

# Southend-on-Sea Borough Council

Agenda  
Item No.

Report of the Deputy Chief Executive (Place)

To  
Cabinet

On 7 November 2017

Report prepared by  
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## Low Carbon Energy and Sustainability Strategy 2015-2020 Annual Update Report

Place Scrutiny Committee

Executive Councillor: Councillor Holland

*A Part 1 Public Agenda Item*

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### 1. Purpose of Report

- 1.1. To consider Southend on Sea Borough Council's ('the Council') Low Carbon Energy and Sustainability Strategy 2015-2020, Annual Update Report

### 2. Recommendations

- 2.1 That Members agree the Low Carbon Energy and Sustainability Strategy updated Annual Report.

### 3. Background

- 3.1 In 2015 the Council adopted its Low Carbon Energy and Sustainability Strategy (LCESS), which looked to identify opportunities available to the Council through the growth in the low carbon and environmental sector and the risks from issues including rising energy prices and impacts of climate change on the Borough.
- 3.2 The LCESS covers a five year period and has the overriding objective of establishing Southend on Sea as a 'Low Carbon City' by 2020. The aims and objectives of the second strategy are more ambitious than its predecessor and has identified six key focus areas to target delivery upon:

Focus Area One: Reducing our Carbon Emissions;

Focus Area Two: Policy and Regulation;

Focus Area Three: Delivering a Local Low Carbon Economy;

Focus Area Four: Supporting Low Carbon Communities;

Focus Area Five: Encouraging Sustainable Transport and Travel; And

Focus Area Six: Adapting to Climate Change

- 3.3 Within LCESS, the Council committed to publishing an Annual Update Report, attached, which highlights achievements to date and is one of the first local authorities in England to make this commitment.
- 3.4 LCESS is supported through an Action Plan in the form of Forward Actions outlined in this report.
- 3.5 LCESS was drafted to demonstrate the Council's commitment to establishing Southend on Sea as a low carbon, smart city and provide opportunities to seek external funding to support the delivery of projects across the six key focus areas of the Strategy.

#### **4. Major Achievements**

- 4.1. Over the 30 months of the strategy to date, the Council has progressed with projects totalling over £19m which are progressing through to complete delivery. On completion, these projects will have saved approximately 3,500 tonnes CO2 each year and provided revenue and savings to the Council of £700k each year net of the costs of delivery, funding and repayment of capital. These projects include LED street lighting, pilot projects at Southend Adult Community College, and Temple Sutton Primary School, over 1.3MW solar on various sites and energy efficiency projects on Council properties.
- 4.2. In most cases, delivery of projects has involved creating processes to facilitate faster and easier delivery of future projects
- 4.3. Southend Energy was launched in May 2015 and has delivered average savings of £250 per household per year taking up the offer, with over 5,700 customers signing up by the middle of September 2017, 8.1% of the households in Southend. Overall, £1.5m savings have been achieved. In addition, the environmental policy within the Southend Energy tariff has saved a further 1,350 tonnes CO2.
- 4.4. The Council has joined and launched the Local Energy Advice Programme, an energy industry initiative that provides free energy advice visits for vulnerable residents. Since launch in July 2017, 113 households have been referred with 63 visits completed saving over £54k, an average of £867 per visit, from energy savings and income maximisation. 400 referrals are targeted in 2017/18 and a further 400+ will be expected in 2018/19.
- 4.5. Working with the Environment Agency (EA) and many departments and external agencies, the Council ran a successful project (TASC) to identify in more detail the likely impacts of climate change locally. This information is now being used to inform projects such as the Queensway Development, Health initiatives, Planning, Coastal Defence, Smart Cities and the Future Actions for LCESS.
- 4.6. Working through EA, Green Investment Bank and other agencies, has established the Council as a leader in development of finance packages, climate change and energy development. These lessons are being

disseminated through invitations to speak at conferences and through working with other Councils on funding bids.

- 4.7. The Council has won funding (SPONGE 2020) from the EU to develop Sustainable Drainage (SuDs) projects to grow internal capability and to find ways to address flooding issues with the Borough. The Council is working closely with Anglian Water on increasing the use of SuDs, on innovative sensing and measurement approaches and ways to better predict and manage excess water and flooding issues and links to the developing Southend Intelligence Hub.
- 4.8. The Council has won funding from the EU to develop a behavioural change energy saving programme for schools working with German, Belgian, Dutch and Danish partners. The 2IMPRESZ project will target 15% savings in 141 schools of which 20 will be in Southend with a view to creating a sustainable business that can be developed further.
- 4.9. The energy and sustainability team has been funded through a £200k allocation from reserves which is to be repaid. The funding has already generated in excess of £200k in direct revenue and recharges within projects delivered although much of the revenue is spread over a 5-year period.

