Training Course on Renewable Energy, Project Financing and Financial Modelling

Professional Development Training Course Outline

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

Course Introduction

This intensive training course provides a comprehensive understanding of **Renewable Energy Project Financing** and **Financial Modelling**, two critical pillars for the successful development and investment in sustainable energy ventures. Participants will gain practical skills in structuring financial deals, assessing project viability through robust models, and navigating the complexities of the renewable energy landscape. By mastering these competencies, professionals can effectively contribute to the growth of clean energy and make informed investment decisions in this rapidly evolving sector.

The curriculum is meticulously designed to cover the entire project lifecycle, from initial assessment and financial structuring to risk management and investment analysis. Through hands-on exercises and real-world case studies, attendees will learn to build sophisticated **Financial Models** tailored to renewable energy projects, understand various **Project Financing** mechanisms, and evaluate the economic feasibility of different renewable energy technologies. This course empowers individuals and organizations to capitalize on the burgeoning opportunities within the renewable energy market while contributing to a sustainable future.

Programme Curriculum

Training Course on Renewable Energy, Project Financing & Financial Modelling

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Course Objectives

1. Understand the fundamentals of **renewable energy finance**.
2. Master **financial modelling for solar projects**.
3. Develop expertise in **wind energy project financing**.
4. Learn to structure **renewable energy investment deals**.
5. Apply **discounted cash flow (DCF) analysis** to renewable projects.
6. Conduct thorough **risk assessment in renewable energy projects**.
7. Analyze **power purchase agreements (PPAs)** financially.
8. Evaluate the **levelized cost of energy (LCOE)** for different technologies.
9. Explore **green bonds and sustainable finance** for renewables.
10. Navigate **policy incentives and regulations** in renewable energy.
11. Understand **project finance structures** for large-scale renewables.
12. Perform **sensitivity and scenario analysis** in financial models.
13. Utilize **financial modelling best practices** for renewable energy.

Organizational Benefits

- **Enhanced Decision-Making:** Equip your team with the skills to make informed financial decisions regarding renewable energy projects.
- **Improved Project Viability Assessment:** Accurately evaluate the financial feasibility and profitability of potential renewable energy investments.
- **Increased Investment Confidence:** Develop robust financial models that instill confidence in stakeholders and investors.
- **Better Risk Management:** Understand and mitigate financial risks associated with renewable energy projects.
- **Optimized Financial Structuring:** Structure project financing deals effectively to maximize returns and minimize costs.
- **Competitive Advantage:** Stay ahead of the curve in the rapidly growing renewable energy sector with specialized financial expertise.
- **Attract Green Financing:** Understand and access various green financing options, including green bonds and climate funds.
- **Standardized Financial Analysis:** Implement consistent and best-practice financial modelling techniques across the organization.
- **Effective Communication with Stakeholders:** Clearly communicate financial projections and analyses to investors, lenders, and partners.

- **Support Sustainability Goals:** Advance your organization's commitment to sustainability through financially sound renewable energy investments.

Target Audience

1. Renewable Energy Project Developers
2. Energy and Finance Professionals
3. Investors and Venture Capitalists.
4. Policymakers and Regulators
5. Sustainability and ESG Professionals.
6. Corporate Energy Managers.
7. Bankers and Financial Analysts.
8. Consultants in Energy Finance and Investment

Course Outline

Module 1: Introduction to Renewable Energy Finance

- Overview of global renewable energy trends and market drivers.
- Key characteristics and economics of different renewable energy technologies (solar, wind, hydro, etc.).
- Understanding the unique financial aspects of renewable energy projects compared to conventional energy.
- Introduction to the project lifecycle and the role of finance at each stage.
- The importance of financial modelling in renewable energy project development and investment.

Module 2: Fundamentals of Financial Modelling

- Best practices in spreadsheet modelling and data organization.
- Essential Excel functions and formulas for financial analysis.
- Structuring a robust and transparent financial model.
- Understanding key financial statements: Income Statement, Balance Sheet, and Cash Flow Statement.
- Time value of money concepts: Net Present Value (NPV) and Internal Rate of Return (IRR).

Module 3: Project Finance Structures in Renewable Energy

- Understanding non-recourse and limited-recourse financing.
- Key stakeholders in a project finance deal: sponsors, lenders, offtakers, etc.
- Different types of project finance debt and equity.
- The role of special purpose vehicles (SPVs) in project finance.
- Analyzing contractual frameworks in renewable energy projects.

Module 4: Financial Modelling for Solar Energy Projects

- Modelling solar resource assessment and energy generation forecasts.
- Incorporating capital expenditure (CAPEX) and operating expenditure (OPEX) specific to solar projects.
- Modelling revenue streams from power purchase agreements (PPAs) and feed-in tariffs.
- Accounting for solar-specific incentives and subsidies.
- Analyzing the impact of degradation and technological advancements on solar project financials.

Module 5: Financial Modelling for Wind Energy Projects

- Modelling wind resource assessment and energy generation forecasts.

