

CARBON MANAGEMENT PLAN



Carbon Management Plan Phase Two 2013 – 2021

i. Executive Summary

Anthropogenic, or man-made, climate change is generally regarded as one of the main contributors to climate change. We have an obligation to the citizens of Glasgow to operate as efficiently as possible in order to reduce our impact on the environment. Further, Glasgow City Council need to lead by example, demonstrating the benefits of reducing consumption and encouraging others, organisations and residents to consider what they can do to reduce their impact.

This version of the Carbon Management Plan (CMP 2) covers the period 2013 to 2021. It follows on from, and builds upon the work undertaken between 2008 and 2013, which set a 20% carbon reduction target by 2013 against a 2005/06 baseline.

A review undertaken in July 2013 showed a reduction of 9% had been achieved.

A 30% reduction target has now been set, to be achieved by 2020/21 against a 2005/06 baseline. This is in line with the Scottish Government's interim target of 42% reduction (against a 1990 baseline) and complements Sustainable Glasgow's target for the city of 30% reduction by 2020/21.

A restructure of the Carbon Management Programme, additional responsibilities, annual targets supported by regular reporting and individual service and ALEO (Arms Length External Organisation) action plans, will add robustness and resiliency to the plan.

The CMP 2 also explains how additional carbon sources will be incorporated into subsequent versions in order to increase the scope and influence of the Carbon Management Programme.



II. Carbon Management Plan – Foreword



BRIAN DEVLIN
EXECUTIVE DIRECTOR
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EXECUTIVE MEMBER

Glasgow City Council has both a responsibility to reduce its contribution to climate change and a duty to the citizens of Glasgow to function more efficiently and effectively. We need to become leaders in sustainability and acknowledge our responsibilities as participants in the global economy.

The next phase of our Carbon Management Programme is presented in this Carbon Management Plan. It sets out how Glasgow City Council will achieve a 30% reduction in annual CO₂ emissions, saving nearly a quarter of a million tonnes of CO₂ between now and 2021. In turn, this will reduce the council's annual running costs, freeing up capital to re-invest in the city.

The plan sits alongside a number of other programmes currently being undertaken by the council, including the European Commission's STEP-UP Programme on strategic energy planning, the Technology Strategy Board's Future Cities Demonstrator project, the Rockefeller Resilient Cities programme and the Sustainable Glasgow programme.

This is an ambitious plan that will require significant changes to the way we work within, and use the city around us, and the timescales do not afford us the luxury of delay.

This plan sets an example to the city. It shapes the future for the council, builds on our strengths and acknowledges our weaknesses, and encourages individual responsibility. It is a plan of action rather than words, and represents a significant step in our transition from an industrial city to a sustainable 'future' city.

I look forward to the support of all employees throughout the council family and thank you for your efforts in helping to make this plan succeed.

- i. Executive Summary
- ii. Foreword Brian Devlin
Introduction

| | | |
|----------|--|-----------|
| 1 | Utility Management | 12 |
| 2 | Carbon Monitoring, Reporting and Review | 13 |
| 2.1 | The Glasgow ‘Carbon Management Family’ | |
| 2.2 | Sustainable Glasgow | |
| 2.3 | Drivers | |
| 2.3.1 | Climate Change | |
| 2.3.2 | Financial Drivers | |
| 2.3.3 | Carbon Reduction Commitment (CRC) | |
| 2.4 | Data | |
| 2.4.1 | Emission Factors | |
| 2.4.2 | Baseline | |
| 2.4.3 | Re-Baselining | |
| 2.5 | Scope | |
| 2.5.1 | ‘Within-scope’ | |
| 2.5.2 | ‘Out-with Scope’ | |
| 2.6 | Reporting and Review | |
| 2.7 | Targets | |
| 2.8 | Responsibilities | |



| | | |
|----------|--|-----------|
| 3 | Project Identification, Implementation and Monitoring | 30 |
| 3.1 | Identifying Projects | |
| 3.1.1 | Energy Audits | |
| 3.1.2 | Council-wide Initiatives | |
| 3.1.3 | Consultancy | |
| 3.1.4 | Funding and Implementation | |
| 3.2 | Monitoring | |
| 4 | Project Plan | 34 |
| 5 | Strategic Projects | 36 |
| 5.1 | CMT Driven Strategic Projects | |
| 5.1.1 | Automatic Meter Reader (AMR) Installations | |
| 5.1.2 | Demand-side Management | |
| 5.1.3 | Voltage Optimisation (VO) | |
| 5.1.4 | BMS Upgrades | |
| 5.1.5 | Behaviour Change Campaign | |
| 5.2 | Projects supported by the CMT | |
| 5.2.1 | Education Refurbishment Programme (4Rs) | |
| 5.2.2 | Biomass Installations | |
| 5.3 | Waste Baseline | |
| 5.3.1 | Carbon Metric | |
| 6 | Emission Factor Sensitivity Analysis | 42 |
| 6.1 | Emission Factors Explained | |
| 6.2 | ‘Greening’ of Emission Factors | |
| 6.3 | Emission Factors Compared | |
| 7 | Review and Mitigation | 45 |
| 7.1 | Contacts | |
| 8 | Appendices | 47 |



Introduction

CARBON MANAGEMENT: A BRIEF HISTORY

Glasgow City Council has a strong record of improving efficiencies; however these have been, in the past, driven by services wanting to improve sustainability rather than having an over-arching plan supported by policy.

THE CARBON IMPLEMENTATION PLAN (2008 – 2011)

The Carbon Implementation Plan (CIP) received approval from the Executive Committee in April 2008. It set a target to reduce annual CO₂ emissions by 20% over a five-year period.

The baseline year, to measure progress in achieving this target, was 2005/06 when 194,169 tonnes of CO₂ were emitted due to energy used to provide council services (buildings, street lighting and business related transport).

The target, therefore, was to reduce emissions by approximately 8,000 tonnes of CO₂ annually over the five years of the programme. This reduction was intended to be over and above any business as usual increases.

CARBON MANAGEMENT PLAN PHASE ONE (2012 – 2013)

The first phase of the Carbon Management Plan (CMP) continued this ambitious target from a 2005/06 baseline, but built upon the governance and reporting arrangements that were in place. A review undertaken in July 2013 showed a 9% reduction had been achieved. This was a disappointing result after a 12% reduction up to the year before and could be largely attributed to an unusually cold, wet winter. It highlighted that carbon management had not been fully embedded within the council and arms length external organisations (ALEOs) and that there was still a need for council-wide buy-in and support.



CARBON MANAGEMENT: THE FUTURE (2013 – 2020)

Phase Two of Glasgow City Council's Carbon Management Plan (CMP), which will span a period of eight years, builds on the work undertaken during the first CMP and sets out how the council and its extended family of ALEOs intend to meet its carbon management targets and obligations.

Carbon and financial budgets usually come hand in hand. Therefore, carbon reductions will usually result in revenue savings. The focus of this plan is the achievement of carbon efficiencies but any efficiencies achieved will help ease pressures on service energy budgets

Although this document has been approved by council leadership and members, it remains a working document, with elements such as the project list and targets being reviewed, and if necessary amended annually to allow a more proactive approach

In addition, comparisons to baseline data will be performed on an absolute basis. There will be no adjustment for weather, changes to the estate or variation of the services provided by the council.

That is not to say that these variables will not be considered when evaluating performance, however any reported figures will be what the council is responsible for emitting, regardless of circumstances. This plan sets a 30% reduction target to be achieved by the end of financial year 2020/21 against a 2005/06 baseline.

**Phase Two of the Carbon Management Plan
sets out an absolute reduction target of**

30%
By 2020/21

This target complements the Scottish Government's interim target of 42% reduction by 2020, albeit from a 2005/06 baseline rather than 1990 baseline. It also mirrors Sustainable Glasgow's target for the city of a 30% reduction by 2020. Further, it will help to ensure we exceed the recently published European target of a 40% reduction by 2030.¹

Based on the reduction schedule presented in Section 2.7, a 30% reduction in emissions is estimated to be worth a cumulative (over 8 years) £39,780,000 (gross) at 2012/13 prices. This could be increased if savings are made earlier and when additional emission sources are included in the plan, for example emissions arising from the production of waste.

In 2012/13, Glasgow City Council emitted 122,776 tonnes of CO₂.

THIS EQUATES TO:



4 tonnes per employee



54 tonnes per degree day²

¹ http://europa.eu/rapid/press-release_IP-14-54_en.htm

² Degree days is a measure of the difference between the baseline and the actual outdoor temperature multiplied by the number of days. (Carbon Trust)

This document is intended to ‘dovetail’ with a number of other council policies and strategies (Box 1) and should be read in parallel with these

Box 1.

Related Council Policies and Strategies

The Council’s Strategic Plan

The Council’s Energy Policy

City Centre Strategy

Air Quality Action Plan

Climate Change Adaptation Policy

Local Development Plan

Planning Policy

The Energy and Carbon Masterplan

This CMP is the ‘blueprint’ for the council’s Carbon Management Programme, administered by the Carbon Management Team (CMT), who perform three related but distinct functions for the council and its extended family.

1.
UTILITY
MANAGEMENT

2.
CARBON
MONITORING

3.
PROJECT
IDENTIFICATION

The CMT has responsibility for delivering the above functions to all council services and ALEOs. Therefore, although being based in Land and Environmental Services (LES), the CMT have a corporate remit and provide a service to all departments and sections within the council family (see Section 2.1 for a detailed Carbon Management Structure).

This phase of the CMP seeks to continue to improve carbon management within the council and support the activities of colleagues throughout the city, Scotland and, indeed, Europe by supporting projects like the STEP-UP programme.

How this will be achieved, and how the Carbon Management Programme will continue to evolve, is detailed throughout this document.

1. Utility Management

THE CARBON MANAGEMENT TEAM HAVE A NUMBER OF RESPONSIBILITIES IN RELATION TO UTILITIES:

- Assisting in the procurement process (managed by Procurement Scotland)
 - Arranging supply to new or upgraded sites
 - Arranging final readings and disconnection for closed or disposed of sites
 - Validation of invoices (on statement billing account)
 - Manual entry of invoices not currently on statement billing
 - Co-ordination of meter readings
 - Ensuring adherence to supply contract terms
 - Continuing to improve the quality of data collected and billed upon
 - Providing assistance when applying for Feed-in Tariff and Renewable Heat Incentive payments where renewable energy technologies installations exist within the council estate.
 - Continuing to review and monitor to help ensure best value is achieved
- Suppliers for each utility and the duration of the contract are detailed in [Table 1](#) below*

TABLE 1. UTILITY CONTRACTS SUMMARY

| Utility | Supplier | Contract Duration |
|-------------|-----------------------|-------------------|
| Electricity | EDF Energy | April 2016 |
| Natural Gas | Total Gas and Power | April 2017 |
| Water | Business Stream | April 2015 |
| Waste | Glasgow City Council* | N/A |

* The council operate as a waste contractor and provide waste collection for all council services and ALEOs

2. Carbon Monitoring, Reporting and Review

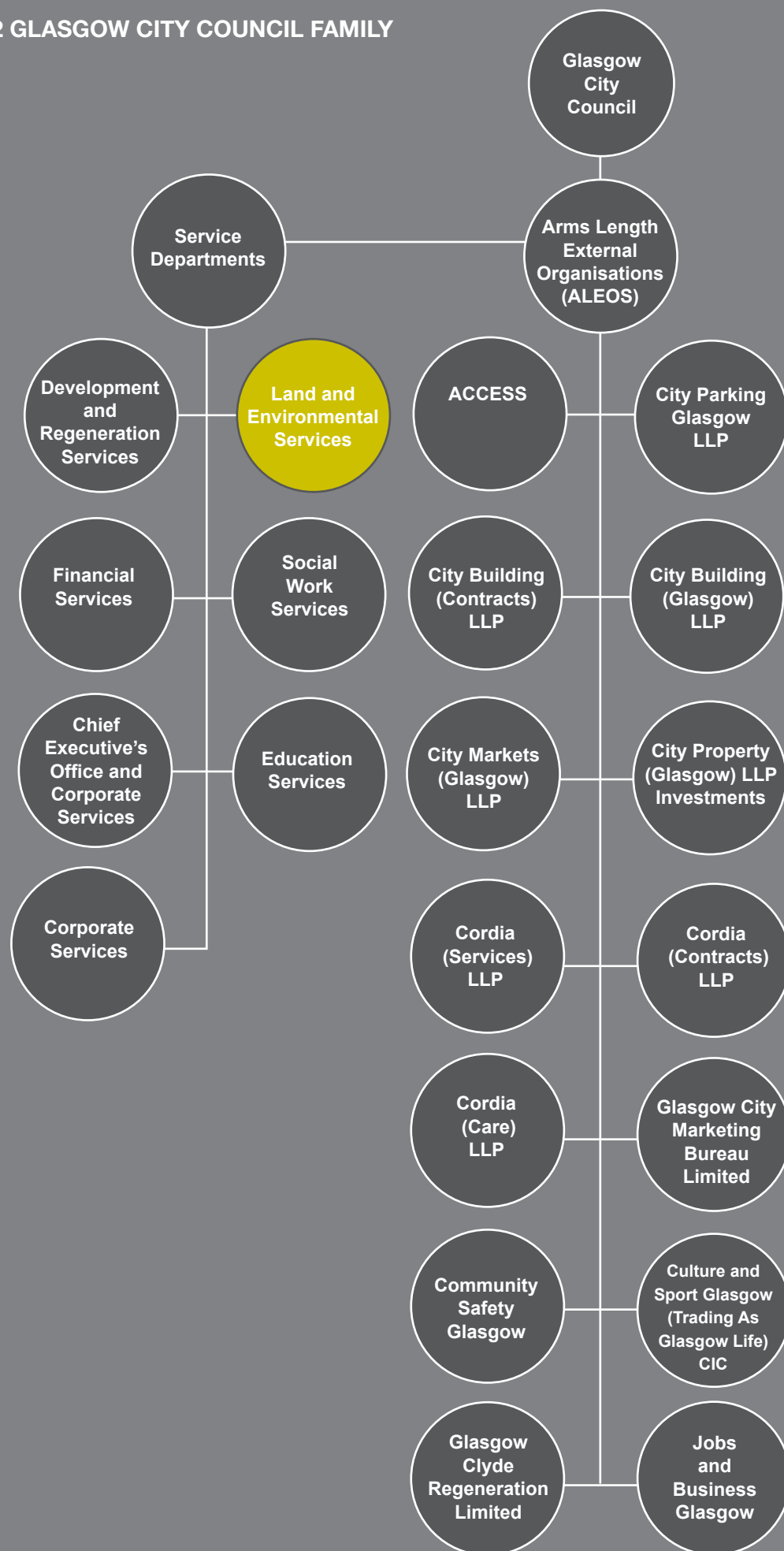
2.1 THE GLASGOW ‘CARBON MANAGEMENT FAMILY’

The CMT is responsible for identifying, monitoring, reporting and supporting projects that reduce all emissions relating to our core services and those of our ALEOs. The team structure and how it fits within the council structure is presented in Figures 1 and 2

FIGURE 1. CARBON MANAGEMENT STRUCTURE



FIGURE 2 GLASGOW CITY COUNCIL FAMILY



2.2 SUSTAINABLE GLASGOW

Although this CMP relates solely to the activities of services and ALEOs within the council family, it is worth presenting the council’s position in relation to the aspirations for the city of Glasgow.

In 2011 (the latest available data at time of writing), the city consumed a total of 8,879.3 gigawatt hours (GWh) of energy to heat and power its buildings. This total constituted 3,063.1 GWh of electricity, 5,603.6 GWh of gas, 4.6 GWh of coal, 213.6 GWh of gas oil, and 1.4 GWh of manufactured fuels. This consumption equates to carbon emissions of 2,564,946.9 tCO₂.

In a similar period, the Glasgow City Council family was responsible for approximately 5% of the city total, when comparing building related emissions.

A collaborative and co-operative approach is required if both the council and the city are to meet their respective targets. Sustainable Glasgow was established to support activities that would help make the city a more sustainable place. The Sustainable Glasgow board has pan-sector representation that provides considerable resources. Figure 3 shows the structure of Sustainable Glasgow.

The activities of Sustainable Glasgow are being supported through two fixed term programmes, the ‘TSB Future Cities Demonstrator Programme’ and ‘Strategies Towards Energy Performance and Urban Planning’ (STEP-UP).

FIGURE 3 SUSTAINABLE GLASGOW STRUCTURE



A stylized illustration of a factory chimney emitting smoke. The chimney is a dark blue silhouette on the left side of the page. A thick plume of smoke rises from the chimney, depicted with several overlapping circles of varying sizes in a lighter blue shade. The background is a solid medium blue.

2.3.1 CLIMATE CHANGE

The 2013 report from the Intergovernmental Panel on Climate Change (IPCC) has provided the most compelling evidence yet that humans are responsible for the warming of the earth, stating that scientists are 95% certain that humans are the “dominant cause” of global warming since the 1950s.

It states that each of the last three decades has been successively warmer at the Earth’s surface, and warmer than any period since 1850, and probably warmer than any time in the past 1,400 years.

The atmosphere and oceans have warmed, accompanied by sea-level rise, a strong decline in Arctic sea ice and increasingly frequent ‘extreme’ weather events including unseasonal rainfall, droughts and hurricanes.

The Scottish Government’s recent publication – Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027 – The Draft Second Report on Proposals and Policies (“RPP2”) – identifies the public sector’s share of Scotland’s 2010 greenhouse gas emissions as 0.9 million tonnes of CO₂ or 2% of total Scottish emissions. Almost all (98%) of these emissions are from public sector buildings with 62% from local authorities.

Therefore, it’s clear that in reducing the council’s emissions, we can contribute to both national and international climate change reduction targets.

The IPCC’s 5th Assessment Report -

<http://www.ipcc.ch/report/ar5/wg1>

2.3.2 FINANCIAL DRIVERS

As a Local Authority, Glasgow City Council has a number of responsibilities and obligations. We recognise the role we have in leading by example in relation to reducing our environmental impact. However, we also have a responsibility to ensure best value for the citizens of Glasgow. Reducing carbon emissions directly reduces the council's operational costs and allows those finances to be directed elsewhere.

Whilst this CMP is focused on reducing CO₂ emissions as a primary objective, it is acknowledged that there is an opportunity to reduce, or at least offset the rise in cost of, the circa £40m spent on council buildings, transport and carbon tax (Carbon Reduction Commitment) annually.

2.3.3 CARBON REDUCTION COMMITMENT (CRC)

The Carbon Reduction Commitment (CRC) has proven to be one of the most influential drivers of change within the council. 2012/13 saw the council's obligation costing £1.47m for 122,776 t CO₂.

This is split between the council, including the Strathclyde Pension Fund (~£987,000), and Glasgow Life (~£413,000). The remaining ALEOs are below the eligibility threshold, however annual checks are undertaken to ensure they remain so.

This is a rise of 6,800 tCO₂ and £80,000 compared to 2011/12, largely due to the introduction of additional building stock, for example the Emirates Arena.

For Phase 2 of the scheme (2014-2017), street lighting will be included, adding around 23,000 tonnes per annum to our total and ~£370,000 due to the rise in cost of CO₂.





2.4 DATA

Data is the basis for any good carbon management activity. Without an understanding of where measurement is starting from using accurate, timely data, the effects of reduction activities cannot be monitored with any degree of certainty.

You can't manage what you don't measure

Data is collected from a range of sources including manual readings, supplier reports and estimates. The CMT strive to continuously improve data quality and, since buildings are responsible for approximately 70% of the council's emissions, the CMT have undertaken a programme of Automatic Meter Reader (AMR) installation. AMRs automatically record readings every half-hour and send that data to an energy monitoring software tool which allows the CMT to analyse and monitor site-level performance.

At the time of writing, the council family has 746 operational properties within which, there are 1,165 electricity meters, 651 natural gas meters and 563 water meters. Of these, 58% of electricity meters, 71% of natural gas meters and 30% of water meters have AMRs installed. Although it should be acknowledged that in consumption terms, coverage will be greater since it is predominantly sites with higher consumption that have AMRs installed.

