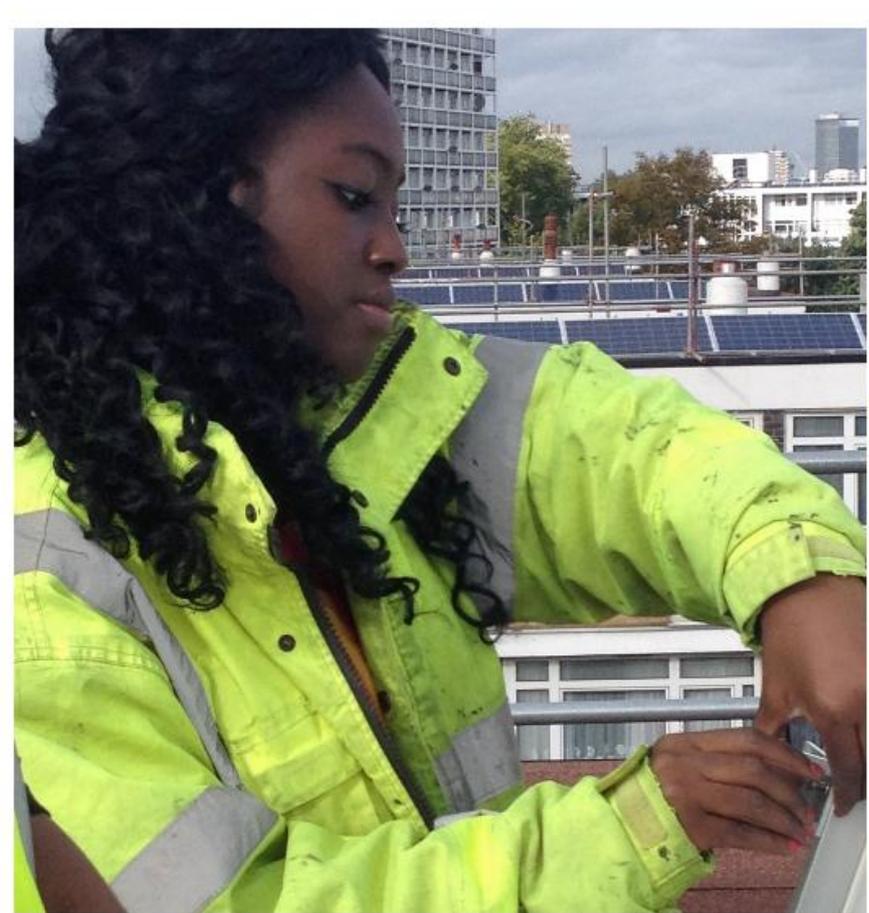




Department
of Energy &
Climate Change

Community Energy Call for Evidence

6 June 2013



Community Energy Call for Evidence

General information

Call for Evidence process

This Call for Evidence was published on 6 June 2013. It will be open for eight weeks and will close on 1 August 2013.

Responses can be made online at: <http://www.gov.uk/government/consultations/community-energy-call-for-evidence>

Enquiries and hardcopy responses to: Community Energy Team, Department of Energy & Climate Change, 6th Floor, 3 Whitehall Place, London SW1A 2AW

Tel: 0300 068 5749

Email: CommunityEnergyCallForEvidence@decc.gsi.gov.uk

Outputs from the Call for Evidence

The Call for Evidence will inform the Community Energy Strategy, to be published in autumn 2013. The precise content of the Strategy will depend on the nature of responses and ideas received through this Call for Evidence, but is expected to include actions for Government, industry and other stakeholders.

It is envisaged this Call for Evidence could lead to a database of evidence on the benefits of community energy and the need for more support for the delivery of such projects.

We will ensure that evidence received by this Call for Evidence also informs other areas of policy where appropriate.

Devolved Administrations

We welcome evidence from all parts of the UK. Parts of the energy system are devolved to Wales, Scotland and Northern Ireland. The respective Devolved Administrations are fully engaged in this call for evidence, but reserve the right to use the evidence and adapt the outputs as appropriate to their countries.

Making responses public

It is intended that responses to this Call for Evidence may be made public. If you do not wish all or part of your response (including your identity) to be made public, please state in your response which parts you wish us to keep confidential. However, information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004). If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, among other things, with obligations of confidence.

In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department. The Department will process your personal data in accordance with the DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

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1. Executive Summary

1. Community energy is on the rise in the UK, reconnecting communities to the energy they use. It is already making a difference to local jobs and local supply chains. It can unlock community investment and help to bring communities together. And it can support security of energy supply and help the country to reduce its carbon footprint.
2. A whole range of projects are being undertaken by groups around the UK: from a community-run advice service in Hampshire promoting energy efficiency, to a community-owned wind farm just north of Swansea which can power hundreds of homes; and from a renewable heat project in Herefordshire where fossil fuels are replaced by locally-grown biomass, to a swathe of collective switching schemes across the country.
3. We believe that community energy has the potential to achieve even more, offering new solutions where Government action alone is not enough. To help unlock this potential, Government needs to understand the benefits, get to the heart of the barriers that are faced by communities, and find ways of overcoming them. Later this year, we will publish a Community Energy Strategy setting out our vision, together with a plan for making that vision a reality.
4. To underpin the Strategy, this Call for Evidence seeks data in three areas: **benefits**, **barriers**, and **solutions**.
5. To identify the true potential of community energy, we need good evidence about its **benefits**. This might include delivering outcomes more effectively and cheaply than Government action alone; improving public engagement in energy and climate change issues; and wider benefits such as improved health, stronger communities and local economic growth. More detail on potential benefits is given in **Section 5**.
6. Community energy groups often face **barriers** to getting started and becoming sustainable over the longer term. Our initial discussions with community energy groups have identified barriers across five main categories: community capacity and capability; access to funding; legal and regulatory framework; networks and grid; and evidence and evaluation. We want to gather evidence on these barriers and identify any others which may exist. More detail on these barriers is given in **Section 7**.
7. We also want to hear about **solutions**: ways in which the barriers can be overcome. This includes helping community energy groups to access skills, information and advice; access funding; navigate regulatory barriers; demonstrate their impact; and work in partnership with others such as local government, business and voluntary sector organisations. More details are outlined in **Section 7**.
8. Not all aspects of the Call for Evidence will be relevant to all organisations. We want to encourage as many people as possible to respond. A full list of all the questions in the Call for Evidence is in Annex A. **We encourage readers to respond to as many or as few of these questions as they wish.**

Who should respond?

In this Call for Evidence, we want to hear from **community energy groups** and **community energy intermediaries** (such as membership organisations or those offering support and advice to community energy groups), as well as all others with an interest in community energy, including **banks, private equity firms, venture capitalists, infrastructure funds, energy companies** (supply, networks and generation), **developers, builders, planners, local authorities** (including parish councils), other **local organisations, health professionals** and **members of the public**. We would also like to hear from community networks and parts of civic society who have an interest in energy, even if it is just a small part of the organisation's remit. This might include **charities, community groups** and **faith groups**.

We know that **England, Wales, Scotland** and **Northern Ireland** have taken a range of different approaches to community energy (see **Section 6**). We are keen to learn lessons from the most effective approaches across the whole of the UK, and we welcome evidence from all four nations. Some parts of the energy system are the responsibility of the respective Devolved Administrations (such as overall climate change policy) while other policies apply across several parts of the UK (for example, Feed-in Tariffs apply in England, Scotland and Wales). Therefore some parts of the Community Energy Strategy will apply to the whole UK, some will apply to several parts of the UK, and others will apply to England only. In areas where the Strategy does not apply, policy will be the responsibility of the Devolved Administrations.

This document highlights several examples of successful community energy projects. However, we know that there may be other communities who want to start energy projects but are not sure how to get started, or who have tried to start projects and faced barriers to doing so. We want to hear from these groups as well.

Call for Evidence Question: Your details

1.	What is your name?
2.	What are your contact details? (E.g. email address, telephone number and/or address)
3.	What is your organisation?

2. The strategic context

9. Maintaining a continued supply of reliable and affordable energy, while meeting our target of an 80% reduction in greenhouse gas emissions by 2050 and ensuring that we maximise the opportunities of the low carbon economy, will mean a major shift in the way we generate and use energy over the coming decades. This shift will need to be made both nationally and in communities up and down the country.
10. For the energy we use to heat and power our homes and businesses, we need to move from fossil fuels to low carbon sources of energy, including renewables. The Government is committed to seeing a 15% share of our energy provided from renewable sources by 2020. Carbon emissions from the power sector will need to be close to zero by 2050. We will also need to transform how we heat our buildings. Heat accounts for a third of the UK's greenhouse gas emissions, and 70% of our heat is generated from natural gas, a fossil fuel. Decarbonising our heat supply will mean large-scale deployment of both air- and ground-source heat pumps, and a greater role for heat networks by 2050.
11. As well as changing how we generate our energy, we need to change how we use it. As the Energy Efficiency Strategy set out, meeting our greenhouse gas emissions targets will require per capita savings of between 21% and 47% over the period 2011 to 2050. This will mean supporting homes and businesses across the country to become more energy efficient, as well as helping people use energy more intelligently and efficiently.
12. This transition to a low carbon future must be one which benefits all consumers. That means putting people in control of their energy use, empowering them to get the best deal on their energy supply, and tackling fuel poverty. Helping people control their energy spending not only helps keep the cost of living down for households, it can also contribute to the country's health, wellbeing and economic prosperity.
13. To achieve these goals we will need to transform the way energy is generated and used across the whole of society. Government has a key role to play in this, and we are already pursuing a range of policies to support these goals. But this change won't happen with top-down Government action alone. We will need to work closely with communities at the grassroots.
14. The good news is that community energy projects are already making a difference across the country, as demonstrated by many of the examples highlighted in this document. On energy generation, the Government's Feed-In tariffs (FiTs) scheme, introduced in 2010, is providing support to small-scale generators of renewable electricity. Since 2011, the Renewable Heat Incentive non-domestic scheme has offered similar support for large and small businesses to fund community heating projects. Community energy projects have also begun to develop new approaches to reducing energy use, purchasing energy and managing demand.
15. Many of these projects go beyond energy and climate change alone. For some of the communities showcased in this Call for Evidence, coming together to tackle energy issues has been a first step which has led to the community taking an interest in wider social and

economic issues, including local regeneration and job creation, education and training, local health and community cohesion. For others, an interest in energy and involvement in community energy projects has grown out of a wider set of shared interests and values.

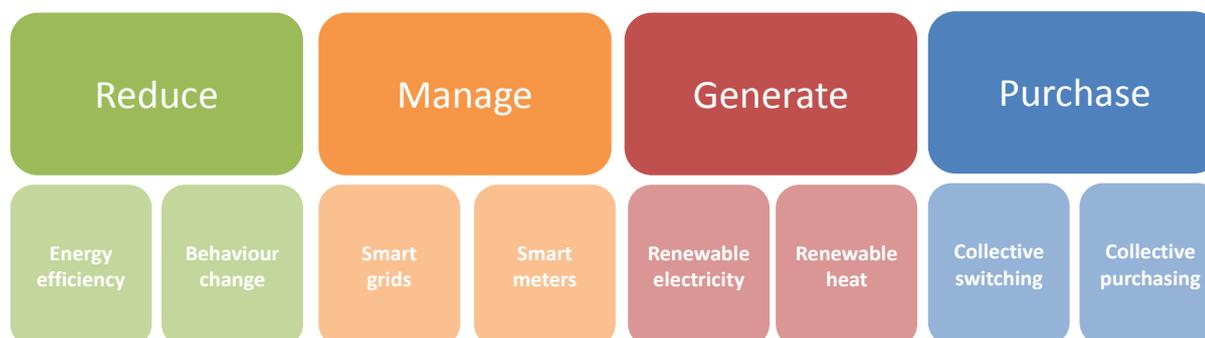
16. In many cases, community-led action can tackle the most challenging issues more effectively than Government alone. Community groups are often better placed than Government to understand their local areas. They have the freedom to develop creative solutions that meet local needs, offering important learning that might be scaled up across the country. Engaging with communities can be a way for Government to increase awareness and understanding of energy and climate change issues, as communities are often able to mobilise and engage people more effectively than Government.
17. Community energy has not always featured strongly in the approaches taken by successive governments to energy and climate change policy, and it has not always been clear how community energy fits into the Government's overall vision. One of the aims of this Call for Evidence is to understand in more detail its potential contribution to the powering the country and protecting the planet, as well as to wider social and economic goals. The evidence we gather will underpin the Community Energy Strategy, to be published later this year, which will set out in more detail our vision for community energy together with a clear set of actions to make that vision a reality.

