

**ENERGY INVESTMENT STRATEGY – PRIORITIES**

*To:* **Economy and Environment Committee**

*Meeting Date:* **24<sup>th</sup> May 2016**

*From:* **Executive Director – Economy, Transport and Environment**

*Electoral division(s):* **ALL**

*Forward Plan ref:* **2016/025** *Key decision:* **Yes**

*Purpose:* **To identify priorities for an Energy Investment Strategy 2016-2020 in light of the changing Government policy environment.**

*Recommendation:* **Members are asked to agree the following priorities for the Energy Investment Strategy 2016-2020**

**a) Maximize investment into schools and Cambridgeshire County Council (CCC) buildings using energy performance contracting to save energy and costs.**

**b) Engage with The Department for Energy and Climate Change (DECC) ‘Local Energy England’ programme and other funders to promote and participate in funding opportunities to support local authorities and communities deliver more local energy generation.**

**c) Bring forward large scale energy projects on transport assets, the farm estate and housing development land, with a view to developing business cases, applying for ‘Contracts For Difference’ funding or other grants and making projects investment ready in anticipation of rising electricity prices.**

**d) Bring to Committee, options on the regulatory requirements under which the Authority could act as a generator and supplier of energy and assess the mechanisms for buying and selling energy locally to consumers.**

**e) The principle that development budgets are set for each of the large energy projects as they come forward and repaid from revenues when a project is successfully delivered.**

<b><i>Officer contact:</i></b>	
<b>Name:</b>	<b>Sheryl French</b>
<b>Post:</b>	<b>Project Director</b>
<b>Email:</b>	<b>Sheryl.french@cambridgeshire.gov.uk</b>
<b>Tel:</b>	<b>01223 728552</b>

## 1. BACKGROUND

- 1.1 Economy and Environment Committee agreed in March 2015 to use some of the profits from the Mobilising Local Energy Investment (MLEI) Project, to fund the development of further energy projects, the purposes being to save energy, generate financial returns and retain capacity to grow the scale and ambition of energy work, including:
- i. Scoping further large scale solar and waste to energy projects for the Authority
  - ii. Progressing opportunities for European Regional Development Fund (ERDF) revenue and low cost capital to match CCC investment
  - iii. Assessing with local stakeholders the value of a Cambridgeshire Energy Services Company for the public sector
  - iv. Attracting Allowable Solutions investment from housing developers into low carbon energy projects across Cambridgeshire (on the then assumption that the Zero Carbon Homes Policy would be brought forward in 2016)
  - v. Scoping potential for power purchase agreements for local energy generation with local businesses and consumers
- 1.2 General Purposes Committee on 9<sup>th</sup> September 2014 agreed the investment principles for energy projects and a delegated decision making process. The investment principles were reviewed on 19<sup>th</sup> May 2015 and agreed, including an increase to the investment allocation from £5 million to £10 million for schools, CCC buildings and other CCC sites.
- 1.3 Appendix A identifies Cambridgeshire County Council's energy investments alongside potential asset areas, which, if developed can grow the scale and ambition of the Authority's energy agenda and revenue generating potential. However, some assets will require some policy and technical development work in advance of bringing forward projects.

## 2. MAIN ISSUES

- 2.1 **Contributing to Cambridgeshire's wider energy security and transition to a low carbon economy.** The Government's recent decisions (concerning Feed In Tariffs, introduction of the climate change levy charges on renewable energy production and cutting of the Zero Carbon Homes Policy), have left energy projects difficult to finance. Future large scale investment required for a low carbon future is further constrained locally by grid capacity and capability constraints and inability to store surplus renewable energy.
- 2.2 However, a return to viability can be anticipated. The UK's Climate Change Act 2008 commits Government to five year carbon reduction budgets and recent global climate change talks in Paris in 2015 builds on this shift from oil and coal to electricity from other sources, with expected electricity price rises. For example, the Government is committing to close coal power fire stations and upgrade nuclear to produce the UK's electricity baseload requirements. To achieve this it must guarantee for Hinckley C a wholesale price of £93 per MWh from mid 2020's. This is a substantial increase over the current whole sale electricity price of £44 MWh (DECC 2015 forecast) and this additional cost will be picked up through consumers' bills.

