

Creating a Global Market for Methane Emissions Certified Gas

An RMI-SYSTEMIQ partnership



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About



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- International, non-profit partnership between Rocky Mountain Institute (RMI) and SYSTEMIQ
- Focused on accelerating methane emissions reductions from the global oil and gas sector through two initiatives:
 1. Climate Action Engine, an analytics platform providing high-quality, real-time data and trusted climate intelligence to inform decision-making and evaluate impact of methane mitigation activities
 2. Methane emissions standard for natural gas; designing the standard and helping build the market for the differentiated product

The Climate Action Engine

Data Input

Measured Data



Asset Data



Modeled Data



Data Analysis

Application for End-Users



Certified gas

Abating oil and gas methane emissions: three complementary approaches

Voluntary Company Action

- Increased measurement, reporting and verification
- Increased focus on upgrading infrastructure
- Progressive companies can move faster, demonstrating better practices
 - *No consequence for failing to meet voluntary commitments*
 - *Self policing/lack of transparency*

Certified Gas

- Voluntary initially, potential to be adopted by regulation (e.g. buyer/import standards)
- Auditable and independent
- Credible and transparent
- Practical and tradeable for market participants

Regulatory and Policy

- Existing regulation (e.g. US EPA)
- Future regulation (e.g. EU)
- Strengthen regulation over time and extend to other regions or globalize
- *Long timeline from concept to implementation*



Methane Emissions Standard for natural gas



SYSTEMIQ

Our market-based certification approach creates a push and a pull for emissions abatement

- Customer demand
- Product differentiation
- Premium pricing



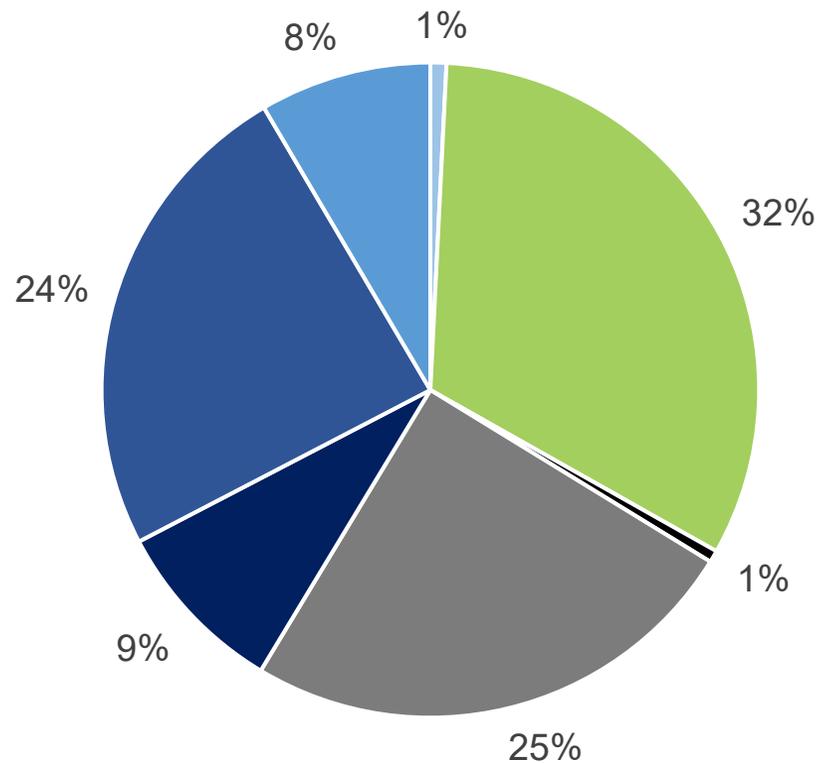
- Uniform methods enable transparent comparison between operators
- Peer, investor, and regulatory pressure
- “Sets the bar” for industry performance”



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Standard V1.0 focuses on onshore and offshore production

US oil and gas methane emissions



- Exploration
- Onshore production
- Offshore production
- Gathering and boosting
- Processing
- Transmission and Storage
- Distribution