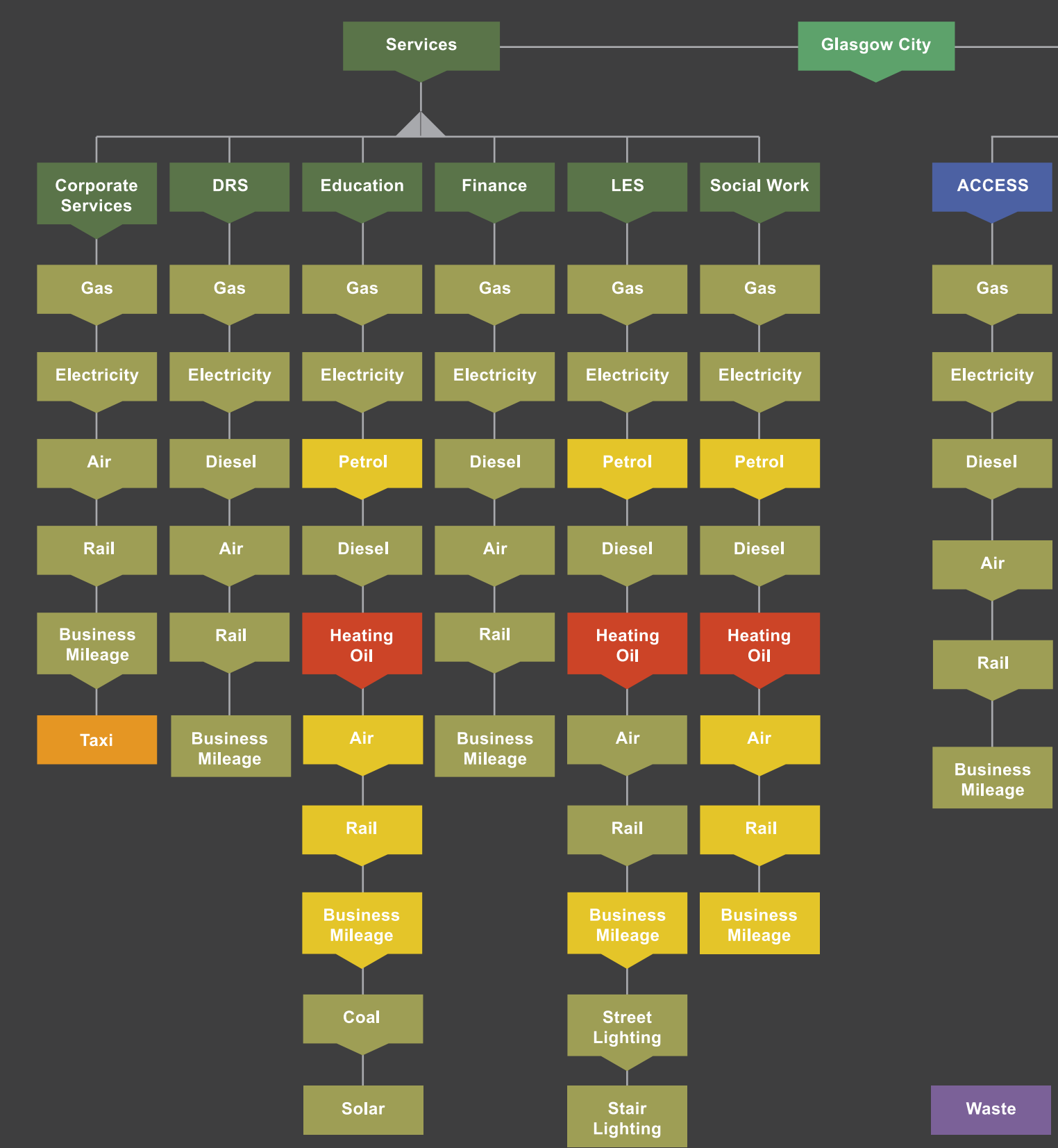
Installations of AMRs will continue throughout the term of the Carbon Management Programme, meaning data quality will continue to improve. Table 2 below presents the various data sources collected by service/ALEO, the colour coding indicates the quality of the data collected. Consumption data is collected for all buildings and business related transport, as detailed in Figure 4

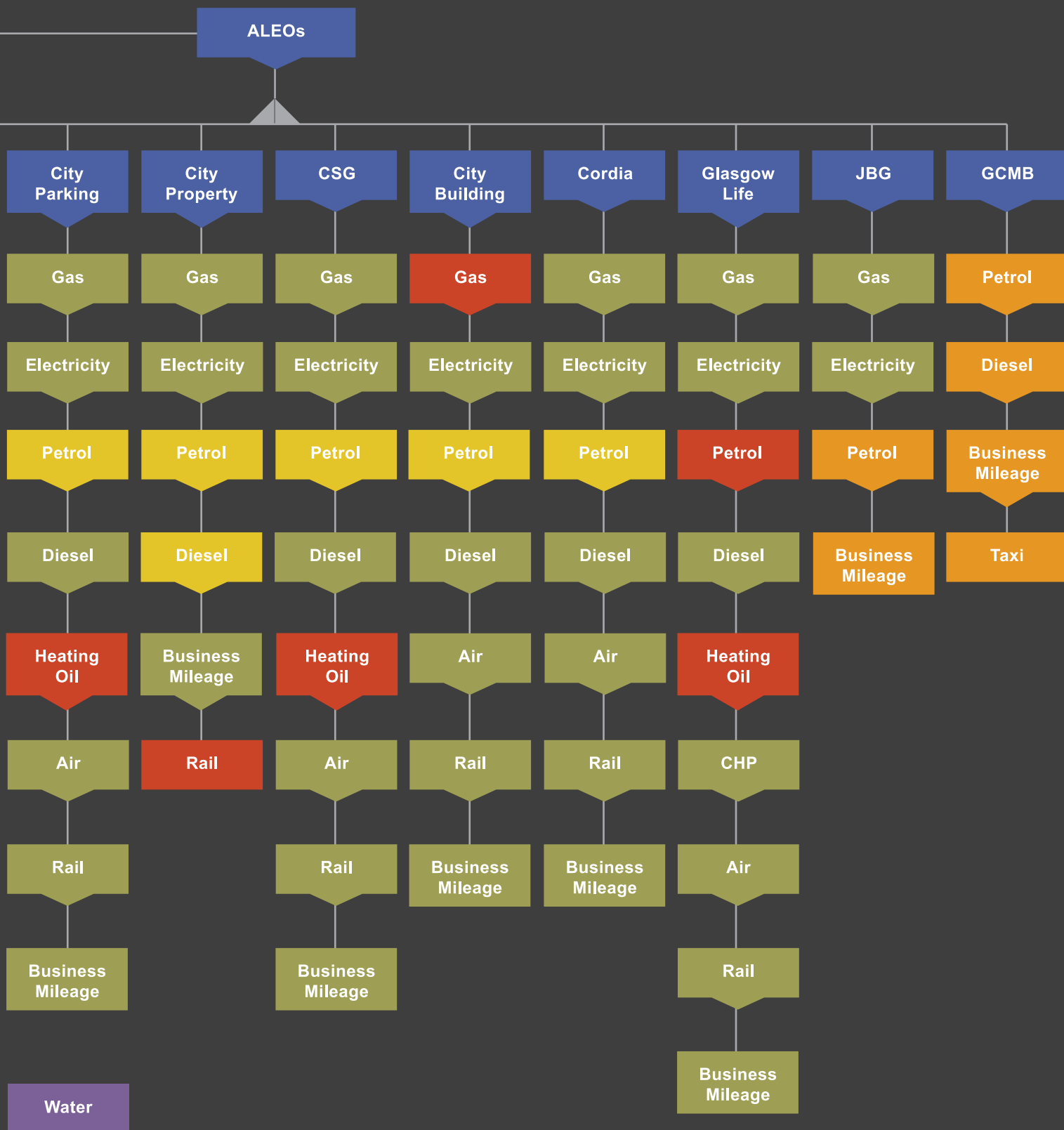
| Data Quality | Explanation |
|----------------------|---|
| Good Data Quality | Automatically collected and validated data |
| Average Data Quality | Automatically collected data requiring manual validation/manipulation |
| Poor Data Quality | Manually collected data requiring manual validation/manipulation |
| New Data | Newly added data sources not yet incorporated into the CMT's data collection procedure. |
| Pending Data | Data currently being gathered but not yet included in our CO ₂ figures. |

TABLE 2. SOURCES OF DATA AND AN EXPLANATION OF THEIR QUALITY

FIGURE 4. EMISSION SOURCES AND DATA QUALITY

* Gas consumption data for City Building is not managed through the CMT's energy management software but is provided by City Building on a quarterly basis.







2.4.1 EMISSION FACTORS

For the purposes of accurate comparison and to avoid confusion when providing internal reports, the CRC carbon emission factors for natural gas and electricity have been used when reporting emissions for the whole estate. However, it is recognised that variation in emissions factors will have an effect on the footprint. For this reason, a sensitivity analysis has been undertaken using the latest available emission factors. This is presented in section 6.

2.4.2 BASELINE

Previous versions of the council's CMP utilised 2005/06 as the baseline year from which progress was measured; 194,169 tonnes of CO₂ were emitted that year.



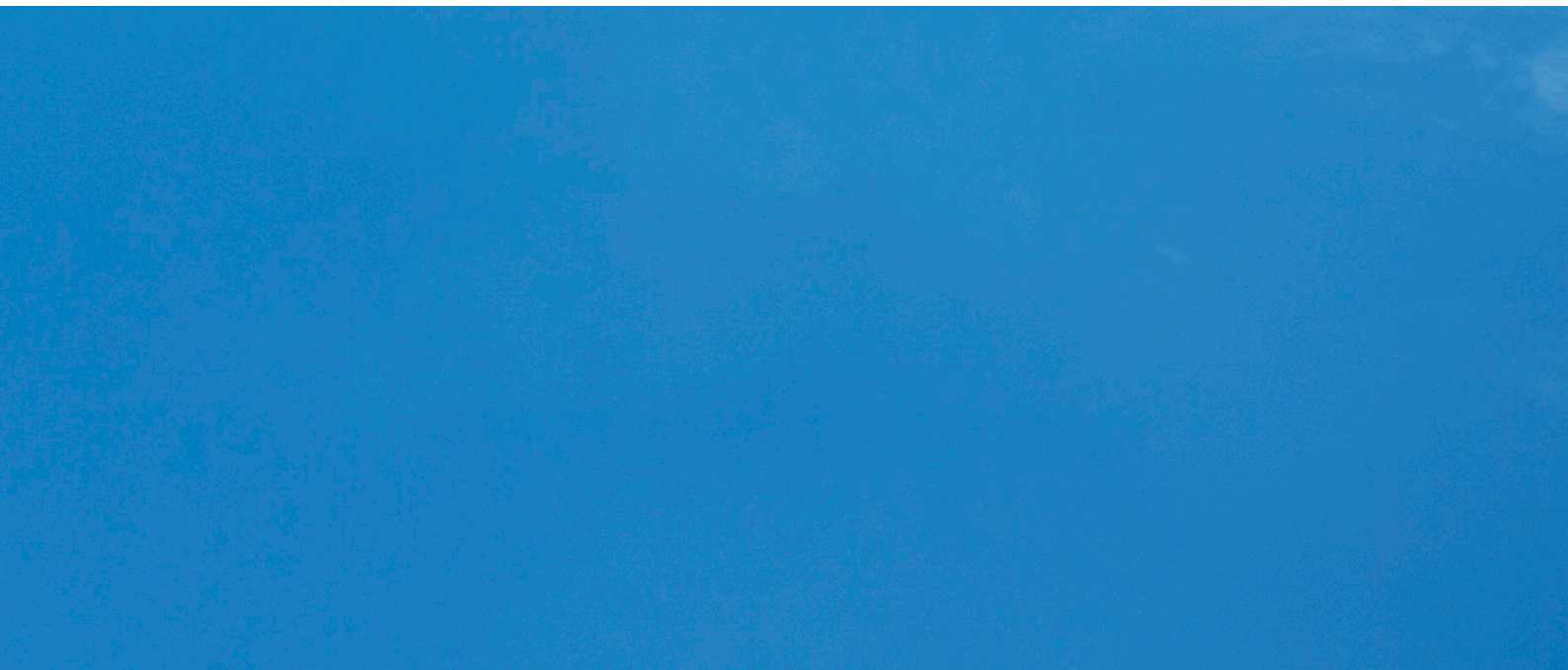


2.4.3 RE-BASELINING

In 2005/06, there were virtually no AMRs in the council estate meaning the CMT were reliant on manual meter readings and estimates from utility companies to establish the baseline. In addition, there have been a number of changes to the estate over the last eight years including but not limited to:

- The inclusion of ALEOs such as Jobs and Business Glasgow and Community Safety Glasgow
- The closure of 263 buildings and the addition of 156 buildings (a net of 107 fewer locations), largely as a result of the 'Tomorrow's Office' programme of building rationalisation
- A number of renewables have been installed including heat-pumps, photovoltaics and biomass boilers

In recognition of this, a new baseline has been calculated. By using the emissions from 2012/13, performance to date could be measured whilst providing a more accurate starting point for the eventual evaluation of phase two.



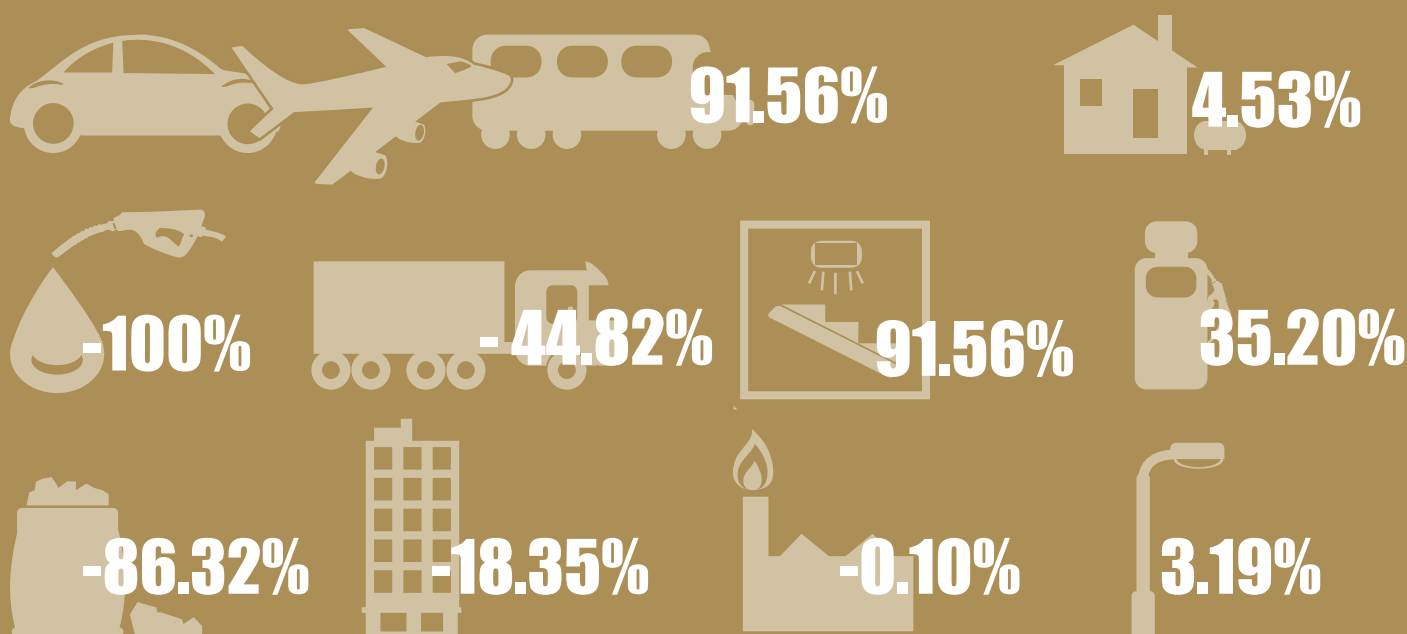
The table below presents an updated 2005/06 baseline against an absolute figure for 2012/13 for each emission source recorded. Both the 2005/06 and 2012/13 totals have not been corrected in any way; they represent what was emitted each year, relative to the emissions sources within scope, regardless of building asset or council activity.

TABLE 3. COMPARISON OF 2005/06 AND 2012/13 BASELINE FIGURES

| Energy Usage | kgCO ₂ /unit | Emissions (tonnes CO ₂) | | Variation (%) |
|-------------------------------|-------------------------|-------------------------------------|----------|--------------------|
| | | 2005/06 | 2012/13 | 2005/06 vs 2012/13 |
| Electricity (buildings) | 0.541 | 80,190 | 65,478 | -18.35% |
| Electricity (street lighting) | 0.541 | 21,816 | 22,513 | 3.19% |
| Electricity (stair lighting) | 0.541 | 13,623 | 9,881 | -27.47% |
| Gas (buildings) | 0.1836 | 50,197 | 50,146 | -0.10% |
| Coal (buildings) | 2577 | 6,752 | 924 | -86.32% |
| Oil (buildings) | 2.762 | 12,767 | 13,345 | 4.53% |
| Diesel (transport/ plant) | 2.639 | 12,797 | 17,301 | 35.20% |
| Petrol (transport) | 2.3035 | 656 | 362 | -44.82% |
| LPG | 1.495 | 338 | 0 | -100.00% |
| Air | 0.1883 | 782 | 306 | 91.56% |
| Rail | 0.0611 | | 32 | |
| Car | 0.2235 | | 1,160 | |
| TOTAL | | 199,919* | 181,447* | -9.24% |

*These figures have not been corrected to reflect the affects of weather or changes to the estate.

FIGURE 5. PERCENTAGE OF VARIATION IN EMISSIONS BY SOURCE SINCE 2005/06



Electricity consumption is our single largest source of emissions, responsible for 54% of the total. Followed by natural gas (for heating and hot water), responsible for 30% of emissions.

2.5 SCOPE

While not all of the work streams presented in Table 4 form part of the current scope of this CMP2, the council acknowledges its responsibility in reducing the impact of all of these, wherever possible. The nature of the Carbon Management Programme will ensure that some of these impacts, both positive and negative, are incorporated in to future revisions of the CMP.

TABLE 4. WORK STREAMS

| BUILDINGS & ESTATE | TRANSPORT | WASTE | OPERATIONS & ACTIVITIES | EMPLOYEE |
|---------------------------|--------------------------|-------------------------------------|-----------------------------|-------------------------|
| Fuel Use | Electric Vehicles | Reducing Waste | Grounds Maintenance | Driving |
| Energy Efficiency Billing | Electric Charging Points | Recycling | Roads and Assets Management | Home working |
| Voltage Optimisation | Fuel Usage | Re-use | Crematoria | Flexible Working |
| Boiler Optimisation | Hybrid Vehicles | Sharing of Equipment and facilities | Cleansing Operations | PC Usage |
| Retrofits | Route Optimisation | Distribution of Equipment | Catering | Monitoring and Analysis |
| Street Lighting | Analysis and Accounting | WARP-IT | Events | Training |
| Solar and PV Panels | | | | Awareness |
| Analysis and Accounting | | | | |

The CMT, working alongside colleagues in other council and ALEO departments, will, where possible, establish baselines, set reduction targets and progress projects for many of these in subsequent versions of this CMP.

2.5.1 'WITHIN-SCOPE' BUILDINGS

The council recognises that energy used in our buildings is by far the largest source of carbon emissions. The building types operated by the council are schools, care homes, day care centres, offices and depots. For reporting purposes, Glasgow Life and City Building (Glasgow) LLP are part of this evaluation, therefore libraries, sports facilities, a manufacturing facility and museums are also included. A full list of sites has been included in Appendix 2.

As part of the National Procurement contract with EDF, we aim to purchase 100% 'Green' electricity. This is the case for the majority of sites meaning they are exempt from paying the Climate Change Levy (CCL).

However, for the purposes of reporting carbon emissions, the standard grid electricity conversion factor has been used universally.

STREET LIGHTING

This includes street lighting in residential areas and highways, traffic signs, bollards and lighting in residential common areas. Glasgow's street lighting supply is un-metered or Pseudo Half Hourly supply, (explanation on p27) so consumption is calculated by the following formula:

representative metered supply x number of lamps = annual consumption

For example, if the consumption of one street light is measured this reading can be extrapolated to obtain a consumption for all street lights.

STAIR LIGHTING

Although a small proportion of private residences are maintained by the council, 'stair-lighting' predominantly refers to lighting provided for close, stair and back-court areas in residential developments formerly



managed as part of the social housing stock. These properties have since transferred to a variety of Registered Social Landlords (RSLs), however, as part of the Housing Stock Transfer Agreement, the council have responsibility for these lights.

TRANSPORT

The data for transport includes all council fleet vehicles, including cars, vans and refuse vehicles; and vehicle mileage used in the course of council business, including personal vehicles, hire cars and taxis.

WATER

Water related consumption has been collected and the resultant emissions calculated. This is the first year water has been included in the CMP and will therefore act as our baseline for water emissions. To allow like-for-like comparison of emissions with the 2005/06 baseline, water emissions will remain separate from the total emissions contributing to the 2020 target.

1,096,934m³ of water was consumed within the council family in 2012/13 and was responsible for 1,865 tCO₂ at a cost of just over £5.5m

2.5.2 'OUT-WITH SCOPE'

WASTE

It is the aim of the council to improve internal waste data management to allow for accurate reporting within the CMP of all waste streams resulting from council premises.

To do so the council will investigate the adoption of an environmental management system or separate waste plan such as the Zero Waste Scotland Waste Prevention Plan.

Once an appropriate waste management programme has been implemented, waste will be integrated into the CMP. The CMT have initiated a waste data gathering

exercise in order to establish a waste baseline. This is detailed in Section 5.3.

Pg 26 Pseudo Half-Hourly Metering is a technique for calculating half hourly electricity supplies where the supply is unmetered. It is defined as a dynamic supply where (i) a set of equipment fixed to land that performs a common function (for example, street lighting), (ii) one element of the set of equipment is metered (for example a lamp post) and (iii) the existing meter point is used as a benchmark to determine the overall supply to the entire set of equipment in a given period.
www.carbonreductioncommitment.co.uk/glos.shtml

2.6 REPORTING AND REVIEW

A new carbon management structure has been established to help ensure better integration of carbon management within the organisation. Figure 6, in section 2.8 presents the new Carbon Management Corporate Structure while Appendix 3 presents the reporting requirements relating to the Carbon Management Programme.



2.7 TARGETS

To help ensure the 30% reduction target by 2020 is met, cumulative annual targets i.e. target against consumption in the preceding year, have been set for all emission sources, for each of the services and ALEOs.

These targets will be reviewed and reported on annually, and adjusted based on performance in the preceding year. There are a number of benefits of managing targets in this way, including:

- Allowing targets to be 'sculpted' around known activities
- Maintaining momentum from early activity
- Reducing the risk of reverting to 'poor' practices
- Mitigating carbon intensive activities i.e. the Commonwealth Games

Using the re-baselined 2012/13 footprint of 181,447 tCO₂, reduction targets will be set as presented in Table 5.

TABLE 5. REDUCTION TARGETS FROM 2013/14 TO 2020/21 BY EMISSION SOURCE

| Targets (% reduction) | | | | | | | | | |
|-------------------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Emission Source | 2012/13 Baseline | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
| Electricity (buildings) | 0 | 2 | 2 | 4 | 4 | 4 | 4 | 3 | 3 |
| Gas (buildings) | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Oil (buildings) | 0 | 2 | 5 | 20 | 20 | 4 | 4 | 3 | 3 |
| Coal (buildings) | 0 | 2 | 50 | 50 | 0 | 4 | 4 | 3 | 3 |
| Street lighting | 0 | 0 | 6 | 4 | 4 | 4 | 4 | 3 | 3 |
| Back-court lighting | 0 | 2 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Vehicles - diesel | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Vehicles - petrol | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Air business travel | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Rail business travel | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |
| Car business travel | 0 | 1 | 3 | 4 | 4 | 4 | 4 | 3 | 3 |

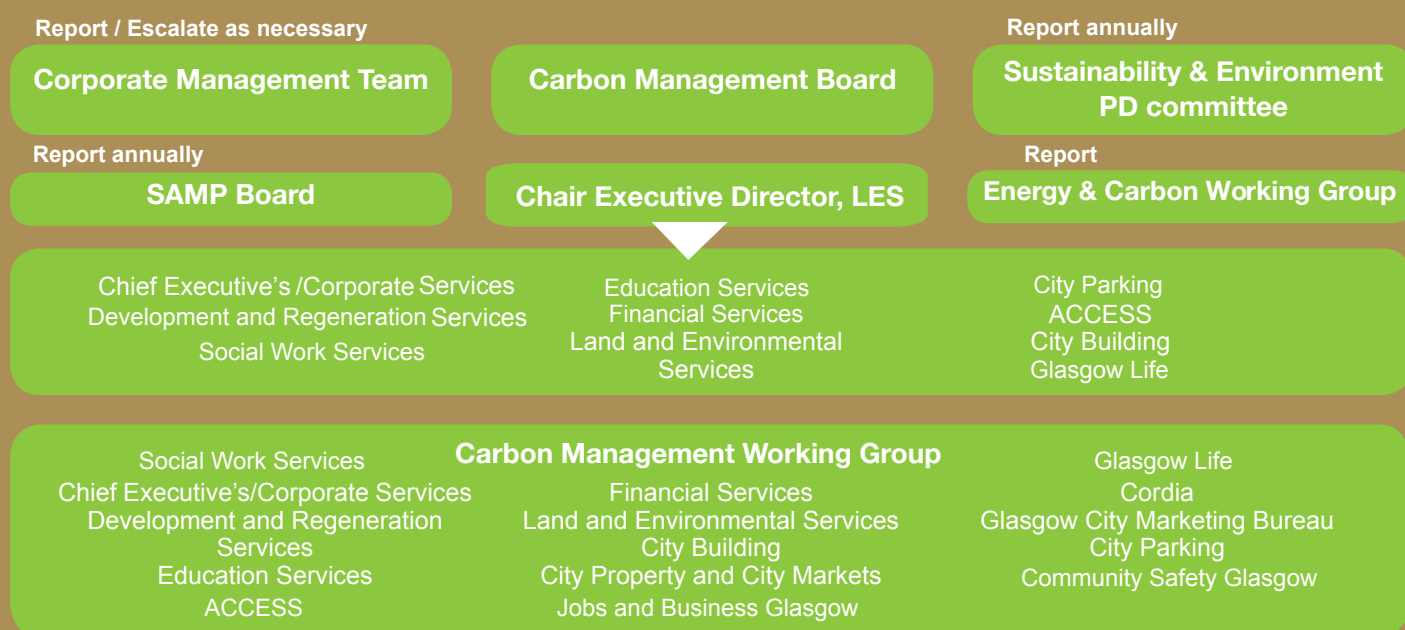
It is noted that additional targets will be required once waste and water are incorporated into the plan.

