MAWA EVENTS

Address: No. 857, Block A2. Leisure Commerce Square - No 9., 46150 Petaling Jaya, Selangor, Malaysia

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FLARE GAS RECOVERY (FGR) & ITS UTILISATION IN OIL & GAS

"Harnessing flare gas for operational efficiency, environmental compliance, and energy recovery."

Schedule

Date	Venue	Fees (Face-to-Face)
13 – 17 Sep 2026	Kuwait	USD 3495 per delegate
25 – 29 Oct 2026	Manama, Bahrain	USD 3495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

Introduction

Flare gas recovery (FGR) is gaining critical importance in oil & gas operations due to its potential to reduce environmental impact, improve energy efficiency, and recover valuable resources. With increasing regulatory pressures and global commitments to reduce greenhouse gas emissions, capturing and utilizing flare gas is both an environmental necessity and a business opportunity.

This comprehensive 5-day training course equips professionals with in-depth knowledge of FGR technologies, system design, operational considerations, and cost-benefit analysis. Participants will learn how to implement or optimize FGR systems and integrate recovered gas into utility or production streams efficiently.

Objectives

By the end of this course, participants will be able to:

- Understand the sources, composition, and challenges of flare gas
- Explore technologies and strategies for flare gas recovery and utilization
- Design or evaluate FGR systems for operational integration
- Analyze economic and environmental benefits of FGR initiatives
- Navigate regulatory frameworks and emission compliance standards
- Optimize recovery systems for safety, efficiency, and sustainability

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Why Attend

- Gain practical expertise in flare gas capture and reuse
- Reduce your plant’s carbon footprint and flaring losses
- Understand the economics behind FGR project investment
- Ensure compliance with environmental standards and emission limits
- Learn from real-world case studies and system design simulations

Target Audience

This program is designed for:

- Plant engineers and operators
- Environmental and process engineers
- Project and design engineers in oil & gas
- Maintenance and reliability professionals
- Energy and utility managers
- Regulatory and compliance officers

Individual Benefits

Key competencies that will be developed include:

- FGR system understanding and selection criteria
- Process integration with existing oil & gas systems
- Monitoring and controlling flare recovery operations
- Emission accounting and regulatory compliance
- Cost-benefit evaluation and project planning

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Reduction in flaring and greenhouse gas emissions
- Improved energy utilization and fuel savings
- Enhanced environmental performance and regulatory alignment
- Increased gas monetization and ROI on recovery systems
- Safer and more sustainable oil & gas operations

Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – FGR principles, system components, and global best practices
- Case Studies – Real-world oil & gas plant applications and performance results
- Workshops – Design calculations, flow balancing, and gas routing analysis
- Peer Exchange – Group exercises on challenges and optimization
- Tools – FGR economic modeling templates and emissions reduction estimators

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Course Outline

Detailed 5-Day Course Outline

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee Breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Introduction to Flaring and Recovery Fundamentals

- Module 1: Flare Gas Overview (07:30 – 09:30)
- Causes, types, and environmental impact of flaring
- Module 2: Regulatory Standards and Global Emission Targets
- ISO, World Bank, and regional compliance mandates
- Module 3: Flare Gas Composition and Measurement
- Characterization and quantification techniques

Day 2: Flare Gas Recovery Technologies

- Module 1: Overview of FGR Systems
- Closed-loop vs open-loop recovery
- Key components: compressors, KO drums, seal gas systems
- Module 2: Compression and Storage Techniques
- Equipment sizing, pressure balancing, and surge protection
- Module 3: Cooling, Scrubbing, and Treatment Methods
- Gas quality preparation for reuse or processing

Day 3: Utilisation Strategies and Integration

- Module 1: Flare Gas Reuse Options
- Fuel gas blending, power generation, feedstock conversion
- Module 2: Integration with Plant Utilities
- Process flow alignment and safety interlocks
- Module 3: Case Study – FGR Implementation in Gas Processing Facility
- Lessons learned, challenges, and optimization results

Day 4: System Design and Operations

- Module 1: Designing an FGR System
- Sizing, flow modeling, materials selection
- Module 2: Monitoring and Control
- Instrumentation, automation, and alarm systems
- Module 3: Maintenance and Troubleshooting
- Reliability challenges and predictive maintenance

Day 5: Economic, Safety & Environmental Aspects

- Module 1: Cost-Benefit Analysis and ROI Calculations
- Payback periods, operating savings, carbon credits
- Module 2: Emission Reporting and Verification
- Audit-ready documentation and tracking templates
- Module 3: Final Simulation and Action Plan
- Design a conceptual FGR project for a sample facility
- Develop a roadmap for implementation and compliance

Certification

Participants will receive a Certificate of Completion in Flare Gas Recovery (FGR) & Its Utilisation in Oil & Gas, validating their technical proficiency in FGR systems, operational strategies, and environmental compliance.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training Interested in running this course for your team? Please contact us:	TEL: **+601116373203**	EMAIL: **info@mawaevents.net**