- By focusing on production, we tackle the largest source of emissions first
- Ambition is to broaden scope to other supply chain segments (e.g. LNG and midstream)



Source: US GHGI 2020
(2018, kt CH₄ natural gas systems)

Elements of the Methane Emissions Standard

In order to be certified to the Standard, a facility must demonstrate:

1



**Robust Monitoring
Technology Deployment** by
operator

2



Company Practices
that enable a culture of
emissions management

3



Calculated Intensity

$$= \frac{\text{Methane emitted}}{\text{Natural gas produced}}$$

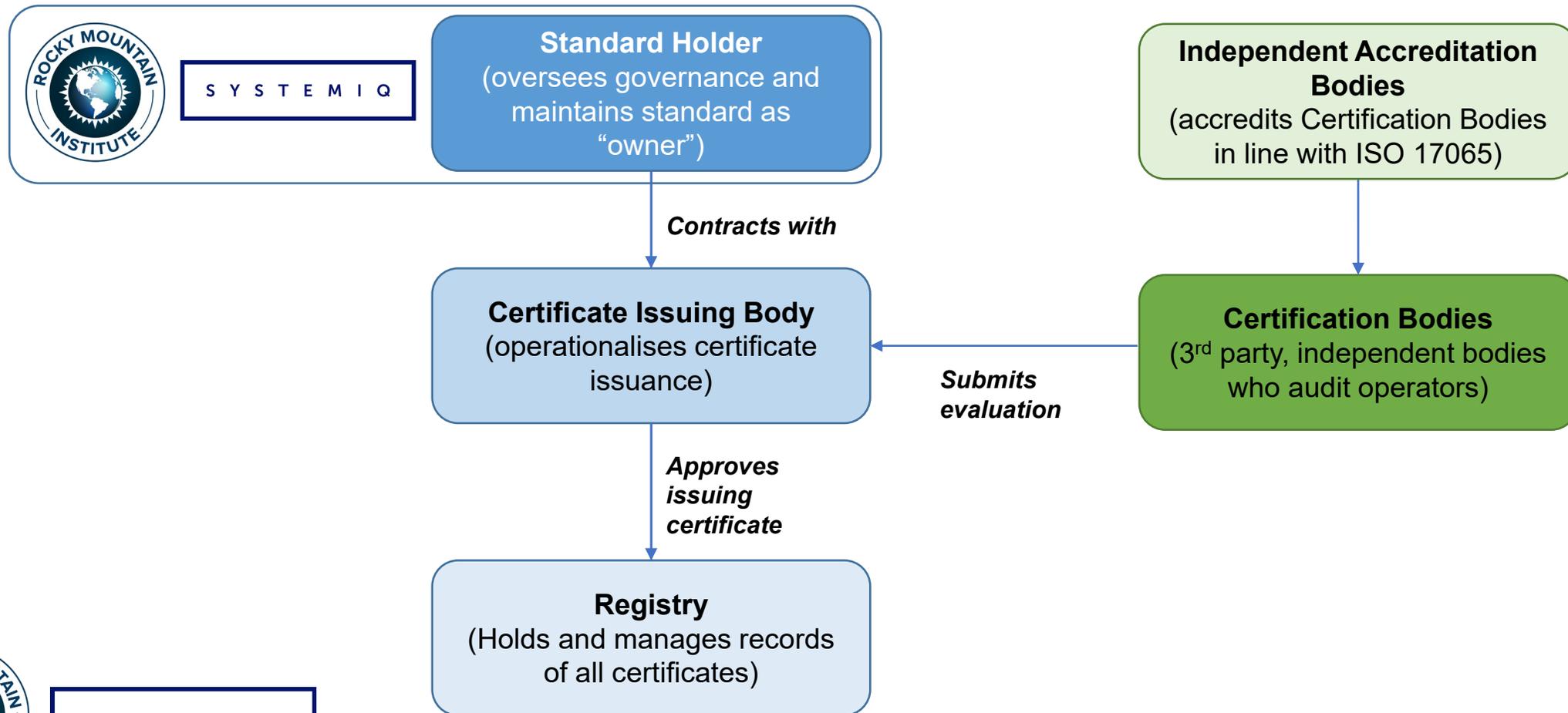
- All elements are reviewed and verified by independent accredited organizations
- Intensity is calculated using the Natural Gas Sustainability Initiative (NGSI) Protocol
- Certificates are issued for a specific batch of gas originating from a certified facility



