Status of European CO₂ Technology Centre Mongstad (TCM)

Tore Amundsen

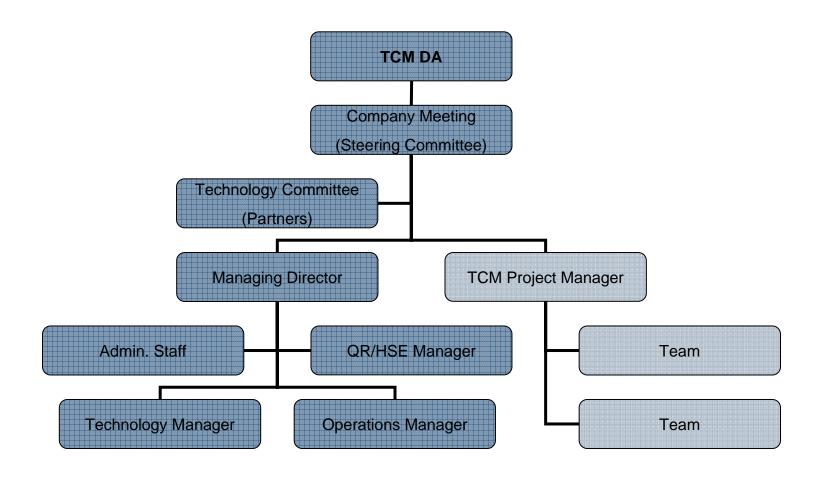
Managing Director

London, 11th October 2009

Background

- Norwegian policy: Carbon based power production (on shore)
 must have CCS
- Government recognized capture technologies are immature
- Government and Statoil agreed to establish centre to test and demonstrate technologies (2006) and split costs 80/20
- Shell joined partnership and planning commenced (2007)
- Investment decision made and TCM company established in June 2009
- o Capex budget approximately USD 800 million
- Scheduled to be in operation 2011/2012 with annual Opex of approximately USD 40 million

TCM Organisation



Scope

Build two process plants (amine and chilled ammonia) enabling capture of CO2 from different flu gas sources (3,5% - 14% CO2) with a total capacity of 100.000 tons of CO2.

International Co-operation

The Norwegian State trough Gassnova SF (77,56%)



StatoilHydro ASA (20%)



o A/S Norske Shell (2,44%)



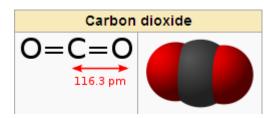
 Other potential partners will be invited

