Subject: Local Energy East Strategy

Report to: Economic Development Committee - 16 July 2018

Report by: Director of Development, Great Yarmouth Borough Council

SUBJECT MATTER

In early 2017, the Department for Business, Energy and Industrial Strategy (BEIS) invited Local Enterprise Partnerships to produce a Local Energy Strategy, building on the work that had begun locally in the Strategic Economic Plans (SEPs) and other local strategies and initiatives.

Local Energy East (LEE) is a partnership covering three Local Enterprise Partnership (LEP) areas of Cambridgeshire and Peterborough, Hertfordshire, and New Anglia (Norfolk and Suffolk) collectively known as the 'LEE area'.

Over the past year LEE worked with a range of stakeholders and experts to develop this Local Energy East Strategy. Over 400 people representing over 50 regional organisations have been engaged to ensure that the objectives and actions have been developed and co-designed with a wide range of partners.

RECOMMENDATIONS: Members are asked to:

- a) Endorse the Local Energy East Strategy;
- b) Note the responses to the questions on the Delivery Plan submitted by officers; and
- c) Note and comment on the main opportunity areas there could be for the Council and companies of the Borough to exploit in the delivery of the Strategy.

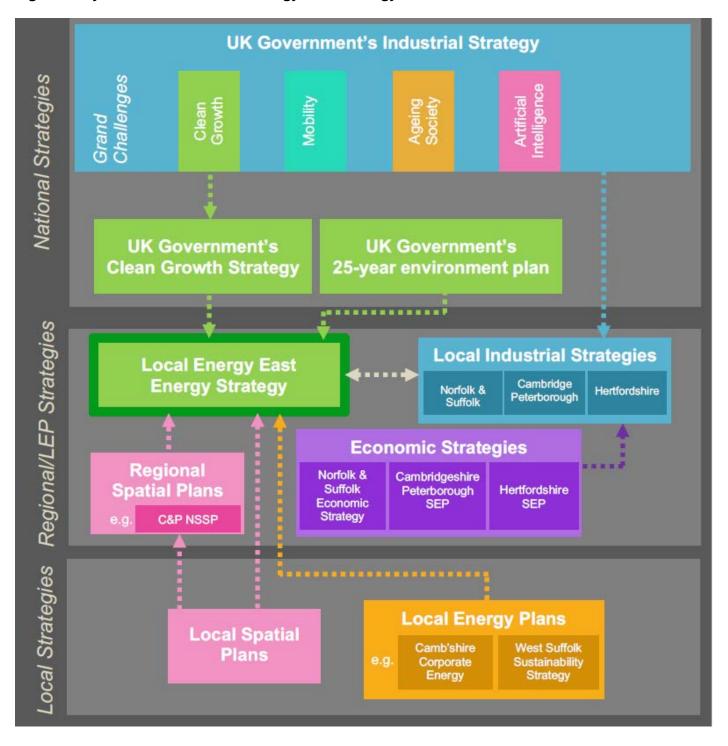
1. INTRODUCTION/BACKGROUND

- 1.1 The Department for Business, Energy and Industrial Strategy (BEIS) invited, in 2017, Local Enterprise Partnerships (LEPs) to produce Local Energy Strategies, building on the work that had begun locally in the Strategic Economic Plans (SEPs) and other local strategies and initiatives.
- 1.2 Since April 2017, New Anglia, Greater Cambridge Greater Peterborough (and later the Cambridge Peterborough Combined Authority) and Hertfordshire LEPs (known as Local Energy East) have been working together to research, map, analyse and co-design a Local Energy Strategy for the combined area, funded by BEIS. The project delivery team comprises a wide range of more than 50 different partners, and has produced, with consultants, a draft Strategy (http://cambridgeshirepeterborough-ca.gov.uk/assets/Uploads/2.3-Appx-1-Local-Energy-East-Strategy-updated.pdf) which considers both local and regional matters which are inhibiting growth.
- 1.3 The Strategy sets out the collective ambitions to 2030 underpinned by a range of activities that the LEE Network and the Local Energy Hub will take forward to ensure that they remain at the forefront of "Clean Growth" in the UK and grasp the opportunities ahead.
- 1.4 All Local Authorities in Norfolk and Suffolk have been asked, by the New Anglia LEP to formally endorse the Strategy by 3 July 2018. The Council has secured an extension of time so as to allow the Economic Development Committee to formally endorse the Strategy at this meeting on 16 July 2018.
- 1.5 A series of questions have also been asked of Local Authorities, seeking feedback on the Strategy, which will support the delivery planning phase after the official launch of the Strategy.

