**Technology Centre Mongstad Project Information**

**Project Developer Website**

Gassnova, Equinor, Total, and Shell www.tcmda.com

**Project Location**

­Mongstad, Norway

**Project Type**

CO2 Capture (Test Facility)

**Project Description**

Technology Centre Mongstad (TCM) offers the world´s most advanced and flexible large scale test arena for CO2 capture technologies. TCM aims to help reduce the cost and risks of CO2 capture technology deployment by providing an arena where vendors can test, verify and demonstrate proprietary CO2 capture technologies. TCM aims to be the preferred verification partner for CO2 capture technologies internationally.

**Operational Status**

Operational (began operations in 2012, now in its third operating period 2020-2023)

Pilot-scale testing: TCM has completed two operating periods (guide by a “Participant’s Agreement) since its start-up in 2012. The current owners, Gassnova, Equinor and Shell, have all been in TCM since the start-up. Total joined the partnership in 2017.

**Technology Description**

TCM provides industrial testing with two live flue gas sources in a single purpose-built facility with 24/7 operations. TCM’s CO2 capture facilities consists of one generic amine plant, one chilled ammonia plan and a site for modular, emerging technologies (under completion 2020). The two industrial flue gas sources are: Equinor’s Refinery Residue cracker (13 % CO2), and an associated combined heat and gas turbine power plant (3.5% CO2). The latter is being revamped for heat generation in 2020.

Since the operational start-up in 2012, Aker Solutions (Norway), Alstom SA (France), Cansolv Technologies Inc (Canada), Carbon Clean Solutions (UK/India), ION Engineering (USA) and Fluor Corporation (USA) have tested their proprietary technologies at TCM. In addition, a number of open source test campaigns have been executed resulting in several dozen accredited publications on CO2 capture technology performance.

**TRL Progression**

TCM looks at technologies nearing maturity for market deployment, typically Starting at TRL 4 and targeting TRL 6 (i.e. progressing from ‘laboratory’ to ‘relevant commercial environment’ testing).

**CO2 Reduction Potential**

TCM’s two main capture units each are approximately at 12 MWe size with a combined total capturing capacity of 100,000 tonnes CO2 per year.

**Project Financing**

TCM is currently owned by the Norwegian State, through Gassnova (73,9 %), together with the industrial partners Equinor (8,7 %), Shell (8.7 %) and Total (8.7 %). Equinor is the operator of the physical facility.