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Making Storage Stack-Up Investment Decision Making

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SDCL (Sustainable Development Capital)

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- Fund launched 4 years ago – focussed on Energy Efficiency;
- The UK Government is our main investor;
- £80 million invested in projects across the UK. Most now fully operational;
- Many different technologies;
- All except 1 project subsidy free;
- All projects meeting or exceeding target returns and carbon objectives.

Make investment decision

Identify follow-on opportunity

Identify threats to certain/ uncertain revenues

Assess stability of 'uncertain revenues'

Ascertain gap between certain revenues and required IRR

Calculate 'certain' revenues within risk parameters

Identify technologies compatible with objectives

Identify acceptable risk parameters

Identify investment objectives

Identify Investment Objectives

- How much money is available to fund the project?
- What are the conditions attached to the money, for instance minimum return, risk profile, date for repayment?
- What projects outcomes are expected, aside from a return on investment? For local authorities this may include social and economic benefits.

Identify acceptable risk parameters

- How certain does the return on investment need to be?
- Are you willing to take technology risk?
- Are you willing to accept a gap between the warranty offered by the relevant manufacturers and the payback period?
- What other risks are relevant to this particular type of project? – for instance grid connection, planning, construction etc.

Identify technologies compatible with objectives

- Not all batteries/storage methods are equal.
- Will you go
- What data is available to support the anticipated performance of the technology?
- Is the warranty offered by the technology provider properly supported by an appropriate balance sheet and/or insurance?

Calculate 'certain' revenues within risk parameters

- Is the project behind or in-front of the meter?
- What are the guaranteed sources of revenue?
- At what level are those sources of revenue guaranteed?
- Nothing is ever fully guaranteed – what are the potential threats to that revenue?

**Ascertain gap between certain
revenues and required IRR**

Assess stability of 'uncertain revenues'

- Currently the most difficult area for investors in batteries/storage.
- Many proposals expect the investor to take merchant risk for an element of the return.
- Currently difficult to assess merchant risk, due to:
 - Early stages of market – lack of performance data;
 - Uncertainty in Government and grid policy;
 - Uncertainty as to price curve for batteries;
 - Uncertainty as to price curve for competing storage technologies.

Identify threats to certain/ uncertain revenues

- Many risks flushed out by this stage, but it is important to take an aggregate view of certain and uncertain revenues and repeat the risk assessment process to capture the aggregate position. Risks might include:
 - Change in law;
 - Changes and information that have emerged since the start of the project development process;
 - Changes in position of the project host/sponsor etc.

Identify follow-on opportunity

- If project development work reveals that there are likely to be significant follow-on projects with a replicable structure, is it worth taking more risk on the pilot?
- Pilots need to be big enough to be useful but small enough to minimise overall risk to the relevant

Make investment decision

- Produce investment paper based upon assessment of all items in the stack;
- Provide a recommendation based upon analysis.
- Currently, many parties making the decision not to proceed. However, the number of approved projects is starting to increase and this pattern may accelerate rapidly.

Making Storage Stack Up

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