Corality Academy

Financial Modelling for Renewable Energy Projects – US/Canada

3 day duration

CORALITY ACADEMY

CORALITY FINANCIAL MODELLING

MAZARS

Company overview

About Mazars Global Infrastructure Finance

For project developers, investors and financiers in the infrastructure and energy industry, Mazars Global Infrastructure Finance, is a globally integrated, world class team delivering a complete industry service suite, including; financial model development, model audits, financial modelling training, advisory and valuations, with global expertise in tax and accounting. Through the combination of specialist offices in London, New York, Toronto, Sydney, Delhi and over 170 professionals, the leading Corality Financial Modelling methodology and global project experience, we deliver specialist services in close collaboration with Mazars globally integrated network of 20,000 staff in 102 countries providing local knowledge and language as required.

About Corality Academy

For people and organisations that rely on financial modelling for financial decisions, the Corality Academy provides specialised global training solutions based on real life experience of over 170 consulting and investment processionals, global industry credentials and the Corality Financial Modelling methodology. Our hands-on courses, delivered to small groups with personalised coaching have been successfully delivered to over 5,000 individuals and more than 300 organisations. Their learning keeps going long after the course through our online learning materials. The training course portfolio ranges from Excel capability development programmes to industry specific modules in project finance, valuations, renewable energy, power, mining and infrastructure.

Mazars acquired Corality in August 2016 and is further investing in the development of the global Academy..

Financial Modelling for Renewable Energy Projects – US/Canada

Financial Modelling for Renewable Energy Projects will give you the skills to efficiently develop, modify and analyse financial models in the renewable energy sector.

The course covers essential topics including funding mechanics, operational analysis and investment metrics and gives you a robust platform for analysis in the most sophisticated environments.

You will learn the financial modelling techniques needed to build a best practice financial model suitable for debt structuring, investment analysis and operational scenario evaluation.

What you will take away from this course

- An industry-best financial model with essential applications for project analysis across diverse project categories
- Corality Financial Modelling methodology best practice rules and techniques that you can apply immediately to your renewable energy projects
- A masterful understanding of essential Excel functionality for professional financial modelling and powerful shortcuts
- Compelling insights from recent market examples, group discussions and interactive workshops

In this programme for you?

If you are working in the renewable energy sector and have frequent challenges with financial models, then this training course is for you. The training course content is suitable for anyone who needs to build, review or analyse project models within the renewable energy sector, either for internal investments/operations/strategy, project finance transactions or greenfield development analysis.

Typical attendees include to analysts, managers, senior managers, associate directors and CFOs from renewable energy companies.

Key learnings

- Master best practice techniques for financial modelling of renewable energy projects to achieve flexibility and robustness
- Acquire specialised skills to building a flexible and powerful scenario manager to analyse your projects sensitivity to key drivers
- Learn how to create a flexible tax modelling framework adaptable to regional jurisdictions
- Understand and prepare flexible funding structures for analysing project finance debt and other funding sources

Course prerequisites

It is expected that participants have a previous exposure to Excel in a financial modelling context, and foundation knowledge of investment concepts such as NPV and cash flows.

Trainer support hotline

We view every training course as a long term commitment to course delegates. Our objective is not just to take you through the training and then leave you to your own devices – it is to fundamentally transform your Excel and financial modelling skills.

This is why your course fee includes post course access to your trainer and the Corality Academy support line.

"We found the approach to financial modelling straightforward, transparent and easy to use. As project developers we now have more confidence in taking our projects forward and presenting our models to potential investors. Overall we found the course very relevant, professionally delivered and we were also given enough time to practice and ask questions about the material being presented to us"

Vivek Nallaratnam, Technical Analyst - Windventures

Detailed course outline

Renewable energy projects often require significant financial analysis, and this hands-on financial modelling training course give you the skills and confidence required to develop a comprehensive financial model for planning, investments and financing analysis. Focused on the US market, participants will gain a solid understanding of the common structures deployed.

