

Corporate Policy and Strategy Committee

10.00am, Tuesday, 12 April 2016

Sustainable Energy Action Plan: Annual Report 2015/2016

Item number	7.6
Report number	
Executive/routine	
Wards	

Executive summary

The Sustainable Energy Action Plan (SEAP) was approved in February 2015 setting out the five year strategic programme aiming to reduce carbon emissions by 42% by 2020 across the city. This report presents the first annual review detailing the progress over the first year. The latest set of Government figures indicates that there is a downward trend in Edinburgh's carbon emissions. The focus of much of the activity over the first year has been on project development and partnership engagement. An energy audit of external activities has revealed a further 18% of carbon reduction through projects.

An annual report is appended to this report providing more detail on progress and a summary report of all the projects.

Links

Coalition pledges	P50 P53
Council outcomes	CO18 CO19
Single Outcome Agreement	SO4

Sustainable Energy Action Plan: Annual Report 2015/2016

Recommendations

- 1.1 The Committee is asked to note the contents of the report and the substantive progress to date.

Background

- 2.1 The Council's first Sustainable Energy Action Plan (SEAP) was approved by Corporate Policy and Strategy Committee in February 2015. This plan sets out the proposed actions and initiatives to reduce carbon emissions by 42% by 2020 across the city.
- 2.2 The delivery of the SEAP is through five work programmes which combine to form a single integrated energy plan for the city. These work programmes reflect the priorities of the SEAP and are:
 - energy efficiency;
 - renewables;
 - district heating;
 - resource efficiency; and
 - sustainable transport.
- 2.3 The SEAP is a five year plan which delivers a number of projects and initiatives on energy and low carbon. Engagement with key partners and communities has been a priority to build up support for the programme and identify potential collaborations going forward. This has led to further projects being added to the list of projects in the SEAP.
- 2.4 This report provides an update on progress over the first year of the Plan.

Main report

Progress towards the Target

- 3.1 Since approval of the SEAP in February, figures were released in June 2015 by the Department of Energy and Climate Change (DECC). These figures are available every year, (albeit with a two year time lag) for every local authority in

the UK. They provide as robust an assessment of carbon emissions as are available and are used by most local authorities.

- 3.2 In releasing the figures, DECC also carry out a review of the 2005 baseline and adjust this accordingly for each local authority. The original Edinburgh baseline has consequently been revised slightly from 3,283kt CO₂ to 3,265kt CO₂. The total figures for Edinburgh show a decrease in carbon emissions from 2,941kt CO₂ in 2012 to 2,849kt CO₂ in 2013 indicating a reduction of 3.2% on the previous year.
- 3.3 In the original modelling of the SEAP action plan there were 898kt CO₂ savings identified from the project plan. This accounted for 65% of the carbon emissions savings required to achieve the 2020 target.
- 3.4 Since approval of the SEAP, a further audit of low carbon and sustainable energy activity was undertaken across the city between June and September 2015. This involved contacting a range of partners such as other public sector agencies, housing associations, neighbourhood partnerships and community groups. The aim was to collate further information on activities across the city that could be captured in the SEAP programme.
- 3.5 Through this detailed audit there has been an additional 234kt of CO₂ reductions that can now be included in the SEAP. This is an increase of 17% and means that the new savings accounted for in the project matrix are 1,131kt CO₂, which represents 83% of the target required. This is very positive progress to date.
- 3.6 Figure 1 below illustrates the closing gap in the target. While encouraging, achieving the target will depend on successful projects being implemented over the next four years delivering the carbon reductions stated.

