

Example Financial Modelling Test - Solar Farm Development Model Build

Introduction

Thanks for your interest in [Numbers Executive Search & Recruitment's](#) Example Financial Modelling test - created with the help of our friends at [Sumproduct](#).

For many employers, financial modelling tests are a **crucial step** in the hiring process - this exercise is reflective of such tests, likely with employers such as:

- Investment Banks & Project Finance Advisors (infrastructure & energy coverage)
- Infrastructure Investors (funds and other investors)
- Corporate Finance & Corporate Development teams (within infrastructure or energy assets)
- Other Bid Origination or Bid Development firms.

The test assesses your ability to build a comprehensive financial model for a solar farm development project. The scenario involves constructing an annual financial model that captures the various aspects of the project, such as construction costs, financing, operations, revenue projections, and cash flow analysis.

The question provides detailed information about the project, such as the construction timeline, asset costs, loan terms, energy generation estimates, revenue projections, operating costs, capital expenditures, tax implications, and economic assumptions. Your task is to create a financial model that accurately reflects these details and calculates the present value of equity over the first ten years of the project's life.

Time Allocation

Generally, applicants will be allotted between 90 and 180 minutes for tests of this nature.

Scenario Background

- You are an Analyst with **Renew Ltd**, a leading developer of renewable energy generation assets.
- Renew is currently evaluating a potential solar farm development which **you have been asked to build an annual financial model for, reporting in \$ '000s**.
- Construction will begin on the 1st of July 2024 and take place over 2 years.
- Construction assets will cost a total of \$2,000,000.00, 45% of which will be incurred in the first year of construction, with the remaining costs occurring in the second year. These, and any other costs incurred throughout the construction term, will be capitalised and later depreciated once operations begin.
- A loan of \$1,500,000.00 has been secured to help finance costs during the construction term. Drawdowns cannot be made on this loan until the first \$500,000.00 of costs have been funded by equity. Any additional costs are also expected to be funded by equity.
- The terms of the loan are as follows:
 - Interest of 4.5% p.a. will be charged on the opening balance of the loan each year
 - Each year, a commitment fee equal to 1% of the undrawn portion of the loan at the start of the year will be charged.
- The SPV intends to refinance at the end of the construction term to fully repay this loan and drawdown a new loan.

- **There are two loans that the SPV may choose from**, please include the functionality to switch between these two loans in your financial model.
- The terms of these loans are as follows:
 - **Loan A**
 - Interest of 3.5% p.a. will be charged on the opening balance of the loan
 - The debt will have a term of 6 years
 - Annuity payments will be made over the debt's term to repay the principal.
 - **Loan B**
 - Interest of 3.5% p.a. will be charged on the opening balance of the loan
 - Payments will be made on a DSCR sculpted basis, with a target DSCR of 1.5x, until the principal is repaid
- The project expects to generate 850MWh of energy during its first operational year, this will then decrease by 2% each year as the hardware degrades. The SPV expects to sign a PPA to sell all generated energy at a price equivalent to \$1.40/kWh. This price is based on the period ending June 2025, increasing in line with CPI.
- Costs of \$200.00 per MWh output are expected to be incurred to cover the operations and maintenance of the project. Land is expected to be leased on a revenue share basis, with the landlord receiving 15% of the revenue of the project.
- Capital expenditure is expected to be made in the third, fifth, and eighth year of operations of \$500,000.00, \$650,000.00, and \$750,000.00, respectively.
- These new assets are expected to have a life of four years, whereas the construction assets are expected to have a life of ten years.
- Tax is expected to be charged at a rate of 20% of the NPBT. Tax will be paid on a one-year delay.
- Any excess cash will be paid out as dividends and any shortfall in cash will require an equity injection.
- Assuming a discount rate of 12% p.a., calculate the present value of equity over the first ten years of the project's life.
- Assume movements occur at the end of each period unless stated otherwise.
- The economic assumptions to use are as follows:

Jun 25	Jun 26	Jun 27	Jun 28	Jun 29	Jun 30	Jun 31	Jun 32	Jun 33	Jun 34
4.5%	4.5%	4.0%	4.0%	3.5%	3.5%	3.5%	3.0%	3.0%	3.0%

Please email test.solution@numbersexecutive.com.au and include your name and contact number to receive a copy of the best practice solution with simple commentary.

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About Numbers Executive

Established in 2010, Numbers Executive is a **specialist boutique search and recruitment firm** that has supported the appointment of **circa 500 professionals across Corporate and Commercial Finance, Investment Banking, Lending, Advisory, and Investment Management.**

Our Team

Numbers Executive's founding members have strong personal brands in the marketplace and combine subject matter expertise with over 45 years of combined professional experience.

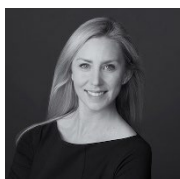
Nicolas Boston, Director & Co-Founder



Nicolas is a co-founder and Director of Numbers Executive. Since 1998 Nicolas has worked in Melbourne with two of the world's largest accounting firms, a specialist financial modelling firm and an international recruitment firm. Nicolas' experience includes external audit, transaction services, corporate finance, financial modelling, valuations, business development and executive recruitment. He hopes this experience provides employers and professionals alike, with comfort that the team at Numbers understands their subject matter. Since co-founding Numbers Executive in 2010, Nicolas has appointed hundreds of professionals across corporate finance, investment banking, funds management, professional services, advisory and corporate development.

Contact Nicolas at nicolas@numbersexecutive.com.au

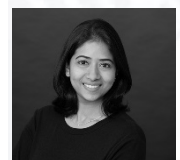
Briana Hill, Director & Co-Founder



An accomplished recruitment and search professional, Briana has supported the selection and appointment of corporate finance, strategy, funds management and accounting professionals across Australia for over 15 years. Previously an Associate Director for the finance division of a listed global recruitment firm, Briana led large teams providing recruitment services to Melbourne's professional, commercial, industrial and financial services sectors. Briana is an experienced leader with a proven track record managing large tenders and accounts alongside designing and delivering bespoke search and selection mandates. Passionate about delivering a more intimate and long-term service to her clients; Briana co-founded Numbers Executive in 2010 and continues to focus on appointments across Investment Banking, Corporate Development and Investment sectors.

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Nivedha Ravindranath, Research Associate



Nivedha holds an MBA in Human Resources and has extensive experience in recruitment, human resources, and training, gained through roles at various notable companies. With a passion for recruitment and talent management, she oversees the candidate research function at Numbers Executive and supports the execution and administration of search and recruitment mandates.

