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REPORT TO: Members' Library Service

MEETING DATE:

BY: Executive Director (Services for Communities)

SUBJECT: Carbon Management Update Report 2012

1. PURPOSE

- 1.1. To provide Cabinet with an annual update report on progress with the Council's Carbon Management Plan (CMP) 2009-14.

2. RECOMMENDATIONS

- 2.1. To note progress towards achieving the 25% carbon reduction target set out in the Council's Carbon Management Plan, and to support the main conclusions / recommendations in the annual report as detailed in the executive summary in Appendix 1. The recommendations can be summarised as follows:
- To extend the Carbon Management Plan by a year to 2014/15, with the existing target of 25% carbon reduction.
 - Refocus of the Sustainable Development Officer Role, with more emphasis on carbon management project delivery
 - To keep Enjoy Leisure within the current CMP reporting framework and work with them to reduce their emissions and produce their own Carbon Management Plan in future.
 - Devolve carbon reduction targets to specific business groups and develop key projects as detailed in the Executive summary.
 - To note and approve the key recommendation for devolving carbon reduction targets to specific business groups and developing key carbon reduction projects, as detailed in the Executive Summary (Appendix1).

3. BACKGROUND

Carbon Management

- 3.1. The Council approved its carbon management plan (CMP) in April 2009, setting itself a target of reducing carbon emissions from its own activities by 25% by 2014 (5% year on year), from a revised 2007/8 baseline.

Although some initial work took place in 2008/9, the CMP formally started in April 2009. Implementation of the plan is being co-ordinated by a cross departmental carbon management team supported by a project board chaired by Executive Director (Services for Communities). This report outlines the 3rd annual progress report for financial year 2011/12. The executive summary forms Appendix 1 to this report and the detailed annual report has been lodged in the Member's Library.

- 3.2 At the end of financial year 2011/12 the Council continued to make positive progress on a range of projects with the result that the carbon footprint has reduced by around 15.3% (32,984 tonnes CO₂e) with two further years to run to meet the target. This progress has been achieved through a range of activities such as expanding the waste recycling service and improving building energy efficiency. In addition, 2011/12 had a mild winter, which meant carbon reductions and consequent energy savings.
- 3.3 In the future it is likely that it will be harder to sustain this level of reduction as there will be fewer *quick wins* to exploit. Energy use in buildings accounts for 53% of the overall carbon footprint - this will be a key area to address to deliver future progress against targets.
- 3.4 The Carbon Management Plan continues to include Enjoy Leisure energy consumption, even though these premises have been operated by an arm's length trust since 2009. The buildings remain in Council ownership (with the exception of Dunbar Leisure Centre, which is owned by Enjoy), additionally FES manages the Mercat Gait Leisure Centre¹. The energy consumption / carbon emissions from leisure centres were part of the original carbon management plan organisational boundary. Enjoy is keen to work with the Council to reduce carbon emissions across the buildings it manages, it is therefore recommended that Enjoy Leisure remains within the Council's Carbon Management Plan (2009-14), but the position be reviewed at the next iteration of the CMP (2014-15).
- 3.5 The Carbon Reduction Commitment tax paid in FY12/13 for FY11/12 building energy related carbon emissions was £156,690. Similar budget provision will be required in FY13/14 for FY12/13 CRC payments. In December 2012, the Government announced that the CRC scheme will be simplified from 2013 and the performance league table abolished. The allowance price will remain at £12 per tonne of CO₂e for the next two years, but will increase to £16 per tonne in 2014-15; thereafter the price will increase in line with the Retail Price Index. A Government review of the effectiveness of the scheme will be held in 2016.

¹ In addition to the six secondary schools and the Musselburgh East Community Learning Centre, which are also included in the Council's CMP and CRC.