3. What do we mean by Community Energy?

18. In this Call for Evidence, we are taking a broad view of ‘community energy’ to include **community projects or initiatives focused on reducing, managing, generating or purchasing energy** (see **Figure 1**). We include both **communities of place** (communities within a defined local area) and **communities of interest** (non-geographical communities united by shared interests, such as workplaces or faith groups).
19. Community energy could range from a small church group talking about energy or helping out with leafleting, all the way through to joint ownership of a wind farm with a commercial development. It can include formal ‘projects’ or informal involvement in energy-related activities. We want to hear about anything and everything communities are doing around community energy.

What kinds of ‘energy’ project are we interested in?

Figure 1: Community energy ‘strands’



20. The different strands of community energy are outlined in **Figure 1**.

21. Examples of ‘community energy projects’ might include:

- A **community initiative to reduce its carbon footprint**, through advice and education on energy use and support to access and install energy efficiency measures (see **Case Study 1 - Energy Alton**);
- A project using **smart grids** to help customers shift their electricity use away from peak times (demand management), so bringing down costs for consumers (see **Case Study 5 - Ecoisland**);

- A community trialling **smart meters** to improve awareness of, and engagement with, energy use, and to showcase new technologies (see **Case Study 19** – Wigton ‘Smart Energy Community’);
 - A **community-owned renewable electricity installation**, to generate electricity for use by the community or to sell to the grid (see **Case Study 2** - Bath and West Community Energy);
 - Members of a community jointly switching to a **renewable heat source** for their heat provision, such as a ground-source heat pump or biomass boiler (see **Case Study 7** - Woolhope Woodheat Co-operative);
 - **Collective switching**, in which groups of consumers come together to negotiate a cheaper tariff with electricity or gas suppliers, often with the support of local authorities or third sector organisations (see **Case Study 3** - Cheaper Energy Together and **Case Study 4** - Big London Energy Switch); or **collective purchasing**, for example groups of householders bulk purchasing heating oil in order to secure lower prices.
22. In practice many community projects combine several of these elements in a single project. For example, projects with an energy efficiency and behaviour change focus often also include small-scale renewable generation technologies.

Case Study 1: Helping communities save energy: Energy Alton, Hampshire

Energy Alton is a community partnership bringing together several community organisations in Alton, Hampshire. Their aim is to spread awareness of the benefits of greater energy efficiency and to give practical help to people who want to insulate their homes, save energy, and reduce their energy bills.

In January 2012 Energy Alton successfully bid for £80,000 of Government funding to help fund a range of energy efficiency work and build on the experience and knowledge of the Alton Local Energy Campaign. Since then they have gone from strength to strength, running many initiatives to help people in Alton make their homes warmer and more comfortable.

They created an Energy Advice Centre in a vacant shop on the High Street, which provided information on renewable energy, energy efficiency and local deals on installation. They now provide this service every Thursday morning from Alton Library.

Energy Alton has enabled hundreds of households to receive free loft and cavity wall insulation, supplied 500 households with DIY loft insulation, carried out 200 home energy surveys, and are in the process of taking 150 thermal images of homes to help households identify where they are losing heat. They are currently installing 10kW solar panels on Alton Library.

They are now looking at how they can enable local people to benefit from the new Energy Company Obligation (ECO) and Green Deal home improvement schemes.

Energy Alton is a community project entirely reliant on volunteers.

Case Study 2: A community enterprise for electricity generation: Bath & West Community Energy (BWCE)



Bath & West Community Energy (BWCE) grew out of an initiative between Transition Bath and Transition Community Corsham. It is an Industrial and Provident Society (IPS) 'Community Benefit Society' set up to deliver renewable energy, energy efficiency and energy supply via a strong community model. BWCE aims to build a financially sustainable community enterprise that reconnects local people with local energy issues by promoting local ownership and generating both individual and community returns.

£750,000 has been raised from a local share offer, together with a £1 million loan from SSE (formerly Scottish and Southern Energy). Funds have been invested in 612kW of solar PV, across ten schools and community buildings, and one 250kW ground mounted system. The partnership with SSE and a cooperation agreement with Bath & North East Somerset Council have been crucial to BWCE's development. It is also developing wind, hydro and biomass projects and working with the council in support of the Green Deal. In the longer term, BWCE hopes to supply energy generated locally to residents and the wider community.

BWCE was awarded £37,000 as part of DECC's Local Energy Assessment Fund (LEAF), which was used to support a feasibility study into an innovative energy efficiency financing model for schools.

Progress to date has been based on significant voluntary input, though some people are now also being paid part-time. BWCE has been trading for two years, with an annual turnover of around £180,000 and a small surplus after loan repayments and 7% interest paid on members' investments.

The first payment into the community fund will soon be made. Currently-installed projects will provide around £750,000 into the community fund over 25 years, with projects under development providing far more.

Case Study 3: Supporting communities to save on energy bills: the Cheaper Energy Together fund

More than 30 projects were awarded a share of £5 million funding to support collective switching and purchasing schemes under DECC's Cheaper Energy Together fund in January 2013. The scheme aimed to support local residents to work together to switch energy supplier and get a better tariff, as well as to set up collective purchasing schemes for energy.

The aim of this scheme is to encourage consumers to group together and use market power to negotiate lower energy bills and save money. The successful projects cover more than 94 local councils and eight voluntary sector organisations in Great Britain.

Case Study 4: Big London Energy Switch

The Big London Energy Switch is the country's biggest ever council-led collective switching scheme to target vulnerable residents, aiming to help people find better deals on gas and electricity by collectively negotiating a better deal with energy providers. Once residents find out how much they could save, it is up to them to choose whether to switch or not.

It is the largest scheme of its kind to specifically target vulnerable residents such as elderly and disabled people and those on benefits through community groups, targeted events and mailings. Of those that signed up for the scheme nearly 20,000 residents can save an average of £122 a year each on their gas and electricity bills after signing up to the Big London Energy Switch - around £2 million savings overall. It is estimated that more than 300,000 homes in the 21 boroughs that participated in the scheme spend more than 10% of their income on energy, which classifies them as living in fuel poverty.

Councillor Catherine West, Chair of London Councils' Transport and Environment Committee and Leader of the London Borough of Islington put the scheme into context: 'In the current financial climate, many vulnerable Londoners are faced with making difficult choices between food and fuel. These are the people most likely to be on the wrong energy tariffs as they don't have the capacity or the resources to shop around for the best rates, which is where the Big London Energy Switch comes in'.

Councillor Derek Osbourne, Leader of The Royal Borough of Kingston upon Thames – lead borough for the scheme – said: 'The scheme has been a huge success. I am pleased that we have been able to help so many Londoners take advantage of this free and easy way to seek a more affordable deal.'

Case Study 5: Using smart grids for energy management: Ecoisland, Isle of Wight

The Isle of Wight Ecoisland project aims to help the island's 142,000 residents save money on their energy bills by matching supply and demand using battery energy storage, hydrogen energy storage and demand side management.

The project at its heart will have an Ecoisland Service company which will operate as a Virtual Power Plant. This will enable the integration of a new diverse energy sources such as solar and wind while maintaining reliability of supply and helping the island achieve its ambition to be energy sufficient by 2020.

The aim of becoming a net energy exporter has already been achieved, with the Isle of Wight exporting energy to the mainland. Ecoisland plan on trading within the UK Balancing and Fast Demand Response markets.

The project is using a Community Interest Company (CIC) to mobilise community involvement in energy and expects to create up to 400 jobs. Ecoisland is also successfully acting as a doorway for Island Residents into the Green Deal and ECO schemes.

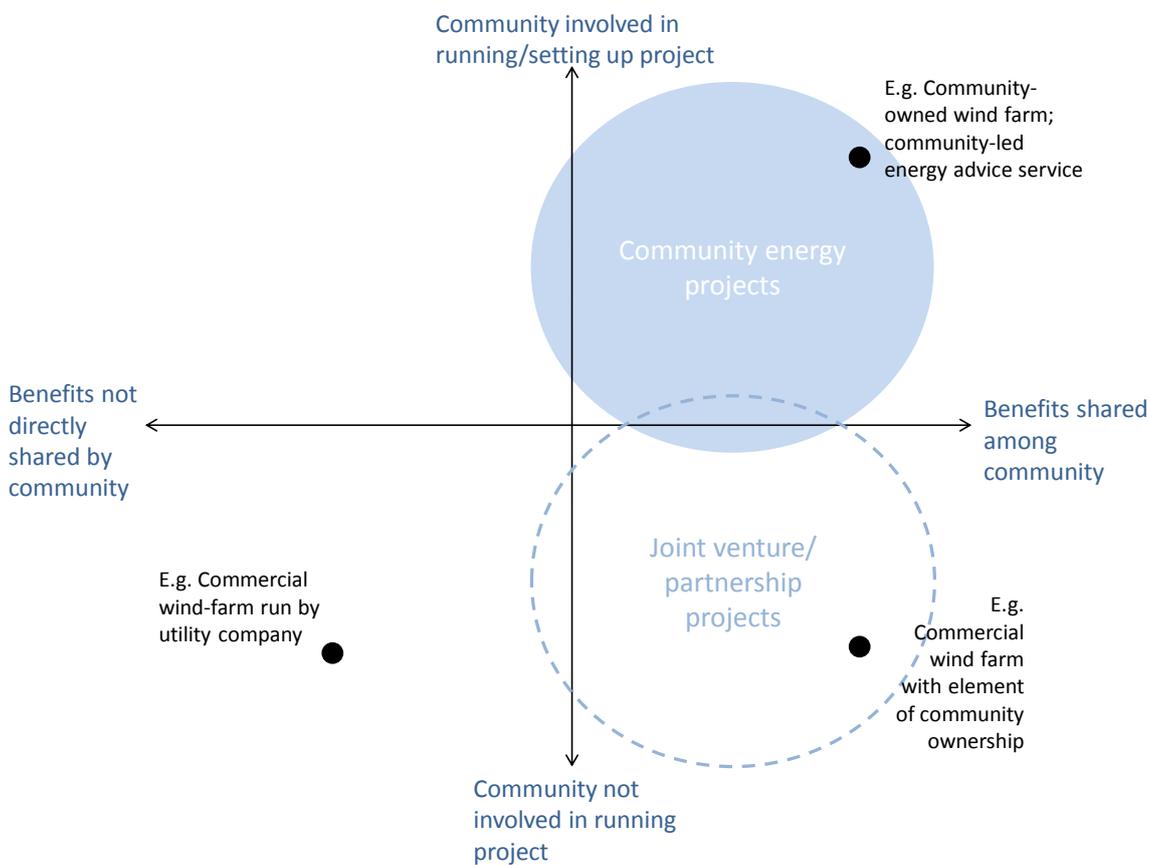
What kinds of 'community' project are we including?

23. For the purposes of this Call for Evidence, we have taken a fairly broad definition of 'community' energy projects as follows:

A 'community' energy project is one with **an emphasis on community ownership, leadership and/or control** in which the **community benefits from the outcomes** of the project.

24. In practice this is a spectrum rather than a clear definition, as illustrated in **Figure 2** below.

Figure 2: Defining community energy projects¹



25. **For the purposes of this Call for Evidence, we are primarily interested in projects in the area labelled ‘community energy projects’** – i.e. those with a strong element of community involvement in running or owning the project in which the benefits (both financial and wider benefits) are shared by the community. This would include projects based on formal community ownership models such as co-operatives, social enterprises, community charities, development trusts and community interest companies, as well as projects without these formal structures but with a strong community-led aspect.
26. **We are also interested in exploring the potential of joint venture or partnership models**, in which community groups partner with a local authority, housing association, commercial developer, energy company or other business, with financial and other benefits (such as jobs or local regeneration) shared by the wider community.
27. We are also keen to explore **how communities can work with other local organisations** to help them achieve their goals. These organisations might include:

¹ Based on a diagram in Walker and Devine-Wright (2008): ‘Community Renewable Energy: What should it mean?’, *Energy Policy* 36, 497-500.

- **Public sector organisations**, such as local authorities, hospitals or schools;
- **Private sector organisations**, such as energy companies, banks, developers, shops or small businesses;
- **Voluntary sector organisations**, including charities, social enterprises and faith organisations.

28. While we use a broad definition here, when required for specific policy purposes, we may need to apply a more precise legal definition, for example as used in the Feed-in-Tariff (FiT) legislation.

