

Climate Risk and Renewable Energy 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

Climate Risk and Renewable Energy Training Course is designed to equip participants with advanced knowledge and practical skills in climate resilience, renewable energy transition, sustainability strategies, carbon management, ESG frameworks, and climate adaptation planning. As organizations worldwide accelerate toward net-zero emissions, clean energy transformation, climate-smart investments, and sustainable development goals (SDGs), professionals need the ability to assess climate vulnerabilities, manage environmental risks, and implement innovative renewable energy solutions. This course integrates climate risk assessment, energy transition strategies, renewable technologies, green finance, climate governance, and sustainability leadership to support organizations in building resilient and low-carbon futures.

The program provides a comprehensive understanding of emerging climate change challenges, energy security priorities, renewable energy innovation, and environmental risk management practices. Through real-world case studies, interactive learning, and industry-driven applications, participants will develop expertise in climate risk modeling, renewable energy project evaluation, ESG reporting, carbon reduction pathways, climate policy frameworks, and sustainable business transformation. The course is ideal for professionals seeking to lead climate action initiatives and contribute to global efforts toward a resilient, clean energy, and climate-positive economy.

Programme Curriculum

Climate Risk and Renewable Energy Training Course

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Course Duration

5 days

Course Objectives

By completing this training course, participants will be able to:

1. Understand global climate change trends, climate risks, and sustainability challenges affecting industries and communities.
2. Develop skills in climate risk identification, assessment, and mitigation planning.
3. Apply advanced approaches for climate adaptation and resilience strategies.
4. Understand renewable energy technologies including solar, wind, hydrogen, biomass, and energy storage systems.
5. Evaluate renewable energy projects using technical, financial, and environmental assessment tools.
6. Implement net-zero strategies and carbon reduction pathways within organizations.
7. Apply ESG principles and international sustainability reporting frameworks.
8. Analyze climate-related financial risks and opportunities through green finance mechanisms.
9. Understand carbon markets, carbon credits, and decarbonization strategies.
10. Develop climate-smart policies aligned with global sustainability frameworks and SDGs.
11. Strengthen organizational capacity for energy transition and climate resilience planning.
12. Apply digital tools including climate analytics, environmental data platforms, and risk modeling solutions.
13. Build leadership capabilities for driving climate innovation and sustainable transformation.

Target Audience

1. Sustainability managers and ESG professionals
2. Renewable energy engineers and project developers
3. Environmental consultants and climate specialists
4. Energy sector executives and decision-makers
5. Government officials and policymakers
6. Corporate risk management professionals
7. Financial professionals involved in green investment and climate finance
8. Researchers, academics, and sustainability-focused professionals

Course Modules

Module 1: Climate Change Fundamentals and Global Climate Risk Landscape

- Global climate change trends and emerging environmental challenges
- Climate risk drivers-physical risk, transition risk, and systemic risk
- International climate agreements and sustainability frameworks
- Climate resilience strategies for organizations and communities
- Role of businesses in global climate action
- **Case Study: European Union Climate Adaptation Strategy**

Module 2: Climate Risk Assessment and Management

- Climate risk identification and vulnerability assessment
- Climate scenario analysis and risk modeling techniques
- Physical and transition risk evaluation
- Climate risk management frameworks
- Developing organizational climate resilience plans
- **Case Study: Banking Sector Climate Risk Assessment**

Module 3: Renewable Energy Technologies and Innovation

- Solar photovoltaic and concentrated solar technologies
- Wind energy systems and offshore renewable development
- Green hydrogen and emerging clean energy solutions
- Battery storage and smart energy systems
- Renewable energy technology trends and innovations
- **Case Study: Denmark Renewable Energy Transition**

Module 4: Renewable Energy Project Development and Management

- Renewable energy project lifecycle management
- Feasibility studies and technical evaluation
- Energy yield assessment and resource analysis
- Investment models and project financing
- Risk management in renewable energy projects
- **Case Study: Large-Scale Solar Farm Development**

Module 5: Net-Zero Strategies and Carbon Management

- Understanding net-zero pathways and decarbonization
- Carbon footprint measurement methodologies
- Scope 1, Scope 2, and Scope 3 emissions management
- Carbon reduction technologies and solutions
- Corporate climate action planning
- **Case Study: Microsoft Carbon Negative Strategy**

Module 6: ESG, Sustainable Finance, and Climate Investment

- ESG principles and sustainability reporting
- Climate finance mechanisms and green bonds
- Sustainable investment strategies
- Climate-related financial disclosures
- Evaluating renewable energy investments

- **Case Study: Green Bond Market Expansion**

Module 7: Climate Policy, Governance, and Sustainable Development

- Global climate policies and regulatory trends
- Sustainable Development Goals (SDGs) alignment
- Climate governance frameworks
- Corporate sustainability leadership
- Stakeholder engagement and climate communication
- **Case Study: Paris Agreement Implementation Programs**

Module 8: Future Trends in Climate Risk and Renewable Energy

- Artificial intelligence in climate risk analytics
- Digital transformation in renewable energy management
- Climate technology innovations
- Energy transition opportunities and challenges
- Building climate-resilient organizations
- **Case Study: AI-Based Climate Forecasting Solutions**

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
21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

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