- 3.6 The quality of data used to assess the Council's carbon footprint is critical to measuring and evidencing progress in meeting the carbon management plan targets and climate change legislation objectives. Data quality has improved considerably over the past three years particularly through the introduction of automatic meter reading of electricity and gas consumption at many of the Council's larger sites. This has reduced the inaccuracies implicit in previously estimated readings and bills. The original data in the carbon management plan was re-evaluated in line with current best practice in 2010/11, with the result that the carbon management team is much more confident in the quality of data for energy consumption, transport and waste; however, there are still data collection and consistency issues for the Council's fleet. In addition, due to the complex nature of the street lighting and traffic signals network, energy consumption is estimated.
- 3.7 This evaluating and updating work will continue to be an essential piece of work for the CMP particularly informing future decision making in investment in energy reduction/ saving measures. However, further detailed work is required to fully evaluate data and to research, develop and implement projects to ensure the Council is targeting the most efficient and effective carbon and energy cost reductions. Refocusing on carbon management project delivery will help to achieve this.
- 3.8 The Carbon Management Plan includes projected carbon emissions for the business as usual scenario (BAU), which assumes that the Council does nothing to reduce the increasing trends in energy use. The BAU projected emission will rise from 38,954 tonnes CO₂ (revised FY07/08 baseline) to 42,041 tonnes CO₂ by the end of 2013/14. Implementing the projects identified within the CMP, achieving the 25% reduction target will reduce carbon emissions from 42,041 to 29,215, equating to almost 40,000 tonnes of carbon savings over the lifetime of the CMP.
- 3.9 The FY11/12 Council spend on energy was £3.4 million. Energy consumption has decreased by 12% since the baseline year; however, there have been significant increases in the price of energy, which has seen the Council's energy costs rise by 18% since FY07/08.
- 3.10 The spend on business travel in 2011/12 was £2.6 million. There has been a reduction in business mileages of 6.5% on the baseline year, with 132,000 less miles driven annually (just over 1.9 million business miles were driven FY11/12). There has been an overall reduction in expenditure on business travel of around £0.5 million, which can be attributed to reduced spend on car user allowances.
- 3.11 The Carbon Management Team has completed the Carbon Trust's progress evaluation self assessment matrix covering various actions across the Council (see Appendix 2). Good progress across a range of

corporate and operational carbon management indicators has been made over the course of the plan.

- 3.12 Behaviour change is an important component of the CMP to reduce energy consumption, waste and minimise other resource use, good progress has been made, but further work is required. A Carbon Management Policy is being developed in 2013, which will set out management and staff responsibilities to support the aim of reducing the Council's carbon footprint.
- 3.13 Successful embedding of carbon management across the organisation, coupled with the implementation of carbon reduction projects will reduce costs and help to protect the Council from future energy price increases.
- 3.14 The current CMP is due to conclude at the end of 2013/14. It is recommended that the current plan and target is extended by a year to 2014/15. This will allow for a more comprehensive iteration of the next Carbon Management Plan 2015-20, due to refinement of carbon accounting and data collection methodologies, as well as the development of detailed carbon reduction projects.

4 POLICY IMPLICATIONS

- 4.1 Work on carbon management and the wider Scottish Climate Change Declaration are significant Council and Scottish Government priority policy areas. Demonstrating progress in this area is part of the Council's obligations in the Climate Change (Scotland) Act 2009 as well as under best value.
- 4.2 The Carbon Management Plan is identified in the key strategy and plans in the East Lothian Council Plan 2012-17, and is also recognised in the corporate risk register.

5 EQUALITIES IMPACT ASSESSMENT

- 5.1 This report is not applicable to the well being of equality groups and an Equality Impact Assessment is not required.

6 RESOURCE IMPLICATIONS

- 6.1 Financial : Ongoing carbon management projects are funded within existing allocated Council budgets eg repairs and maintenance. More substantive investment in the Council's estate will be required to achieve ongoing carbon reduction targets.

Around £150k will need to be managed within the Council's revenue budget in future years to meet CRC tax obligations. The CRC tax rate will

increase from the current £12/ tonne carbon to £16/ tonne carbon from 2014/15.

Implementing and developing the carbon management plan will help to reduce the Council's exposure to increased energy costs as well as the CRC tax.

6.2 Personnel :The Sustainable Development Officer, who supports co-ordination and reporting on carbon management work is currently on maternity leave in January 2013. This will reduce the Council's capacity to further develop carbon management work including review of the currentCMP, for a significant part of the year.

6.3 Other: None.

7 BACKGROUND PAPERS

7.1 East Lothian Council Carbon Management Plan (April 2009)

7.2 ELC Carbon Management Plan Annual Report 2011/12

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APPENDIX 1

East Lothian Council Carbon management Plan 2009-14 Progress Report 2011/12

Executive Summary

East Lothian Council (the Council) has set itself a target of reducing the greenhouse gas (GHG) emissions arising from its operational activities by 25% by 2014, from a revised Financial Year 07/08 baseline of 38,954 tonnes of carbon dioxide equivalent (CO₂e)². The Carbon Management Plan (CMP) supports the Council's commitments in the Scottish Climate Change Declaration (SCCD) and its statutory obligations under the Climate Change (Scotland) Act 2009 (CC(S)A). In addition, the CMP will help to reduce the Council's exposure to anticipated increased energy costs as well as the forthcoming Carbon Reduction Commitment (CRC) tax.