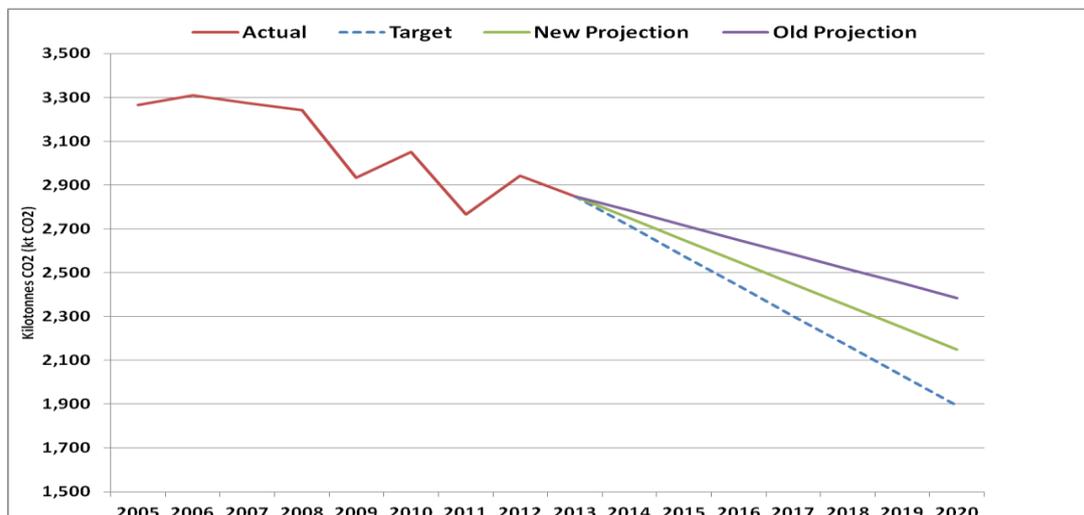


Figure 1: Carbon Emissions Target and Trajectory

Progress on the SEAP Programme

- 3.7 Appendix 1 details the annual report and provides more information on the SEAP programme.

- 3.8 Since Committee approval of the SEAP, the Plan has been formally approved by the Covenant of Mayors (CoM) Office in November 2015. Approval means that the Council can formally use the CoM logo and joins a considerable number of European cities and towns who are active in the area of low carbon and sustainable energy.
- 3.9 The approach adopted for the SEAP over the first year has been the “ground work phase”, focusing firstly on existing activities (and where possible to scale these up) and secondly on the development of new projects. The aim here has been to progress these from concept to feasibility stage and for some, to full business case. This will enable the development of a pipeline of projects for the future phases of the SEAP.
- 3.10 Appendix 1 in the Annual Report provides a summary of all the projects now included in the main Project Matrix. This includes the original projects as detailed in the February 2015 report and in addition the new projects identified as a result of the energy audit.
- 3.11 As can be seen a number of projects are underway and ongoing. As the SEAP progresses it is anticipated that the status of some projects will change to “completed”. The SEAP is a five year plan and the timescales are as expected variable depending on the project with some taking longer to progress than others.
- 3.12 While a focus has been on a development phase, there has still been a number of achievements over the last year including:
- approval to establish a Council ESCo;
 - appointment of the preferred bidder for the energy retrofit RE:FIT project and the development of business cases for 9 of the Council’s largest buildings due the end of March 2016;
 - approval of a Business Case for the roll out of Light Emitting Diode (LED) lanterns across the City seeing the conversion of 54,000 street lights to LED’s in a three year programme;
 - energy replacement programmes underway within Housing including a feasibility study into district heating in the multi storey blocks;
 - successful funding application for the expansion of a resource and re-use centre in Edinburgh;
 - the development of business cases for district heating for Fountainbridge and the Bioquarter;
 - the expansion of electric vehicle charging points across the city from 8 in 2012 to 110 in 2016 (February);
 - engagement with private sector developers on decentralised energy;
 - a feasibility study for solar farms and solar canopies on park and ride sites completed and moving to the next phase;

- the Memorandum of Understanding agreed between the Council and the new Solar Co-operative in the City for access to 25 Council buildings;
- a Business Case developed for a full Building Management System for the Council's own buildings;
- successful funding application for a full Business Case for the use of Ground Source Heat Pumps in Saughton Park;
- successful feasibility funding for the a major study into Ultra Low Emission Vehicle (ULEV) taxis and EV charging infrastructure;
- Harlow Hydro now generating energy;
- the Eco Stars Project signing up its 100th member in Edinburgh representing over 5000 commercial vehicles in the city;
- Lothian Buses surpassing its 2015 target on cleaner engines and as of January 2016, 67% of the bus fleet was operating at Euro 5 or higher;
- 2015 also saw the arrival of a further twenty Volvo double deck hybrid buses into Lothian's fleet with support from the Scottish Green Bus Fund; and
- the approval of the Council's own Carbon Management Plan in June 2015.

