Summary
Energy demand and Green house gas emissions in the UK continue to increase despite rising prices and real and present impacts of climate change.

The energy industry in the UK is complex, uncompetitive, and structured in favour of large corporations.

Asset ownership of renewable energy can provide a real and actual solution to generate new capacity, reduce emissions, and increase awareness of climate change with multiple economic, social and environmental benefits to boot.

The desire from the public to embrace carbon free solutions, such as Baywind Energy Co-operative, already exists however, the framework to do so is missing.

Over 100 MW / yr from wind alone is viable from wind alone. The opportunity for biomass hydro and solar is even greater with additional emission reductions funded by the projects themselves and driven by the environmental awareness of members.

Supporting the development of such schemes is fundamental to meeting renewable, carbon dioxide reduction targets and providing replicable and viable economic models for climate change mitigation.
Kind regards

Angela

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STERN REVIEW ON THE

ECONOMICS OF CLIMATE CHANGE

October 2005

Energy4All Ltd

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European Experience

The DTI-funded study tour by Co-operatives UK to Denmark and Sweden highlighted how these countries energy systems are characterised by a large number of small 'green' heat and power stations that provide a vision for the UK in the medium to long-term.

Increased capacity is achievable if stakeholders can realise the tangible benefits of local ownership through the direct engagement of producers (foresters and farmers), consumers (households, business and public sector) and investors (households, banks, pension funds and public sector) as members of democratically controlled, independent social enterprises.

In the UK a strong desire from community groups, landowners, companies, and organizations exists to develop renewable schemes. Often they have identified local sites however, the majority of these potential projects remain unexploited, as risk funds and know-how are unavailable and current initiatives over subscribed.

The renewable obligation, and the wholesale electricity market as a whole, drives towards lower development cost per MW therefore projects with a capacity less than 5MW requiring significant community buy-in are unattractive to conventional developers. Furthermore, the development of heat networks to facilitate biomass projects requires long-term investment on a monopoly supply basis - something which, at present, can only be facilitated by social enterprise.

However, as larger wind sites are exhausted increasingly new sites will be of medium to small scale, in populated areas. There will also need to be a greater push for deployment of other renewable technologies such as biomass CHP in the sub 5-10 MW category.

If projects are requested by the community support is greater, site location is deemed more appropriate, benefits remain in local area and further MW will come on stream. Once planning and grid are secured organizations exist to provide funding either through co-operative capital or more conventional finance routes such as bank debt. Ongoing accountability to facilitate management and operation of projects is also secured, along with direct/indirect financial benefits.

Across the UK, individual organisations are attempting to address this demand including increasing willingness of the private sector to support pre-planning work once some initial work has been undertaken. However a nation-wide strategy to co-ordinate these efforts, would maximize results, reduce overlap, meet an increasing demand and assist in delivering on numerous government targets cutting across rural diversification, MW installed, climate change awareness and social enterprise development.

Benefits of community involvement

- Encourage proactive rather than reactive community engagement and accountability
- Respond to the concerns and needs of local communities
- Ensure efficient targeting of investment.
- Raise awareness of the need for action on climate change
- Delivery of key public services in partnership with local authorities
- Delivery of direct accountability for stakeholders and energy consumers
- Develop smaller projects, which depend on investors accepting a lower return
- Sites closer to demand and / or in less sensitive sites
- Deliver direct economic benefits and revenue streams for members
- Bringing together and co-ordinate complex relationships between key stakeholders for biomass and district heating schemes
- Mobilising investment from members and the wider community
- Supporting long-term infrastructure investment
- Developing tailored local solutions to project delivery
- Attracting new skills and jobs into social enterprise sector

Current Government Initiatives

At the moment there are a plethora of government initiatives for sustainable energy advice. On small renewables alone the Community Renewable Initiative, run by the Countryside Agency; Clear Skies funding for non-profit community and households is run by BRE; Community Action for Energy, is funded by EST and run by CSE; public consultation on micro renewables is underway and a study into Community Benefits was released by the Dti. Most regions have a regional development energy officer, an EST and a Carbon Trust advisor working to promote new projects and the Highlands and Islands have just created the Community Energy Company and individual councils are also attempting renewable implementation work.

Trade associations such as RPA, Energy 21 Network and BWEA are also active in the sector. However, to provide practical support to potential projects access to legal, financial and technical information and expertise is required and sources of risk funding. Potential support across these areas is currently spread out across too many sources, and where it is available it is not sufficiently orientated towards practical project development and delivery 'on the ground'.

Proposed Assistance
As part of a wider climate change commitment it is envisaged that communities (defined by stakeholders - households, farmers or businesses – and geography - village, town, district or county) are provided with enough advice, information, drivers, and funding to engage in and deliver low carbon lifestyles.

EU experience has shown that supporting the development of strong social enterprise renewables sector - one based on ownership by democratically controlled, independent social enterprises - requires the practical support of highly organised, member-led trade associations/development agencies. For example the Scottish Executive just announced £3m to fund a co-op development agency specifically to focus on new sectors such as renewable energy.

Any assistance would need to:

- Be focused on the scoping and development of new schemes, such as wind farms, to be owned by the community not other community renewables schemes (e.g. rooftop turbines etc.)
- Include an incentive upon the community to support the scheme by requiring them
    - to raise additional funds/private finance once the higher risk earlier stages have been completed and
    - to have in place an effective "local democracy" structure alongside evidence of real community support and other structures to maintain that support etc.
- Include controls on the release of funding

key factors to success will include:

- Promotion of concept and best practice
- Human and Information Resources
- Business and legal support
- Funding for new initiatives
- Member led organisations
- Tailored development/support services
- Technology and finance partners
- Local Government involvement
- Risk Finance for development activities

Promotion
Based on clear models of how stakeholders can develop energy projects (eg. community-led wind farm investment, farmer-controlled biomass, consumer-owned district heating) whilst promoting best practice to stakeholders through farmers co-operatives federations, local authorities, local energy advice centers, regeneration agencies and co-op development agencies. It is anticipated that existing energy support organisations signpost initial enquiries to the website portal and provide extended assistance where necessary.