In FY11/12 the total emissions associated with the Council's operational activities are estimated to be **32,984 tonnes of CO₂e**³. A breakdown of these emissions by source is shown below.

Source of emissions	CO ₂ (tCO ₂)	CH ₄ (tCO ₂ e)	N ₂ O (tCO ₂ e)	Total (tCO ₂ e)	Percentage of total
Direct emissions					
Building energy consumption	17,201	15	82	17,299	53%
Plant fuel consumption	448	0	42	490	1.5%
Fleet vehicles	1,915	1	17	1,932	6%
Business travel by car	594	0.3	3	598	2%
Street lighting and traffic signals	3,129	1.6	19	3,150	10%
Area wide waste disposal	-	-	-	9,393	29%
Refrigerant gas losses	-	-	-	0.03	0.0001%
Indirect emissions					
Building water consumption	-	-	-	122	0.4%
Total	-	-	-	32,984	100%

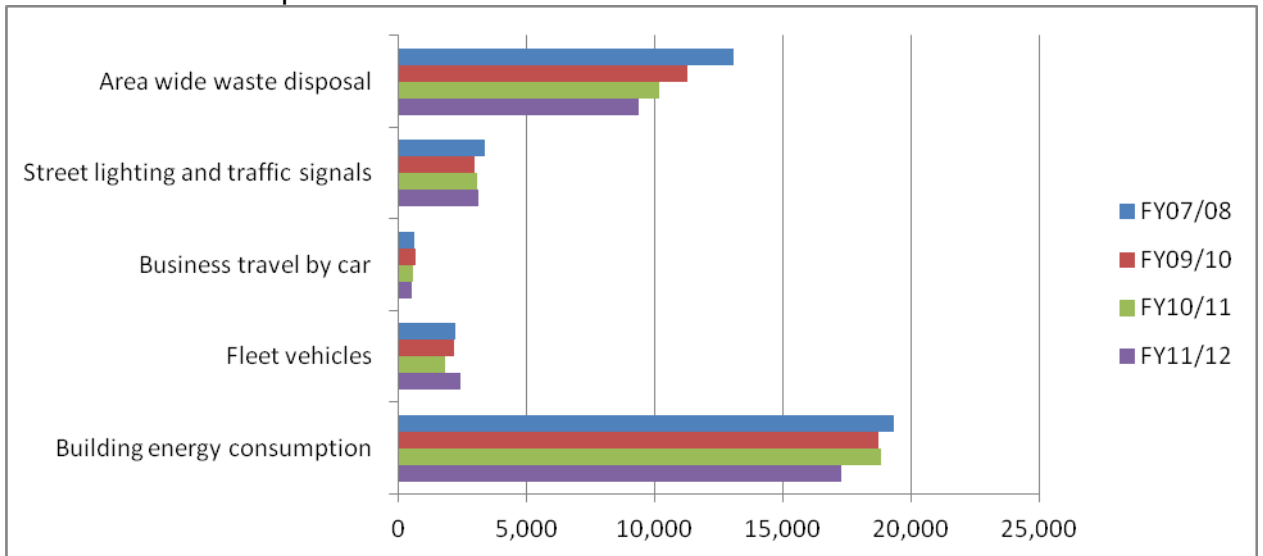
When the assessment boundary is reduced to include only those sources of emissions included in the baseline, this is equivalent to a 15.3% reduction, or **5.1% per annum** (the graph on the following page shows a comparison of emissions between reporting periods by source). When compared to FY10/11 we have reduced our emissions by 2,020 tonnes CO₂e, a 5.8% reduction.