2. BODY OF REPORT

2.1 The tri-LEP Local Energy East Project, as one of the first in the country, has positioned the region well to be chosen to lead on the Local Energy Hub for the Greater South East area covering the East of England, the South East and Greater London. The Local Energy Strategy, and its respective evidence base, will form part of the starting point for the Energy Hub's activities to unblock current challenges and capitalise on local energy generation, storage, distribution and supply opportunities. Figure 1 shows the broader policy context which the Strategy sits within:

Fig. 1 Policy Context of the Local Energy East Strategy



2.2 A summary of the main themes and elements of the Strategy are included in Appendix A, but the main headings are: Clean economic growth; Housing growth and commercial site infrastructure; Secure, local, affordable, low-carbon consumption; and Clean transport networks.

- 2.3 Clearly, Great Yarmouth Borough already plays an important and growing role in clean energy production, with the strength of the offshore wind sector and supply chain in particular well known. The core aims of the Strategy are therefore aligned with the Borough's wider aims of capitalising further on Great Yarmouth's status as England's offshore energy capital.
- 2.4 In responding to the questions asked through the consultation (see Appendix B), officers have noted the strengths of the Borough, have expressed the Council's interest in potentially taking part in any trial projects (perhaps on rural electric vehicle charging points, for example). Any opportunities for local energy supply companies to be set up perhaps working with Equinox, the Council's own housing company might also bring benefits.
- 2.5 A delivery-planning and target-setting phase will be entered into next, with the responses from the councils and other partners to the questions taken into account. There will therefore need to be continued involvement from the Council over time in the evolution and delivery of the Strategy's key aims and objectives. As stated above, there are likely to be some good opportunities for the Council, and local companies and bodies, to be at the forefront of some exciting initiatives to deliver cleaner, greener growth.
- 2.6 The Committee is therefore asked to note the response made by officers to the Strategy's questions in June 2018, endorse the Strategy itself, and comment on potential opportunities for the Council, and Borough more generally, to get involved in the implementation and delivery of the Strategy.

3. FINANCIAL IMPLICATIONS

3.1 None at present, but the longer-term benefits to the Council and Borough could see higher levels of (clean) economic growth, boosting prosperity locally and regionally.

4. RISK IMPLICATIONS

4.1 No significant risks at present. Any more detailed involvement in later specific projects would need to be considered on a case-by-case basis. The main risk is considered to **not** engage fully in clean energy growth, as this is clearly the direction of travel globally, nationally and regionally; other Councils, if fleeter of foot, may have the opportunity to trial exciting initiatives that might have been of particular relevance and benefits to the Borough.

5. CONCLUSIONS

5.1 The Local Energy East Strategy offers real opportunities for the Council, and Borough, to build on the existing strengths in the energy industry, and particularly the offshore wind sector. For this reason, it is recommended that the Strategy is endorsed, and that the Council looks to be actively involved in the development of initiatives of particular relevance and benefit to the Borough.

6. RECOMMENDATIONS

Members are asked to:

- a) Endorse the Local Energy East Strategy;
- b) Note the responses to the questions on the Delivery Plan submitted by officers; and
- c) Note and comment on the main opportunity areas there could be for the Council and companies of the Borough to exploit in the delivery of the Strategy.

