Disclaimer

This document has been developed by the Methane Guiding Principles partnership. The Synopsis provides a summary of current known mitigations, costs, and available technologies as at the date of publication, but these may change or improve over time. The information included is accurate to the best of the authors’ knowledge, but does not necessarily reflect the views or positions of all Signatories to or Supporting Organisations of the Methane Guiding Principles partnership, and readers will need to make their own evaluation of the information provided. No warranty is given to readers concerning the completeness or accuracy of the information included in this Synopsis by SLR International Corporation and its contractors, the Methane Guiding Principles partnership or its Signatories or Supporting Organisations.

This Synopsis describes actions that an organisation can take to help manage methane emissions. Any actions or recommendations are not mandatory; they are simply one effective way to help manage methane emissions. Other approaches might be as effective, or more effective in a particular situation. What readers choose to do will often depend on the circumstances, the specific risks under management and the applicable legal regime.
Checklist
Achieving continual improvement in methane management

- Commit to a program of methane management.
- Improve methane reduction capabilities for preventing, identifying and repairing leaks, and using effective engineering and design.
- Set strong methane-reduction targets.
- Report methane-reduction efforts and results.
- Integrate methane management into the company culture.

Continual improvement of methane management efforts will eventually result in 'methane excellence', i.e., low methane emissions from oil and gas operations. Methane excellence can enable the oil and gas industry to become one of the main players in reducing methane emissions and providing low-carbon energy worldwide.

The most important factor in achieving methane excellence is commitment throughout the company, from senior management to front-line employees.

With that commitment, continual improvement of methane management is accomplished by doing the following:

- Systematically improving methane management by having a formal or informal management system such as the Plan Do Check Act cycle
- Improving methane-reduction by improving the processes of preventing, identifying and repairing leaks
- Learning from existing practices and maximizing methane reduction through project engineering and design
- Setting strong methane-reduction intensity targets for operated assets
- Reporting an overall group level methane number (Mte) and a methane intensity (%)
- Reporting methane as both carbon dioxide equivalents and methane
- Building methane-reduction efforts into company culture

Systematically improving methane management

Transforming a company from one that does the minimum required by law to one that achieves methane excellence is a complex journey that involves technical, organizational and leadership skills. Such an undertaking requires a systematic approach. Continual improvement in methane management requires a management system like the plan-do-check-act cycle to be applied to the elements of reducing methane emissions.
Improving methane monitoring and reduction capabilities
The starting point for improving methane management capabilities is an accurate inventory of the sources of methane and the amounts they emit. This helps to identify the sources that should be prioritized for reduction activities. From there, projects such as increasing leak detection practices and improving the process of repairing and preventing leaks can be launched. As methane reduction technologies develop and operations grow and change, a systematic continual improvement process will make sure that best practices continue to be applied.

Setting strong methane-reduction targets
Continual improvement in methane management is driven by methane reduction targets. Methane reduction targets should be ambitious but also achievable. Current best practice for setting strong methane reduction targets includes setting intensity targets for operated assets. Future recommended best practice includes setting targets for both natural-gas and oil production; addressing emissions from both operated and non-operated assets; including both an absolute and an intensity target for methane; performing rigorous emissions measurements and analysis to inform targets and validate reduction levels.

Transparent reporting
Transparent reporting of methane emissions and reduction targets, as well as the information these are based on, is critical to building internal and external stakeholders’ confidence in a company’s efforts to reduce methane emissions. Globally, investors are starting to ask more questions about a company’s management of climate change issues. Current best practice demonstrating transparent reporting includes reporting an overall group level methane number (Mte) and a methane intensity number (%) and reporting methane emissions in carbon dioxide equivalents (CO₂e) and methane (CH₄). Future recommended best practice includes reporting of asset level methane emissions, moving towards regional emission factors and the use of direct methane detection and measurement technologies and third party validation of methane performance reporting.

Building methane management into company culture
An oil and gas company can promote a culture that supports methane excellence by continually improving awareness of methane management strategies across the business until methane management is embedded in the company’s culture. Specific best practices for integrating methane management into company culture include.

• Integrating methane reduction into existing business and operational procedures
• Establishing new learning opportunities relating to reducing emissions for both technical and non-technical staff
• Promoting methane excellence and innovation by encouraging team communications, setting team goals and boundaries, then tracking and rewarding positive results.

Synopsis – Reducing Methane Emissions: Continual Improvement
Further information

MGP Website:
www.methaneguidingprinciples.org

OGCI:
https://oilandgasclimateinitiative.com

CCAC OGMP:

IEA Methane Tracker:
https://www.iea.org/weo/methane

Natural Gas STAR Program:
https://www.epa.gov/natural-gas-star-program