In addition, a mechanism will need to be put in place for district heating networks operated by the council to account for the fuel in versus the heat output where that is being utilised.

2.8 RESPONSIBILITIES

One of the key themes of this revised CMP is the devolution of responsibilities. The new carbon management corporate structure ensures that all services and ALEOs are represented in the Carbon Management Programme, presented in Figure 6 below. Reporting requirements relating to this new structure are detailed in Appendix 3.

Figure 6. Carbon Management Corporate Structure



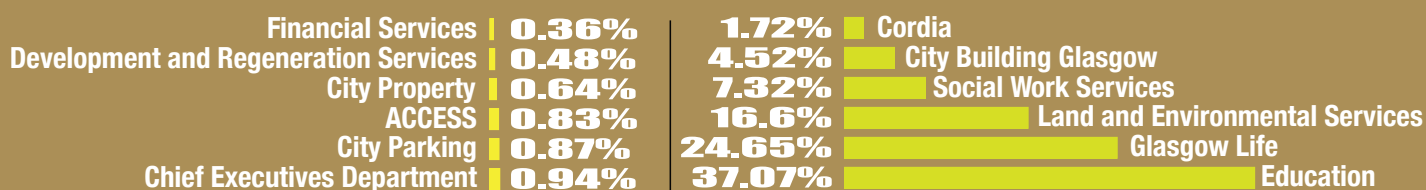
To ensure participation, each service and ALEO has produced a Carbon Action Plan (CAP). This sets their respective baseline, using 2012/13 consumption, their CO₂ reduction target and a list of projects that will contribute to this target.

These CAPs will be reviewed annually and performance will be reported to the Carbon Management Board.

This assigns responsibility for reducing emissions to the services that have the ability to influence change and, through the reporting requirements, provide accountability.

Figure 7 below, presents emissions by service and ALEO. The three largest consumers, responsible for nearly 80% of emissions, are Education, Glasgow Life and Land and Environmental Services.

Figure 7. Percentage of total emissions by Service/ALEO



One of the core activities of the CMT is the identification and implementation of carbon reduction strategies, projects and activities.

In addition, the CMT provides support in an advisory capacity, which includes energy auditing of buildings as well as rolling out council wide energy saving initiatives. It also provides advice in a consultancy role, providing support and information to services with existing project ideas.

3. Project Identification, Implementation and Monitoring

3.1 IDENTIFYING PROJECTS

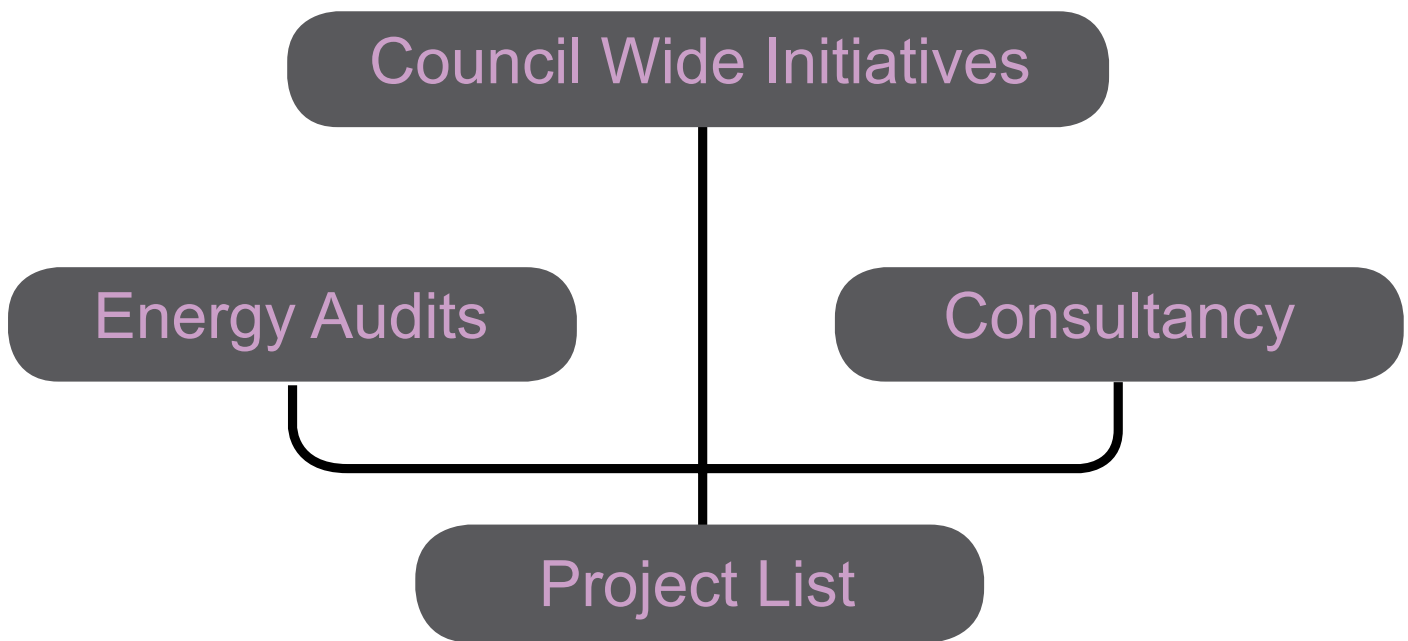


FIGURE 8 PROJECT IDENTIFICATION PROCESS



3.1.1 ENERGY AUDITS

The majority of projects arise from a programme of energy audits undertaken by the Carbon Officers. Sites are selected in three main ways:

- 1** Monitoring consumption increases: the Carbon Officers track consumption increases on a monthly basis, and, where increases are identified without a known cause, investigation is initiated.
- 2** Benchmarking: Three main benchmarking exercises are undertaken; sites that appear to show consumption greater than expected are investigated;
 - Using figures provided by the Chartered Institute of Building Services Engineers (CIBSE), sites are assessed on a consumption by area (kWh/m₂) basis;
 - By comparison to similar building types; and
 - By using degree days for heating related consumption.
- 3** Service requests: a request for a site audit may come from the service as a result of employees flagging up issues.

Once sites have been selected, a more detailed desktop study of energy use is carried out to help guide the on-site audit.

Information is gathered on a range of factors including site use, hours of occupancy, recent/planned works (which may involve energy efficiency measures), details of existing plant and of the general condition of the building fabric.

A site audit is undertaken to identify areas of energy saving which may include lighting, heating/cooling, out of hours consumption, draught proofing and behavioural change.

Identified opportunities are presented, alongside the data gathered and results of the audit, in a detailed report, which is sent to the service/ALEO and the site contact. Once costed and agreed, opportunities are added to the service CAP and to the master project list.

3.1.2 COUNCIL-WIDE INITIATIVES

The CMT has been pivotal in the identification of technologies that yield significant carbon savings and can be rolled out across the whole estate, where appropriate. To date, this has included the following initiatives:

- Boiler optimisation
- Voltage optimisation
- Window sealant
- Installation of smart meters for electricity, gas and water
- PC shutdown software
- BMS upgrades
- Behavioural change campaign
- Lighting upgrades and refurbishments

Refer to Section 5 for more detail on each programme.

3.1.3 CONSULTANCY

The CMT are well placed to offer expertise pertaining to the carbon and energy aspects of projects being delivered by the council, both internally and externally. This leads to the CMT being contacted to provide expertise on projects on an ad hoc basis. For example, in relation to the school's refurbishment programme (details provided in Section 5.2).

The type of advice given can include the provision of energy data, determining the suitability of a site for a particular technology, legislation and funding queries, organising trials of products as well as any ongoing support that may be required.

As well as supporting energy projects, the CMT has capability in waste and water and supports carbon saving programmes in these areas. Examples include developing smart metering for water supplies and developing the waste baseline for council premises (see Section 5).

3.1.4 FUNDING AND IMPLEMENTATION

The vast majority of projects that arise from energy audits conducted by the CMT are funded using the Central Energy Efficiency Fund (CEEF). CEEF is a cyclical fund set up in 2004, which can be utilised for energy efficiency projects with a payback of up to seven years for non-renewable technologies and up to ten years for renewable technologies projects.

However, where a business case can be made, capital funding may be utilised. For example £1.1m was provided to install voltage optimiser units throughout the estate.

Projects are assessed on payback and relative carbon savings to ensure best utilisation of the fund. Figure 9 summarises the CEEF funding process .

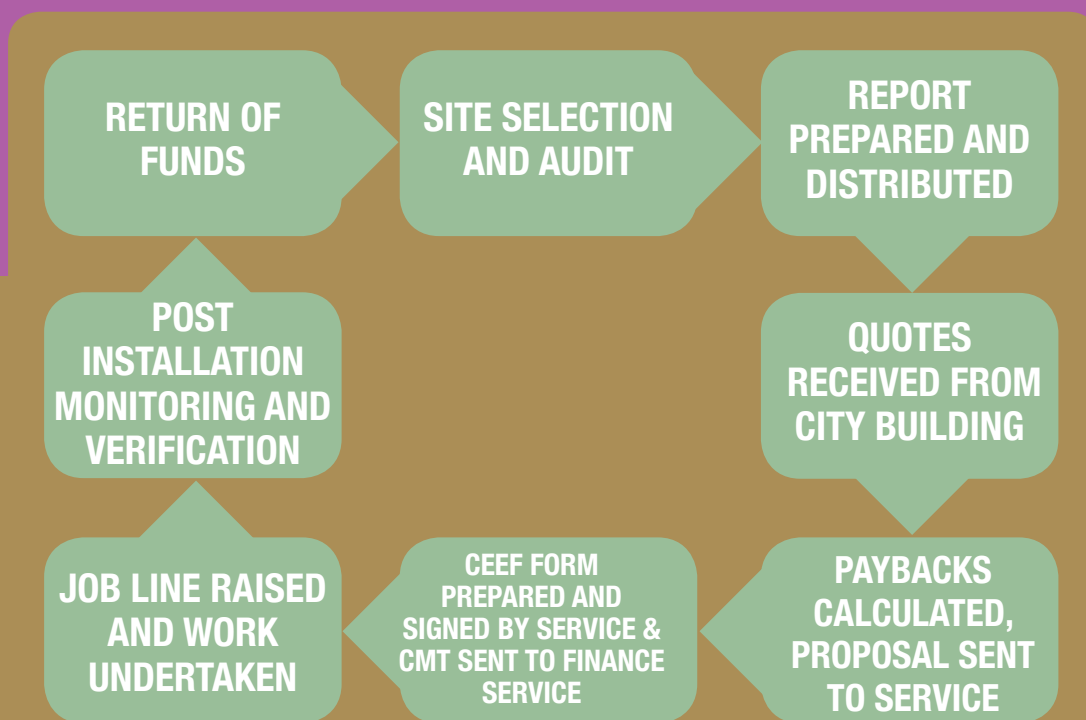


FIGURE 9. SUMMARY OF FUNDING PROJECTS USING THE CEEF FUND.

City Building Glasgow (CBG) act as both procurer, using various frameworks, project manager, where required, and contractor. For ICT related projects, for example PC shutdown software, ACCESS provide these services.

Council-wide initiatives are funded by a mix of CEEF and Capital Funds. To access Capital Funds, business cases are presented to the CMB for initial approval, prior to submission to the Capital Programme Board. In some instances, approval from elected members may also be sought via an appropriate committee.

In some instances, energy efficiency projects may be carried out by services using their own budget allocations.

3.2 MONITORING

Post installation of energy saving technologies, the Carbon Officers monitor energy consumption data to verify estimated savings and to determine that the technology is working as anticipated. Half-hourly data is interrogated where available and invoice data is used if not.

In addition to this data analysis, Carbon Officers engage with site contacts and other employees to obtain feedback to help gauge the success of the new technology on the ground.

Verification is used to help guide the future roll out of technology types; where results have been lower than expected or feedback has been negative, the CMT can try a new approach. Where results have been favourable, the technology may be rolled out across the estate to further carbon savings.



4. Project Plan

As of 2013, individual services were issued with a Carbon Action Plan (CAP) to further drive carbon savings. Each CAP has a service specific target based on consumption in previous years; with these targets being met by council wide carbon saving initiatives managed by the CMT as well as the services themselves coming forward with projects of their own.

There are a number of advantages in ensuring a close working relationship between the CMT and the services including:

- A greater number of carbon saving measures will be identified and quantified
- Knowledge sharing and awareness raising is improved
- Competition is created

All initiatives, whether they come from the CMT or the services, are entered into each of the CAPs as well as a master project list. Doing so allows the CMT to track the types of projects identified and implemented as well as any financial and environmental savings.

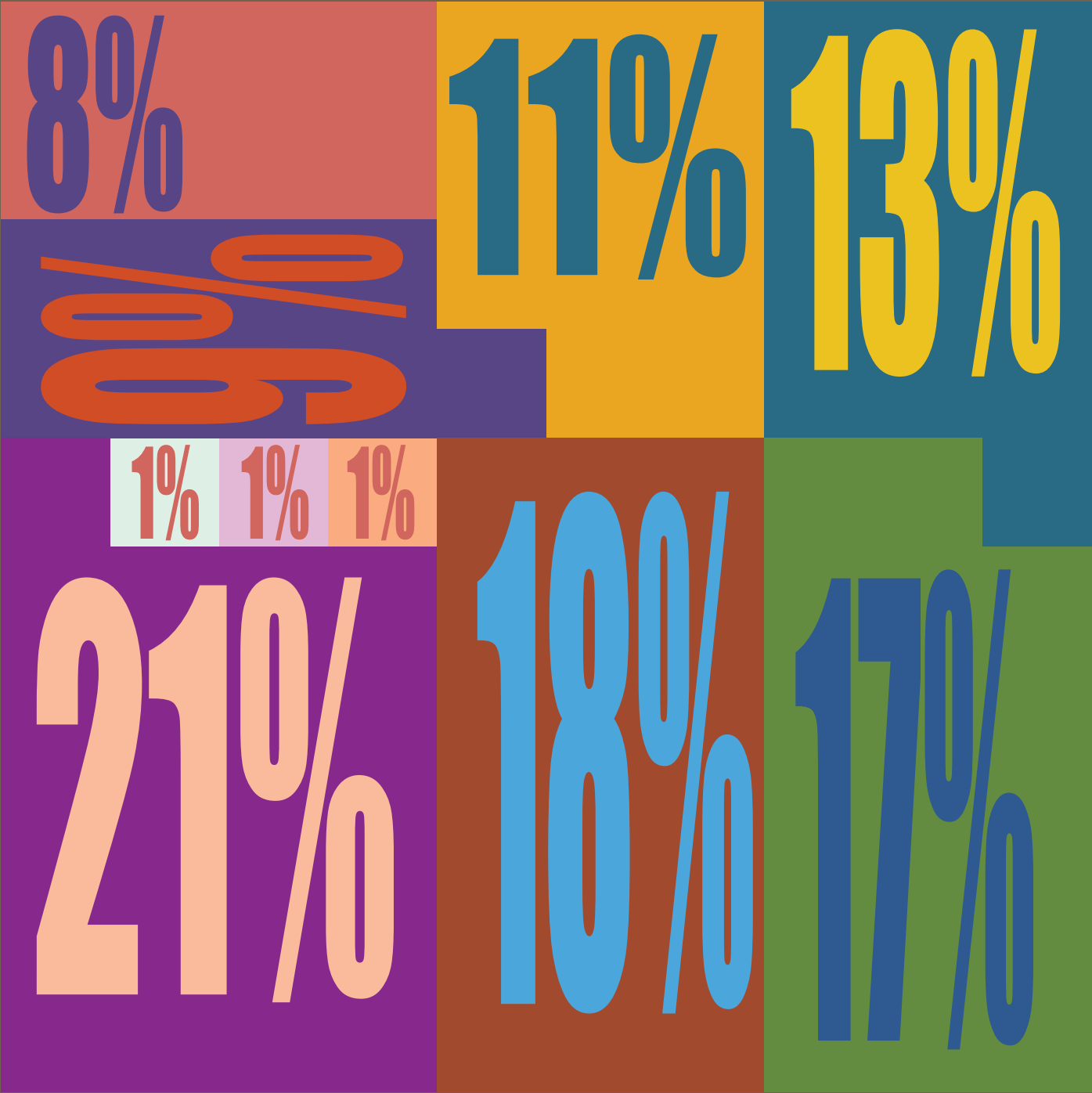
Table 6 shows where the council currently stands regarding the carbon reduction total compared to savings identified from projects identified in 2013/14.

TABLE 6. TARGETS SET FOR 2013/14 VS SAVINGS IDENTIFIED

| Tonnes of Carbon Dioxide | | | | | |
|-------------------------------|---------------------|----------------|-----------------|-----------------------------|--------------|
| Electricity (buildings) | 2012/13 Performance | 2013/14 Target | Reduction Total | 2013/14 Projects Identified | 2013/14 Gaps |
| Electricity (buildings) | 73,277 | 69,189 | 4,088 | 3,559 | 529 |
| Electricity (street lighting) | 22,513 | 22,513 | 0 | 0 | 0 |
| Gas (buildings) | 51,310 | 51,071 | 239 | 2,032 | -1,793 |
| Coal (buildings) | 924 | 878 | 46 | 0 | 46 |
| Oil (buildings) | 13,343 | 13,084 | 259 | 16 | 243 |
| Back-court lighting | 19,975 | 19,575 | 400 | 139 | 261 |
| Diesel (transport/plant) | 7,082 | 7,042 | 40 | 0 | 40 |
| Petrol (transport/plant) | 486 | 350 | 136 | 0 | 136 |
| Air | 304 | 303 | 1 | 0 | 1 |
| Rail | 33 | 31 | 2 | 0 | 2 |
| CAR | 1,158 | 1,018 | 140 | 0 | 140 |
| TOTAL | 190,405 | 185,054 | 5,351 | 5,746 | - 395 |

Figure 10 shows the types of projects identified and associated savings as a percentage of the total.

FIGURE 10. SUMMARY OF THE MAIN PROJECT TYPES IDENTIFIED IN CARBON ACTION PLANS



- Lighting Controls
- Behaviour
- Metering
- Controls
- Lighting
- Heating
- Building Closure
- BMS
- Boiler
- Voltage Optimisation

5. Strategic Projects

As well as the more technological projects mentioned above, the CMT drives a number of strategic projects, detailed in section 5.1 and supports projects driven by other services/teams, some examples of which are provided in section 5.2.



5.1 CARBON MANAGEMENT TEAM DRIVEN STRATEGIC PROJECTS

5.1.1 AUTOMATIC METER READER (AMR) INSTALLATIONS

The Carbon Management Team was instrumental in rolling out the AMR programme over the past few years.

As detailed in section 2.4, the council have significant coverage of AMRs, however this programme will continue to be rolled wherever practical.

In order to ensure that all appropriate meters are fitted with AMR devices, all the remaining meters were assessed to determine their energy spend as well as the operational life. Those meters above a cost threshold have been put forward to gather quotes for installing AMR devices. Depending on the cost of works, the estimated payback period and pending approval from the Services, AMRs will be installed to provide greater visibility on our energy consumption.

At the time of writing, quotes for all suitable gas meters have been received and are being processed. The list of suitable electricity meters is complete and relevant stakeholders have been contacted to begin the process.

5.1.2 DEMAND-SIDE MANAGEMENT

A trial is underway to investigate the potential for entering into an agreement with the network operator whereby the council allows DSM technology to be installed in council buildings that permits certain pieces of equipment to be shut down at times of pressure on the supply grid. The process will be automated and managed through sophisticated building management systems. The process only shuts down equipment if given permission by the BMS.

Initially, up to ten sites could be included in the trial. Essentially it's the beginnings of a smart grid system in Glasgow and, pending the success of the trial, this could be rolled out throughout the city with particular focus on heavily utilised areas of the grid network. The additional benefit to Glasgow City Council is the identification of efficiencies that may be achieved by turning off certain pieces of equipment.

5.1.3 VOLTAGE OPTIMISATION (VO)

At the time of writing, VO units have been installed in 62 buildings during three phases to a range of sites including schools, offices, depots, leisure centres, museums and a theatre. Financial savings of nearly £400,000 and over 2,200 CO₂ a year are being realised.

The current phase of installations will continue to install these units wherever viable.

Resource Efficient Scotland (RES) have produced a case study on this programme. More information can be obtained from their website .

<http://www.resourceefficientscotland.com/resource/case-study-glasgow-city-council>

5.1.4 BMS UPGRADES

The variability in age, design and condition of building stock within the council family makes it very difficult to employ one solution universally; however, the CMT are committed to upgrading BMS wherever viable. Indeed the programme has already included some of our larger buildings, including the City Chambers Complex and 220 High St.

5.1.5 BEHAVIOUR CHANGE CAMPAIGN

Awareness raising is a continual process, therefore the CMT have a dedicated, full-time awareness officer. Their first main task is revitalisation of the awareness campaign combined with a new communications plan.

The campaign has four main objectives that will be achieved through a variety of activities and media, delivered through external, top-down and peer-to-peer communication.

- Inform external stakeholders of the council's activity in relation to carbon management
- Keep staff informed of carbon reduction targets, projects and progress
- Educate staff of the reason for reducing their and the council's impact
- Inform staff of their responsibilities (based on position) and what they can do to contribute



5.2 PROJECTS SUPPORTED BY THE CMT



5.2.1 EDUCATION REFURBISHMENT PROGRAMME (4RS)

The Education Refurbishment Program will see a £250m capital investment in the school estate over 5 years, upgrading roofs, exterior walls, decorations, fences, paths, drainage and the removal of dry rot and asbestos. The CMT are using the opportunity created by the refurbishment to act in concert with the program and undertake work to enhance the sustainability and energy efficiency of the school estate. This involves liaising with the Project Management and Design Teams to ensure all the options are explored and, where necessary, additional funding can be secured. Interventions will include window and roof light replacements, insulation and draft proofing, lighting, boiler upgrades and BMS.

