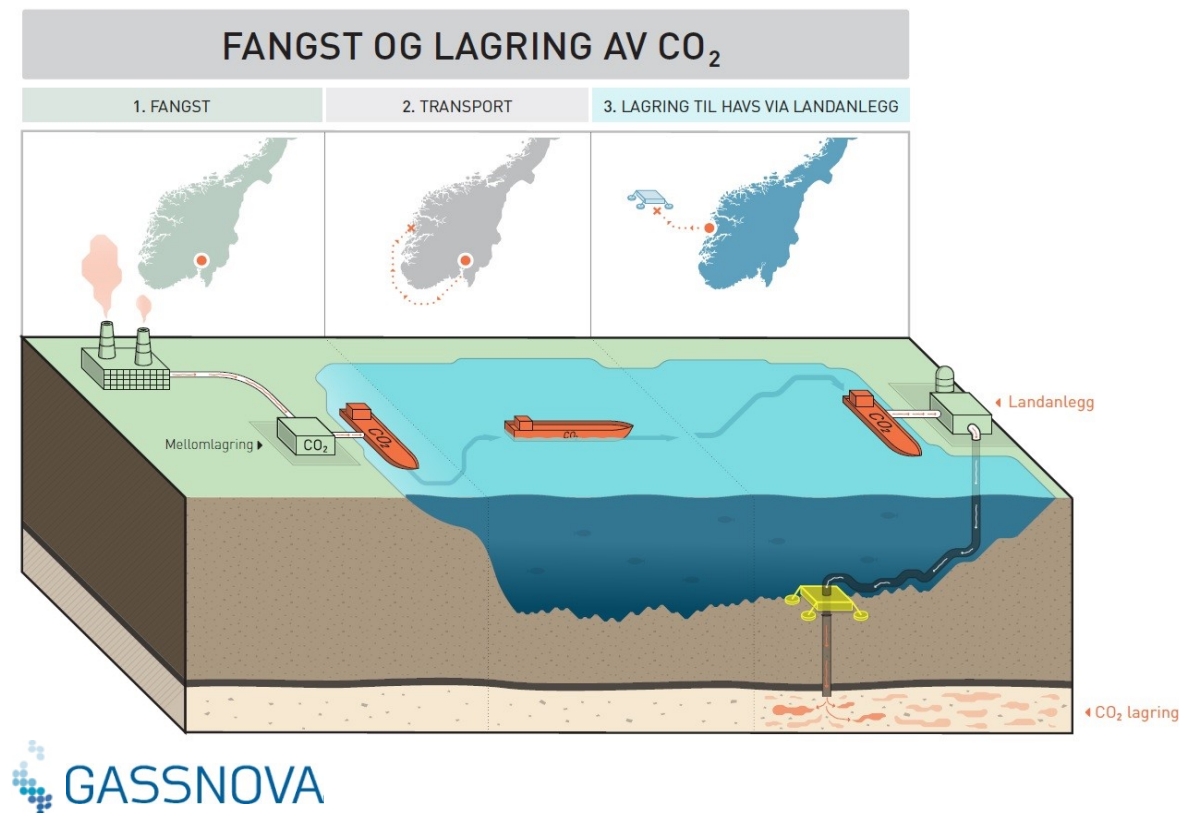
LARGE SCALE



CLIMIT
FORSKNINGSRÅDET OG GASSNOVA



CO₂ TECHNOLOGY CENTRE MONGSTAD



Large scale CCS in Norway

"...realise a **cost-effective** solution for full-scale CCS in Norway, provided that this incite **technology development in an international perspective**".

Solberg Government's Political Platform

Our aim for a CCS project in Norway:

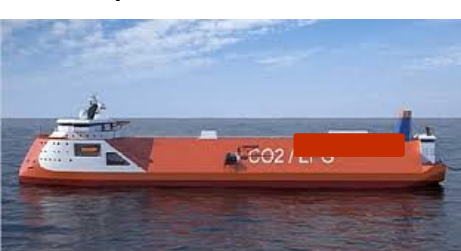
- Demonstrate a full chain of capture, transport and storage of CO₂ – with acceptable costs
- Demonstrate CO₂ capture in existing industry
- Establish a flexible storage solution with excess capacity
- Provide cost and risk reductions for subsequent CCS projects



