

Economics and financing for community-scale energy generation

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Communities for Renewables CIC

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Community-scale energy generation



Ladock Parish 500kW Community Wind Turbine
c.£1.4m cost and over £80k per year surplus for community
1/3 of parish's electricity consumption

Community-scale energy generation



Westmill Solar Co-operative Limited
*“a rare opportunity to share
in a clean energy future.”*

**WESTMILL SOLAR
CO-OPERATIVE LIMITED**

4,000,000 shares @ £1/share
Opens: Saturday 23rd June 2012
Closes: Tuesday 31st July 2012

Westmill 5MW Solar Farm, Oxfordshire (c.1,000 homes)
£5.8m raised through co-op share offer + £12m local authority
(Lancashire) pension fund bond finance

Community-scale energy generation



Middelgrunden Denmark (4% of Copenhagen's power)
40MW community offshore wind project
50% funded by co-op share offer, 50% by municipal utility

Illustrative economics

	Cost	Generatio n	Reven ue	Operat ing costs	Invest or return	Surplu s
500kW wind	£1.3 m	1,800MWh	370k	£75k	7%	£80k+
5MW solar	£6m	5,000MWh	£640k	£150k	7%	£50k
6MW wind	£9m	17,000MW h	£1.6m	£370k	7%	£150k+

Best use of £20k feasibility budget?

What makes a project real?	Indicative budget
Site identified and basic feasibility carried out	£3k - £10k
Landowner agreement in place	Exclusivity £0 Option £5k - £10k
Grid connection offer	£1k to submit
Initial development (e.g. engage planners, basic noise assessment, basic ecology, aviation and telecoms, basic landscape)	£5k - £10k
Initial community and stakeholder engagement and strategy for development	£3k
Business case, detailed budget and work program for development, financing plan, procurement of development suppliers	£3k
Context - develop wider business plan for local energy initiative	As required

Illustrative development costs for a 5MW solar project

Development cost	Indicative budget
To planning decision (land, EIA, planning fees, grid, resource, community engagement, project management)	£140,000
Planning decision to share offer (planning conditions discharge, share offer advisory fees, procurement, project management)	£120,000
TOTAL	£260,000

How CfR can help

CfR works on a consultancy basis – we help local energy coops to develop their own locally owned projects. However, we can provide supplementary risk investment for suitable projects (repaid at construction stage).

Community generation project development services

- Feasibility and business case development
- Development (land, planning, grid, community engagement)
- Preconstruction (co-op set up, share offer management, procurement)
- Operations management

Commercial advice

- Local energy plans
- Funding applications for Defra Rural Community Energy Fund and other sources (e.g. to support organisational costs)
- Commercial support to implement business models
- Joint venture models with commercial developers

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