Corporate Policy and Strategy Committee

10am, Tuesday, 2 October 2018

Sustainable Energy Action Plan Update

Item number	7.8
Report number	
Executive/routine	Routine
Wards	All
Council Commitments	C18

Executive Summary

At its meeting in May 2018 the Committee requested progress reports every two cycles. This report provides an update on progress towards achieving the target of reducing carbon emissions by 42% by 2020. Between 2005 and 2016 carbon emissions in Edinburgh have reduced by 33%. Per capita emissions have reduced from 7.3 tonnes to 4.3 tonnes in that period. The report updates members on progress on the audit of the Council's sustainability activity. Committee is asked to note the report.

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THE CITY OF EDINBURGH COUNCIL

Report

Sustainable Energy Action Plan Update

1. Recommendations

1.1 The Committee is asked to note that:

1.1.1 carbon emission have reduced by 33% in Edinburgh between 2005 and 2016 against a target of 42% by 2020 and per capita emissions have reduced from 7.3 to 4.3 tonnes during that period; and

1.1.2 an audit of sustainability work is being carried out by the Edinburgh Centre for Carbon Innovation (ECCI) the result of which will be reported to Committee later in the year.

2. Background

2.1 At the 15 May 2018 meeting, the Committee received a report on the annual progress of the Sustainable Energy Action Plan (SEAP) and the target of reducing carbon emissions by 42% by 2020 against 2005 carbon emission levels. The Committee agreed to receive a report every two cycles until 2020 on progress towards meeting the target.

2.2 At its meeting on 28 June 2018 the Council noted the intention to work with external partners who were experts in climate change and sustainability to provide an independent audit of council activity and recommendations as to how the Council might continue to improve the cumulative impact it has on sustainability. The outcome of the audit will be reported to Corporate Policy and Strategy Committee in December 2018.

2.3 On 9 August 2018 the Transport and Environment Committee agreed to consult on the city mobility plan, low emission zones and city centre transformation including proposals to improve air quality, encourage greater use of public transport and walking and cycling.

3. Main Report

3.1 Since reporting to Committee in May 2018 the Department of Business, Energy and Industrial Strategy (BEIS) have released further data on progress towards reducing carbon emissions. At the time of reporting officers had estimated that reduction in carbon emissions were 30% between 2005 and 2016.

3.2 The updated BEIS data shows that carbon emissions in Edinburgh have reduced by 33% during that period. If current trends continue Edinburgh is on course to meet the 42% carbon reduction target. This target remains one of the most ambitious set by any local authority.

Figure 1 below shows the reduction in carbon emissions by tonnage

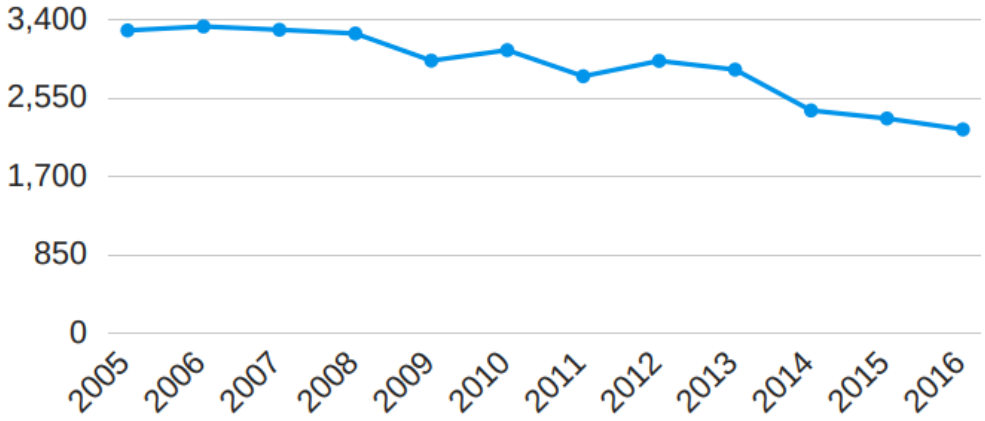

Fig. 1: Edinburgh's CO_2 Emission Reduction Progress 2005-2016 (Kilo Tonnes of CO_2)

3.3 While the share of CO_2 emissions from the domestic sector is relatively unchanged, emissions from the industrial and commercial sector have steadily decreased while the share of CO_2 emissions from transport has continued to increase. The two charts below in Figure 2, highlight the difference in the share of emissions over three sectors from 2005 to 2016.

