Training Course on Methane Emissions Measurement, Reporting and Mitigation

Professional Development Training Course Outline

Category	Oil and Gas	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The urgent need to reduce greenhouse gas emissions has made methane emissions a critical focus in global climate action. Methane is more than 80 times more potent than CO? over a 20-year period, and addressing methane emissions from oil and gas, agriculture, and waste sectors is essential for meeting net-zero targets. Training Course on Methane Emissions Measurement, Reporting & Mitigation offers a comprehensive framework for methane measurement, emissions tracking, reporting protocols, and mitigation technologies aligned with current global regulatory and voluntary frameworks such as the Global Methane Pledge and OGMP 2.0.

This course equips participants with the technical tools, data handling skills, and mitigation strategies needed to identify methane sources, apply advanced monitoring techniques, and implement data-driven reduction initiatives. Through real-world case studies and practical training, attendees will be prepared to develop compliance strategies, leverage digital tools for emissions monitoring, and contribute to sustainable environmental practices and climate resilience.

Programme Curriculum

Training Course on Methane Emissions Measurement, Reporting & Mitigation

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Course Objectives

1. Understand the global impact and climate risks of methane emissions.
2. Identify key methane sources in energy, agriculture, and waste sectors.
3. Apply best practices in methane measurement and detection technologies.
4. Interpret national and international reporting protocols (e.g., EPA, OGMP 2.0).
5. Assess remote sensing, drone, and satellite-based methane monitoring.
6. Design methane reduction and mitigation strategies using predictive analytics.
7. Understand policy frameworks, regulations, and compliance standards.
8. Analyze methane lifecycle data for informed decision-making.
9. Explore methane abatement technologies like flaring, oxidation, and CCS.
10. Apply data analytics and visualization tools to methane reporting.
11. Implement effective carbon and methane management systems.
12. Build organizational readiness for ESG and sustainability reporting.
13. Evaluate real-world case studies and lessons from methane-reducing projects.

Target Audiences

1. Environmental Consultants
2. Energy Sector Professionals
3. Agricultural Technicians
4. Government and Regulatory Agencies
5. Climate and ESG Analysts
6. Researchers & Academicians
7. Corporate Sustainability Managers
8. Nonprofit and Climate Advocates

Course Duration: 5 days

Course Modules

Module 1: Introduction to Methane Emissions & Global Trends

- Understanding methane's role in climate change
- Global emissions trends and key methane contributors

- The science of methane potency and atmospheric behavior
- Introduction to sector-specific methane emissions
- Overview of global methane pledges and summits
- **Case Study**: Global Methane Pledge – Country Action Plans

Module 2: Methane in Oil & Gas Operations

- Key methane sources in upstream, midstream, and downstream
- Fugitive emissions and leak detection protocols
- LDAR (Leak Detection and Repair) technologies
- Quantification standards for oil and gas facilities
- Emissions management in shale operations
- **Case Study**: BP’s Methane Reduction Program

Module 3: Methane from Agricultural Sources

- Methane from enteric fermentation and manure
- Mitigation strategies in livestock management
- Anaerobic digestion and biogas capture
- Cropland management and rice cultivation impacts
- Role of precision agriculture in methane control
- **Case Study**: New Zealand's Dairy Methane Reduction Initiative

Module 4: Reporting Frameworks & Regulations

- Introduction to GHG Protocol and national inventories
- OGMP 2.0 compliance framework
- US EPA Greenhouse Gas Reporting Program
- Tiered quantification methods and uncertainty analysis
- Aligning with ESG and SEC climate disclosure rules
- **Case Study**: TotalEnergies’ OGMP 2.0 Compliance Strategy

Module 5: Data Analytics & Methane Inventory

- Methane inventory creation and verification
- Data collection standards and QA/QC protocols
- Emissions factors and activity data integration
- Data visualization and emissions dashboards
- Use of AI in predictive emission modeling
- **Case Study**: EDF’s MethaneSAT for Transparent Inventories

Module 6: Emerging Detection & Mitigation Technologies

- Infrared cameras, drones, and mobile labs
- Satellite methane sensing advancements
- Innovations in continuous monitoring systems
- Methane recovery and reuse systems

- Role of blockchain in emissions tracking
- **Case Study**: Project Astra – Real-time Methane Monitoring Network

Module 7: Corporate Methane Reduction Programs

- Setting organizational methane reduction targets
- Aligning internal operations with net-zero goals
- Methane risk assessments and management plans
- Integration into sustainability and CSR reports
- Employee training and stakeholder engagement
- **Case Study**: Shell's Net Zero Methane Roadmap

Module 8: Policy, Finance & Global Methane Pledges

- International climate finance for methane reduction
- Methane in NDCs and global policy instruments
- Role of carbon pricing and offsets
- Public-private partnerships in methane projects
- Advocacy and citizen science impact
- **Case Study**: UNFCCC-backed Methane Mitigation Project in Africa

Training Methodology

- Interactive lectures by subject-matter experts
- Group-based simulations and scenario planning
- Real-time data analysis from monitoring tools
- Hands-on training with measurement technologies
- Case study discussions with global best practices
- Pre- and post-training assessments with feedback

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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