



# Financial Modelling for Renewable Energy Projects

*Empowering Renewable Energy Decisions Through Financial Precision*

**25 – 29 August 2025** | Instructor-Led Online Training (5 Days)  
**16, 17, 20 – 22 October 2025** | Instructor-Led Online Training (5 Days)

## Who Should Attend

Professionals in corporate finance, financial analysts, investment bankers, financial controllers, finance managers, professionals responsible for project valuation, project finance, portfolio managers, and professionals in the private investment industry

## Training Methodology

- ✓ 70% hands-on Excel modelling
- ✓ 20% real-world illustrations
- ✓ 10% theory & best practices

## Training Outcomes

- ✓ Apply time value of money concepts
- ✓ Perform and interpret financial analysis
- ✓ Apply cost of capital calculation techniques
- ✓ Construct forecasted financial statement models and perform sensitivity analysis
- ✓ Use the free cash flow technique in determining the value of a project or a company
- ✓ Develop financial models using different Excel modeling techniques

## Learning Objectives

By the end of this training, participants will be able to:

- ✓ Build a project finance model from scratch in Excel.
- ✓ Understand project development and financing structures.
- ✓ Apply best-practice Excel macros and VBA to resolve circularities.
- ✓ Size debt based on lender covenants (DSCR, LLCR, PLCR).
- ✓ Model Debt Service Reserve Accounts (DSRA) and funding mechanisms.
- ✓ Calculate unlevered (project) returns and blended equity IRRs.
- ✓ Integrate P50, P90, and P99 generation profiles into financial models.
- ✓ Understand GP/LP flip structures and tax equity financing.
- ✓ Follow a structured financial model development process.

## About the Training

### Why Attend

Financial modelling is crucial for taking investment decisions that can have a huge financial impact on companies. By attending this course, you will be able to effectively prepare and build financial models that cater to different types of investments alternatives, understand and analyze time value of money, present value, future value and weighted average cost of capital (WACC), in addition to conducting proper analysis of financial information.

### Course Methodology

This course uses hands-on application of financial modeling in Excel, in addition to demonstrating theoretical core topics. The course also features real-life case studies and presentations by participants.

### Target Competencies

- ✓ Using Excel for financial applications
- ✓ Performing capital budgeting analysis
- ✓ Understanding and practicing Present Value (PV), Net Present Value (NPV), Internal Rate of Return (IRR)
- ✓ Understanding and calculating Weighted Average Cost of Capital (WACC)
- ✓ Performing financial modeling using Excel
- ✓ Reviewing scenario analysis

# Financial Modelling for Renewable Energy Projects

## Your Expert Facilitator

Stephen Rwafa is a Chartered Certified Accountant and Forensic and Fraud Examiner at Stafford Institute of Business (SIBM) specialising in management consulting, business strategy and training. Stephen is enthusiastic, dedicated and passionate about organisational development and skills development in both corporate establishment and small to medium enterprises. He graduated from Oxford Brookes University in the United Kingdom with a Bachelor of Science in Applied Accounting and worked for a number of years in Senior Management positions in organisations like Unilever, Standard Chartered Bank, Civil Aviation Authority and various other private public partnerships.

Through the years he has gained significant experience, over 20 years in both private and public establishments, which he has translated in designing and developing course programs targeted at enhancing and optimising organisational human capital investment, through knowledge and skills transfer to improve employee and employer skills for more efficiency and effectiveness at the workplace. Stephen has extensive hands-on training experience in various technical and specialist fields, including but not limited to administration and management skills needed in the office environment, field management, business development, soft skills, quality management, financial modelling in deal structuring for corporate and project finance and Excel training from novice to advanced levels.

Stephen has also consulted extensively with the office of the Auditor General of South Africa in modifying graphical presentation of report findings presented to parliament by the Auditor General.

## Programme Agenda

### Module 1: Foundations of Project Finance & Model Setup

#### Session 1: Introduction to Energy Project Finance

- Key stakeholders in project financing
- Project finance vs. corporate finance
- Typical financing structures (limited/non-recourse debt, tax equity)

#### Session 2: Setting Up the Financial Model

- Best practices for financial modelling (modular approach, flexible inputs)
- Building the assumptions sheet (capex, opex, energy yield, tariffs, incentives)
- Incorporating P50/P90/P99 generation profiles and their impact on revenue

#### Session 3: Revenue & Cost Build-Up

- Modelling energy production (availability, degradation, curtailment)
- Power Purchase Agreements (PPAs) & merchant price assumptions
- Opex modelling (fixed vs. variable, inflation escalations)
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#### Session 4: Debt Structuring Basics

- Introduction to debt sizing (senior debt, mini-perm, mezzanine)
- Key debt covenants (DSCR, LLCR, PLCR)
- **Hands-on Exercise:** Debt sizing based on covenants

### Module 2: Advanced Debt & Equity Modelling

#### Session 5: Debt Mechanics & DSRA Modelling

- Debt repayment structures (annuity, sculpted, bullet)
- Modelling Debt Service Reserve Accounts (DSRA)
- Cash sweep mechanics (if applicable)

#### Session 6: Tax Equity & GP/LP Flip Structures

- Basics of tax equity financing (ITCs, PTCs, accelerated depreciation)
- Modelling a GP/LP flip structure (promote structures, investor IRR hurdles)
- Hands-on Exercise: Tax equity cash flow waterfall

#### Session 7: Circularities & VBA Automation

- Common circularities in project finance models (interest during construction, DSRA)
- Writing Excel VBA macros to break circularities
- Best practices for model auditing & error checks

#### Session 8: Returns Analysis (Unlevered vs. Levered IRRs)

- Calculating Project IRR (unlevered) and Equity IRR (levered)
- Blended equity returns (sponsor vs. tax equity investor)
- Sensitivity analysis (IRR vs. key drivers: energy yield, capex, debt terms)

### Module 3: Finalizing the Model & Real-World Applications

#### Session 9: Scenario & Sensitivity Analysis

- Creating scenario manager (Base, Upside, Downside cases)
- Stress-testing the model (revenue shocks, construction delays)

#### Session 10: Model Optimization & Presentation

- Optimizing debt structure (refinancing, tenor extension)
- Preparing outputs for lenders/investors (summary dashboards, key metrics)

# REGISTRATION

## Financial Modelling for Renewable Energy Projects Training Course

**Total cost per delegate: R14,990.00**

- ☐ 25<sup>th</sup> – 29<sup>th</sup> August 2025 | Instructor-Led Online Training  
☐ 16<sup>th</sup>–17<sup>th</sup>, 20<sup>th</sup> – 22<sup>nd</sup> October 2025 | Instructor-Led Online Training

Please Note: This fee includes training, workshop materials & certification.

E-mail the completed form to:  
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### Your Organisation

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### Delegates' Details

#### Attendee (1)

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

#### Attendee (2)

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

#### Attendee (3)

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

### Terms & Conditions

#### Travel & Accommodation

Delegates are responsible for the arrangement and payment of their own travel and accommodation. Please contact us for further details.

#### Cancellations

The following charges will apply for written notice received:

30 + days before the course: 10%

15–30 days before the course: 50%

1–15 days before the course: 100%

The Hill Institute reserves the right to offer a conference voucher instead of a refund for any cancellations either by the client or by the event organizer, after payment has been done.

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### Authorising Party

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Dept: \_\_\_\_\_

Email: \_\_\_\_\_

Signature: \_\_\_\_\_

#### Attendee (4)

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

#### Attendee (5)

Full Name: Mr./Mrs./Ms \_\_\_\_\_

Position: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

### Payment Details

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