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What does it take to demonstrate CCS?

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Man. Dir.



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The Norwegian State enterprise for carbon capture and storage



Challenges in the CCS value chain



Cost

- ✓ Technology development
- ✓ Scale up & verify
- ✓ “First of its kind”

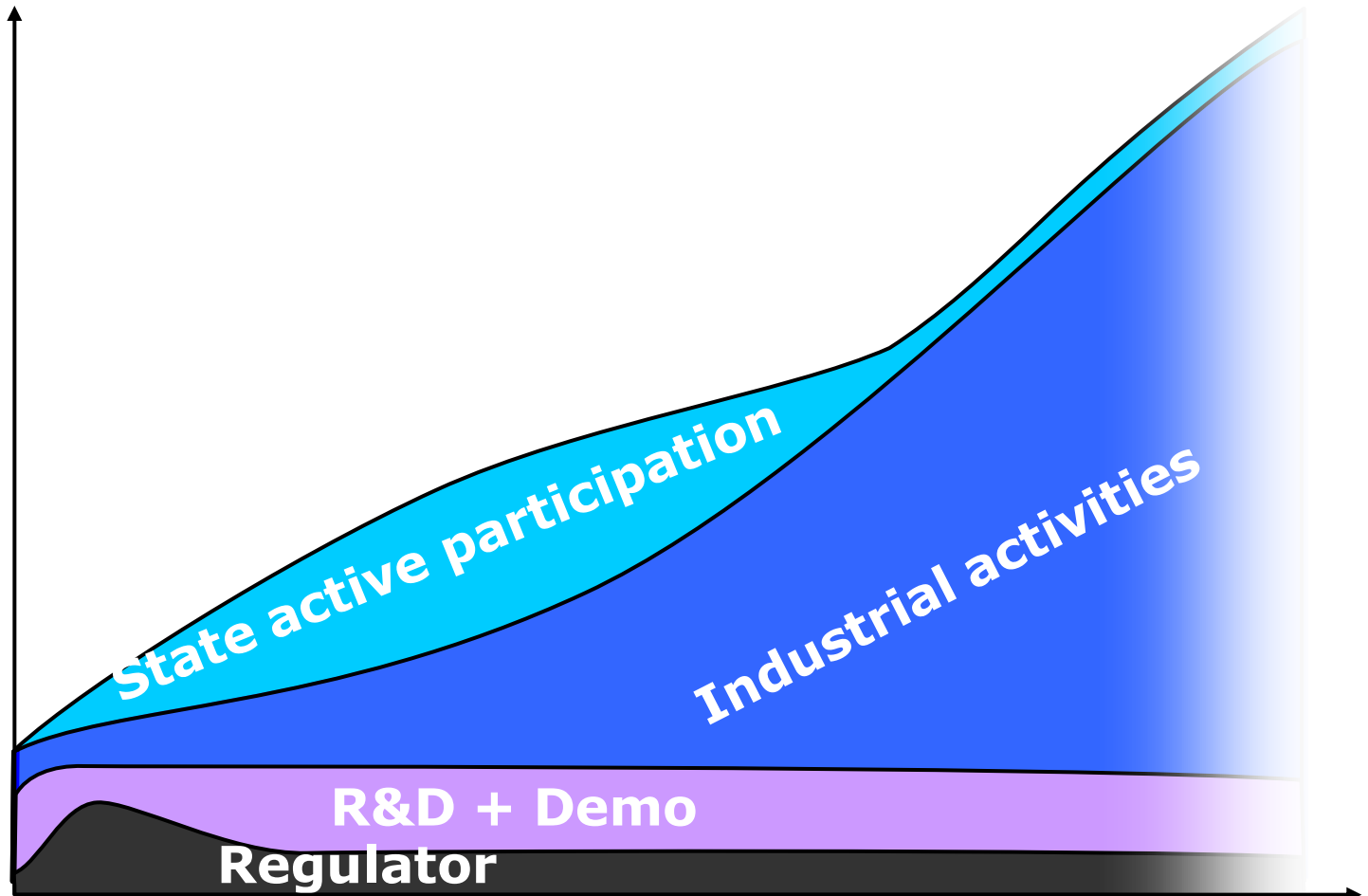
Confidence

- ✓ Methods
- ✓ Demonstration
- ✓ legislation



Govt. role in CCS

Costs