- Incorporating CAPEX and OPEX specific to onshore and offshore wind projects.
- Modelling revenue streams considering wind intermittency and grid connection costs.
- Accounting for wind-specific incentives and subsidies.
- Analyzing the impact of turbine technology and site conditions on wind project financials.

Module 6: Revenue Modelling: Power Purchase Agreements (PPAs)

- Understanding different types of PPAs and their key terms.
- Modelling fixed price, floating price, and hybrid PPA structures.
- Incorporating volume risk and curtailment factors in PPA models.
- Analyzing the creditworthiness of offtakers and PPA security mechanisms.
- Forecasting revenue under different PPA scenarios.

Module 7: Cost Modelling: CAPEX and OPEX in Renewables

- Identifying and forecasting all capital expenditure items for renewable energy projects.
- Developing detailed operating expense budgets, including O&M, land lease, and insurance.
- Understanding the impact of economies of scale and technological advancements on costs.
- Incorporating inflation and currency fluctuations in cost projections.
- Analyzing cost sensitivities and potential cost overruns.

Module 8: Debt Financing and Loan Structuring

- Understanding different types of debt financing for renewable energy projects.
- Modelling loan drawdowns, repayments, and interest calculations.
- Analyzing debt service coverage ratios (DSCR) and other key debt metrics.
- Incorporating debt sculpting and refinancing options in financial models.
- Understanding lender due diligence and credit risk assessment.

Module 9: Equity Financing and Investor Returns

- Identifying different sources of equity financing for renewable energy projects.
- Modelling equity contributions and dividend distributions.
- Analyzing key equity return metrics: Equity IRR and Return on Equity (ROE).
- Understanding investor perspectives and required rates of return.
- Incorporating exit strategies and valuation for equity investors.

Module 10: Risk Assessment and Sensitivity Analysis

- Identifying key financial and non-financial risks in renewable energy projects.
- Developing risk mitigation strategies and incorporating them into financial models.
- Performing sensitivity analysis on key input variables (e.g., discount rate, energy yield, electricity price).
- Conducting scenario analysis to evaluate the impact of different market conditions.
- Using tornado diagrams and spider charts to visualize risk and sensitivity.

Module 11: Project Valuation and Financial Feasibility

- Applying different valuation methods for renewable energy projects (DCF, LCOE, comparables).
- Calculating key financial feasibility indicators: NPV, IRR, Payback Period, Profitability Index.
- Determining the bankability and investment attractiveness of renewable energy projects.
- Understanding the influence of discount rates and terminal value on project valuation.
- Presenting valuation results and recommendations to stakeholders.

Module 12: Policy Incentives and Regulatory Frameworks

- Overview of global and local policy incentives for renewable energy (tax credits, subsidies, feed-in tariffs).
- Analyzing the impact of regulatory frameworks and permitting processes on project financials.
- Understanding carbon pricing mechanisms and their effect on renewable energy economics.
- Incorporating policy changes and regulatory risks into financial models.
- Navigating the complexities of grid connection and energy storage policies.

Module 13: Green Bonds and Sustainable Finance

- Understanding the principles and growth of green bonds.
- Analyzing the role of sustainable finance in funding renewable energy projects.
- Exploring different types of green financial instruments and their applications.
- Understanding ESG (Environmental, Social, Governance) factors in investment decisions.
- Accessing green finance opportunities and reporting requirements.

Module 14: Advanced Financial Modelling Techniques

- Incorporating macroeconomic factors and market trends into financial models.
- Modelling project finance with multiple debt tranches and complex waterfall structures.
- Using VBA (Visual Basic for Applications) for model automation and customization.
- Developing integrated financial dashboards for performance monitoring.
- Exploring real options analysis for valuing flexibility in renewable energy projects.

Module 15: Case Studies and Real-World Applications

- In-depth analysis of successful and challenging renewable energy project financing deals.
- Applying financial modelling techniques to real-world case studies across different technologies and regions.
- Understanding the perspectives of different stakeholders through case study discussions.
- Identifying key lessons learned and best practices in renewable energy project finance.
- Developing practical strategies for applying course knowledge to individual professional roles.

Training Methodology

This training course employs a blended learning approach that combines theoretical knowledge with practical application. The methodology includes:

- **Interactive Lectures:** Engaging presentations covering key concepts and principles of renewable energy project financing and financial modelling.
- **Hands-on Workshops:** Practical sessions where participants build and analyze financial models using Microsoft Excel, applying the concepts learned.
- **Case Study Analysis:** In-depth examination of real-world renewable energy projects to understand financing structures and financial outcomes.
- **Group Discussions:** Collaborative sessions to share insights, discuss challenges, and learn from the experiences of other participants.
- **Individual and Group Exercises:** Practical assignments designed to reinforce learning and develop practical skills in financial modelling and analysis.
- **Software Demonstrations:** Step-by-step demonstrations of financial modelling techniques using industry-standard software.

- **Q&A Sessions:** Dedicated time for participants to ask questions and clarify doubts with the instructor.
- **Templates and Tools:** Provision of pre-designed financial model templates and relevant analytical tools to facilitate practical application.

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
23 Nov 2026	04 Dec 2026	Physical	$9,000

Start Date	End Date	Location	Price
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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