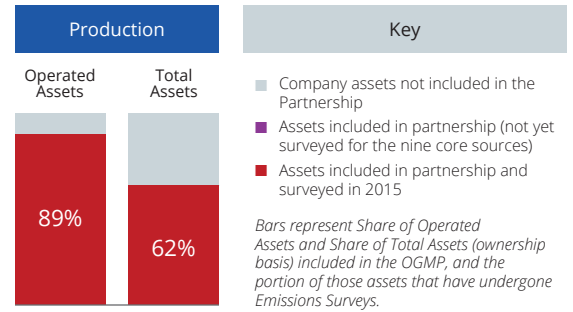


## INTRODUCTION TO STATOIL

In 2014, Statoil joined the CCAC OGMP as a founding partner, committed to systematically address our methane emissions and report on annual progress. In the initial implementation plan submitted to the OGMP in June 2015, Statoil confirmed the participation of all our Norwegian offshore operations, accounting for 89% of our upstream operated assets. Throughout 2015, Statoil conducted a mapping of all methane and nmVOC emission sources at our offshore installations in Norway. Through this effort, Statoil was able to quantify methane emissions and credibly demonstrate that only 0.015% of our total gas production is emitted from core sources as defined by the OGMP.

## SCOPE OF PARTICIPATING ASSETS AND EMISSIONS SURVEY PROGRESS



## PROGRESS IN MITIGATING METHANE EMISSIONS

For each asset surveyed, OGMP partners screen for the presence of each of the nine core OGMP sources. Sources found to be present are then further analyzed to quantify the number of sources overall, the number of sources mitigated, and the mitigation technology or practice being used. For unmitigated sources, OGMP partners also quantify the methane emissions in order to evaluate that source for mitigation feasibility (emissions levels are not part of public reporting).

### CORE SOURCES PRESENT AT SURVEYED ASSETS

- Pneumatic Controllers and Pumps
- Fugitives
- Centrifugal Compressors with Wet Seals
- Reciprocating Compressors
- Glycol Dehydrators
- Storage Tanks
- Liquids Unloading
- Hydraulically Fractured Completions
- Casinghead gas

Core Sources Present at Surveyed Assets	Mitigation Progress (%)	Total Sources Identified as Present	Emissions Reduced under Program (metric tons CH <sub>4</sub> )
Fugitive equipment and process leaks	100	31	0
Centrifugal compressors with "wet" (oil) seals	100	165	0
Reciprocating compressors rod seal/packing vents	100	4	0
Glycol dehydrators	52 (Mitigated within program) / 48 (Unmitigated)	21	0
Hydrocarbon liquid storage tanks	100	2	0
	Mitigated prior to the program / Mitigated within the program / Unmitigated		

Total identified sources mitigated to date

*Note: With the exception of Fugitive Equipment and Process Leaks, the "Total Sources Identified as Present" column indicates the actual number of equipment or component sources or emissions events. For Fugitive Equipment and Process Leaks, the source is counted on an asset-wide basis, so the number of sources indicates the number of assets counted within the Emission Surveys. Finally, because leaks can occur at random, Fugitive mitigation action must happen on an annual basis for the source to count as mitigated. Therefore all Fugitive mitigation shows as occurring "within the program," even if the practice was in place prior to joining OGMP.*

Mitigation Actions by Source\*

**Fugitive equipment and process leaks**

- DI&M program in which leaking components are generally repaired within 12 months of identification.

**Glycol Dehydrators**

- Dehydrator system has all vents routed to a flare, Vapor Recovery Unit (VRU), or other beneficial use.

**Centrifugal compressors with “wet” (oil) seals**

- Compressors use mechanical dry seal.
- Seal oil is de-gassed at intermediate pressure and routed to productive use or to flare.

**Hydrocarbon liquid storage tanks**

- Tank vapors are recovered by routing to a Vapor Recovery Unit (VRU) system and directing to productive use.

**Reciprocating compressors rod seal/packing vents**

- “Distance piece” or packing case vents are vented to the atmosphere and rings are replaced at least every 26,000 hours or no less frequently than every three years.
- Rod packing is vented to the atmosphere and excessive leakage is identified and stopped whenever maintenance occurs between main engine overhauls.

Methodology(ies) Used to Quantify Unmitigated Emissions\*

**Glycol Dehydrators**

- Engineering calculation with software as described in OGMP Technical Guidance Document Number 5

\*More detailed descriptions of these actions and methodologies are found in OGMP’s Technical Guidance Documents.

**STATOIL’S BACKGROUND**

*Since the founding in 1972, Statoil has grown to be the leading oil and gas operator on the Norwegian continental shelf and is the second biggest gas supplier to Europe. Statoil aims to provide energy for a low carbon future and to create lasting value for communities. Addressing methane emissions is one of the most effective short term climate measures we can implement, and a pre-requisite for ensuring that gas is seen as a credible part of the future, lower carbon, energy mix.*

**ABOUT THE PARTNERSHIP**

The Climate and Clean Air Coalition (CCAC) has created a voluntary initiative to reduce methane emissions in the oil and gas sector: the CCAC Oil & Gas Methane Partnership. The CCAC officially launched the Partnership at the UN Secretary General’s Climate Summit in New York in September 2014. To learn more about this Partnership, visit [www.ccacoalition.org/en/content/ccac-oil-gas-methane-partnership](http://www.ccacoalition.org/en/content/ccac-oil-gas-methane-partnership).