



Agenda

- Introduction
- Current U.S. Federal Regulatory Landscape
- High-Level Overview of State Rulemaking
- EU Methane Regulation
- Voluntary Program Overview
- Audience Q &A







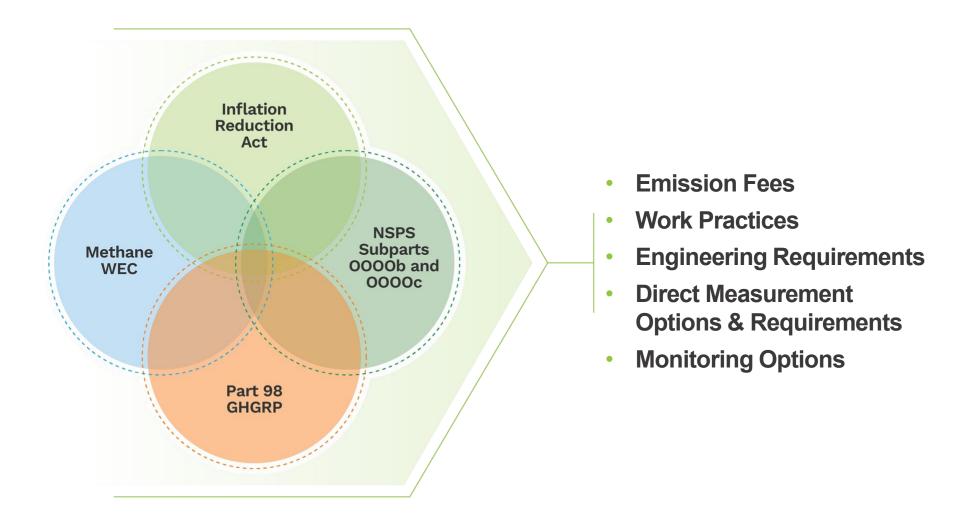
Montrose Knows Methane





Regulatory GHG/Methane Programs 2026 Awareness Edition

2024 U.S. Methane Regulatory Framework





2024: Intertwined Rules and Prioritized Empirical Data

NSPS Subpart 0000b/c Emissions standards for new and modified stationary sources Emission Standards for existing stationary sources IRA Regulatory compliance 1. Establish a methane exemption for WEC applicability charge (WEC). 2. Establish that NSPS WEC Subparts 0000b and Methane waste emissions charge based 0000c compliance will on annual emissions exceeding allowance be a WEC exemption 3. Increase the accuracy of reported emissions Subpart W report dictates inventory inventory (MRR Subpart W) used for WEC determination MRR Subpart W More provisions for measurement-based inventories

sources

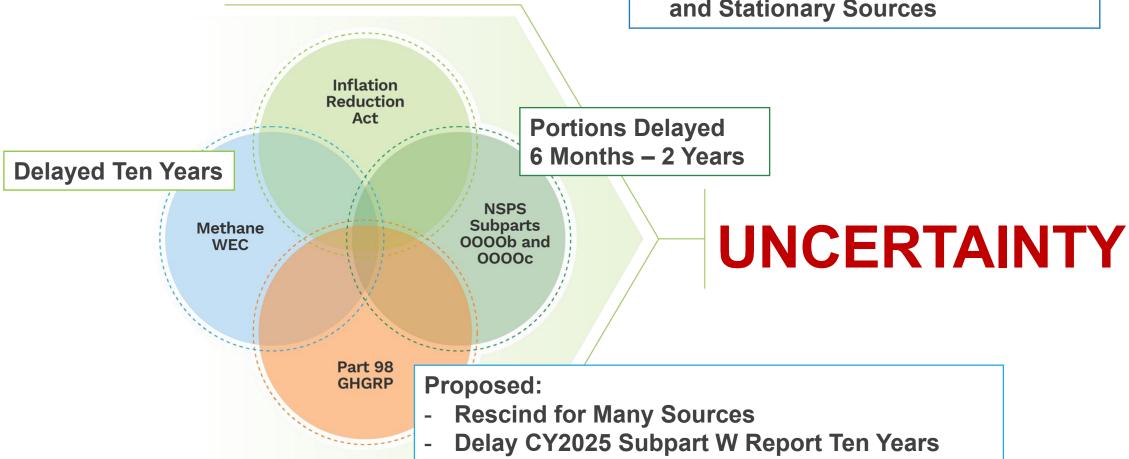
Include previously unreported emissions



How it Looks in 2026

Proposed:

- Reconsideration of GHG Endangerment Findings for Mobile and Stationary Sources



Sources:

