



A response to:

**UK Renewable Energy Strategy
consultation**

***Department for Business, Enterprise
and Regulatory Reform***

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“While communities are consulted on new projects, what they often **lack** is a **real sense of ownership**. There is often a sense that global warming and other environmental problems are **abstract threats** best dealt with by Governments, **unconnected** to peoples’ day to day lives. If instead people feel **involved** in a local renewable energy scheme, they will feel that they have a **real stake** in the **solutions** to global warming. The local community will also be more likely to **accept** a new project if they feel that it is being run in the **interests of their community**.”

Rt Hon Alun Michael MP¹

¹ Writing as then minister of state for DEFRA in 'Community Engagement in Energy Through Mutuals', Owen, G, 2004, London: Mutuo

1 Executive summary

To meet the huge challenge of achieving our share of the EU target of 20% of energy from renewable sources by 2020 we will need vision and commitment from all levels of society – political leaders, business, the voluntary and community sector and the general public.

Renewable energy and the challenge of climate change are inextricably linked. Climate change comes high up the list of issues that people in the UK rank as of global concern – ahead of global poverty, healthcare and disease.² However, many individuals feel powerless in the face of such a huge challenge, particularly in the UK: we exhibit one of the lowest levels of engagement with climate change compared with other developed countries.³ The reasons for this disparity between concern and engagement are poorly understood. However, putting individual people in control of solutions to climate change through community ownership is one way in which it could be tackled. It need not be demanding; individuals can choose their preferred level of engagement in a renewable energy project, from basic membership as with The Co-operative Group, through to sitting on the Board.

Co-operatives^{UK} believes that there is huge potential for growth in community ownership and control of renewable energy. There are clearly large numbers of individuals in the UK who wish to do something concrete in the fight against climate change and are willing to invest their own money to do so. For example, community renewable developer Energy4All has raised approximately £12 million to date across a variety of projects: no community share offer has as yet failed to achieve its target.

However, existing community owned energy projects have come to fruition despite significant barriers, due to the determination and commitment of dedicated individuals. However, many communities do not have the resources – in terms of time, finance and expertise – to overcome these barriers. Taking wind farms as an example, the lengthy planning process means that money and time invested in the early stages of a project is done at risk. This is not a risk that many people are able or prepared to take.

Government can take action to change this situation and unlock the potential of community ownership to contribute towards the challenging 2020 target. It has been done in other European countries: in Denmark 23% of wind capacity is owned by investor co-operatives with 100,000 members, largely individual citizens, owning over 3,200 wind turbines.⁴ Based on BERR's projection of 14 GW of onshore wind by 2020, replicating this situation in the UK would place 3.2 GW of wind generated energy in some form of community ownership. Community ownership and control of district heating networks also has huge potential: in Denmark around 300 of the 400 district heating networks are owned by their consumers.

What Danish examples also tell us is that support from local Government such as underwriting investments for biomass projects and share ownership of wind farms has been key to success, providing the kind of large scale support that communities alone often cannot. This support is driven by clear policy leadership from central Government: in the UK this would also need to come from the devolved administrations. It provides the enabling environment within which regional and local Government, local communities, and individuals themselves can identify and develop renewable energy projects to match local need.

Why community ownership and control? It resonates strongly with a number of Government objectives: providing affordable warmth, community empowerment, encouraging active citizenship, rural diversification and devolving power to a local level. It develops support for

² HSBC Climate Confidence Index 2007: UK country profile

³ HSBC Climate Confidence Index 2007: UK country profile

⁴ 'Community Energy: urban planning for a low carbon future', p.10, Dodd, N, for the TCPA & CHPA, 2008

renewable energy, empowers people to find their own solutions to climate change, overcomes opposition, promotes embedded energy supply, encourages farm diversification and in the case of district heating, ensures accountability for a monopoly supply. These additional benefits are often not apparent in the case of privately owned projects.

1.1 Key recommendations

1.1.2 Lessons from Europe

Co-operatives^{UK} asks that Government carefully considers lessons from Government intervention in other European countries that if applied to the UK could unlock the potential of community renewables:

- National plans and targets – long-term strategic planning and target setting;
- Use of the planning system – use of planning powers to direct investment;
- Price support – feed-in tariffs for favoured technologies;
- Grid connections – regulation of charges to support small generators;
- Local authority engagement – direct enabling role for local authorities;
- Smart technology subsidies – grants designed to support different stages of development;

Lessons from countries that have achieved a significant deployment of decentralised community energy show that projects work best if they operate on a 'more-than-just-profit' basis, taking a long-term view on investments and developing beneficial relationships with stakeholders that create value for the wider community. Based on this, Co-operatives^{UK} asks that:

- 'Statements of community involvement' should be used to bring people into this process. Planning Policy Statement 22 (PPS 22) highlights the need to "foster community involvement in renewables and promote knowledge of and greater acceptance by the public of prospective renewable energy developments;" and
- community strategies developed by Local Strategic Partnerships – and associated new Local Area Agreements – should continue to be used to galvanise support for local action on climate change, bringing together the public, private, social enterprise and voluntary sectors. Information about models of community ownership should be provided as part of the development of such strategies.

1.1.2 Developing community ownership

Given the strong evidence that support bodies play a vital role in the success of community owned projects, Co-operatives^{UK} asks that:

- central Government works with the regions and local Government to develop information resources for different stakeholders. Co-operatives^{UK} suggests that these ought to be tailored to different stakeholder groups in partnership with trusted independent bodies such as Co-operatives^{UK}, for example:
 - the farming community: information should be provided on how to develop co-operatively run energy projects such as biomass plants, in partnership with organisations such as the Plunkett Foundation and the Scottish Agricultural Organisation Society (SOAS) which have a proven track record of working with this stakeholder group;
 - rural communities: information should be provided on how to develop community owned energy projects such as wind farms, in partnership with

organisations such as Energy4All, CoRE, the Plunkett Foundation and Action for Market Towns;

- o urban communities: information should be provided on how to develop community owned energy projects such as district heating, in partnership with organisations such as Renew.

Co-operatives^{UK} strongly suggests that Government works with us and our associated network of co-operative and social enterprise development bodies, regional co-operative councils, and partner organisations, to develop information resources on community ownership aimed at particular stakeholder groups. These resources should include information on ownership models, links to relevant support bodies, advice on funding and case studies highlighting key lessons. Co-operatives^{UK} believes that these resources would function best when provided on a regional basis in order to take account of regional variation and need and should be delivered with support and involvement from regional and local Government, and RDAs. We also strongly suggest that this resource should be offered as a separate service to Business Link.

Co-operatives^{UK} also suggests that the provision of this information should be supported by central Government, perhaps through a community energy unit which could function in a similar way to [Supporters Direct](#).

1.1.3 Planning permission

- Change planning law to enable community developments without the need for formal permission. There are two possible routes:
 - a. Prior approval: developments such as telecoms masts, agricultural buildings and railway works do not need planning permission as they are considered essential infrastructure. The local authority is required to approve them for siting and appearance only.
 - b. Full permitted development rights: certain restrictions would need to be considered, for example limiting turbine numbers and ensuring output is tied to local community need.
- There is a need to recognise that in Scotland the planning system is devolved and that therefore action is required by both the Scottish and UK Governments.

1.1.4 Lack of communally owned land

- Allow local authorities to invest more than £20,000 in renewable energy co-operatives – as they are already permitted to do for housing – thereby encouraging councils to support renewable energy schemes on their land. Investing in such schemes would generate a revenue stream for the council while providing economic benefit for the community through members' investments in the co-operative and through environmental funds supported by the project.
- There is an opportunity for local authorities to support renewables through the 'Asset Transfer Programme' if central Government can allow land as well as buildings to be transferred.