Call for Evidence Question

- | | |
|-----------|--|
| 4. | <p>We would like to hear your views about the definition of ‘community energy projects’ outlined in this section. In particular:</p> <ol style="list-style-type: none"> a. Are you aware of any community energy projects that go beyond the goals of reducing, managing, generating and purchasing energy as outlined here? b. Are there other types of community that should be in scope for the Community Energy Strategy? If so, please explain why they should be included. |
|-----------|--|

Call for Evidence Question

- | | |
|-----------|---|
| 5. | <p>We would like to hear what evidence you have of the current and potential scale of community energy projects. For example:</p> <ol style="list-style-type: none"> a. Do you have evidence of the number of community energy projects or number of people currently involved in community energy projects in the UK? b. Do you have estimates of the potential future scale of community energy projects in the UK in terms of numbers of people, generation capacity, carbon or energy savings? Please explain the methodology used to reach any estimate that you provide. c. If you are a community energy group, does your group intend to expand in the future? |
|-----------|---|

4. Why we need a Call for Evidence

29. The Government intends to publish a Community Energy Strategy in the autumn, which will set out our vision for community energy together with specific policy proposals. We want to ensure that the Strategy is underpinned by as strong an evidence base as possible, and that it identifies concrete actions to help realise the potential benefits of community energy.
30. That is why we are publishing this Call for Evidence: so that we can gather as much evidence as possible from a range of stakeholders about benefits and barriers, and identify ‘what works’ in supporting community energy projects. The Strategy will build on the barriers and opportunities identified in this Call for Evidence, including: community capacity and capability; access to funding; legal and regulatory framework; networks and grid; evidence and evaluation; and partnerships (developed in more detail in **Section 7**). The Strategy will also set out how key actions will be implemented, including the mechanism for holding Government to account for delivery.
31. The more evidence and ideas we can collect, and the greater the range of organisations and individuals we can consult, the stronger the case will be for a Community Energy Strategy that delivers significant change. **Examples of the type of evidence we are looking for are included in the box at the end of this section.**

Who should respond?

In this Call for Evidence, we want to hear from **community energy groups** and **community energy intermediaries** (such as membership organisations or those offering support and advice to community energy groups), as well as all others with an interest in community energy, including **banks, private equity firms, venture capitalists, infrastructure funds, energy companies** (supply, networks and generation), **developers, builders, planners, local authorities**, (including parish councils), other **local organisations, health professionals**, and **members of the public**. We would like to hear from community groups and civil society organisations with an interest in energy, even if it is just a small part of their remit.

We know that **England, Wales, Scotland and Northern Ireland** have taken a range of different approaches to community energy (see **Section 6**). We are keen to learn lessons from the most effective approaches across the whole of the UK, and we welcome evidence from all four nations. Some parts of the energy system are the responsibility of the respective Devolved Administrations (such as overall climate change policy) while other policies apply across several parts of the UK (for example, Feed-in Tariffs apply in England, Scotland and Wales). Therefore some parts of the Community Energy Strategy will apply to the whole UK, some will apply to several parts of the UK, and others will apply to England only. In areas where the Strategy does not apply, policy will be the responsibility of the Devolved Administrations.

This document highlights many examples of successful community energy projects. However, we know that there may be other communities who want to start energy projects but are not sure how to get started, or who have tried to start projects and faced barriers to doing so. We want to hear from these groups as well.

32. In addition to this Call for Evidence, DECC and Consumer Focus have jointly commissioned a **research project to support the Community Energy Strategy**. This research will review the existing evidence base surrounding the delivery and impact of community energy projects, drawing out existing knowledge on opportunities and barriers, and identifying gaps. It will also establish the scale of current community energy activity in the UK and make an assessment of the potential of the UK community energy sector to 2020. An interim research report, 'Community Energy in the UK: A review of the evidence', is published alongside this Call for Evidence. This sets out findings from the initial evidence assessment stage of the research. The final report will be published alongside the Strategy in the autumn.

33. We would like insights into three main areas, as outlined below:

- **Understanding the potential benefits of community energy**
- **Understanding the barriers to community energy projects**
- **Identifying examples of innovation and best practice**

Understanding the potential benefits

34. The Government recognises that there are a number of **potential benefits of community energy**, both directly to communities themselves and more widely to the goals of powering the country and protecting the planet. We are keen to use this Call for Evidence to test some of the evidence for these benefits, to help us better understand the potential of different types of community energy projects (see **Section 5**).

Understanding the barriers

35. We also know that communities who want to set up energy projects sometimes face **barriers and challenges**. Some community energy projects have been able to overcome these hurdles, as evidenced by the range of projects showcased in this Call for Evidence. However, we recognise that there is still more that could be done to make it easier for community energy projects to get started and become sustainable. We want to build an evidence base to understand what can be done to make it easier for the community energy sector to build on successes to date, so that this sector can realise its potential (see **Section 7**).

Identifying examples of innovation and best practice

36. We want to see independent and sustainable community energy projects, which are able to attract private sector backing and generate their own revenue streams. We want to use this Call for Evidence to identify examples of the **most innovative and creative approaches** that other community groups can learn from. We also want to **identify actions that could be taken** – by Government, community groups, businesses and others – to maximise the benefits of, and remove some of, the barriers to community energy.
37. We know that some other countries have developed innovative approaches to supporting community energy projects (see box below). While in many cases these approaches will not necessarily translate to the UK context, we are also interested in where we can learn lessons from community energy in other countries.

International approaches to community energy

In countries such as Denmark and Germany, community energy projects focused on electricity generation are a more established part of the energy system and operate at a significantly larger scale than in the UK.

In Denmark and Germany, community energy is central to their transformation of the energy market and to wider public engagement in energy security and climate change issues. For example, the Middelgrunden co-operative in Denmark operates 50MW of renewable energy generation. Public engagement in Germany has raised some €30bn of annual household and community investment in renewable energy schemes. As a consequence, a much larger proportion of renewable generating capacity is owned by households, communities, development trusts and farmers in Germany than it is in the UK.

A number of factors explain why community-owned renewables are less widespread in the UK than in Denmark and Germany. These include differences in the legal, policy and regulatory environment, but there are also important cultural differences. For example, the co-operative and alternative energy movement in Germany has historically been stronger than in the UK.

Despite these differences, we want to learn as much as we can from other countries' approaches and apply this, where applicable, in the development of the Community Energy Strategy. We therefore welcome evidence and views from outside the UK.

What evidence are we looking for on the benefits of community energy?

There are three types of evidence that you may be able to provide:

- **Quantitative (numerical) evidence** – particularly evidence on specific outcomes such as reductions in carbon emissions, energy saved, energy generated, cost savings, jobs created or impact on other outcomes such as community cohesion or health. This may be collected via rigorous methodologies such as a randomised controlled trial, or more likely via a less intensive method.
- **Qualitative (non-numerical) evidence**, i.e. research to provide an in-depth understanding of people's experiences, perspectives and histories based on their particular context.
- **Case study or anecdotal evidence**, i.e. descriptions of projects or problems, such as examples of actual community energy projects which are being delivered.

We have recently completed a review of the existing evidence base which collates much of the robust quantitative and qualitative evidence, and outlines key gaps in the existing research. We are most interested in receiving robust evidence in response to this Call for Evidence, but we appreciate that evidence in this sector is limited both by the time that community energy projects have been in existence and the quality of data collection and evaluation that has been carried out.

5. The potential benefits of community energy

38. Various benefits are often cited for community energy projects, whether these projects focus on reducing energy use, better energy management, generating energy, or collective purchasing. For the communities involved, such projects can lead to direct benefits, such as lower energy bills or income from selling the energy generated. They can also help consumers secure better deals through collective purchasing, which can help make the energy market work better. Involvement in community energy projects may also have wider social benefits, such as helping bring communities together and empowering them to tackle wider social and economic issues in their area.
39. On a national level, community energy projects can also make a potential contribution to the wider goals of powering the country and protecting the planet. This contribution may include identifying and piloting innovative new approaches to difficult problems and supporting successful delivery of key policies. It may also include improving public engagement with energy and climate change issues, boosting local economic growth and jobs, and building stronger communities.
40. Any decision to offer additional support for community energy projects needs to ensure value for money, and balance any benefits against costs. That is why it is important to establish robust evidence to underpin the Community Energy Strategy.
41. To do this, we hope to test the available evidence for the reported benefits further as part of the Call for Evidence and through the on-going research project.
42. Some of the potential benefits of community energy are outlined in more detail below. **We are keen to investigate these and any additional benefits further, as outlined in the questions at the end of this section.** The main benefits we want to explore are:
 - **Tackling the problems that Government cannot reach**
 - **Improving public engagement with energy and climate issues**
 - **Wider economic and social benefits**

Tackling the problems that Government cannot reach

43. Community-led action can offer new ways to tackle some of society's toughest problems, which Government finds difficult to address alone. Community projects have the freedom to innovate and develop solutions that are tailored to local needs, and are often able to mobilise and engage people more effectively than Government. Furthermore, community-

led action can offer important learning that might be scaled up and deployed at the national level.

44. In this Call for Evidence, we are keen to identify areas where community-led approaches can add the most value. For example, we know that some community-led projects have achieved significant **reductions in energy use** and **carbon emissions** through developing innovative approaches locally (see **Case Study 6 - Isle of Eigg**). We also know that small-scale solutions such as heat pumps will make an important contribution to helping the UK meet our ambitious greenhouse gas emissions targets, and we are interested in the contribution that **heat-focused community projects** can make (see **Case Study 7 - Woolhope Woodheat Co-operative**).

Case Study 6: Reducing carbon emissions on the Isle of Eigg

On the Isle of Eigg in the Inner Hebrides, Scotland, a community energy project has aimed to create a green island by halving carbon emissions. Led by the Isle of Eigg Heritage Trust, the initiative started in 2008. The Isle of Eigg received an award for Innovation and Energy Efficiency at the 2009 Scottish Energy and Environment conference and was a finalist in the NESTA Big Green Challenge, selected from over 350 applications to receive a £300,000 share of the prize fund.

The community in Eigg are not connected to the mainland electricity supply and previously used diesel generators to provide electricity. Now Eigg Electric, a subsidiary of the Heritage Trust, provides 24 hour power to homes and businesses from renewable hydroelectric, wind and solar sources. These sources have a maximum generation capacity of approximately 164kW and electricity is distributed via an 11km high-voltage grid.

To further reduce carbon emissions, the community in Eigg has also installed insulation in buildings and developed low-carbon community transport, including an electric vehicle and bio-diesel from chip oil. The community-led approach has included most of the island's 38 households.

The 'Green Team' in Eigg have had lots of interest from around the world from others interested in replicating their work. To share their knowledge and support others, they have set up the Islands Going Green website (<http://islandsgoinggreen.org>).

Case Study 7: Generating renewable heat: the Woolhope Woodheat co-operative, Herefordshire

The Woolhope Woodheat co-operative is a renewable energy scheme that aims to provide local people and organisations with biomass boilers and locally sourced woodchip. The consumer pays Woolhope Woodheat for the energy they use, and upfront costs are paid for by the co-operative through the sale of shares, which provide a return on investments through the sale of energy.

The co-operative's first scheme will be at Canon Frome Court, a community of 19 flats in a large mansion building. Each flat is currently heated individually, with systems running on LPG, oil or coal. Woolhope Woodheat is in the process of installing a 200kW biomass boiler in a separate building on the site to provide heating to the whole community. Over the projected 20-year lifetime of the project, an estimated 1400 tonnes of local wood will be used, saving over 900 tonnes of carbon emissions.

David Straker, a member of the Woolhope Woodheat board, said '...we hope that we can pave the way for other schemes like this across country and inspire other communities to want to make a difference.'

45. We would like to hear about other examples of where community approaches could help to solve some of the most challenging energy and climate change problems, across the full spectrum of reducing, managing, generating and purchasing energy.
46. We are aware that successful community projects often combine several of these elements in a single project (for example, projects with a large energy efficiency and behaviour change element often also include small-scale renewable technologies). We are also interested in how the different 'strands' of reducing, managing, generating and purchasing energy can interact to deliver additional benefits.
47. The Government has identified funding to initiate a project exploring the costs and benefits of the 'D3' approach, which combines three elements (demand reduction, demand management and distributed generation) with the aim of creating additional energy-saving and carbon emissions reduction benefits (see **Case Study 8**). We hope this will provide more evidence of the benefits of this integrated approach.

Case Study 8: The ‘D3’ approach: integrating demand reduction, demand management and distributed energy

The ‘D3’ approach takes an integrated approach to energy supply and energy demand, combining demand reduction, demand management and distributed energy generation. Advocates of the ‘D3’ approach, such as the Distributed Energy Contact Group (an informal advisory group set up to advise DECC), assert that the integration of the three strands can deliver major additional benefits. For example, in New York City, D3 has provided reported benefits of \$221 million at a cost of \$122 million.²

Using funding from the Cabinet Office’s Contestable Policy Fund (launched in 2012), DECC will commission an external project to critically review evidence on international experience of D3 and assess the potential financial implications of D3 in the UK energy market, both in cost and benefit terms. The project will aim to better understand the existing models and identify any policy barriers, as well as provide practical policy recommendations on the adoption of a D3 approach compatible with the UK energy market and carbon emission reduction commitments.