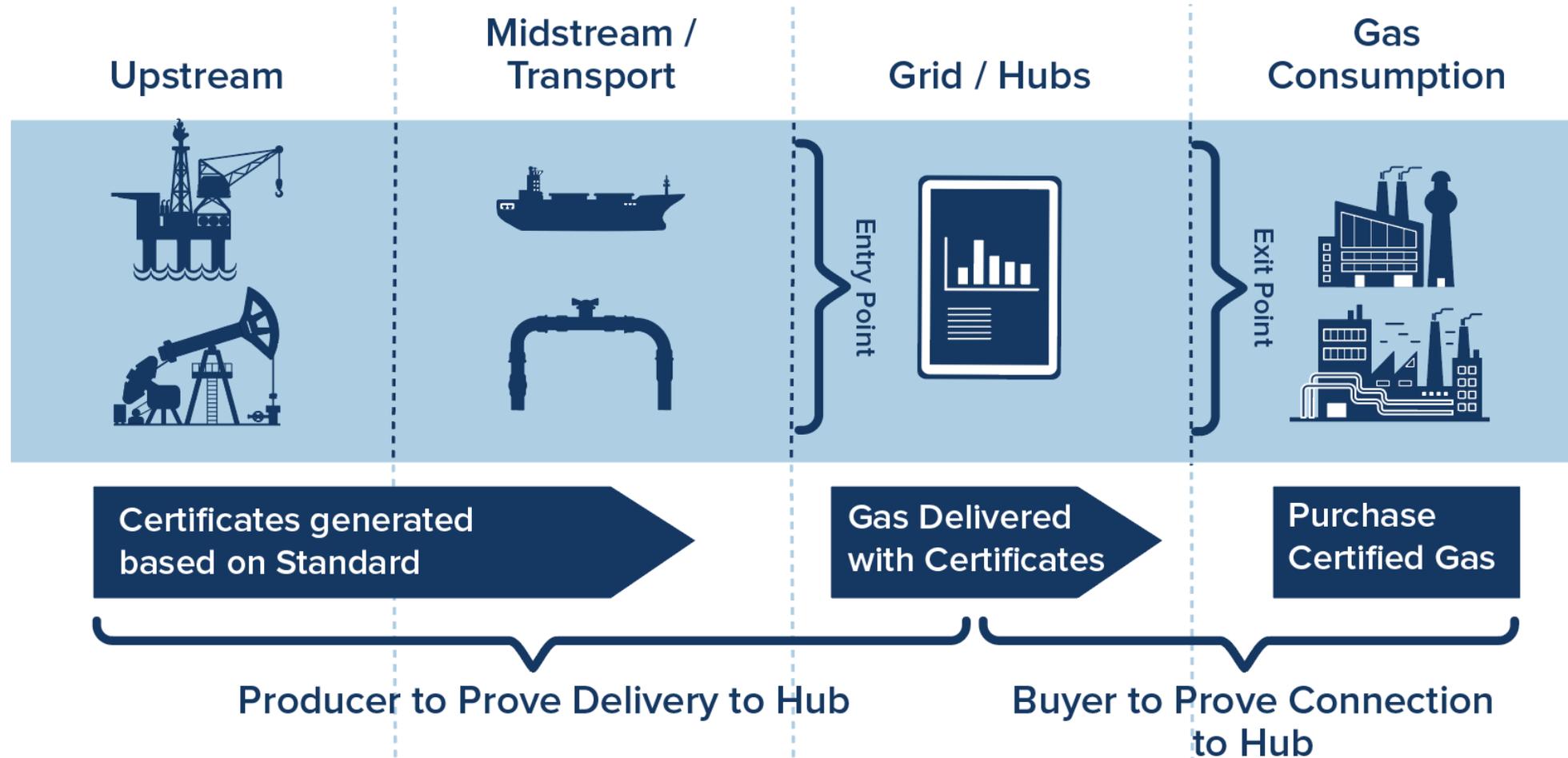
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** An onshore facility is the sum of a company's operations in a basin (US EPA GHGRP definition), and an offshore facility is an offshore platform.*