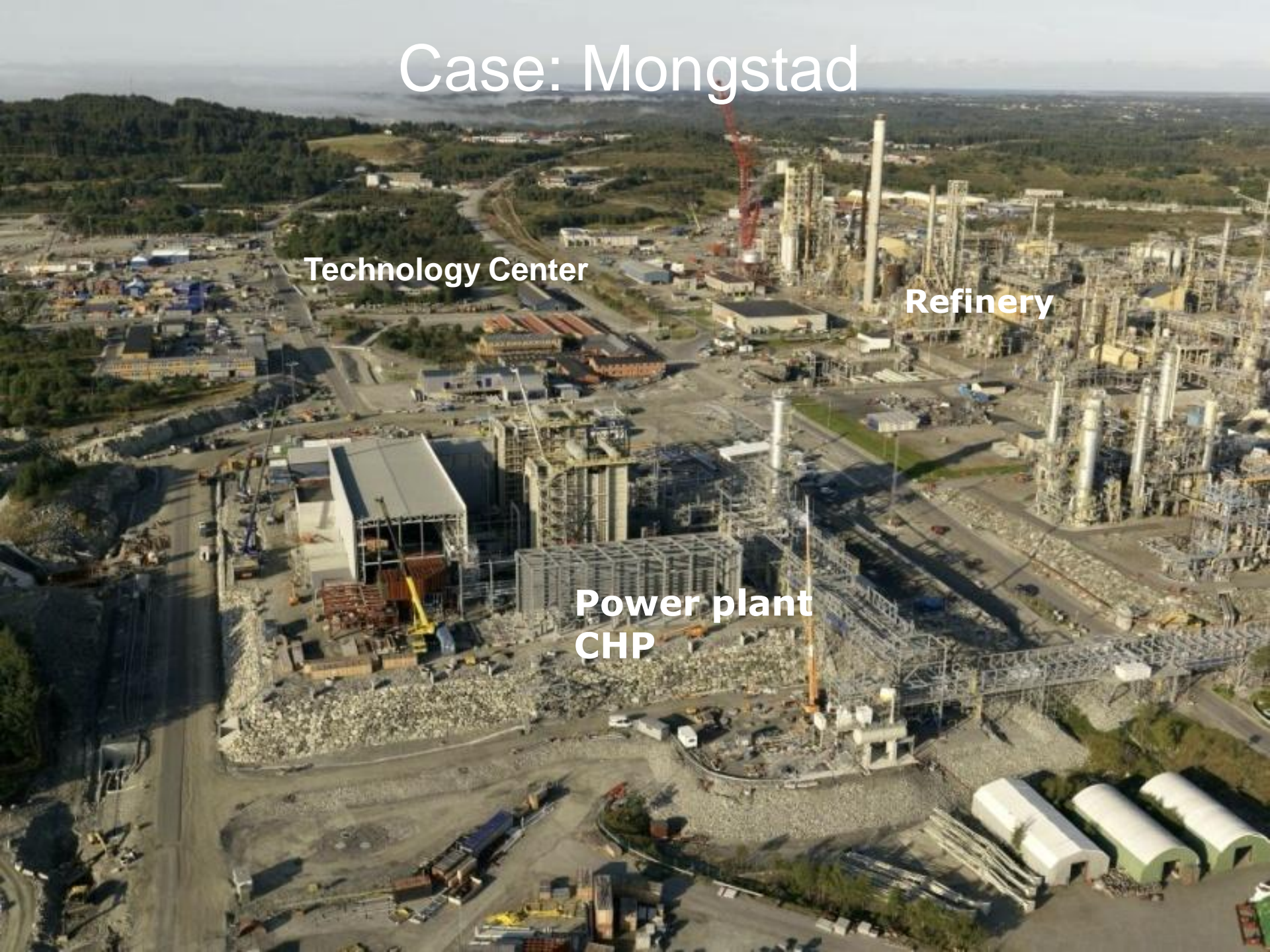
Time

Case: Mongstad

Technology Center

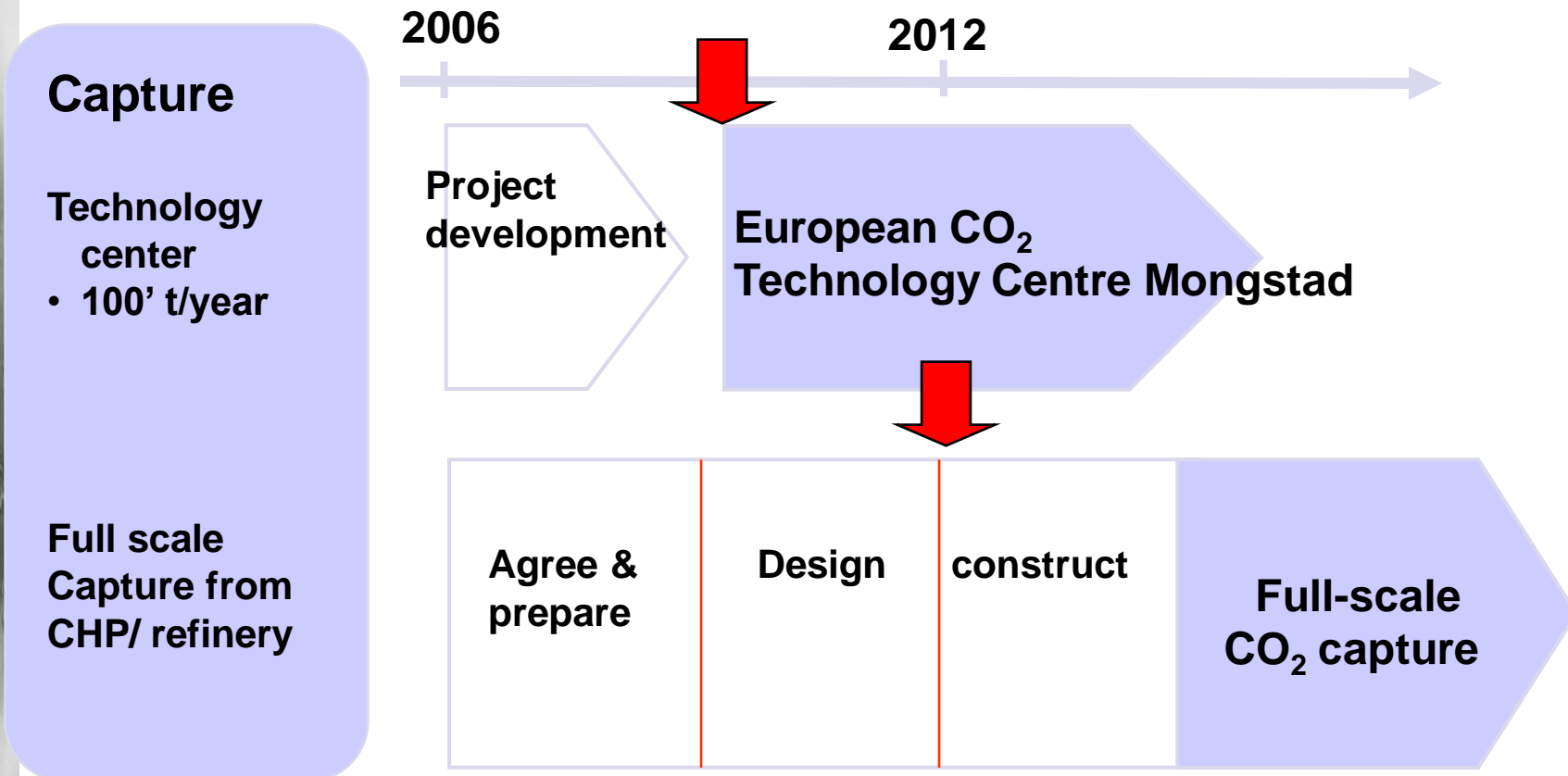
Refinery

Power plant
CHP





Mongstad agreement 2006 Statoil and the Norw. Government Two stages



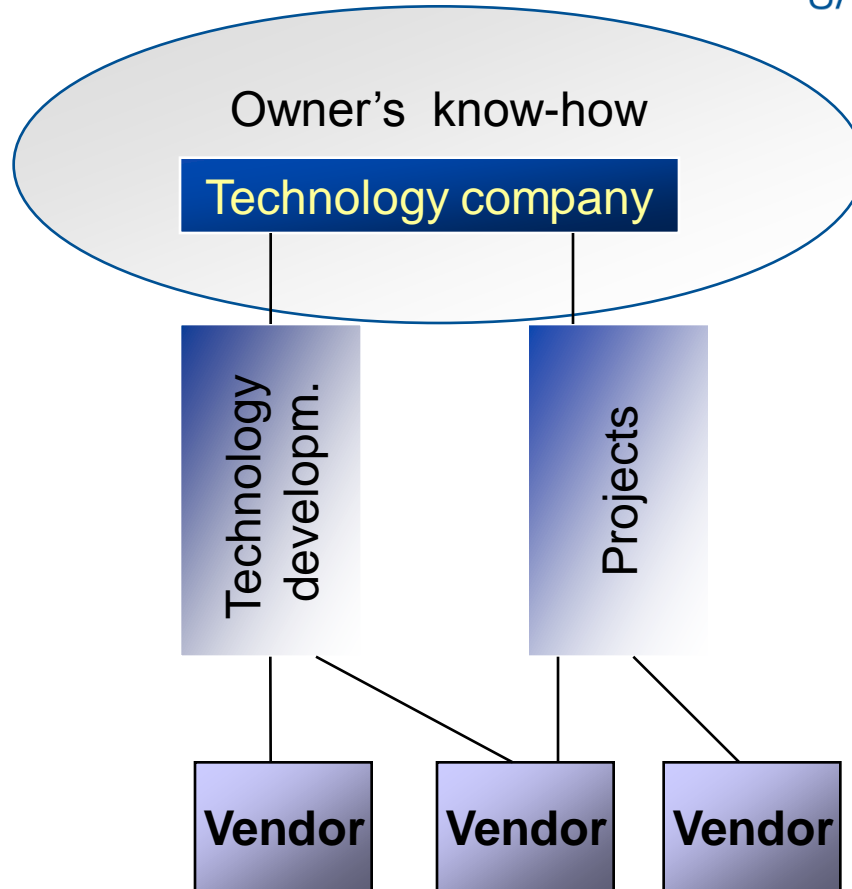


