



Financial Modelling, Corporate Finance and Project Finance Advisory Practices for Renewable Energy Projects in Africa: An Internship-Based Study of Hawkins Eberdal Ltd., Mauritius

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ABSTRACT

Renewable energy projects in Africa need large amounts of money at the start, but many of them find it hard to raise it. Financial advisory firms help by building reliable financial models, planning the funding and connecting projects with suitable investors. This paper is based on a ten-week On the Job Training (OJT) at Hawkins Eberdal Ltd., a financial advisory firm based in Mauritius that works mainly on renewable energy in sub-Saharan Africa. Earlier studies explain why financing is difficult, but say less about the practical work of preparing a project for funding. The study follows a descriptive, single-firm, participant-observation approach. It uses the intern's own work, discussions with the industry mentor, the firm's training material and public reports. The paper explains how Excel financial models for solar and wind projects are organised, how inputs flow into results, and how measures such as NPV, IRR and DSCR are used to judge whether a project is feasible. It also describes how company research, investor pitching and outreach, a weekly client report and weekly tender tracking support fundraising. The main findings are that a model is only as reliable as its inputs, that feasibility depends on several results read together, that power price, electricity produced and construction cost are the most important drivers, and that more debt raises the owners' return but lowers the safety margin for lenders. Client names and figures are confidential and are not used. The paper suggests simple practices, such as an input checklist, a model guide, a standard investor tracker and a one-page sensitivity summary, that can improve the quality of advisory work.

Keywords: Financial modelling; Project finance; Corporate finance; Renewable energy; Africa; Investor outreach; On the Job Training

1. Introduction

Africa has a very large need for electricity, and also large and mostly unused sources of sunlight and wind. Yet the continent receives only a small share of global clean energy investment compared with its share of the world's population (International Energy Agency, 2024; 2025). One reason is that solar and wind plants need most of their money at the start, when the plant is built, and lenders see many African projects as risky or not fully prepared. Financial advisory firms help to close this gap. They build financial models that show a project honestly, plan how it should be funded, and connect it with banks, funds and development finance institutions.

This paper looks at these advisory practices from the inside. It is based on an On the Job Training (OJT) carried out from 01 September 2026 to 13 November 2026 at Hawkins Eberdal Ltd., a financial advisory firm based in Mauritius. The firm started in London in 2019 and works mainly on renewable energy in sub-Saharan Africa, linking projects and companies to investors (Hawkins Eberdal Ltd., 2022). The author worked as a Finance Intern on financial models, research, investor outreach and tender tracking.

The purpose of the paper is to explain, in simple terms, what financial modelling and finance advisory involve in practice, and what a student can learn from them. Because the firm's clients and deals are confidential, no client names, projects or figures are used.

Earlier studies have shown that the cost of finance and the perceived risk are the main obstacles to renewable energy in developing countries (Schmidt, 2014; Ameli et al., 2021; Sweerts, Dalla Longa, & van der Zwaan, 2019). These studies mostly use large-scale models and compare countries or technologies. They say less about the daily practical work through which advisers prepare a project for funding: building the financial model, checking it, planning the funding and finding the right investors. This paper looks at that practical side, using the firsthand experience of an intern at an advisory firm.

1.1 Objectives

The study has four objectives:

To understand how financial models for solar and wind energy projects are built in Excel.

To study how cash flows, funding needs and returns are used to judge whether a renewable energy project is financially feasible.

To understand corporate finance and project finance concepts as used in an advisory firm.

To learn how company, industry and investor research supports fundraising for projects in Africa.

2. Theoretical background and literature review

2.1 Value, return and risk

The basic idea in finance is that an investment is worth the money it is expected to earn in the future, adjusted for time and risk. Future cash flows are converted into today's value using a discount rate. The Net Present Value (NPV) is the sum of these values minus the money invested, and the Internal Rate of Return (IRR) is the discount rate at which NPV becomes zero (Brealey, Myers, & Allen, 2020). Advisers look at the project IRR, which measures the return of the project itself, and the equity IRR, which measures the return to the owners after the loans are paid.

2.2 Capital structure

Modigliani and Miller (1958) showed that in a perfect market the mix of debt and equity does not change the value of a company. In the real world, taxes and the cost of financial trouble matter, so firms balance the benefit of debt against the risk of not being able to repay it. The pecking-order view says that firms prefer internal funds first, then debt, and new equity last (Myers & Majluf, 1984). In project finance, projects with stable and contracted income can carry a large share of debt because their risk is lower.