² CO₂ equivalent (CO₂e) is the unit used to indicate the Global Warming Potential of the six Kyoto GHGs

³ To be consistent with previous reporting the indirect emissions from fuel use have been excluded – see Section 3.3 for details

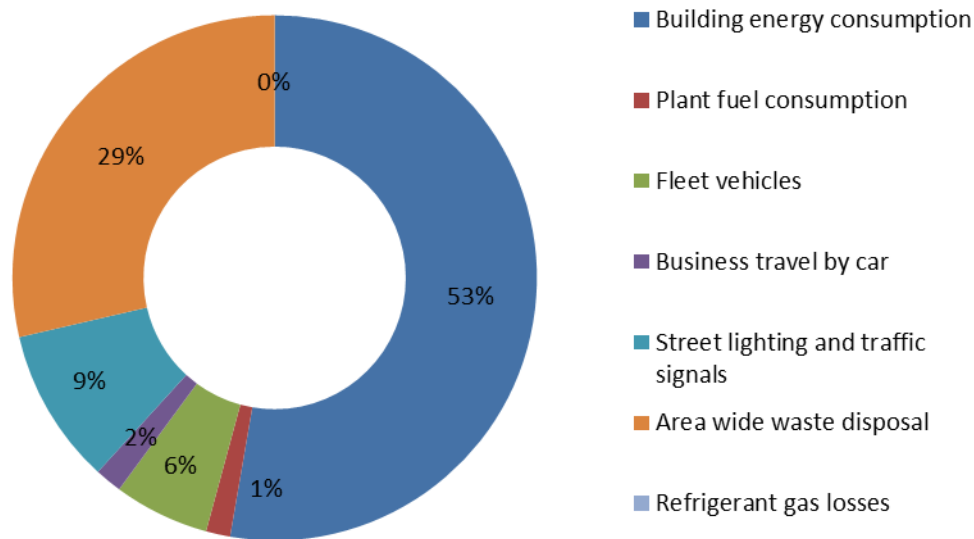
To date the Carbon Management Plan has achieved 16,500 tonnes carbon savings. The FY11/12 Council spend on energy and business travel was £3.4 million and £2.6 million respectively. Energy consumption has decreased by 12% since the baseline year; however, there have been significant increases in the cost of energy, which has seen the Council's energy cost rise by 18% since the baseline year. There has been a reduction in business mileage of 6.5% on the baseline year, with 132,000 less miles driven annually. There has been an overall reduction in expenditure on business travel of around £0.5 million, which can be attributed to reduced spend on car user allowances.

Building energy consumption and area wide waste disposal have achieved particularly impressive reductions of 9% and 8% respectively. However, the reduction in building energy consumption can be, on the most part, attributed to the milder winter experienced in FY11/12.



However, it should be noted that this progress has been achieved through relatively easy options, such as increased recycling uptake and improving building energy efficiency, as well as the knock-on effects of the economic downturn. In the future it is likely that it will be harder to sustain this level of reduction as there will be fewer *quick wins* to exploit.

Following the impressive reductions in the amount of waste sent to landfill, building energy consumption now accounts for more than 50% of total emissions and should therefore be the focus for emissions reduction projects moving forward, along with reducing carbon associated with street lighting and fleet (see graph below). There has been a programme of building rationalisation across the Council's estate. However, there have also been a number of new buildings that have come on line in the last couple of years.



A focus on continual energy efficiency upgrades through ongoing property projects, coupled with business cases put forward for Renewable Energy Technology (RET) projects across the Council's estate should help to deliver continued energy and carbon savings and reduce the Council's exposure to future increases in the cost of energy.

The CMP identifies a number of actions for the Council to take forward to embed carbon management across the organisation, the carbon management matrix (shown in appendix IV), measures progress towards this. The table below shows progress towards these actions, where we are aiming to achieve a level 5 score by the end of the CMP period.

Year	Corp Strategy	Programme Mgmt	Responsibility	Data Mgmt	Comms & Training	Finance & Investment	Policy Alignment
FY07/08	2	2.5	2	3	2	2.5	1.5
FY08/09	2.5	3	3.5	4	2	3	2
FY09/10	3.5	3.5	3.5	4	3	3	2
FY10/11	4	4	3.5	4	3.5	4.5	2.5
FY11/12	3.5	3.5	3.5	4.5	4	3	2.5

The core Carbon Management Team feels that the profile of carbon management has decreased somewhat, with regards to embedding Carbon Management within the Council in the past year. This can be attributed to the significant organisational change with some refocusing of roles and responsibilities, and the competing budget demands across the Council's services. In addition, a number of new buildings have come on line in recent years, which has also had an effect on staff resourcing for carbon management, as the Property Team has been heavily involved in implementing these projects. Despite this, the core CMT continues to meet and progress carbon management across the Council. It is noted that Carbon Management is identified in the key strategies and plans in the East Lothian Council Plan 2012-17, and is also recognised in the corporate risk register.