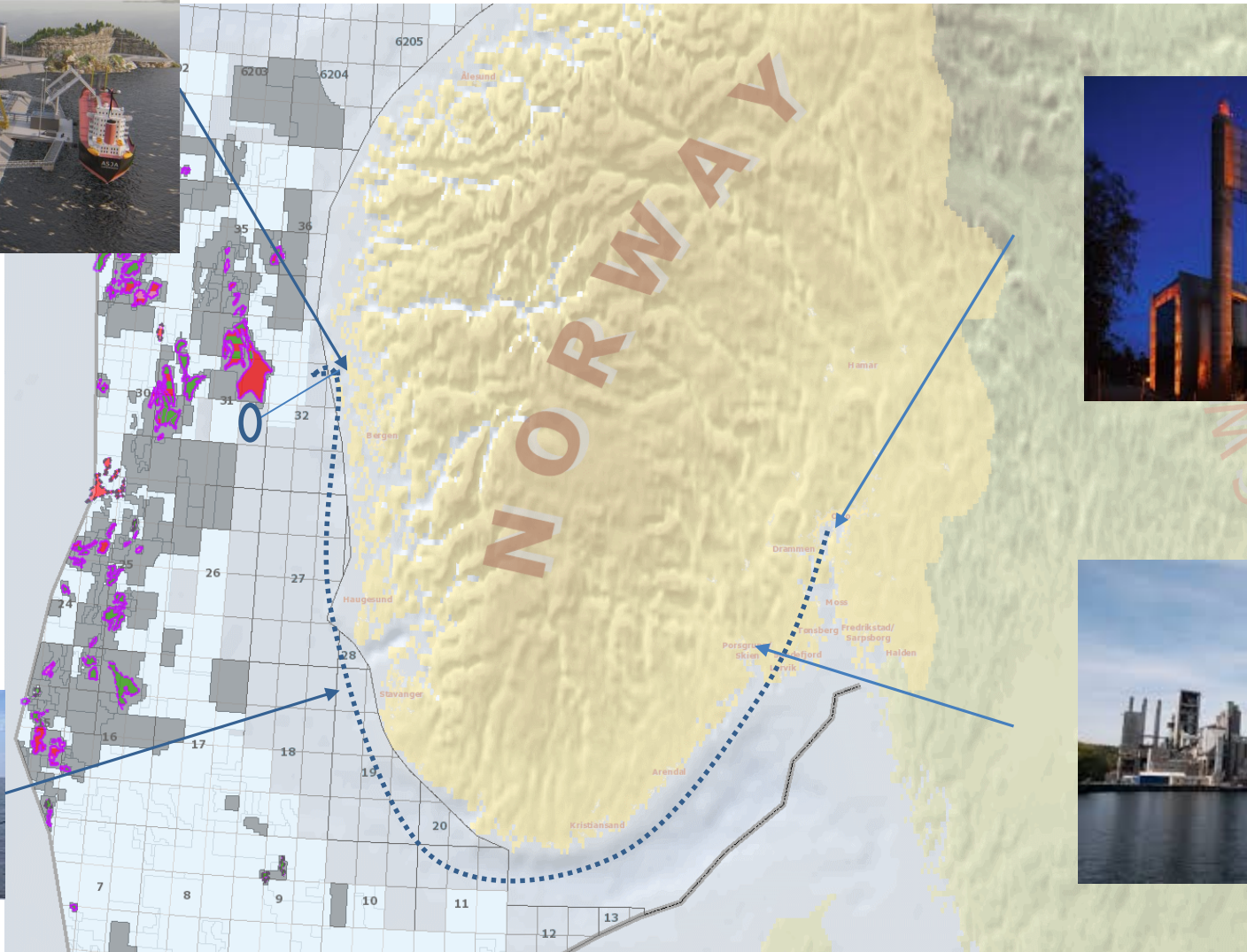
The Norwegian CCS demonstration project



Ship transport from capture to storage terminal – pipeline to offshore storage complex



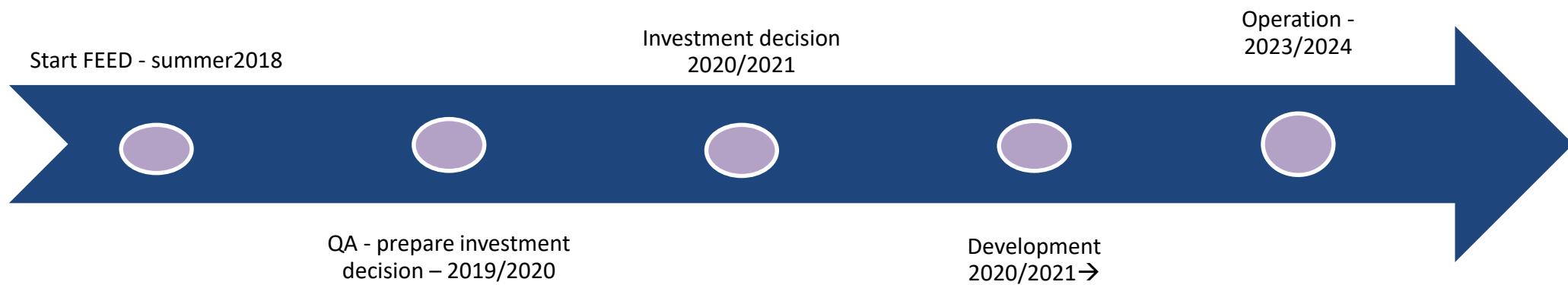
Olje- og energidepartementet



Waste-to-energy
400 000
tonnes CO₂
per annum



Cement
production
400 000
tonnes CO₂
per annum



Challenges

Final Investment Decision - Crucial Aspects:

- 1) Results from FEED, including quality, costs, risks,
- 2) Expected learning effect vs. resources spent:
Will the Norwegian CCS project make a significant contribution to international use of CCS?
- 3) Political acceptance and support
- 4) Sharing of costs and risks
- 5) ~~The London Protocol~~



ccsnorway.com





Norwegian Ministry
of Petroleum and Energy

Thank you for listening