5.2.2 BIOMASS INSTALLATIONS

The council has been working towards reducing carbon emissions by converting oil fired sites to biomass. For the initial phase, nine sites have been identified. Six schools were included as well as two care homes and an LES depot; savings are identified as:

- **1,472,534kWh**
- **2,064 tonnes CO₂**
- **£67,037 (based on unit cost for gas oil versus heat)**

5.3 WASTE BASELINE

To date, a baseline of council waste data has not been recorded due to the way in which waste is collected; waste from council premises is collected on the same rounds as other non-council sites. This means that tonnage information cannot be gathered from waste transfer notes.

Historically, council premises have had very limited (and sometimes no) recycling facilities. The Waste (Scotland) Regulations 2012 require that, as of 1 January 2014, recyclables must be separated at site. As such, council sites will be receiving recycling facilities in the form of co-mingled dry recyclables, food waste (where appropriate) and general waste uplifts.

This change in waste provision has reinforced the need for the development of a baseline for waste data. The CMT have assumed responsibility for this in assistance with the Waste and Recycling Team in Land and Environmental Services.

Due to the fact that waste and recycling will continue to be collected in mixed rounds, waste tonnages will be estimated. Weight estimation will be achieved in the following way (Figure 11):



FIGURE. 11 PROCESS FOR ESTIMATING TONNAGE INFORMATION ON A SITE - BY SITE BASIS

Every site within each service and ALEO will be inspected at least twice over the course of the next year to calculate the baseline. This will help mitigate for unusual uplifts and seasonal variances.



5.3.1 CARBON METRIC

The Scottish Carbon Metric is a method for measuring and helping to reduce the environmental impact of waste. The Scottish Government and Zero Waste Scotland, with advice from other stakeholders, have developed the Carbon Metric to support and record work to reduce waste and its damage to the environment.

The Carbon Metric has a national focus, which can be applied more locally throughout Scotland by individual organisations. While use of the Metric is optional, the council aim to be one of a few exemplar organisations who will be early adopters of the metric as a way of better understanding and reporting the impact of their waste management practices.

The Carbon Metric allows organisations to convert waste/resources into Carbon Equivalents (examples in Table 6 below). Credit is given where waste is recycled or incinerated for energy providing an incentive for treating waste rather than simply disposing to landfill.

TABLE 7 CARBON FACTORS FOR PUBLIC SECTOR WASTE

| Waste Management Route | Carbon factor (tCO ₂ eq per tonne of waste) |
|------------------------|--|
| Arisings | 2.514 |
| Recycled | -0.955 |
| Incinerated | -0.355 |
| Landfilled | 0.346 |

These factors are taken from other sectors and considered to be the best possible match for mixed waste from the public sector, although it is recognised that more accurate figures could be developed within the sector, over time.

6. Emission Factor Sensitivity Analysis

6.1 EMISSION FACTORS EXPLAINED

The Kyoto Protocol lists a 'basket' of six main greenhouse gases (GHG):

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Sulphur hexafluoride (SF_6)
- Perfluorocarbons (PFCs)

The primary GHGs emitted in significant amounts are the three principal gases associated with generating electricity (CO_2 , CH_4 and N_2O).

Greenhouse gases vary in how effectively they trap heat in the atmosphere (radiative forcing) .

The term "radiative forcing" refers to the amount of heat-trapping potential for GHG, measured in units of power per unit of area.

(watts per metre squared)

"Global warming potential" (GWP) is a measure of this ability. The GWP of a gas considers the immediate impact and the longevity of that gas in the atmosphere. CO_2 is used as the base unit and so has a GWP of 1. The GWP of all other GHGs is expressed as a multiple relative to the impact of CO_2 . CH_4 , for example, has a GWP of 21, indicating that its radiative forcing is 21 times that of CO_2 . In other words, releasing one tonne of CH_4 is equivalent to releasing 21 tonnes of CO_2 , which can also be expressed as 21 tonnes of carbon dioxide equivalent (CO_2e).

Emission factors allow consumption activity to be converted into universally comparable units. They are typically expressed as kilograms of carbon dioxide per consumption unit (kgCO_2).

A range of factors are available, meaning organisations are able to compare the impact of their electricity, natural gas, coal, oil, water and waste (and many more) using the same units i.e. the carbon associated with electricity can be compared to the carbon associated with water.

By converting to CO_2 , an organisation can compare the impact of their activities and use that to target their actions. For example, Glasgow City Council's greatest measured impact is its buildings, therefore the majority of our carbon reduction activities relate to reducing electricity and gas consumption in buildings.

6.2 'GREENING' OF EMISSION FACTORS

The carbon emissions factors tend to vary over time depending on the mix of fuels contributing to energy source. In the case of grid electricity, the factor has been decreasing due to the increased proportion of generation from renewable sources, more efficient plant generating the electricity and more efficient management and distribution of that electricity.

In the case of liquid transport fuels, the 'Renewable Transport Fuel Obligation' (RTFO), introduced in April 2008, placed a legal requirement on transport fuel suppliers (who supply more than 450,000 litres of fossil fuel per annum to the UK market) to ensure that 4.75% (by volume) of their overall fuel sales are from a renewable source by 2013/14. This should have the effect of reducing the carbon associated with petrol and diesel.

As carbon footprinting becomes more sophisticated, and the lifecycle of the various energy sources is better understood, emission sources can also be affected.



6.3 EMISSION FACTORS COMPARED

Table 8 below presents the emission factors employed in 2005/06 (these have been used in subsequent years to allow like-for-like comparison of performance), the latest factors published for each emission source currently measured and reported, and the affect these have on emissions.

TABLE 8. 'STANDARD' VERSUS UPDATED FACTORS

| Energy Usage | Units | 2005/6 Factors kgCO ₂ /unit | Updated kgCO ₂ /unit | Emissions using 2005/6 | Emissions using Updated 2012/13 | Variation (%) |
|-------------------------------|--------|---|------------------------------------|---------------------------|--|------------------|
| Electricity (buildings) | kWh | 0.541 | 0.4939 | 71,438 | 65,218 | -8.71% |
| Electricity (street lighting) | kWh | 0.541 | 0.4939 | 22,513 | 20,553 | -8.71% |
| Electricity (stair lighting) | kWh | 0.541 | 0.4939 | 9,881 | 9,021 | -8.71% |
| Gas (buildings) | kWh | 0.1836 | 0.18521 | 51,892 | 52,347 | 0.88% |
| Coal (buildings) | Tonnes | 2577 | 2449 | 924 | 878 | -4.97% |
| Oil (buildings) | Litres | 2.762 | 3.0213 | 13,345 | 14,598 | 9.39% |
| Diesel (transport/plant) | Litres | 2.639 | 2.6769 | 17,301 | 17,549 | 1.44% |
| Petrol (transport) | Litres | 2.3035 | 2.3144 | 362 | 364 | 0.55% |
| LPG | Litres | 1.495 | 1.4929 | 0 | 0 | 0.00% |
| Air | Miles | 0.1883 | 0.16685 | 306 | 271 | -11.43% |
| Rail | Miles | 0.0611 | 0.05818 | 32 | 30 | -6.25% |
| Car | Miles | 0.2235 | 0.3129 | 1,160 | 1,624 | 40.00% |
| TOTAL | | | | 189,154 | 182,454 | |
| | | | | | | |

As can be seen from the above figures, if updated emission factors are used, the council's annual footprint would be reduced by approximately 6,700 tCO₂ based on 2012/13 emissions. That represents 3.5% of the 2005/06 footprint.

The single largest variance relates to grid electricity, 8.71%. This is due to the decision to use the CRC factor for both electricity and gas, to ensure consistency when reporting carbon figures.

In contrast, the factors relating to gas, oil, diesel, petrol and car emissions have all risen since 2005/06.

As part of the efforts to simplify the CRC scheme, a decision was taken by the Carbon Management Team to utilise the emission factors published by the Department for Energy and Climate Change (DECC), this will take effect from the beginning of Phase 2 (2014). This will be reflected in future footprint calculations.

7. REVIEW AND MITIGATION

Performance against the targets set out in this plan will be reviewed annually, three months in arrears to allow all quarterly consumption figures to be included in the final figures. A timetable is included below (Table 9).

This annual review will allow for earlier intervention where individual projects, services/ALEOs or the plan as a whole is not meeting targets.

TABLE 9. TIMETABLE FOR REVIEW OF CMP

| | 2014 - 15 | 2015 - 16 | 2016 - 17 | 2017 - 18 | 2018 - 19 | 2019 - 20 | 2020 - 21 | 2021 - 22 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| PURCHASE PHASE 2 CRC ALLOWANCES (BASED ON 3 YEAR EST.) | | | | | | | | |
| PUBLICATION OF CMP2 | | | | | | | | |
| REVIEW OF 2013 / 14 PERFORMANCE | | | | | | | | |
| REVIEW OF 2014 / 15 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2014 / 15 | | | | | | | | |
| REVIEW OF 2014 / 15 PERFORMANCE | | | | | | | | |
| REPORT PHASE 2 YEAR 1 2014 / 15 CRC ALLOWANCES | | | | | | | | |
| REVIEW OF 2015/16 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2015 / 16 | | | | | | | | |
| REVIEW OF 2015/16 PERFORMANCE | | | | | | | | |
| REPORT PHASE 2 YEAR 2 2015/16 CRC ALLOWANCES | | | | | | | | |
| REVIEW OF 2016 / 17 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2016 / 17 | | | | | | | | |
| REVIEW OF 2016 /17 PERFORMANCE | | | | | | | | |
| REPORT PHASE 2 YEAR 3 2016 /17 ALLOWANCES | | | | | | | | |
| UNDERTAKE RECONCILIATION OF CRC ALLOWANCES FOR END OF PHASE 2 | | | | | | | | |
| REGISTER FOR PHASE 3 OF CRC | | | | | | | | |
| REVIEW OF 2017/18 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2017/ 18 | | | | | | | | |
| REVIEW OF 2017/ 18 PERFORMANCE | | | | | | | | |
| REVIEW OF 2018/19 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2018/19 | | | | | | | | |
| REVIEW OF 2018/19 PERFORMANCE | | | | | | | | |
| REVIEW OF 2019/20 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2019/20 | | | | | | | | |
| REVIEW OF 2019 / 20 PERFORMANCE | | | | | | | | |
| REVIEW OF 2020/21 TARGETS | | | | | | | | |
| COMPLETION OF SERVICE CARBON ACTION PLANS FOR 2020 /21 | | | | | | | | |
| REVIEW OF 2020/21 PERFORMANCE | | | | | | | | |
| FINAL REPORT ON CMP2 (30% REDUCTION TARGET) | | | | | | | | |
| PREPARATION OF CMP 3 | | | | | | | | |

■ Review
 ■ Reporting
 ■ CMP Revision

The results will be reviewed annually and presented to the CMB in July of each year. Where required, targets and CAPs will be revised to ensure we remain on track for a 30% reduction.

7.1 CONTACTS

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|---------------------------|--|---------------------------------------|---|----------|
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8. APPENDICES



8. Appendices

Appendix 1 – Carbon Management Drivers

Appendix 2 – Building Asset List

Appendix 3 – Reporting Requirements

Appendix 4 – Project List

Appendix 5 – Communication Aims

Appendix 6 – Energy Policy

APPENDIX 1

INTERNAL DRIVERS OF CARBON MANAGEMENT PLAN

| Name of Driver | Type | Summary | Key points for Carbon Management Plan |
|----------------------------------|--------------|--|---|
| Current Financial Climate | Financial | The current financial pressure creates added impetus to meeting various targets, thus avoiding unnecessary financial penalties. The financial climate emphasises the importance of using resources in an optimal manner, working as efficiently as possible and reducing waste. 'Although it seems as though we have been dealing with funding cuts for years, we are only a third of the way through the reductions we face. This means our service reform programme remains vital. It has already delivered some £170 million of savings, with £52 million more to be delivered this year' - George Black, October 2013 Insider. | The Carbon Management Plan is a tool for the council to use when maximising resource potential, save on energy bills and promoting efficiency and sustainability in infrastructure. |
| Tomorrow's Glasgow | Reputational | Glasgow City Council has made a commitment to 'develop(ing) Glasgow as the most sustainable city in Europe by improving the city's approach to energy, waste and transport to achieve: <ul style="list-style-type: none"> ● jobs and investment in the city; ● a reduced carbon footprint; connected transport infrastructure for business and the community; ● increased use of public and green transport.' (accessed from connect.glasgow.gov.uk/WorkingTogether/TomorrowsGlasgow/tomorrowsglasgowsustainablecity.htm on 15/10/13). | The Carbon Management Plan is an essential document in supporting and developing Glasgow's sustainability credentials and is a blueprint for Glasgow on which to act when leading by example. |
| The Glasgow City Plan 2 | | Part 2 - Development Strategy Priorities and Proposals: Environment section 5.70 - 5.81 advance social renewal by delivering more energy efficient homes, reducing household fuel consumption and expenditure; promote sustainability by encouraging lower carbon buildings, with increased on-site energy generation and use of low and/or zero carbon technologies; and improve and maintain residents' health by promoting the development of energy efficient, warmer homes. | The Carbon Management Plan furthers the Council's commitment to low carbon, and introduces tools such as energy audits to maximise energy efficiency in Council and ALEO buildings. |

EXTERNAL DRIVERS OF CARBON MANAGEMENT PLAN

| Name of Driver | Type | Summary | Key points for Glasgow City Council |
|--|-------------|--|--|
| Climate Change (Scotland) Act 2009 | Legislation | The Climate Change (Scotland) Act 2009 sets a net emission target for 2050 which is an 80% reduction on the 1990 baseline. A target for 2020 is also set at 42% of the 1990 baseline. Emissions of concern are identified as Carbon Dioxide, Methane, Nitrous Oxide, Hydrofluorocarbons, Perfluorocarbons and Sulfur Hexafluoride. The Act sets out various obligations for Scottish Ministers and Public Bodies as part of achieving these targets. | <p>Part 4, Section 44 of the Act requires Public Bodies to act:</p> <ul style="list-style-type: none"> ● in the way best calculated to contribute to delivery of the Act's emissions reduction targets; ● in the way best calculated to deliver any statutory adaptation programme; and ● in a way that it considers most sustainable. <p>Part 5, Section 65 of the Act requires the Local Authority to establish energy efficiency discount schemes.</p> |
| The CRC Energy Efficiency Scheme Order 2010 | Legislation | The CRC (Carbon Reduction Commitment) Energy Efficiency Scheme Order 2010 (the Scheme) is a United Kingdom wide mandatory scheme that applies to large non-energy intensive Private and Public bodies. The Scheme is part of the British Government commitment to cut emissions 80% by 2050 from a 1990 baseline. The Scheme covers direct energy used as well as purchased. Organisations covered by the Scheme use over 6,000 MWh of energy per year and are required to report their annual energy use and carbon emissions; league tables are produced ranking by energy use and emissions reductions over time. Those companies who do poorly in the league tables are required to pay penalties. | Under the Scheme Glasgow City Council is required to report its energy use and emissions levels and purchase carbon offset if emissions limits are exceeded on an annual basis. To avoid penalties Glasgow City Council must continue to improve its energy efficiency. |
| Switched on Scotland: A road map to widespread adoption of plug in vehicles. Developed by Urban Foresight Limited and Transport Scotland 2013 | | <p>Switched on Scotland sets out the Scottish Government's vision for the near complete decarbonisation of road vehicles by 2050, almost all new vehicles will be zero carbon at the tailpipe by 2040 and by 2030 there will be less than 50% fossil fuelled vehicles in urban Scottish areas. Switched on Scotland identifies five key areas for Scottish Government development:</p> <ol style="list-style-type: none"> 1. Providing public sector leadership 2. Making strategic investments 3. Promoting incentives 4. Mobilising key stakeholders 5. Outreach and education | Switched on Scotland promotes public sector leadership in relation to the uptake of plug in vehicles. The Government is committed to greening the fleet as far as possible and will, as part of the ongoing vehicle replacement cycle, replace fossil-fuelled vehicles with plug-in vehicles, where appropriate. |

| Name of Driver | Type | Summary | Key points for Glasgow City Council |
|--|-------------|---|---|
| United Nations Intergovernmental Panel on Climate Change 5th Assessment Report 2014 | Advisory | <p>The United Nations Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) is due to be published in 2014. The AR5 consists of three working groups, the first of whom published their findings on 27th September 2013.</p> <p>Key findings of the working group are:</p> <ul style="list-style-type: none"> • There is no doubt warming of the climate system is occurring; • Each of the last three decades have been successively warmer; • Over the last two decades Greenland and Antarctic ice sheets have been losing mass, glaciers are shrinking and sea ice cover is decreasing; • The rate of sea level rise has increased; • Atmospheric concentrations of CO₂, methane and nitrous oxide have increased to unprecedented levels; • There is no doubt humans are influencing the climate system; • It is extremely likely that humans are the dominant cause of the observed climate warming since the mid -20th century. | |
| Scotland's Zero Waste Plan 2010 | Legislation | The Zero Waste Plan 2010 (the Plan) sets targets for reducing the approximately 20 million tonnes of waste that go to landfill every year in Scotland. The Plan promotes recycling, reusing and composting as part of achieving its target of 70% of waste recycled and a maximum of 5% going to land fill by 2025. | Local Authority progress in relation to the targets is recorded by SEPA and published in performance reports. The Plan requires Local Authorities along with other public bodies to ensure the land use planning system supports the Zero Waste Plan. |
| The Carbon Metric | Reporting | In concert with the Zero Waste Plan 2010, Scotland is measuring the carbon cost of waste produced. The reports and tools developed as part of this are collectively known as the 'Carbon Metric'. The Carbon Metric sets out an expected carbon reduction of 22% from the 2011 baseline, by 2025. The Carbon Metric covers domestic, industrial and commercial waste, and includes carbon impact across product lifecycles - which includes emissions from outside Scotland. | |
| The Air Quality Standards (Scotland) 2010 | Legislation | The Air Quality Standards (Scotland) 2010 (the Standards) sets out target values for atmospheric pollutants including: Sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide. The Scottish Ministers are required to ensure the limits placed on the pollutants by the Standards are not exceeded. The Standards include sampling, monitoring and modelling obligations for Government. | |
| The Environmental Protection Act 1990 | Legislation | <p>The Environmental Protection Act 1990 (the Act) gives responsibility to the Environment Agency and Scottish Environment Protection Agency along with the Local Authorities to enforce limits and targets regarding emissions as set by the Secretary of State for Environment, Food and Rural Affairs. The Act empowers SEPA to create a waste strategy for Scotland and gives Local Authorities a duty to collect and/or recycle controlled waste.</p> <p>The Act also defines statutory nuisances and gives the Local Authorities the power to demand remedial action. The act also covers GMOs and creates Nature Conservancy Councils.</p> | Local Authorities have a number of duties under the Act including collecting waste, keeping public spaces litter free, and responding to statutory nuisances. |

| Name of Driver | Type | Summary | Key points for Glasgow City Council |
|---|--------------------------|--|--|
| The Clean Air Act 1993 | Legislation | The Clean Air Act 1993 (the Act) sets standards for furnaces and chimneys to reduce emissions that are potentially detrimental to public health and environmental health. The Act covers domestic, commercial and industrial sources. | The Act obligates Local Authorities to measure emissions. Local Authorities are also granted the power to create smoke control areas, require adaptations of fire places in public and private buildings, and give grants to enable adaptations as they see fit. Local Authorities are also encouraged to investigate air pollution problems and conduct awareness campaigns around air pollution. |
| Renewable Heat Incentive (RHI) and Feed in Tariff (FIT) | Financial and Regulatory | The Renewable Heat Incentive (RHI) was introduced in 2011 as part of the 2008 Energy Act. The RHI operates on a tariff system where generators of heat from renewable resources receive a payment, the rate of which depends on the heat system used and the scale of generation. The RHI is currently for non-domestic buildings - with roll out to domestic buildings scheduled for 2014. Feed in Tariffs were introduced in 2010 and likewise sit within the 2008 Energy Act. Feed in Tariffs are small fixed payments for renewable energy sources which produce up to 5MW of power. The Tariffs are administered by Ofgem and cover a range of generators - such as domestic solar. | The Carbon Management Plan is key in the council's response to the required reductions and promoting the uptake of renewables. |
| The United Nations Framework Convention on Climate Change (The Kyoto Protocol) | Regulatory | Parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the Kyoto Protocol in 1997, which came into force in 2005. The Protocol sets obligations for countries to reduce emission of greenhouse gases and includes concepts such as emissions trading, implementing new policies, establishing an adaption fund for climate change in developing countries, and monitoring and reporting. | |
| 2009/28 EC (European Union Renewable Energy Directive) | Legislation | The 2009/28 EC (the Directive) was established as part of meeting European Union commitments under the Kyoto Protocol and the United Nations Framework Convention on Climate Change. The Directive promotes adoption of renewable energies and reduction of greenhouse gases. The Directive mandates 20% of EU energy by 2020 must come from renewable sources and sets individual targets for members; the United Kingdom's target is 15% by 2020. | Glasgow City Council has an obligation under the Act to plan for sustainable, low emission development. The Carbon Management Plan fulfils this. |
| World Health Organisation Air Quality Guidelines: Global Update 2005 | Public Health | The World Health Organisation Air Quality Guidelines (the Guidelines) set targets for air pollutants; specifically: particulate matter, ozone, nitrogen dioxide and sulfur dioxide. The Guidelines encourage sampling, monitoring and mitigation of these air pollutants as high levels have negative impacts for public health. | |
| United Kingdom Committee on Climate Change | Advisory | The Committee on Climate Change (CCC) was established under the 2008 United Kingdom Climate Change Act and is an independent, statutory body. The CCC provides advice to Government on setting emissions targets and creating policy and plans to meet these. | |

| Name of Driver | Type | Summary | Key points for Glasgow City Council |
|---|--------------|---|---|
| Town and Country Planning Act (Scotland) 1997 | Legislation | Section 3F of the Act requires 'A planning authority, in any local development plan prepared by them, must ensure that all new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions from their use, calculated on the basis of the approved design and plans for the specific development, through the installation and operation of low and zero-carbon generating technologies.' | Glasgow City Council, as a Local Authority, has an obligation under this Act to plan for sustainable, low emission development. |
| Carbon Trust's Local Authority Carbon Management Programme | Advisory | Carbon Trust works with the public sector to help public bodies to reduce energy use without impacting on services and become more efficient, while also tackling the urgent need to cut emissions to reduce the risk of damaging climate change. | Glasgow has been participating in the Carbon Trust's Local Authority Carbon Management Programme since 2007. |
| Conserve and Save: Energy Efficiency Action Plan (Scotland) 2010 | | The Action Plan sets a number of key actions for the Scottish Government to assist in meeting their energy efficiency targets. Actions include: improve the energy efficiency of the housing stock; establish a single energy and resource efficiency service for Scottish businesses; develop a public sector that leads the way through exemplary energy performance; reduce our transport energy demand; promote infrastructure improvements; and create education/skill development opportunities for people. | |
| Community Energy Scotland | Reputational | Community Energy Scotland support renewable energy initiatives in communities and help community groups to engage with policy makers. Community Energy Scotland works to build good relationships between Local Authorities and community action groups, promoting co-operation on renewable energy projects. | |
| Covenant of Mayors | Reputational | The Covenant of Mayors is open to Local Authorities in the European Union who want to make a voluntary commitment to meet and exceed the targets set out under the 2009/28 EC (European Union Renewable Energy Directive). The target relates to the percentage of energy which comes from renewable sources; for the United Kingdom the target is 15% by 2020. | Glasgow City Council ratified the covenant in 2009. |
| Keep Scotland Beautiful | Reputational | Keep Scotland Beautiful is a charity which works on three main areas: sustainable development education, local environmental quality and sustainability and climate change. Keep Scotland Beautiful co-ordinates the Eco-School campaign and is the leading provider of sustainable development education initiatives in schools. Over 98% of Local Authority schools in Scotland have signed up to the Eco-School campaign. | The enthusiasm for the Eco Schools programme in Glasgow is demonstrated by the very high participation of the city's schools taking part in the Eco Schools Programme. 280 Glasgow Schools are registered with the programme and the campaign is a key part of the Council's commitment to developing a sustainable city. |

