The Big Energy Summit
Workshop 7

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Building a Business Case

Financial Model – Project Control

- Vital for viability assessment

- Sensitivity analysis

- Model develops over time – inputs gain surety

- Return threshold testing

- Reporting

- Supports financing/funding (bankability)

Financial Model – Key Drivers

- e.g. Location – irradiance levels = yield for Solar

- Scale/capacity/feedstock for biomass or W2E

- Grid access/capacity

- Site conditions – geotechnical/access/proximity

- Planning

- Timing and incentives

- Indexation – RPI and power price inflation

- Interest rates

Financial Model – Key Components

- Revenue
  - Electricity sales
  - Gate fees/costs
  - FiT/ROC incentives
  - CfD – Capacity Payments

- Costs
  - Development costs
  - Capital costs
  - Grid connection
  - Operation & maintenance
  - Insurance
  - Business rates
  - Rent (if applicable)
  - Community benefit (if applicable)

Financial Model - Variations

- Use of power on site

- Private wire/private power sales

- Sleeving

- Batteries

- STOR/Demand Side Services

Financial Model - Outputs

- Plant size

- Irradiance – kWhrs/kWp for Solar or output x operating hours for biomass/W2E

- Yield – kWhrs per annum of energy production

- FiT/ROCS and PPA revenue (maybe feedstock)

- Total development costs

- Funding structure and ratios (Equity and Debt)

- Project IRR

- Payback

- NPV

- Cash flow

A Business Case that is Robust and Bankable

- Detailed analysis and sensitivity

- Bankable equipment – Tier 1 - validated

- Degradation for Solar

- Performance for Biomass (sensitivity to feedstock quality)

- Indemnities and warranties

- Contractual risk transfer (EPC and O&M)

Conclusion

- Financial model forms the backbone of the project Business Case

- Referable and reportable

- Benchmark against return threshold targets

- Renewable energy projects are a good asset class – low risk revenue creation – if you get it right!

- Grid parity for Solar – not so far away – be ready!!

Thank you

- Any questions?