Improving public engagement with energy and climate change issues

48. Meeting the challenges of energy security and climate change – while keeping prices low for consumers and tackling fuel poverty – will require wholesale technological, social and behavioural change over the coming decades. Not only Government but the whole of society will need to play its part in these changes, and public engagement and understanding will be crucial.
49. Community energy projects often report that a side effect of involvement in community energy (particularly renewable energy generation) is a greater awareness of, and engagement in, energy and climate change issues (see **Case Study 9**). If there is sufficient evidence of this, there could be a case for encouraging wider participation in community energy projects as an end in itself in order to realise these ‘secondary’ benefits or side effects. However, we think there is limited robust evidence to support pursuing such a goal. We are keen to gather further evidence on this.
50. Community engagement and buy-in are also key issues for larger renewable energy infrastructure projects, and we are interested in exploring the potential for greater community ownership or involvement to improve community buy-in for such projects. This might include partnerships or joint venture models of community ownership and involvement, such as part community ownership of large infrastructure projects (see **Case Study 10**).

² Evidence submitted to the Electricity Market Reform consultation by the D3 group, March 2011.

Case Study 9: Engaging the community in energy issues: Wadebridge Renewable Energy Network (WREN), Cornwall



Wadebridge Renewable Energy Network (WREN) is an Industrial and Provident Society (Co-op), formed in 2011, to bring the benefits of the low carbon economy to the North Cornwall town of Wadebridge.

WREN's guiding principle is that local initiatives can make a major contribution to pressing energy-related problems such as fuel poverty, energy-inefficient homes and reducing carbon emissions. The project has a strong focus on engaging the community to take action on these issues. For example, a recent intensive campaign to increase uptake of home insulation resulted in 222 surveys and 119 measures installed over an eight week period, with each beneficiary also receiving 25 Wrens (the local currency). Similar approaches are being taken to facilitate Green Deal uptake.

WREN has around 820 members and hopes to make WREN membership near-universal in the area. The project is targeting as large a proportion of the approximately £10 million per annum local energy economy as is logistically, financially and technically practicable.

Case Study 10: Giving local people a stake in larger projects – Kilbraur Wind Energy Co-operative

The Kilbraur Wind Energy Co-operative (KWEC) is an investment co-operative linked to a Falck Renewables wind farm sited between Brora, Golspie and Rogart in Sutherland in the north of Scotland.

KWEC was formed in 2008 with the primary objective of providing local people with an opportunity to invest in the wind farm. The initial share offer raised just over £1 million from 528 investors, and this formed KWEC's initial stake in the wind farm. A subsequent share offer associated with an extension to the wind farm in 2011 increased the co-op's stake to £1.6 million. Investors receive annual interest payments based upon the performance of the wind farm. Many investors use their interest to augment their pensions while, at the other end of the age range, some of the shares are held in trust for young people under the age of 18 years.

In addition to its role as an investment co-op, KWEC also undertakes outreach projects in the local community. To date, KWEC has completed a project designed to increase environmental awareness among pupils at the local primary schools in Brora, Golspie and Rogart, and has funded a portable ultrasound scanner for the Highland Hospice. The scanner enables people who live in the more remote areas of the Scottish Highlands to have scans and other medical procedures locally instead of having to travel great distances to hospitals in the region. Apart from its medical and convenience advantages, the portable scanner provides environmental advantages by reducing the number of road journeys that otherwise would be needed.

Wider social and economic benefits

51. Community energy projects – like community projects more widely – can have wider social and economic benefits. We have anecdotal examples of community energy projects acting as a focal point for communities, with local people coalescing around energy projects (and the revenue they can generate) to tackle wider issues such as education, jobs, health and community cohesion (see **Case Studies 11 and 12 - Repowering London and Awel Aman Tawe**).
52. Many of these wider benefits of community energy will go beyond energy and climate change issues and will have benefits for the many different areas of social and economic policy. For example:
 - Local regeneration and **strengthening local economies** through local income generation, new jobs, training and skills for community groups and local organisations.
 - A strengthened sense of **community empowerment**, purpose, pride and achievement.

- Stronger **local networks** and enhanced relationships with local authorities
- Greater levels of **volunteering and social action**, with spill-over into areas beyond community energy such as schools, health and justice.
- Increased **social capital**, with associated benefits such as **lower crime** and **better health**

Case Study 11: Providing training and jobs for local people: Repowering London



Repowering London develops local energy projects through a community-led approach, working with local authorities, professional installers and local community groups. For example in 2012, two projects in Brixton, south London, installed several hundred square metres of solar panels on six blocks in the Loughborough Estate.

Repowering provides work placement opportunities for local young and unemployed people from the estate in areas such as finance and marketing as part of each project, including work experience opportunities with solar installation company Southern Solar.

The projects under the umbrella of the Repowering London co-operative are funded by a community share offer; for example Brixton Energy Solar 1 has 103 investors, mostly from the London Borough of Lambeth where the projects are located. Income is generated from the sale of electricity to the grid, which is used to repay shareholders an annual return of up to 3% on their investment and reduce the service charge for residents. 20% of annual revenue is allocated to a fund administered by members of the co-operative. This money is used to help local people understand simple changes that they can make to reduce their energy bills, such as draught-proofing their homes, as well as helping to pay for interactive solar panel-making workshops.

Case Study 12: Funding local regeneration through renewable energy: Awel Aman Tawe, South Wales



Awel Aman Tawe (AAT) is a charity developing a community-owned wind farm on Mynydd y Gwrhyd, north of Swansea. The wind farm will be a trading subsidiary of the charity, gift aiding profits back from the sale of the electricity. The charity will then support low carbon regeneration projects in the surrounding 12 villages.

The wind farm consists of two turbines with a total rated capacity of 4MW. Full planning has been secured. Turnover will be £1 million per annum and the project is currently undertaking studies (funded by a £125k Community Generation Fund loan) in order to start due diligence with the Co-operative Bank for 80% of the £6 million capital cost.

These villages are in a former coal mining area and are among the most deprived in Wales. Several are off the mains gas network so there is potential for financially viable renewable heating and electricity generation.

The charity has piloted this approach previously with grant funding and, more recently, on a household level with the Renewable Heat Premium Payment (RHPP) Communities Stream. There was huge interest in RHPP with 200 people attending information days, although only ten households were able to take up their vouchers mainly due to the requirement to pre-finance. AAT are looking at the possibility of setting up a revolving loan scheme to address this.

AAT also have an energy efficiency advice service and have previously surveyed over 2,000 homes for insulation measures. The charity has a qualified Green Deal Assessor within its staff.

Call for Evidence Question

6. We would like evidence or examples of the benefits of community energy approaches (please see **Section 4** for more information on the types of evidence that we are seeking).
- a. How have community-led approaches delivered energy and climate change outcomes more cheaply or effectively than top-down Government action? These outcomes could include generating renewable electricity or heat, reducing greenhouse gas emissions or helping consumers save money on energy bills.
 - b. How has participation in community energy projects changed attitudes to or increased engagement with energy and climate change issues?
 - c. What are the wider social and economic benefits of community energy projects? These might include improving health, education, jobs or transport; strengthening communities; or tackling other local issues.

53. In addition to the potential benefits of community energy projects, we are aware that there may be potential drawbacks, unintended consequences or side effects.

Call for Evidence Question

7. Do you have evidence or examples of any potential drawbacks or negative consequences of community energy?

6. What are we already doing to support community energy projects?

54. We are not starting from a blank page with community energy. Government has already run a range of initiatives and programmes to support community groups and help them to engage in energy and climate change issues. Some of these initiatives are outlined in this section.
55. Different approaches to community energy have been taken by different parts of the UK. More information about Scotland and Wales is given in the box on page 36.
56. Two major sources of revenue for community energy projects focused on energy generation are Feed-in Tariffs (FiTs) for renewable electricity and the Renewable Heat Incentive (RHI) for renewable heat. More detail on these schemes is given in the boxes below. **The role of these and other Government programmes in providing a source of income for community projects is considered in more detail in Section 7** (see Access to funding, page 43).

Funding for small-scale renewable electricity: Feed-in Tariffs (FiTs)³

The Feed-in Tariffs (FiTs) scheme, which operates in England, Scotland and Wales, aims to encourage the deployment of additional small-scale (up to 5MW capacity) low-carbon electricity generation, particularly by individuals, householders, organisations, businesses and communities who have not traditionally participated in the electricity market. The scheme covers solar, wind, hydro, anaerobic digestion (AD) and micro-CHP. It offers a payment per unit (kWh) of electricity generated.

In December 2012 the Government put in place, for solar PV, a 'tariff guarantee' for community energy and education providers. Under this guarantee, community-eligible installations not exceeding 50kW can pre-register and fix their tariff for a period of one year. Qualifying groups also benefit from a relaxation from the current minimum energy efficiency of Level D or above for their Energy Performance Certificate. This is an additional benefit available to some (but not all) types of legally constituted community groups, including Co-ops and Community Interest Companies.

³ Currently there is no small scale FiT in NI and small scale renewables are incentivised through the Northern Ireland Renewables Obligation. Northern Ireland anticipates introducing a small scale FiT in 2015/16.

Supporting renewable heat technologies: the Renewable Heat Incentive (RHI)⁴

The Renewable Heat Incentive (RHI) for non-domestic properties was launched in November 2011 to provide financial incentives to install renewable heating in place of fossil fuels. The RHI provides a payment per unit (kWh) of renewable heat produced. The non-domestic scheme covers anything from large-scale industrial heating to small business and community heating projects. It also includes organisations such as hospitals and schools, as well as district heating schemes such as a central boiler for an apartment building, or a network of pipes delivering heat from a central installation to a number of local households or businesses.

57. In addition to FITs and RHI, the Government has offered a range of schemes aimed at supporting community energy projects and has made a range of policy changes which will help reduce barriers to community energy projects. These are outlined below.

Financial support

58. Government has launched a range of schemes which offer financial support for community energy projects, although such schemes have often been ad hoc and have not always amounted to a coherent programme. Financial support includes:

- In autumn 2011 we announced a **Defra/DECC £15 million Rural Communities Renewable Energy Fund**, and this will be officially launched shortly. It will offer funding to community groups in rural areas in England to undertake feasibility studies and planning applications for community renewable energy projects. A range of renewable energy technologies will be eligible, including: wind, hydro, biomass, anaerobic digestion and ground- or air-source heat pumps. A key aim of the fund is that local energy technologies will deliver benefits for local communities. Similar pre-planning loan schemes are already operating in Wales and Scotland. For further details see <https://www.gov.uk/government/policies/stimulating-economic-growth-in-rural-areas>.
- We provided £10 million funding to 236 communities in England and Wales as part of the **Local Energy Assessment Fund (LEAF)**, which launched in December 2011. The funding aimed to help communities assess energy efficiency potential, undertake

⁴ Northern Ireland operates a different RHI mechanism from the scheme in place in Great Britain. The NI RHI was launched in November 2012 and was specifically tailored for the NI heat market, accounting for factors such as the differences in existing fuel uses and scales of heating required, although is similar to the GB scheme in terms of administration. As well as considering expanding the NI scheme to support more innovative technologies, DETI is considering the need for additional support for community heating schemes and whether an 'uplift' under the RHI is appropriate. On the domestic side, the Renewable Heat Premium Payment has offered grant support for householders installing renewable heating technologies and to date DETI has received over 900 applications has offered support of £1.4m equating to investment in this sector of £4.4m.

feasibility studies and in some cases submit planning applications for community renewable electricity projects.

