



Natural Gas Supply Chain Initiatives

2019 Natural Gas STAR & Methane Challenge Workshop

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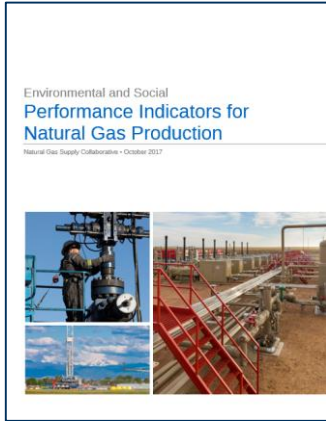


Increasing Focus on Natural Gas Supply Chain

- **ESG Reporting**
- **Benchmarking Industry and Company Performance**
- **Natural Gas Procurement Initiatives**
- **Corporate Supply Chain Sustainability Goals**
- **Supply Chain Footprint**



Natural Gas Supply Chain Engagement



Natural Gas Supply Collaborative (NGSC)

Voluntary forum for companies promoting safe and responsible practices for the supply of natural gas.



Natural Gas Sustainability Initiative (NGSI)

Overarching voluntary framework for the natural gas supply chain to recognize and advance innovative, voluntary programs.

Initiated by a CEO Natural Gas Task Force organized by the Edison Electric Institute and the American Gas Association.

Natural Gas Supply Collaborative (NGSC)

Collectively, purchases of natural gas by participants for delivery or electric generation are equivalent to over 14% of U.S. marketed natural gas.



Drivers for Participation:

Increasing Understanding of Natural Gas Supply

Addressing Stakeholder Questions

Supporting Corporate Sustainability Goals



Additional information is available at:
<https://www.mjbradley.com/NGSC>

NGSC Environmental and Social Performance Indicators for Natural Gas Supply

NGSC identified environmental and social performance indicators from **existing voluntary reporting frameworks.**



Topic Area	Environmental and Social Performance Indicators	
	Quantitative	Management Strategy
01 Methane and Air Emissions	Methane Emissions (Total and Intensity)	Overall Methane Strategy
02 Water	Water Use (Total and Freshwater Intensity) Water Testing Spill Reporting	Freshwater Use Strategy Well Planning and Integrity Strategy Wastewater Management Strategy
03 Chemical Use	Chemical Stewardship	Chemical Management Strategy
04 Community and Safety	Measuring Community Engagement Safety Incident Rates	Community Engagement Strategy Contractor Performance Strategy

Natural Gas Sustainability Initiative Guiding Principles

- NGSI participants are **committed to continuous improvement** to respond to customer and stakeholder expectations for **managing environmental and social issues** along the natural gas supply chain.
- **Building on existing voluntary programs**, NGSI is a voluntary framework to **expand and accelerate industry-wide actions** and recognize the collective benefits of these actions.
- NGSI supports individual companies' voluntary efforts to manage environmental and social issues by **promoting consistent approaches** for measuring and reporting on key ESG topics and **recognizing industry leadership** across all segments.
- All NGSI participants' supplier-related decisions are at the sole discretion of the individual companies. NGSI is focused on supporting companies through **common tools and metrics** to meet environmental and social objectives and promote continuous improvement.



Current Focus on Methane Emissions Intensity

- There is limited clarity and consistency on approaches for voluntarily calculating and reporting methane emissions intensity.
- **NGSI focuses on disclosure of methane emissions intensity, at the company-level for all segments supply chain.**
- NGSI seeks to work with participants to develop a consistent and transparent approach to estimate and report total methane emissions and natural gas throughput, and to calculate methane emissions intensity at the segment level.

Why use methane emissions intensity?

Emissions intensity is a measure of methane emissions relative to some measure of output. This measurement:

- Normalizes year-to-year fluctuations
- Tracks performance over time
- Compares performance between business operations
- Benchmarks performance



NGSI Methane Emissions Intensity Protocol

A consistent approach for company-level reporting within each segment of the U.S. natural gas supply chain

Segments

- Production
- Gathering & Boosting
- Processing
- Transmission & Storage
- Distribution

Methane Emissions
Methane Throughput

Schedule

- Methane Emissions Intensity White Paper *released April 2019*
- Draft Protocol *released July 2019*
- Final Draft Protocol *to be released Late 2019*
- Protocol Version 1.0 *to be released First Quarter 2020*



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