1.1.5 Lack of familiarity with co-operative and ESCO models

- Central Government and the devolved authorities should take a lead in raising the profile of local energy networks and the role they can play in meeting the UK's climate change objectives.
- Central Government should also give strong encouragement to local authorities and other parts of the public sector (e.g. the health service and education) to help facilitate

local energy networks, serving as anchor energy customers for such networks and to provide clear local policy encouragement.

- Local energy networks are naturally quasi monopolistic once established. Giving strong encouragement to consumer co-operative business models is more effective than other responses such as detailed local network regulation or profit capping (although some such regulation may still be required).
- The Government should commission in-house training about the co-operative enterprise model for Government staff across all relevant departments. Co-operatives^{UK} has seen the benefits that this has brought when it delivered such training for Defra, the Financial Services Authority, and the then Social Enterprise Unit at the DTI.

1.1.6 Lack of finance/fiscal incentives

- Require developers to offer a stake in their developments to the community, for example in the form of shares, through a co-operative structure, as their share of the Community Infrastructure Levy. An extra community dividend should also be considered as the project becomes financially successful.
- Raise the Enterprise Investment Scheme (EIS) limit for renewable energy projects to £10 million. This would greatly assist community scale projects.
- Grant programmes such as CERT should be adapted to provide more financial support for local energy networks and to operate on a rolling programme basis recognising that local network projects typically have long lead times.
- Introduce a heat equivalent to the ROC incentive for renewable electricity, of equivalent value, and readily usable by local energy networks, as proposed in the Renewable Energy Strategy.⁵
- Address the timing of funding programmes: they should be rolling, not stop-start. There should be a minimum three year forward CERT at any one time, launched in advance of the completion of any current scheme. CERT should also be made available for network as well as energy centre costs.
- Financial incentives could be better focused, for example the Low Carbon Buildings Programme should be accessible for large and small local energy projects.

1.1.7 Regulatory environment

⁵ Point 54 in the Renewable Energy Strategy reads:

“Building on responses to the Heat Call for Evidence which the Government published in January 2008, we would like to hear your views on how to increase renewable heat generation in the UK. Measures proposed in this document include:

- > introducing a new heat incentive mechanism, such as a Renewable Heat Obligation or a Renewable Heat Incentive, akin to a feed-in tariff, to provide the financial stimulus for new renewable heat deployment;
- > improving the regulation of biomass heating systems to ensure that their rollout minimises the impact on air quality standards;
- > providing regulatory incentives to install renewable heat technologies in new buildings through the implementation of the zero-carbon homes and non-domestic buildings initiatives;
- > providing better information to consumers, businesses and Local Authorities on the potential of renewable heat, including for the planning process.”

- Clear powers to enter into long term retail electricity – as well as heat – contracts are required.

1.1.8 The role of local Government

- Renewable energy targets set centrally will need to be cascaded down to a local level. As part of the delivery of these targets, information should be provided to local authorities – including planners and developers – and through business support, on different models of renewables delivery, including community ownership.

Co-operatives^{UK} supports the view that local authorities will need to take a strong leadership position to support the development and roll out of community energy strategies. We ask that local Government should:

- set targets, using national ones as a framework, for developing renewable energy in their area;
- report on the proportion of energy consumed by public bodies (and private sector and household where possible) coming from renewable sources, including information on different models of ownership;
- work with existing local networks, such as Local Strategic Partnerships (LSPs), to develop community-owned renewable energy by providing information, support and guidance;
- raise awareness of community-owned renewable energy through local strategies such as Local Area Agreements (LAAs) and Sustainable Community Strategies: this will be vital for building understanding and support within communities for such projects;
- be the recipient of capacity building support from central Government to increase knowledge of renewables – and community ownership as a possible model – amongst local planners and developers;

Co-operatives^{UK} also asks that:

- given the importance of local Government in Scotland, the Scottish Government should look at ways in which Scottish local Government can be encouraged to promote community energy;
- local authorities build up a strong evidence base of the potential for new renewable energy projects – including location, scope and type – as outlined in Planning Policy Statement 1 (PPS1). Community ownership should be considered alongside other models in the development of new zero carbon building projects; and
- the new Scottish planning process includes wider community participation and that the Scottish Government and Scottish local Government (CoSLA) should work to promote community owned energy projects.

1.1.9 The role of regional Government

Co-operatives^{UK} asks that:

- all regions map their energy generation needs, with a particular focus on renewable energy, and opportunities for community ownership; and
- as recommended above (local Government) all regions report on the proportion of energy consumed by public bodies (and private sector and household where possible) coming from renewable sources, including information on different models of ownership.

1.1.10 The role of RDAs

- Co-operatives^{UK} asks that RDAs, as the bodies responsible for business support, are tasked with ensuring that models of community ownership for renewables are strongly encouraged, with clear regional targets. Such a policy will clearly complement the proposed changes to the planning system to reduce risk and encourage the development of financially robust community-owned projects.

1.1.11 Hydro electricity

Co-operatives^{UK} asks that:

- Government takes a strong policy leadership position to ensure that where possible local communities benefit from hydro schemes in their area, including providing information on community ownership at all levels of Government and also to RDAs and professionals working in the development of hydro;
- given that the Scottish Government has indicated small scale hydro is likely to comprise a significant proportion of Scotland's renewable energy mix, that it in particular should take a strong policy leadership position on community ownership.

1.1.12 Business environment

- Government should look at how it can create market conditions in which investing in renewable technology is as commercially attractive to business as non-renewables.
- Government, with the regions and RDAs, should support businesses to develop a knowledge base on renewables that will bring about a step change in their take up of renewable technology, through projects such as [Epic](#) at Lincolnshire Showground.

We would welcome the opportunity to discuss any of the recommendations set out in this response.

2 This response

This document is a response to the UK Renewable Energy Strategy consultation from the Department of Business, Enterprise and Regulatory Reform (BERR).

Co-operatives^{UK} has co-ordinated this response on behalf of its members and the wider co-operative movement, with particular support from renewable energy development specialists Energy4All, Renew and CoRE. A profile of Co-operatives^{UK} and the co-operative economy can be found at Appendix 1.

2.1 Objectives

Its main objectives are to:

- a. answer specific questions posed in the consultation;
- b. provide a broad picture of the scale of the co-operative movement's involvement in renewable energy in the UK, the innovative renewable energy projects it runs and the professional expertise within co-operative movement for developing these projects;
- c. illustrate the benefits of co-operatively owned renewable energy;
- d. outline the key challenges faced by organisations in the co-operative movement which act as a barrier to an increased role in renewable energy and their possible solutions; and,
- e. outline the key areas where Government intervention would act as a driver for growth in the co-operative movement's involvement in renewable energy in the UK.

2.2 Response process

The process of compiling this response was as follows:

a. Response scoping

A response scoping document was circulated to all members of Co-operatives^{UK} and posted on a publicly-available area of its website at the beginning of August. This scoping document contained a summary of the UK Renewable Energy Strategy, outlined what this response might contain and asked for comment and contribution. Responses to this scoping document were then used to write a draft response.

b. Drafting process

All individuals and organisations that submitted significant responses to the scoping document were invited to a meeting to discuss the draft response.

A list of respondents to the scoping document and to the draft response can be found at Appendix 2.