Develop a strong understanding of typical financial structures, financial model architecture and process in the renewable energy sector, to ensure the big picture is always in mind:

- Understand how to envision a financial modelling process from beginning to end
- Recognise the process similarities in modelling for wind, solar or hydro projects and learn which modules can be standardised across energy sources
- Gain insights into a typical financial model development process – step-by-step – for a renewable energy model
- Benefit from a flexible timing framework to underpin the model architecture – an essential feature for projects where the dates / timing may change over time (which includes 99% of all projects)
- Capture the structures deployed in the US including industry metrics, back-leverage, typical capital stacks and returns and the corporate structure with tax equity, partnership structures

Representing the construction phase of a renewable energy project in the Excel model:

- Discuss funding alternatives for renewable energy projects (bank debt, equity, tax equity, capital markets, government supported structures, export agencies) and how this impacts the financial modelling process
- Incorporate flexible functionality for funding
- Integrate typical renewable energy construction contracts and contingencies

Modelling of pricing and purchase agreements in renewable energy:

- Learn about off-take, prepaid and power purchase agreements (PPA) and renewable energy certificates (RECs) and the implication of these on funding
- Integrate both PPA and merchant pricing into the operational calculations
- Expand PPA analysis by having variable pricing structures, milestones, and penalties

Forecasting and modelling of production metrics:

- Understand application of different forecasting methods, the appropriate allocation of each
- Learn to integrate multiple probability exceedance profiles concurrently (e.g., P50, P90)
- Convert gross production to net production by accounting for: Operational ramp up schedules, impact of production unit (e.g. turbines) availability and efficiency, and gains and losses of production such as seasonality of renewable energy.

Incentives in US renewable energy projects:

- Learn about renewable energy certificates (RECs) and their impact on funding projects
- Discuss the typical types of local and state incentives available
- Calculate the investment tax credit (ITC) and production tax credit (PTC) and apply them to equity and tax equity as per the partnership agreement

Financial modelling techniques for operational costs and project maintenance:

- Integrate fixed and variable costs typical of renewable energy projects
- Learn how to model flexible volume driver controls for variable costs
- Understand the important role of real vs. nominal costs (escalation) and how to integrate powerful indices
- Discuss different reserve account structures (i.e. maintenance)

Course outline (cont.)

Project finance modelling: Integrate project finance debt:

- Incorporate the functionality of target Debt Service Coverage Ratio repayments
- Discuss other repayment options including bullets and linear commonly used in project finance
- Incorporate various debt sizing methodologies

Review depreciation and tax calculations:

- Flexible depreciation calculations for an efficient financial model structure
- Understand how to develop flexible input structures for analysis of multiple depreciation methods and the application of depreciation within the tax equity structure
- Correct taxable income for tax calculations and discuss the impact pre and post-flip as well as the difference at projectco vs holdco level
- Tax creditor accounts for correct assignation of tax payable and paid on a self-sheltering basis
- Understand the working of tax loss accounts with self-sheltering and the differences for tax equity investors

Financial return analysis: Project return – essential financial model output:

- Inclusion of best practice net present value (NPV) and internal rate of return (IRR) calculations for the renewable energy project both pre and post-flip
- Discussion about key differences between XNPV vs. NPV functions
- Calculate returns at projectco and holdco to equity and tax equity participants

Master scenario management with an efficient financial model structure:

- Work faster, better and with more insights using Corality Academy's scenario management solutions
- Use commercial scenario analysis to assess the working of the financial model, and to sense check your logic and calculations
- Build confidence in your analysis through pre-programmed combinations of model inputs

Optimize your project:

- Understand the tools available to optimize the project returns and debt size
- Calculate indicative tax equity size based on partnership structure
- Discuss the high-level HLBV concepts with tax equity (note: this is not an accounting course!).

We train industry leaders

A selection of our renewable energy clients clients

GOLDWIND, bcpg, EQUIS ENERGY, 茂能 MAONENG, First Solar, CanadianSolar, eDF, John laing

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