Partnership Development

- 3.13 While the Council needs to lead the SEAP, it cannot deliver the target on its own. The participation of the public, private and community sectors across the city is crucial in developing new initiatives and galvanising action. This has been a particular focus of activity over the last 12 months.
- 3.14 The members of the Edinburgh Sustainable Development Partnership (ESDP) are supportive of the aims and objectives of the SEAP and there have been regular updates on progress. As a strategic partnership of the Edinburgh Partnership, members of the ESDP (who include community organisations, public sector, academia and NGO's) have been asked to develop actions to reduce carbon and report back by September 2016.
- 3.15 One specific action initiated by the ESDP has been the assessment of carbon accounting methodologies by students of the Edinburgh Centre for Carbon Innovation who are evaluating a range of tools which could be useful for future assessment of SEAP projects.
- 3.16 In other partnership developments, over the summer of 2015, approaches were made to eight of the largest employers in the city. Collectively these organisations contribute nearly 17% to the city's carbon footprint and consequently reductions across their activities would make a significant impact to the SEAP target.
- 3.17 Meetings were held individually with these key partners who included: the three Universities - Edinburgh, Napier and Heriot Watt, Edinburgh College, Lothian Health BT, Standard Life and RBS. These meetings were very positive and resulted in agreement to collaborate on the energy and low carbon agendas.

SEAP Pledge

3.20 At an event on 1 December 2015, all eight partners agreed to formally endorse the SEAP and signed a pledge at senior management level (including the Council Leader and Chief Executive) to collaborate on initiatives that would reduce carbon. The partners also agreed to provide data and information on their own carbon footprints. Examples of activities from the partners over the last 12 months include:

- Edinburgh Napier University reduced the carbon emissions associated with the use of electricity, gas and water from its non-residential buildings by 36% from a baseline of 2006/07;
- Through the RBS Gogarburn Innovation Challenge in 2015, innovative solutions being developed to tackle energy consumption in the city;
- BT now has 100% of its electricity from renewable sources such as solar farms which includes its Edinburgh buildings;
- Heriot Watt University collaborating on using the resources of its Energy Academy to progress energy activities for the Council;
- Lothian Health partnering with the Council on the Bioquarter District Heating Business Case;
- Edinburgh College partnering on energy efficiency in buildings and piloting new approaches to building retrofit;
- Standard Life seeking to align its own carbon objectives with those of the SEAP; and
- the University of Edinburgh working with the Council on a funding application for the feasibility of electric taxis in the city;

Other Achievements/Outcomes

3.21 Progression of the programme over the first year has resulted in other associated outcomes including:

- Committee approval for a low carbon jobs and investment framework as a sub strategy of the SEAP identifying the potential economic benefits from this agenda;
- agreements on students from the Universities working on low carbon projects within the Council;
- specific projects such as RE:FIT and Saughton Park being seen as examples of good practice by Scottish Government and used as Case Studies for other councils;
- a recent event in February 2016 organised by COSLA and the CoM identified Edinburgh's SEAP Pledge as a particular example of good practice particularly in the area of partnership working. The Council has been asked to provide further information to enable a European case study to be developed;

- the multinational company Jacobs working closely with the Council on the potential for an annual SEAP award for schools and university students to put forward projects which could contribute towards the goals set out in the SEAP. The expectation is that the Jacobs will provide support for this award for 5 years; and
- a number of companies positively aligning the aims and objectives of their own carbon management plans with the SEAP.

Delivery

- 3.22 An important element of the SEAP has been evaluating the options for the delivery of projects particularly strategic energy projects that can deliver substantial carbon savings. A number of separate reports have been submitted to Committee on the development of a Council Energy Services Company (ESCo) to undertake this role.
- 3.23 At Full Council on 10 March, the decision was taken to set up an ESCo named “Energy for Edinburgh”. This strategic arms length company will have a key role in the delivery of energy initiatives across the city. Work is now underway on setting up the company and separate reports on progress will be submitted to Committee.

Internal Audit Review

- 3.23 The 2015/16 Audit plan included an early audit of the “Sustainable Energy Action Plan”. The high level scope was to review progress in implementing the SEAP and took place in autumn 2015.
- 3.24 The audit revealed no major concerns regarding the SEAP. It also identified areas of good practice including: the strategic focus of the plan, that regular updates on progress had occurred, that formal consultation had taken place and that a project plan was in place. The audit also praised the approach of seeking external funding for projects.