2.3 A definition of 'community'

'Community' is a much used term and can refer to a number of different stakeholders. For the purposes of this consultation response, we take the term 'community' to mean all stakeholders that are connected to the energy needs of a particular area and who will be affected by its ongoing condition. 'Community renewables' are taken to be commercially viable, renewable energy projects set up and controlled by local stakeholders to deliver social, environmental and economic benefits. These stakeholders will include some or all of the following, depending on the type of renewable energy technology: producers (foresters and farmers); consumers (households, business and public sector) and investors (households, banks, pension funds and the public sector). Community ownership places renewable energy in the hands of those which it serves, rather than under the control of private investors.

3 Consultation questions

We have answered questions individually where our answer is brief and in other cases have signposted to relevant parts of this document.

Q2: To what extent should we be open to the idea of meeting some of our renewable energy target through deployment in other countries?

Co-operatives^{UK} firmly believes that we ought to meet the target through developing renewable energy in the UK. We must develop technical knowledge of and support for renewable energy at home if we are to succeed in meeting this ambitious target: to 'outsource' renewable energy is a short term solution that will not see the effects of a thriving renewable energy sector, such as increased engagement in the issue of climate change, benefit the UK. Deploying overseas, other than to share technical expertise, should not be the primary focus of the strategy.

Q3: In the light of the EU renewable energy target, where should we focus further action on energy efficiency and what, if any, additional policies or measures would deliver the most cost-effective savings?

Co-operatives^{UK} suggests that Government consider how it can assist in the development of collective purchasing through consumer co-operatives, based on a geographical locality, that could deliver economies of scale on energy saving products. These consumer co-operatives could be developed with the support of local Government and could be particularly effective in delivering cost savings to low income communities.

Q5: What more could the Government or other parties do to enable the planning system to facilitate renewable deployment?

See sections 6.2 and 7.1.

Q6: What more could the Government or other parties do to ensure community support for new renewable generation?

Sections 4 through to 9 address this question.

Q13: Assuming financial support measures are in place, what more could the Government do to realise the full potential of renewable combined heat and power?

&

Q14: Are our assessments of the potential of renewable heat deployment correct?

&

Q17: What more could the Government or other parties do to encourage renewable heat deployment with regard to: awareness raising; air quality; building regulations; planning; anything else?

See sections:

5.3

5.5

7.3 & 7.3.1

7.4 & 7.4.1

7.5 & 7.5.1.

Q15: Have we captured the key features of a Renewable Heat Incentive and a Renewable Heat Obligation as they would apply to the heat sector correctly?

See section 7.4.1.

Q19: Do you agree with our analysis of the mechanisms for support of small-scale renewable electricity?

&

Q20: Given the analysis on the benefits, costs and potential, in what way and to what extent should we direct support to microgeneration electricity?

&

Q21: If you agree that better information will aid the development of distributed energy, where should attention be focused?

Sections 4 through to 9 address these questions.

Q36: Is there evidence that specific emerging renewable and associated technologies are not receiving an appropriate form of support?

See sections 7.4.1 & 7.5.1.

4 Comparison with European & international markets

Co-operatives are a key part of the energy retail mix in many countries. For instance, in the Global 300, a listing of the top 300 co-operatives globally⁶, there are eight utility co-operatives producing and/or supplying power. They have a combined turnover of \$5,797 million and combined assets of \$7,213 million. All eight are in the USA.⁷

Co-operatives^{UK} firmly believes that strong policy leadership will be vital should the UK wish to have a thriving community energy sector. This case study of engagement in Denmark, extracted from a recent report on community energy, is an illustration of what can be achieved through such leadership and vision.

"Community engagement in energy in Denmark

The direct engagement of communities – encompassing households, businesses, farmers and local authorities – has been central in the development of the Danish decentralised energy sector. This can be illustrated by the ownership models for each technology:

Wind farms: 23% of Denmark's wind capacity is owned by investor co-operatives with 100,000 members, largely individual citizens, owning over 3,200 turbines. Local authorities own shares in a number of substantial wind farms.

CHP/District heating: Around 300 of the 400 district heating networks are owned by their consumers, ensuring accountability for a monopoly supply. Local Authorities own most of the larger metropolitan heating networks.

Biomass fuel: Farmer-owned businesses and co-operatives manage the fuel supply chain and own the majority of the 120 straw and woodfuel district heating plants. Local Authorities have assisted farmers by developing heating networks and underwriting investments.

Anaerobic Digestors: Farmer owned businesses and co-operatives own over 20 large-scale digester plants, providing them with a sustainable waste management solution. Local Authorities have assisted farmers by developing heating networks and underwriting investments.

Denmark's 1996 energy plan - 'Energy 21' - sought to ensure that 'the energy sector is well rooted in a democratic, consumer-orientated structure' and that this structure should be 'robust in relation to market developments' and based on the principles of 'self-sustainability' - to be achieved through an emphasis on consumer ownership and consumer democracy."

'Community Energy: urban planning for a low carbon future', p.10, Dodd, N, for the TCPA & CHPA, 2008⁸

The following extract illustrates how central Government leadership can act as a catalyst for community-scale heat energy:

"European Pioneers: Community heat planning, Denmark

Denmark contrasts sharply with the UK in its choice of community or district heating rather than piped natural gas to heat its towns and cities. District heating currently accounts for 60% of space heating. This level of market penetration has been achieved over a period of twenty years almost entirely on a retrofit basis.

The 1979 Heat Supply Act was instrumental in stimulating major investment in heating networks. Local Authorities were required to prepare strategic heating plans. They were also given the planning powers to make consumers connect to new district heating networks, starting with the highest density heat loads, and the ability

⁶ Judged by turnover

⁷ For more information on the Global 300 visit www.cooperatives-uk.coop/live/cme2168.htm.

⁸ available at www.urbed.coop/journal_docs/UrbedReport_LoRes.pdf

to establish new local community controlled heating companies (similar to ESCOs). Compulsory heating connections were balanced by a requirement for consumer control, not-for-profit operation and price transparency. District heating has had the advantage of allowing cheaper, lower grade fuels than oil to be used, including municipal waste. This has enabled communities to become more resilient to fuel price fluctuations ensuring greater energy security.”⁹

4.1 Recommendations

Co-operatives^{UK} asks that Government carefully considers lessons from Government intervention in other European countries that if applied to the UK could unlock the potential of community renewables:

- National plans and targets – long-term strategic planning and target setting;
- Use of the planning system – use of planning powers to direct investment;
- Price support – such as feed-in tariffs for favoured technologies;
- Grid connections – regulation of charges to support small generators;
- Local authority engagement – direct enabling role for local authorities;
- Smart technology subsidies – grants designed to support different stages of development;

In addition, lessons from countries that have achieved a significant deployment of decentralised community energy show that projects work best if they operate on a ‘more-than-just-profit’ basis, taking a long-term view on investments and developing beneficial relationships with stakeholders that create value for the wider community. Particularly, projects have been found to have more community support when under some form of community ownership and control.¹⁰ Based on this, Co-operatives^{UK} asks that:

- ‘Statements of community involvement’ should be used to bring people into this process. Planning Policy Statement 22¹¹ (PPS 22) highlights the need to “foster community involvement in renewables and promote knowledge of and greater acceptance by the public of prospective renewable energy developments”; and
- community strategies developed by Local Strategic Partnerships – and associated new Local Area Agreements – should continue to be used to galvanise support for local action on climate change, bringing together the public, private, social enterprise and voluntary sectors. Information about models of community ownership should be provided as part of the development of such strategies.

⁹ ‘Community Energy: urban planning for a low carbon future’, p.19, Dodd, N, for the TCPA & CHPA, 2008, available at www.urbed.coop/journal_docs/UrbedReport_LoRes.pdf

¹⁰ ‘Global Watch Mission Report: Co-operative energy: lessons from Denmark and Sweden’, Co-operatives^{UK} for the DTI, October 2004

¹¹ Planning Policy Statement 22 (PPS22) sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing local development documents and when taking planning decisions. For more information see www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps22/.

