

ESSENTIAL REFERENCE PAPER 'C'

Community Energy

1.0 What is community energy?

The Government's Community Energy Strategy was published by Department of Energy and Climate Change (DECC) in January 2014. The Government defines community energy as collective action to reduce, purchase, manage and generate energy. There are clear links with the national carbon reduction agenda and also fuel poverty and energy efficiency initiatives.

Community energy projects have an emphasis on local engagement, local leadership and control and the local community benefiting collectively from the outcomes.

Community-led action can often tackle challenging issues around energy, with community groups well placed to understand their immediate local areas and to bring people together with common purpose.

Examples of community energy projects include:

- Community-owned renewable installations such as solar photovoltaic. We have one example of Community Energy in Hertford at Millmead School, where solar PV was installed in May 2014 by Hertford Energy Now (following very positive local interest in the share offer). HEN is a cooperative of local people who have invested a minimum of £250 each in shares in the scheme and who will receive an above inflation dividend for 20 years, with the option to cash in their shares at any time.
- Members of the community jointly switching to a renewable heat source such as a heat pump or biomass boiler.
- A community group supporting energy saving measures such as the installation of cavity wall or solid wall insulation, which can be funded wholly or partly by the Green Deal.
- Working in partnership with the local Distribution Network Operator (DNO) to pilot smart technologies.
- Collective purchasing of heating oil for off gas-grid communities

- Collective switching of electricity or gas suppliers.

2.0 Chief Benefits of Community Energy to East Herts

- Will assist with overall carbon reduction targets for the district
- Provision of more energy efficient homes
- Assist with the reduction of fuel poverty
- Facilitate community action
- Enable local people to invest in their own area; helping the community achieve a return on its investment whilst benefitting the local economy
- Generate free renewable energy which can offset use of purchased energy from the grid

3.0 Support available for Community Energy

The Government is encouraging local authorities to become involved in supporting local community energy projects, although there is some specific national financial support available to community groups to aid the development of Community Energy Schemes.

4.0 How could East Herts offer support?

- Specific grants
- Provision of Advice
- Joint funding of schemes as a partners within a community project
- By providing a location or site for the renewable energy resource e.g the roof at Wallfields is suitable for PV generation.
- Facilitating public meetings to raise awareness of the Government's Community Energy Initiative, and encouraging the formation of interested groups to investigate ideas in their local area.
- By liaising with local businesses e.g energy efficiency companies, solar installers, of which there are very few in East Herts at present.

5.0 Community Electricity and Heat Generation

Community electricity or heat generation can enable communities to benefit from local resources. Renewable electricity and heat generation contribute to the UK's goal of reducing greenhouse gas emissions, helping our community play a part in reducing climate change. The community may be able to receive a financial benefit from electricity and heat generation, in addition to other benefits, such as bringing everyone together or engaging people with ideas on how to save energy or money on energy bills. Officers have already been working with community groups to encourage this behaviour shift for some time but there is an opportunity to extend the work further across the district.

6.0 Feed in Tariffs (FIT's) scheme

FIT's support individuals and organisations, including communities, to generate low-carbon electricity using small-scale systems. The scheme covers a number of technologies including solar PV panels, wind turbines, anaerobic digestion (biogas energy) and micro combined heat and power (micro-CHP).

Currently FITs are available on installations of up to 5 megawatts (MW). The Government is consulting on the introduction of a higher threshold of 10 MW for community groups. Feed-in Tariffs provide a payment for the electricity that is generated; the up-front costs need to be funded eg via a local share offer or loan finance (as in the case of Mill Mead School)

There are additional benefits for some community groups for FITs. Community Interest Companies (CICs), cooperatives and Community Benefit Societies are able to fix tariff rates for a period and may be exempt from certain energy efficiency requirements for energy generated using solar PV panels. There are also certain potential tax advantages for these schemes, through the Enterprise Investment Scheme (EIS).

7.0 The Renewable Heat Incentive (RHI) Scheme

The RHI helps organisations, including communities, to meet the cost of installing renewable heat technologies. The scheme covers

biomass, ground and water source heat pumps, geothermal, solar thermal, biomethane and biogas heating.

Currently the RHI is available for non-domestic installations, but the domestic RHI is becoming available during 2014. The RHI provides payments for the heat produced renewably for 20 years, and as for FITs, the up-front costs need to be funded by the community organisation. As well as receiving RHI payments, community groups generating heat can sell the heat produced to provide a supplementary income stream.

8.0 Heat Networks

The Heat Networks Delivery Unit within DECC will support local authority-led heat network projects in England and Wales. There are many funding and delivery models for these. These might include setting up energy service companies (ESCOs) that are wholly owned by the local authority, co-operative models that are owned by those they serve or joint venture companies including a private developer or financier. These are of chief interest in new large scale developments.

