

From: Susan Carey, Cabinet Member for Environment
Barbara Cooper, Director of Growth, Environment and Transport

To: Kent County Council

Subject: Kent County Council Approach to Net Zero

Date: 16 July 2020

Classification: Unrestricted

Past Pathway of Paper: n/a

Future Pathway of Paper: n/a

Electoral Division: All

Summary: In May 2019, County Council approved a motion to acknowledge a Climate Emergency and support a net-zero emissions target of 2050 for the county. The motion also included that by May 2020, Kent County Council would set an accelerated net-zero target for its own estate and operations and those of its traded companies.

This work is being taken forward under the framework of the Kent Environment Strategy (KES) and the Energy and Low Emissions Strategy (ELES). A proposed approach to a net-zero target by 2030 for the KCC estate is derived from the high-level action plan that will deliver ELES. The draft ELES is being considered for adoption by Kent County Council at the Environment and Transport Cabinet Committee on 17 July following which it is anticipated that the Cabinet Member for Environment will take the decision.

This paper provides an update on the approach for Kent County Council to reach a net-zero target for its own estate and operations (excluding schools) and those of its traded companies.

This paper outlines the approach, based on scenario modelling, for achieving Net Zero, as well as funding opportunities.

A target of 2030 is achievable and can be delivered with the proposed strategy.

Recommendation(s):

1. Kent County Council is asked to note the progress made and comment on the proposed approach.
2. Note the indicative funding that will need to be secured to achieve this.

1. Introduction

- 1.1 In response to the Climate Emergency, the UK government revised the Climate Change Act 2008 in 2019. This introduced into law the UK target of net-zero carbon emissions by 2050. This Act requires local authorities to act to reduce emissions both from their own operations and their geographical area. In addition

to setting an organisational target to deliver net-zero emissions, Kent County Council has led on the development of the Kent and Medway Energy and Low Emissions Strategy, which is due to be considered by the Environment & Transport Cabinet Committee on 17 July 2020.

- 1.2 Under the framework of the Kent Environment Strategy (KES) and the principles of the draft Energy and Low Emissions Strategy (ELES), the Kent County Council Sustainable Business and Communities Team has been taking forward the Kent County Council response to the County Council Climate Emergency motion presented in May 2019. The Kent County Council approach to Net Zero by the 2030 target is derived from the high-level action plan that, once agreed, will deliver ELES.
- 1.3 This report describes the proposed approach, utilising an innovative scenario model developed by Laser Energy (Commercial Services Kent Ltd), which analyses the best current delivery mechanisms available for Kent County Council to achieve net-zero by 2030. It is important to be clear that within the agreed route forward, opportunities in this fast-evolving sector will need to be dynamically shaped and responded to, to support Kent County Council's clear commitment and stated ambition. Our approach should focus on outcomes and be flexible about the solutions applied to achieve emissions reduction. Taking account of fast-moving technologies, our approach must be proactive and iterative. Kent County Council is a frontrunner nationally in developing an evidence-based, data driven, adaptable approach to Net Zero. We are also aware that many of the existing technologies and energy programmes already in place within Kent County Council will help deliver our target. These include projects which have proven and ongoing carbon savings for the authority already, including LED street lighting and solar energy schemes.
- 1.4 This report identifies how Kent County Council's own estate and operations (excluding schools) and those of its traded companies can be carbon neutral by 2030. This report does not seek to cover how Kent and Medway as a county will achieve Net Zero by 2050. That programme of work is being developed by Anthesis, the specialist who developed the Government's Scatter Tool (emission reduction pathway tool), who will report back in September to the multi-agency Kent and Medway Environment Group which is facilitated by Kent County Council, and chaired by a District Chief Executive. The Anthesis work will be reported to the Cabinet Member for Environment, the Environment and Transport Cabinet Committee and the KCC Kent Environment Strategy Cross Party Member Group.

2. Kent County Council Net Zero by 2030

- 2.1 In 2010/11 when the baseline was set, Kent County Council's carbon emissions were 58, 210 tonnes per year. By 2014/15, this had reduced to 49, 461 tonnes per year. The completion of the highways LED streetlight programme and estate-wide energy projects have been major contributors to reducing this considerably further. It must be emphasised that significant progress has therefore already been made. In order to be carbon neutral, Kent County Council needs to invest to reduce emissions by 17, 500 tonnes per annum.
- 2.2 Laser Energy is a business unit within Commercial Services Kent Ltd, a company wholly owned by Kent County Council. Commissioned by the Sustainable Business and Communities team, and with advice from officers from Finance and Infrastructure, Laser has developed a pioneering methodology to model scenarios

to achieve Net Zero. Using the method, Laser has identified an approach to enable Kent County Council to be Net Zero by 2030 that balances three primary ways of reducing emissions: investing in renewable energy generation, shifting to electric vehicles and energy rationalisation across the estate.