European CO₂ Technology Centre Mongstad (TCM)

StatoilHydro



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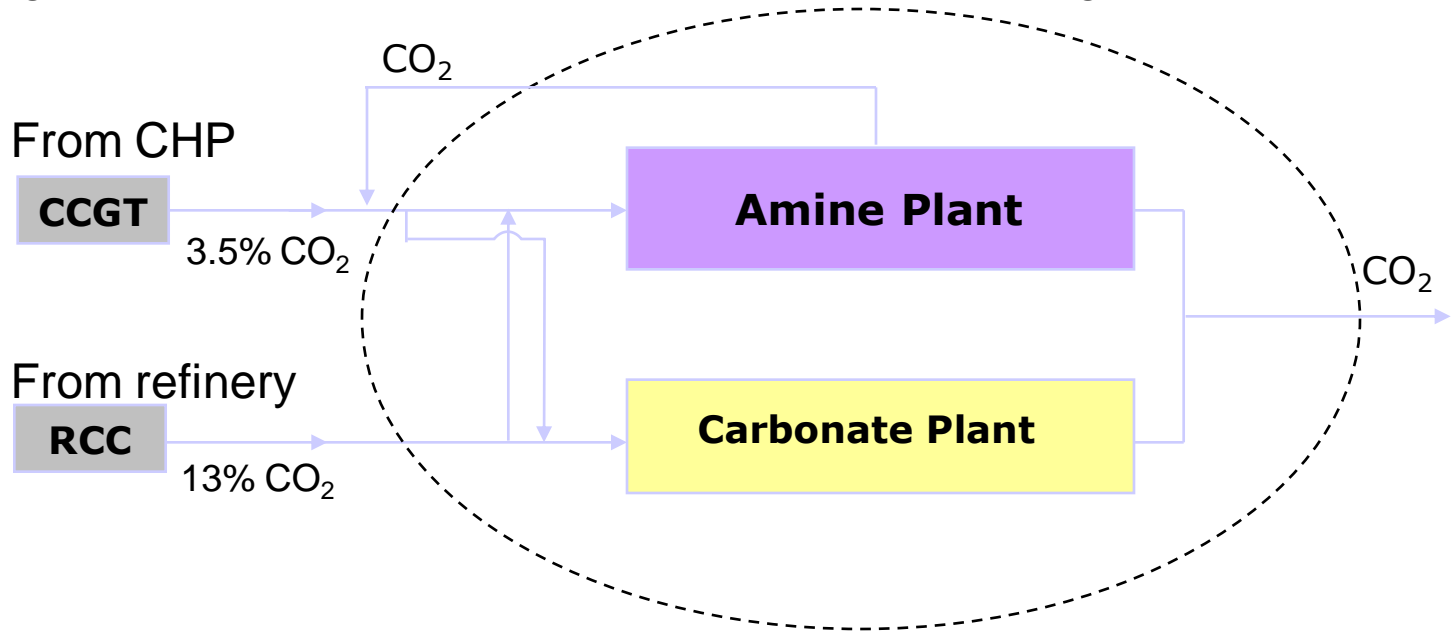
- Government and industry: technology users
- Owners contribute with know-how, resources and capital