7. BACKGROUND PAPERS

Attached:

Local Energy East Strategy May 2018 on CMIS (weblink at http://cambridgeshirepeterborough-ca.gov.uk/assets/Uploads/2.3-Appx-1-Local-Energy-East-Strategy-updated.pdf)

- LEE Mapping Analysis Report (see link on CMIS)
- Officers' Response to Feedback Survey (Appendix B)

Areas of consideration: e.g. does this report raise any of the following issues and if so how have these been considered/mitigated against?

Area for consideration	Comment
Monitoring Officer Consultation:	No issues
Section 151 Officer Consultation:	No issues
Existing Council Policies:	Corporate Plan: Economic Growth and Neighborhoods, Communities and the Environment, Transport and Infrastructure
Financial Implications (including	None at present
VAT and tax):	
Legal Implications (including human	No issues – this is not a legally required document
rights):	
Risk Implications:	Limited at this stage – see the body of the report
Equality Issues/EQIA assessment:	No issues
Crime & Disorder:	No issues
Every Child Matters:	No issues

Appendix A – Local Energy East Strategy details

The following themes that are the basis for the Strategy (edited highlights are below):

- A1 Clean Economic Growth (over-arching) to support growth in the local energy sector, ensure local people benefit from the employment opportunities this creates, and to support the transfer of the benefits of new energy technologies across sectors as part of our wider drive to boost productivity.
- A2 To meet these challenges and opportunities, the LEE proposes to:
 - Build on existing centres of excellence and develop new ones that support sectoral growth. The partners will work with BEIS to develop a renewable energy office based in the LEE area;
 - Build on existing supply chain initiatives in order to promote opportunities for SMEs in the renewables sector;
 - Support sector funding through initiatives like the University of East Anglia's Low Carbon Innovation Fund (LCIF);
 - Support networking across the sector through initiatives like Cambridge Cleantech, and existing networks like Orbis Energy and EEEGr;
 - Invest in infrastructure needed to support the energy sector. This includes working with Highways England and local planning authorities to develop key transport links for example, dualling of the A47 and A12.
- A3 The Local Energy East Strategy organisations will:
 - Work with education providers, industry and training centres to ensure relevant training needs are met:
 - Work with schools, colleges, university and businesses to ensure that a clear pathway into the offshore energy sector is defined, as the government rolls out the new T-levels; and
 - Develop in partnership with industry and education providers a higher technical engineering offer.

- A4 **Housing growth and commercial site infrastructure** to work with UKPN (UK Power Networks) and partners to ensure that the grid enables the region's housing and commercial development ambitions and to support new smart grid systems.
- A5 In addressing these challenges the LEE proposes to:
 - Work with UKPN and the National Grid to consider how the current regulatory system can be improved in order that DNOs are able to provide necessary infrastructure investment up-front and make representations on this to Government;
 - Make use of national funds to address site-based infrastructure issues. In particular, we will support and lead on Housing Infrastructure Fund (HIF) bids that deliver energy infrastructure to support site development;
 - Work across the LEPs and local planning authorities to consider how a dedicated revolving fund can be used to address these and other site-based issues that prevent or slow development.
- A6 In order to advance the roll-out and adoption of decentralised energy networks the LEE proposes to:
 - Support localised pilots of decentralised energy generation and distribution.
 - Work with planning authorities and developers to encourage the development of "smart energy" grids as islands with the longer aim to connect these smart energy islands together, thus growing the energy system with smart technologies;
 - Develop smart grid programmes within existing business and residential communities located in highly constrained areas of thee power network;
 - Work with local partners, including local authorities and business, to develop bids for funding to help develop innovative solutions to grid capacity constraints in order to unlock growth, for example Innovate UK funding linked to the Industrial Strategy Challenge Fund and future rounds of the Housing Infrastructure Fund;
 - Explore local peer-to-peer trading of generation and consumption capacity to reduce network imbalances, the need for re-enforcement and to retain local value;
 - Work with planning authorities and others to bring forward heat networks.
- A7 **Secure, local, affordable, low-carbon consumption** to work to increase energy efficiency and improve energy affordability; reducing fuel poverty; and to work to reduce carbon emissions and improve air quality.
- A8 Therefore, to address fuel poverty the following activities could be considered by the LEE Network of organisations:
 - Bid for available Government funding that addresses fuel poverty;
 - Support improved energy efficiency measures;
 - Support community scale energy schemes as part of new developments where these are commercially viable:
 - Develop local time-of-use tariffs and feasible smart metering to allow consumers benefit from changing their consumption behaviours:
 - Support more equitable tariffs for vulnerable householders on pre-payment meters;
 - Develop off-gas grid low carbon heating projects in rural areas;
 - Work with planning authority partners to review mechanisms to either ensure high levels of energy efficiency/carbon reduction as standard in new development and/or to raise money for retrofitting activities.
 - Work with planning authorities to develop robust planning policies targeting energy performance across all sectors of development (housing, commercial development, transportation and other infrastructure) to achieve carbon emissions reductions targets;
 - Consider a pilot programme to invest in energy efficiency that also supports fuel poverty aims;
 - Sustainable transport-related action not about EV change the tenure model for ownership to point of use hire, e.g. car clubs, logistics sharing.
- A9 **Clean transport networks** the transition to electric vehicles (EVs) will be supported, as will behavioural change and modal shift that improves transport sustainability.

