



Greenhouse Gas Supply Chain Emissions Measurement, Monitoring, Reporting and Verification Framework

Overview

Reliable and comparable information on greenhouse gas (GHG) emissions and intensity will be critical to achieving global reductions in GHG emissions in the coming decades. While there is considerable activity underway related to the measurement, monitoring, reporting, and verification (MMRV) of GHG emissions associated with natural gas, gaps and inconsistencies across platforms impede the ability to provide market participants with comparable and reliable information about GHG emissions and intensity.

In November 2023, the U.S. Department of Energy's (DOE) Office of Fossil Energy and Carbon Management joined with international partners to announce the formation of a working group to develop an MMRV framework to account for GHG emissions associated with delivered natural gas. This action serves to advance the Biden-Harris Administration's U.S. Methane Emissions Reduction Action Plan and fulfill the pledge to work with global partners to reduce the world's methane emissions.

MMRV Framework Working Group

The MMRV Framework Working Group is a dynamic forum of representatives from 18 natural gas importing and exporting countries and regions, plus the European Commission and Eastern Mediterranean Gas Forum. The Working Group is developing a framework to provide market participants with verified information about life cycle GHG emissions associated with natural gas. It is meeting throughout 2024 to:

- Review and build upon existing standards and protocols to provide a consistent set of technical criteria for reporting emissions and operating data at various levels of availability;
- Support comparability by using transparent and consistent tools for estimating GHG supply chain emissions and data quality, from pre-production through final delivery of the natural gas;
- Support independent third-party verification of the accuracy and representativeness of emissions data and aggregate supply chain emissions intensity; and
- Support accreditation to ensure that natural gas certifiers are independent of the reporting entity and are technically qualified to conduct reviews.

The MMRV Framework is not a regulatory process, and countries and regions participating in its development are not committing to use it in a regulatory process. This approach to reducing GHG emissions is a voluntary, market-driven approach and is intended to improve the accuracy, completeness, and transparency of reported emissions in the marketplace as well as drive methane and carbon dioxide emission reductions across the natural gas supply chain. DOE is not introducing a regulatory standard for natural gas, nor will it be certifying natural gas.

Impacts

The envisioned MMRV Framework will facilitate GHG emissions reductions in the fossil energy sector by allowing differentiation of natural gas supply chains by GHG emissions. Such a framework could later be expanded to include other fossil fuels. The Framework will help:

- Enable credible verification of methane and other GHG emissions across the supply chain and provide market participants with verified information about life cycle GHG emissions and intensity from production through delivery; and
- Enable buyers to value lower GHG natural gas directly through contracting and purchasing decisions, while providing incentives to upstream and midstream operators to engage in strong MMRV and actions to reduce emissions.

Additional Information

- [MMRV Website](#)
- [MMRV Frequently Asked Questions](#)