TCM: flexible technology centre

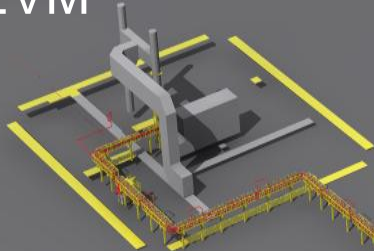
2 x gas sources

2 x capture technologies

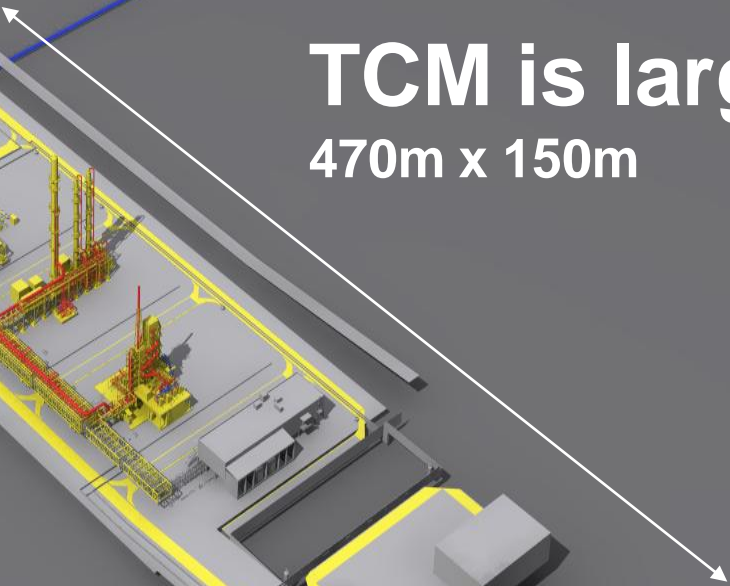