5 Developing community ownership

5.1 The need for support

A major research project into community energy found that support bodies play a vital role in the success of community energy:

“Particular factors explain why projects appear and succeed in some places and not in others. In each of the case studies initial ideas came from individuals who saw an opportunity to creatively utilise a renewable energy technology to meet a local need. Some communities ‘do it for themselves’, with local people taking the initiative, managing projects and drawing on their collective skills and enthusiasm. In most cases though a leading part is played by partnerships of local organisations, and there is **far more need for assistance and hand-holding by support bodies** and other forms of ‘intermediary’. In some cases there is minimal public participation outside of local institutions, but benefits are seen either directly or indirectly to accrue to the local community or to community services.”¹²

5.2 Energy4All

Despite significant barriers, Energy4All (a not-for-profit company) has been instrumental in the development of six co-operatives which either own or have a stake in operating wind farms. Energy4All was formed following demand for advice following the success of the Baywind Energy Co-operative (a community project launched in 1996 and the owner/operator of a wind farm in Cumbria). Energy4All co-operatives have raised a total of over £12 million of equity through public share offers, largely from people local to the projects. Co-operative members receive an annual share of the profits from the windfarms. All support local energy conservation funds.

Projects suitable for ownership by the community are rare in the UK for a range of reasons. As a result, Energy4All has pioneered a unique deal with a developer in Scotland (Falck Renewables) to engage local communities near to major commercial wind farms by buying a stake in the project. This initiative has now created three successful co-operatives in the North of Scotland, with a fourth currently being launched. At a recent seminar for local authority planners in Edinburgh, Falck was cited as an example of best practice in the sector. Energy4All is owned by the co-operatives that it creates and has always sought to be independent of public funding. The ‘triple bottom line’ benefits are impressive: Baywind alone, for example, has generated enough green electricity to power 1,300 homes a year since 1996, whilst paying an attractive return to its 1,350 members, and supporting local initiatives, such as the Baywind Energy Conservation Trust.

Energy4All has submitted a response to the UK Renewable Energy Strategy consultation. Co-operatives^{UK} supports the recommendations made in this response.

5.3 Renew

Renew Services Ltd (‘Renew’) is a co-operative energy services company (‘ESCO’) established in Scotland and operating UK wide. Its purpose is to develop, fund and manage sustainable energy projects in the interests of the communities and customers which it serves as an energy services company accountable to those communities. Its founding members are Fife Council and Ore Valley Housing Association. Most of its projects centre on local energy generation for housing and non-housing needs in a community setting. Renew works with both new and existing communities and across both public and private sectors.

¹² Walker, Gordon (2007). Community Energy Initiatives: Embedding Sustainable Technology at a Local Level: Non-Technical Summary (Research Summary). ESRC End of Award Report, RES-338-25-0010-A. Swindon: ESRC. Emphasis Co-operatives^{UK}.

Locally generated district heating and combined heat and power (CHP) has the potential to be a major part of the new energy mix. For instance, the Office of Climate Change has estimated that with regard to district heating: *“the maximum cost-effective potential is of the order of 5.5–6.5 million existing households (22–26%) and a large share of non-residential buildings; located generally in major cities.”*¹³ ESCOs are key to local energy delivery and given the long term customer relationships ESCOs require the co-operative model is most capable of attracting large scale take up.¹⁴

One of the early projects promoted by Renew, a biomass CHP project serving a low income community, illustrates the benefits with over 5,000 tonnes per annum reduction in carbon emissions projected whilst also eliminating dependence on gas, offering some protection against ever rising gas prices.

5.4 CoRE

Community Renewable Energy (CoRE) works with the voluntary and community sector primarily in the North East of England to develop renewable energy systems that will generate income for communities and provide them with sustainable, low cost, reliable energy supplies. In return, CoRE takes a stake in the companies set up; to recoup costs and to fund the establishment of more community owned renewable energy systems. CoRE works with community based groups to establish two types of companies:

- Joint ventures between CoRE and a community organisation to establish larger renewable energy systems such as wind turbines or hydro electrics.
- Co-operatives, involving community based organisations and individuals who combine together, sometimes with fuel suppliers, to set up a number of smaller renewable energy systems supplying members.

CoRE has also established an ESCO to set up supply services to these companies.

CoRE attracted £380,000 from One NorthEast RDA to fund a regionally based national pilot project over three years, with financial sustainability as the exit strategy. CoRE anticipates that by the end of year three the project will be generating an income of £80,000 - £100,000 per annum. By the end of year three, CoRE companies are projected to be generating and additional £80,000 - £100,000 cash return for the communities it works with.

However, CoRE and its member companies will have a substantial requirement for capital – currently just over £2 million. So far £500,000 has been identified. CoRE states that it has sound, bankable returns on each business model and is seeking both interest free and interest bearing loans, grants, and in the case of its Berwick wind turbine, equity stakeholders.

CoRE is also working with urban communities. Part of its work is matching local resources with renewable technologies. In urban settings it has a CHP pilot running on recycled vegetable oil (Linskill centre, North Tyneside) and is developing an Anaerobic Digestion plant with the principal feedstuff being the city stables and urban farm (Ouseburn, Newcastle).

CoRE believes that its most important long-term contribution will be the provision of dependable, stably priced, relatively low cost energy to communities; that they manage and control.

5.5 Recommendations

Given the strong evidence that support bodies play a vital role in the success of community owned projects, Co-operatives^{UK} asks that:

¹³ See ‘Heat call for evidence’, BERR, January 2008, p.73 www.berr.gov.uk/files/file43609.pdf.

¹⁴ For instance see web.uvic.ca/bcics/research/energy/index.htm.

- central Government works with the regions and local Government to develop information resources for different stakeholders. Co-operatives^{UK} suggests that these ought to be tailored to different stakeholder groups in partnership with trusted independent bodies such as Co-operatives^{UK}, for example:
 - the farming community: information should be provided on how to develop co-operatively run energy projects such as biomass plants, in partnership with organisations such as the Plunkett Foundation and the Scottish Agricultural Organisation Society (SAOS) which have a proven track record of working with this stakeholder group;
 - rural communities: information should be provided on how to develop community owned energy projects such as wind farms, in partnership with organisations such as Energy4All, CoRE, the Plunkett Foundation and Action for Market Towns;
 - urban communities: information should be provided on how to develop community owned energy projects such as district heating, in partnership with organisations such as Renew.

Co-operatives^{UK} strongly suggests that Government works with us and our associated network of co-operative and social enterprise development bodies, regional co-operative councils, and partner organisations, to develop information resources on community ownership aimed at particular stakeholder groups. These resources should include information on ownership models, links to relevant support bodies, advice on funding and case studies highlighting key lessons. Co-operatives^{UK} believes that these resources would function best when provided on a regional basis in order to take account of regional variation and need and should be delivered with support and involvement from regional and local Government, and RDAs. We also strongly suggest that it should be offered as a separate service to Business Link.

Co-operatives^{UK} also suggests that the provision of this information should be supported by central Government, perhaps through a community energy unit which could function in a similar way to [Supporters Direct](#).

6 The benefits of community ownership

Community ownership is not just an idea, but a successful method of raising finance that has been employed for a variety of purposes: local shops, pubs, land, farms and of course, renewable energy projects. Sometimes used to save local services – as in the case of shops and pubs – and sometime to ensure community benefit of new developments – as with wind farms – community ownership can bring not only financial benefits to a community, but significant social and environmental ones too.