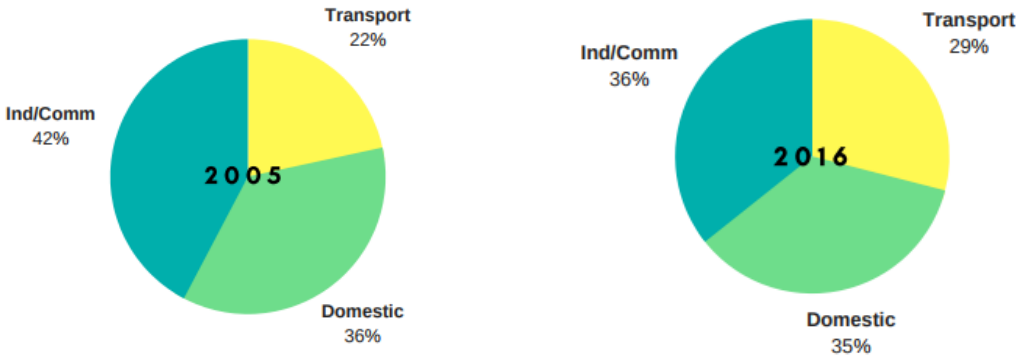

Fig 2. Change in Industrial Share of Emissions in Edinburgh (2005-2016)

3.4 The largest fall in emissions within the domestic and industrial/commercial sectors in Edinburgh has come from electricity use. Emission reductions from gas use in Edinburgh have not decreased significantly.

3.5 Some original CO_2 emissions reduction progress in transport has started to be reversed with year on year rises in CO_2 emissions since 2013. Edinburgh has the highest rates of public transport patronage, pedestrian and cycle use in Scotland.

3.6 The primary driver in driving up transport emissions is freight. Figure 3 below shows the tonnes of oil equivalent consumed across personal transport modes and freight transport modes. Personal transport modes include buses and diesel and petrol cars, while freight transport includes HGVs, and diesel and petrol LGVs. The upward trend since 2013 can be seen in the freight categories.

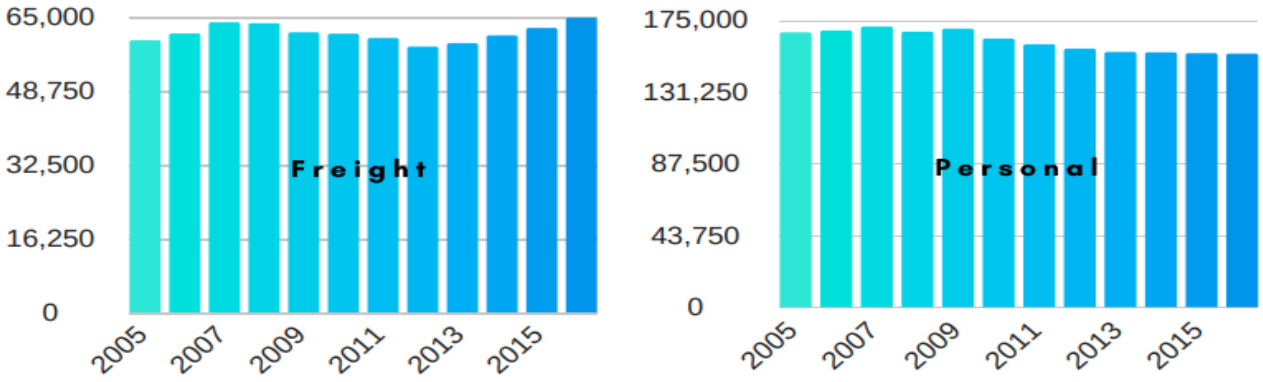

Figure 3 Tonnes of Oil Equivalent Edinburgh Freight and Personal Transport (2005-2015)