The Council is currently on track to reach its 25% reduction target, but it will be challenging to sustain this level of progress. (As noted above the continued reduction in carbon emissions in 2011-12 was significantly helped by the mild winter weather). In addition, future CMPs will need to deliver much more ambitious reduction targets of 42% and then 80%. To ensure that the Council is prepared to meet these challenges it is recommended that the following points are considered:

- Devolve carbon reduction targets to business units and develop key projects, e.g.:
 - Property
 - Building audits
 - Develop business cases for low carbon measures
 - Infrastructure
 - Street lighting (lantern replacement and review of street lighting / traffic signals network)
 - Develop integrated fleet asset management plan
 - Facilities management
 - Lettings consolidation
 - Education
 - Develop a primary school carbon reduction pilot
 - Corporate – supported by CRAW
 - Embedding CM into decision making process
 - Carbon management policy – business travel, removal of unnecessary electrical equipment, behaviour change
 - Business travel
 - Enjoy Leisure
 - Undertake energy, water and waste audits across facilities
 - Awareness raising and improved housekeeping
 - Installation of energy efficiency measures
- The incorporation of carbon management into decision-making needs to be more structured and robust - in line with Climate Change (Scotland) Act 2009 recommendations, a Sustainability Impact Assessment is being developed for the evaluation of policies, plans and programmes but tougher measures, such as the introduction of carbon budgets, may be more effective at focussing attention in the longer term;
- In addition to this a review of all policy should be undertaken to identify policies that are in conflict with CC(S)A obligations;
- The quality of energy use data has improved considerably since the start of the CMP for example through automatic meter reading displacing estimated readings on many sites. Accurate data collection and management will continue to be a priority for delivering the CMP. However, recording and management of transport fleet data to a consistent methodology needs to be improved to inform both future fleet investment and transport dependent service delivery decisions, and to enable effective reporting on financial and carbon savings. An integrated fleet asset management plan would assist with provision of consistent data. In addition, electricity usage for street lighting and traffic signals is currently estimated.

- CRC carbon tax paid in FY12/13 for FY11/12 building energy related carbon emissions was £156,690. Similar budget provision will be required in FY13/14 for FY12/13 CRC payments.
- The carbon management plan continues to include Enjoy Leisure energy consumption even though these premises have been operated by an arm's length trust since 2009. The buildings remain in Council ownership and the energy consumption / carbon emissions from leisure centres were part of the original carbon management plan organisational boundary. For these reasons it is recommended that Enjoy Leisure remains within the Council's management plan (2009-14) but the position be reviewed at the next iteration of the Plan.

APPENDIX 2: EMBEDDING CARBON MANAGEMENT

The CMP identifies a number of actions for the Council to take forward in order to embed carbon management across the organisation. The Carbon Management Matrix, shown below, measures progress towards embedding carbon management. Progress from our baseline year is shown in the table below, where we aiming to achieve a level 5 score by the end of the CMP period.

Progress against Carbon Management Matrix

Year	Corp Strategy	Programme Mgmt	Responsibility	Data Mgmt	Comms & Training	Finance & Investment	Policy Alignment
FY07/08	2	2.5	2	3	2	2.5	1.5
FY08/09	2.5	3	3.5	4	2	3	2
FY09/10	3.5	3.5	3.5	4	3	3	2
FY10/11	4	4	3.5	4	3.5	4.5	2.5
FY11/12	4	3.5	3.5	4.5	4	3.5	2.5

Although the Council has made positive progress towards embedding carbon management across the organisation, the Carbon Management Team feels that the profile of CM has reduced over the last year and that there is still a lack of policy alignment to support carbon management objectives.

The Council's statutory obligations under the Climate Change (Scotland) Act 2009 (CC(S)A) may help to address this issue in two ways:

- Firstly, as recommended in the Public Bodies Duties (PBD) guidance, a Sustainability Impact Assessment is being developed for the evaluation of new policies, plans and programmes;
- Secondly, the PBD guidance also recommends that all public bodies undertake a review of existing policy to identify policies that are in conflict with CC(S)A obligations.

In addition, it is felt that by devolving carbon reduction targets and a carbon management policy endorsed by the Corporate Management Team, carbon management will be seen as the responsibility of all employees and not just that of a small team of individuals.

