**Agenda Item No: 7**

**TRI-LEP LOCAL ENERGY INVESTMENT AND DELIVERY STRATEGY & OTHER STRATEGIC ENERGY INITIATIVES**

*To:* **Commercial and Investment Committee**

*Meeting Date:* **23rd March 2018**

*From:* **Graham Hughes, Executive Director, Place and Economy**

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

*Forward Plan ref:* **N/a** *Key decision:* **No**

*Purpose:* **To update Members on progress on the strategic energy initiatives that the Council is supporting and developing.**

*Recommendation:* **Members are asked:**

- **To note the development of a Tri-LEP Local Energy Investment and Delivery Strategy sponsored by the Department for Business, Energy and Industrial Strategy (BEIS)**
- **To note the setup of Regional Energy Hubs sponsored by BEIS from April 2018 to support the delivery of emerging Local Energy Investment and Delivery Strategies across the UK**

**Members are asked for in principle support**

- **To develop the concept for a network of smart energy grids, initially on the Council's park and ride sites, to support the electrification of transport across Cambridgeshire**
- **To scope the outline business cases for the initial projects identified in Appendix B under the recent REFIT 3 procurement**


| | ***Officer contact:*** | | ***Member contacts:*** |
|---|---|---|---|
| Name: | **Sheryl French** | Names: | Councillors Schumann and Hay |
| Post: | Project Director | Post: | Chair/Vice-Chair |
| Email: | sheryl.french@cambridgeshire.gov.uk | Email: | Joshua.schumann@hotmail.com<br>Anne.hay@cambridgeshire.gov.uk |
| Tel: | 01223 728552 | Tel: | 01223 706398 |

## 1. BACKGROUND

1.1 The UK energy model is evolving with increased diversity of technologies and relationships in the energy supply chain that is changing the traditional model of energy provision. This is creating challenges and opportunities that require a new strategic approach to our energy provision, a new approach is needed that will enable the energy system to sustain communities and support growth and the electrification of transport in a way which can benefit the whole economy.

1.2 UK Government's Industrial Strategy published in 2017 highlights several ways in which it supports clean energy development, and its role in our economy, including:

- Launching a new programme 'Prospering from the energy revolution' to develop world-leading local smart energy systems that deliver cheaper and cleaner energy across power, heating and transport, while creating high value jobs and export capabilities;

- Working with the energy sector to identify how it can support rapid adoption of Artificial Intelligence technologies at scale to support and lead the fourth industrial revolution;

- Developing UK leadership in low carbon transport and investing into innovation to develop clean technologies across road, rail, aviation and maritime transport; and

- Delivering affordable energy and keeping energy costs down for businesses through energy efficiency.

1.3 The Department for Business, Energy and Industrial Strategy (BEIS) published the Clean Growth Strategy on 12 October 2017 as a legal requirement of the Climate Change Act. This sets out the Government's proposals for decarbonising all sectors of the UK economy through the 2020s. The Clean Growth Strategy commits to growing our national income while cutting greenhouse gas emissions and tackling air quality. In addition it will drive the uptake of ultra-low emission vehicles including a rollout of electric vehicle (EV) charge points through a £1billion investment fund. A further £900 milliion of public funds will be invested in smart systems for energy storage, demand response technologies, new nuclear, and reducing the cost of renewables.

## 2. MAIN ISSUES

*2.1 Tri- LEP Local Energy Investment and Delivery Strategy*

2.2 In April 2017, BEIS commissioned the three Local Enterprise Partnerships (LEPs) in the East of England, Greater Cambridgeshire and Greater Peterborough, New Anglia and Hertfordshire to develop an area-based local energy strategy covering 38 local authority areas to support the implementation of the Industrial Strategy and the Clean Growth Strategy.

2.3 To underpin the strategy, a data platform has been collated to host information on energy demand, supply, generation, distribution and storage facilities across the tri-LEP area, overlaid with critical information that affect the energy system including:

- Grid power and gas networks and any constraints that may exist;
- Areas of projected housing and commercial growth;
- Development of electric charging infrastructure;
- Indices of fuel poverty; and
- Domestic and non-domestic electricity and gas consumption.

2.4 The strategy will be completed by May 2018 and once signed off by the three LEP Boards, will be presented to BEIS. Local Authorities in the area can endorse the final strategy which will set out actions to meet strategic aims under the following four themes:

- Housing Growth and Commercial Site Infrastructure;
- The shift to a non-gas domestic economy;
- The transition to an electricity and hydrogen transport system; and
- Affordable, secure, low carbon consumption in all sectors.

2.5 *Regional Energy Hubs*

2.6 In addition to the initial financial support for strategy development across the country, BEIS is looking to set up regional energy hubs to bring forward projects identified in the local strategies and delivery plan process. BEIS is proposing five energy hubs across England with one of the hubs covering the 11 LEPs in the Greater South East region, based in Cambridgeshire. The South East Energy Hub will receive £1.29 million for two years, from April 2018. The Greater Cambridgeshire Greater Peterborough LEP will act as the lead LEP operating and managing the Hub. A team of eight dedicated, technical staff will work with the different local authorities on strategic projects to deliver the changes to our energy system to ensure a thriving a modern economy.