## **5. Future Actions**

- 5.1. A number of projects, funding bids and energy projects are proposed to move the strategy towards delivery. The energy market is subject to enormous change and innovation and many projects are becoming possible due to this change. At the same time, incentive and funding regimes are constantly changing as the market and government policy develops. These projects include solar PV and energy efficiency opportunities and will contribute both carbon reduction and savings for the Council net of funding and implementation cost.
- 5.2. The Council is working to implement a programme of standards for energy generation and storage to help households to cut their costs for energy but also to start to tackle some of the long term threats to energy supply. The solutions developed will be linked into the developing grid rebalancing market allowing peaks and troughs within the energy market to be used to provide savings and revenue both for residents and the Council.
- 5.3. To start to address local resilience issues and to exploit the developing energy storage market, the Council is bidding on funding opportunities and is investigating opportunities to provide a solar PV and battery package for residents.
- 5.4. The Council continues to develop innovative solutions to energy and water management including investigating innovative opportunities to generate energy from tidal and wave power on the Pier, potential innovative wind energy solutions that are quieter and less visually intrusive than traditional turbines and further ways to better manage surface water and drainage where interfacing systems are managed by multiple agencies including the Council. New innovations will be monitored and exploited when they provide more

appropriate solutions than traditional methods. The Council will continue to work with Anglian Water on the current flood risks and to extend initiatives to deal with the expected increased flooding risk from climate change.

- 5.5. The Council will continue to work to find ways to reduce energy costs for residents both by expanding Southend Energy and other mechanisms including the Big Essex Energy Switch to encourage supplier switching but also by working through the redesigned Energy Company Obligation (ECO) scheme to target hard to heat homes and those who are struggling to afford their energy costs.
- 5.6. The Council will continue to manage LCESS through a self-funding team balancing wider strategic understanding of climate change and development of adaptation measures with projects that yield tangible benefits to the Council net of costs of implementation and funding.

## **6. Reasons for Recommendations**

- 6.1 The recommendations have been made in order to continue to position the Council as a leading local authority in the East of England with regards to the UK's transition to the low carbon economy. Successful implementation of the new strategy will provide the Council with the opportunity to establish new funding streams (including EU funding bids), efficiency savings and revenue sources (including money generated through renewable energy installations).
- 6.2 The Strategy continues to provide an excellent opportunity for the Council to make a real contribution in delivering local objectives around health and well-being, housing, fuel poverty, air quality, transport, education, economic development and community cohesion.

## **7. Corporate Implications**

### **7.1 Contribution to Council's Vision & Corporate Priorities**

The measures listed above are in line with the Corporate Priorities and also the Council's vision in terms of becoming an exemplar authority by developing best practice and supporting the Council's vision to become a city and support the regeneration of the Borough.

### **7.2. Financial Implications**

- 7.2.1 A major objective of the Low Carbon and Sustainability Strategy 2015-2020 is to help the Council safeguard against rising energy costs, make efficiency savings and explore new revenue generation models at a time of public sector cutbacks.
- 7.2.2. The new Strategy identifies low carbon and renewable projects that will mostly be 'cash positive' from year one across both the Council's property estate and from utilising assets throughout the Borough. The Council will need to consider funding the projects through private sector suppliers and Energy Service Companies (ESCos), the Public Works Loan Board, existing capital works programmes, a variety of European schemes (Horizon 2020, Life, Interreg), the European Investment Bank and the Green Investment Bank.

- 7.2.3. Currently no council funding is contained within the existing capital or revenue budgets for any new identified projects in this strategy beyond those approved in the Council's current revenue and capital budget. If any projects require Council funding they will need to be considered as individual projects as part of the annual budget process in determining annual Revenue and Capital budgets.
- 7.2.4. Projects are expected to deliver a financial return of between 1-3% each year net of all costs of capital repayment, interest and project implementation including the £200k referred in 7.2.5. To date, in excess of 700k is projected as net financial return from £17.8m projects both completed and in progress, a net return of 4%. These projects include the LED street lighting conversion, solar PV, biomass and energy efficiency in schools and in Council buildings. Over 3,800 tCO<sub>2</sub> will be eliminated each year by these projects on completion.
- 7.2.5. The current team is mainly funded from earmarked reserves of £200k over 2 years with the current approved funding expiring on 31 March 2019. More than £200k has already been generated in direct revenue and salary charges to projects in order to repay the current and previous allocations and continued funding needs to be considered as part of the forthcoming budget process with the intention of the whole LCESS being cash neutral in terms of delivery resources. Applications are being made to UK and EU funding sources to fund the team without the self-funding mechanism and the team will seek additional revenue generation using its established position with other Local Authorities.