2.3 Project finance and corporate finance

In project finance, a separate company is created for one project. The lenders are repaid mainly from the cash that the project itself earns, not from the other businesses of the owners (Yescombe, 2014; Gatti, 2018). The loan is therefore judged on the strength of the project's cash flow and contracts, while in corporate finance it is judged on the overall health of the company. Project finance is usually used for large, long-term projects, takes more documents and checks, and is more expensive than a normal company loan. A key measure is the Debt Service Coverage Ratio (DSCR), which compares the cash available for debt service with the interest and loan repayments due in a period. Lenders usually ask for a safety margin above 1.

2.4 Financial modelling standards

A financial model is a spreadsheet that shows how a project will perform in money terms. Good practice keeps inputs, calculations and outputs separate, uses clear formats, avoids hidden fixed numbers inside formulas and includes checks (FAST Standard Organisation, n.d.). The firm follows habits of this kind in its models.

2.5 Earlier studies on financing renewable energy in Africa

Schmidt (2014) explains that low-carbon investments, especially in developing countries, often carry high risks, and that "de-risking", meaning actions that reduce the risk for investors, is an important way to attract private money. Ameli et al. (2021) show that developing economies face a higher cost of capital than richer regions, and that this makes the move to green energy more expensive and can leave climate investment chronically too low, which they call a climate investment trap. Sweerts, Dalla Longa, and van der Zwaan (2019) compare the effect of financial conditions on the cost of electricity from six renewable and three fossil-based technologies in 46 African countries. They find that current financial practices disadvantage renewables, and that financial de-risking is a key way to unlock Africa's renewable energy potential.

2.6 Research gap

The studies above explain why financing is difficult and what policy can do. They do not describe how an advisory firm works at project level to make a project easier to fund. This paper adds a practical, small-scale view of this work: how financial models are organised, which inputs matter most, how feasibility is judged and how investors are approached.

3. Methodology

3.1 Research design

The study is a qualitative, single-firm case study based on participant observation. The author worked as a Finance Intern at Hawkins Eberdal Ltd. from 01 September 2026 to 13 November 2026 (74 days) and took part in real work under the guidance of an industry mentor. This design suits the objectives because it shows how financial concepts are used in daily advisory work, which cannot be seen in textbooks or reports.

3.2 Data sources

Primary data came from the tasks performed, direct observation, a weekly learning diary, discussions with the industry mentor and feedback on the work. Secondary data came from the firm's website and internal training material on project finance, reports of the International Energy Agency, publications on the financial sector of Mauritius, the World Bank, published studies and standard finance books. The work covered five areas, shown in Table 1.

Table 1 - Main tasks performed during the OJT

Task	What was done
Financial model work	Worked on models built from the client's inputs, forecasts and scenarios; built and updated sections from construction and operations to financing, returns and valuation
Cash flow and feasibility analysis	Projected cash flows, prepared the funding plan, applied loan terms and checked return and coverage results
Research	Researched the companies raising funds (background, what they do, why and where the money is needed) and the investors that fund such projects
Fundraising and investor outreach	Helped pitch the companies to investors, approached investors through conferences, email, LinkedIn and follow-ups, and kept a weekly tracker and client report
Tender tracking	Followed tenders and prepared a weekly tender report with the deadline of each tender

3.3 How the findings were reached

The findings come from reviewing the models and results during the work and discussing them with the mentor. For each key input, the author noted whether the result moved up or down when the input changed and how large the effect appeared to be (very high, high, medium or low). Feasibility was judged with a fixed checklist of results, and the findings were compared with the four objectives.

3.4 Confidentiality

Client engagements and investor details are confidential. For this reason, no client names, projects or figures are used. The paper explains how the models work and how the results are read, not what a particular client's results were.

4. The organisation and its sector

Hawkins Eberdal Ltd. is a private financial advisory firm with its base in the north of Mauritius. It offers four connected services: project finance advisory, corporate advisory, financial modelling and strategic advisory (Hawkins Eberdal Ltd., 2022). Its main focus is renewable energy in sub-Saharan Africa, covering solar, wind, hybrid, hydro, biomass and biogas projects. In practice, the firm acts as a link between companies that need funds and investors that provide them.

