UPDATE ON THE MAJOR REVIEW "REDUCING THE COUNCIL'S CARBON FOOTPRINT" - 2013/14

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REASON FOR ITEM

To provide the Committee with an update on the impact of the Major Review "Reducing the Council's Carbon Footprint" that was undertaken in 2013/14.

BACKGROUND INFORMATION

Recommendations in the Review

- "That the Cabinet Member for Finance, Property and Business Services considers whether to develop a corporate energy policy statement and strategy to help the Council in its approach to carbon reduction, for approval at a subsequent Cabinet meeting."
- "That the Cabinet Member for Finance, Property and Business Services asks officers to look at the feasibility of recording Council carbon emissions and carbon mitigated on a plus and minus balance sheet to give a fuller picture on the Council's carbon footprint and enable proactive monitoring by officers."
- "That the Cabinet Member for Finance, Property and Business Services considers whether to ask officers to enter into discussions with the Department of Energy and Climate Change Heat Network Delivery Unit on a district heat and power capability in Hillingdon, including outline concepts, business case, costs benefit analysis and feasibility."
- "That the Cabinet Member for Finance, Property and Business Services considers whether to ask officers to undertake further discussions and research with a view to supporting a small scale Anaerobic Digestion project in the New Years Green Lane area, if financially viable for the Council."

IMPACT OF THE REVIEW

Officers are currently reviewing consultant proposals for a corporate energy policy.

The Council has invested in an energy management software system to manage the data for all its electricity and gas supplies. The software has enabled officers to manage its energy contracts effectively, monitor energy consumption and target sites for energy reduction projects, and comply with the statutory reporting requirements of the CRC Energy Efficiency Scheme.

The CRC Energy Efficiency Scheme (CRCEES) has been a key policy for government to incentivise large business and public sector organisations to reduce their carbon emissions. Emissions from these organisations are estimated to account for 10% of all the UK's CO2 emissions. The Council has to report its emissions annually and pay a levy (CRC Allowances) for each tonne of CO2 produced. Phase II of the CRCEES scheme commenced in April 2014. Government reviewed the CRCEES in 2016 and announced that the scheme would continue until the end of Phase II in March 2019. Table 1.0 below shows the actual reported emissions for 2014-15 and 2015-16 under the CRCEES. Figures for 2016-17 are projected and final figures will be reported to the Environment Agency in July 2017.

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Table 1.0: CRCEES Phase II - London Borough of Hillingdon Emissions (tCO2)

CRC Year	Emissions (tCO2)	CRC Allowance Cost		
2014-15	13,278	£207,137		
2015-16	11,992	£187,075		
2016-17	10,811	£168,652		

In 2015-16, emissions reduced by 10% compared to the figures for 2014-15. Projected figures for 2016-17 are 10,811 tCO2 which would represent a 19% reduction since the 2014-15 baseline.

In 2015-16, electricity accounted for 85% of total reported CRC emissions. The Council has focused on reducing electricity demand as a priority. Street lighting accounts for 50% of CRC electricity emissions and an annual electricity cost of £1m. Cabinet has approved a two-year project to replace all of the Authorities street lamps with LED and this will commence in February 2017.

The Civic Centre accounts for 26% of total CRC electricity emissions. In January 2017, the Leader of the Council and the Cabinet Member for Finance, Property And Business Services approved the tender from Laser Energy Buying Group for the installation of the next phase of LED lighting in the Civic Centre. Once completed, the project is estimated to reduce annual emissions by 130 tonnes of carbon dioxide and save the Council £29K per annum in electricity and carbon taxes.

Data from the Council's energy management software identified the Cedars and Grainges car parks as high consuming electricity supplies, and in late 2015, work commenced on installing LED lighting at both car parks. Consumption data from the half-hourly meter at Cedars car park has shown a reduction in kWh in excess of 60%. For the period December 2015 to December 2016, the new LED lighting at Cedars Car Park saved the Council £27K compared to the period a year earlier. Appendix A contains the consumption and electricity cost information.

From April 2014, Schools and Academies were outside the scope of the CRCEES but the Council incorporated renewable solar PV systems as part of the primary school expansion programme which has helped reduce electricity emissions. The Council will also benefit from the Feed in Tariff scheme and receive a payment for the electricity generated.

The design of new buildings will incorporate energy efficiency requirements of current building regulations and planning regulations. Work has commenced on the construction of two new extra care schemes Grassy Meadow Court and Park View Court. These schemes will include communal heating systems, energy efficient boilers, LED lighting, solar PV systems and smart metering.

Funding from planning agreements to meet energy efficiency targets is also currently being utilised for schemes proposed to upgrade air conditioning units and gas boilers in corporate buildings.

To develop a heat and power network capability in Hillingdon, the Council would need to consider carefully the risk of potentially spiralling feasibility costs for a project of this scale against a background of reduced financial resources. The Council has achieved a 19% reduction in its CRC reportable emissions since 2014-15 through the adoption of focused smaller scale projects. The street lighting LED project and Civic Centre LED project once completed will significantly reduce the Council's electricity emissions.

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Appendix A

Cedars Car Park Reduction in Energy Consumption following LED Lighting Installation



Cedars Car Park

Electricity 0259210000

Month	2015 - 16	2014 - 15	Variation		2015 - 16	2014 - 15	Variation	
	kWh	kWh	kWh	%	Cost (£)	Cost (£)	Cost (£)	%
Dec	19,917	38,745	-18,828	-48.59	2050	3925	-1874	-47.75
Jan	13,962	38,147	-24,185	-63.40	1500	3872	-2372	-61.26
Feb	13,285	35,289	-22,004	-62.35	1426	3575	-2150	-60.13
Mar	13,892	38,617	-24,725	-64.03	1492	3915	-2424	-61.90
Apr	13,655	37,353	-23,698	-63.44	1412	3699	-2288	-61.84
May	13,543	38,219	-24,676	-64.56	1407	3786	-2379	-62.84
Jun	12,971	36,722	-23,751	-64.68	1351	3645	-2294	-62.93
Jul	13,234	38,112	-24,878	-65.28	1383	3787	-2404	-63.48
Aug	13,358	37,385	-24,027	-64.27	1391	3757	-2366	-62.98
Sep	13,307	35,665	-22,358	-62.69	1385	3545	-2160	-60.93
Oct	14,101	36,835	-22,734	-61.72	1463	3670	-2206	-60.12
Nov	14,424	33,260	-18,836	-56.63	1490	3317	-1827	-55.09
Total	169,649	444,349	-274,700	-61.82	17749	44493	-26744	-60.11

Average Cost Rate 10.46 10.01

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