COMMITTEES

| Committee | Convenor | Terms of reference |
|---|---|--|
| Energy and Carbon Working Group (ECWG) | Councillor Martha Wardrop | |
| Sustainability and Environment Policy Development Committee (S&E PD Committee) | Brian Devlin | <p>In addition to the general terms of reference for all PD committees, to fulfil the functions of Policy Development (including consideration of equalities issues) as they relate to Council policies, services and activities on sustainability and the environment. These functions include:</p> <ul style="list-style-type: none"> • transport infrastructure; • highway maintenance and improvements; • sustainability; • climate change; • road safety; • lighting strategy; • parks regeneration and events; • street environment; • waste and recycling; • energy management; • public health; • pollution; • trading standards; • scientific services; • Nuclear Free Zones |
| Corporate Management Team | Anne Marie O'Donnell | <p>Consists of the Executive Directors of each of the seven Services.</p> <p>The role of the CMT is to ensure that the council meets its statutory duties; is transparent and accountable; and provides best quality services to everyone who lives, works, studies, plays or does business in Glasgow.</p> <p>The CMT makes decisions which steer the council on the best course. It is responsible for promoting the city as a vibrant, innovative, sustainable, modern metropolitan city.</p> <p>The CMT is currently working to the following five key objectives:</p> <ul style="list-style-type: none"> • Improving the efficiency and effectiveness of our services • Increasing access to lifelong learning • Making Glasgow a cleaner, safer city • Building a prosperous city • Improving health and well being |
| Carbon Management Board | Brian Devlin, Executive Director of LES | <p>Membership: Senior Managers (Grade 10 and above) from each of the Council's core services and ALEOs.</p> <p>Functions of the Carbon Management Board:</p> <ol style="list-style-type: none"> 1. To review the output of the Carbon Management Working Group. 2. To review and monitor the development of and compliance with the Council's Carbon Management Programme. 3. To review the carbon emissions relative to the targets set out in the Carbon Management Plan. 4. Identify resource efficiency programmes, including waste minimisation and develop a business case for resource efficiency as appropriate. 5. To make recommendations and bring forward plans and escalate concerns, as appropriate, to the Corporate Management Team. 6. To inform the proceedings of the SAMP Board, as appropriate. 7. To report to the Sustainability & Environment Policy Development Committee annually. |
| Carbon Management Working Group (CMWG) | Alastair Brown | <p>The CMWG reports to the Carbon Management Board. CMWG implements actions and new initiatives within GCC, in relation to energy efficiency and carbon management</p> |

| Committee | Convenor | Terms of reference |
|--|----------------|---|
| Senior Officers Group on Sustainability and the Environment | Alastair Brown | <p>Membership: Nominated Officers from all Glasgow City Council Services and ALEOs</p> <p>General Remit</p> <p>1. To support the Sustainability and Environment Policy Development Committee in discharging the following general functions:</p> <ul style="list-style-type: none"> To examine, on behalf of the Council, various policies, strategies and plans in draft relating to the subject area (whether provided directly by the Council, external organisations or partnerships) and reporting on these to the Executive Committee. To undertake reviews or policy development tasks in relation to any matters falling within the remit of this Committee or as requested by the Executive Committee. <p>2. To support the Sustainability and Environment Policy Development Committee in fulfilling the functions of Policy Development as they relate specifically to Council policies, services and activities on sustainability and the environment (excluding functions supported by the Carbon Management and Resource Efficiency Board, i.e. on carbon management and reduction within the GCC “family”). This includes:</p> <ul style="list-style-type: none"> Sustainable Development Climate Change – adaptation and mitigation Sustainable Procurement Natural Environment Cultural Heritage Air Quality Planning and the Built Environment <p>Specific Remit</p> <ul style="list-style-type: none"> Monitor, assess and provide feedback on the Climate Change Strategy and Action Plan. Oversee and authorise allocation of the Sustainability Innovation Fund. Receive feedback from/provide support to GCC-wide action on the 2014 Commonwealth Games Environmental Legacy. Receive feedback from/provide support to GCC-wide action on the 2015 European Green Capital application. |

APPENDIX 2

BUILDING ASSET LIST

| LOCATION | ADDRESS | POSTCODE |
|---|----------------------------------|----------|
| 1 BROOMLOAN PLACE | 1 BROOMLOAN PLACE | G51 2RX |
| 100 BRAND STREET | 100 Brand Street | G51 1DH |
| 115-117 QUEEN MARGARET DR FLAT 1 | 100 Brand Street | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 2 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 3 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 4 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 5 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 6 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 7 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 8 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 9 | G20 8PB |
| 115-117 QUEEN MARGARET DR FLAT 1 | FLAT 10 | G20 8PB |
| 121 LANGLANDS ROAD | 121 LANGLANDS ROAD | G51 3TL |
| 1403 GALLOWGATE | 1403 GALLOWGATE | G31 4EU |
| 15 GLENTANAR ROAD | 15 Glentinar Road | G22 7XS |
| 150 BRAND STREET | 150 Brand Street | G51 1DH |
| 18 ALBION STREET | 18 Albion Street | G1 1DB |
| 19 NETHAN STREET | 19 NETHAN STREET | G51 3LX |
| 192 McNEIL STREET | 192 McNeil Street | G5 0NZ |
| 2 TONTINE LANE 5TH FLOOR LIFTS | 5th Floor Lift | G1 5EY |
| 2 TONTINE LANE G/F | Ground Floor | G1 5EY |
| 20 BALDINNIE ROAD | 20 BALDINNIE ROAD | G34 9EP |
| 20 ORKNEY STREET | 20 Orkney Street | G51 2BX |
| 20 TONTINE LANE - WORKSHOP | Venture Workshop Base | G1 5EX |
| 20 TRONGATE - 3L | 3L (Dars 9) | G1 5ES |
| 20 TRONGATE - FLAT 4/1 | Flat 4 / 1 (Dars 5) | G1 5ES |
| 20 TRONGATE - L/L SUPPLY | L/L Supply | G1 5ES |
| 20 TRONGATE AT TONTINE LANE | 20 Trongate | G1 1LX |
| 2060 POLLOKSHAWS ROAD | 2060 Pollokshaws Road | G41 3YF |
| 211 BLOCHAIRN ROAD - MATERIALS RECYCLING FACILITY | 211 Blochairn Road | G21 2RL |
| 220 HIGH STREET | 220 HIGH STREET | G4 0UP |
| 23 MONTROSE STREET | 23 Montrose Street | G1 1RN |
| 231 GEORGE STREET | 231 George Street | G1 1QX |
| 29 HIGH STREET | 29 High Street | G1 1PN |
| 3 AVENUE STREET - IND UNIT | 3 Avenue Street | G40 3SA |
| 30 ARDLAW STRRET | 30 ARDLAW STREET | G51 3RR |
| 30 BELL STREET - 6/1 | 6/1 | G1 1LG |
| 32-34 ALBION STREET - 1st FLOOR | 1st Floor Social Work Department | G1 1LH |
| 33 TUREEN ST BLOCK C | BLOCK C | G40 2HG |
| 34/46 TRONGATE | 34 Trongate | G1 5OO |
| 342 ASHGILL ROAD | 342 ASHGILL ROAD | G22 7HW |
| 35 ARNGASK ROAD | 35 ARNGASK ROAD | G51 4TR |
| 357 DUMBARTON RD | 357 DUMBARTON ROAD | G11 6AL |
| 37 HIGH STREET - 3L | 3L (Dars 7) | G1 1HJ |
| 37 HIGH STREET - 3R | 3R (Dars 11) | G1 1LX |
| 37 High Street - 5 Up | 5 Up | G1 1LX |
| 37 High Street - Base 2 | Base - 2 | G1 1LX |
| 37 High Street - Ground Floor | Ground Floor | G1 1LX |
| 391-393 NITSHILL ROAD | 391-393 NITSHILL ROAD | G53 7BN |
| 393 NITSHILL ROAD | 393 NITSHILL ROAD | G53 7BN |
| 40 LOCHDOCARTS ROAD - LANDLORD LIGHTING | 40 Lochdocharts Road | G34 0PU |
| 48 ALBION ST BASE (LANDLORDS SUPPLY) | Landlords Supply (Base) | G1 1LH |
| 48 Barnton Street | 48 Barnton Street | G32 6HW |
| 50 CATHEDRAL SQ - FLOODLIGHTING SUPPLY | 50 CATHEDRAL SQUARE | G4 0UZ |
| 514 VICTORIA ROAD | 514 VICTORIA ROAD | G42 8BG |
| 53 HAGGS ROAD | 53 HAGGS ROAD | G41 4AP |
| 78-80 TOLLCROSS ROAD | 78-80 TOLLCROSS ROAD | G31 4XA |

| LOCATION | ADDRESS | POSTCODE |
|---|-------------------------------|----------|
| 88 BELL STREET | 88 Bell Street | G1 1LQ |
| 88 BELL STREET - 1 | 1 | G1 1LQ |
| 94 DUKE STREET | 94 DUKE STREET | G4 0UW |
| ABERCORN SECONDARY SCHOOL | 195 Garscube Road | G4 9QH |
| ADELPHI NURSERY SCHOOL | 40 Waddell Court | G5 0QA |
| AIR QUALITY MONITORING UNIT IBROX LIBRARY | 1-7 MIDLOCK STREET | G51 1SL |
| AIR QUALITY UNIT ABERCROMBIE ST | 1-7 MIDLOCK STREET | |
| AIR QUALITY UNIT BROOMHILL | BROOMHILLST/CLARENCE DR | G11 7JZ |
| AIR QUALITY UNIT BURGHER ST | BURGHER STREET | G31 4TB |
| AIR QUALITY UNIT NITHSDALE RD | POLLOKSHAWS RD | |
| AIRTH DRIVE CHILDRENS UNIT | 49/53 Airth Drive | G52 1JU |
| ALARM RECEIVING CENTRE | 71-73 Tradeston Street | G5 8BL |
| ALEXANDRA GOLF AND BOWLING | Sannox Gardens | G31 8SE |
| ALEXANDRA PARADE PRIMARY SCHOOL | 136 Armadale Street | G31 2TL |
| ALEXANDRA PARK | 77 Sannox Gardens | G31 3JE |
| ALL SAINTS SECONDARY SCHOOL (NEW) | 299 Ryehill Road | G21 3EN |
| ALLERDYCE DRIVE - YARD LIGHTING | ALLERDYCE DRIVE | G15 6RY |
| ANDERSTON CENTRE | | G3 8YJ |
| ANDERSTON PRIMARY SCHOOL | 3 Port Street | G3 8HY |
| ANNETTE STREET PRIMARY SCHOOL | 27 Annette Street | G42 8YB |
| Annfield Place - Festive Ligthing | Festive Lighting | G31 1AA |
| ANNICK INDUSTRIAL ESTATE | UNIT 48 | G32 0HS |
| ANNIESLAND LIBRARY | 833 Crow Road | G13 1LE |
| ANNIESLAND REVENUES AND BENEFITS CENTRE | 841 Crow Road | G13 1YT |
| ANTONINE PRIMARY SCHOOL (NEW) | 4 Abbotshall Avenue | G15 8PR |
| ARCHERHILL ROAD VETERANS SHELTER | ARCHERHILL ROAD | G13 3NR |
| Ardlaw Street Nursery School | 30 Ardlaw Street | G51 3RR |
| ARDNAHOE NURSERY SCHOOL | 18 Ardnahoe Place | |
| AREA SERVICES GOVAN - ROWAN PARK | 5 Ardlaw Street | G51 3RR |
| ARGYLE STREET TOILETS | 70-76 Argyle Street | G2 8AG |
| ASHCRAIG SECONDARY SCHOOL | 100 Avenue End Road | G33 3SW |
| ASHGROVE CENTRE | HALLHILL ROAD | G32 0PD |
| ASHPARK PRIMARY SCHOOL | 75 Kyleakin Road | G46 8DQ |
| ATHLETES VILLAGE - ENERGY CENTRE | SPRINGFIELD ROAD | G40 3HS |
| AULTMORE PARK PRIMARY SCHOOL | 48 Newhills Road | G33 4HH |
| AVENUE END PRIMARY SCHOOL | 290 MOSSVALE ROAD | G33 5NY |
| BAILLIESTON DISTRIBUTION CENTRE (UNIT 2) | Unit 2 | Unit 2 |
| BAILLIESTON DISTRIBUTION CENTRE (UNITS 17-20) | Units 17-20 | G69 6UL |
| BAILLIESTON DISTRIBUTION CENTRE (UNITS 21-22) | Units 21-22 | G69 6UL |
| BAILLIESTON LIBRARY | 141 Main Street | G69 6AA |
| BALGRAYHILL TENANTS HALL | 139 Balgrayhill Road | G21 3AF |
| BALMORE ROAD | 20 Balmore Road | G21 6RN |
| BALORNOCK HOUSE HOME FOR THE ELDERLY | 56 Wallacewell Quadrant | G21 3PX |
| BALORNOCK PRIMARY SCHOOL | 422 Broomfield Road | G21 3UT |
| BALSHAGRAY CRES UNDERPASS | BALSHAGRAY CRESCENT UNDERPASS | |
| BALSHAGRAY DRIVE UNDERPASS | Victoria Park Drive South | G11 7DD |
| BANKHEAD PRIMARY SCHOOL | 66 Caldwell Avenue | G13 3AS |
| BANNERMAN HIGH SCHOOL | Glasgow Road | G69 7NS |
| BARDOWIE CARE HOME | BARDOWIE STREET | G22 5DY |
| BARLANARK COMMUNITY CENTRE | 33 Burnmouth Road | G33 4SA |
| BARLIA SPORTS CENTRE | 60 Glenwood Path | G45 9UD |
| BARMULLOCH COMMUNITY CENTRE | 46 Wallacewell Quadrant | G21 3PX |
| BARMULLOCH LIBRARY | 46 Wallacewell Quadrant | G21 3PX |
| BARMULLOCH PRIMARY SCHOOL - NEW | 305 Forge Street | G21 8AH |
| BASE 75 | 75 Robertson Street | G2 8QD |
| BATTLEFIELD COURT DAY CENTRE | 17 Cathkinview Place | G42 9ER |
| BATTLEFIELD PRIMARY SCHOOL | 44 Carmichael Place | G42 9SY |
| BELHAVEN NURSERY SCHOOL | 54 Kelvinside Avenue | G20 6PY |
| BELLAHOUSTON ACADEMY SCHOOL | 30 Gower Terrace | G41 5QE |
| BELLAHOUSTON LEISURE CENTRE | 31 Bellahouston Drive | G52 1HH |
| BELLAHOUSTON NURSERY OFFICE | 36 Dumbreck Road | G41 5BW |

| LOCATION | ADDRESS | POSTCODE |
|--|------------------------------|----------|
| BELLAHOUSTON PARK BOWLING | Bellahouston Park | G52 1DP |
| BELLAHOUSTON PARK GLASSHOUSE | 36 Dumbreck Road | G52 1EQ |
| BELLCRAIG COMMUNITY CENTRE | 30 GOWER TERRACE | G41 5QE |
| BELLCRAIG COMMUNITY CENTRE | 10 Gorstan Street | G23 5QA |
| BENVIEW CAMPUS STREET LIGHTS | SLCP METER OPPOSITE | G20 9JN |
| BERRYKNOWES RESOURCE CENTRE | 14 HALLRULE DRIVE | G52 2HH |
| BERRYKNOWES RESOURCE CENTRE FLAT | 14 Hallrule Drive | G52 2HH |
| BLACK AND ETHNIC MINORITY CENTRE | 39 NAPIERSHALL STREET | G20 6EX |
| BLACKFRIARS PRIMARY SCHOOL | 310 CUMBERLAND STREET | G5 0SS |
| BLAIR COURT | 100 BORRON STREET | G4 9XE |
| BLAIRDARDIE FOOTBALL PAVILION | 479 BLAIRDARDIE ROAD | G15 6JP |
| BLAIRDARDIE PRIMARY SCHOOL | 78 KEARN AVENUE | G15 6HL |
| BLAIRVADACH OUTDOOR CENTRE | RHU | G84 8NN |
| BLUEVALE COMMUNITY CENTRE | 30 ABERNETHY STREET | G31 3SZ |
| BONNYBROOM NURSERY SCHOOL | 233 PETERSHILL DRIVE | G21 4QJ |
| BOTANIC GARDENS/KIBBLE PALACE | 730 GREAT WESTERN ROAD | G12 0UE |
| Braidfauld Children's Home | 18 Dalness close | G32 7RH |
| BRASSEY ST IRRIGATION PUMP | Brassey St Irrigation Pump | G20 1AA |
| BRIDGETON FAMILY LEARNING CENTRE | 106 ORR STREET | G40 2QF |
| BROOMFIELD CHILDREN'S UNIT | 14 BROOMFIELD CRES | G21 3HA |
| BROOMHILL PRIMARY SCHOOL | 57 EDGEHILL ROAD | G11 7HZ |
| BROOMHILL PRIMARY SCHOOL ANNEXE | 67 RANDOLPH ROAD | G11 7EE |
| BUCHLYVIE NURSERY SCHOOL | 45 ABERDALGIE ROAD | G34 9HX |
| BUDHILL DAY CENTRE | 11B THREESTONEHILL AVENUE | G32 0LX |
| BUDHILL FAMILY LEARNING CENTRE | HALLHILL ROAD | G32 0PR |
| BURGHEAD DRIVE UNDERPASS | BURGHEAD DR UNDERPASS | |
| BURNBANK HOUSE HOME FOR THE ELDERLY | 25 BURNBANK GARDENS | G20 6HD |
| BURRELL COLLECTION | 2060 POLLOKSHAWS ROAD | G43 1AT |
| CADDER PRIMARY SCHOOL | 60 HERMA STREET | G23 5AR |
| 25 DOUGLAS STREET | 25 DOUGLAS STREET | G2 4EZ |
| CAIRNBROOK INDUSTRIAL ESTATE YARD LIGHTING | Cairnbrook Industrial Estate | G34 0NZ |
| CAIRNBROOK ROAD | Cairnbrook Road | G34 0NZ |
| CALDERCUILT PRIMARY SCHOOL | 101 INVERSHIEL ROAD | G23 5NR |
| CALEDONIA CHURCH | Floodlighting | G5 9XA |
| CALEDONIA PRIMARY SCHOOL | CALDERWOOD DRIVE | G69 7DJ |
| CAMBRIDGE STREET CAR PARK | 89 CAMBRIDGE STREET | G3 6RU |
| CAMSTRADDEN PRIMARY SCHOOL | 10 BANKGLEN ROAD | G15 7LG |
| CARDINAL WINNING PRIMARY SCHOOL | 30 FULLARTON AVENUE | G32 8NJ |
| CARDONALD CEMETERY | 547 MOSSPARK BOULEVARD | G52 1JL |
| CARDONALD LIBRARY | 1113 MOSSPARK DRIVE | G52 3BU |
| CARDONALD PRIMARY SCHOOL | 1 ANGUS OVAL | G52 3HD |
| CARETAKER'S FLAT | 10 Northinch Court | G14 0UG |
| CARLTON RESOURCE CENTRE | 1-7 COBURG STREET | G5 9JF |
| CARMICHAEL HOUSE HOME FOR THE ELDERLY | 39 LANDRESSY PLACE | G40 1HL |
| CARMYLE NURSERY SCHOOL | 158 WATERSIDE ROAD | G32 8AG |
| CARMYLE PRIMARY SCHOOL | HILLCREST ROAD | G32 8AG |
| CARNTYNE PRIMARY SCHOOL | 38-62 LIBERTON STREET | G33 2HF |
| CARTVALE SCHOOL | 3 BURNDYKE COURT | G51 2BG |
| CASTLEMILK COMMUNITY CENTRE | 121 CASTLEMILK DRIVE | G45 9UG |
| CASTLEMILK DAY NURSERY SCHOOL | 8 BARLIA STREET | G45 0NT |
| CASTLEMILK HIGH SCHOOL | 223 CASTLEMILK DRIVE | G45 9JY |
| CASTLEMILK LIBRARY | 100 CASTLEMILK DRIVE | G45 9TN |
| CASTLEMILK POOL | 137 CASTLEMILK DRIVE | G45 9UG |
| CASTLEMILK SPORTS CENTRE | 10 DOUGRIE ROAD | G45 9NF |
| CASTLETON PRIMARY SCHOOL | 70 DOUGRIE ROAD | G45 9NW |
| CATHCART OLD PARISH CEMETERY | Kilmailing Road | G44 5UU |
| CATHCART SERVICE CENTRE | 34 GREENHOLME STREET | G44 4DU |
| CATHEDRAL STREET TOILETS | CATHEDRAL STREET | G4 0XA |
| CATHKIN LANDFILL SITE | CAIRNMUIR ROAD | G73 5RE |
| CENTENARY HOUSE | 100 MORRISON STREET | G5 8LN |
| CENTRE FOR SENSORY IMPAIRED | 17 GULLANE STREET | G11 6AH |