- Waste Emissions Charge | US EPA
- 2025 Interim Final Rule to Extend Compliance Deadlines | US EPA
- Federal Register :: Reconsideration of the Greenhouse Gas Reporting Program



States Filling the Gap



<u>California</u>

SB1137
Health Protection Zone
Continuous Monitoring
Climate Risk Disclosures



New York

Routine LDAR (OGI/M21)
Annual GHG Reporting



Colorado

GHG Emissions Intensity Verification Reg 7



Pennsylvania

Published draft SIP for Subpart OOOOc implementation



New Mexico

LDAR (OGI/M21)
Release Reporting
Gas Capture
Requirements

Other early drafters of EG OOOOc proposed rules: Utah, Wyoming, Others



Internationally, the EUMR

- European Methane Regulation
- Published June 2024
- Fossil Fuel Regulations
 - Domestic Production
 - Imported Energy
- Monitoring/Measurement
 - LDAR
 - Venting/Flaring Activities
 - Flaring Efficiency
 - Source- and Site-Level Reconciliation

- Verification
- Reduction and Mitigation
- Transparency
 - Public Emissions Databases
 - Super-Emitter Monitoring and Response





Regulation EU 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector amending Regulation (EU) 2019/942: Regulation (EU) 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector and amending Regulation (EU) 2019/942Text with EEA relevance. (europa.eu)

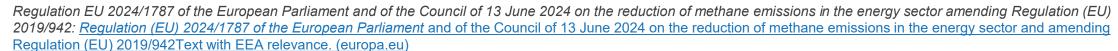


EUMR Rule Summary

- Different requirements for natural gas, crude oil, and coal
 - Provisions for EU member countries
 - Provisions for energy imports placed on EU market

Article	Description	Article	Description
1	Subject Matter and Scope	27	Requirements Applying to Importers
2	Definitions	28	Equivalence of Monitoring, Reporting, and Verification Measures
4	Competent Authorities	29	Methane Intensity of the Production of Crude Oil, Natural Gas, and Coal
5	Tasks of Competent Authorities	30	Methane Transparency Database and Methane Performance Profiles
8	Verification Activities and Verification Statement	31	Global Methane Monitoring Tool and Rapid Reaction Mechanism
9	Independence and Accreditation or Authorisation of Verifiers	33	Penalties
10	Use and Sharing of Information	IX	Annex: Information to be Provided by Importers in Accordance with Article 27(1), Article 28(1),(2), and (3), and Article 29(1)
12	Monitoring and Reporting		

Source:





EU LNG Importers

- Methane Report to EU to import product
- · Includes: emissions inventory and intensity

Impacts to U.S. Producers

LNG Exporters to EU

- Determine methane emissions and intensity associated with production of product
- Provide methane data to importers, likely as part of contractual requirements

Upstream Producers

- Implement compliant MRV program
- Prove it, likely as part of contractual requirements

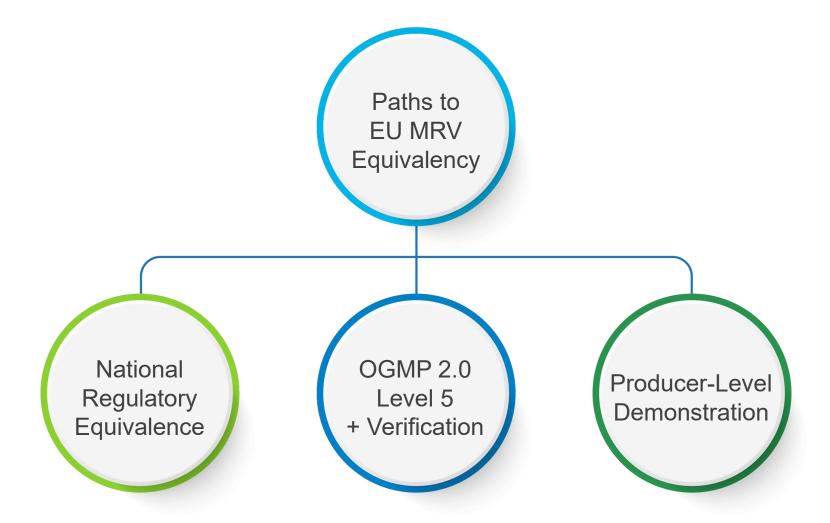
- Article 28: "Producer-Level MRV Demonstration"
- 'Producer' means an undertaking which, in the course of a commercial activity, produces crude oil, natural gas or coal, by extracting it from the ground in a licensed area, processing it or conveying it through connected infrastructure within that licensed area
- What does this mean for US value chain?