Therefore, the Local Energy East organisations will:

- Work with partners to support and finance the installation of EV charging points at strategic locations, where people visit regularly and for a sufficient amount of time to charge, such as supermarkets, places of employment, and town centres;
- Work with planning authorities to encourage the installation of charging points in new homes where feasible (and associated grid reinforcement activities) and collaborate with employers to install EV charging points in staff car parks. Car clubs with shared electric vehicles and charging bays will also be supported;
- Support the work of Highways England to install EV charging points on the strategic road network, building on local partners' existing work in this area;
- A10 Local Energy Strategy is very strongly aligned with the economic and emissions reductions aims and methods of both the Industrial Strategy and the Clean Growth Strategy.

Success will only be achieved if all partners play their role in delivering the strategy. It will be delivered through actions taken by a wide range of local partners, through new delivery models to enable distributed energy generation and supply; and be supported by innovative funding models to enable the investment our infrastructure needs.

Appendix B – Officers' response to the Strategy Consultation

Local Energy East Strategy

Feedback questions to aide delivery planning

The following questions have been designed to gain further insight from your organisation that will be taken into consideration when planning wider engagement and designing the delivery planning and target setting phase as described in chapter 8, Future Work. You need not answer any or all of the 15 questions specifically but the Local Energy East Project Team are keen to understand your organisation's views on these specific aspects of the strategy.

Great Yarmouth Borough Council's answers – 18th June 2018

Chapter 4. Clean Economic Growth

- 1. Where should investment be targeted to most effectively boost clean economic growth?
 - Tight gas will remain a relatively clean and important component of the energy mix into the 2030s. Shell upgrading their Bacton facility shows their confidence in this being so.
 - o Initiatives should not wholly focus on renewables
 - Sometimes the incentives in current LEP run grant schemes are mixed
 - Grants based on efficiency gains through capital investment often stipulate the need for extra employment
 - o Increase access to grants that target capital investment with fewer stipulations
 - Clean economic growth should be targeted most at areas which are proximal to sources of renewable energy generation or transportation (such as Great Yarmouth), with a focus also on areas of more significant growth, where (for example) the infrastructure for the generation and/or use of clean energy can be designed and planned in advance. See para 5.20
 - Areas with a shortage of available capacity could also be prioritised
 - Longer-term projects should be developed to extend clean energy networks to more remote market towns and rural areas. Case studies and exemplars should be sought for this
- 2. How can career pathways into the energy industry be better defined and understood, to ensure local colleges equip young people with the skills to enter these industries?
 - University of East Anglia needs an Engineering School. (point 4.16)
 - o It currently offers a BEng and MEng but within the Maths department
 - Will consider an independent school when student numbers reach 100
 - This will allow a better defined profile for the discipline