### **7.3. Legal Implications**

- 7.3.1 The Low Carbon Energy and Sustainability Strategy 2015-2020 complies with the Climate Change Act 2008 and Carbon Reduction Commitment Energy Efficiency Scheme and supports the UK's targets for energy generated from renewable sources.

### **7.4 People Implications**

- 7.4.1. The Council will need to maintain the team to deliver the pipeline of low carbon and renewable projects, but this will depend on the scale of the projects that the Council undertake. Most of the costs of staffing projects can be paid from the cost savings and money generated from energy efficiency and renewable generation returns combined with direct revenue generation but there will be some pre-project work and costs which will be more difficult to fund in this way for which budget funding for work such as feasibility will be sought.
- 7.4.2. The team managing and developing LCESS are on short term contracts which expire on 31 March 2019.

### **7.5 Property Implications**

- 7.5.1. The Council will need to continue working in a coordinated fashion to ensure that priority projects are delivered.

## **7.6 Consultation**

- 7.6.1. The Council has established a close working relationship with Imperial College one of the leading academic institutions in the energy market and has sought input from a number of organisations based within the low carbon and environmental sector – including Sustainability East, the Energy Saving Trust Environment Agency, BEIS - they have also consulted with local groups (e.g. Trustlinks) and with relevant departments from within the Council. The individual sections within the strategy and the annual report have been drafted by the responsible teams and managers, so already reflects existing Council activities.

## **7.7 Equalities and Diversity Implications**

- 7.7.1. The Council will need to be aware that the groups in the community most vulnerable to increased energy costs will be those in disadvantaged areas. Projects and initiatives are already targeted at the most vulnerable sectors of the community, without excluding other parts of the community where energy efficiency project will also benefit.

## **7.8 Risk Assessment**

- 7.8.1 There is a risk that if the Council fails to develop the Low Carbon Energy and Sustainability Strategy 2015-2020 that it will not adequately safeguard itself against the risks associated with future fuel security, rising energy costs and climate change.
- 7.8.2 There is a risk that the Council could miss out on future funding and grant bids by not developing the new Strategy.
- 7.8.3 There is a risk that by failing to act and promote the low-carbon economy sufficiently to local residents and businesses that there will be negative health implications and increased risk from not adapting to embedded climate change. e.g. increased number of properties falling within fuel poverty, winter deaths and negative economic implications.

## **7.9 Value for Money**

- 7.9.1 The vast majority of work proposed in the new Strategy already falls within existing work streams at the Council and although additional staff time will be required to embed low-carbon and sustainable considerations into the Council's decision-making processes the benefits will far outweigh the costs.
- 7.9.2 The team working on energy projects and LCESS is largely self-funding through direct revenue and projects whilst the projects completed and underway will deliver approximately £700k each year revenue and savings net of implementation and funding costs.
- 7.9.3 The Low Carbon Energy and Sustainability Strategy 2015-2020 has been drafted to help the Council deliver local objectives around health, congestion, education, housing, air quality, economic development and social inclusion.

## **7.10 Community Safety Implications**

- 7.10.1 Adopting a proactive approach on the transition to a low-carbon economy will help to address poverty and health inequalities.

## **7.11 Environmental Impact**

- 7.11.1 Development of the Low Carbon Energy and Sustainability Strategy 2015-2020 will help the Council improve its overall environmental performance and result in a reduction in carbon emissions and the promotion of the sustainable use of resources throughout the Southend on Sea Borough.

## **8 Background Papers**

Low Carbon Energy and Sustainability Strategy 2015-2020

Upgrading our Energy System – smart systems and flexibility plan, BEIS/Ofgem Plan July 2017 <https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

Smart Power: A National Infrastructure Commission Report 2016 [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/505218/IC\\_Energy\\_Report\\_web.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505218/IC_Energy_Report_web.pdf)

Carbon Trust Report: Can storage help reduce the cost of a future UK electricity system? <https://www.carbontrust.com/media/672486/energy-storage-report.pdf>

Climate Change Risk Assessment 2017: Projections of future flood risk in the UK <https://www.theccc.org.uk/wp-content/uploads/2015/10/CCRA-Future-Flooding-Main-Report-Final-06Oct2015.pdf.pdf>

## **9 Appendices**

**Appendix 1** Low Carbon Energy and Sustainability Strategy 2015-2020 – Draft Annual Report 2017