Resources
Additional time and resources are needed to build capacity and engage stakeholders within communities to develop projects. Resources should be available to a wide

range of social enterprise organisations to avoid current government department overlap potentially by outsourcing work to existing players.

The provision of making good information available will assist project champions including the updating of the dti report on community renewables and creation of a web portal working from existing templates such as the hydro power guide to development.

Set up and maintain a high quality website portal with independent information and guidance to support new Social Enterprise Renewable Energy Companies, case studies, contact details of consultants working in the sector etc. Information and feasibility studies from developing projects will be shared through the website.

Business Support
Support the development of 'off-the-shelf' model rules and structures that can be made available such as Co-operatives UK's range of model rules and legal advice service. The legal structure may be a Co-operative, Company Limited by Guarantee or Community Interest Company

Funding
Fund the development of a number of demonstration projects for a range of technologies, in order to build confidence and create home grow examples of best practice. Funds for innovative schemes, such as Westmill Wind Farm, should be assessed accounting for best social as well as economic value.

Ensure that sources of funding support are clearly brought together, and navigable based on type of project and technology. At the moment they are split across DEFRA, EST, DTI and National Lottery Funds.

Mutual support
Support the establishment of independent, project-focused, member-led association(s) to develop specific technologies - these could be seeded or outsourced from existing organisations to act as one-stop-shops for project development support, accumulating knowledge/expertise, and being able to respond to/identify new opportunities.

Mutual support services avoid 're-inventing the wheel' on each new project, providing 'hands-on' project development support, knowledge of technology, access to finance, and the opportunity to benefit from strength in numbers - collective bargaining power, specialist services and lobbying to overcome institutional barriers. In the EU this has enabled community support associations such as the Danish Wind Turbine Owners Association (DV) and the Danish District Heating Association to function like p.l.c's albeit at the request of communities, and controlled by their members.

The technologies and fuels are, for the most part, tried and tested. Partnerships should therefore be established/supported with EU co-operatives and social enterprises in order to share best practice, including business structures and technology transfer (where desirable) - as recommended by DTI mission report.

Local Government Facilitation
Local Authorities have played a significant role in facilitating co-operative development and distributed generation in the EU whether through the planning

system or by providing bank guarantees to unlock low cost finance. Rural development agencies, local energy advice centres, and existing co-operative development agencies have also played an important role.

In the long term Local Authorities should be empowered with greater responsibility to facilitate project development, including the use of planning powers and financial guarantees. This could also include establishment of project development officers to scope the potential in each district.

Project finance could be supported through a local authority-financing route (which would require PFI-type credits or guarantees) and/or through fiscal incentives for new investment funds. This could be on a revolving or equity basis - as in Objective 1 regeneration areas such as Merseyside, or as facilitated in regeneration areas by RDA's – such as EMPIF property fund by EMDA

Risk Finance
Risk finance for community-owned energy enterprises is readily available in countries such as Denmark or Germany. It is proposed that a £5m development fund be established to which legally incorporated eligible organisations can apply for up to £100,000 grant to develop social enterprise renewable energy projects to a bankable position. The fund would cover feasibility studies, professional consultancy and project management to the post planning consent stage. Acknowledging that the availability of smaller sums of funding for individual elements of development work can relieve some barriers.

Applications will be initially screened for deliverability and value for money. Successful projects will repay the funds originally leant. The intention would be that the project is commercially viable post planning consent, with finance from conventional and ethical lenders available for capital and installation costs (see below for further details).

Outcomes

- Commercially viable social enterprise renewable energy companies
- High quality website to facilitate developments and disseminate key learning points
- Resources to provide 'one stop' advice and information
- Network of renewable energy practitioners who specialise in community enterprise development.
- An increase in awareness and support for sustainable energy initiatives.
- Increased jobs and skill opportunities in rural areas.

Information would be submitted by the project at the end of each phase (for milestone payments as agreed beforehand) to the DTI (or the consultant appointed by the DTI) for confirmation of satisfactory completion of each phase.

> Only once a phase has been completed is a project entitled to any funding for the following stage.
>
> Different levels of funding would be provided for different stages to ensure (a) only viable projects are progressed (b) only those projects where the community remains genuinely involved be progressed (c) the maintenance of

momentum and (d) that the private sector is brought in as quickly as possible, so funds can go farther:

Because the community will have had grant support for the high-risk element, the community would still retain significant ownership, revenue and control whilst the private sector will investment in it.

Similar to the offshore round 1 projects, it is envisaged that the viable projects will attain backing to financial close very much in partnership with the private sector.

Summary

Community involvement, accountability and ownership is a key aspect for the successful integration of distributed, micro and small renewable generation systems. Current support is dispersed and inefficient to meet current barriers and public demand.

Central Government support and facilitation for community, individual and business owned renewable energy schemes has the potential to play a key role in unblocking the economically viable MW potential through co-ordinated information and financial support as well as developing UK industry. If structured appropriately the cost of assistance will represent considerable value for money for the anticipated social, economic and environmental returns.

Energy efficiency measures that are difficult to excite public interest can be sold on the back of building integrated and community initiatives.

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