6.1 Combating fuel poverty

District heating in particular has potential to address the damaging effects of rising fuel prices on low income households. Aberdeen Heat and Power and Shetland Heat and Power in Lerwick and other projects in Dunfermline, Falkirk and Clydebank and many other projects provide examples of local energy generation and supply providing affordable warmth keeping heating bills below 10% of net income. A case study of the Beaumont Rd estate (Waltham Forest, London) gas CHP system serving 686 homes¹⁵ reports average fuel price reductions of 39% along with CO2 emission reductions of 52%.

Renew is working collaboratively in two areas with new build private housing developers and housing associations with existing stock to develop district heating. One project is set to serve around 700 homes, the other around 5,000. The projects will be owned by the community through the Renew co-operative.

Community wind can help address fuel poverty in a quite different way. Where the project is wholly or partly owned by the community then income can be used, at the community's discretion, to address fuel poverty amongst other pressing priorities which each community may have: if they are in control, the choice is theirs.

6.2 Overcoming local opposition

“From our case study research surveying local people we found that all apart from one of the projects achieved a good general level of local acceptance and support. There was little overt opposition or conflict involved and people to varying degrees were trusting of those leading the projects.”¹⁶

Evidence shows that through engaging various local interest groups at an early stage in the development of a project, models of community ownership can be effective at avoiding and solving potential conflicts, including opposition to planning permission.¹⁷

6.3 Developing support for renewable energy

There is evidence to suggest that where communities are involved in local renewable energy projects, knowledge and confidence gained translates into improvement at an individual household level. In a radio interview¹⁸ with Patrick Devine-Wright, a Senior Lecturer at the University of Manchester and researcher on the Community Energy Initiative project¹⁹, the presenter visits a case study community renewable energy project in Gamblesby, Cumbria.

¹⁵ See <http://www.chpa.co.uk/> (About CHP;Case Studies)

¹⁶ Walker, Gordon (2007). Community Energy Initiatives: Embedding Sustainable Technology at a Local Level: Non-Technical Summary (Research Summary). ESRC End of Award Report, RES-338-25-0010-A. Swindon: ESRC

¹⁷ 'Community Engagement in Energy Through Mutuals', Owen, G, 2004, London: Mutuo

¹⁸ BBC Radio 4 Today, 20th February 2007: MP3 file available at geography.lancs.ac.uk/cei/CommunityEnergyKeyPublications.htm.

¹⁹ Community Energy Initiatives: embedding sustainable technology at a local level, geography.lancs.ac.uk/cei/communityenergyproject.htm.

Following a period of decline, largely due to the foot and mouth outbreak, the village hall fell into disrepair, and morale in the community was in decline.

According to the presenter:

"...the village made a decision to renovate the hall to restore the morale and spirit of the community...farmers brought their heavy lifting equipment to get the heat pump in, others became experts in renewable energy techniques for example finding the insulating material, made from local sheep's wool, that's now lagging the loft."

According to an interviewee:

"...since this was up and running there must be four or five houses that have installed underfloor heating systems in the village, using the same technology...you've got individuals in the community – now energy suddenly means something to them, it's not something that's boring to them or they know nothing about...and when they come to making decisions about doing up their homes, they're more informed...so it extends beyond the boundaries of the village across who knows what kind of regional and national boundaries...since it opened two months ago, the village hall has revitalised the community."

The final summary of this study confirms that this example is representative of a wider pattern:

"All of the projects had some positive impact on local people's understanding of and support for renewable energy."²⁰

6.4 Overcomes market failure

District heating has not so far been attractive to the private sector. Schemes that have succeeded have done so because of support from local Government. Set up by the local authority, Aberdeen Heat and Power owns and operates a district heat network serving schools, houses and local authority buildings: it now serves over 25% of city council housing stock. It does not have shareholders, but members, including Aberdeen City Council, the Combined Heat and Power Association and Energy Action Scotland, ensuring it remains accountable to the people of Aberdeen. The intention is to broaden the membership base to include other Aberdeen based organisations, to further ground it in the local community.

Though not a co-operative there is potential for other combined heat and power projects to use the co-operative model as Renew is working to do and as has proven successful in Denmark.²¹

6.5 Unlocking local demand

In many communities people want to take action against climate change and see renewable energy as a positive way that they can achieve this. Current initiatives are often oversubscribed.

6.6 Enables rural diversification

Due in part to the reduced prices that farmers are getting for their products, they are having to improve efficiency and introduce new revenue streams. One example is a mainly arable farm in Penrith, Cumbria, which was advised by a co-operative energy consultant.

²⁰ Walker, Gordon (2007). Community Energy Initiatives: Embedding Sustainable Technology at a Local Level: Non-Technical Summary (Research Summary). ESRC End of Award Report, RES-338-25-0010-A. Swindon: ESRC

²¹ 'Global Watch Mission Report: Co-operative energy: lessons from Denmark and Sweden', Co-operatives^{UK} for the DTI, October 2004

The farm installed a £2m Biomass-fired Combined Heat and Power unit, which supplies reclaimed heat to chicken sheds, electricity to the farm and to the grid. The biomass comprises chicken litter, general biodegradable waste, local woodland waste and Miscanthus grass (which is grown on 35 acres of the farm's land). The payback for the scheme is just over 5 years. There are savings for reduced disposal of waste, as well as the electricity and heat provided.

Such schemes can also work well as a co-operative venture, with several farms providing the biomass to one scheme.

6.7 Engages people with the climate agenda

Climate change is a complicated issue and leaves many people feeling powerless to effect positive change. Although there is conflicting evidence about whether community ownership can provide a solution to this, what is certain is that community ownership empowers people to find their own solutions to climate change.

Some evidence, such as the Community Energy Initiatives research²² suggests that community ownership does not have a significant impact on awareness of climate change. However, other evidence contradicts this. For instance, Energy4All reports that its members of co-operatives it helps to establish do become more engaged with climate change and is confirmed by the following finding:

There is increasing evidence of the importance of community engagement in achieving wider acceptance of the need for action on climate change. Engagement can inform the development of Sustainable Community Strategies and Local Area Agreements, as demonstrated by Cornwall County Council and the Marches Energy Agency in Shropshire.²³

6.8 Promotes embedded energy supply

There is an environmental and economic benefit from co-operatives creating energy close to usage, usually termed 'embedded generation'. This is largely due to reduced transmission losses on the Grid. Distribution losses from traditional centralised electricity power stations are very high and these are largely avoided in the case of, for example, local CHP schemes.

6.9 Community empowerment

Community ownership can deliver both financial and social empowerment. Community ownership can require that a greater number of local people participate in the management of an organisation than is the case with private ownership, as the following quote demonstrates, but need not necessarily be the case (see section 3 above):

"Co-operatives provide locally owned and managed jobs and services. Their democratic governance structures lead to a far higher proportion of people being involved in the management process than in a conventional business of the same size. This spreads entrepreneurial and management skills, competencies and expertise among a wider group of people. Co-operatives are run for the benefit of their members, not for the benefit of external providers of capital. They therefore promote economic equality and community cohesion. Their democratic governance structures increase the social capital in the communities they serve."

Co-operatives^{UK} member, survey response

6.10 Social cohesion

²² Walker, Gordon (2007). Community Energy Initiatives: Embedding Sustainable Technology at a Local Level: Non-Technical Summary (Research Summary). ESRC End of Award Report, RES-338-25-0010-A. Swindon: ESRC

²³ 'Community Energy: urban planning for a low carbon future', p.25, Dodd, N, for the TCPA & HCPA, 2008

Community owned organisations bring people together to share in the creation of a new enterprise, developing and strengthening social relations. According to a founder member of a biodiesel co-operative in Clapham:

"It has had an enormous impact on the sense of community in Clapham. People who previously did not know one another have been brought together. There is now a real network of villagers, and this is growing into a set of amazing cohesive relationships."

