Community Energy: possible models

Energy Innovation Co-operative members have been researching and looking for a viable, achievable model to establish a community owned renewable energy facility in South Gippsland/Bass Coast, Victoria, for some years.

With others from across Gippsland we went to the Community Energy Congress in Canberra in June, and now are working with people from across Gippsland who are interested in the same idea.

We are now seeking your input to help us take the idea further!

Possible models:

1. **Establish a trading Co-operative**, undertake business planning, feasibility studies and prospectus development. Issue shares, seek other investors, planning approval, build, pay into community fund for local groups.

   Strengths: It has been done for wind (not solar). Hepburn Wind established 2009. 2X 2mW Wind turbines. Some returns given as grants to local community. Co-op principle- one person=one vote.
   Weaknesses: Project costs were higher than planned, especially for connecting to grid, even with government support (previous governments' support, not possible now). Required debt. Attending to many small shareholders is costly when income is too small to employ sufficient staff. Has no long term power purchase arrangement, less viable with abolition of carbon tax, likely to go under if RET is abolished. No shareholder dividends paid since established.

   To note: Was originally part of the idea behind the establishment of EICo-op in 2009. However, EICo-op converted to a non-trading Co-op in 2013, to encourage eligibility for the incoming state and federal Coalition governments and their grants which would not recognise us as an NFP otherwise.

2. **Partner with a renewable energy developer**. As part of the developer's efforts to gain a "social licence", the company partners with a community Co-operative, offering members a "share" of ownership of the larger windfarm.
   Strengths: Company does the work of finding site, establishing project approval etc and technical requirements. Will establish and contribute to a community fund to fund community projects.
   Weaknesses: Vulnerable to loss of RET. Uncertainty over the model- will the community investors own 1 turbine of the 42 in the development (large risk) or 1/42 of whole development?
   To Note: The model is being developed -Central NSW Renewable Energy Co-operative & Infigen (Windfarm developer). Work continues, model not finalised. Energy Innovation Co-operative investigated this possibility with Bald Hills Windfarm developer, but developer not interested, although they will be involved in making community grants available.

3. **Behind the meter power sales**: Community organisation in partnership with local government or business. Do detailed analysis of electricity loads and solar PV capacity of suitable roof space at council/ business facilities. Aim to size PV to use all power on site, priced to the Council/ business at retail cost (approx. 25c p/kWh?).

Do power purchase agreement with Council/ business, pricing the power/ repayment at a level which will pay back the purchase price of panels, plus the cost of the power used, within 7-10 years.

Strengths: Council/ business doesn't have to source capital to pay for the PV. Payback is within reasonable time for community investors. Minimises vulnerability to power price fluctuations because both sides have previously agreed an acceptable price for the amount of power which the system generates, independent of retailers and fluctuating retail prices. Ownership returns to business owner/ council after payback period.
Weaknesses: Vulnerable to business risk (sale of building or business, bankruptcy). Less risky with council buildings, but councils often pay lower than retail rate for their power, and arrangement needs high level commitment and capacity from council management. If panel ownership remains with community organisation, some risk to investors if malfunction within payback period.
To Note: EICo-op began discussions with a potential business owner with large power requirements in 2013. Ceased negotiations when the business had "issues" paying local business suppliers. Would like to explore the notion with Councils.

4. **Loan based model**: Requires same detailed analysis of business/ council facility power usage, and PV roof capacity, so as to use all power generated on site, as per model 3. Community organisation provides expertise and community involvement , sets up associated company (ltd by guarantee), raises capital through encouraging community members to lend, lends to Council amount to pay for PV at slightly cheaper than market rate, eg 7% pa (?), sets community return @5% (?). As per option 3, aim for payback 7-10 years. Council/ business is owner-operator of the panels, and community organisation is just the lender.
   Strengths: Removes operational risk to community investors. Relatively simple, clear legal structures and agreements. Provides Council/ business with positive community involvement and legitimacy on renewable energy initiatives, plus saves them from finding the capital for investment.
   Weaknesses: "Selling" idea to community, to get them to invest, could be harder because they wouldn't actually "own" the renewable energy generation.
   To Note: Embark-Starfish initiative with Lismore City Council (NSW) MOU was signed in 2013. Lismore Council has a target to reach 100% renewable energy usage by 2020. Starfish has not yet established a company structure. Initial costings by Starfish suggest a minimum $500,000 community investment is needed to provide the funds to cover governance and administration.

5. **Trust model:** Community organisation establishes a series of trusts (one for each proposed site). Same arrangement as per option 3, with trust effectively owning and managing PV on roof of a business/council with whom they've established a power purchase agreement and site use agreement. Panels remain the property of the trust until payback achieved within 7 years.
   Strengths: model exists- Clear Sky solar investments. Need maximum 20 investors per trust (which means significant investment per investor). www.cleanenergyforeternity.com.au
   Weaknesses: complex legal structure (trust deeds, contracts with service provider, contract with roof owner,) with significant business risk for trustees and for community organisation. Costs in establishing trusts and paying annual tax. Needs volunteer trustees. Suggested risk management workshops ongoing and frequent, ensure compliance with corporations act. Investors have little say in managing their investment.

6. **Corena Fund** (" power for the people, by the people".) Established as NFP 2013, is a funding organisation which accepts donations. Funds will be lent interest free to organisations wishing to establish solar PV on their roof, to be repaid in instalments according to savings from the project.
   Strengths: fund exists now, with funding recycled as each project pays back the funds. Relatively simple loan arrangements possible, looking for recipient groups and regional partners wanting to install interest-free solar with no up-front costs.
   Weaknesses: need to access more donations to build capacity of the organisation

To Note: funded 7kW at Bega disability services facility, 10kW at Gawler Community Centre plus energy efficiency measures.

7. **Moreland Energy Foundation initiative**: Working with Darebin City Council currently. Council is the bank, lending eligible pensioners and concession- card holders funds to install PV on suitable roof space, with pensioners repaying the loan via their rates, funded through savings achieved on their power bills. Council attaches the debt to the property title, so if title changes hands, repayments continue (as does PV generation). MEFL is community advocate and publicity/ broker/ technical advocate/call centre/ procurer of panels via a tender arrangement.
   Strengths: Existing capability demonstrated. MEFL now in discussion with Goulburn Valley Community Energy and maybe others, and looking for more capital investment. (MEFL is Vic/Melb focussed)
   Weaknesses: Requires very significant Council commitment to the idea and to the mechanics of the rate agreements. Needs an organisation with MEFL's capacity and knowledge to drive the process.

   To Note: MEFL emphasises the need to get customers signed up with a particular retailer which they have agreement with, at the point of contract signing. Significant value in having signed customer numbers when negotiating good group power rates with a retailer.

Written with acknowledgement, and many thanks to, the presenters at the Community Energy Congress 2014 (some presentations up on the C4CE website). Any errors in information are due to my note taking. All details should be checked before being acted upon!

Any other ideas, strength, weaknesses, points to note?? Let's talk.

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