2.7 *Initial concept for a network of Smart Energy Grids on Park and Ride & other sites*

2.8 The challenges of local air quality and the electrification of public and other transport require new innovative energy solutions. The Greater Cambridge area is a particular challenge owing to a heavily constrained local electricity distribution network.

Smart Energy Grids are a potential solution to the local grid challenges as these allow renewable energy generation and battery storage to be delivered without the need for expensive upstream grid reinforcements. Building on the learning developed at St Ives park and ride, the concept for a network of smart energy grids is being developed connected to interval electricity charging on key public transport routes. Initial proposals cover the Greater Cambridge area, please see **Appendix A**, but the idea is to extend this concept more broadly across Cambridgeshire.

*2.9 Pipeline of Energy Projects under development*

2.10 During 2017 a procurement using the Refit 3 Framework was undertaken to appoint a service provider to design and construct energy performance projects for the Council. Bouygues Energies and Services Ltd (BES Ltd) were appointed 1st November 2017 under

the Refit 3 Framework. BES Ltd bring valuable energy engineering, design, and construction skills to support the development and delivery of projects.

Projects currently being scoped to identify outline business cases include:

- Solar and battery storage for five landfill sites in partnership with the Waste Management Team;
- A 3MW battery storage project in partnership with the Farm Estates Team;
- Smart Energy Grids for Trumpington and Babraham Park and Rides in partnership with the Park and Ride team; and
- A pipeline of over twenty school projects.

Please see **Appendix B** for the range of projects in the pipeline.

## 3. ALIGNMENT WITH CORPORATE PRIORITIES

### 3.1 Developing the local economy for the benefit of all

The strategic energy initiatives and projects will benefit the local economy through building a local energy market, unlocking clean growth and developing skills and high quality jobs locally.

### 3.2 Helping people live healthy and independent lives

All the energy initiatives are looking to reduce greenhouse gas emissions and improve air quality leading to better health for all.

### 3.3 Supporting and protecting vulnerable people

Without a strong focus on upgrading our energy infrastructure and developing local energy markets the cost of energy will become unaffordable putting more homes and people into fuel poverty.

## 4. SIGNIFICANT IMPLICATIONS

### 4.1.1 Resource Implications

The development of the Local Energy Investment and Delivery Strategy along with the concept for a network of Smart Energy Grids and other energy projects will reduce carbon emissions, improve air quality and promote sustainable energy generation and consumption.

### 4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications.

### 4.3 Statutory, Legal and Risk Implications

There are no significant implications at this point.

### 4.4 Equality and Diversity Implications

There are no significant implications.

### 4.5 Engagement and Communications Implications

Over 200 stakeholders attended an event on 26th February 2018 on the development of the Tri-LEP Local Energy Investment and Delivery Strategy. In addition a number of workshops have been run to engage Local Authorities in the development of the evidence base, key themes and issues for the strategy.

Discussions on the initial concept for a network of Smart Energy Grids have been undertaken internally including the Park and Ride and Connecting Cambridgeshire teams. In addition the concept has been shared with the Greater Cambridge Partnership and officers at the Combined Authority.

Public engagement meetings will be held at Trumpington Park and Ride, 07.30-09.30am on Monday 19th and 20th March 2018 to discuss the concept ideas for a Smart Energy Grid on the site. Local residents and businesses will be invited to attend the sessions alongside discussions with park and ride users. This will help gather data and start a dialogue on the Smart Energy Grid concept.

### 4.6 Localism and Local Member Involvement

Sharing the strategic energy initiatives and emerging energy projects with Members at this early stage will help build understanding of our future energy challenges. This provides the opportunity for Members to start conversations in their communities and seek new ideas and solutions from our communities to bring forward innovation.

### 4.7 Public Health Implications

The strategic energy initiatives will help mitigate climate change and bring air quality benefits for our communities.

| Source Documents | Location |
|---|---|
| Industrial Strategy – Building a Britain Fit for the Future, 2017 | https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf |
| The Clean Growth Strategy, 2017- Leading the way to a low carbon future | https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/651916/BEIS_The_Clean_Growth_online_12.10.17.pdf |

| Implications | Officer Clearance |
|---|---|
| | |
| **Have the resource implications been cleared by Finance?** | Yes<br>Name of Financial Officer: Sarah Heywood |
| | |
| **Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?** | Yes<br>Name of Officer: Paul White |
| | |
| **Has the impact on statutory, legal and risk implications been cleared by LGSS Law?** | Yes<br>Name of Legal Officer: Debbie Carter-Hughes |
| | |
| **Have the equality and diversity implications been cleared by your Service Contact?** | Yes<br>Name of Officer: Tamar Oviatt-Ham |
| | |
| **Have any engagement and communication implications been cleared by Communications?** | Yes<br>Name of Officer: Jo Shilton |
| | |
| **Have any localism and Local Member involvement issues been cleared by your Service Contact?** | Yes<br>Name of Officer: Tamar Oviatt-Ham |
| | |
| **Have any Public Health implications been cleared by Public Health** | Yes<br>Name of Officer: Iain Green |

## Appendix A: Initial Concept for a network of Smart Energy Grids