Performance Against Other Cities

3.7 The table below shows Edinburgh's performance against that of other cities and Scotland wide.

City	2020 Target (if approved)	CO_2 reduction (2005-2016)	Per capita emissions (t) 2005-2016
Edinburgh	**42%**	**-33%**	**4.3**
Aberdeen	31%	-30%	5.6
Dundee	n/a	-34%	4.7
Glasgow	30%	-38%	3.8
Scotland	42%	-45% (since 1990)	5.2

Table 1: Emissions Target and Reductions across Scottish Cities

3.8 It should also be noted that the overall reductions in carbon emissions have been achieved at a time when the city is growing at a faster rate than other Scottish cities.

3.9 Between 2005 and 2016, Edinburgh's population increased by 57,700 or a 13% increase in contrast to Aberdeen's 10%, Glasgow's 8% and Dundee's 3%. Overall economic activity is considerably higher in Edinburgh than the Scottish average. Gross Value Added (GVA) per head in Edinburgh is £39,000, well above the Scottish average of £24,800.

3.10 Projects which target measures to reduce emissions relating to domestic gas and transport include:

3.10.1 major insulation programmes for domestic Council homes across Edinburgh;

3.10.2 in partnership with the Edinburgh World Heritage Trust unique energy efficiency upgrades being piloted in the Canongate which could mean replicable delivery models for other historic, hard-to-treat tenements;

3.10.3 through the Scottish Government's new Energy Efficient Scotland programme the Council and a number of partners will provide tailored support to the able to pay market, targeting both domestic and commercial properties to encourage the uptake of energy efficiency measures;

3.10.4 continuing to deliver energy efficiency upgrade measures via HEEPS:ABS (Homes Energy Efficiency Programme for Scotland – Area Based Scheme). The scheme delivers free and part-funded home insulation schemes for private owners; and

3.10.5 the development of an Electric Vehicle Infrastructure Business Case which presents the opportunity for substantial CO_2 emissions savings.

3.11 In line with the Council decision in June 2018, the Edinburgh Centre for Carbon Innovation (ECCI) is undertaking an audit of Council activity on sustainability and is expected to report with recommendations on how the Council may improve its cumulative impact on sustainability in the city by the end of the year. This will also reflect the SEAP programme.

3.12 A further update report on progress made on initiatives to reduce carbon emissions set out in the SEAP will be made to Committee in two cycles.

4. Measures of success

4.1 The key measures 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 across the estate in terms of buildings and infrastructure. The SEAP will also be a key programme in meeting the Coalition pledge to reduce carbon.

5. Financial impact

5.1 A number of SEAP projects may result in both financial savings for the Council as well as a potential revenue stream although further work will be needed to determine these benefits. These will include energy generation, renewable and storage projects as well as projects on electric vehicles. This work will feed into the transformation change strategy.

5.2 £3m of external funding has been secured to assist in the development of project feasibility work and business cases.

6. 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, a number of the SEAP projects will assist the mandatory carbon emissions reporting under the Public Bodies Duties introduced by Scottish Government.

6.2 The SEAP also complements or directly links to a number of other key strategies including the City Housing Strategy; Local Development Plan and associated guidance documents; the Local Transport Strategy and Sustainable Edinburgh 2020. In addition, the SEAP feeds into key programmes such as the City Deal, City Vision and Scottish Cities Alliance low carbon programme.

7. Equalities impact

7.1 There are no adverse equalities 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.

8. Sustainability impact

8.1 The SEAP 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 projects within the SEAP will benefit 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.

9. Consultation and engagement

9.1 There is ongoing engagement on the SEAP with a wide range of organisations. The SEAP is a standing item on the Edinburgh Sustainable Development Partnership and updates are provided on a regular basis.

10. Background reading/external references

None.

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11. Appendices

None.