**2.3 Improving the Authority's and schools resilience to energy price increases.** Across CCC buildings and schools there is scope to further reduce energy usage and generate savings. To date, investments totalling £5.1m have been made and there is scope for a further £5m of investment using the energy performance contracting business model on current forecasts. This investment is: reducing energy consumption; upgrading school boilers and generating renewable energy from solar photovoltaic (PV) and biomass boilers for on-site consumption. At current prices - but not necessarily medium term prices - the payback period on new investments may need to be extended for some projects from the current maximum of 15 years to 20 years where new boilers are included on smaller school projects.

**2.4 Delivering financial and policy benefits to the authority.**

The 12MW Soham Solar Park when operational will provide a 7% return to the authority before funding costs. It is financed via Government's Contract for Difference (CFD). Other similar schemes prepared to access CFD finance are uncertain of success but such schemes may become profitable in the near future due to rising electricity prices, falling PV scheme costs, evolution of storage technologies and selling electricity to consumers via a licensed operator. Storage and licensing together may enable the Authority to sell electricity directly to local users at retail prices. Given the grid capacity constraints, it will be prudent during the current investment hiatus to identify and develop future large scale renewable opportunities to apply for CFD and be 'investment ready' for anticipated price and market changes. These are actions that would fit with the Government's desire to increase energy supply competition and for communities to benefit directly from decentralised energy projects but would need the Authority to agree a 'development budget' for energy projects which is repaid through revenue returns when projects become operational.

**3. PRIORITIES FOR ENERGY INVESTMENT STRATEGY 2016-2020**

**3.1 *Schools and CCC buildings:*** To date £5.1million of investment has been committed and there is scope for a further £5 million. The priority is to maximize investment into energy performance contracting with a view to save more energy and costs for the overall public purse.

**3.2 *Identifying new opportunities for increasing energy and cost savings:*** Given the radical changes to the investment environment, the current priorities are to:

(a) Engage with The Department for Energy and Climate Change (DECC) 'Local Energy England' programme and other funders to promote and participate in funding opportunities to support local authorities and communities to deliver more local energy generation.

(b) Identify and bring forward further large scale energy projects that can be developed on transport assets (including park and ride sites), housing sites, the farm estate or other land assets with a view to developing business cases, applying for CFD or grants and/or making projects investment ready in anticipation of rising electricity prices.

(c) Review the regulatory requirements under which the Authority could act as a generator and supplier of energy and assess the mechanisms for buying

and selling energy locally. This will include the options of setting up Cambridgeshire County Council energy and generation companies, power purchase agreements or white label arrangements using an existing energy company e.g. Nottingham's Robin Hood Energy Company. This review will bring forward options for the Authority to consider.

- 3.3 *Project development budgets.* To bring forward a more ambitious energy programme, development budgets are needed to fund feasibility work e.g. ground conditions assessments; grid connection and planning applications. Project development costs are included in the business case and providing most projects are successful, profits from these can pick up the shortfall from projects which haven't progressed to delivery.

## **4. ALIGNMENT WITH CORPORATE PRIORITIES**

### **4.1 Developing the local economy for the benefit of all**

A thriving economy is dependent on affordable and secure energy supplies. Government is encouraging decentralised energy generation and a shift from centralised generation and dependency on coal and oil. There are economic opportunities that come from developing local energy projects including job creation, product innovations and revenue opportunities. If the investments in large schemes on the Authority's land can be developed, these should generate income for the County Council and provide opportunities that benefit our local community.

### **4.2 Helping people live healthy and independent lives**

Fuel poverty is a significant issue, despite recent falls in energy prices. Evidence suggests that cold homes will bring greater health risks impacting negatively on health budgets and services. A Cambridgeshire Energy Company can undertake collective purchasing and selling of energy to help save vulnerable residents money on their energy bills.

