Wilmington Solar Farm Due Diligence

An analysis of B&NES's council's proposed loan of £500,000 at 6.5% to Bath and West Community Energy for the 2.34MW Wilmington Solar Farm

Philip Haile, September 2014

For presentation to B&NES Council's Scrutiny Panel 29 September 2014

My background: Experienced Financial Analyst

- Experienced financial analyst, risk manager:
  - 15 years experience as a Director at several major US investment banks, including credit risk analysis
  - Several years doing due diligence for venture capitalists in California analysing technology start-ups
  - Degrees and professional qualifications in Finance, Engineering, Sustainable Energy
- Bath
  - Retired, living off financial investments, a significant shareholder in BWCE after doing careful analysis
  - Volunteer extensively for Transition Bath, attempting to reduce demand in Bath: project manager for thermal imaging, LED lighting, planning & consultations and schools energy project (including involvement in 72 x schools energy assessments last year). Volunteer for Bath Green Homes (all of these are demand reduction projects)

How I would go about doing due diligence on this loan (part 1: Fundamental Analysis)

- **Fundamental Analysis**: look at the company, its track record, seniority of debt/debt structure, management, risks:
  - A 3 year track record of delivering not just projects in Bath (£2M), but for Wiltshire (WWCE/£1.3M) and Bristol (LCG/£2.2M)
  - Probably the most experienced such management team in Jeff Kenna and Peter Capener in the UK (including Community Energy Company of the year), advisors to DECC on community energy schemes
  - The loan is secured against the solar farm and is more senior than shareholders, only 20% of overall investment
  - Low beta investment: significant asset, very constant government backed almost deterministic cashflow
  - What are the risks: performance of project (previous projects are 5% to 10% above forecast), a new free energy source is discovered in next 15 years (unlikely)

How I would go about doing due diligence on this loan (part 2: Market Analysis)

- **Market Analysis:** what other precedents are there out there, is 6.5% reasonable?

6.5%	SSE £750K loan to BWCE, 5% rising to 8.5%, 6.5% IRR
6.5%	Ecotricity Retail Bond (unsecured)
4.3%	Cornwall council community fund (distributed at 6.5% to 8.5% via a 3rd party)
5.6%	Tridos bank, larger schemes only
5%	Oxford Council solar farm
6.5%	Carbon Leapfrog

- **Conclusion**: 6.5% is not unreasonable and at the top end of the market

What are the alternatives?

- Invest in another renewable company or alternative
  - Who? and will they invest £700K back into the community?
  - Wind: difficult due to planning and Bristol airport
  - Hydro: small scale only, dependent on B&NES plans for Avon
- Demand reduction: e.g. insulation
  - Yes, I agree, but I think you need a diversity of approaches investment in both reduction of demand and production of renewable energy. An even split between the 2 seems reasonable
  - And, where are these investments going to be made, BWCE has tried it in schools and found it to be uneconomic because of its small scale
  - Investment unlikely to achieve anywhere near 6.5%

Conclusion

- **I can't see any other alternative**, B&NES will struggle to meet its carbon commitments given this farm will offset 650 homes of electricity but the Core Strategy requires 850 homes per year to be built. It needs a continuous annual investment at this level.
- This scrutiny is not unreasonable, but don't delay your decision because the feed-on-tariff locked into the project means the farm has to be built by Dec 2014
- This will be a community asset which invests £700K back into the community over its life
- The speed of your decision making is important to BWCE, this uncertainty could undermine a local community enterprise, reducing its ability to deliver local benefits

S