Source:

- Regulation EU 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector amending Regulation (EU) 2019/942: Regulation (EU) 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector and amending Regulation (EU) 2019/942Text with EEA relevance. (europa.eu)
- EUMR Questions and Answers Document: Methane regulation import requirements Q&A final



How Can Energy Exporters Meet EUMR Requirements?





Regulation EU 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector amending Regulation (EU) 2019/942: Regulation (EU) 2024/1787 of the European Parliament and of the Council of 13 June 2024 on the reduction of methane emissions in the energy sector and amending Regulation (EU) 2019/942Text with EEA relevance. (europa.eu)



Stepwise Compliance Deadlines

August 30, 2030

May 2025

- Annex IX Reports
- Due 5/31 Annually

January 1, 2027

- Comprehensive MRV Reports
- Due Annually

August 5, 2028

- Methane Intensity Reports
- Due Annually

- Methane Intensity Limit In Effect
- Due Annually

EU Importer Reporting Requirements

- Gas provenance
- Information on MRV/OGMP programs
- LDAR, venting, flaring practices information
- Verification measures

- Regulatory equivalence pathway
- Program basis:
 - Source- and site-level MRV
 - Reconciliation
 - Verification

- Calculation methodology to be released by August 5, 2027
- Emissions intensity limit to be released by August 5, 2029



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Some Open Questions About the EUMR

How does the EU define producer? What industry segments will be impacted?

What will the requirements be for third-party verifiers? How often will verification be required?

What are the EUMR's expectations regarding reconciliation?

How will companies calculate methane emissions intensity?

What is the methane emissions intensity limit?

How will the annual timelines allow for OGMP reporting and sufficient verification?





Voluntary GHG/Methane Programs Options for reporting, progressing, and selecting

Voluntary Frameworks – Conceptual Basis

International Standards

- Principle-based
- Highly standardized processes
- Inter-related
- Support other frameworks

Voluntary Certifications

- Performance-based
- Industry/Organization sponsored
- Audited or nonaudited

MRV Protocols

- Principle and prescriptive-based
- Enabling Protocols
- Technical guidance on assuring accuracy and conformity
- Support certifications and compliance



International **Standards: GHG Protocol**



- Corporate Accounting and Reporting Standard
- Scope 2 Guidance
- Corporate Value Chain (Scope 3) Standard
- Product Life Cycle Accounting and Reporting Standard
- The GHG Protocol for Project accounting

International **Standards:** ISO



- ISO 14064 (1-3) Greenhouse Gases
- ISO 14021-25- Environmental labels
- ISO 14040/14044 Life cycle assessment
- ISO 14067 Carbon footprint of products
- ISO 14001 Environmental management systems
- ISO 9001- Quality
- ISO 24624-1 Upstream methane emissions (in development)



Voluntary Certifications: OGMP 2.0



- What it is: International methane reduction program focused on measurement and reconciliation
- Use if: You want to shift to a measurement-based inventory, reduce emissions, and align with EUMR
- Level of effort: Medium-High
- Pros/Cons
 - Pros: Ramped approach (Plan, Levels 1-5), global use, custom approach
 - Cons: MRV disparities, reconciliation guidance is light

Additional Information:

Montrose OGMP 2.0 Blog Series –

<u>Link</u>



OGMP 2.0 Reporting Overview

Level 1: Venture/Asset Reporting

- Single, consolidated emissions number
- Only applicable where company has very limited information

Level 2: Emissions Category

- Emissions reported based on IOGP and Marcogaz emissions categories
- Based on generic emissions factors

Level 3: Generic Emission Source Level

- Emissions reported by detailed source type
- Based on generic emissions factors

Level 4: Specific Emission Source Level

- Emissions reported by detailed source type using specific emissions and activity factors
- Based on direct measurement or other methodologies

Level 5: Site Level

- Emissions reported at a site or facility level, typically through sensors mounted on a mobile platform
- Based on direct measurement methodologies

Gold Standard:

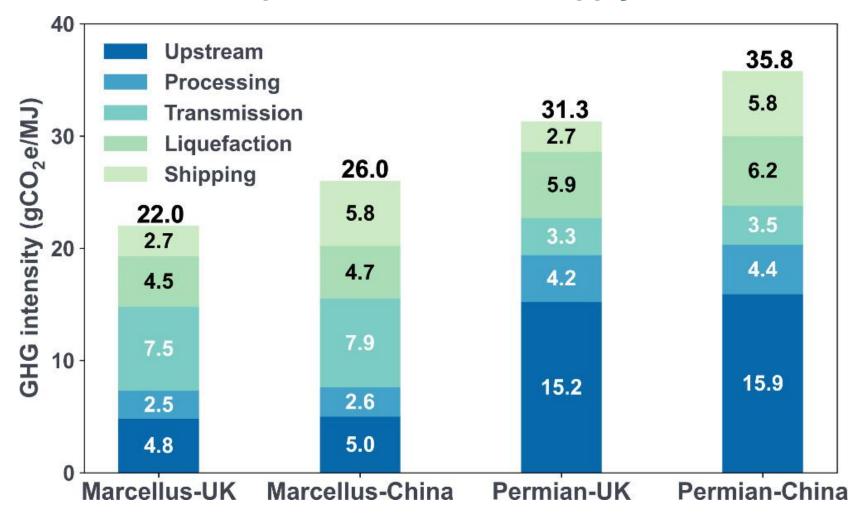
Integrates
"bottom-up" source
level reporting with
independent
"top-down" site level
measurements, taken
from a representative
sample of facilities.