| LOCATION | ADDRESS | POSTCODE |
|---|------------------------|----------|
| CERIUM | Douglas Street | G2 4EZ |
| CHAPLET AVENUE CHILDRENS HOME | 81-83 CHAPLET AVENUE | G13 3XU |
| CHARING CROSS CAR PARK | 10 ELMBANK CRESCENT | G2 4PR |
| CHIRNSYDE PRIMARY SCHOOL | 288 ASHGILL ROAD | G22 7SB |
| CITY BUILDING CANTEEN | 350 DARNICK STREET | G21 4BA |
| CITY CHAMBERS | GEORGE SQUARE | G1 1DU |
| CITY HALLS - CANDLERIGGS | 84-100 ALBION STREET | G1 1NQ |
| CITY MARKETS OFFICE & CUTTING ROOM | ROOMS 22 AND 23 | G21 2DU |
| CITY PARK DATA CENTRE | 368 ALEXANDRA PARADE | G31 3AU |
| CLEEVE'S PRIMARY SCHOOL | 271 HOUSEHILLMUIR ROAD | G53 6NL |
| CLEVEDEN HIGH SCHOOL | 42 CLEVEDEN ROAD | G12 0JW |
| CLOAN AVE NURSERY | 45 CLOAN AVENUE | G15 6DE |
| CLOVERBANK NURSERY SCHOOL | 193 MORAINES AVENUE | G15 6LG |
| CLYDE PLACE ASSESSMENT CENTRE | 38 CLYDE PLACE | G5 8AQ |
| CLYDE TUNNEL | 959 DUMBARTON ROAD | G14 9UF |
| CLYDE TUNNEL OFFICE | 959 DUMBARTON ROAD | G14 9UF |
| CLYDE WEIR | 4 ADELPHI STREET | G5 0YL |
| COMMUNITY CASEWORK FACILITY - GOVAN/GOVANHILL | 1st Floor | G5 0RE |
| CONCERT SQUARE CAR PARK | 90 COWCADDENS ROAD | G4 0LU |
| CONTROL PILLAR DP1 | NEAR 421 POLMADIE RD | |
| CONTROL PILLAR DP2 | NEAR 421 POLMADIE RD | |
| COOK FREEZE UNIT | 74 BLACK STREET | G4 0EF |
| CORKERHILL DAY CENTRE | 11 CORKERHILL PLACE | G52 1RU |
| CORNWALL STREET | CORNWALL STREET | G41 1AA |
| CORKERHILL DAY CENTRE | 11 CORKERHILL PLACE | G52 1RU |
| CORNWALL STREET | CORNWALL STREET | G41 1AA |
| CORPUS CHRISTI PRIMARY SCHOOL | 179 PIKEMAN ROAD | G13 3BH |
| COUPER INSTITUTE HALL | 86 CLARKSTON ROAD | G44 3DA |
| COUPER INSTITUTE LIBRARY | 84 CLARKSTON ROAD | G44 3DA |
| COWCADDENS NURSERY SCHOOL | 12 MANRESSA PLACE | G4 9SZ |
| CRAIGBANK NURSERY SCHOOL | 26 GLENLORA DRIVE | G53 6BH |
| CRAIGTON PRIMARY SCHOOL | 9 MORVEN STREET | G52 1AL |
| CRANHILL BEACON | 200 BELLROCK STREET | G33 3LZ |
| CRANHILL PRIMARY SCHOOL | 17 SKERRYVORE ROAD | G33 3HJ |
| CRANSTONHILL NURSERY SCHOOL | 3 LITTLE STREET | G3 8DQ |
| CRAWFORD STREET FAMILY UNIT | 31 CRAWFORD STREET | G11 6TT |
| CROFTFOOT PRIMARY SCHOOL | 114 CROFTHILL ROAD | G44 5QQ |
| CROOKSTON CASTLE PRIMARY SCHOOL | GLENSIDE AVENUE | G53 5SD |
| CROOKSTON NURSERY SCHOOL | GLENSIDE AVENUE | G53 5SD |
| CROSSMYLOOF RESIDENTIAL CENTRE | 80 TITWOOD ROAD | G41 2DD |
| CROWNPOINT BOTHY | 195 CROWNPOINT ROAD | G40 2AL |
| CROWNPOINT PLAYING FIELDS | FORBES ST/CUBIE STREET | G40 2AF |
| CROWNPOINT SPORTS COMPLEX | 183 CROWNPOINT ROAD | G40 2AL |
| CUTHBERTSON STREET PRIMARY SCHOOL | 35 CUTHBERTSON STREET | G42 7RJ |
| DALDOWIE CREMATORIUM | HAMILTON ROAD | G71 7RU |
| DALDOWIE GARDEN/TRAINING CENTRE | 5 HAMILTON ROAD | G71 7SN |
| DALMARNOCK PRIMARY SCHOOL | 111 BALTIC STREET | G40 3PG |
| DARNICK STREET RESOURCE CENTRE | 350 DARNICK STREET | G21 4BA |
| DARNICK STREET SERVICE CENTRE | 350 DARNICK STREET | G21 4BA |
| DARNLEY COMMUNITY CENTRE | 10 GLEN LIVET PLACE | G53 7LA |
| DARNLEY PRIMARY SCHOOL | 169 GLEN MORISTON ROAD | G53 7HT |
| DAVIELAND COURT UNIT 3 | UNIT 3 | G51 2JR |
| DAVISLEA HOUSE HOME FOR THE ELDERLY | 100 MALLAIG ROAD | G51 4PE |
| DAWSHOLM DEPOT | 75 DALSHOLM ROAD | G20 0TB |
| DEANPARK NURSERY SCHOOL | 10 DEANSTON DRIVE | G41 3AE |
| DENNISTOUN LIBRARY | 2 CRAIGPARK | G31 2NA |
| DONALD DEWAR LEISURE CENTRE | 220 GARSCADDEN ROAD | G15 8SX |
| DOULTON FOUNTAIN | Glasgow Green | G40 1AT |
| DRAKEMIRE BUSINESS PARK | 179 Drakemire Drive | G45 9SS |
| DRAKEMIRE BUSINESS PARK - Block A | 179 Drakemire Drive | G45 9SS |
| DRUMCHAPEL BOWLS | HOWGATE AVENUE | G15 8QN |

| LOCATION | ADDRESS | POSTCODE |
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| DRUMCHAPEL COMMUNITY CENTRE | 320 KINFAUNS DRIVE | G15 7HA |
| DRUMCHAPEL HIGH SCHOOL | 45 CALLY AVENUE | G15 7SQ |
| DRUMCHAPEL LIBRARY | 65 HECLA AVENUE | G15 8LX |
| DRUMCHAPEL POOL | 197 DRUMRY ROAD EAST | G15 8NS |
| DRUMMORE PRIMARY SCHOOL | 129 DRUMMORE ROAD | G15 7NH |
| DRUMRY HOUSE HOME FOR THE ELDERLY | 40 KINFAUNS DRIVE | G15 7TS |
| DRYNOCH PLACE - YARD LIGHTING | DRYNOCH PLACE | G22 7QQ |
| DUKE STREET CAR PARK | COLLEGELANDS | G4 0UG |
| DUNARD PRIMARY SCHOOL | 65 DUNARD STREET | G20 6RL |
| EAST AREA SERVICES TEAM - NEWLANDS CENTRE | 871 SPRINGFIELD ROAD | G31 4HZ |
| EASTBANK ACADEMY ANNEXE | 26 ACADEMY STREET | G32 9AA |
| EASTBANK ACADEMY SCHOOL | 26 ACADEMY STREET | G32 9AA |
| EASTBANK PRIMARY SCHOOL | 80 GARTOCHER ROAD | G32 0HA |
| EASTER QUEENSLIE DEPOT | 90 EASTER QUEENSLIE ROAD | G33 4UL |
| EASTERHOUSE CULTURAL CAMPUS | 5 BOGBAIN ROAD | G34 9DU |
| EASTERHOUSE SPORTS CENTRE | 47 AUCHINLEA ROAD | G34 9PR |
| EASTERN DEPOT | 400 BALTIC STREET | G40 4SF |
| EASTGATE | 727 LONDON ROAD | G40 3AQ |
| EASTMUIR PRIMARY SCHOOL | 211 HALLHILL ROAD | G33 4QL |
| EASTWOOD NURSERY SCHOOL | 16 BONNYRIGG DRIVE | G43 1HW |
| ELBA LANE NURSERY SCHOOL | 1346 GALLOWGATE | G31 4DJ |
| ELDER PARK BOATHOUSE | Govan Road | G51 4AA |
| ELDER PARK LIBRARY | 228A Langlands Road | G51 3TZ |
| ELDER STREET RESETTLEMENT PROJECT | 55 ELDER STREET | G51 3PX |
| ELMCROFT NURSERY SCHOOL | 40 CROFTCROIGHN ROAD | G33 3SE |
| ELMVALE PRIMARY SCHOOL | 712 HAWTHORN STREET | G22 6ED |
| EMIRATES SPORTS ARENA | 1000 LONDON ROAD | G40 3HY |
| EXCHANGE HOUSE | 229 GEORGE STREET | G1 1QU |
| FAIRFIELD HOUSE | FAIRFIELD HOUSE | G51 2JR |
| FAMILY CONTACT SERVICE | 53 MOSS-SIDE ROAD | G41 3TP |
| FAMILY SUPPORT GROUP | 1st FLOOR | G40 2BN |
| FAMILY SUPPORT GROUP - 229 ORR STREET | 229 ORR STREET | G40 2BN |
| FAMILY SUPPORT GROUP - LADYLOAN | 11 LADYLOAN AVENUE | G15 8LE |
| FASQUE FAMILY CENTRE | 9 LADYLOAN PLACE | G15 8HU |
| FERGUSON ANDERSON HOUSE HOME FOR THE ELDERLY | 66 CALDERCUILT ROAD | G20 0AL |
| FESTIVAL BUSINESS CENTRE | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F10 | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F12 | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F13 | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F17 | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F23A | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F4 | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE F8A | 150 BRAND STREET | G51 1DH |
| FESTIVAL BUSINESS CENTRE -TBC | 150 BRAND STREET | G51 1DH |
| FESTIVAL PARK NURSERY SCHOOL | 66 LORNE STREET | G51 1DP |
| FESTIVAL PARK POND | PACIFIC QUAY, GOVAN ROAD | G51 2AS |
| Festive Lighting | George Square | G2 1DU |
| FISH MARKET OFFICE 34 | OFFICE 34 | G21 2DX |
| FISH MARKET OFFICE L/LORDS SUPPLY | 130 BLOCHAIRN ROAD | G21 2DX |
| FISH MARKET OFFICES 7, 8 & 9 | OFFICES 7,8 & 9 CLEANERS BOTHY | G21 2DU |
| FLOODLIGHTING AT PIRIE PARK PRIMARY | 337 LANGLANDS ROAD | G51 4AW |
| FOCAL POINT DAY CENTRE | 195E DRUMRY ROAD | G15 8NS |
| FORFAR AVENUE HOME FOR THE ELDERLY | 60 FORFAR AVENUE | G52 3JF |
| FORGE STREET DAY CENTRE | 261 FORGE STREET | G21 2AR |
| FORTROSE NURSERY SCHOOL | 74 PEEL STREET | G11 5LR |
| Fossil Grove | 12 VICTORIA PARK NORTH | G14 9NN |
| FOUNTAIN AND CHEMICAL PORTACABIN | 94 SANNOX GARDENS | G31 3JE |
| FRUIT MARKET COMPACTOR UNIT | BLOCHAIRN ROAD | G21 2DU |
| FRUIT MARKET LANDLORDS SUPPLY | BLOCHAIRN ROAD | G21 2EP |
| FRUIT MARKET OFFICE | BLOCHAIRN ROAD | G21 2EP |
| FULTON LODGE HOME FOR THE ELDERLY | 68 ABBEYCRAIG ROAD | G34 0DN |

| LOCATION | ADDRESS | POSTCODE |
|--|--------------------------------|----------|
| GADBURN PRIMARY SCHOOL | 70 ROCKFIELD ROAD | G21 3DZ |
| GALLERY OF MODERN ART | 111 QUEEN STREET | G1 3AZ |
| GARNETBANK PRIMARY SCHOOL | 231 RENFREW STREET | G3 6TX |
| GARROWHILL COMMUNITY HALL | 31 MAXWELL DRIVE | G69 6LU |
| GARROWHILL PRIMARY SCHOOL | SPRINGHALL ROAD | G69 6PP |
| GARSCADDEN DEPOT | 85 CHAPLET AVENUE | G13 3XP |
| GARSCADDEN HOUSE | GARSCADDEN HOUSE | G15 8TG |
| GARSCADDEN PRIMARY SCHOOL | 15-19 HURLFORD AVENUE | G13 4AY |
| GARTCRAIG ROAD DEPOT | 201 GARTCRAIG ROAD | G33 2SN |
| GEOFF SHAW COMMUNITY CENTRE | 25 KERRYLAMONT AVENUE | G42 0DN |
| GEORGE SQUARE | GEORGE SQUARE | G2 1DU |
| GEORGE STREET REVENUES AND BENEFITS OFFICE | 280 GEORGE STREET | G1 1PR |
| GLASGOW GAELIC SCHOOL | 147 BERKLEY STREET | G3 7HP |
| GLASGOW GREEN - THE HOUSE | Glasgow Green | G40 1BA |
| GLASGOW GREEN CHILDRENS PLAY AREA | Templeton Street | G40 1BA |
| GLASGOW GREEN DEPOT | 50 GREENDYKE STREET | G1 5DB |
| GLASGOW GREEN FOOTBALL CENTRE | 28 KINGS DRIVE | G40 1HB |
| GLASGOW MUSEUM RESOURCE CENTRE | 200 WOODHEAD ROAD | G53 7NN |
| GLASGOW NATIONAL HOCKEY CENTRE | 8 KINGS DRIVE | G40 1HB |
| GLASGOW ROYAL CONCERT HALL | 2 SAUCHIEHALL STREET | G2 3NY |
| GLASGOW SCHOOLS ROWING CLUB | GLASGOW GREEN | G1 5BA |
| GLENDALE PRIMARY SCHOOL | 120 MCCULLOCH STREET | G41 1NX |
| Glenwood Business Park - Unit 8D | 70 Glenwood Place | G45 9UH |
| GLENWOOD BUSINESS PARK B | 45 Glenwood Place | G45 9UH |
| GLENWOOD BUSINESS PARK C | 65 Glenwood Place | G45 9UH |
| GLENWOOD BUSINESS PARK E | Glenwood Business Park E | G45 9UH |
| GLENWOOD BUSINESS PARK F | 30 Glenwood Place | G45 9UH |
| GLENWOOD BUSINESS PARK F4 | GLENWOOD BUSINESS PARK F4 | Unit F4 |
| GLENWOOD DAY CENTRE | 160 CASTLEMILK DRIVE | G45 9UE |
| GORBALS LEISURE CENTRE | 275 BALLATER STREET | G5 0YP |
| GORBALS LIBRARY | 180 CROWN STREET | G5 9ZR |
| GOVAN HIGH SCHOOL | 12 ARDNISH STREET | G51 4NB |
| GOVAN POLICE STATION | 18-20 ORKNEY STREET | G51 2BZ |
| GOVAN REVENUES AND BENEFITS OFFICE | 780 GOVAN ROAD | G51 2YL |
| GOVANHILL LIBRARY | 170 LANGSIDE ROAD | G42 7JU |
| GOVANHILL NEIGHBOURHOOD CENTRE | 8 DAISY STREET | G42 8JL |
| GOVANHILL NURSERY SCHOOL | 335 ALLISON STREET | G42 8HH |
| GOWANBANK PRIMARY SCHOOL | 20 OVERTOWN AVENUE | G53 6JB |
| GRAY STREET CHILDRENS UNIT | 30 GRAY STREET | G3 7TY |
| GREATER POLLOK AREA TEAM - POLLOK | 130 LANGTON ROAD | G53 5DD |
| GREENFIELD DEPOT | ESKBANK STREET | G32 6TP |
| GREENFIELD DEPOT (Romney Shed) | Eskbank Street | G32 |
| GREENFIELD PARK FOOTBALL | 127 DUROR STREET | G32 6TP |
| GREENVIEW PRIMARY SCHOOL | 165 GLENHEAD STREET | G22 6DJ |
| HAGHILL PARK PRIMARY SCHOOL | 415 CUMBERNAULD ROAD | G31 3LS |
| HALT PROJECT | 4TH FLOOR | G1 1NP |
| HAMILTONHILL FAMILY LEARNING CENTRE | 115 ELLESMERE STREET | G22 5QT |
| HAMISH ALLAN CENTRE | 180 CENTRE STREET | G5 8EE |
| HAMPDEN PARK AND RIDE | BUS SHELTER AT HAMPDEN STATION | G42 0NA |
| HAMPDEN PRIMARY SCHOOL | 80 ARDNAHOE AVENUE | G42 0DL |
| HAMPDEN SCHOOL | 30 LOGAN STREET | G5 0HP |
| HAWTHORN STREET - WOMANS ASSESSMENT CENTRE | HAWTHORN STREET | G22 6EN |
| HAZELWOOD SCHOOL | 50 DUMBRECK COURT | G41 5NJ |
| HELENSLEA NURSERY SCHOOL | 36 METHVEN STREET | G31 4RB |
| HELENSVALE CHILDRENS HOME | 51 HELENSVALE STREET | G31 4LT |
| HIGH CRAIGHALL BUSINESS CENTRE | Craighall House | G4 9UD |
| HIGH STREET CAR PARK | 206 HIGH STREET | G1 1PQ |
| HIGHPARK PRIMARY SCHOOL | 100 BILSLAND DRIVE | G20 9NY |
| HILLHEAD HIGH SCHOOL | OAKFIELD AVENUE | G12 8LJ |
| HILLHEAD LIBRARY | 348 BYRES ROAD | G12 8AP |
| HILLHEAD PRIMARY SCHOOL | 110 OTAGO STREET | G12 8NS |

| LOCATION | ADDRESS | POSTCODE |
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| HILLINGTON PRIMARY SCHOOL | 227 HARTLAW CRESCENT | G52 2JL |
| HILLPARK SECONDARY SCHOOL | 36 CAIRNGORM ROAD | G43 2XA |
| HILLS TRUST | NETHAN STREET | G51 3LY |
| HOLLYBROOK SECONDARY SCHOOL | 135 HOLLYBROOK STREET | G42 7HU |
| HOLLY CROSS PRIMARY SCHOOL | 316 CALDER STREET | G42 7NH |
| HOLYROOD SECONDARY SCHOOL | 100 DIXON ROAD | G42 8AU |
| HOLYROOD SPORTS CENTRE | 600 AIKENHEAD ROAD | G42 0PD |
| HOMELESS PERSONS TEAM | 31 STOCKWELL STREET | G1 4SF |
| Househill Depot | 1514 Barrhead Road | G53 7TW |
| HOWFORD PRIMARY SCHOOL | 487 CROOKSTON ROAD | G53 7TX |
| HYNDLAND PRIMARY SCHOOL | 44 FORTROSE STREET | G11 5LP |
| HYNDLAND SECONDARY SCHOOL | 9 LAUDERDALE GARDENS | G12 9RQ |
| IBROX BUSINESS PARK | UNIT 5 | G51 2XX |
| IBROX COMPLEX | 80 HINSELWOOD ROAD | G51 2XP |
| IBROX LIBRARY | 1-7 MIDLOCK STREET | G51 1SL |
| IBROX PRIMARY SCHOOL | 46 HINSELWOOD DRIVE | G51 2XP |
| INTENSIVE COMMUNITY SUPPORT UNIT - SOUTH | 136 STANLEY STREET | G41 1JH |
| JAMES MCLEAN PROJECT | 10 OATFIELD STREET | G21 4NT |
| JOHN PAUL ACADEMY SCHOOL | 2 ARROCHAR STREET | G23 5LY |
| JOHN PAUL II PRIMARY SCHOOL (NEW) | 29 DUNAGOIL ROAD | G45 9UR |
| KELBOURNE PARK SCHOOL | 109 HOTSPUR STREET | G20 8LH |
| KELBOURNE PRIMARY SCHOOL | 109 HOTSPUR STREET | G20 8LG |
| KELVIN HALL ISA | ARGYLE STREET | G3 8AW |
| KELVIN WAY PUBLIC TOILETS | KELVINGROVE PARK | G11 6 |
| KELVINDALE PRIMARY SCHOOL | 11 Dorchester Place | G12 0BP |
| KELVINDALE PRIMARY SCHOOL | ARGYLE STREET | G3 6BY |
| Kelvingrove Bandstand | Kelvingrove Park | G3 6BY |
| KELVINGROVE PARK VISITORS CENTRE | KELVINGROVE PARK | G3 6BY |
| KELVINGROVE PAV/BOWLS | GRAY STREET | G3 1AA |
| KEMPSTHORN - NEW | 28 Kempsthorn Crescent | G53 5ST |
| KEPPOCH CAMPUS SCHOOL | 65 STONYHURST STREET | G22 5AX |
| KINGS PARK PRIMARY SCHOOL | 44 KINGSBRIDGE DRIVE | G44 4JS |
| KINGS PARK PUBLIC PARK | CARMUNOCK ROAD | G44 5JQ |
| KINGS PARK SECONDARY SCHOOL | 14 FETLAR DRIVE | G44 5BL |
| KIRKLEE PLAYING FIELDS | 42 BELLSHAUGH ROAD | G12 0JW |
| KIRKRIGGS PRIMARY SCHOOL - ASL | 500 CROFTFOOT ROAD | G45 0NJ |
| KNIGHTSWOOD BOWLS AND PITCH AND PUTT | CHAPLET AVENUE | G13 3XP |
| KNIGHTSWOOD COMMUNITY CENTRE | 201 ALDERMAN ROAD | G13 3DD |
| KNIGHTSWOOD COMPLEX | 19 DUNTERLIE AVENUE | G13 3BB |
| KNIGHTSWOOD GOLF COURSE | LINCOLN AVENUE | G13 3DN |
| KNIGHTSWOOD LIBRARY | 27 DUNTERLIE AVENUE | G13 3BB |
| KNIGHTSWOOD PRIMARY SCHOOL | 36 KNIGHTSCLIFFE AVENUE | G13 2TE |
| KNIGHTSWOOD SECONDARY SCHOOL | 60 KNIGHTSWOOD ROAD | G13 2XD |
| LADYWELL SCHOOL | 12a VICTORIA DRIVE SOUTH | G14 9RU |
| LANDLORD LIGHTING | 35 CONISBOROUGH ROAD | G34 9QN |
| LANGA STREET NURSERY SCHOOL | 83 LANGA STREET | G20 0SQ |
| LANGFAULDS PRIMARY SCHOOL | 56 LEDMORE DRIVE | G15 7AQ |
| LANGSIDE HALL | 5 LANGSIDE AVENUE | G41 2QR |
| LANGSIDE LIBRARY | 2 SINCLAIR DRIVE | G42 9QE |
| LANGSIDE PRIMARY SCHOOL | 233 TANTALLON ROAD | G41 3JW |
| LANGSIDE ROAD TENNIS COURT | LANGSIDE ROAD | G42 8XY |
| LETHAMHILL GOLF COURSE | 1240 CUMBERNAULD ROAD | G33 1AH |
| LIDDESDALE ROAD CHILD CARE UNIT | 152-154 LIDDESDALE ROAD | G22 7QR |
| LIGHTING TEST LABORATORY | 34 TRONGATE | G1 5ES |
| LINBURN SCHOOL | 77 LINBURN ROAD | G52 4EX |
| LINN CEMETERY | 413 LAINSHAW DRIVE | G45 9SP |
| LINN CREMATORIUM | LAINSHAW DRIVE | G45 9SP |
| LINN PARK | 661 CLARKSTON ROAD | G44 5EP |
| LINN PARK ADVENTURE PLAYGROUND | 145 NETHERLEE ROAD | G44 3ST |
| LINN PARK BOTHY / MAIN YARD | SIMSHILL ROAD | G44 5TA |
| LINN PARK GOLF | SIMSHILL ROAD | G44 5EP |

