

HAMPSHIRE COUNTY COUNCIL**Report**

Committee/Panel:	Buildings, Land and Procurement Panel
Date:	9 October 2018
Title:	Energy and Carbon Management Activities Update
Report From:	Director of Culture, Communities and Business Services

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1. Recommendation

It is recommended that:

- i) The positive achievements of the Carbon Management Strategy Phase 2 are noted. This has produced a further reduction of 2.1% year on year resulting in an overall reduction of 40.2% against the revised target supported by the Panel of 50% by 2025.
- ii) The further £185,000 of carbon tax reductions in Phase 2 is noted.
- iii) A further saving of £102,000 in energy costs over the past year is noted
- iv) The good progress in Energy Performance Programmes Phases 4 and 5 is noted.
- v) The positive engagement with schools is noted
- vi) The savings and reduced costs arising from the improved management of the energy supply contracts is noted.
- vii) The Panel support the Governments Emissions Reduction Pledge 2020 initiative.

2. Executive Summary

- 2.1 In October 2015, the Director of Culture, Communities and Business Services (CCBS) reported that the first phase of the Carbon Management Strategy had been successful in achieving a 22.8% carbon emissions reduction over the first five years against a 20% target.
- 2.2 In June 2016 the Panel supported the proposal from the Director of CCBS to focus Phase 2 of the carbon management strategy on carbon emissions reductions from the corporate estate, street lighting and officer travel.

- 2.3 In October 2017 the Director of CCBS reported that excellent progress was being made on Phase 2 of the Strategy. A 38.1% reduction had been achieved against the 40% target to 2025 approved by Cabinet in 2010.
- 2.4 Recognising the progress made, in January 2018 the Director of CCBS recommended to the Panel that the target be revised upward to 50% by 2025. The new target of 50% was duly adopted.
- 2.5 The Executive Member for Policy and Resources (EMPR) approved further investment in energy programmes in July 2017 allocating £2.72m from available funds. This annual report now updates Members on progress against those initiatives.
- 2.6 Members are reminded that since 2010 the energy cost savings have been in the order of around £30m (including schools in Phase 1). In addition Carbon Tax Charges have been reduced by £385,000 since the start of the programme.
- 2.7 A further saving in of £102,000 in energy cost has been made this year as a result of the reduction in energy consumption

3. National reporting on Carbon Consumption

- 3.1 2018/19 will be the final year of the Carbon Reduction Commitment (CRC) scheme which will be replaced by the enhanced Climate Change Levy (CCL). CCL is already a component of our utility bills and is designed to incentivise organisations to reduce their energy consumption.
- 3.2 Currently CRC applies only to large consumers of energy in the public and private sectors, but CCL will be charged on all energy used by all consumers.
- 3.3 The success of Phase 1 of the carbon management strategy saved in excess of £200,000 in CRC charges for the County Council.
- 3.4 This year as a result of the reductions in emissions and by forward purchasing lower cost carbon credits a further saving of £55,000 has been realised.
- 3.5 This means that in the first three years of phase 2 of the strategy has realised a total of £185,000 of savings as the price of carbon credits has risen over the life of the scheme.
- 3.6 The Director of CCBS has recently signed up to the Department of Business, Energy and Industrial Strategy's (BEIS) Emissions Reduction Pledge 2020. This initiative is linked to the Clean Growth Strategy in which the government introduced a voluntary target for carbon reduction across the wider public and higher education sectors in England. This

target would aim to reduce greenhouse gas emissions across these sectors by 30% by 2020/21, compared to a 2009/10 baseline.

- 3.7 Whilst the 30% has been set across the sectors as a common target, the government recognises some organisations like the County Council have already exceeded this and will accommodate this within their reporting structure.
- 3.8 As the County Council already report our emissions through the CRC and greenhouse gas emissions schemes, there will be no additional burden placed on officers to collate the information required as part of the BEIS Pledge.

4. Carbon Management Strategy Phase 2

- 4.1 The carbon management strategy, phase 2, concentrates on reducing carbon emissions from street lighting, buildings in the corporate estate and business travel by officers and is currently on track to achieve the objective of a 50% reduction from 2010 levels by 2025.
- 4.2 The table below shows a very positive start was made on the phase 2 emissions reduction programme in year 1(2016) with consistent reductions in years 2 & 3. A further reduction of 2.1% has been achieved in the 2017/2018 “energy year”.