The firm works within the financial services sector, which is one of the main pillars of the economy of Mauritius. Public sources report that the sector contributes about 13 to 14 percent of GDP directly and supports tens of thousands of jobs (Mauritius Financial Services, 2025). Mauritius is attractive as a base for investment into Africa because it is stable, has a good network of tax treaties and a skilled workforce. The firm's clients and projects, however, are in Africa, where the main challenges are the high cost of funding, currency risk, too few well-prepared projects and a shortage of experienced finance professionals.

5. Findings from the work done

5.1 How a renewable energy model is organised

The models used at the firm are single Excel files divided into sheets that each have one job. Input sheets hold all assumptions, calculation sheets work out operations, financing and returns, and output sheets show summaries and reports. Sheets are colour coded so that users know what can be changed. A scenario switch controls key drivers, so that a driver can be raised or lowered without changing any formula. A central Checks sheet separates errors, which must be fixed, from warnings, which need attention, and shows both on the first page of the model. Inputs are grouped from general to specific: timeline, revenue, costs, capital spending, financing, returns, tax and macroeconomic assumptions.

5.2 How a model is prepared step by step

A model starts with inputs. Many inputs come from the client, as the client knows the plans for the business. They are forecasts or scenarios, for example how much revenue may grow in each year, and how much it could rise or fall in a better or a worse case. The firm builds the whole model from these inputs in a fixed order: construction, operations, financing, and then returns and valuation. The final result tells whether a business or project is a good one, and investors use it to decide whether to put in money. Table 2 shows the main parts.

Table 2 - Main parts of a financial model

Part	What it covers
Inputs and scenarios	Client information, forecasts and different cases, such as base, better and worse
Construction	Cost of building the project and the time it takes
Operations	Revenue, running costs and the cash the project earns
Financing	Debt and equity, interest, repayments and fees
Returns and valuation	IRR, NPV, payback, DSCR and the value of the business

Revenue is built from separate streams and then added up. In an electricity project, for example, generation revenue depends on how much power can be generated and the price at which it is sold. Consumption revenue comes from the power used by customers, and connection revenue comes from fees paid by new customers to be connected. These give the total revenue. Costs are deducted to reach profit and cash flow, and the financing part shows how much cash is left after the lenders are paid.

5.3 What drives the results

Through model work and review, the effect of each input on the results was observed. Table 3 shows the direction of the effect when one input changes and the others stay the same.

Table 3 - Effect of changing key inputs on project results

If this input...	Returns (IRR)	Debt coverage (DSCR)	Importance
Power price goes up	Up	Up	Very high
Electricity produced goes up	Up	Up	Very high
Construction cost goes up	Down	Down	High
Running cost goes up	Down	Down	Low to medium
Interest rate goes up	Down	Down	Medium
More debt is used	Up (owners)	Down	High

The inputs linked to income, which are the power price and the amount of electricity produced, have the largest effect, followed by construction cost. Running costs and interest rates matter, but usually less. This helps advisers to focus checking on the assumptions that matter most. Break-even analysis was also useful. By finding the lowest power price at which the lenders' minimum DSCR is still met, the adviser knows how much room a project has before lenders become uncomfortable.

5.4 Capital structure in practice

Changing the mix of debt and equity showed a clear trade-off. More debt raises the owners' return because they invest less of their own money, but it also increases repayments, so the DSCR falls and the project becomes riskier. Sponsors prefer more debt, lenders limit it through coverage requirements, and the adviser's task is to find a structure that works for both. This is the trade-off idea of capital structure theory seen in a real setting.

5.4 Judging feasibility

A project is judged feasible when several results are acceptable together, not when one result looks good. The checklist used is shown in Table 4.

Table 4 - Checklist used to judge feasibility

Measure	What it shows	Good sign
NPV	Value created after the cost of capital	Positive
Project IRR	Return of the project itself	Above the cost of capital
Equity IRR	Return to the owners after loans	Above the return expected
DSCR	Whether cash can repay lenders	Above the lenders' minimum in every year
Sensitivity	Strength of results when inputs get worse	Still acceptable

5.5 Fundraising: pitching and outreach

Fundraising is the second main part of the work. The firm acts as a link between companies that need money and investors. When a company is pitched to investors, the firm explains the company's background and history, what the company does, how much money it needs, why the money is being raised and where it will be used. The firm mostly targets renewable energy projects, such as electricity, wind and agriculture-related projects. The team looks for possible clients and for investors that match each project, narrowing a wide list step by step by sector focus, country, project stage, investment size and type of funding.