Capacity: 100.000 t/yr CO₂

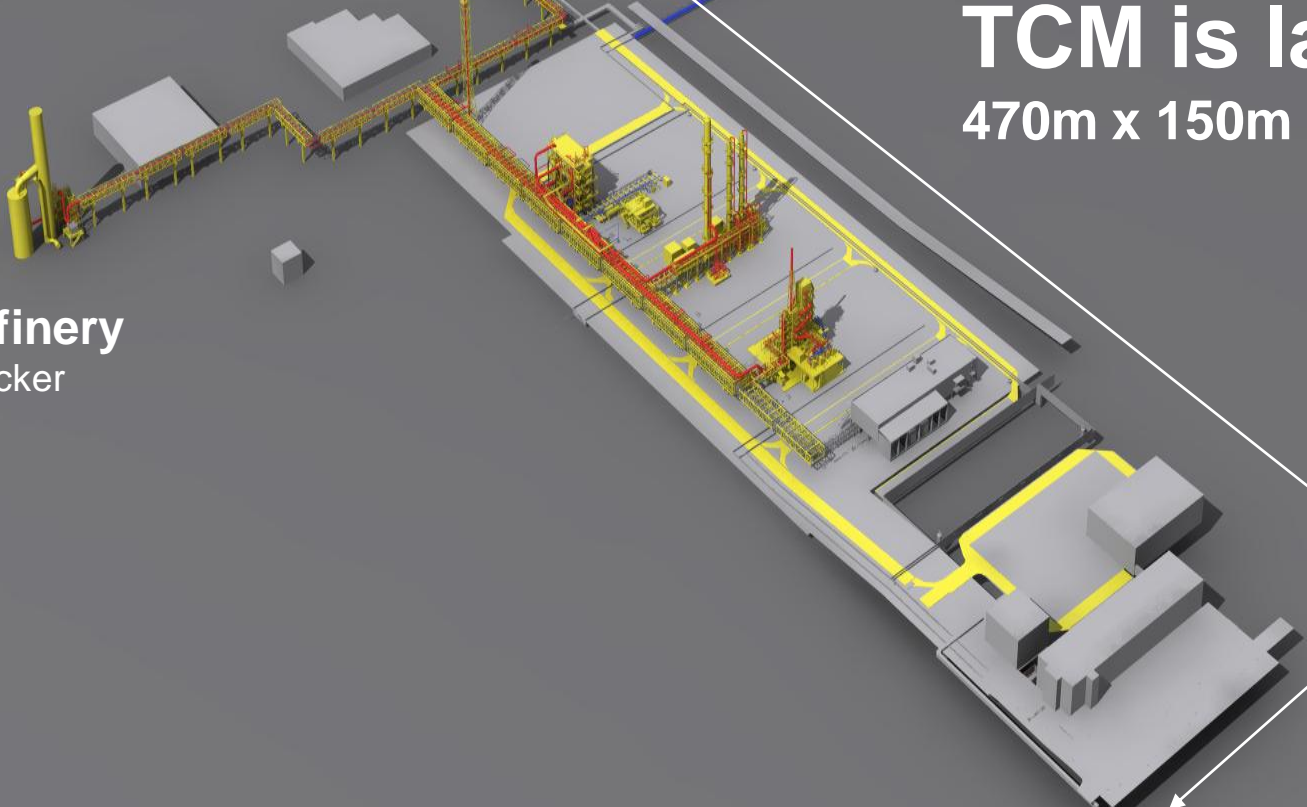
Power Plant
EVM

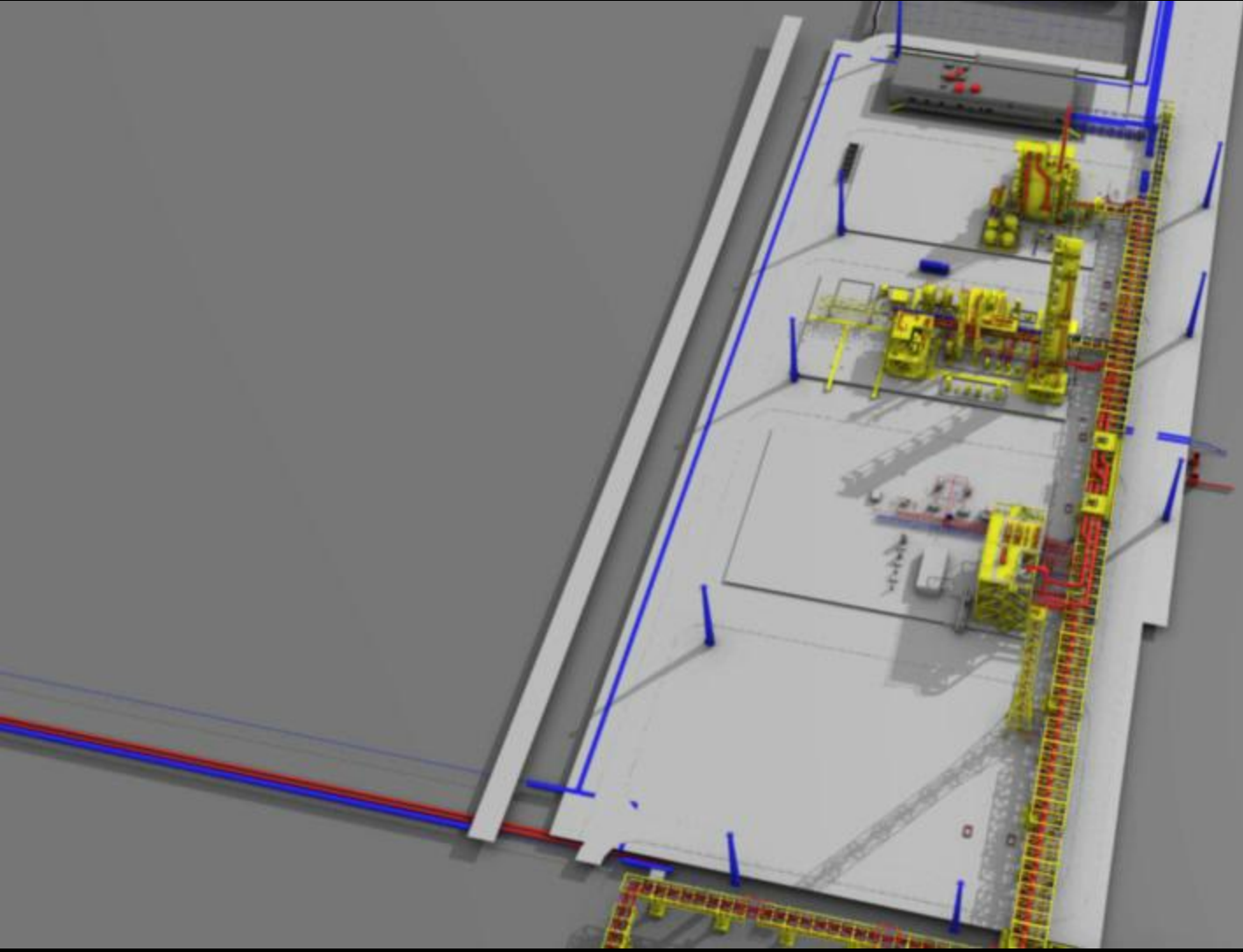