Table of Carbon Emissions from 2010

Sector	2010 Emissions Tonnes	2015 Emissions Tonnes	2016 Emissions Tonnes	2017 Emissions Tonnes	2018 Emissions Tonnes	2025 Target Emissions
Corporate Buildings	21,000	19,060	16,829	16,830	16,425	-
Street Lighting	26,600	17,558	13,450	12,119	11,560	-
Officer Travel	6,600	4,889	4,534	4,605	4,420	-
Total	54,200	41,507	34,813	33,544	32,405	27,100
% Reduction	-	-23.4%	-35.8%	-38.1%	-40.2%	50%

- 4.3 There has been a reduction in emissions from corporate buildings, further analysis of the data shows that;
- Electricity emissions have reduced by 1.4% over the year, the reduction achieved through a combination of the energy performance programmes and greater staff awareness and engagement.

- Gas emissions fell by almost 4.6% over the same period despite the prolonged cold winter period.
- 4.4 Street lighting continues to show a reduction in emissions year on year. A number of initiatives including the dimming of some street lighting for specific periods overnight have been deployed and more is being proposed by the Director of ETE. The use of LED lamps to replace the conventional compact fluorescent type is also under consideration based on fitting in with cyclical maintenance schedules. Feasibility work is ongoing by officers in the two departments.
- 4.5 Having seen an increase in officer travel last year, this year that has been reversed and there has been a reduction from the emissions seen last year. The greater deployment of electric vehicles through the fleet and the planned conversion of the pool cars to electric vehicles (EV) is expected to see emissions reduce further. The proposed implementation of modern meeting room technology is also expected to reduce travel demands as officers can 'meet' and connect remotely.
- 4.6 In June 2017 the Panel supported the proposal from the Director of CCBS to undertake two further phases of the Energy Performance Programme (EPP4 and EPP5). This was approved by the Executive Member Policy and Resources (EMPR) in July 2017. Additional resources of £2.72m were approved as a total investment for the future planned phases.

Energy Performance Programme Phase 4

- 4.7 This phase will entail the replacement of conventional lighting with low energy LED lighting and controls across the corporate estate. This is expected to deliver a revenue saving of £240,000 per year in both energy and maintenance costs.
- 4.8 The first stage of the LED lighting programme is now well underway with around £300,000 of works already completed. By the close of this financial year this will be around £850,000 of completed projects with the second stage in 2019/20 amounting a further £800,000.
- 4.9 The early schemes are already showing good returns on investment. For example, replacing the lighting in just one building (the Sunderland Hangar) at Calshot Activities Centre will save £10,000 a year in energy costs.
- 4.10 The second initiative in EPP 4 is the development of an Electric Vehicle (EV) charging point procurement framework for the public sector.
- 4.11 Earlier this year, the Director of CCBS launched Hampshire's framework for the procurement of charging points for the public sector. To date 12 organisations including Winchester City Council, Southampton City Council, Oxford City Council, Test Valley Borough Council and Hampshire Police have signed up to the accession agreement with a potential for around £500,000 of investment through the framework. This is an excellent start and there is more interest from the public sector

market. This framework is self sustaining financially and through a small levy will cover the costs of officer resources to manage and promote it.

- 4.12 The Director of CCBS is also delivering a programme of charge point installations to support the roll out of the County Councils electric vehicle (EV) fleet. Supply points have been installed at Bar End, Bishops Waltham highways depot and at the Scientific Services building in Southsea. Further points are planned in a number of highways depots and workshops as well as a number in specific strategic location across the estate to support the use of EVs by the Council catering and courier services.
- 4.13 By the end of the financial year approximately 80 charge points will have installed including 12 for public use in our country parks. This will enable the acceleration of the conversion of vehicles to EV as pilots complete and pool car lease arrangements come up for renewal. The EV conversion programme is expected to save around £210,000 per year in the reduction of fuel costs (around 96%) by conversion from diesel to electric.
- 4.14 On-street charge points are being explored in response to interest from residents. The technology exists to facilitate this and there are number of market providers including the market leader Ubertricity. Generally chargers are powered from the street lights with smart leads allowing on-line payment by the user. Office of Low Emission Vehicles (OLEV) grants are also available to part fund on-street charging and officers are currently looking into how this may be developed.

Energy Performance Programme - Phase 5

- 4.15 EPP5 focuses on the deployment of electric vehicles for the HCC managed fleet and exploring the potential of battery storage technology for the built estate.
- 4.16 The Panel supported the proposal to the roll out of electric vehicles to replace conventional diesel and petrol models. The Director of CCBS has identified a number of potential 'early wins' and these have been progressed to provide EVs for client departments and business units.
- 4.17 EVs are now being used by the asbestos team in Scientific Services, H3CS Catering Service, County Supplies, the Courier Service, the Highways Maintenance team and Facilities Management. The Director of CCBS is reviewing the use of EVs to replace the 'pool car' fleet in 2019.
- 4.18 Sites suitable for battery storage trials are being investigated with a view to the development of a business case for two initiatives – battery storage for buildings with Photo Voltaic (PV) attached and bulk storage of grid electricity. The Director of CCBS has commenced a study on a number of buildings to establish the feasibility of installing battery storage. An update on the outcome of the study will be brought to a future meeting of the Panel.