New contacts are made at conferences attended in different parts of the world, and then followed up by email, LinkedIn and sometimes WhatsApp. The outreach follows clear stages, shown in Table 5. A weekly report on these stages is shared with the client, so that the client knows how much outreach has been done, how many follow-ups are needed and how many contacts have accepted.

Table 5 - Stages of investor outreach

Stage	What happens
1. Connection request	The investor or contact is approached
2. Request accepted	The contact accepts and a conversation can start
3. Follow-up	Further messages are sent to keep the interest alive
4. Email obtained	The contact shares an email address for sending information
5. Teaser sent	A short summary of the company and its funding need is sent

Targeted, short messages that referred to the investor's own focus were more useful than general ones. Investor documents must always match the model, because a difference reduces trust. Outreach results are confidential and are not reported.

5.6 Tender tracking

The firm also follows tenders. Each week, a tender list is prepared with the deadline of each tender. Tenders with early deadlines, in the coming week or soon after, are handled first so that none is missed. There are two types of tenders: company tenders, where the firm applies as an organisation, and individual tenders, where a person with long experience and a strong resume can apply. If the firm is shortlisted for a project, the team works on that project, including its financial models.

5.7 Findings against the objectives

Table 6 links the main findings to the four objectives of the study.

Table 6 - Main findings linked to the objectives

Objective	Main finding
1. How models are built	A model is built from client inputs and scenarios in a fixed order: construction, operations, financing, returns and valuation. It needs a clear structure, consistent formats and regular checks. Results are only as good as the inputs.

Objective	Main finding
2. Cash flow, funding and feasibility	Feasibility depends on several results together: NPV, IRR, DSCR and sensitivity. Power price, electricity produced and construction cost are the biggest drivers.
3. Corporate and project finance concepts	More debt raises the owners' return but lowers coverage. The lenders' DSCR requirement in effect decides how much debt a project can carry.
4. Research and fundraising	Clear research on the company, a step-by-step investor screening and staged outreach, with documents that match the model, make fundraising more useful. A weekly tender list protects deadlines.

5.8 Challenges faced

The main challenges were understanding large, linked models, keeping inputs consistent and correct, applying strict Excel standards, learning technical terms and handling confidential information. These were handled by tracing inputs to outputs, recording the unit and source of every input, using the model checks, keeping a glossary and following the firm's confidentiality rules.

6. Discussion and recommendations

The OJT showed that modelling, funding structure, research and investor communication are not separate topics but stages of one process: a project is described by a model, funded through a structure that lenders accept, and presented to investors who match its profile. The findings fit the view in earlier studies that risk and the cost of finance are central to renewable energy in Africa (Schmidt, 2014; Ameli et al., 2021; Sweerts et al., 2019). In daily work, this showed up in the close attention paid to coverage ratios, break-even levels and risk protection. A clear and well-checked model also helps to reduce uncertainty for lenders and investors, because they can see how the results are reached. This is an observation from the work and not a tested result.

Based on the work done, four simple practices are suggested for advisory firms of this type:

A standard input checklist that records the unit, source and date of every input.

A short model guide and a version log inside every model.

A standard investor tracker with fixed fields, used for every mandate.

A one-page sensitivity summary for every model.

These practices should reduce input errors, make handovers easier and speed up discussion of risks with lenders and investors.

7. Limitations and future work

The OJT was short, so only part of a full deal could be seen. Client and investor information is confidential, so no client-specific data is used. The firm is private and its financial data is not public. The study is based on one firm and on the author's own tasks and observations, so the findings may not apply to every advisory firm, and they are not statistical results. Future work could study how different loan repayment plans change the debt a project can carry, how currency risk affects projects in African countries, and which types of investors respond best to which types of projects.

8. Conclusion

Financial modelling is the link between a renewable energy project and its funding. A well-built model shows cash flows, funding needs and feasibility, while project finance and corporate finance concepts guide how the funding is arranged. Research and well-targeted investor outreach connect the project with capital. For students, an internship in an advisory firm shows how classroom concepts such as NPV, IRR, DSCR and capital structure are used in real decisions, and why accuracy, clear structure and confidentiality are the foundation of trust in this work.

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