- We provided £10 million in grants to help 22 communities across England, Wales and Northern Ireland to explore pioneering approaches to becoming a low carbon community, through the **Low Carbon Community Challenge (LCCC)**, which ran from 2009 to 2011.
- We have allocated £3.1 million to help 38 communities to deliver renewable heating systems through **Renewable Heat Premium Payment (RHPP) Communities Scheme**.
- We launched a £5 million **Cheaper Energy Together fund** in October 2012 to support local authorities and third sector organisations in England, Scotland and Wales to develop collective purchasing and switching schemes.
- **Ofgem's £500 million Low Carbon Network Fund** has funded a number of projects to improve the efficiency of electricity networks; one project with a community focus is the Ashton Hayes Smart Village project in Cheshire. This is helping local electricity distribution network companies understand the impact of connecting low carbon technologies such as solar PV and heat pumps on networks in order to facilitate their connection.
- The Government is supporting the growth of the social investment market in the UK which will increase the amount and type of finance available to social enterprises and charities as well as to communities developing renewable energy projects. **Big Society Capital was launched in April 2012 with up to £600 million to grow the social investment market**. To date it has invested in at least two funds providing finance for community renewable energy projects, including the FSE Group Community Generation Fund (see **Case Study 16**).
- The **European Regional Development Fund** has identified community energy as a strategic objective for EU funding from 2014-2020, as part of a focus on development of 'whole place' low carbon solutions (which also includes heat and cooling networks, urban design, sustainable urban mobility, decentralised and off grid energy systems, climate change adaptation measures and demand management). The funding is an estimated €580m over seven years, with at least 20% earmarked for low carbon objectives. It will be distributed via Local Enterprise Partnerships (LEPs) and will be offered as match funding, with investment plans drawn up by January 2014.

Planning and regulation

59. We have also made a number of changes, and are considering others, to make it easier for community energy projects to navigate planning and other regulations. For example:

- **Gov.uk** provides advice and guidance to communities interested in setting up energy projects, including links to video training, how to set up legal structures, information about funding and the National Heat Map (see www.gov.uk/community-energy).

- The Government has funded **PlanLocal training events on community energy** for a number of communities, attended by local authorities and community group leaders, and supported the development of the Community Pathways website that provides practical guidance to communities on energy action (www.communitypathways.org.uk).
- We held a call for evidence on **Community Engagement and Benefits for Onshore Wind** in September 2012, which closed in November 2012. DECC has also issued a call for evidence on onshore wind community engagement and benefits. This looked at what more can be done to ensure that communities have a greater say over and receive a greater benefit for onshore wind developments in their area, including through increased community ownership. Government will be responding to the call shortly.
- The Government is taking action to give local communities new rights to have a say in how services are run in their area and shape local planning decisions. New rights include:
 - **Community Right to Bid**, which gives community groups the right to prepare and bid to buy community buildings and facilities that are important to them.
 - **Community Right to Challenge**, which allows voluntary and community groups, charities, parish councils and local authority staff to bid to run a local authority service where they believe they can do so differently and better.
 - **Neighbourhood planning** allows communities to shape new development by coming together to prepare neighbourhood plans.
 - **Community Right to Build**, which allows local communities to propose small-scale, site-specific, community-led developments.
 - **Community Right to Reclaim Land**, which helps communities to improve their local area by giving them the right to ask that under-used or unused land owned by public bodies is brought back into beneficial use.
- The Government welcomed **Lord Taylor's Report of the Review of Planning Practice Guidance** in December 2012, and is currently considering the responses received through the consultation which followed in February 2013. We expect to respond to both the Report and the consultation shortly. As set out in the Budget, the Government will publish significantly reduced planning guidance by this summer, in line with Lord Matthew Taylor's recommendations, providing much needed simplicity and clarity.

Partnering with communities to deliver Government policies

60. The Government has also partnered with communities to deliver key policies, including:

- **DECC's Local Authority Competition** was local authority-led, but the majority of projects are working with local community partnerships to deliver policies. The 2012/13 scheme awarded £31 million support to reduce fuel poverty; £10 million to support Green Deal Pioneer Places; and the £5 million Cheaper Energy Together scheme to promote collective switching.
- DECC's **Core Cities** programme worked with local authorities to trial early elements of Green Deal across seven major cities in England.
- DECC has funded the Centre for Sustainable Energy to produce an **interactive Green Deal pack for communities** as well as support for its delivery. The pack can be found at: www.planlocal.org.uk/pages/energy-efficiency-and-the-green-deal/identifying-opportunities-in-your-community
- The roll-out of **smart metering** will be supported by a centralised programme of consumer engagement, which will be undertaken by a new body (the Central Delivery Body, CDB) established and funded by energy suppliers. Through regulations, the Government is requiring that the CDB facilitate and coordinate the involvement of third parties (such as charities or community groups) in its consumer engagement activities. The CDB is being established in 2013.

Community energy in Scotland and Wales

Different parts of the UK have taken different approaches to community energy, and we are keen to ensure that learning from these approaches is shared. For example **Scotland** has a 500MW target for community energy, and by June 2012 had installed 204 MW of renewable generation capacity. This is made up of over 5000 individual projects, including community projects and locally owned projects, where the former are wholly owned by the community or a joint venture with a commercial organisation, and the latter are rural enterprises or other organisations.⁵

To support community energy projects, the Scottish Government established the Community And Renewable Energy Scheme (CARES), which is currently managed by Community Energy Scotland Ltd and from 1 August will be delivered across Scotland by a consortium led by Energy Saving Trust. CARES offers support including free advice, de-risked loans for the pre-planning stage, access to post-planning finances, and support for negotiations on community benefit from commercial schemes.

A range of support is also provided by Community Energy Scotland, a national charity dedicated to supporting community energy projects. This includes:

- Interactive advice sessions (mentoring), which is reportedly more valuable than web-based advice;
- A block of free legal advice;
- Discounted membership benefits such as insurance and legal advice (beyond the free block);
- Project pairing;
- Access to technology performance data;
- Collaborative opportunities, such as procurement and joint funding bids.

In **Wales** the Welsh Government has put in place the Ynni'r Fro programme which uses European Union structural funds to offer social enterprises grant aid, loans and free, independent, hands-on advice and information to help social enterprises develop their own community scale renewable energy schemes across Wales.

⁵ *Community and locally owned renewable energy in Scotland, June 2012* – A report by the Energy Saving Trust for the Scottish Government (Final report, February 2013): <http://www.energysavingtrust.org.uk/scotland/Publications2/Communities/Community-and-locally-owned-renewable-energy-PDF>

7. Unlocking the potential of community energy: barriers and opportunities

61. We know communities which want to set up energy projects sometimes face **barriers** to doing so. Many community energy projects have been able to overcome these obstacles, as evidenced by the range of different projects showcased in this Call for Evidence. However, we recognise that there is more that could be done to make it easier for projects to get started and become sustainable.
62. Our initial discussions with community energy groups have identified key **barriers** across five main categories: **community capacity and capability; access to finance; regulation and process; networks and grid; and evidence and evaluation**. Some of these barriers are generic to most types of community energy project, while some relate more specifically to one type of community project (such as those focused on renewable electricity generation). Where the barriers are specific, this is signalled in the text.
63. We would like to understand the five barriers in more detail and identify any others. We also welcome views on how any of these barriers could be overcome, as well as examples of communities which have done so successfully.
64. We also see potential **opportunities for community energy projects to build partnerships** with central and local government, commercial organisations and voluntary sector organisations to deliver their goals, be they social, environmental or financial. We would like to hear from these organisations as well as from community groups about their experiences of working in partnership, including any barriers that may have arisen and any effective ways of overcoming them.

Call for Evidence Question

8. What evidence or examples do you have of the barriers faced by community energy projects and the ways in which they have been overcome, or could be overcome?
- Categories might include:
- Community capacity and capability
 - Access to funding
 - Legal and regulatory framework
 - Selling electricity generated and grid connections
 - Gathering evidence of the benefits of community energy and evaluating projects

Community capacity and capability

65. We know that having the skills, know-how and time can be crucial to getting community energy projects off the ground and making them sustainable in the long term. Some specific barriers include:
- **Skill and knowledge gaps.** Community energy projects often rely on having the right mix of skills and knowledge among volunteers, including legal skills, understanding of the energy market, grant application skills and business experience. It can be costly to get professional advice and training, and while members of established community energy projects are usually happy to share their expertise with others, they have a limited capacity to do so without compensation for their time and expenses.
 - **Lack of time and rewards.** Community energy groups often rely on individuals volunteering their time to help move projects forward. Volunteers are not motivated by financial reward, but in general there is a limit to how much time they are willing or able to give without any kind of recognition or reward. Lack of time may be a particular barrier to participation for some groups, such as those in full-time work or education – meaning there is a risk those with more flexibility over their time may dominate community energy projects.
 - **Lack of information and advice.** While lots of information exists relating to community energy projects, it is not always easy to find, and often the information is in technical legal language or jargon. There is no single resource (e.g. a website) with all a community group needs to know, and it can be difficult for groups to know whether advice they find is reliable.
66. Community energy projects have potential benefits for all kinds of communities, but benefits such as financial returns, reduced energy bills and local employment and economic growth are potentially even more important for **the most vulnerable or deprived groups**. However, such communities may also be least able to access these benefits due to a range of factors such as lack of professional skills, lack of resources or lack of social capital. We will need to address this issue to ensure that members of all communities have the opportunity to participate in community energy projects.
67. We know that many community energy projects are already coming up with creative ways of addressing some of these barriers, and we have highlighted some of these in the ideas and case studies below, along with some examples which have been successful in other fields. We are interested in hearing about approaches that have worked well in the past and suggestions of what else could be done to help overcome these barriers.

Information and advice in one place – a ‘One-stop shop’ for community energy

There are already several sources of information on community energy available online, including the Community Energy Portal now hosted on the new Government website (www.gov.uk/community-energy) as well as a range of advice provided by other organisations. We are interested in whether there is potential for an organisation outside Government to develop and host a single ‘best practice’ community energy web portal with content / direct links to information. This might build and draw together existing resources, and could include for example:

- Easy-to-follow plain English guides;
- A community energy ‘starter pack’;
- Legal pro-formas;
- Information on tax issues;
- Example timelines;
- Advice on engaging consultants;
- Easy to follow guidance on navigating the planning and guidance systems;
- Inspirational case studies.

Call for Evidence Question

9. We would like to hear your views about sources of **information and advice** for community energy projects. In particular we would like to hear from you about:
- a. Which current sources of information or advice have you found most useful in setting up a community energy project?
 - b. What information or advice would have been helpful when you were setting up a community energy project?
 - c. Do you think there is potential for a new information resource for community energy groups (see box above), and who might be best placed to develop and host such a resource?
 - d. How could more be done to build interest among those communities who are not already involved in community energy?

Case Study 13: Regen SW peer learning and advice service

Regen SW, a ten-year-old social enterprise, runs a community support programme. This aims to help community energy projects overcome the challenges of limited resources and learn from the experience of others, and to provide a collective voice for active communities at government and industry forums.

The Community Support Programme provides hands on support to community groups, for example by providing training on working with the media at 'Renewable Energy Marketplace' exhibitions. The Network supports people in learning from those who are a step ahead on their journey towards delivering community energy projects. It puts communities in touch with each other, uses case studies to share learning and provides regular briefings on policy and finance. For example, communities from Cornwall to Bath have all successfully raised the funds they need from local people for their projects, and so sharing the keys to this success is vital for new communities looking to do the same.

In addition to facilitating peer to peer learning, Regen SW provides tailored advice to those interested in pursuing community energy projects. Local authorities are particular keen to support their communities and take advantage of the opportunities sustainable energy offers. From Regen's in-house team of experts working to build capacity and a better understand of the resource potential, through to the provision of detailed advice on business models and site suitability provided by the specialist advisors in Communities for Renewables CIC, set up by Regen SW, this work helps to address the capacity and expertise challenges faced by many aspiring community energy groups.

Further details are at: <http://www.regensw.co.uk/projects/communities-for-renewables>

Case Study 14: Low Carbon Hub peer mentoring and Osney Lock Hydro Scheme, Oxfordshire



The Low Carbon Hub Community Interest Company was launched in late 2011 by a group of experienced community energy practitioners to move from a 'reinventing the wheel' situation to one where community groups in Oxfordshire could access a centralized, expert 'Hub'. The Hub helps communities fast-track through the renewable energy development process.

Peer mentoring from Low Carbon Hub helped **Osney Lock Hydro Scheme (OLH) in West Oxford** with the development of a community hydro scheme. The community had been planning the scheme at Osney Lock for twelve years and wanted to develop the entire project themselves. The project got the green light from the Environment Agency in February 2013, but only two months to raise construction funds of £600,000 so the installation could coincide with EA remedial works at the site. Low Carbon Hub were able to provide rapid support to speedily produce a share offer, marketing/PR materials and confirm debt finance.

By May 2013, equity shares had reached over £530,000. The scheme aims to generate £2 million over 40 years to fund energy demand reduction programmes. The Hub is helping to bring seven further schemes to investment readiness over the next 3 years.

Call for Evidence Question

- 10.** We are interested in your views about peer mentoring. In particular:
- a. Do you have any examples of successful peer mentoring schemes?
 - b. What more could be done to support and enable peer mentoring schemes such as that described in Case Study 14 above?
 - c. Are you aware of any other models of peer mentoring or advice sharing which could help community energy projects address skills and knowledge gaps?
 - d. What more could be done to support peer mentoring schemes in the community energy sector?