7 Community ownership: obstacles & recommendations

7.1 Planning system

The planning system is the single largest barrier to the growth of community owned wind farms. Gaining planning permission is a very lengthy and time consuming process and with no guarantee of success makes community investment at the early stages of a project very high risk.

A striking example of this is the largest of Energy4All's projects to date, the Westmill Wind Farm Co-operative in Oxfordshire. The project exists solely due to the determination of the farmer Adam Twine to develop a community owned wind farm on his land. The entire planning process took nearly 15 years and it has been estimated that £150,000 of personal investment was needed to bring the project to a successful conclusion. This investment was at risk until the final stages of the project. Energy4All became involved in the project about four years ago and eventually launched it successfully, raising a remarkable £4.6 million (complemented by bank borrowing) to build the wind farm. Around 2,500 co-operative members now own and run the largest community wind farm in the UK.

Throughout the country a well organised opposition to onshore wind projects is operating and makes obtaining planning permission for projects even more of a challenge.

It is unfortunate that the UK planning system gives no benefit to community ownership of projects, giving them no advantages at the planning stage. Not only does this expose communities to the vagaries of the planning system, with the risk of losing all their investment up to the planning stage; it also provides no incentive for commercial developers to engage with communities in any way.

7.1.1 Recommendations

- Change planning law to enable community developments without the need for formal permission. There are two possible routes:
 - a. Prior approval: developments such as telecoms masts, agricultural buildings and railway works do not need planning permission as they are considered essential infrastructure. The local authority is required to approve them for siting and appearance only.
 - b. Full permitted development rights: certain restrictions would need to be considered, for example limiting turbine numbers and ensuring output is tied to local community need.
- There is a need to recognise that in Scotland the planning system is devolved and that therefore action is required by both the Scottish and UK Governments.

7.2 Landowner system

Unlike some European countries, in the UK it is relatively rare for land to be owned communally by small communities. This creates a significant problem for communities seeking suitable sites for possible development. For example, in the absence of a sympathetic and supportive landowner many communities are unable to find suitable sites for community scale wind farms.

7.2.1 Recommendations

- Allow local authorities to invest more than £20,000 in renewable energy co-operatives – as they are already permitted to do for housing – thereby encouraging councils to support renewable energy schemes on their land. Investing in such schemes would generate a revenue stream for the council while providing economic benefit for the

community through members' investments in the co-operative and through environmental funds supported by the project.

- There is an opportunity for local authorities to support renewables through the 'Asset Transfer Programme' if central Government can allow land as well as buildings to be transferred.

7.3 Lack of familiarity with the co-operative and ESCO models

Co-operatives^{UK} has long been working to raise awareness of the co-operative model, including Industrial and Provident Societies (IPSS). Despite these efforts the majority of people – both professionals and the general public – do not appreciate that co-operatives have a long history as a successful and legitimate form of enterprise. Government (at all levels) and Regional Development Agency (RDA) awareness of co-operative structures can be poor. New start co-operatives often find that they have to explain their structures and ethos to professionals such as lawyers, bankers and accountants. People wanting to start a business using the co-operative model can be discouraged by lack of understanding by mainstream business support providers.

In the case of local energy services (ESCO) provision, whilst the legal model adopted may be more familiar (limited company), the ESCO business model itself is still unfamiliar to many and needs wider exposure.

7.3.1 Recommendations

- Central Government and the devolved authorities should take a lead in raising the profile of local energy networks and the role they can play in meeting the UK's climate change objectives.
- Central Government should also give strong encouragement to local authorities and other parts of the public sector (e.g. the health service and education) to help facilitate local energy networks, serving as anchor energy customers for such networks and to provide clear local policy encouragement.
- Local energy networks are naturally quasi monopolistic once established. Giving strong encouragement to consumer co-operative business models is more effective than other responses such as detailed local network regulation or profit capping (although some such regulation may still be required).
- The Government should commission in-house training about the co-operative enterprise model for Government staff across all relevant departments. Co-operatives^{UK} has seen the benefits that this has brought when it delivered such training for Defra, the Financial Services Authority, and the then Social Enterprise Unit at the DTI.

7.4 Lack of finance/fiscal incentives

As noted above in relation to the Westmill Wind Farm Co-operative, the few successful community-owned schemes in the UK have relied on risk-funding from the landowner or a public or philanthropic body. Typical communities in the UK simply do not have the resources to invest in developing a wind farm project (often in excess of £100,000) knowing that the money is at risk if the project fails at planning. This risk is cited by Energy4All as the single biggest factor holding back community ownership. In their view, addressing the planning issues is the key factor, as it will reduce the risk of loss and therefore encourage funders to make the necessary finance available.

It is also notable that there are minimal financial incentives available for community owned projects.

For example, the current Enterprise Investment Scheme limit of £2 million will not on its own buy one commercial sized wind turbine. In addition, individuals or communities get no special treatment for investing in community ownership of renewables.

Energy4All's experience is that there is significant demand for community-owned projects (the company has yet to fail with a share offer). However the risks of this new sector are clearly perceived by the public and Energy4All's rule of thumb is that a projected return of 10% p.a. is necessary to overcome the perceived risks and the long time-frame of investment in the sector. If investment is to become more mainstream a more benign environment would be helpful in overcoming perceived risks.

With regard to renewable heat generation, currently there is no financial incentive, as is the case with renewable energy with the Renewables Obligation Certificate (ROC).

Also, the stop-start nature of some schemes, such as the Carbon Emissions Reduction Target (CERT), causes difficulty for large scale local energy projects which require fairly long lead times.

7.4.1 Recommendations

- Require developers to offer a stake in their developments to the community, for example in the form of shares, through a co-operative structure, as their share of the Community Infrastructure Levy. An extra community dividend should also be considered as the project becomes financially successful.
- Raise the Enterprise Investment Scheme (EIS) limit for renewable energy projects to £10 million. This would greatly assist community scale projects.
- Grant programmes such as CERT should be adapted to provide more financial support for local energy networks and to operate on a rolling programme basis recognising that local network projects typically have long lead times.
- Introduce a heat equivalent to the ROC incentive for renewable electricity, of equivalent value, and readily usable by local energy networks, as proposed in the Renewable Energy Strategy.²⁴
- Address the timing of funding programmes: they should be rolling, not stop-start. There should be a minimum three year forward CERT at any one time, launched in advance of the completion of any current scheme. CERT should also be made available for network as well as energy centre costs.

²⁴ Point 54 in the Renewable Energy Strategy reads:

"Building on responses to the Heat Call for Evidence which the Government published in January 2008, we would like to hear your views on how to increase renewable heat generation in the UK. Measures proposed in this document include:

- > introducing a new heat incentive mechanism, such as a Renewable Heat Obligation or a Renewable Heat Incentive, akin to a feed-in tariff, to provide the financial stimulus for new renewable heat deployment;
- > improving the regulation of biomass heating systems to ensure that their rollout minimises the impact on air quality standards;
- > providing regulatory incentives to install renewable heat technologies in new buildings through the implementation of the zero-carbon homes and non-domestic buildings initiatives;
- > providing better information to consumers, businesses and Local Authorities on the potential of renewable heat, including for the planning process."

- Financial incentives could be better focused, for example the Low Carbon Buildings Programme should be accessible for large and small local energy projects.