Some Issues for the Next Phase

- 3.25 In developing the next phase of the SEAP and moving into delivery of projects, a number of key issues emerge:
- ensuring that resourcing of projects is in place as part of any business case;
 - that there is a robust mechanism to identify carbon savings and ensure that figures are as robust as possible;
 - continued profiling of the SEAP is necessary with both internal service areas and external partners; and
 - further engagement with partners will continue.

Next Phases

- 3.26 Feasibility and business cases are due to be completed for a number of projects such that the main focus of the SEAP programme over the next 12 months will be on project delivery. The SEAP partners will continue to develop their own plans to reduce carbon with a number of programmes expected to be published during 2016. The ESDP Partners will be looking to develop their own individual contributions to the SEAP by September 2106.
- 3.27 Work will continue to develop the SEAP pledge, a potential Award scheme, and identifying further projects. The Council ESCo will be established and work underway to deliver projects. There will be further actions on profiling and raising awareness to ensure that the key issue of behaviour change is addressed.

Measures of success

- 4.1 The key measure of success for the SEAP is a reduction in carbon emissions across the city. Other measures however will include a reduction in the number of households in fuel poverty, the amount of renewable energy generated across the city and the number of local energy projects initiated.
- 4.2 For the Council a measure of success will be the potential savings in energy consumption thus complying with Council targets. The SEAP will also be the main initiative in meeting the Capital Coalition Pledge 50 to reduce carbon emissions by 42% by 2020

Financial impact

- 5.1 There are no financial impacts for the Council associated with the activities outlined in this report.
- 5.2 The SEAP programme has no dedicated budget and consequently officers have to apply to external schemes for funding to develop projects. Over 2015 it is estimated that nearly £600k has been secured for funding projects, feasibility studies; developing business cases and assisting community groups with their own applications.

Risk, policy, compliance and governance impact

- 6.1 By implementing a SEAP, the Council is mitigating any risks of non compliance with the Climate Change (Scotland) Act 2009. In addition, mandatory reporting of carbon will become a requirement for local authorities from October 2016. The SEAP will be an important element of that report.

- 6.2 The SEAP will also complement a number of other policy areas, including: the City Housing Strategy; the Community Plan, the Edinburgh Local Plan, the Local Transport Strategy, Sustainable Edinburgh 2020 and the Transport Vision 2030.

Equalities impact

- 7.1 There is no adverse impact associated with this report.
- 7.2 By delivering affordable energy and reducing fuel poverty, the SEAP will contribute positively to key equalities outcomes of reducing inequality, poverty and deprivation

Sustainability impact

- 8.1 The proposals in this report will have a positive impact on sustainability through actions specifically designed to lower carbon emissions through energy efficiency, encouraging sustainable travel, resource efficiency and encouraging low and zero carbon energy generation. This will increase the city's resilience to climate change impacts.
- 8.2 The proposals will help achieve a sustainable Edinburgh by helping alleviate fuel poverty in communities and by improving both quality of life and the environment. It will assist in making local businesses more resilient, provide business opportunities for local suppliers, and provide local people with more disposable income, providing a boost to the local economy and a knock on effect in terms of employment opportunities.

Consultation and engagement

- 9.1 Formal consultation has already been carried out on the SEAP with a range of organisations including community councils, academia, voluntary and community groups and businesses. There is ongoing engagement through groups such as the Edinburgh Sustainable Development Partnership as well as specific consultation on individual projects and initiatives.
- 9.2 A SEAP working group has been set up within the Council to ensure continual monitoring of initiatives and projects. This group meets regularly and provides input and contributions to the development of projects. Officers across a range of services such as Corporate, Housing, Planning, Property and Transport have been consulted on the contents of the SEAP report.

Background reading / external references

Sustainable Energy Action Plan www.edinburgh.gov.uk/SEAP

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Links

Coalition pledges	P50 Meet greenhouse gas targets, including the national target of 42% by 2020. P53 Encourage the development of Community Energy Co-operatives.
Council outcomes	CO18 Green- we reduce the local environmental impact of our consumption and production. CO19 Attractive Places and well maintained – Edinburgh remains an attractive city through the development of high quality buildings and places and the delivery of high standards and maintenance of infrastructure and public realm.
Single Outcome Agreement	SO4 Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix 1 : SEAP Annual Report