Case Study 15: Tackling fuel poverty through reducing carbon emissions: Energy Efficient Widcombe



Energy Efficient Widcombe (EEW) is a small volunteer group which aims to involve and assist residents of Widcombe, in the Bath area, to save energy, reduce carbon emissions and identify those in fuel poverty. It is part of Widcombe Association, a large and successful residents' association.

The group runs workshops for local residents on energy saving topics such as draught-proofing or low energy lighting, and provides information in the form of 'Home Energy Saving Packs' on their website www.energyefficientwidcombe.co.uk for different types of houses. EEW have been offering free Green Deal assessments to 70 residents, to help them make energy efficiency improvements like insulation and to take advantage of the Government-funded cashback scheme.

Bath and North East Somerset previously had a high rate of excess winter deaths. The group has responded by working with the NHS, the local council, Age UK and Friends of the local surgery to develop an integrated care pathway to improve the effectiveness of identifying and supporting older people at risk from winter cold. This work was partly funded by a small grant from their local Primary Care Trust.

The project has benefitted from excellent support from the council Community Sustainability Officer, particularly in terms of training. It has received grant funding from the DECC LEAF scheme and a small grant from a local charity. The group have also been working with five students from Bath Spa University who have carried out some work to help local residents to reduce energy and enable us to better evaluate previous projects. This has enabled EEW to complete more work and has helped the students enhance their employability.

Call for Evidence Question

- 11.** How can we ensure that vulnerable groups, including those in fuel poverty, are able to take part in and share the benefits of community energy projects?

Access to funding

Costs

68. Access to funding is repeatedly cited as a barrier to community energy projects. This applies across the spectrum of community energy groups, whether they are focused on reducing, managing, generating or purchasing energy. Community energy projects will encounter a range of costs at different stages in their development.

69. The stages of development will differ slightly for different types of project. Some likely activities requiring funding are outlined in **Figure 3** below. Not all projects will require all project stages.

Figure 3: Project stages for community energy projects

Capacity building	<ul style="list-style-type: none"> - The phase when a community is thinking about doing a community energy project, but may not yet be ready to move to the feasibility and planning phase. - Likely activities include exploring possibilities and raising interest, with costs including analysis of local potential or set up costs.
Feasibility and planning	<ul style="list-style-type: none"> - This phase begins when work starts on developing a specific project, including feasibility studies or market research (for all projects). - For generation projects, this may involve detailed feasibility studies and design work, planning applications, and environment impact assessments and environmental surveys.
Installation	<ul style="list-style-type: none"> - For generation projects costs may be high (e.g. constructing and installing the generating technology). - For some energy use reduction projects, costs might include building materials for energy efficiency as well as installation. Collective purchasing projects are less likely to involve significant upfront costs.
Ongoing operation	<ul style="list-style-type: none"> - Most types of community energy projects will have some ongoing running costs, such as maintenance, administration, monitoring and evaluating, advising, training and other costs. - For purchasing projects these costs are likely to be minimal.

70. Our goal is for community groups to become more sustainable and less reliant on one-off or time-limited grant funding, or entirely reliant on volunteer input. To do this in the longer term, community energy projects need to have a source of ongoing **income**. Where community energy groups have a source of income, they are more likely to be able to attract **investment** to cover costs of getting the project up and running. Without a source of income, community energy groups will almost by definition be unable to attract such investment, as they will have no way of paying it back.
71. The following section looks in more detail at sources of funding for community energy projects, making a distinction between **sources of income** (which can include grant funding, ongoing revenue streams or cost savings) and **sources of investment** (which are loans which must be paid back, or shares which may offer dividend returns).

Sources of income

72. Income for community energy projects can be in the form of **grants**, which are often one-off, time-limited payments, or in the form of **ongoing revenue** generated through delivery of a product or service. Both could be either from Government or other sources, including companies or voluntary sector organisations.
73. **Money saved** by community energy groups (for example through lower energy bills) could also be considered a source of 'income', although in many cases such savings are taken as benefits to householders or the site owner rather than used as a revenue stream.
74. The diagram below (**Figure 4**) maps out some of the current and recent sources of income for different types of community groups at the different project stages (note that this is not a comprehensive list).

Figure 4: Some current and recent sources of income at different stages for different strands of community energy projects⁶

	Reduce	Manage	Generate	Purchase
Capacity building	NESTA Big Green Challenge (2009)			DECC Cheaper Energy Together Fund (2013)
	Co-op Community Energy Challenge (2012)			
Feasibility and planning	DECC Local Energy Assessment Fund (LEAF) (2012)			Ynni'r Fro (Wales) CARES (Scotland)
	NESTA Big Green Challenge (2009)			
	Co-op Community Energy Challenge (2012)			
Installation and implementation	DECC/Defra RCREF fund (2013)			DECC Cheaper Energy Together Fund (2013)
Ongoing operation	Feed in Tariffs (since 2010)			DECC Cheaper Energy Together Fund (2013)
	Renewable Heat Incentive (since 2011)			

75. In general, community projects can only access ongoing revenue once they are up and running in the operation phase. In the capacity-building and feasibility/planning stages, funding tends to be grant-based although contingent loans (where the loan is paid back only if the project goes ahead) may also be on offer here (such as the FSE Group Community Renewables Fund – see **Case Study 16**). In the longer term, where community energy groups develop multiple projects they may be able to generate sufficient income from existing projects to cover early development costs of new ones.
76. Groups focused on **electricity generation** have for the last few years been able to access Feed-in Tariffs as a reliable long-term source of revenue. We are continuing to actively consider **raising the FiTs threshold from 5 MW**. This would have potential benefits for some community groups, although we know that not all community groups would be in favour of an increase. Some community groups are also beginning to access the non-domestic Renewable Heat Incentive scheme to generate revenue from **heat generation** projects.

⁶ Note that the size of the boxes is not intended to represent the scale or significance of the programmes listed.

77. In contrast, groups focused on **reducing, managing and purchasing** have had no clear route to generate revenue on an ongoing long-term basis. For these groups, the challenge is to find ways of converting the benefits they generate (such as lower energy bills, higher take-up of policies or reduced carbon emissions) into a sustainable source of income.
78. One way for community groups to access new sources of income could be through **building partnerships with other organisations**. This is developed further in the section on partnerships (see page 55).
79. There could also be opportunities for community groups to tap into new funding sources through engaging in existing Government programmes such as the Energy Company Obligation (ECO) – see below.

Delivering ECO – a potential opportunity for communities

The **Energy Company Obligation (ECO)** will work alongside the Green Deal to provide additional support for packages of energy efficiency measures, including solid wall insulation or hard-to-treat cavity wall insulation – measures which are socially cost effective, but unlikely to be fully financeable by Green Deal finance. ECO will also provide insulation and heating measures to low-income and vulnerable households and insulation measures to low income communities.

As trusted messengers in their communities, community groups are potentially well placed to help energy companies deliver on their ECO commitments. Forming partnerships with energy companies could help community groups access this opportunity (see also the section on partnerships, page 55).

Alternatively, the ECO brokerage scheme could offer a potential route for community groups to generate revenue through participating in ECO more directly. ECO brokerage allows Green Deal Providers to auction future carbon savings and financial savings based on commitments to deliver installations within 3, 6 or 12 months. Energy companies then bid for these commitments to contribute towards their ECO targets. The scheme is currently only open to Green Deal Providers, but some community groups have told us that they would be interested in participating in the scheme if it were to be opened up to a wider range of providers.

Although any future opening up of the ECO brokerage scheme could be a potential opportunity for community groups, the high penalties for non-delivery of commitments could make this a high-risk option which many groups would be unwilling or unable to take on. Similarly, because brokerage is an auction, it depends on whether energy companies buy the lots on offer and is therefore not a guaranteed income stream. We are interested in exploring with both community groups and energy companies what the potential might be for greater community involvement in ECO.

Call for Evidence Question

12. We are interested in your views on the potential for community groups to engage in delivering the Energy Company Obligation (ECO). In particular:
- What could be the role for communities in delivering ECO, either through participation in ECO brokerage or building partnerships with energy companies?
 - What might be the potential barriers to community groups participating in ECO brokerage?

Call for Evidence Question

13. If you are a community energy project, what has been your experience of accessing funding from Feed-in-Tariffs (FiTs) or the Renewable Heat Incentive (RHI)?

Call for Evidence Question

14. Do you have any other examples of, or ideas for, innovative revenue-generation models for community energy projects, particularly for projects not based on electricity generation?

Sources of investment

80. Community energy groups often need to access investment in order to cover the upfront and installation costs of developing a project. The ability to access investment depends on having some future source of income in order to pay back the money invested.
81. Community **energy generation** projects often borrow to cover the costs of the implementation/installation phase, on the basis that FiTs or RHI will provide a guaranteed future revenue stream once the project is up and running.
82. Some of these groups have told us one of the main financial barriers they face is at the feasibility and planning stage, before planning approval has been granted. At this stage, it can be difficult to access development finance as the project is usually high risk at this point: any money invested is unsecured, so if the project does not go forward then all the money may be lost. In addition, community groups embarking on their first energy project sometimes find that a lack of track record can be a barrier to accessing investment.

83. Once **energy generation projects** have planning permission and any required environmental permits, along with access to the grid, access to commercial finance becomes easier. However, community groups tell us that the availability of capital investment depends on the amount sought. In particular, some community energy projects report difficulties in securing investment for 'mid-sized' projects, requiring more than around £20,000 but less than £1 million. We are keen to understand this issue in more detail.
84. Investments by individuals and communities through **community share offers** have also been a source of equity investment for community energy projects. For example, the Osney Lock Hydro Scheme in Oxfordshire was able to go ahead thanks to raising more than £530,000 in share capital between February 2013 and May 2013 through a community share offer, exceeding its target of £250,000 (see **Case Study 14** - Low Carbon Hub and Osney Lock Hydro). We are interested in exploring the potential to harness community investment further, alongside the debt finance which community groups also tell us they often need.
85. The growing **social investment market** is also a potential source of investment. Social investors look for social as well as financial returns on their investment, meaning that some community energy projects may be able to attract social investment where they would struggle to attract investment on a purely commercial basis. The Government is supporting the growth of the social investment market in the UK, and **Big Society Capital** was launched in April 2012 with up to £600 million to help grow this market.
86. To date, Big Society Capital has invested in at least two funds providing finance for community renewable energy projects, including £750,000 in the **FSE Group Community Generation Fund**, which offers **contingent loans** at the pre-planning stage (repayable only if the project goes ahead) as well as long-term finance (see **Case Study 16**). It has also invested £1,000,000 in the **PURE Community Energy Fund** loan scheme, to provide small, low interest loans to communities to meet the costs of installing renewable energy equipment. PURE looks to invest into projects that deliver environmental, social and economic benefits to the 50% most deprived communities in the country, and will normally lend up to 50% of project costs to a maximum of £50,000.
87. For community energy projects focused on other strands such as **reducing energy use**, the investment landscape is less well developed. This is largely due to the difficulties these groups have in accessing a reliable source of income: while some groups are developing innovative business models in this space (see **Case Study 20** - Energise Barnet), in general such models are less well established than for energy generation.

Case Study 16: Financing community renewable projects at the pre-planning stage: FSE Group Community Generation Fund

The Community Generation Fund, managed by the FSE Group (via its subsidiary, FSE Fund Managers Ltd), provides communities with funding for the pre-planning ('Development') stage of renewable energy projects, as well as offering long-term finance for the construction phase.

The development loans offered by the Fund can be used for items such as project design, environmental assessments and other external studies and expenses involved in achieving the required planning and other consents and licences. The development loan is only repaid if the project goes ahead and so provides a responsible source of financing and resolves a critical barrier which otherwise would impede many community projects.

The construction loans offered by the fund are available to cover the cost of equipment, construction and commissioning (post planning consent), either as a stand-alone source of finance or ideally alongside traditional bank finance. The Fund will consider project sizes from 25kW capacity upwards. Typical development costs are likely to be around £20,000 - £100,000 (depending on technology and scale), with construction cost of £200,000 upwards.

The Fund considers loans on a competitive basis and all decisions are subject to assessment of technical viability, financial viability and importantly, the social impact to be achieved through the project. Surplus revenues from the project must be directed towards a relevant local social need and therefore the fund is targeting projects falling within or benefiting the top 50% most deprived communities (based on the latest available Indices of Multiple Deprivation). The fund aims to help the most disadvantaged communities realise some of the benefits of community renewables, such as reduced energy costs, lower carbon footprint, reduced fuel poverty and a long term income stream to fund local community initiatives.