7.5 Regulatory environment

ESCO models, whether co-operative or otherwise, normally rely on long term contractual relationships with a customer. This is key to the way they can raise additional capital to implement energy projects. This should be unproblematic. Ofgem has relaxed the “28 day rule” which restricted the length of contract for retail electricity customers, and heat has not been subject to such regulation in any case. But recent case law from Germany has caused some uncertainty and the ability to provide electricity via private wire arrangements under long term contract needs clarifying to ensure that barriers to low carbon solutions are not found in the regulatory environment.

7.5.1 Recommendation

- Clear powers to enter into long term retail electricity – as well as heat – contracts are required.

8 The regions and local Government

Co-operatives^{UK} believes that scaling up community ownership of renewables will require strong policy leadership from central Government, but that it will equally depend on commitment from regional Government, Regional Development Agencies (RDAs) and local Government.

8.1 Recommendations

- Renewable energy targets set centrally will need to be cascaded down to a local level. As part of the delivery of these targets, information should be provided to local authorities – including planners and developers – and through business support, on different models of renewables delivery, including community ownership.

8.2 Local Government

“With its remit in the UK strengthened by the well-being powers under the Local Government Act of 2000 and the Local Government White Paper (2007), Local Government can be a 'strategic leader and place shaper', coordinating, facilitating, and directly engaging in the development of community energy projects.

...Local authorities are significant purchasers of energy services in their local areas. They have the ability to act as a catalyst for energy projects with the potential for their portfolio of buildings to provide baseloads and long-term supply contracts as anchors for community energy projects.

They can also provide covenant strength as partners in Energy Service Companies (ESCOs)”²⁵

Community Energy: urban planning for a low carbon future', p.10, Dodd, N, for the TCPA & CHPA, 2008

8.2.1 Recommendations

Co-operatives^{UK} supports the view, outlined above, that local authorities will need to take a strong leadership position to support the development and roll out of community energy strategies. We ask that local Government should:

- set targets, using national ones as a framework, for developing renewable energy in their area;
- report on the proportion of energy consumed by public bodies (and private sector and household where possible) coming from renewable sources, including information on different models of ownership;
- work with existing local networks, such as Local Strategic Partnerships (LSPs), to develop community-owned renewable energy by providing information, support and guidance. Co-operatives^{UK} asks that this is part of the existing mandate, as outlined below, given to LSPs by central Government:

“Delivering sustainable communities is the core purpose of sustainable community strategies and local strategic partnerships.”

*Local strategic partnerships: Shaping their future, Office of the Deputy Prime Minister consultation paper, December 2005*²⁶

²⁵ available at www.urbed.coop/journal_docs/UrbedReport_LoRes.pdf

²⁶ From www.sustainable-development.gov.uk/advice/local/localleadership.htm

- raise awareness of community-owned renewable energy through local strategies such as Local Area Agreements (LAAs) and Sustainable Community Strategies: this will be vital for building understanding and support within communities for such projects;
- be the recipient of capacity building support from central Government to increase knowledge of renewables – and community ownership as a possible model – amongst local planners and developers;

Co-operatives^{UK} also asks that:

- given the importance of local Government in Scotland, the Scottish Government should look at ways in which Scottish local Government can be encouraged to promote community energy;
- local authorities build up a strong evidence base on the potential for new renewable projects – including location, scope and type – as outlined in Planning Policy Statement 1 (PPS1). Community ownership should be considered alongside other models in the development of new zero carbon building projects; and
- the new Scottish planning process includes wider community participation and that the Scottish Government and Scottish local Government (CoSLA) should work to promote community owned energy projects.

8.3 Regional Government

It appears that the North East is the only UK region to have mapped its energy generation needs to the sub-regional geography in its Regional Spatial Strategy (RSS). PPS 22 uses the North East RSS as an example of best practice. At a domestic level the RSS has defined that new developments should include a minimum of 10% onsite energy generation.

8.3.1 Recommendation

Co-operatives^{UK} asks that:

- all regions map their energy generation needs, with a particular focus on renewable energy, and opportunities for community ownership; and
- as recommended above (local Government) all regions report on the proportion of energy consumed by public bodies (and private sector and household where possible) coming from renewable sources, including information on different models of ownership.

8.4 RDAs

Given the strengthened role of RDAs in regional planning as driven by the Review of Sub National Economic Development and Regeneration²⁷ ('the Sub National Review'), clearly they will have a key role in planning and implementing renewable energy projects. Some RDAs have already taken the initiative in this area. Energy4All has agreed a programme with Advantage West Midlands aimed at kick-starting community ownership of renewable generation in the region, probably using the co-operative model successfully pioneered by Energy4All in both England and Scotland. The intention is to create a financially self-sufficient and expanding programme of community projects by the time the 3-year contract comes to an end. Other RDAs in the English regions are discussing similar ideas with Energy4All, and in the North East, CoRE is supported by the local RDA (see 5.4 above).

²⁷ The latest consultation on the Sub National Review can be found at www.bmgresearch.co.uk/SNR-Consultation/KMS/news.aspx. Co-operatives^{UK}'s response to this consultation is available to download from www.cooperatives-uk.coop/Home/mini-webs/miniwebs/consultations/empowermentSnr.

8.4.1 Recommendation

- Co-operatives^{UK} asks that RDAs, as the bodies responsible for business support, are tasked with ensuring that models of community ownership for renewables are strongly encouraged, with clear regional targets. Such a policy will clearly complement the proposed changes to the planning system to reduce risk and encourage the development of financially robust community-owned projects.

9 Hydro electricity

With regard to hydro electricity, the Renewable Energy Strategy consultation states: "The untapped resource for further hydropower generation in the UK is that from micro and small-scale schemes."²⁸

Micro and small-scale schemes typically serve a local geographical community, making them especially suitable for community ownership. The case study below is evidence of how community owned hydro can be successful with support from a variety of stakeholders including the RDA, local Government and the local community and guidance from a professional body.

Case study: Torrs Hydro²⁹

Torrs Hydro New Mills Limited was established for the specific purpose of owning the Torrs Hydro Electric scheme by Torr Weir on the River Goyt in New Mills in the High Peak of Derbyshire.

The project was started in 2006 by [Water Power Enterprises](#) (H2ope), a social enterprise whose mission is to set up small-scale hydro plants and reduce carbon emissions. They approached New Mills Town Council, who were very supportive of the scheme and quickly went about building support in the local community.

To make the project happen capital was needed to build the plant. They received grants of £75,000 from East Midlands Development Agency and £45,000 from the Co-operative Fund, but the majority was raised from the community via a public share issue that was completed in January 2008. From 200 members, £97,000 was raised. As Torrs Hydro points out, 50% of the members are residents in New Mills and its immediate surrounding area, which indicates the strength of local support for the scheme.

Unlike Baywind and other community owned wind farms established with the help of Energy4All, investor members of Torrs Hydro do not receive a share of the profits generated from the scheme. Instead the profits are either ploughed back into the scheme or used to help regenerate the New Mills and promote environmental sustainability in the town.

The hydro plant consists of a 70kW Reverse Archimedean Screw with a diameter of 2.4 Metres. Based on records of river levels over the last 20 years, Torrs Hydro estimates that it will generate 70kW 45% of the time, meaning that approximately 260,000 Kilowatt hours (or units) will be generated annually. When the river level is low it will just turn off.

Torrs Hydro in New Mills was thought to be the first community owned hydro plant in the UK, but Water Power Enterprise (H2ope) have a number of new projects, such as a similar project in Settle on Yorkshire, which began a community share offer in September 2008.

9.1 Recommendations

Co-operatives^{UK} asks that:

- Government takes a strong policy leadership position to ensure that where possible local communities benefit from hydro schemes in their area, including providing information on community ownership at all levels of Government and also to RDAs and professionals working in the development of hydro;

²⁸ Point 3.2.1

²⁹ For more information see www.h2ope.org.uk and www.torrshydro.co.uk.

