

EAST HERTS COUNCIL

ENVIRONMENT SCRUTINY COMMITTEE - 10 NOVEMBER 2015

REPORT BY THE EXECUTIVE MEMBER FOR ENVIRONMENT AND PUBLIC SPACE

UPDATE REPORT ON COMMUNITY ENERGY

WARD(S) AFFECTED: ALL

Purpose/Summary of Report

- To update the Committee on the concept of community energy
- To consider possible options for encouraging the development of community energy initiatives within the District through potential closer working between the Council and local community groups looking to undertake community energy projects

RECOMMENDATION FOR ENVIRONMENT SCRUTINY COMMITTEE:

That:

(A)	from the range of opportunities listed in paragraph 5.0 of the report for encouraging and facilitating the development of community energy initiatives in East Herts, the Committee recommends to the Executive that the level of involvement of the Council should be: • ; and
(B)	officers be requested to investigate further the benefits of any such scheme and its associated costs.

1.0 Background

1.1 At the meeting of the Environment Scrutiny Committee in September 2014, members received a report on the East Herts Climate Change Action Plan and the activity undertaken in its implementation.

1.2 The report introduced to Members the concept of Community

Energy. It was agreed at that meeting that officers report back to the Committee with some budgeted options and initiatives to progress Council policy to assist community energy groups. It was agreed that further reports would be provided to this Committee as project work in the area develops. This report aims to update Members on the potential for local initiatives particularly in the light of further guidance from the Department of Energy and Climate Change (DECC) as well as recent national energy policy changes.

2.0 What is Community Energy?

2.1 The Coalition Government's Community Energy Strategy was first published by Department of Energy and Climate Change (DECC) in 2014 with a subsequent update in the Spring of this year. The Government defined 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 as well as 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. The report from DECC emphasises that 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.

In summary the Government strategy sees Community Energy as possessing 3 key benefits:

- Helping to maintain energy security and tackle climate change
- Saving people money on their energy bills and assisting with fuel poverty
- Promoting a range of wider social and economic benefits including community income generation schemes and increasing community cohesion

2.2 Activity relating to community energy may be led directly by local community groups either independently or in partnership with other organisations. Local authorities are increasingly being seen as pivotal players in facilitating local action, be it in supporting community activity or in terms of establishing their own projects.

2.3 Potential examples of community activity include community owned renewable energy infrastructure; local community support for

energy efficiency measures; energy clubs; and renewable heat projects amongst others.

- 2.4 Hertfordshire has an active Community Energy Network of some 30 organisations including East Herts Council. Indeed this District has one of the most active Community Energy groups in the county, Hertford Energy Now (HEN) which already has established a successful cooperatively owned, share offer funded, company investing for its first venture in solar panels on Mill Meads School, Hertford. HEN is currently exploring and registered 5 other sites in the Hertford and Ware area.
- 2.5 East Herts Council currently chairs the Hertfordshire Sustainability Forum (HSF), which is made up of Hertfordshire district authorities, the University of Hertfordshire and a number of third sector organisations. HSF will be holding its annual conference on 5th November 2015 at Ware Priory on the subject of Community Energy, drawing delegates from across the county and beyond. An update on the outcomes from the Conference will be provided at the meeting.

3.0 Changes in tariff payments

- 3.1 There are some potential 5000 community energy project groups underway across the England. Most use funding from share capital raised within the community and so do not require public funding for the initial infrastructure. Many have developed on the back of the availability of Feed in Tariff (FiT) payments for the generation of renewable energy. Different technologies attract varying levels of FiT, which is generally paid for 20 years and is obtainable as an index linked amount per kWhr of energy generated (and used on site), with a further export tariff paid for any surplus exported to the grid.
- 3.2 As Members may be aware the phenomenal success of FiT's in kick-starting the domestic and commercial demand for many renewable technologies has meant that the Government is currently consulting on reducing payments by at least a 90% from January 2016, in addition to an existing period of depression which has already seen tariffs reduce on a quarterly basis.
- 3.3 This reduction in tariff is likely to affect the level of interest in community energy projects as some schemes have relied to a large extent on the FiT payments. However, officers believe, as is the case with some initiatives in Hertfordshire, that projects based

on renewable technology, e.g. solar, will remain viable, but adjustments will need to be made to some financial models. For example the most successful schemes “sell” their generated energy at low cost to the occupier of the building where they are generating their energy, ensuring that the scheme remains sustainable, rather than relying on income from the FiT to provide the sole return on investment. This therefore is likely to be the model that will become more usual in the future. It is anticipated that the payback period may initially almost double. However, in the case of solar it is probable that capital costs of installations will fall considerably in the near future, as many panels are currently manufactured in China and EU import tariffs on Chinese renewables are shortly to be lifted.

4.0 The opportunity in East Herts

- 4.1 Officers have recently completed a desk top study to look at the potential for community energy generation using solar PV on community owned buildings. Such buildings include schools, scout huts, parish halls, community centres, churches and council buildings. It is such community owned buildings that the DECC strategy wishes to encourage to be used for solar generation because as they are in public/charitable ownership it makes it easier for these organisations to establish their own community energy companies and gives a real feeling of community ownership.
- 4.2 The analysis has looked at over 310 buildings in East Herts and graded them into 5 categories from high to low potential. If one considers only the top 60% in terms of suitability i.e. those that are non-listed buildings; those with open non- shaded sites; and, pitched roofs then there is a possible 118,625 kW of generating capacity which would be equivalent to installing the same panels on 19,700 individual private homes. The potential for utilising community infrastructure for generation is therefore considerable. Examples from the study will be presented to the Committee at the meeting.
- 4.3 By retaining generation within the community setting it allows the investment return to be either used for other efficiency initiatives e.g. insulation projects to help those in fuel poverty or financial return to the community investors. In addition the power generated can be provided as suggested above to the community at lower cost.