Big Society Capital has invested £750,000 in the Community Generation Fund, alongside £500,000 from the Esmée Fairbairn Foundation. The FSE Group intends to introduce additional investors over time to expand the capacity of the Fund.

Further information on the Fund criteria and applicant guidance notes are available on the FSE website: <http://www.thefsegroupp.com/social-impact-funding/community-generation-fund>

Call for Evidence Question

- 15.** We would like to understand the different types of funding available for community energy projects at different stages of their development and the barriers to accessing these. In this question we are particularly keen to hear from potential investors in community energy projects, as well as community energy groups.
- a. In addition to those sources mentioned in questions 12-14 above, what types of funding are available for community energy projects at different stages of their development?
 - b. What barriers do community energy projects face in accessing funding at different stages of their development?

Legal and regulatory framework

88. We know that for community groups looking to set up a community energy project, there are a range of regulations that they need to navigate. Meeting regulatory requirements can be time-consuming, and in some cases can stop projects going forward at all. Community groups may not be aware at the start of the project of the regulatory processes they need to go through in order to get a project off the ground.
89. For example, applications for community wind turbines can be affected by the siting of radar installations, and it can be difficult for communities to find out information about this at the outset. Community energy schemes can also be affected by European Commission regulations on State Aid, which can have an impact on eligibility for Feed-in Tariffs and grant programmes. Where community groups are involved in brokerage, they need to comply with the relevant licensing requirements under the Community Credit Act (see page 57 for more detail).
90. Clearly regulations are put in place for a reason; for example, regulations relating to rivers to protect wildlife, and planning rules which aim to prevent inappropriate development. The fact that some community energy groups may see some regulations as a 'barrier' does not necessarily mean that the regulations need to change.
91. However, we know that the number and complexity of regulations can seem daunting. Communities often have to deal with a range of different regulatory bodies, and navigate regulatory processes that can seem complicated and confusing. Regulations that may be relatively straightforward for larger organisations can seem disproportionately burdensome to community groups.
92. We are interested in whether there is scope to improve or simplify regulations and processes to help avoid unnecessary barriers.

Call for Evidence Question

16. If you have been involved in community energy, what legal, regulatory or planning barriers have you encountered during your project?

Call for Evidence Question

17. We would like to hear your views on the role of Government or others in making it easier for communities to deal with these regulations. For example:
- a. Are there any regulations or processes that could be improved or simplified?
 - b. What support could help community energy groups navigate these regulations or processes?

Networks and grid

93. Community energy does not exist in a vacuum and is part of the larger energy system, and indeed has a dependence on the rest of this system.
94. We know that community energy projects focused on **renewable energy generation** face two main difficulties stemming from their interaction with the energy system as a whole. These are:
- **Selling the electricity generated**
 - **Grid connections**
95. These issues apply to renewable electricity generation as well as heat generation (by heat pumps).

Selling community-generated electricity

96. Community renewable electricity projects typically sell their electricity through Power Purchase Agreements (PPAs), whereby an energy supply company agrees to buy electricity from a generator over a fixed period of time at a fixed rate. For community electricity generators it can be difficult to negotiate with large energy supply companies. Aggregators such as Smartest Energy have in the past helped community groups overcome this hurdle. We also recognise that the move from the Renewables Obligation to the Contracts for Difference (CfDs) is a significant one and that the structure of PPAs will need to change, to reflect the changes to the risk profile and the structure of CfDs. The Government has initiated a process to support the market in preparing for the CfD in order to speed this transition and reduce costs.⁷
97. Another route to market for community-generated electricity is Licence Lite, a new form of electricity supply licence, which was proposed by Ofgem in February 2009.⁸ The purpose of the licence is to enable smaller scale electricity generators to overcome the costs, risks and complexities of operating in the electricity supply market. If successfully implemented, it will enable them to supply electricity into the retail electricity market and earn a higher market rate than at present for the power they produce.
98. Although no Licence Lite has yet been granted, initial applications have recently been made, including by the Mayor of London, through the Greater London Authority. We hope this will help resolve some of the issues around selling community-generated electricity, and we will be keen to see what evidence comes out of these cases.

Grid connections

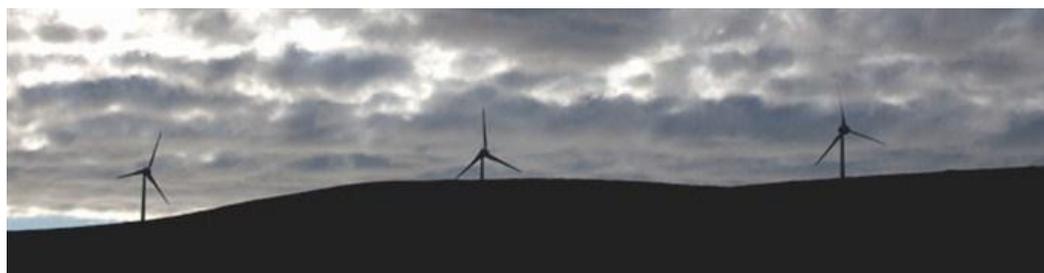
99. Connection to the grid is necessary in order to sell electricity in the GB wholesale market. Community Energy projects typically connect to one of the 14 regional Distribution Network Operators (DNOs), although there are also now 150 independent connection providers, following the introduction of competition for connections.
100. Grid connection has been cited as an issue for community projects focused on renewable electricity generation. One aspect of this relates to the speed at which a connection is made, but community energy groups also perceive inconsistencies between DNOs in the way they deal with requests for a grid connection. They would like greater transparency of grid connection costs, and the opportunity for regular strategic engagement with DNOs to allow collaboration between project developers and the DNO in order to find mutually beneficial solutions.

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66554/7077-electricity-market-reform-annex-a.pdf

⁸ Distributed Energy – Final Proposals and Statutory Notice for Electricity Supply Licence Modification Ref: 08/09 (http://www.ofgem.gov.uk/Sustainability/Environment/Policy/SmallrGens/DistEng/Documents1/DE_Final_Proposals.pdf)

101. Recognising these concerns, Ofgem published plans to strengthen the incentives for DNOs to provide timely connections. It has also emphasised the importance of robust customer engagement and will strengthen incentives to drive up customer service. We will follow these regulatory developments closely to see the impact they have on easing concerns about grid connections for the community energy and distributed energy generators. As well as new generation, DNOs will also need to accommodate new electricity demand, potentially driven by increased penetration of heat pumps and electric vehicles. This could trigger the need for reinforcement, especially where new installations are clustered in a close geographical area.
102. 'Smart' technologies and approaches could help reduce or defer the need for reinforcement, bringing down costs for consumers (see **Case Study 17 – Orkney Smart Grid**).⁹ Government is working with Ofgem and the DNOs to understand and address these challenges through the Smart Grid Forum.

Case Study 17: Managing power flows to relieve grid congestion and connect more renewables, Orkney Smart Grid



Over the last few years, applications to connect new wind generators to Orkney's electricity grid meant it had become unable to accommodate any renewable generator projects.

The local Distribution Network Operator, SSE, used an innovative approach – Active Network Management (ANM) – which allowed it to exploit latent capacity and connect greater numbers of renewable generators to the existing grid.

ANM works by monitoring and regulating various characteristics of the grid in real time, and maximising the real-time output of new renewable generators within the prevailing constraints of the grid.

SSE was able to add 51MW of renewable wind generation to the grid which otherwise would not have been able to do so and save £30 million in avoided network reinforcement costs.

⁹ Recent analysis for the DECC / Ofgem Smart Grid Forum suggests 'smart' technologies and approaches could save up to £11 billion over conventional distribution solutions by 2050

Call for Evidence Question

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|------------|---|
| 18. | How could it be made easier for community energy projects to sell the energy they generate and connect to the grid? |
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Evidence and evaluation

103. As outlined in **Section 5**, although there are a range of anecdotally reported benefits to community energy projects, the evidence of these is limited. Developing a **stronger evidence base** on the impacts of community energy would help us understand the areas where community approaches can add the most value, and enable us to identify the most effective models and approaches which could be scaled up as needed. For community groups, being able to clearly demonstrate their impact (for example on reducing carbon emissions) could make it easier for them to make their case to potential investors or funders, and to energy companies or other organisations to form partnerships.
104. We hope that responses to this Call for Evidence, as well as the research project, will help us fill some of the current evidence gaps on community energy. However, we recognise that at present there may be a limited amount of evidence (particularly quantitative evidence) of the benefits of community energy.
105. We are keen to identify where such evidence gaps exist and explore possible ways forward to fill them. We are interested in hearing from both community groups and other organisations about what type of evidence would be most helpful, and how it can be gathered. This might include **running pilots or trials**, and **support for community groups to evaluate their outcomes more robustly**.

Call for Evidence Question

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| 19. | <p>Research published alongside this Call for Evidence (<i>Community Energy in the UK: A review of the Evidence</i>) has found that the evidence base for community energy is currently limited. We are interested in how community energy projects are evaluated and how better evidence could be collected.</p> <ol style="list-style-type: none"> a. What approaches have you taken to evaluating the impact of your community energy project? Where have these worked particularly well or badly? b. What kind of evidence would help potential investors and funders make more informed financial decisions about community energy projects? c. What support do community energy groups need to better evaluate their projects and collect evidence of different outcomes and benefits? |
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Opportunities for partnerships

Partnering with Government

106. For central Government, working in partnership with communities, often with the cooperation of local authorities, can help us deliver our programmes and policies more effectively, quickly or cheaply compared to other delivery routes. For communities, such partnerships may offer the chance to benefit from early access to Government programmes and additional support and guidance (see **Case Study 18**).

Case Study 18 – Central and local government working with communities to pilot the Green Deal: ‘Warm Up North’ scheme, North East England

As part of the preparation for the launch of the Green Deal in the North East of England, in 2012/13 local authorities worked with communities to provide new energy efficiency measures as part of the Green Deal ‘Go Early’ Scheme.

Under this scheme, utilising over £2 million funding from DECC and energy providers, around 130 homes have benefitted from energy efficiency measures, typical of those which will be delivered as part of Warm Up North. This has enabled the partnership to pilot delivery of these measures, to learn lessons from residents on their experience, and to be able to demonstrate the benefits of such works to local communities.

One of the criteria for selection of the seven schemes was that there should be strong community support for such measures. Schemes which have been delivered have included: solid wall insulation on non-traditionally constructed bungalows in social ownership (at Holywell, Northumberland and Lemington, Newcastle); delivery of energy efficiency measures as part of a wider, community-led approach to sustainability (Greening Wingrove, Newcastle); utilisation of energy efficiency measures as an opportunity to regenerate estates (Craghead, Durham, and Biddick Hall, South Tyneside); and focussing on hard to treat properties (Darlington).

The first phase of the scheme has now been successfully delivered, with highly positive feedback from local residents, who are reporting high levels of satisfaction with the quality of the works, and savings on energy bills of £8 per week (over £400 per year). Six local authorities are now procuring a private sector partner who will work with local authorities across the region to install energy efficiency measures to tens of thousands of homes under the Green Deal initiative.

107. We want to make the most of opportunities to work in partnership with communities. But community energy groups tell us that they don’t always find central Government easy to engage with. Community energy groups sometimes feel that the policymaking process does not do enough to consider the role of communities. It is not always easy for them to identify a ‘way in’ to engaging with Government, and when they do they often find

Government communications confusing or overly technical. This is bad for community groups, who can become frustrated with the whole process of working with Government. It is also bad for Government, as we miss opportunities to maximise the effective design and delivery of our policies by working with communities on the ground.

108. We are keen to explore whether there are further opportunities for central Government to work in partnership with communities to deliver key energy and climate change policies, and to identify how we can make these partnerships as mutually beneficial as possible.
109. We are also keen to explore the role of local authorities as brokers between central Government and communities, and identify how this role might be strengthened. For example, in recognition of the crucial role of local authorities in increasing the deployment of heat networks, the Government has announced that we will establish a Heat Networks Delivery Unit (HNDU) within DECC that will work closely with individual authorities' heat project teams in England and Wales.¹⁰ We are interested in how similar models might work to support community energy projects across the spectrum of energy saving, management, generation and purchasing.

Call for Evidence Question

- 20.** We want to hear your views about how central Government could engage communities more effectively in developing and delivering its policies.
- a. Do you have examples of where Government engagement has worked well or badly?
 - b. Are there specific Government processes that make it hard for communities to engage?
 - c. How could the role of local authorities as 'brokers' between central Government and communities be strengthened?

Partnering with other organisations

110. Partnerships with organisations such as energy supply and network companies, energy technology installers (e.g. Green Deal and heat pump installers) and developers can enable community groups to develop new business models and identify new sources of finance. For partner organisations, community energy groups' role as trusted messengers within their communities can be a real strength, helping these organisations engage local people more effectively. Some community groups are already exploring the opportunities for such partnership. For example, partnerships can be a way of piloting innovative approaches or new technologies (see **Case Study 19** - Wigton, Cumbria).