- given that the Scottish Government has indicated small scale hydro is likely to comprise a significant proportion of Scotland's renewable energy mix, that it in particular should take a strong policy leadership position on community ownership.

10 UK consumer co-operatives and renewables

A number of consumer co-operatives have taken a leading role in sourcing their energy from renewables, in some cases going so far as to develop their own renewable energy projects. A significant number of community owned renewable energy projects have received some of their funding from consumer societies. Indeed, some societies have a strong renewable portfolio, but it is important to note that this is because of positive market conditions but because of wanting to take a leadership position and to support the development of microgeneration. Other less values-led businesses are unlikely to follow the same path unless the renewables market is made more attractive.

10.1 The Co-operative Group

The Co-operative Group has submitted a response to the UK Renewable Energy Strategy consultation. Co-operatives^{UK} broadly supports the proposals outlined in its response.

10.2 Midcounties Co-operative

- Midcounties have installed solar panels at their Oxford based Head Office which have so far generated 4027 kwh – saving almost 2 tonnes of CO₂.
- Midcounties source 100% of their electricity from green sources. This energy is 100% pure and comes only from wind, solar and small scale hydro sources. A proportion of this energy comes from The Co-operative Group's own wind farm in Cumbria.
- Midcounties' current major project is setting up a wind turbine (850kw) on land near their Oxford based head office. They have planning permission for a test mast and if wind speeds are good enough they hope to put up a turbine that could provide up to 75% of the electricity requirements for the Oxford offices, their Motorworld dealership, and their nearby Botley Food store.
- Midcounties have created five green stores using the following technology; heat reclamation equipment that takes the heat from refrigerators and recycles it to warm the building, eliminating the need for additional heating; automatic night blinds on refrigerators that reduce energy use; high frequency/low wattage sales area lighting, energy efficient out of hours lighting levels, movement sensor lights in common areas, and sustainable urban drainage systems.
- Throughout 2008 they will continue to look for other potential sites to locate wind turbines on land we own.
- Midcounties are researching the use of solar and wind powered lighting for their store car parks. As part of a refurbishment project at their Cainscross Food Store car park they are planning to install solar powered grid connection lighting. The solar panels will offset the electricity used in lighting the car park at night and electricity generated will be sold back to the grid as green energy.

10.3 Lincolnshire Co-operative

Lincolnshire Co-operative has been involved in the development of a groundbreaking conference venue at Lincolnshire showground. The aim of the venue, called '[Epic](#)', is to be a test bed for trialling technologies. For instance, it contains a variety of 'plug and play' technology including different boilers such as biomass. Lincolnshire Co-operative has funded an Education Resources Manager at the venue, who will share knowledge with the local community including businesses. Lincolnshire Co-operative plans to transfer learning from the project to a store environment. The Epic project at not only provides learning opportunities for

a business, but also motivates and educates local residents and communities about low carbon technology.

Lincolnshire Co-operative has also invested in a local co-operative wind farm, has introduced a heat reclamation system into its two newest stores, together with movement sensor lighting. All of its energy comes from renewable sources.

10.4 Barriers to innovation in the consumer co-operative sector

Wind energy

“From our experience of trying to install a wind turbine a major challenge is the length of time and difficulties in getting planning permission from the local council. To just get planning permission for a test mast, we have spent well over a year to finally get the permission we need. We now need to get 18 months of wind speed tested, and then need to go through the full proposal for planning application for the turbine. From what we have experienced and heard from others, it looks like we have at least another 2 to 3 years until we get planning permission (if we do) and install the turbine. With renewable energy being a major focus surely this type of process needs to be made simpler, but more importantly quicker! This needs to be an area that Government/local councils need to look at if we truly want to generate renewable energy strategies. “

Midcounties Co-operative spokesperson

Solar energy

One consumer society reported that it had not invested in solar photovoltaics ('solar PV') because the return on investment was over 40 years for a technology that currently lasts 20, and that they also had issues with the raw materials used to make the panels potentially being sourced from conflict zones. The spokesperson stated that in the current climate, energy saving was cheaper than investing in renewable energy generation.

Waste cardboard

“We looked at a project for using waste cardboard as a heating fuel, all seemed quite attractive until we were told that this would be classified as 'energy from waste'. This elevated the equipment required to monitor emissions to an excessively costly level, so much so that we did not proceed beyond the initial investigation. We did not even proceed to an investment appraisal as figures looked so frightening.”

East of England Co-operative Co-operative Society spokesperson

10.5 Recommendations

- Government should look at how it can create market conditions in which investing in renewable technology is as commercially attractive to business as non-renewables.
- Government, with the regions and RDAs, should support businesses to develop a knowledge base on renewables that will bring about a step change in their take up of renewable technology, through projects such as [Epic](#) at Lincolnshire Showground.

APPENDIX 1

Co-operatives^{UK}

Co-operatives^{UK} is the national member owned and led trade association for all types of co-operative enterprise throughout the UK. It is the strategic voice for co-operation and works to increase awareness and understanding of co-operative values and principles, supports the development and growth of new co-operatives and helps existing co-operatives to achieve high performance levels and good governance. It is a focal point for the sector and a forum for innovation and best practice. Co-operatives^{UK} represents co-operative enterprise throughout the United Kingdom of Great Britain, Northern Ireland, the Channel Islands and the Isle of Man.

The co-operative contribution

Co-operatives make a substantial contribution to the UK economy. They provide effective sustainable solutions to many of the social and economic challenges of modern society. The movement has 160 years experience of adapting membership-based trading organisations of all types and sizes to changing economic, social and political conditions.

The most recent statistics produced by Co-operatives^{UK} show that co-operatives:

- have an annual turnover of £27.4 billion³⁰
- have net assets of £9.2 billion
- are owned by 10.8 million people in the UK – one in five of the British population
- employ 237,000 people

A co-operative is a business that is jointly owned and democratically controlled by its members. Co-operatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. Co-operative members believe in the ethical values of honesty, openness, social responsibility and caring for others. Seven principles provide the guidelines by which co-operatives put their values into practice:

1. Voluntary and open membership
2. Democratic member control
3. Member economic participation
4. Autonomy and independence
5. Education, training and information
6. Co-operation among co-operatives
7. Concern for community

Co-operatives are trading enterprises, providing goods and services and generating profits, but these profits are not taken by outside shareholders as with many investor owned businesses: they are under the control of the members, who decide democratically how they should be used. Co-operatives often use their profits for social purposes, investing in the education of members, in the sustainable development of the community or the environment, or for the welfare of the wider community.

³⁰ See Co-operatives Review 2008, http://www.cooperatives-uk.coop/live/images/cme_resources/Public/Co-operative%20Review%202008/Review08.pdf

APPENDIX 2

Response contributors

Organisations listed in the table below were involved at some or all stages of the response process:

Organisation	Website address
Co-operation and Mutuality Scotland	www.scotland.coop
Co-operative Group Ltd	www.co-operative.coop
CoRE	www.core.coop
Creative Consumer Co-operative Limited	www.outofthisworld.coop
East of England Co-operative Co-operative Society Ltd	www.eastofengland.coop
Economic Energy Ltd	www.economic-energy.com
Energy4All Ltd	www.energy4all.co.uk
Lincolnshire Co-operative Ltd	www.lincolnshire.coop
The Midcounties Co-operative Ltd	www.midcounties.coop
Renew Services Ltd	www.renewenergy.coop
Scottish Agricultural Organisation Society Ltd	www.saos.co.uk
URBED (Urbanism Environment and Design) Ltd	www.urbed.coop
Wales Co-operative Development & Training Centre Limited	www.walescoop.com