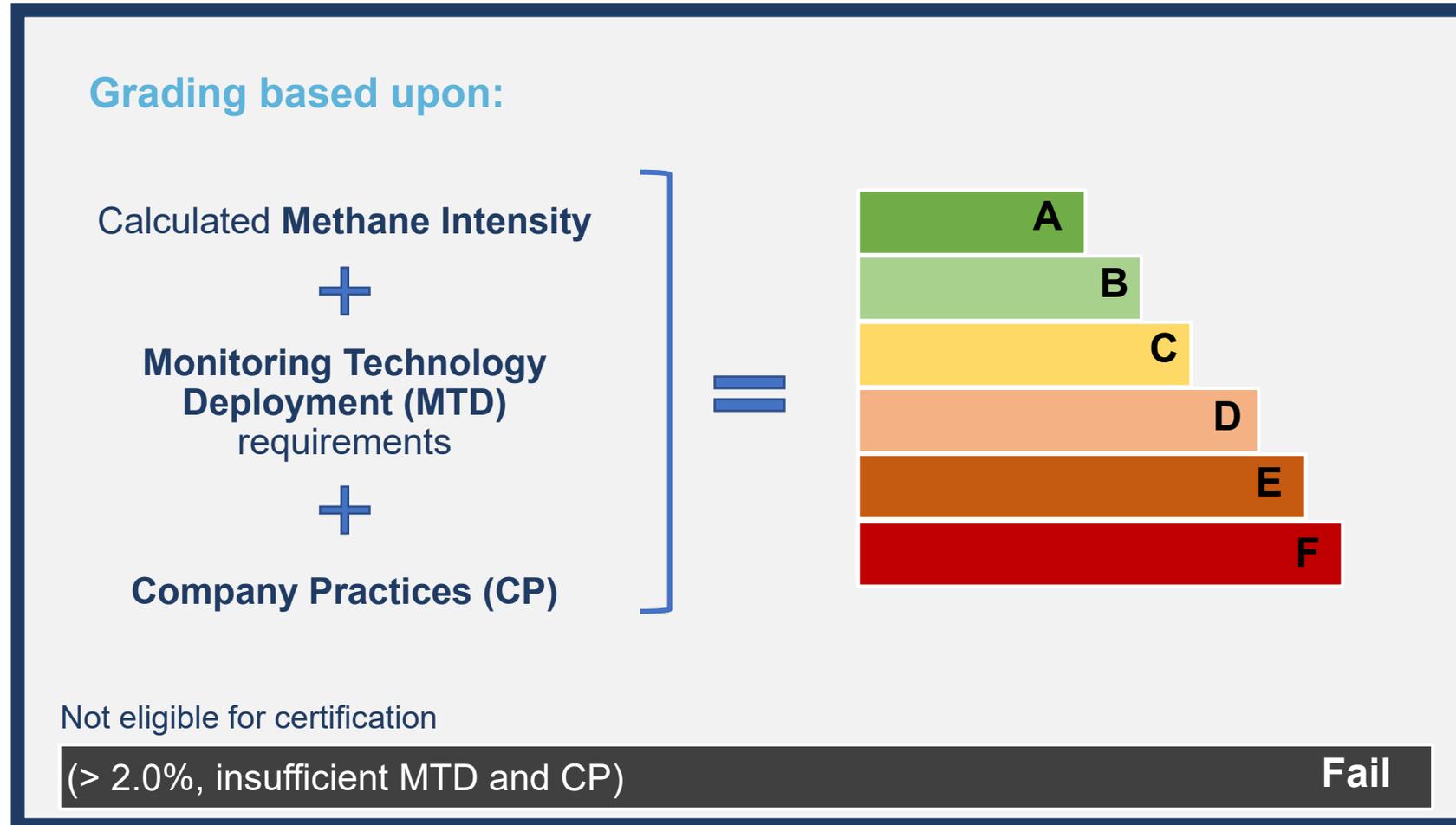
The Standard's credibility depends upon a robust governance framework



