Renewable Energy Enterprise Risk Management Training Course

Professional Development Training Course Outline

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

Course Introduction

Renewable Energy Enterprise Risk Management (ERM) Training Course is designed to equip energy professionals, project leaders, risk practitioners, and executives with the capabilities required to identify, assess, manage, and monitor the interconnected risks facing modern renewable energy enterprises. As the sector scales solar, wind, battery storage, hybrid projects, and digital energy systems, organizations must navigate climate risk, cyber risk, supply-chain disruption, energy security, regulatory uncertainty, geopolitical exposure, project-finance risk, operational resilience, ESG, and AI governance. Current industry outlooks emphasize supply-chain agility, storage integration, digitalization, AI, resilience, and capital discipline as important priorities for renewable-energy businesses.

The course develops an enterprise-wide risk mindset that connects strategic, financial, operational, technological, environmental, compliance, and reputational risks to business performance and decision-making. Participants learn how to construct risk registers, conduct risk assessments, develop Key Risk Indicators (KRIs), perform scenario analysis and stress testing, strengthen business continuity, manage third-party risk, and integrate emerging technologies into resilient risk frameworks. Particular emphasis is placed on cyber resilience, AI risk, climate adaptation, critical-mineral and supplier resilience, energy security, ESG performance, and data-driven risk intelligence areas receiving increasing attention across the 2026 risk and energy landscape.

Programme Curriculum

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5 days

Course Objectives

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

1. Develop an enterprise-wide ERM framework aligned with renewable-energy business strategy.
2. Identify and prioritize strategic, operational, financial, project, and emerging risks across the renewable-energy value chain.
3. Apply risk appetite, risk taxonomy, risk registers, heat maps, and KRIs to enterprise decision-making.
4. Assess climate-related physical and transition risks affecting renewable-energy assets and portfolios.
5. Strengthen cybersecurity, digital resilience, OT/IT security, and critical-infrastructure protection.
6. Evaluate AI governance, AI-related risk, automation risk, and responsible AI within energy operations.
7. Manage supply-chain resilience, third-party risk, critical minerals, procurement exposure, and geopolitical disruption.
8. Apply project-finance risk management to renewable-energy development, construction, commissioning, and operations.
9. Assess market, power-price, PPA, liquidity, interest-rate, currency, and investment risks.
10. Integrate ESG, sustainability, regulatory compliance, and stakeholder risk into enterprise risk processes.
11. Design business continuity, crisis management, disaster recovery, and operational resilience strategies.
12. Use scenario planning, stress testing, predictive analytics, and risk intelligence to improve strategic decisions.
13. Build a practical renewable-energy ERM roadmap with governance, controls, reporting, monitoring, and continuous improvement.

Target Audience

1. Renewable Energy Executives and Senior Managers
2. Enterprise Risk Management and Risk Officers
3. Energy Project Managers and Project Directors
4. Solar, Wind, Hydro, Geothermal and Battery-Storage Professionals
5. Finance, Investment and Project-Finance Professionals
6. HSE, ESG, Sustainability and Compliance Professionals

7. Cybersecurity, IT/OT and Digital Transformation Leaders
8. Consultants, Auditors, Regulators and Energy-Sector Advisors

Course Modules

Module 1: Renewable Energy Enterprise Risk Management Foundations

- **ERM principles and risk governance** for renewable-energy organizations.
- Enterprise risk taxonomy covering **strategic, financial, operational, project and emerging risks**.
- Risk appetite, tolerance, ownership and **three-lines governance**.
- Risk identification, assessment, prioritization and **enterprise risk registers**.
- **Case Study:** A renewable-energy developer establishes an integrated ERM framework across a growing solar, wind and storage portfolio.

Module 2: Strategic, Market and Financial Risk

- **Energy-market volatility, power-price risk and revenue uncertainty**.
- PPA, merchant exposure, offtaker credit and counterparty risk.
- **Capital allocation, project finance, liquidity, interest-rate and foreign-exchange risks**.
- Investment, M&A and portfolio-diversification risk.
- **Case Study:** A solar-plus-storage portfolio uses scenario analysis to evaluate changing power prices, financing costs and revenue structures.

Module 3: Project Development and Operational Risk

- Risk across **feasibility, permitting, procurement, construction, commissioning and operations**.
- EPC, contractor, schedule, cost-overrun and performance risks.
- Asset integrity, reliability, maintenance and **predictive maintenance**.
- HSE, emergency preparedness and operational resilience.
- **Case Study:** A wind project experiences construction delays and equipment-performance issues; participants develop an integrated mitigation plan.

Module 4: Climate, Environmental and ESG Risk

- **Physical climate risk**
- **Transition risk** arising from policy, technology, markets and stakeholder expectations.
- Environmental compliance, biodiversity, water and community impacts.
- ESG governance, sustainability metrics and **decision-useful reporting**.
- **Case Study:** A renewable portfolio conducts climate scenario analysis to identify asset vulnerabilities and prioritize adaptation investments.

Module 5: Supply Chain, Procurement and Geopolitical Risk

- **Supply-chain resilience, supplier concentration and third-party risk management**
- Critical minerals, batteries, solar modules, turbines and strategic components.
- Geopolitical tensions, tariffs, trade restrictions and sourcing diversification.
- Supplier due diligence, business continuity and alternative sourcing.
- **Case Study:** A battery-storage developer faces component shortages and geopolitical disruption and develops a multi-source procurement strategy.

Module 6: Cybersecurity, AI and Digital Risk

- **Cyber risk, ransomware, identity security and critical-infrastructure protection**
- IT/OT convergence and cybersecurity for renewable-energy assets.
- AI governance, **generative AI, agentic AI and emerging technology risk**.
- Data governance, digital twins, cloud risk and third-party technology exposure.
- **Case Study:** A digitally connected renewable portfolio develops a cyber-resilience strategy covering operational technology, vendors and AI-enabled systems.

Module 7: Business Continuity, Crisis Management and Resilience

- **Business continuity management (BCM)** and critical-process identification.
- Crisis management, emergency response and disaster recovery.
- Scenario planning, **stress testing and resilience metrics**.
- Recovery strategies for climate, cyber, supply-chain and operational disruptions.
- **Case Study:** A renewable-energy operator develops a crisis-response playbook for simultaneous extreme weather and grid disruption.

Module 8: ERM Analytics, Reporting and Continuous Improvement

- **Key Risk Indicators (KRIs), Key Performance Indicators (KPIs)** and risk dashboards.
- Risk data analytics, predictive intelligence and early-warning systems.
- Board-level risk reporting and **risk-based decision intelligence**.
- ERM maturity assessment, assurance and continuous improvement.
- **Case Study:** Participants build an executive risk dashboard for a renewable-energy enterprise and translate risk data into strategic actions.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

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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