Appendix2: Carbon Management Matrix

	CORPORATE STRATEGY	PROGRAMME MANAGEMENT	RESPONSIBILITY	DATA MANAGEMENT	COMMUNICATION & TRAINING	FINANCE & INVESTMENT	POLICY ALIGNMENT *
Best 5	<ul style="list-style-type: none"> Top level target allocated across organisation CO₂ reduction targets in Directorate Business Plans 	<ul style="list-style-type: none"> Senior Management Team/Committee/Court review progress against targets on quarterly basis Quarterly diagnostic reports provided to Directorates Progress against target published externally 	<ul style="list-style-type: none"> CM integrated in responsibilities of senior managers CM part of all job descriptions Central CO₂ reduction advice available Green Champions leading local action groups 	<ul style="list-style-type: none"> Quarterly collation of CO₂ emissions for all sources Data externally verified M&T in place for: <ul style="list-style-type: none"> buildings street lighting waste transport 	<ul style="list-style-type: none"> All staff given formalised CO₂ reduction: <ul style="list-style-type: none"> induction and training communications Joint CM communications with key partners Staff awareness tested through surveys 	<ul style="list-style-type: none"> Finance committed for 2+ yrs of Programme External funding being routinely obtained Ring-fenced fund for carbon reduction initiatives 	<ul style="list-style-type: none"> CO₂ friendly operating procedure in place Central team provide advice and review, when requested Barriers to CO₂ reduction routinely considered and removed
4	<ul style="list-style-type: none"> CO₂ reduction commitment in Corporate Strategy Top level targets set for CO₂ reduction Climate Change Strategy reviewed annually 	<ul style="list-style-type: none"> Sponsor reviews progress and removes blockages through regular Programme Boards Progress against targets routinely reported to Senior Mgt Team 	<ul style="list-style-type: none"> CM integrated in to responsibilities of department heads Senior Management Team/Committee/Court regularly updated Staff engaged though Green Champion network 	<ul style="list-style-type: none"> Annual collation of CO₂ emissions for: <ul style="list-style-type: none"> buildings street lighting transport waste Data internally reviewed 	<ul style="list-style-type: none"> All staff given CO₂ reduction: <ul style="list-style-type: none"> induction communications CM matters communicated to external community 	<ul style="list-style-type: none"> Coordinated financing for CO₂ reduction projects via Programme Board Finances committed 1yr ahead Some external financing 	<ul style="list-style-type: none"> Comprehensive review of policies complete Lower level policies reviewed locally Unpopular changes being considered
3	<ul style="list-style-type: none"> CO₂ reduction vision clearly stated and published Climate Change Strategy endorsed by Cabinet and publicised with staff 	<ul style="list-style-type: none"> Core team regularly review CM progress: <ul style="list-style-type: none"> actions profile & targets new opportunities 	<ul style="list-style-type: none"> An individual provides full time focus for CO₂ reduction and coordination across the organisation Senior Sponsor actively engaged 	<ul style="list-style-type: none"> Collation of CO₂ emissions for limited scope i.e. buildings only 	<ul style="list-style-type: none"> Environmental / energy group(s) given ad hoc: <ul style="list-style-type: none"> training communications 	<ul style="list-style-type: none"> A view of the cost of CO₂ reduction is developing, but finance remains ad-hoc Some centralised resource allocated Finance representation on CM Team 	<ul style="list-style-type: none"> All high level and some mid level policies reviewed, irregularly Substantial changes made, showing CO₂ savings
2	<ul style="list-style-type: none"> Draft Climate Change Policy Climate Change references in other strategies 	<ul style="list-style-type: none"> Ad hoc reviews of CM actions progress 	<ul style="list-style-type: none"> CO₂ reduction a part-time responsibility of a few department champions 	<ul style="list-style-type: none"> No CO₂ emissions data compiled Energy data compiled on a regular basis 	<ul style="list-style-type: none"> Regular awareness campaigns Staff given CM information on ad-hoc basis 	<ul style="list-style-type: none"> Ad hoc financing for CO₂ reduction projects 	<ul style="list-style-type: none"> Partial review of key, high level policies Some financial quick wins made
1 Worst	<ul style="list-style-type: none"> No policy No Climate Change reference 	<ul style="list-style-type: none"> No CM monitoring 	<ul style="list-style-type: none"> No recognised CO₂ reduction responsibility 	<ul style="list-style-type: none"> No CO₂ emissions data compiled Estimated billing 	<ul style="list-style-type: none"> No communication or training 	<ul style="list-style-type: none"> No specific funding for CO₂ reduction projects 	<ul style="list-style-type: none"> No alignment of policies for CO₂ reduction

* Major operational policies and procedures, e.g. Capital Projects, Procurement, HR, Business Travel