4.4 Whilst solar PV is the most easily installed technology, there are many other opportunities including biomass boilers, combined heat & power (CHP), and ground source heat pumps. There is very limited opportunity for micro hydro in the District, whilst wind generation is not feasible given the low mean wind speed in Hertfordshire, the large area of open land required together with its general unpopularity.

4.5 The principles of Community Energy can also be used to provide other sources of energy infrastructure such as community investment in LED lighting or even heat distribution.

5.0 How can the Council facilitate the expansion of Community Energy?

5.1 There are a wide range of levels at which the Council could choose to become involved in Community Energy. The main ones will be briefly considered below, although Members may wish to discuss other opportunities at the meeting. A further summary of the risks and benefits will be presented on the evening. An approximate indication of minimum costs has been provided where known. However, at the current time it is difficult to be precise due to the state of flux in the renewable energy arena. It is suggested that in the case of East Herts the *Council as Facilitator* (paragraph 5.7) is the most appropriate way forward at the current time not least as the level of local interest in developing community energy in the District has yet to be fully assessed. Other models could become more attractive depending on community take up and activity of other local authorities in this region.

5.2 *The Nottingham Model* - The Council establishes a fully-fledged energy supply company which purchases energy from both the national market and from individual community suppliers. This is a high risk option, but provides the greatest financial return and flexibility to establish social energy supply tariffs to assist fuel poor households or income to spend on other initiatives. Set up cost at very minimum £500,000 plus marketing/support functions. Example Nottingham City Council.

5.3 *The Energy Partner Model* – The Council forms a commercial partnership with an energy supply company. This is usually just a relabeling of an existing energy company tariff with the name of the Council. Locally generated energy is sold by community groups to the energy supplier. Lower cost, little control over tariffs, some

generation of income to spend on other projects. Example Peterborough City Council.

- 5.4 *Partnership Model* – The Council teams up with other local authorities, usually neighbouring ones, together with a managing agent and supply company. Energy may or may not be purchased externally alongside locally produced energy. Ability to set social tariff. Plus opportunity to generate fund for other projects. Return on investment directly related to initial investment. Minimum cost for a partnership as a whole is £150,000 for licences spread across partners plus back room costs. Example LGiU Local Energy Partnership.
- 5.5 *Council as Broker* – The Council acts as a broker for Community Energy groups within its area and purchases the energy generated from them to sell onto a third party. This enables local groups to obtain a higher price for the green energy they generate. Can create a social fund. Usually undertaken in partnership with a managing agent. This could be a partnership of other local authorities. Costing dependent on contract but could be entirely funded on self-supporting basis. Likely initial minimum basic set up cost £15,000.
- 5.6 *Council as its own Community Energy Group* – Here the Council acts as on its own establishing itself in effect as a community energy group. The Council uses its own property e.g. roof of council owned building for solar PV; develops a leisure centre CHP facility; or perhaps uses proposed Hertford micro hydro. Set up and capital costs are all met by Council. No input/funding from the community. Council benefits from income from FiT (if applicable); can sell/use energy to grid or to an independent broker or another council or could ring fence income to assist fuel poverty initiative for example. Income is proportional to investment. Cost and pay back dependent on technology. Minimum cost £12,000 for small solar array but heavier investment is required to make worthwhile returns.
- 5.7 *Council as Facilitator* – Other than a do nothing approach this requires least involvement and lowest cost. The Council acts to support and encourage community energy within the District through various measures. These may include dissemination of information to community groups and charities to encourage and inform them of the potential for establishing community energy groups. This may be achieved through using the East Herts web site, presentation at Rural Conference, or through working with

HertsCDA who are taking an active interest in promoting Community Energy. Alternatively the Council may choose to hold a number of public meetings to raise awareness. The outcome from the solar mapping study mentioned in paragraph 4.2 above may be useful in demonstrating the level of opportunity in a given area. Due to limited officer capacity this may require the use of a community facilitation consultant that specialises in local energy. Estimated cost about £600 per meeting. Through the Council's involvement with the Hertfordshire Community Energy network a toolkit to help local groups' interested in the community energy concept is being developed. This will be made available through the Council's website, alongside a similar toolkit to help local schools negotiate the requirements of HCC in relation to gaining permission to use school roofs and premises for community energy infrastructure. The Council may wish to make available some of its own estate for community groups to utilise e.g. rent a roof at a peppercorn rent. There would be legal and structural survey costs to be considered, which could be met by the Council or directly by the community group. Finally the Council may wish to consider a dedicated grant fund to establish community energy groups or to permit applications through existing grant funds. Typical startup costs for a community energy group are in the region of £3000 excluding capital costs which would be expected to be raised through a share offer.

6.0 Implications/Consultations

6.1 Information on any corporate issues and consultation associated with this report can be found within **Essential Reference Paper 'A'**.

Background Papers

Community Energy Saving Competition Guidance Note (DECC January 2014 and Update March 2015)

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