Training Course on Sustainable Energy Transition for Oil and Gas Professionals

Professional Development Training Course Outline

Category	Oil and Gas	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The global energy landscape is undergoing a transformative shift as industries pivot toward sustainable, low-carbon energy solutions. The oil and gas (O&G) sector, traditionally a cornerstone of global energy supply, is now at a critical inflection point. In the face of increasing regulatory pressures, environmental accountability, and market shifts, the role of O&G professionals is rapidly evolving. Training Course on Sustainable Energy Transition for Oil & Gas Professionals is designed to empower industry leaders with in-depth knowledge of the energy transition, enabling them to navigate and lead within an increasingly green economy.

This comprehensive training provides the tools and insights needed to bridge traditional fossil fuel operations with clean energy innovations. By mastering the principles of decarbonization, energy efficiency, circular economy, and renewable integration, participants will be equipped to drive strategic transformations across the energy value chain. Each module is tailored to foster climate-resilient decision-making, stakeholder engagement, and future-ready business strategies—ensuring professionals not only survive but thrive in the evolving energy future.

Programme Curriculum

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Course Objectives

1. Understand the global landscape of sustainable energy transition.
2. Analyze the impact of climate change policies and net-zero targets on the O&G sector.
3. Evaluate carbon capture, utilization, and storage (CCUS) technologies and strategies.
4. Explore renewable energy integration into existing O&G infrastructure.
5. Identify opportunities in green hydrogen and biofuels.
6. Enhance decision-making through energy data analytics and AI applications.
7. Foster organizational change for low-carbon leadership and governance.
8. Apply principles of environmental, social, and governance (ESG) in energy projects.
9. Promote energy efficiency and digital transformation in operations.
10. Assess financial and investment strategies for sustainable energy projects.
11. Examine the role of circular economy in upstream and downstream processes.
12. Cultivate stakeholder alignment for sustainable development goals (SDGs).
13. Design transition roadmaps and sustainability action plans tailored to company context.

Target Audiences

1. Oil & Gas Engineers and Technicians
2. Energy Policy Advisors
3. Corporate Sustainability Officers
4. HSE (Health, Safety & Environment) Managers
5. Project Managers in Oil & Gas
6. Financial Analysts in Energy Sector
7. Business Development Executives
8. Environmental and Compliance Consultants

Course Duration: 10 days

Course Modules

Module 1: Understanding the Global Energy Transition

- Historical and current trends in global energy use
- Key drivers of the energy transition
- Paris Agreement and Net Zero targets
- Global commitments and national energy plans
- Challenges and opportunities for the O&G sector
- **Case Study**: BP's Net Zero 2050 Strategy

Module 2: Climate Change and Environmental Policy

- Science of climate change and GHG emissions
- Carbon budgets and carbon pricing mechanisms
- International and regional climate frameworks
- Regulatory compliance in energy industries
- Policy incentives for renewable energy
- **Case Study**: EU ETS Impact on Shell Operations

Module 3: Decarbonization Technologies

- Role of decarbonization in emission reduction
- Energy efficiency technologies
- Electrification of operations
- Emissions monitoring and reporting tools
- Role of carbon offsetting
- **Case Study**: Chevron’s Methane Reduction Initiative

Module 4: Carbon Capture, Utilization & Storage (CCUS)

- Overview of CCUS systems
- Project lifecycle of CCUS infrastructure
- Regulatory and safety aspects of CO? storage
- Economic considerations and investment trends
- Public perception and community engagement
- **Case Study**: ExxonMobil’s Baytown CCUS Project

Module 5: Renewable Energy in O&G

- Solar and wind integration into O&G facilities
- Offshore wind and marine energy
- Energy storage systems and battery technologies
- Hybrid energy systems
- Transitioning refineries for renewables
- **Case Study**: Equinor’s Floating Wind Platform

Module 6: Hydrogen Economy

- Fundamentals of hydrogen production (green, blue, gray)

- Infrastructure and transport considerations
- Applications in refining and transport
- Safety, storage, and scalability challenges
- Policy and market drivers for hydrogen
- **Case Study**: TotalEnergies Hydrogen Mobility Project

Module 7: ESG and Governance

- Introduction to ESG frameworks
- Sustainability reporting standards (GRI, SASB)
- ESG metrics for the energy industry
- Stakeholder management and corporate accountability
- Linking ESG to business performance
- **Case Study**: Repsol's Integrated ESG Strategy

Module 8: Energy Efficiency and Digital Transformation

- Role of digitalization in energy management
- Smart grids and digital twins
- Internet of Things (IoT) in energy monitoring
- Predictive maintenance and AI
- Enhancing productivity and reducing emissions
- **Case Study**: Saudi Aramco's Digital Oilfield Program

Module 9: Financing Sustainable Energy Projects

- Funding mechanisms and green bonds
- Project finance for renewables
- ROI and risk assessment in energy transition
- Public-private partnerships
- International climate funds
- **Case Study**: Financing the Hornsea Wind Project (UK)

Module 10: Circular Economy in Energy Sector

- Concepts of reuse, recycling, and resource recovery
- Waste-to-energy innovations
- Lifecycle analysis and material footprint
- Integration into supply chain and operations
- Sustainable procurement strategies
- **Case Study**: Schlumberger's Circular Equipment Model

Module 11: Workforce Transformation and Change Management

- Reskilling and upskilling the energy workforce
- Leadership in the sustainability era
- Diversity, equity, and inclusion in energy teams

- Creating a culture of sustainability
- Transition communication strategies
- **Case Study**: Petronas' FutureSkills Workforce Program

Module 12: Strategic Energy Planning and Scenario Analysis

- Strategic foresight and long-term energy planning
- Scenario planning tools and techniques
- Risk management in transition pathways
- Aligning corporate goals with global energy trends
- KPI setting and impact measurement
- **Case Study**: IEA Scenarios in TotalEnergies' Planning

Module 13: Stakeholder Engagement and Community Relations

- Identifying and mapping stakeholders
- Social license to operate
- Community benefits and impact mitigation
- Indigenous rights and local participation
- Communication best practices
- **Case Study**: Enbridge's Community Consultation Model

Module 14: Emerging Technologies and Innovations

- Blockchain in energy markets
- Advanced materials and nanotechnology
- Artificial intelligence and robotics
- Clean fuel innovations (ammonia, synthetic fuels)
- Tech-based emissions monitoring
- **Case Study**: Siemens' Smart Grid Pilot Project

Module 15: Designing a Sustainable Transition Roadmap

- Steps in creating a transition roadmap
- Aligning with SDGs and climate goals
- Building cross-functional sustainability teams
- Benchmarking and best practices
- Monitoring, review, and continuous improvement
- **Case Study**: Oman Oil's Strategic Transition Plan

Training Methodology

- Instructor-led live sessions (in-person or online)
- Interactive group activities and scenario planning
- Real-world case study analyses
- Digital tools and simulation-based learning
- Pre- and post-assessment evaluations

- Personalized action plans and feedback loops

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	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

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