9.0 Rural Community Energy Fund (RCEF)

The £15m RCEF is aimed at helping rural communities in England access funding to carry out feasibility studies for renewable energy projects, fund pre-planning studies and preparation of planning applications. RCEF funds will support eligible rural projects including wind, solar, biomass, heat pumps, anaerobic digestion, gas Combined Heat and Power (CHP).

As announced in the Community Energy Strategy, the Government is also launching an Urban Communities Energy Fund (UCEF) as a counterpart to RCEF for non-rural communities in England.

10.0 Reducing energy use in the local community

Reducing energy use can reduce carbon emissions, and also save people money on their energy bills. The local community can work together and save energy in a number of ways.

For example, the community may get together to improve the energy efficiency of a local building; share tips on how households can use less energy on a day-to-day basis; or advise people about what support is available to help them insulate their homes.

Communities can be particularly effective at engaging vulnerable consumers and reaching those in fuel poverty.

East Herts is attempting to encourage this through schemes such as Keep Warm Stay Well, but there could be an opportunity to encourage the creation of specific local community energy efficiency networks. These could also look at water efficiency and there may be an opportunity to team up with the Utility companies in this regard. The Herts Sustainability Forum is currently exploring this area further.

11.0 Community Energy Demand Management

Some community groups, who have undertaken energy generation and energy reduction projects elsewhere in the UK have also considered energy demand management. With a progressively smarter grid, consumers are offered more information about their energy use and incentivised to shift their demand to help balance supply and therefore reduce the need for costly generation capacity to meet high peak demand. This also helps to accommodate renewable electricity generation, electrification of heating (eg heat pumps) and electric vehicles.

Communities wishing to undertake demand management projects work with their local Distribution Network Operator (DNO). Such partnerships are eligible to apply to Ofgem's Low Carbon Networks Fund if they wish to pilot new approaches. Community groups are also being invited to collaborate with others to bid for funding through the Technology Strategy Board Localised Energy Systems competition.

Future community energy management initiatives will benefit from better consumption data, available as a result of the roll-out of smart meters. Most households will start to have smart meters installed by their energy company between 2015 and 2020, although some energy companies are starting to install smart meters now. As

community leader we may wish to promote the move to smart meters or provide mini meters on a loan basis during the interim period.

12.0 Community Collective Purchasing and Switching

Community energy purchasing and switching can help consumers secure better deals on electricity, gas, heating oil, insulation or renewable technologies through discounts or referral fees. Community groups can bring people together to purchase collectively or switch together, saving money. The involvement of a community group can reach out to the most vulnerable members of the community who may be most in need. In East Herts, for example, we already have several Oil Buying Clubs, although there is no doubt further opportunity to encourage additional such groups.

HCC has also been operating Fuel Tariff Switching Scheme in partnership with Peterborough Council, although it is not clear how successful this has been. There is possibly an opportunity for further promotion in this area or through East Herts taking a more direct lead in the local area.

Fuel tariff switching can help with fuel poverty issues, although it is not always possible to guarantee the lowest available rate at any one time through the fuel switching auction process.

13.0 Governance and legal structures for community groups

A legal structure for community groups is needed to apply for the majority of grants and to qualify for loans. The following are examples of community group legal structures that can be used to develop community energy initiative. Such structures or groups could be either new (created specifically for the purpose) or simply utilise the structure of an existing organisation (e.g local charity):

There are two types of ***Industrial and Provident Society***:

- Community Benefit Society (BenCom). This is set up to benefit a particular stakeholder group. They cannot operate like a private company and IPSs can offer community shares (less than £20,000 limit).

- Co-operative Society. This is run by and for the interest of its members. Co-operatives pay out dividends to members, often on the basis of participation not investment. Each member gets one vote, regardless of the number of shares they own. An example of this type of structure is Hertford Energy Now (at Millmead School).
- **Community Interest Companies (CICs)** cannot be formed or used solely for the personal gain of a particular person, or group of people. They have an asset lock and a limit on dividends. CICs are supervised by the CIC Regulator. CICs cannot run community share offers.

Charities are run by trustees, supported by donations and have charitable status (tax relief). They are regulated by the Charity Commission.

Joint Ventures involve a community group and one or more other bodies like a private investor who may bring business or technical skills, capital, legal expertise, local land etc.

14.0 Business planning and funding

Community groups need to develop a business plan. This may have to fund an income and enough profit to pay interest on any premium or loans and give investors a reasonable rate of return. Other costs are likely to include administration, project management, communication, planning, testing, community share offers, land ownership/leasing, insurances, legal advice, installation, grid connection, ongoing maintenance, repair and taxes and decommissioning.

Funding for the up-front costs can come from loans, grants, private investors, or community share offers. Not for profit organisations like CICs and IPSs may find difficulty borrowing all of the funding for less than £1m and may only be able to raise a 50% bank loan. East Herts Council could potentially consider providing assistance in the establishment of such groups.

Some banks also specifically support community groups. These include: Charity Bank, Triodos and the Cooperative Bank.