- 2.3 The approach has been developed using national, regional and local data to best inform the carbon impact as well as the costings but is reliant on a suite of assumptions that will be refined continually as understanding and emissions reduction programmes are tested and delivered, nationally and locally. The methodology uses emissions factors published in the UK Treasury Green Book, which is the only source that provides future emissions factors and is the recommended approach for assessing financial investments.
- 2.4 The approach is based on a balanced and flexible blending of the three primary ways highlighted in 2.2 above that Kent County Council can reduce emissions. Depending on the specifics of schemes taken forward, this approach will require investment of the order of an estimated £27m between now and 2030 (from sources to be identified) and will deliver returns in the region of £96m (to sources to be identified) between now and 2050. The carbon savings could be 15, 639 tonnes per annum. This leaves in the region of 1, 861 tonnes requiring carbon offsetting. As part of this programme, officers will look to ensure as much carbon offsetting as possible is achieved within Kent, informed additionally by value for money considerations. Where possible Kent County Council would avoid carbon offsetting as it provides no financial return and will rather look to use appropriate emerging technologies such as green hydrogen instead of gas. New technologies may also develop that will allow even more progress.
- 2.5 The approach identifies strategic actions, many of which are already underway but will need to be accelerated. Such strategic actions include reduction of staff business miles, conversion of remaining business miles to electric miles, reduction of staff fleet miles, conversion of remaining fleet miles to electric miles, reduction of Kent County Council energy use through estate review, establishing the district heat network in Maidstone, and solar farm investment. There are then a further set of secondary actions which again are already in play but require acceleration, including solar on Kent County Council buildings, moving from gas heating to heat pumps with associated improved insulation to the Kent County Council buildings, and further roll out of LED office lighting.
- 2.6 Laser's methodology to model scenarios to achieve Net Zero has been and remains a useful mechanism to explore financial and carbon policy options for the authority as it provides a flexible, reactive and iterative way to assess solutions and outcomes.

3. Governance of selected projects and programmes

- 3.1 Kent County Council Member leadership and oversight will be with the Cabinet Member for Environment advised by the Environment and Transport Cabinet Committee, and the KCC Kent Environment Strategy Cross Party Member Group.

4. Financial Implications

- 4.1 The financial figures identified above are indicative, but nonetheless are underpinned by some considerable national, regional and local datasets, and provide a quantum at this early stage.

- 4.2 Funding for agreed measures will be identified from several sources. These include MHCLG, DfT, BEIS, SELEP, and Greater South East Energy Hub grant streams (often for one off projects and activities). These may require elements of match funding which Kent County Council may contribute via prudential borrowing, Salix - Government interest free loans, Kent County Council Public Works Loans Board, or use of reserves. Additionally, developer contributions, business rates, and charitable donations are all possible sources of match funding particularly for the smallest schemes. In the short term, we are currently awaiting approval of £500k European funding through LOCASE (Low Carbon Across the South East). These are in addition to the £1m Climate Change Fund committed by Kent County Council as an annual reserve contribution, which will go some way to funding measures especially in relation to the smaller scale projects, as well as feasibility studies to leverage in the larger monies that will be required.
- 4.3 A net-zero evidence-based investment plan will be produced annually by the Sustainable Business and Communities team in consultation with finance and relevant services, outlining broad areas of spend and specific projects as appropriate, together with resulting savings in carbon emissions. The investment plan will capture anticipated costs and all sources of funding internal and external to Kent County Council. This will then be considered by the Kent County Council Environment Board and informed by debate at the KCC Kent Environment Strategy Cross Party Member Group and Environment and Transport Cabinet Committee before being agreed annually by the Cabinet Members for Environment, and for Finance.

5. Policy Framework

- 5.1 This paper and the activity within it are directly linked to the Kent County Council's commitment to "A Cleaner and Greener Kent" and directly supports the COVID-19 Economic Recovery Plan.
- 5.2 The Kent and Medway Energy and Low Emissions Strategy will, if agreed, form part of the Kent Environment Strategy and its Implementation Plan; and will inform the emerging Economic Recovery Plan. Its ten proposed priority actions directly support the achievement of net-zero by Kent County Council. The Kent and Medway Energy and Low Emissions Strategy is also relevant to the Kent and Medway Growth and Infrastructure Framework, Local Transport Plan 4 (and will inform LTP5), the extended Health and Wellbeing Strategy and Kent's Public Health Outcomes.
- 5.3 The Climate Change Risk and Impact Assessment for Kent and Medway is now ready to be published on Kent County Council's new Environment Hub and disseminated to partner organisations. The resulting Adaptation Programme and Implementation Plan will be developed over the summer of 2020 for agreement later in the year.

6. Equalities Impact Assessment

- 6.1 An Equalities Impact Assessment has been undertaken on the Energy and Low Emissions Strategy, which net-zero underpins. Individual projects and programmes agreed as part of the net-zero approach will conduct their own Equalities Impact Assessment.

7. General Data Protection Regulation Considerations

7.1 A Data Protection Impact Assessment is not needed as the net-zero approach does not require the processing of personal data.

8. Conclusion

8.1 Innovative work by Laser Energy has enabled Kent County Council to understand both how and at what cost net-zero can be achieved for its own estate and operations.

8.2 An approach has been identified which would enable Kent County Council to reach net-zero by 2030. Indicative costs and returns have also been identified.

9. Next Steps and Timescales

9.1 Following Council's discussions and resolution, a report will be taken to Environment and Transport Cabinet Committee in September 2020 for further discussion ahead of a proposed Key Decision on the proposed approach.

10. Recommendation(s)

Recommendation(s):

1. Kent County Council is asked to note the progress made and comment on the proposed approach.
2. Note the indicative funding that will need to be secured to achieve this.

Background Documents

Kent Environment Strategy – www.kent.gov.uk/environmentstrategy

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