Renewable Energy Valuation Techniques 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 Valuation Techniques Training Course provides a practical and strategic framework for professionals seeking to master renewable energy project valuation, financial modelling, investment analysis, and risk assessment. As the global energy transition accelerates, organizations require specialists who can evaluate the commercial viability of solar PV, wind, hydropower, battery energy storage, green hydrogen, and hybrid renewable energy projects. This course explores advanced valuation methodologies including Discounted Cash Flow (DCF), Net Present Value (NPV), Internal Rate of Return (IRR), Levelized Cost of Energy (LCOE), comparable transactions, project finance modelling, sensitivity analysis, and scenario modelling. Participants will learn how to translate technical, operational, market, regulatory, and financial assumptions into robust investment decisions.

Designed around real-world renewable energy investment challenges, the course connects valuation theory with practical application through case studies, financial modelling exercises, market analysis, and investment decision simulations. Participants will examine how power purchase agreements (PPAs), renewable energy certificates, carbon markets, inflation, interest rates, tax incentives, grid constraints, merchant power exposure, curtailment, resource risk, and technology costs influence project value. By the end of the programme, learners will be equipped to conduct bankable valuations, investment due diligence, portfolio assessments, acquisition analysis, and strategic renewable energy investment decisions in an increasingly competitive net-zero and clean energy economy.

Programme Curriculum

Renewable Energy Valuation Techniques Training Course

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Course Objectives

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

1. Understand the principles of renewable energy project valuation and their application across different clean-energy technologies.
2. Build professional DCF valuation models for renewable energy assets and portfolios.
3. Calculate and interpret NPV, IRR, payback period, DSCR, LCOE, and equity returns.
4. Evaluate solar, wind, hydropower, battery storage, green hydrogen, and hybrid energy projects.
5. Assess the financial impact of PPAs, merchant pricing, tariffs, and renewable energy incentives.
6. Apply project finance modelling techniques to infrastructure-scale renewable energy investments.
7. Conduct sensitivity analysis, scenario analysis, and Monte Carlo-style risk assessment.
8. Evaluate technology risk, resource risk, market risk, regulatory risk, and financing risk.
9. Perform comparable company, precedent transaction, and market-based valuation.
10. Assess M&A, acquisition, divestment, and refinancing opportunities in renewable energy.
11. Incorporate ESG, climate risk, carbon pricing, and energy-transition scenarios into investment valuations.
12. Develop investment-grade valuation assumptions, financial forecasts, and investment cases.
13. Make evidence-based investment, financing, portfolio optimization, and strategic asset-management decisions.

Target Audience

1. Renewable Energy Investment Analysts
2. Project Finance Professionals
3. Energy & Infrastructure Investment Managers
4. Financial Modelling & Valuation Specialists
5. Renewable Energy Developers and Project Managers

6. Corporate Finance, M&A and Private Equity Professionals
7. Banks, Lenders and Infrastructure Finance Teams
8. Energy Regulators, Consultants and Policy Professionals

Course Modules

Module 1: Renewable Energy Valuation Fundamentals

- Energy transition economics.
- Renewable energy asset classes.
- Valuation frameworks
- Key value drivers.
- **Case study:** Valuation of a utility-scale **solar PV project** from development stage through commercial operation.

Module 2: Renewable Energy Financial Modelling

- Project finance models
- Financial forecasting
- Return metrics
- Model integrity
- **Case study:** Build a financial model for a **100 MW wind farm** and evaluate its investment returns.

Module 3: DCF and Advanced Valuation Techniques

- DCF methodology.
- Discount rates
- Terminal value
- Scenario valuation.
- **Case study:** Conduct a **DCF valuation of a renewable energy portfolio** under changing power-price assumptions.

Module 4: PPA, Revenue and Market Valuation

- Power Purchase Agreements
- Merchant exposure
- Revenue stacking
- Market forecasting
- **Case study:** Compare the valuation of a **solar-plus-storage project under a long-term PPA versus merchant exposure**.

Module 5: Risk, Sensitivity and Scenario Analysis

- Risk identification
- Sensitivity analysis
- Scenario modelling
- Risk-adjusted valuation
- **Case study:** Stress-test a **wind project** following changes in power prices, interest rates, construction costs, and capacity factor.

Module 6: Project Finance, Debt and Investment Structuring

- Project finance fundamentals
- Debt sizing
- Capital structure
- Bankability
- **Case study:** Structure financing for a **utility-scale battery energy storage project** and evaluate equity returns.

Module 7: M&A, Portfolio Valuation and Investment Due Diligence

- Asset acquisitions
- Comparable analysis
- Due diligence
- Portfolio optimization
- **Case study:** Perform an **acquisition valuation and due-diligence assessment** for a multi-country renewable energy portfolio.

Module 8: ESG, Carbon Markets and Future Energy Valuation

- ESG integration
- Carbon economics
- Emerging technologies
- Energy-transition scenarios
- **Case study:** Develop an investment valuation for a **green hydrogen and renewable power hybrid project** under multiple energy-transition scenarios.

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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