The East of England Skills for Energy Campus represents the Easts collective and collaborative response to providing the right environment and skills for our all energy sector to flourish and grow. It should be given the resource to help leverage the combined efforts on:

- New Anglia Energy Sector Skills Plan aligning public and private sector resources dedicated to skills around clearly articulated joint priorities
- The East of England Offshore Wind Skills Centre an industry led, collaborative project delivering an enhanced range of accredited training in Great Yarmouth harnessing the strengths of four regional training providers into a single, comprehensive and easy to access facility
- Eastern Institute of Technology the proposal, now at the final stage, is an ambitious and innovative solution specialising in providing a high quality collaborative energy/engineering offer
- Skills for Energy (EEEGR) an industry led collaboration focussed on delivering skilled people and ensuring the existing workforce continues to meet the industry's needs
- £11m new Energy & Engineering Skills Centre in Lowestoft
- 3. What examples are there already of cross disciplinary or cross sector working that is boosting growth and productivity or reducing energy consumption?
 - Use of solar panels on Normally –Unmanned-Installations (NUIs) in the Southern North Sea is a visually powerful metaphor
 - "Walk to Work" vessels developed out of offshore oil/gas but work also in offshore wind.

Chapter 5. Housing growth and commercial sites infrastructure

- 4. Where are there energy constraints hindering developments?
 - This has not been a particular problem in Great Yarmouth borough, but the wider challenges in Greater Norwich, Cambridge etc are recognised
- 5. What changes to the regulatory system could make it more conducive to energy capacity leading development, not lagging behind it?
 - The report highlights the difficulties there have been, and are, in working with UKPN to plan for the delivery of future development sites and ensure that sufficient energy is available. Up-front investment from UKPN is critical to help demonstrate to potential developers that power availability will not be an issue hindering growth boosting confidences and certainty is vital when the housing market is not as robust as would be ideal
 - Regularity changes should include requiring much easier availability of information on current and future power availability to all who want it, updated regularly on companies' websites.
 - Power companies (as other utility companies) should also be required to work on an ongoing basis
 and agree and sign a Memorandum of Co-operation with councils producing Local Plans, which
 would provide greater confidence that the infrastructure (power) needs of future planned
 developments are understood, and will be able to met in a timely way
- 6. To what extent could innovative models, like a development corporation, a Multi- Service Utility Company (MUSCo) and smart grids, transform energy provision in the area? What consequences need to be considered in making these decisions?
 - These innovative models offer considerable potential. CHP networks, decentralised grids and
 greater take-up of large battery storage all offer real opportunities for boosting energy provision.
 Strategic Plans, or joint Local Plans (such as in Greater Norwich), should be the main vehicles for
 identifying opportunities for innovative models (particularly in larger-scale allocations)
 - A key point in these, as ever, is the temptation for them to be rolled out first in high-growth areas, such as Cambridge, with more rural areas often being the last to benefit. The Scilly Isles example shows how this can be achieved in more challenging scenarios. Great Yarmouth BC would be very happy to support a local pilot (or too) in the area

Chapter 6. Secure, affordable, low-carbon consumption

7. What are the most effective ways to tackle fuel poverty? How can we ensure that electrification of heat

doesn't lead to more individuals in fuel poverty?

- Post Brexit, U.K. likely to be outside of the VAT Directive (even in the soft-Brexit scenarios)
- 5% VAT, currently the legal minimum under the directive, can be abolished or offset for the poorest.