Mongstad

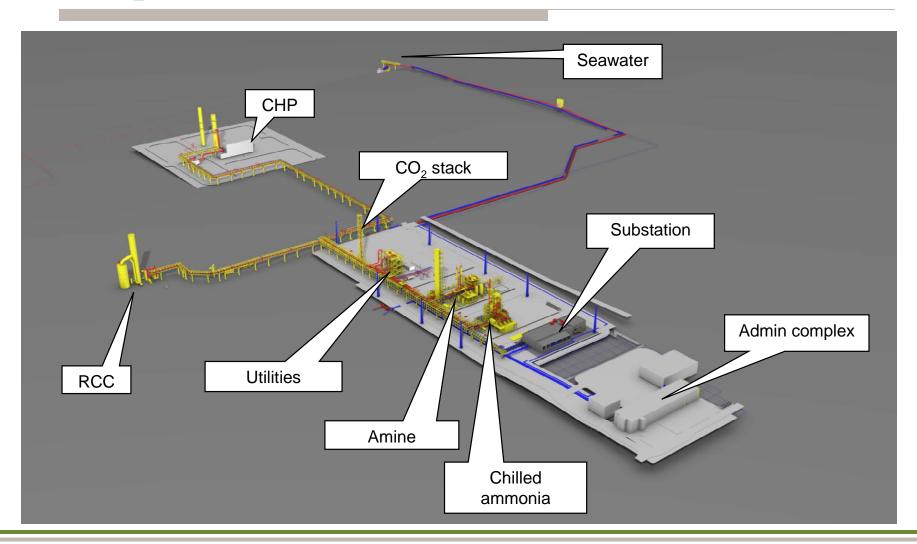


TCM Ambitions

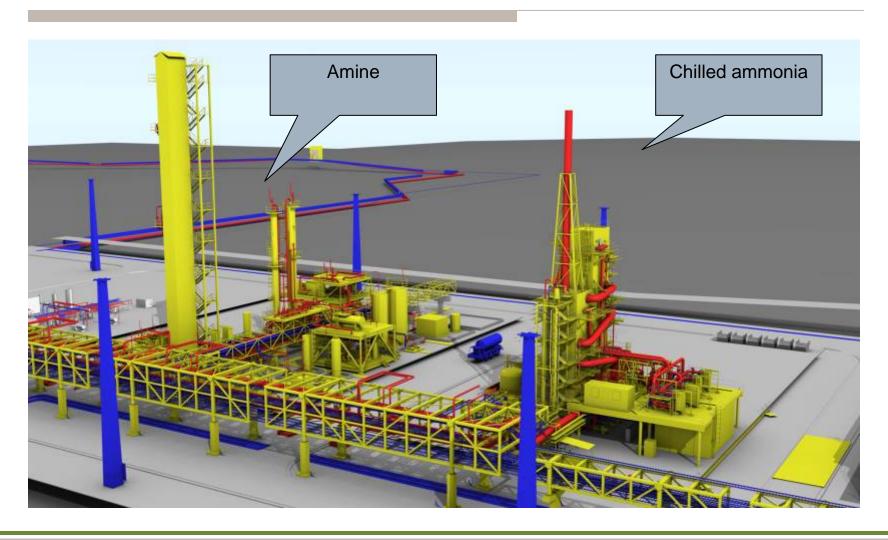
- Develop technologies for CO₂ capture capable of wide national and international deployment
- Reduce cost and technical, environmental and financial risks related to large scale CO₂ capture
- Test, verify and demonstrate CO₂ capture technology owned and marketed by Vendors
- Encourage the development of technology and vendors



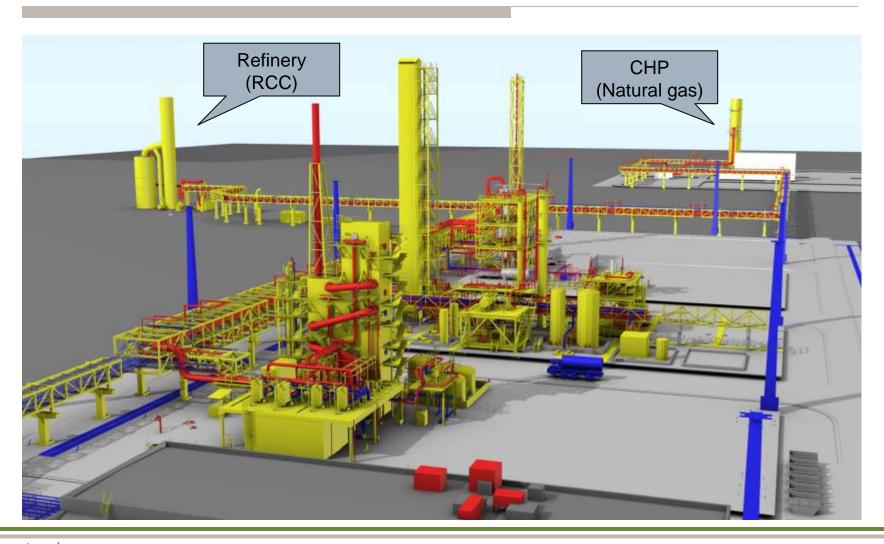
Plot plan -63.000 m2



Two Technologies



Two CO₂ sources



European CO₂ Technology Centre Mongstad (TCM)

Schedule

	2009	2010	20	11	2012	2013	2014
Amine	Construction			Tes	sts by ACC	Test by	TCM
Carbonate	Construction				Tests by	Alstom	TCM
3 rd technology						To be o	decided

Key messages

- European CO₂ Technology Centre Mongstad will be an important driving force in the qualification of large-scale capture technology and development of improved technology
- > TCM is approved and under construction
- Relative to existing and scheduled pilots/demos, TCM can test effects that depend on scale with a higher accuracy at a larger variety of flue gasses.
- TCM's plants will have a large degree of flexibility which gives many opportunities for the test program
- > More information in GHTG-9 article and www.tcmda.no

Europeisk CO₂ Teknologisenter Mongstad (TCM)

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Thank You!