| LOCATION | ADDRESS | POSTCODE |
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| LINTHAUGH NURSERY SCHOOL | 533 CROOKSTON ROAD | G53 7TX |
| LISTER STREET BOWLS | LISTER STREET | G4 0BZ |
| LITTLEHILL GOLF COURSE | 90 AUCHINAIRN ROAD | G64 1UT |
| LOANCROFT HOUSE HOME FOR THE ELDERLY | 101 MUIRHEAD ROAD | G69 7HB |
| LOCHEND COMMUNITY HIGH SCHOOL | 20 CAIRNBROOK ROAD | G34 0NZ |
| LOCHVIEW NURSERY SCHOOL | 145 LOCHEND ROAD | G34 0LW |
| LORNE STREET PRIMARY SCHOOL | 28 LORNE STREET | G51 1DP |
| LOURDES PRIMARY SCHOOL - NEW | 140 BERRYKNOWES ROAD | G52 2DE |
| LOURDES SECONDARY SCHOOL | 47 KIRRIEMUIR AVENUE | G52 3DF |
| LYONCROSS NURSERY SCHOOL | LYONCROSS ROAD | G53 5UR |
| MAIN STREET CHILDREN'S UNIT | Dunn Street | G40 3BG |
| MALLAIG RD DAYCARE CENTRE | 102 MALLAIG ROAD | G51 4PE |
| MANSEFIELD PARK | Mansefield Street | G11 5QP |
| MARKETS OFFICE - UNIT 4 | Unit 4 | G21 2DU |
| MARTHA STREET REGISTRAR'S OFFICE | 1 MARTHA STREET | G1 1JJ |
| MARTYRS SCHOOL | 17 Parson Street | G4 0PS |
| MARTYRS SCHOOL | 35 AVENUEPARK STREET | G20 8TS |
| MARYHILL HUB | 186 Wyndford Road | G20 8HF |
| MARYHILL LEISURE CENTRE | 1513 MARYHILL ROAD | G20 8NH |
| MARYHILL LIBRARY | 1508 MARYHILL ROAD | G20 9AD |
| MARYHILL PARK NURSERY SCHOOL | 23 KILMUN STREET | G20 0EL |
| MARYHILL REVENUES AND BENEFITS CENTRE | 1 GAIRBRAID AVENUE | G20 8YA |
| MARYHILL SERVICE CENTRE | 187 THORNTON STREET | G20 0RA |
| MARYHILL STORE | 255 LOCHBURN ROAD | G20 0QQ |
| MCGREGOR STREET - BLOCK D | Block D | G51 1XX |
| MCLELLAN GALLERIES | 270 SAUCHIEHALL STREET | G2 3EH |
| MEIKLEWOOD SERVICE CENTRE | 15 MEIKLEWOOD ROAD | G51 4EU |
| MERCAT BUILDING | 26 GALLOWGATE | G1 5AB |
| MERKEN HOUSE | 18 PURDON STREET | G11 6AJ |
| MERKLAND STREET / BEITH STREET | | G11 6HD |
| MERRYLEE LODGE | 55 MUIRSKEITH ROAD | G43 2JX |
| MERRYLEE PRIMARY SCHOOL | 50 Friarton Road | G43 2PR |
| MIDDLEFIELD RESIDENTIAL SCHOOL | 26 PARTICKHILL ROAD | G11 5BP |
| MILE END OUT OF SCHOOL CARE | 146 ORR STREET | G40 2BH |
| MILLER PRIMARY SCHOOL - NEW | 20 ARDENCRAIG ROAD | G45 0VV |
| MILTON SECONDARY SCHOOL | 6 LIDDESDALE TERRACE | G22 7HL |
| MILTONBANK PRIMARY SCHOOL | 11 SKERRAY STREET | G22 7PT |
| MITCHELL LIBRARY | 201 NORTH STREET | G3 7DN |
| MOLENDINAR COMMUNITY CENTRE | 1210 ROYSTON ROAD | G33 1HE |
| MOLENDINAR FAMILY CENTRE | 84 CRAIGHEAD AVENUE | G33 1LH |
| MONREITH ROAD CHILD UNIT | 152 MONREITH ROAD EAST | G44 3DF |
| Moorpark House | Unit 4A | G51 2HF |
| MOORPARK INDUSTRIAL ESTATE | ADJACENT UNIT 1 | G51 2WW |
| MOSS ROAD UNDERPASS | LANGLANDS ROAD | G51 4JT |
| MOSSPARK PRIMARY SCHOOL | 20 MOSSPARK SQUARE | G52 1LZ |
| MOUNT FLORIDA PRIMARY SCHOOL | 1127 CATHCART ROAD | G42 9HF |
| MOUNT VERNON HALL | KENMUIR AVENUE | G32 9LE |
| MOUNT VERNON PRIMARY SCHOOL | PENRYN GARDENS | G32 9NY |
| MUIRHEAD DAYCARE CENTRE | 101 MUIRHEAD ROAD | G69 7HB |
| MUSEUM BUSINESS PARK UNIT 16 | 140 WOODHEAD ROAD | G53 7NN |
| MUSEUM BUSINESS PARK UNIT 17 | 140 WOODHEAD ROAD | G53 7NN |
| NECROPOLIS GATEHOUSE | CATHEDRAL SQUARE | G4 0QS |
| NETHERCRAIG FOOTBALL PAVILION | 310 CORKERHILL ROAD | G52 1RR |
| NETHERPOLLOK FOOTBALL PAVILION | 49 HAGGS ROAD | G41 4AP |
| NETHERTON CHILD CARE UNIT | 16 BLAELOCH DRIVE | G45 9QR |
| NETHERTON COMMUNITY CENTRE | 358 NETHERTON ROAD | G13 1AX |
| NEW HORIZONS | 26 PENSTON ROAD | G33 4AG |
| NEWARK CHILDRENS HOME | 12 NEWARK DRIVE | G41 4QE |
| NEWHILLS SECONDARY SCHOOL | 42 NEWHILLS ROAD | G33 4HJ |
| NEWLANDS PARK - RANGERS OFFICE AND DEPOT | LUBNAIG ROAD | G43 2RY |
| NHO POLLOK | 25 BROCKBURN ROAD | G53 7BN |

| LOCATION | ADDRESS | POSTCODE |
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| NITHSDALE ROAD NURSERY SCHOOL | 264 NITHSDALE ROAD | G41 5LB |
| NITSHILL NEIGHBOURHOOD OFFICE | 409 NITSHILL ROAD | G53 7BN |
| NITSHILL ROAD DEPOT | 121 WOODHEAD ROAD | G53 7NN |
| NORSE ROAD CHILD UNIT | 122 NORSE ROAD | G14 9EH |
| NORTH AREA OFFICE - UNIT 18-24 | UNIT 18-24 | G21 4DD |
| NORTH AREA OFFICE - UNIT 3 | UNIT 3 | G21 4DD |
| NORTH AREA SERVICES - POSSIL | 7 CLOSEBURN STREET | G22 5JZ |
| NORTH AREA TEAM - ROYSTON | 15 GLENBARR STREET | G21 2NW |
| NORTH EAST AREA SERVICES - EASTERHOUSE | 1250 WESTERHOUSE ROAD | G34 9EA |
| NORTH KELVINSIDE PLAYING FIELDS | QUEEN MARGARET DRIVE | G20 6PY |
| NORTH WEST AREA SERVICES - PARTICK | 35 CHURCH STREET | G11 5JT |
| NORTH WEST AREA TEAM - UNITS 6,7 AND 9 | 59 RUCHILL STREET | G20 9PX |
| NORTH WOODSIDE LEISURE CENTRE | 10 MONCRIEFF STREET | G4 9YB |
| NORTHINCH COURT BLOCK 2 | UNIT 4, BLOCK 2 | G14 0UG |
| NOTRE DAME & ST PETERS | 30 HAVELOCK STREET | G11 5JE |
| NOTRE DAME HIGH SCHOOL | 160 OBSERVATORY ROAD | G12 9LN |
| NOVAR DRIVE NURSERY SCHOOL | 5 LAUDERDALE GARDENS | G12 9UA |
| NYE BEVAN HOUSE 1 AND 2 | 20 INDIA STREET | G2 4PH |
| OAKGROVE PRIMARY SCHOOL | 20 St PETERS STREET | G4 9PW |
| OAKWOOD PRIMARY SCHOOL | 22 DRUMLANRIG AVENUE | G34 0GD |
| ONSLOW DRIVE DAY NURSERY SCHOOL | 6 ONSLOW DRIVE | G31 2LX |
| OPEN GATE - 44 HECLA SQUARE | 44 HECLA SQUARE | G15 8NH |
| ORAN STREET DAY CENTRE | 45 ORAN STREET | G20 8LY |
| ORTON PLACE | UNIT 4 | G51 1AA |
| ORTON PLACE - STREET LIGHTING | Street Lighting | G51 2HF |
| OUR LADY OF PEACE PRIMARY SCHOOL | 343 HALLHILL ROAD | G33 4RY |
| OUR LADY OF THE ANNUNCIATION PRIMARY SCHOOL | 80 FRIARTON ROAD | G43 2PR |
| OUR LADY OF THE ROSARY PRIMARY SCHOOL | 50 TARFSIDE GARDENS | G52 3AA |
| OUTDOOR ADVENTURES | 195C DRUMRY RD EAST | G15 8NB |
| PALACE OF ART (Sports Centre) | 1121 PAISLEY ROAD WEST | G52 1EQ |
| PALACE OF ART HOCKEY PITCH | 1121 PAISLEY ROAD WEST | G52 1EQ |
| PARENT AND CHILDREN TOGETHER (PACT) - DRUMCHAPEL | 35 HECLA AVENUE | G15 8LG |
| PARISH HALLS | 266 GEORGE STREET | G1 1QX |
| PARKHEAD LIBRARY | 64 TOLLCROSS ROAD | G31 4XA |
| PARKHEAD REVENUES AND BENEFITS CENTRE | 125 WESTMUIR STREET | G31 5EX |
| PARKHILL SCHOOL HAGHILL CAMPUS | 375 CUMBERNAULD ROAD | G31 3LP |
| PARKING SHOP | 46 ALBION STREET | G1 1LH |
| PARKVIEW PRIMARY SCHOOL | 19 ROTHES DRIVE | G23 5PZ |
| PARTICK BURGH HALL | 9 BURGH HALL STREET | G11 5LW |
| PARTICK LIBRARY | 305 DUMBARTON ROAD | G52 4BD |
| PENILEE COMMUNITY CENTRE | 10 GLEDDOCH ROAD | G52 4BD |
| PENILEE NURSERY SCHOOL | 23 INKERMANN ROAD | G52 2RW |
| PEOPLES PALACE | GLASGOW GREEN | G40 1AT |
| PEOPLES PALACE / WINTER GARDENS | GLASGOW GREEN | G1 500 |
| PETER McEACHRAN HOME FOR THE ELDERLY | 12 KENNYHILL SQUARE | G31 3LW |
| PETERSHILL BUSINESS CENTRE | UNIT 3 | G21 4DD |
| PETERSHILL SPORTS CENTRE | 30 ADAMSWELL STREET | G21 4DD |
| PETERSON PARK FOOTBALL PAVILION | 22 YOKERMILL ROAD | G13 4PF |
| PIKEMAN NURSERY SCHOOL | 21 ARCHERHILL ROAD | G13 3NJ |
| PINKSTON RESOURCE CENTRE | UNIT W7 ROSEMOUNT WORKSPACE | G21 1QA |
| PIRIE PARK PRIMARY SCHOOL | 337 LANGLANDS ROAD | G51 4AW |
| PLENSHIN YPU | 33 Plenshin Court | G52 6QW |
| PLOT L L ABERDALGIE ROAD | Aberdalgie Road | G34 1AA |
| POLLOK CHILDRENS CENTRE | 8 NETHERPLACE CRESCENT | G53 5AA |
| POLLOK CIVIC REALM | 27 COWGLEN ROAD | G53 6EW |
| POLLOK COMMUNITY CENTRE | 134 LANGTON ROAD | G53 5DP |
| POLLOK NEIGHBOURHOOD OFFICE | 27 BROCKBURN ROAD | G53 5BQ |
| POLLOK PARK - OLD STABLE | 2060 POLLOKSHAWS ROAD | G43 1AT |
| POLLOKSHAWS LIBRARY | 60 SHAWBRIDGE STREET | G31 2NT |
| POLLOKSHIELDS EARLY YEARS | 9-11 MELVILLE STREET | G42 2NA |
| POLLOKSHIELDS EARLY YEARS | 30 LESLIE STREET | G41 2LF |

| LOCATION | ADDRESS | POSTCODE |
|---|---|---------------------|
| POLLOKSHIELDS PRIMARY SCHOOL | 241 ALBERT DRIVE | G41 2NA |
| POLMADIE DEPOT | 425 POLMADIE ROAD | G42 0PJ |
| POSSILPARK LIBRARY | 127 ALLANDER STREET | G22 5JJ |
| POSSILPOINT COMMUNITY CENTRE | 130 DENMARK STREET | G22 5LQ |
| PROPOSED NEW OFFICES - ORTON PLACE | Orton Place | G51 2HF |
| PROVAND'S LORDSHIP | 3 CASTLE STREET | G4 0RB |
| PROVAND'S LORDSHIP | C/TAKERS HOUSE | G34 9NQ |
| PROVANHALL MUSEUM | AUCHINLEA ROAD | G34 9NQ |
| QUARRYBRAE PRIMARY SCHOOL | 61 CRAIL STREET | G31 5AL |
| QUEENS PARK AREA OFFICE | 520 LANGSIDE ROAD | G42 9QL |
| QUEENS PARK BOWLS AND TENNIS AND PITCH AND PUTT | QUEENS PARK BOWLS AND TENNIS AND PITCH AND PUTT | 520 LANGSIDE AVENUE |
| QUEENSLIE TRAINING CENTRE RADNOR BOWLING | 39 BLAIRTUMMOCK ROAD | G33 4ND |
| RADNOR BOWLING | KELVIN WAY | G3 |
| RANNOCH HOUSE HOME FOR THE ELDERLY | 97 CLEVEDEN ROAD | G12 0JN |
| RENFREW STREET NURSERY SCHOOL | 256 RENFREW STREET | G3 6TT |
| RETAIL ACADEMY LEVEL 2 | Level 2 Retail Academy | G1 2FF |
| RIDDRIE LIBRARY | 1020 CUMBERNAULD ROAD | G33 2QS |
| RIDDRIE PARK CEMETERY | 1171 CUMBERNAULD ROAD | G33 1AS |
| RIDDRIE RESOURCE CENTRE | 1 RIDDRIEVALE COURT | G33 2RN |
| RIDDRIE RESOURCE CENTRE TRAINING FLAT | 116 LIBERTON STREET | G33 2HJ |
| RIVERSIDE BUSINESS PARK | 5 Moffat Street | G5 0PD |
| RIVERSIDE MUSEUM OF TRANSPORT | YORKHILL QUAY | G3 8QE |
| RIVERSIDE PRIMARY SCHOOL | 635 GOVAN ROAD | G51 2AQ |
| ROSE STREET PLAYGROUND | 30 ROSE STREET | G3 6RE |
| ROSSHALL ACADEMY | 131 CROOKSTON ROAD | G52 3QF |
| ROSSHALL NURSERY SCHOOL | 35 CRONBERRY QUADRANT | G52 3NU |
| ROYSTON LIBRARY | 61 ROYSTON ROAD | G21 2QW |
| ROYSTON PRIMARY SCHOOL | 102 ROYSTON ROAD | G21 2NU |
| ROYSTONHILL RECREATION CENTRE | 15 FORRESTFIELD STREET | G21 2HG |
| RSBI FACTORY | 12 EDGEFAULD AVENUE | G21 4BB |
| RSBi FACTORY ANNEXE | 7-9 ATLAS PLACE | G21 4BB |
| RUCHAZIE COMMUNITY CENTRE | 441 GARTLOCH ROAD | G33 3TJ |
| RUCHILL COMMUNITY CENTRE | 671 BILSLAND DRIVE | G20 9NF |
| RUCHILL COMMUNITY CENTRE | 61 SMEATON STREET | G20 9JS |
| RUCHILL GOLF COURSE CLUBHOUSE | BRASSEY STREET | G20 9HP |
| RUCHILL PARK | 212 FIRHILL ROAD | G20 7SQ |
| SACRED HEART PRIMARY SCHOOL | 31 REID STREET | G40 4AR |
| SANDAIG NURSERY SCHOOL | USMORE PLACE | G33 4TE |
| SANDAIG PRIMARY SCHOOL | 31 BURNMOUTH ROAD | G33 4SA |
| SANDWOOD PRIMARY SCHOOL | 120 SANDWOOD ROAD | G52 2QY |
| SARACEN / BALMORE NEIGHBOURHOOD OFFICE | 30 MANSION STREET | G22 5SZ |
| SARACEN HOUSE | Saracen House | G22 5AD |
| SCARAWAY NURSERY SCHOOL | 24 SHAPINSAY STREET | G22 7JN |
| SCIENTIFIC SERVICES | 64 EVERARD DRIVE | G21 1XG |
| SCOTLAND STREET SCHOOL MUSEUM | 225 SCOTLAND STREET | G5 8QB |
| SCOTSTOUN LC - BADMINTON CENTRE | 112 DANES DRIVE | G14 9HD |
| SCOTSTOUN LEISURE CENTRE | 112 DANES DRIVE | G14 9HU |
| SCOTSTOUN PRIMARY SCHOOL | 21 DUNCAN AVENUE | G14 9HN |
| SCOTSTOUN STADIUM | 112 DANES DRIVE | G14 9HU |
| SEAMILL ST CHILDRENS HOME | 31 SEAMILL STREET | G53 7AY |
| SECC CAR PARK | 38 STOBXCROSS ROAD | G3 8YH |
| SHANTI BHAVAN | 41 DONCASTER STREET | G20 7DQ |
| SHAWBRIDGE REVENUES AND BENEFITS CENTRE | 24-34 SHAWBRIDGE ARCADE | G43 1RT |
| SHAWLANDS ACADEMY SCHOOL | 31 MOSS-SIDE ROAD | G41 3TR |
| SHAWLANDS PRIMARY SCHOOL | 1284 POLLOKSHAW ROAD | G41 3QP |
| SHERBROOKE AVE - CHILD UNIT | 53 SHERBROOKE AVENUE | G41 4SE |
| SHETTLESTON COMMUNITY CENTRE | 54 AMULREE STREET | G32 7UT |
| SHIELDHALL TRANSFER STATION | 154 WELLSHOT ROAD | G32 7AX |
| SHIELDHALL TRANSFER STATION | 200 BOGMOOR ROAD | G51 4SN |
| SIGHTHILL CEMETERY BOTHY | SPRINGBURN ROAD | G21 1RE |
| SIGHTHILL NURSERY SCHOOL | 61 FOUNTAINWELL ROAD | G21 1RG |

| LOCATION | ADDRESS | POSTCODE |
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| SIGHTHILL PARK FLOODLIGHTS | FOUNTAINWELL DRIVE | G21 100 |
| SKILLS ACADEMY | 99 NORFOLK STREET | G5 9LQ |
| SMITHYCROFT SEC SCHOOL | 282 SMITHYCROFT ROAD | G33 2QU |
| SOUTH AND WEST DAYCARE | 44 SOUTH PORTLAND STREET | G5 9JJ |
| SOUTH AREA SERVICES - GOVAN/GOVANHILL | 2ND, 3RD AND 4TH FLOORS | G5 0RE |
| SOUTH AREA SERVICES - GOVAN/GOVANHILL ANNEXE | 2ND, 3RD & 4TH FLOORS | G5 0RE |
| SOUTH EAST AREA SERVICES - CASTLEMILK | 10 ARDENCRAIG PLACE | G45 9US |
| SOUTHBRAE RESOURCE CENTRE | 190 SOUTHBRAE DRIVE | G13 1TX |
| SPRINGBURN ACADEMY SCHOOL | 151 EDGEFAULD ROAD | G21 4JL |
| SPRINGBURN DISTRICT OFFICE | 154 BALGRAYHILL ROAD | G21 3AB |
| SPRINGBURN HOUSE HOME FOR THE ELDERLY | 62 BROOMFIELD ROAD | G21 3UB |
| SPRINGBURN LEISURE CENTRE (inc Library) | 2 KAY STREET | G21 1JY |
| SPRINGBURN NURSERY SCHOOL | 48 GOURLAY STREET | G21 1AE |
| SPRINGBURN OFFICE | 179 AYR STREET | G21 4BW |
| SPRINGBURN OLD MENS CLUB | SPRINGBURN PARK | G21 3AX |
| SPRINGBURN PARK | MOSESFIELD STREET | G21 3AB |
| SPRINGBURN PARK BOWLING PAVILION | SPINGBURN PARK | G21 3UB |
| SPRINGBURN REVENUES AND BENEFITS CENTRE | 30 CHARLES STREET | G21 2PN |
| SPRINGBURN SYNTHETIC PITCHES | MOSESFIELD STREET | G21 3AB |
| ST ALBERTS PRIMARY SCHOOL | 36 MAXWELL DRIVE | G41 5DU |
| ST ANDREWS SECONDARY SCHOOL | 47 TORPHIN CRESCENT | G32 6QE |
| ST ANGELA'S PRIMARY SCHOOL | 227 GLEN MORISTON ROAD | G53 7HT |
| ST ANNES PRIMARY SCHOOL | 35 DAVID STREET | G40 2UN |
| ST BARTHOLOMEWS PRIMARY SCHOOL | CAVIN ROAD | G45 9TR |
| ST BENEDICTS PRIMARY SCHOOL (NEW) | 62 LOCHEND ROAD | G34 0NY |
| ST BERNARD'S PRIMARY SCHOOL | 14-16 DOVE STREET | G53 7BP |
| ST BLANES PRIMARY SCHOOL | 23 ARROCHAR DRIVE | G23 5QB |
| ST BRENDANS PRIMARY SCHOOL | 170 HAWICK STREET | G13 4HG |
| ST BRIDES PRIMARY SCHOOL | 83 CRAIGIE STREET | G42 8NB |
| ST BRIDGET'S PRIMARY SCHOOL | CAMP ROAD | G69 6DF |
| ST BRIGID'S PRIMARY SCHOOL | 4 GLENMORE AVENUE | G42 0EH |
| ST CATHERINE'S PRIMARY SCHOOL | 274 RYE ROAD | G21 3JR |
| ST CHARLES PRIMARY SCHOOL | 13 KELVINSIDE GARDENS | G20 6BG |
| ST CLARES PRIMARY SCHOOL (NEW) | 15 KILCLOY AVENUE | G15 8RP |
| ST CONSTANTINES PRIMARY SCHOOL - NEW | 45 DRUMOYNE ROAD | G51 4AX |
| ST CONVAL'S PRIMARY SCHOOL | 140 SHAWHILL ROAD | G43 1SY |
| ST DENIS PRIMARY SCHOOL | 129 ROSLEA DRIVE | G31 2RZ |
| ST FILLANS PRIMARY SCHOOL | 20 CROMPTON AVENUE | G44 5AF |
| ST FRANCIS CENTRE | 405 CUMBERLAND STREET | G5 0SE |
| ST FRANCIS OF ASSISSI PRIMARY SCHOOL | CROWN STREET | G69 7XB |
| ST FRANCIS PRIMARY SCHOOL | 430 OLD RUTHERGLEN ROAD | G5 0PA |
| ST GEORGES PRIMARY SCHOOL | 101 MUIRDYKES ROAD | G52 7QJ |
| ST JOACHIM'S PRIMARY SCHOOL | MONTROSE AVENUE | G32 8BZ |
| ST JOSEPH'S PRIMARY SCHOOL | 39 RAGLAN STREET | G4 9QX |
| ST KEVIN'S PRIMARY SCHOOL | 25 FOUNTAINWELL ROAD | G21 1TN |
| ST MARGARET MARYS SECONDARY SCHOOL | 9 BIRGIDALE ROAD | G45 9NJ |
| ST MARIA GORETTI PRIMARY SCHOOL (NEW) | 67 SKERRYVORE ROAD | G33 3LT |
| ST MARNOCKS PRIMARY SCHOOL | 13 LANGTON CRESCENT | G53 5LW |
| ST MARTHA'S PRIMARY SCHOOL | 85 MENZIES ROAD | G21 3NG |
| ST MARY'S PRIMARY SCHOOL | 2 KILMUN STREET | G20 0EL |
| ST MICHAELS PRIMARY SCHOOL | 865 SPRINGFIELD ROAD | G31 4HZ |
| ST MIRIN'S PRIMARY SCHOOL | 260 CARMUNNOCK ROAD | G44 5AP |
| ST MONICA'S (MILTON) PRIMARY SCHOOL | 200 LIDDESDALE ROAD | G22 7QR |
| ST MONICA'S PRIMARY SCHOOL | 30 KEMPSTHORN ROAD | G53 5SR |
| ST MUNGO MUSEUM | 2 CASTLE STREET | G4 0RH |
| ST MUNGO'S ACADEMY SCHOOL | 235 CROWNPOINT ROAD | G40 2RA |
| ST MUNGO'S PRIMARY SCHOOL | 45 PARSON STREET | G4 0PX |
| ST NINIANS PRIMARY SCHOOL | 2150 GREAT WESTERN ROAD | G13 2AB |
| ST OSWALDS SECONDARY SCHOOL | 83 BRUNTON STREET | G44 3NF |
| ST PATRICK'S PRIMARY SCHOOL | 10 PERTH STREET | G3 8UQ |
| ST PAULS HIGH SCHOOL | 36 DAMSHOT ROAD | G53 5HW |