8. How can we incentivise the building of more energy efficient homes and transform the existing housing stock?

- Not only about materials density is efficient
- Better fiscal incentives to bring urban land to its highest and best use (which is what the draft revised NPPF is seeking for areas close to major transport hubs)
- Part L (Regulation 28) of the Building Regulations requires "consequential improvements" to energy efficiency of existing buildings which are being changed/extended (more efficient windows, upgrade heating system, on-site energy generation etc). Broadly, consequential improvements must be at least 10% of the value of the improvement works (e.g. £5,000 in a £50,000 project). At present, this applies only to non-residential dwellings. Extending it to residential dwellings would assist enormously in improving the energy efficiency of existing stock, given the increase in permitted development rights and the cost of moving (stamp duty etc) means that people are moving house much less often now, choosing to extend/improve instead
- Phasing out more inefficient lighting/bulb systems in favour of things like LED bulbs would also help

9. What role could a locally owned energy supply company play in keeping down energy tariffs?

- Local energy companies are to be encouraged, either as cooperatives or at the municipal level
 - o Changes economic incentives
 - Residents and local authorities can invest and derive dividends from successful venture
 - More self-reliant communities and the efficiencies gained by local power generation (8-15% is lost in transmission) should bear down on the prices offered by the established market actors.
- Look to Germany for examples

Chapter 7. Clean transport networks

10. How can we ensure that distribution of charging points does not discriminate against rural populations?

- The best way of doing this is to roll out the use of very large batteries (such as lithium-ion), the storage capacity of which is increasingly very quickly as technology improves. Allied to solar panel technology to keep the batteries charged, and the kind of technology used to run bike-share schemes such as Ofo (using apps to unlock bikes), these could become installed at the roadside at a variety of locations (supermarket car-parks, petrol stations, car-parks, village halls, lay-bys etc), with people "logging in" to plug in and recharge
- They could also be required to be provided as part of all new developments over a certain(small) size, such as 5 dwellings, through changes to national and/or local planning policy

11. What examples are there of changing behaviours towards less damaging means of transport? How can best practice be rolled out across the region?

- Copenhagen, Rotterdam etc are good examples of enhanced levels of urban cycling, with dedicated cycle networks
- Safer town and city centres can make people more likely to walk (e.g. New York City)
- Improved reliability of public transport provision is very important, with "turn up and ride" frequency also the ideal scenario (although it is recognised that this is impractical for more rural areas)
- The use of a "carnet" ticket system is common on buses, but not yet on trains, which militates against the greater use of trains by those who would not/could not use them every day (in essence, it makes train travel very expensive compared to buses, particularly "turn up and go" prices). Rolling

out Oyster ticket-type approach across public transport more generally in England will clearly happen at some point in the future, and the sooner it does, the better. Bigger settlements and subregions (Norwich, Cambridge, Ipswich etc) would logically be the starting point for rollout, but this should be a national priority

- 12. Should EV charging point installation be primarily market led or should local authorities and sector organisations support the transition more actively?
 - They should be primarily public-sector led with the technology and take-up still in its infancy. As the technology emerges, and costs fall, the market will naturally take over

General questions

- 14. Does your organisation have any additional case studies of relevance to the objectives of this strategy that could be referenced as best practice or an area of critical importance for the delivery planning activities?
 - There are not any further case studies in Great Yarmouth Borough that would be of value. However, the expansion of the offshore industry and supply chain in Great Yarmouth will likely see significant growth in employment and housing (for example, a 10 hectare expansion of Beacon Business Park in Gorleston is planned and allocated in the Local Plan).
- 15. How could your organisation contribute locally to the delivery of the Strategy delivery priority activities?
 - The Council offers its willingness to be involved in relevant pilot projects across any areas. In particular, the Council's wholly-owned housing company, Equinox, is looking to take forward development on a number of Council-owned landholdings, so offers the opportunity to consider pilot projects (such as decentralised energy, smart grids etc)
 - The Council will also continue to work closely with clean energy companies who are already very active in Great Yarmouth (such as Siemens, Vattenfall and Ørsted) to try to involve them in clean energy initiatives relevant to the Strategy
- 16. What do you think should be the delivery priorities over the next three years?
 - The development of a local energy market should be a major priority, with the clean energy component particularly important
 - Improving air quality is vital, particularly in major urban areas the reduction in the use of diesel
 engines in particular, and the move to alternative fuels and electric vehicles should be advanced yet
 further
 - Having a clearer and agreed strategy for working with UKPN to deliver certainty of the future availability of power for new development is key