### **4.3 Supporting and protecting vulnerable people**

See above for the issue of fuel poverty and the relationship between cold homes, respiratory and cardio-vascular diseases and excess winter deaths. Fuel poverty impacts most on the vulnerable in our society

## **5. SIGNIFICANT IMPLICATIONS**

### **5.1 Resource Implications**

The following bullet points set out details of significant implications identified by officers:

- *Development costs.* The Authority will be taking the upfront development risk on larger projects. If a project is successful, development costs are repaid. However, some projects may not get delivered for technical or other reasons despite costs being incurred but the assumption will be that revenue generating schemes will need to cover all development costs.

- *Public Works Loan Board (PWLB) borrowing.* Financing new energy schemes will require the Authority to continue to provide funding, e.g. by borrowing from the Public Works Loan Board. The Authority will continue to carefully manage risks to projects, e.g. where business cases are based on award of grants or anticipated changes in market conditions to make them viable.
- *Property implications.* There are a range of ambitions for the Authority's property and land assets. It is important for close collaboration to ensure projects are not competing or compromised by different agendas.

## 5.2 Statutory, Risk and Legal Implications

There is a risk that investments make a loss. However, if investment decisions are made on good business cases and a balanced portfolio of projects is developed to spread the risk, this can be managed.

## 5.3 Equality and Diversity Implications

High energy prices affect the low paid disproportionately and so measures to manage prices and energy availability will be beneficial.

## 5.4 Engagement and Consultation Implications

When projects are brought forward, there will be engagement with local members and the community as part of the planning approval process.

## 5.5 Localism and Local Member Involvement

As above.

## 5.6 Public Health Implications

No implications.

Source Documents	Location
General Purpose Committee, 9 <sup>th</sup> September 2014, item 5, key decision: A Finance Framework within which Energy Performance Contracting and Renewable Energy Projects for Schools, Cambridgeshire County Council sites and buildings can be delivered.	<a href="http://www2.cambridgeshire.gov.uk/CommitteeMinutes/Committees/Meeting.aspx?meetingID=831">http://www2.cambridgeshire.gov.uk/CommitteeMinutes/Committees/Meeting.aspx?meetingID=831</a>
General Purposes Committee, 19 <sup>th</sup> May 2015, item 7: Review of Investment Principles for Energy Projects, Key decision	<a href="http://www2.cambridgeshire.gov.uk/CommitteeMinutes/Committees/Agendaltem.aspx?agendaltemID=11507">http://www2.cambridgeshire.gov.uk/CommitteeMinutes/Committees/Agendaltem.aspx?agendaltemID=11507</a>

**Appendix A: Target areas for energy projects across Cambridgeshire County Council assets**

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Asset Type	Investment Scale	Investment to date	Project Type	Projects underway	Pre-2016	2016	2017	2018	2019	2020
<b>Schools</b>										
240 schools (existing)	£10million	£5.1million	**EnPC	Yes						
10 new schools	£3million	0	Power purchase	No						
<b>CCC Buildings</b>										
Offices		£478,201	EnPC	Yes						
Libraries		incl in above	EnPC	Yes						
Catering Services			EnPC	No						
Community buildings			EnPC	No						
Children Centres			EnPC	No						
<b>Transport Assets</b>										
Park and Ride	Over £10million		Mini Smart Grids	Viability stage						
Guided busway	£1million		Solar PV/wind turbines	No						
Cycle ways	?		Solar paths?	No						
Highways land/verges	£2million		Solar	No						
<b>Farm Estate</b>										
Barns + farm buildings	Over £10million	£548,032	Solar PV	Yes see 1						
Land - Further five sites?	Over £10million	£9.59million	Solar PV/wind	Yes see 2						
<b>Other</b>										
Housing Company - land development	Over £10million		Energy Centres	No						
			Energy Centre and PPA	Planning app April 2016						
Milton Road Library			As above							
Barnwell Hub			As above							
Burwell homes			As above							
Cottenham homes			As above							
Addenbrookes homes										
Willingham, Shepreth and Littleton										
Soham			As above							
			Combined Heat and Power and district heating	No						
Waste to Energy - Amey	Over £20million									
Cespa	£66million	£15,716,233								
1 LGSS Estates have forty nine PV schemes registered										
2 12 MW Solar Park completion October 2016										
* Licensing arrangements will need to be in place to buy and sell energy										
** Energy Performance Contracting										