

## Course Curricula

# Foundation in Project Finance Modelling

This 2-day course is designed for participants who would like to build, review or analyse project finance models. Participants will create a discounted cash flow model from scratch using best practice methodology and along the way, practice powerful Excel techniques and shortcuts.

### Financial models in the context of project finance

- Discuss the role of the financial model in a project finance transaction
- Understand what differentiates a “good” model from a “bad” one
- Apply industry accepted best practice principles
- Discuss the 3Fs – foundation, formatting, formula
- Learn tips and shortcuts to improve efficiency and reduce errors

### Model development

- Plan the model layout, structure, flow and periodicity/ timing
- Design a user-friendly input sheet and create drop down lists, data validation and custom formatting
- Understand the phases of a typical project and create flexible timing and flags
- Write clear and concise formulas using binary flags, switches, and range names. Discuss the pros and cons of these techniques
- Learn the common Excel functions and understand when to use them

### Capital expenditure

- Discuss how to layout construction costs in a transparent and flexible way
- Add flexible contingency cost calculation

### Operations phase

- Consider the cash flow drivers and calculate production and revenue
- Calculate fixed and variable operating costs
- Understand real vs nominal values and use escalation index

### Funding the project

- Understand the structure of the cash flow waterfall
- Discuss typical funding options and drawdown approaches seen in typical transactions
- Discuss different debt repayment options and add a switch to allow users to evaluate the repayment methods
- Incorporate costs of debt including upfront fees and commitment fees

### Ratios and returns

- Calculate equity and project returns
- Perform returns (NPV and IRR) analysis and understand their drivers and pitfalls to different calculation methods
- Analyse key project finance ratios including DSCR and discuss the requirements from lenders

### Scenario and sensitivity analysis

- Perform sensitivity analysis and build a powerful scenario manager
- Create data tables to perform project analysis
- Introduction to optimising the funding mix using data tables

### Reviewing and troubleshooting (optional time permitting)

- Add checks to the model to reduce the risk of errors
- Where to start reviewing a model and what to look out for
- How to navigate around a model and interrogate formulas
- Model circularity - What is it? Why is it not accepted How to eliminate it?
- Discuss types of Excel errors and how to fix them
- Use a delta worksheet to analyse changes and spot potential errors

### Charting and presentation (optional time permitting)

- Pick up quick charting tips and pointers
- Create dynamic and flexible charts