



OIL AND GAS

Strategic Project Risk & Decision Analysis for Energy Sector Professionals

Course code: OG-012

SPARK TRAINING

Professional training courses for leaders, specialists, and organizations seeking practical capability development.

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— Workshop Overview

Energy projects are characterized by high capital exposure, long execution timelines, and complex technical and market uncertainties. Strategic decisions made early in the project lifecycle have a direct impact on profitability, safety, and operational success. This course equips professionals with advanced risk and decision analysis techniques to support strategic planning, investment evaluation, and project execution in uncertain environments. It enables participants to move beyond qualitative risk identification toward structured, evidence-based decision-making.

Why Attend

The course is delivered through a practical and interactive approach:

- Real-life energy and oil & gas case studies
- Facilitated group discussions and decision workshops

Who Should Attend

Project Managers and Senior Engineers
Risk Management Professionals
Strategy and Planning Managers
Investment and Portfolio Analysts
Technical and Operational Leaders in energy sector
Professionals involved in capital project decision-

— Learning Objectives

- Apply strategic risk analysis techniques in energy projects
- Evaluate complex project decisions under uncertainty
- Integrate risk thinking into strategic planning and investment decisions
- Use structured frameworks for multi-criteria decision analysis
- Assess project alternatives based on risk-adjusted outcomes
- Improve decision quality in high-stakes environments

Course Outline

DAY
1

Strategic Risk Fundamentals in Energy Projects

- Understanding strategic risk in energy sector projects
- Sources of uncertainty in large-scale energy investments
- Risk management frameworks and governance structures
- Identifying and structuring strategic risks
- Developing a strategic risk register
- Qualitative risk analysis and prioritization techniques

DAY
2

Quantitative Risk Analysis for Strategic Decisions

- Introduction to quantitative risk thinking
- Probability concepts applied to project risk
- Sensitivity analysis and key risk drivers
- Introduction to simulation-based thinking (Monte Carlo concepts)
- Evaluating uncertainty in cost, schedule, and performance
- Interpreting risk outputs for decision support

DAY
3

Decision Analysis Frameworks

- Decision-making under uncertainty principles
- Decision trees and expected value analysis
- Multi-criteria decision analysis (MCDA)
- Risk appetite and strategic trade-offs
- Evaluating investment alternatives
- Case study: Energy project investment decision

DAY
4

Scenario Planning & Strategic Risk Modeling

- Scenario development for energy projects
- Stress testing and extreme scenario analysis
- Modeling dependencies and interrelated risks
- Strategic portfolio risk considerations
- Risk mitigation and optimization strategies
- Practical workshop: scenario-based decision modeling

DAY

5

Embedding Risk into Strategic Decision-Making

- Integrating risk analysis into strategic planning
- Governance and executive risk reporting
- Communicating uncertainty to senior stakeholders
- Enhancing decision quality in capital projects
- Industry best practices from energy sector
- Final case study and group presentations

— Upcoming Classroom Dates

DATE	LOCATION	FEE
5 - 9 October 2026	Amsterdam - Netherlands	€2,125
12 - 16 October 2026	London - United Kingdom	€1,925
9 - 13 November 2026	Barcelona - Spain	€2,125
16 - 20 November 2026	Kuala Lumpur - Malaysia	€1,425
7 - 11 December 2026	London - United Kingdom	€2,125
14 - 18 December 2026	Barcelona - Spain	€2,125
21 - 25 December 2026	Vienna - Austria	€2,100
4 - 8 January 2027	Kuala Lumpur - Malaysia	€1,400

— Certificate and Registration

Participants who attend and complete the full programme receive a SPARK Training Certificate of Completion. For registration, in-house delivery, or availability questions, contact info@sparktraining.eu or +31 85 115 0004.