¹⁰ DECC (March 2013): *The Future of Heating: Meeting the Challenge*.

Case Study 19: Enabling energy awareness and control: building a ‘Smart Energy Community’ in Wigton, Cumbria

Wigton is a small market town and civil parish outside the Lake District, Cumbria. The ‘Smart Energy Community’ project aims to help residents realise the benefits of innovative new technologies while developing the town as a showcase to inspire other rural communities. The project hopes to help the community understand and engage in energy saving in order to reduce their energy bills, as well as to provide a route for community cohesion and empowerment and create new economic opportunities.

Local people in Wigton are working in partnership with technology company Silver Spring Networks, which has deployed a trial communications network in the community. This uses wireless mesh technology integrated into the electricity distribution network, which enables two-way communications between premises in the town and the energy network. Consumers across Wigton have received smart meters with online portals that enable them to start controlling their energy use. These sites include a range of domestic consumers, the school, youth club, Barnardos and the main market hall. A community energy awareness board has also been set up in the local marketplace to raise awareness and interest.

Local partnerships are a key element of the project, which has the backing of local Member of Parliament Rory Stewart and is also engaging closely with the supportive local electricity Distribution Network Operator Electricity North West (ENW), with the local authority, and with Innovia Films, the main local employer in Wigton.

111. Partnerships with Green Deal providers may provide a possible revenue source for community energy groups (see **Case Study 20** – Energise Barnet). Note that under the Consumer Credit Act 1974, community groups may need a licence (Category C) to engage in credit brokerage connected to the Green Deal – i.e. if they effect introductions to Green Deal Providers or to other creditors or credit brokers, with a view to the consumer entering into a regulated consumer credit agreement. According to guidance on CCA licence requirements for Green Deal participants that will be published shortly by DECC, if a Green Deal participant (such as a community group or landlord) engages in relevant activities only on an occasional basis and, as such, is not carrying on a business, then a licence is unlikely to be required. This will, however, depend upon the individual facts and circumstances, including the frequency and nature of any introductions made to Green Deal Providers (or credit brokers), whether this is with a view to entry into a credit agreement, and whether there is any remuneration or other benefit. Further information on credit licensing requirements are outlined at OFT’s credit licensing webpages at <http://www.of.gov.uk/OFTwork/credit-licensing/>

Case Study 20: Building local partnerships to deliver energy efficiency – Energise Barnet and the Green Deal

Energise Barnet (www.energisebarnet.org.uk) is a community-led project to increase the energy efficiency of homes and buildings, reduce fuel poverty and make renewable energy more affordable in the London Borough of Barnet.

The project hopes to create £200 million of social, economic and environmental benefit in London's largest borough, including:

- 40,000 homes and buildings improved through the installation of energy / water saving measures and renewable energy systems.
- 300 new 'green' jobs and business opportunities for local SMEs / tradespeople.
- £60 million savings in energy bills for property owners and tenants.
- £30 million new income for property owners that generate renewable energy.
- 50,000 residents lifted out of fuel poverty.
- £8 million savings for the NHS.
- Carbon emissions reduced by 35%, equivalent to taking 50% of vehicles off the road.

A community interest company, Energise Barnet CIC (EB), has been established to deliver the project and provide a single point of contact for information and arranging advice, property assessments, funding and installation.

Working in partnership with Barnet Council, NHS Barnet and local community groups, EB plans to particularly channel help to vulnerable households whose health is adversely affected by their living conditions. Carillion Energy Services, a pioneer Green Deal Provider, has initially been appointed by EB to arrange surveys, funding and installation of measures. EB are in the process of securing the appropriate license under the Consumer Credit Act 1974 for this arrangement.

EB is a member of the Green Deal Finance Company and has won national awards. As a pioneer example of a social enterprise leading delivery of the Government's Green Deal, it hopes to act as pathfinder for other community organisations. Furthermore, subject to funding, EB will seek to capitalise on its brand by replicating its community-driven business model elsewhere by way of social franchising.

112. We are keen to identify other innovative ways for community energy projects to build such mutually beneficial partnerships with other organisations.

Call for Evidence Question

21. What could be the role for Government in helping community energy projects to build partnerships with other organisations, such as energy companies, local authorities and installers?

Call for Evidence Question

22. How might several community energy projects work collectively in order to negotiate and partner with larger organisations more effectively?

113. In addition to community energy projects forming partnerships with other organisations, we would like to explore the potential for partnerships through greater community ownership of, or involvement in, larger energy infrastructure projects.
114. Responses to the recent Onshore Wind Call for Evidence (Part A) on Community Engagement and Benefits suggested that increased community ownership of onshore wind projects (where local people want it) can improve community buy-in for such projects and offer social and economic benefits for communities, including the development of new local knowledge and skills, and improved local cooperation and social interaction.
115. We are keen to explore how such 'joint venture' or part-ownership models could be a way to improve community involvement with and buy-in to renewable energy infrastructure in general (not just wind).

Call for Evidence Question

23. How might Government encourage greater community ownership of or involvement in larger energy infrastructure projects?

116. Large energy infrastructure projects often offer a 'community benefits' package for the community in the area close to the development. This is usually in the form of financial benefits paid to community groups or local authorities, to be used for the benefit of the local community. We are interested in exploring the potential of such 'community benefits' payments to provide a new source of financial support to help community energy projects get started, and we are interested in your views on how this could be done through building local partnerships between developers, local authorities and communities.

Call for Evidence Question

24. How might 'community benefits' packages associated with large energy infrastructure projects help support community energy schemes in the area?

Call for Evidence Question

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| 25. | For some respondents we would like to follow up with additional questions. Are you happy to be contacted for further information if required? |
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Annex A: List of questions

This Call for Evidence includes background information on some of the key benefits, barriers and opportunities, as well as a number of case studies aimed at showcasing the range of community energy projects already up and running and highlighting some innovative approaches to overcoming barriers. We hope that this will be helpful in setting the context, explaining what information we are looking for, and generating new ideas.

However, we recognise that not all aspects of the Call for Evidence will be relevant to all organisations, and we want to encourage as many people as possible to respond to the parts that are of most interest to them. A full list of all the questions in the Call for Evidence is given below. We encourage you to respond to as many or as few of these questions as you feel are relevant to you.

Call for Evidence Question: Your details

1.	What is your name?
2.	What are your contact details? (E.g. email address, telephone number and/or address)
3.	What is your organisation?

Call for Evidence Questions: What do we mean by 'Community Energy'?

4.	<p>We would like to hear your views about the definition of 'community energy projects' outlined in this section. In particular:</p> <ol style="list-style-type: none"> Are you aware of any community energy projects that go beyond the goals of reducing, managing, generating and purchasing energy as outlined here? Are there other types of community that should be in scope for the Community Energy Strategy? If so, please explain why they should be included.
5.	<p>We would like to hear what evidence you have of the current and potential scale of community energy projects. For example:</p> <ol style="list-style-type: none"> Do you have evidence of the number of community energy projects or number of people currently involved in community energy projects in the UK? Do you have estimates of the potential future scale of community energy projects in the UK in terms of numbers of people, generation capacity, carbon or energy savings? Please explain the methodology used to reach any estimate that you provide. If you are a community energy group, does your group intend to expand in the future?

Call for Evidence Questions: Potential benefits of community energy

6.	<p>We would like evidence or examples of the benefits of community energy approaches (please see Section 4 for more information on the types of evidence that we are seeking).</p> <ol style="list-style-type: none"> a. How have community-led approaches delivered energy and climate change outcomes more cheaply or effectively than top-down Government action? These outcomes could include generating renewable electricity or heat, reducing greenhouse gas emissions or helping consumers save money on energy bills. b. How has participation in community energy projects changed attitudes to or increased engagement with energy and climate change issues? c. What are the wider social and economic benefits of community energy projects? These might include improving health, education, jobs or transport; strengthening communities; or tackling other local issues.
7.	<p>Do you have evidence or examples of any potential drawbacks or negative consequences of community energy?</p>

Call for Evidence Questions: Unlocking the potential of community energy

Barriers to community energy

8.	<p>What evidence or examples do you have of the barriers faced by community energy projects and the ways in which they have been overcome, or could be overcome?</p> <p>Categories might include:</p> <ul style="list-style-type: none"> • Community capacity and capability • Access to funding • Legal and regulatory framework • Selling electricity generated and grid connections • Gathering evidence of the benefits of community energy and evaluating projects
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Community capability and capacity	
9.	<p>We would like to hear your views about sources of information and advice for community energy projects. In particular we would like to hear from you about:</p> <ol style="list-style-type: none"> a. Which current sources of information or advice have you found most useful in setting up a community energy project? b. What information or advice would have been helpful when you were setting up a community energy project? c. Do you think there is potential for a new information resource for community energy groups (see box above), and who might be best placed to develop and host such a resource? d. How could more be done to build interest among those communities who are not already involved in community energy?
10.	<p>We are interested in your views about peer mentoring. In particular:</p> <ol style="list-style-type: none"> a. Do you have any examples of successful peer mentoring schemes? b. What more could be done to support and enable peer mentoring schemes such as that described in Case Study 14 above? c. Are you aware of any other models of peer mentoring or advice sharing which could help community energy projects address skills and knowledge gaps? d. What more could be done to support peer mentoring schemes in the community energy sector?
11.	<p>How can we ensure that vulnerable groups, including those in fuel poverty, are able to take part in and share the benefits of community energy projects?</p>
Access to funding	
12.	<p>We are interested in your views on the potential for community groups to engage in delivering the Energy Company Obligation (ECO). In particular:</p> <ol style="list-style-type: none"> a. What could be the role for communities in delivering ECO, either through participation in ECO brokerage or building partnerships with energy companies? b. What might be the potential barriers to community groups participating in ECO brokerage?
13.	<p>If you are a community energy project, what has been your experience of accessing funding from Feed-in-Tariffs (FiTs) or the Renewable Heat Incentive (RHI)?</p>

14.	Do you have any other examples of, or ideas for, innovative revenue-generation models for community energy projects, particularly for projects not based on electricity generation?
15.	<p>We would like to understand the different types of funding available for community energy projects at different stages of their development and the barriers to accessing these. In this question we are particularly keen to hear from potential investors in community energy projects, as well as community energy groups.</p> <ol style="list-style-type: none"> a. In addition to those sources mentioned in questions 12-14 above, what types of funding are available for community energy projects at different stages of their development? b. What barriers do community energy projects face in accessing funding at different stages of their development?
Regulatory framework	
16.	If you have been involved in community energy, what legal or regulatory or planning barriers have you encountered during your project?
17.	<p>We would like to hear your views on the role of Government or others in making it easier for communities to deal with these regulations. For example:</p> <ol style="list-style-type: none"> a. Are there any regulations or processes that could be improved or simplified? b. What support could help community energy groups navigate these regulations or processes?
Networks and grid	
18.	How could it be made easier for community energy projects to sell the energy they generate and connect to the grid?

Evidence and evaluation

- 19.** Research published alongside this Call for Evidence (*Community Energy in the UK: A review of the Evidence*) has found that the evidence base for community energy is currently limited. We are interested in how community energy projects are evaluated and how better evidence could be collected.
- What approaches have you taken to evaluating the impact of your community energy project? Where have these worked particularly well or badly?
 - What kind of evidence would help potential investors and funders make more informed financial decisions about community energy projects?
 - What support do community energy groups need to better evaluate their projects and collect evidence of different outcomes and benefits?

Call for Evidence Question: Partnerships

- 20.** We want to hear your views about how central Government could engage communities more effectively in developing and delivering its policies.
- Do you have examples of where Government engagement has worked well or badly?
 - Are there specific Government processes that make it hard for communities to engage?
 - How could the role of local authorities as ‘brokers’ between central Government and communities be strengthened?
- 21.** What could be the role for Government in helping community energy projects to build partnerships with other organisations, such as energy companies, local authorities and installers?
- 22.** How might several community energy projects work collectively in order to negotiate and partner with larger organisations more effectively?
- 23.** How might Government encourage greater community ownership of or involvement in larger energy infrastructure projects?
- 24.** How might ‘community benefits’ packages associated with large energy infrastructure projects help support community energy schemes in the area?

Call for Evidence Question: Further information

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| 25. | For some respondents we would like to follow up with additional questions. Are you happy to be contacted for further information if required? |
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Annex B: List of case studies

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Department of Energy & Climate Change
3 Whitehall Place
London SW1A 2AW
www.gov.uk/decc

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