TCM is large
470m x 150m



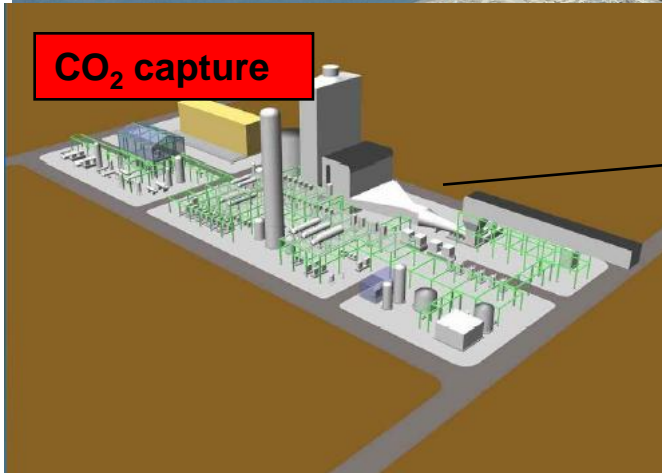
Refinery
Cracker





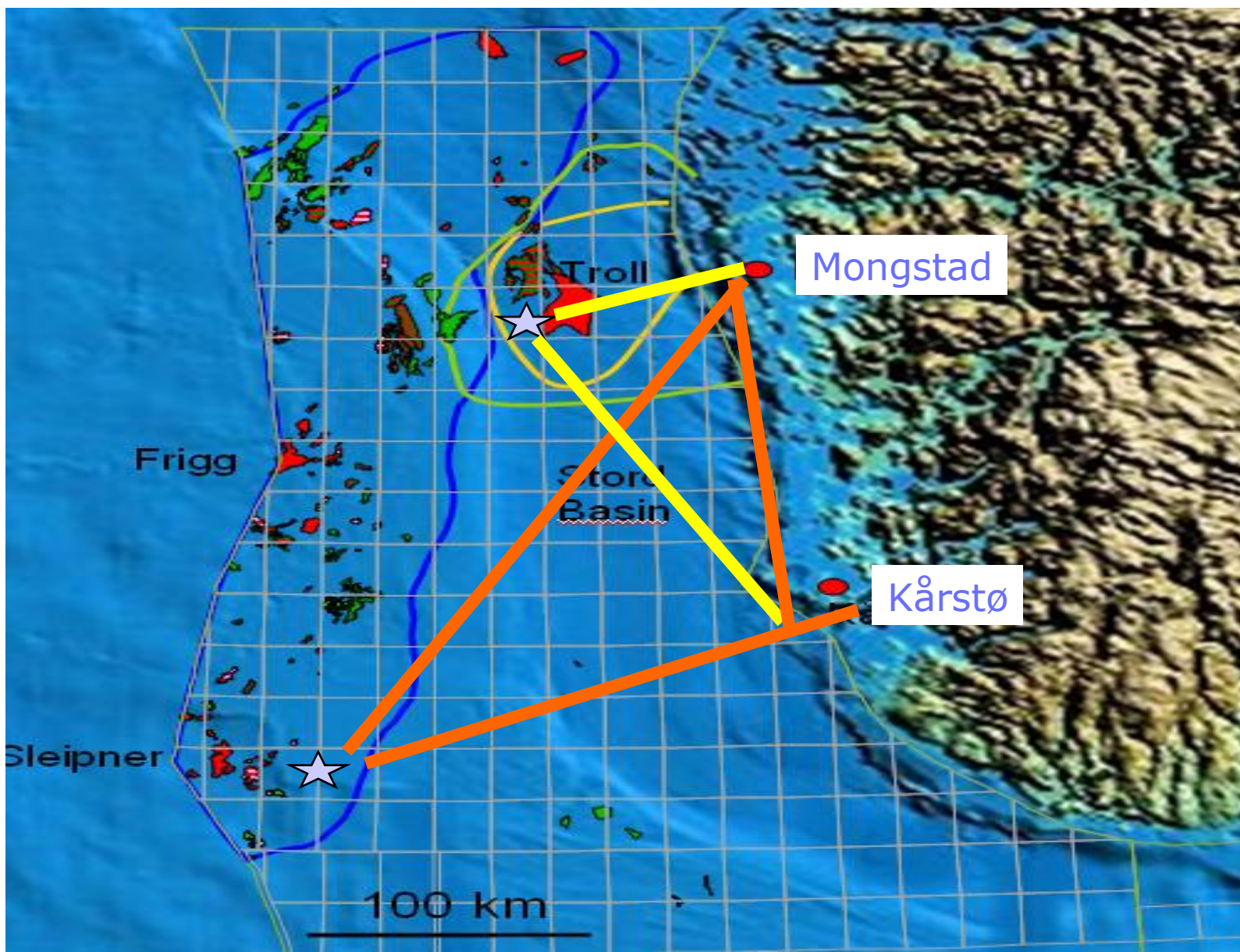


CO₂-capture at Kårstø



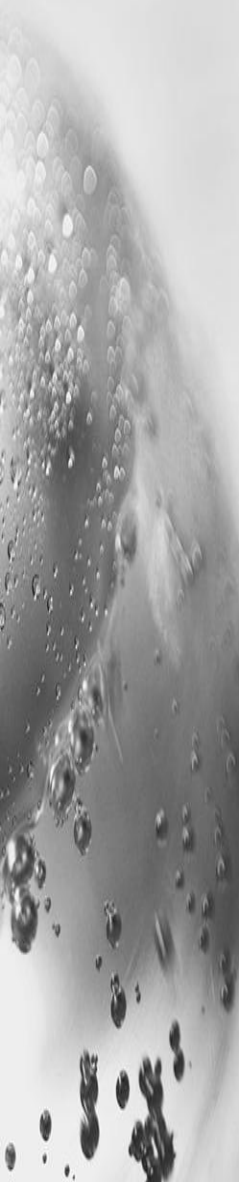


Transport and storage of CO₂





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