Salix Funding

- 4.19 Salix funding has been used successfully to augment our energy programmes to fund (or part fund) capital investments in energy saving technologies. Salix loans are interest free loans which have a simple payback criteria of a maximum of 5 years for local authority schemes. The Director of CCBS is in regular contact with Salix and the County Council are regarded as a leader in the public sector for innovation and investment in energy saving initiatives.
- 4.20 In 2014 the Director CCBS secured a Salix loan of £750,000 to support our Energy Performance Programmes (EPP) and to date over £600,000 of this Salix loan has been deployed. The Director of CCBS is looking to secure a further £500,000 to continue to augment the funding for our EPPs.
- 4.21 Council officers continue to have regular dialogue with Salix who are about to launch a revised Recycling Fund where authorities match fund any Salix loan contribution which is then used to fund energy saving works. The revenue saved in energy cost is returned to the funding pot and is further used to invest in more energy saving measures.
- 4.22 The recycling fund could be used to fund, or part fund the upgrade of the street lighting to LED subject to a satisfactory business case being formulated and approved.

Schools

- 4.23 The Director CCBS continues to provide support for Hampshire's schools. To date 36 schools have expressed an interest in joining the schools energy performance programme and have been sent an information pack outlining details of the scheme. 20 schools have been surveyed to assess their viability and 6 schools have had detailed option appraisals prepared. 5 more schools will be surveyed in the autumn term.
- 4.24 6 schools have had their works completed with savings anticipated to be in the order of £30,000 per annum in total. As schools budgets come under increasing pressure these savings are very welcome and we are anticipating more demand as the programme scales up. The work of the Property Services team is fully funded through the budget from Salix and is another self financing business opportunity.

Energy Supply Contracts & Management

- 4.25 The Director of CCBS has engaged the services of an energy category specialist to review our current energy supply contracts and undertake an options analysis for the development of future energy supply contracts for the County Council and its partners. The initial work has focussed on driving efficiencies from the remaining 2 years of existing contracts including invoice processing, metering arrangements, capacity optimisation and billing reconciliation. By moving to a consolidated billing arrangement with the utilities it now takes less than half the time each

month to process the bills saving the County Councils corporate transaction team the equivalent of 7 FTE days per month.

- 4.26 Electricity metering contracts have been rationalised to align them with the energy supply contracts resulting in savings of £45,000. Many of our sites have been paying for capacity which has never been used. By re-evaluating the capacity required it has been possible to reduce our maximum demand charges by £53,000 p.a.
- 4.27 Billing reconciliation has resulted in £40,000 being returned to HCC from credits held by the utilities. In addition the reconciliation of the previous energy supply contracts – correcting billing errors, estimated readings and the like - has resulted in £220,000 being returned to the County Council by the utility companies.
- 4.28 In order to take advantage of existing lower energy prices and to allow sufficient time to evaluate the new Crown Commercial Services and Laser procurement frameworks the Executive Member for Policy and Resources at the Decision Day in September approved a proposal by the Director of CCBS to extend the current energy supply contracts by 12 months to October 2020.
- 4.29 The investment in an energy specialist has been very fruitful realising both ongoing revenue savings and also the return of funds held by the utilities company. This role is being extended in to 2019 to support the re-procurement of the energy supply contracts to maximise purchasing power in the market for the Council and our partners – including schools, police and fire.

CORPORATE OR LEGAL INFORMATION:**Links to the Strategic Plan**

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	yes
People in Hampshire enjoy being part of strong, inclusive communities:	yes

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

DocumentLocation

None

IMPACT ASSESSMENTS:

1. Equality Duty

1.1. The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;
- b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;
- c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionately low.

1.2. Equalities Impact Assessment:

An equalities impact assessment has not been considered in the development of this report as access requirements are always considered during the design stages of building projects and are often improved.

2. Impact on Crime and Disorder:

2.1. The County Council has a legal obligation under Section 17 of the Crime and Disorder Act 1998 to consider the impact of all decisions it makes on the prevention of crime. The proposals in this report have no impact on the prevention of crime.

3. Climate Change:

3.1. The Energy Strategy and Carbon Management Plan will have significant positive effect on the carbon emissions of the County Council. Climate change impacts are a driver in implementing reduction programmes.