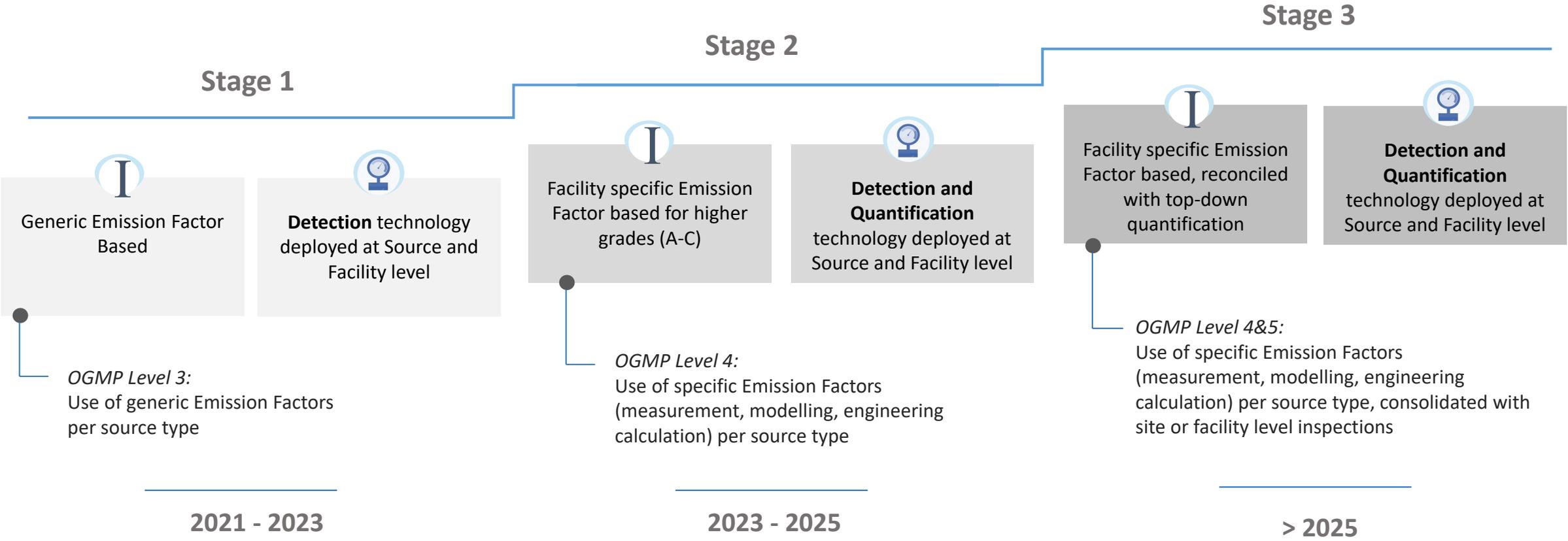
Buying certified gas: Finding a balance between credibility and practicality



Certification is based on a comprehensive and inclusive grading system



Standard to be improved over time to required increased direct methane detection and quantification



➤ **Moving toward faster and more accurate methane detection, increased confidence in calculated intensity**



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Looking forward

- Draft Standard for use in pilots developed, available for review and comment
- Launch Standard and Certification program in December 2020
- Facilitate **bilateral pilot deals with producers and buyers** in the US and Europe to test Standard concepts in 2021
- Seek continuous feedback from stakeholders (policymakers, other NGOs, industry bodies, producers and purchasers, trading platforms)
- Develop governance structure and partner with organisations to operationalise market-ready standard
 - Standard Holder, Certificate Issuing Body, Certificate Registry Body
- Extend concept to additional supply chain segments (midstream, LNG)

Please contact us if you are interested in learning more and participating in the pilot period. chight@rmi.org