Voluntary **Certifications:** Lifecycle **Analysis** (LCA)/Carbon **Footprint**

- What it is: Supply Chain Emissions from defined lifecycle stages (e.g. cradle (extraction) to gate (transmission, LNG, regasification)
- Use if: A comprehensive analysis of the entire supply chain is desired
- **Level of effort:** High
- Pros/Cons
 - **Pros** Builds up an industry-wide basis of emissions, follows clear protocols, comparative potential, ISO basis, achieves supply chain emissions goal, some existing models and databases (Simapro, SLiNG, etc.), demonstrate LCA for marketing
 - Cons Custom; no agreed upon models, data gaps (gas hubs), little precedent for fossil fuel products



LCA Study Example - Geospatial Life Cycle Analysis of Greenhouse Gas **Emissions from US Liquefied Natural Gas Supply Chains**





Yuanrui Zhu, David T. Allen, and Arvind P. Ravikumar ACS Sustainable Chemistry & Engineering 2024 12 (49), 17843-17854 DOI: 10.1021/acssuschemeng.4c07255



Voluntary **Certifications:** ISCC CFC



International Sustainability & Carbon Certification: ISCC Carbon Footprint Certification - ISCC System

- What it is: Certification scheme from the International Sustainability & Carbon Certification (ISCC) for a Carbon Footprint Certification (CFC)
- Use if: You want an internationally recognized certification for the lifecycle emissions of your product
- **Level of effort**: Med-High
- Pros/Cons
 - Pros: Internationally recognized quantified carbon footprint certification, audited by third-parties, layered on ISO with sector-specific requirements, compatible with fossil fuel products
 - Cons: Not yet available for Oil or Natural Gas (coming soon!), emergent scheme risk



Voluntary **Certifications:** MiQ



- What it is: Voluntary methane certification based on field audits, graded on 1) methane intensity 2) field practices, and 3) monitoring frequency for entire asset groups
- **Use if**: You want a robust methane reduction program; creating low emission gas certificates
- **Level of effort**: Medium-High
- Pros/Cons
 - **Pros:** Clear requirements with optionality, established program, alignment with international standards, certificates
 - **Cons:** Limited transactions to date, high recordkeeping and level of effort needed to maintain, stigma around low grades, uncertain compliance; not explicitly measurement-based

Additional Information: Montrose MiQ Blog Series – Link



Voluntary **Certifications:** Certified/Quanti: fied Emissions **Tokens** (CETs/QETs)

- What it is: Digital assets representing emissions associated with hydrocarbon products
- **Use if:** You want to transact on low-emissions digital products and/or want the security of blockchain
 - Level of effort: Medium
 - Pros/Cons
 - Pros: Monetize existing emissions reduction projects, blockchain capabilities, support supply chain quantification, generally third-party verified
 - Cons: Emergent market risks, variable registries, developing protocols, blockchain risks



MRV **Programs: EEMDL CEESA**



- What it is: Verification and Reporting Protocol to support conformity of reporting for EUMR
- **Use if**: You want to align operational practices with EUMR reporting requirements
- Level of effort: Med-High
- Pros/Cons
 - Pros: Designed for both verifiers and operators, based on ISO, global, aiming for December 2026 release
 - Accepting comments through: November 8, 2025
 - Cons: not designed by the regulator, untested



Final Thoughts

- Federal Regulations
 - Likely to see continued uncertainty and deregulatory efforts in the federal space
 - Expect to see litigation
 - Watch carefully for proposed vs codified changes
 - The pendulum will swing eventually
- During Federal Uncertainty...
 - States fill the gaps
 - Operators can continue to focus on accuracy
- Global Marketplace
 - We operate in a global marketplace and regulatory environment
- Voluntary Certifications
 - Mechanisms for consistent disclosure
 - May be able to leverage as part of regulatory strategy



Questions and Discussion







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