| LOCATION | ADDRESS | POSTCODE |
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| ST PAUL'S PRIMARY SCHOOL (SHETTLESTON) | 85 ANWORTH STREET | G32 7RR |
| ST PAULS PRIMARY SCHOOL (WHITEINCH) | 17 PRIMROSE STREET | G14 0TF |
| ST PHILOMENA'S PRIMARY SCHOOL | 21 ROBROYSTON ROAD | G33 1EA |
| ST RAYMONDS PRIMARY SCHOOL | 384 DRAKEMIRE DRIVE | G45 9SR |
| ST ROCH'S PRIMARY SCHOOL | 267 ROYSTON ROAD | G21 2BS |
| ST ROCH'S SECONDARY SCHOOL | RHYMER STREET | G21 2NR |
| ST ROLLOX DEPOT | CHARLES STREET | G21 2QA |
| ST ROLL ST ROLLOX DEPOT OX HOUSE | 130 Springburn Road | G21 1YL |
| ST ROSE OF LIMA PRIMARY SCHOOL | 295 MOSSVALE ROAD | G33 5QS |
| ST STEPHEN'S PRIMARY SCHOOL | 22 PINKSTON DRIVE | G21 1NL |
| ST THOMAS AQUINAS SECONDARY SCHOOL | 112 MITRE ROAD | G14 9PP |
| ST THOMAS' PRIMARY SCHOOL | 8 SMITHYCROFT ROAD | G33 2QJ |
| ST TIMOTHY'S PRIMARY SCHOOL | 41 INVERESK STREET | G32 6SL |
| ST VINCENT CRESCENT CHILD UNIT | 56 ST VINCENT CRESCENT | G3 3NQ |
| ST VINCENTS PRIMARY SCHOOL | SCHOOL ENTRANCE | G46 8EQ |
| STAIR LIGHTING - UM5 5UP | STAIR LIGHTING | UM5 5UP |
| STEPFORD ROAD SPORTS TRUST | 1514 EDINBURGH ROAD | G33 4NU |
| STEWART MEMORIAL FOUNTAIN | | G31 4EG |
| STRATHCLYDE HOUSE 10 | 94 ELMBANK STREET | G2 4PF |
| STREET LIGHTING - UM5 5UP | STREET LIGHTING | UM5 5UP |
| STREET LIGHTS - 229 GEORGE STREET | Street Lighting | UM5 5UP |
| STREETWATCH | BLOCHAIRN ROAD | |
| SUMMERSTON TIP | BALMORE ROAD | G22 6OO |
| SUNNYSIDE PRIMARY SCHOOL | 1 POWRIE STREET | G33 5LA |
| SWINTON PRIMARY SCHOOL | 2 RHINDMUIR ROAD | G69 6AZ |
| TEMPLE LIBRARY | FULTON STREET | G13 1JLS |
| TEMPLE POOL | FULTON STREET | G13 1AX |
| TEMPLETON BUSINESS CENTRE - BLOCK 4 | Block 4 | G40 1DA |
| THE LIGHTHOUSE | 11 MITCHELL LANE | G1 3NU |
| THORNTREE PRIMARY SCHOOL | 55 COBINSHAW STREET | G32 6XL |
| THORNWOOD PRIMARY SCHOOL | 11 THORNWOOD AVENUE | G11 7QZ |
| TINTO PRIMARY SCHOOL | 61 NETHER AULDHOUSE ROAD | G43 2XG |
| TOLBOOTH STEEPLE | Floodlighting | G1 1LX |
| TOLLCROSS BOTHY / YARD / WORKSHOP - 254A | 254A Wellshot Road | G32 7YH |
| TOLLCROSS BOTHY / YARD AND WORKSHOP | TOLLCROSS ROAD | G32 8TQ |
| TOLLCROSS BOTHY/ YARD/ WORKSHOP - 254B | 254B Wellshot Road | G32 7YH |
| TOLLCROSS LEISURE CENTRE | 360 WELLSHOT ROAD | G32 7QR |
| TOLLCROSS YOUTH CENTRE | 1120 TOLLCROSS ROAD | G32 8HE |
| TONTINE LANE | 20 TRONGATE | G1 5EY |
| TORYGLEN FOOTBALL CENTRE | 480 PROSPECTHILL ROAD | G42 0BY |
| TORYGLEN PRIMARY SCHOOL | 6 DRUMREOCH PLACE | G42 0ER |
| TORYGLEN RESOURCE CENTRE FLAT | FLAT 10/3 | G42 3HD |
| TRAMWAY THEATRE | 25 ALBERT DRIVE | G41 2PE |
| Transport Vehicle Workshop | 91 Jessie Street | G42 0PG |
| TRONDRA ENTERPRISE | 51 TRONDRA PLACE | G34 9AX |
| TRONGATE 103 | LANDLORD SUPPLY, UNIT 1 THE NORTH BLOCK | G1 5RB |
| TRONGATE 103-GL | KING STREET | G1 5RB |
| UNIT 11 RIVERSIDE BUSINESS SERVICES | Moffat Street | G5 1AA |
| UNIT 20 ADELPHI CENTRE | Unit 20 Adelphi Centre | G5 0PQ |
| UNIT 3 - MOFFAT STREET (VACANT) | UNIT 3 | G5 0QB |
| UNIT 3 ADELPHI CENTRE | Unit 3 | G5 0PQ |
| VEHICLE POUND | VICTORIA PARK DRIVE NORTH | G40 3SA |
| VICTORIA PARK BOWLS | 12 VICTORIA PARK NORTH | G14 9NN |
| VICTORIA PARK DEPOT | VICTORIA PARK DRIVE SOUTH | |
| VICTORIA PARK DRIVE SOUTH | 70 Wallacewell Quadrant | G21 3PX |
| Wallacewell Children's Home | 305 STANDBURN ROAD | G21 3RH |
| WALLACEWELL PRIMARY SCHOOL | 285 WELLSHOT ROAD | G32 7QD |
| WELLSHOT PRIMARY SCHOOL | WELLSHOT ROAD | G32 7HY |
| WELLSHOT ROAD | 31/39 HECLA SQUARE | G15 8NH |
| WEST AREA SERVICES - MERCAT HOUSE | 1660/1670 GREAT WESTERN ROAD | G13 1HH |
| WEST AREA TEAM - ANNIESLAND | 20 Dunkenny Square | G15 8NB |

| LOCATION | ADDRESS | POSTCODE |
|---|--|----------|
| WEST COMMUNITY CASEWORK TEAM | 40 KELVINHAUGH STREET | G3 8PB |
| WESTERN DEPOT | | |
| WESTERN NECROPOLIS | 35 TRESTA ROAD | G23 5AA |
| WESTMUIR HIGH SCHOOL | 255 RIGBY STREET | G32 6DJ |
| WESTWOOD BUSINESS CENTRE - CAFE LL SUPPLY | 69 ABERDALGIE ROAD | G34 9HJ |
| WESTWOOD BUSINESS CENTRE - EX UPPERGRD D | Extension Upperground D Westwood Business Centre | G34 9HJ |
| WESTWOOD BUSINESS CENTRE - EX UPPERGRD E | Extension Upperground E Westwood Business Centre | G34 9HJ |
| WESTWOOD BUSINESS CENTRE 1/2G | 1/2G | G34 9HJ |
| WESTWOOD BUSINESS CENTRE LGA | WESTWOOD BUSINESS CENTRE | G34 9HJ |
| WESTWOOD BUSINESS CENTRE LGF | LOWER GROUND FLOOR | G34 9HJ |
| WESTWOOD BUSINESS CENTRE PLOT 7 | PLOT 7 | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UGC | 69 ABERDALGIE ROAD | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 1 | UNIT 1 | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 1A | UNIT 1A | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 1B | UNIT 1BW | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 2 | UNIT 2 | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 2A | Unit 2a Westwood Business Centre | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 2E | UNIT 2E | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 2F | Unit 2F Westwood Business Centre | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 2G | UNIT 2G | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3 | UNIT 3 | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3A | UNIT 3A | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3B | UNIT 3B | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3C | 69 Aberdalgie Road | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3D | 69 Aberdalgie Road | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3E | 69 ABERDALGIE ROAD | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 3F | UNIT 3F | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UNIT 4 | UNIT 4 | G34 9HJ |
| WESTWOOD BUSINESS CENTRE UPPER GROUND B | Upper Ground B | G34 9HJ |
| WESTWOOD TRAINING CAMP | 71 ABERDALGIE ROAD | G34 9HY |
| WHITEHILL SECONDARY SCHOOL | 280 ONSLOW DRIVE | G31 2QF |
| WHITEHILL SWIMMING POOL | 240 ONSLOW DRIVE | G31 3QU |
| WHITEINCH LIBRARY | 14 VICTORIA PARK DRIVE SOUTH | G14 9RL |
| WHITEINCH PRIMARY SCHOOL | 56 MEDWYN STREET | G14 9RW |
| WINDLAW HOUSE HOME FOR THE ELDERLY | 340 ARDENCRAIG ROAD | G45 0QA |
| WOODSIDE HALLS | 36 GLENFARG STREET | G20 7QF |
| WOODSIDE LIBRARY | 343 ST GEORGES ROAD | G3 6JQ |
| Woodside Library - Floodlights | 343 St Georges Road | G3 6JQ |
| WOODSIDE NURSERY SCHOOL | 445 ST GEORGES ROAD | G3 6JX |
| WS14 PUMPING STATION | SPEAN STREET | G44 4DQ |
| WS15 PUMPING STATION | CARTSIDE QUADRANT | 9RL |
| WS16 PUMPING STATION | SINCLAIR DRIVE | G42 9PT |
| WS17 PUMPING STATION | LANGSIDE DR/TANTALLON ROAD | G41 3HY |
| WS28 PUMPING STATION | CREBAR STREET | G46 8EQ |
| WS9 PUMPING STATION | HOLMHEAD CRESCENT | G44 4HC |
| WYNDFORD COMMUNITY FACILITY | 186 WYNDFORD ROAD | G20 8HF |
| WYNDFORD NURSERY SCHOOL | 33 LATHERTON DRIVE | G20 8JR |
| YOKER PRIMARY SCHOOL | 56 CRAGGAN DRIVE | G14 0ES |
| YOKER SPORTS CENTRE | 2 SPEIRSHALL TERRACE | G14 0LN |
| YOUNG MOTHER'S SUPPORT GROUP | FLAT 0/1 | G31 4TS |
| YOUNG WOMENS PROJECT | Ground Floor | G40 2BN |

APPENDIX 3

REPORTING REQUIREMENTS

| Committee/Group | Convenor | Terms of Reference | Reporting Frequency |
|---|---------------------------|---|--|
| Energy and Carbon Working Group (ECWG) | Councillor Martha Wardrop | | 6-weekly (subject to the Summer Recess) |
| Sustainability and Environment Policy Development Committee (S&E PD Committee) | Brian Devlin | <p>In addition to the general terms of reference for all PD committees, to fulfil the functions of Policy Development (including consideration of equalities issues) as they relate to council policies, services and activities on sustainability and the environment. These functions include:</p> <ul style="list-style-type: none"> ● Transport infrastructure. ● Highway maintenance and improvements. ● Sustainability. ● Climate change. ● Road safety. ● Lighting strategy. ● Parks regeneration and events. ● Street environment. ● Waste and recycling. ● Energy management. ● Public health. ● Pollution. ● Trading standards. ● Scientific services. ● Nuclear free zones. | Annual report to be provided by the CM Board however updates on specific projects are provided as necessary. |
| Corporate Management Team | Anne Marie O'Donnell | <p>Consists of the Executive Directors of each of the seven Services. The role of the CMT is to ensure that the Council meets its statutory duties; is transparent and accountable; and provides best quality services to everyone who lives, works, studies, plays or does business in Glasgow.</p> <p>The CMT makes decisions that steer the council on the best course. It is responsible for promoting the city as a vibrant, innovative, sustainable and modern metropolitan city.</p> <p>The CMT is currently working to the following five key objectives:</p> <ul style="list-style-type: none"> Improving the efficiency and effectiveness of our services Increasing access to lifelong learning Making Glasgow a cleaner, safer city Building a prosperous city Improving health and well being | |

| Committee/Group | Convenor | Terms of Reference | Reporting Frequency |
|--|---|---|---------------------|
| Carbon Management Board | Brian Devlin, Executive Director of LES | <p>Membership:</p> <p>Attended by the Director/Assistant Director from each of the council's core services and ALEOs, the functions of the Carbon Management Board Include:</p> <ul style="list-style-type: none"> ● To review the output of the Carbon Management Working Group. ● To review and monitor the development of, and compliance with, the council's Carbon Management Programme. ● To review the carbon emissions relative to the targets set out in the Carbon Management Plan. ● Identify resource efficiency programmes, and develop a business case for resource efficiency as appropriate. ● To make recommendations and bring forward plans and escalate concerns, as appropriate, to the Corporate Management Team. ● To inform the proceedings of the SAMP Board as appropriate. ● To report to the Sustainability & Environment Policy Development Committee annually. | Quarterly |
| Carbon Management Working Group (CMWG) | Alastair Brown | <p>Senior Managers (Grade 10 and above) from each of the Council's core services and ALEOs.</p> <p>The CMWG reports to the Carbon Management Board.</p> <p>CMWG implements actions and new initiatives within GCC in relation to energy efficiency and carbon management.</p> | Quarterly |
| Senior Officers Group on Sustainability and the Environment | Alastair Brown | <p>Attended by nominated Officers from all Glasgow City Council Services and ALEOs</p> <p>General Remit</p> <p>To support the Sustainability and Environment Policy Development Committee in discharging the following general functions:</p> <ol style="list-style-type: none"> 1. To examine, on behalf of the council, various policies, strategies and plans in draft relating to the subject area (whether provided directly by the council, external organisations or partnerships) and reporting on these to the Executive Committee. 2. To undertake reviews or policy development tasks in relation to any matters falling within the remit of this Committee or as requested by the Executive Committee. 3. To support the Sustainability and Environment Policy Development Committee in fulfilling the functions of Policy Development as they relate specifically to Council policies, services and activities on sustainability and the environment (excluding functions supported by the Carbon Management and Resource Efficiency Board, i.e. on carbon management and reduction within the GCC "family"). This includes: <ul style="list-style-type: none"> • Sustainable Development • Climate Change – adaptation and mitigation • Sustainable Procurement • Natural Environment • Cultural Heritage • Air Quality • Planning and the Built Environment | Bi-monthly |

| Committee/Group | Convenor | Terms of Reference | Reporting Frequency |
|--|----------------|--|---------------------|
| Senior Officers Group on Sustainability and the Environment | Alastair Brown | <p>Specific Remit (Short-term):</p> <ul style="list-style-type: none"> ● Monitor, assess and provide feedback on the Climate Change Strategy and Action Plan. ● Oversee and authorise allocation of the Sustainability Innovation Fund. ● Receive feedback from/provide support to GCC-wide action on the 2014 Commonwealth Games Environmental Legacy. ● Receive feedback from/provide support to GCC-wide action on the 2015 European Green Capital application. | |

APPENDIX 4

PROJECT LIST

| Technology | Owner | Project/Action |
|-------------------|---------------------------------------|---|
| Heating | City Building | Feasibility study and subsequent installation of improved gas heating and BMS at Darnick St Hub building |
| Heating | City Building | Feasibility study and subsequent installation of improved gas heating and BMS at RSBi |
| Lighting | City Building | Feasibility study and subsequent installation of more efficient lighting at RSBi |
| Ventilation | City Building | Feasibility study and subsequent installation of improved dust extraction at RSBi with more efficient fan |
| Energy Champions | City Building | Impact of Energy Champions in reducing electricity in CB premises |
| Energy Champions | City Building | Impact of Energy Champions in reducing gas in CB premises |
| Fleet | City Building | Change to higher proportion of smaller vehicles and Euro VI engines in vehicle fleet |
| Heating | Social Work Services | Newlands Centre TRV installation including drain down |
| Heating | Social Work Services | Newlands Centre pipework insulation |
| Heating | Social Work Services | Newlands Centre UMAX |
| Heating | Land and Environmental Services | Easter Queenslie UMAX |
| Heating | Social Work Services | Clyde Place Assessment Centre UMAX |
| Heating | Social Work Services | Centre for Sensory Impairment UMAX |
| Heating | Social Work Services | Stanley Street UMAX |
| Heating | Social Work Services | Castlemilk Area Office UMAX |
| Heating | Social Work Services | Newlands Centre BMS |
| Heating | Land and Environmental Services | Eastern Cleansing Depot BMS |
| Heating | Social Work Services | Housing Alarm Centre BMS |
| Heating | Social Work Services | Hamish Allan Hostel BMS |
| Heating | Social Work Services | Oran Street Day Centre BMS |
| Heating | Social Work Services | Easterhouse Office BMS |
| Heating | Social Work Services | Budhill Day Care Centre BMS |
| Catering | Development and Regeneration Services | Lighthouse LED lighting trial |
| Heating | Social Work Services | Multiple sites Vendsense trial |
| Heating | City Property | Strathclyde House Heating Control |
| Lighting | Land and Environmental Services | Queens Park Depot LED |
| Lighting | Development and Regeneration Services | Lighthouse LED refit |
| Lighting | Chief Executive/Corporate Services | Exchange House Lighting Reconfiguring |
| IT | Education Services | PC Shutdown |
| Street Lighting | Land and Environmental Services | Street lighting |
| Car Park Lighting | City Parking | Concert sq |
| Car Park Lighting | City Parking | Charing Cross |
| Renewables | Land and Environmental Services | Queens Park Depot Biomass |
| Renewables | Social Work Services | Ferguson Anderson House Biomass |
| Heating | Chief Executive/Corporate Services | 220 High Street Sub Metering |
| Site removal | Chief Executive/Corporate Services | Nye Bevan |
| Site removal | Chief Executive/Corporate Services | Nye Bevan |
| Site removal | Social Work Services | Berryknowes Resouce Centre |

| Technology | Owner | Project/Action |
|--------------|----------------------|--------------------------------------|
| Site removal | Social Work Services | Wallacewell Childrens unit |
| Site removal | Social Work Services | Inglefield Street Hostel |
| Site removal | Social Work Services | Hinshaw st |
| Site removal | Social Work Services | Onslow drive |
| Site removal | Social Work Services | Blythe Road day centre |
| Lighting | Cordia | Cordia Alarm Response Centre |
| Lighting | Cordia | Cordia Cook Freeze |
| Cooling | ACCESS | RES Data Centre Project |
| Lighting | Education Sevices | Wallacewell Floodlighting LED Trial |
| Lighting | Education Sevices | Avenue End Floodlighting LED Trial |
| Lighting | Education Sevices | Govan Campus Floodlighting LED Trial |

APPENDIX 5

COMMUNICATION AIMS

Make use of the new Carbon Management Governance Structure, namely the Carbon Management Board (CMB) and Carbon Management Working Group (CMWG) to disseminate information throughout the council estate.

Make staff aware of the need to reduce energy consumption and cut carbon in the workplace and at home. Also, make staff aware of the link between energy and carbon.

Make staff aware of the need to recycle and use recycling bins wisely .

Make staff aware of how to prevent unnecessary water usage.

Understanding of the importance of the Programme e.g. climate change and the potential long term environmental and financial impacts of not taking action now

Motivate staff to take responsibility towards cutting energy usage – this will cut both our energy bills and reduce the cost of CRC related taxes as well as reduce our carbon emissions.

Promote the changes staff can make to cut energy consumption, e.g. switching off equipment that is not in use, reporting problems such as draughts, leaks, lights left on in buildings overnight, making correct use of recycling bins, being careful in kitchens, i.e. boiling only enough water, not over-stocking fridges and clearing out as

necessary, assessing the need for printing, etc.

Recognise the efforts staff are making through publishing consumption reports/ graphs and updates. Also, thank staff for their efforts.

Engage with CMWG members to support behavioural changes in services and drive actions around key messages – ensure that staff know who the members are and enable confidence that appropriate action will be taken to resolve any issues/concerns raised.

Make staff aware of the projects taking place within Glasgow City Council to reduce energy consumption and cut carbon emissions and of who to contact for further information.

Encourage staff to save at home by holding awareness events, competitions, providing tips, advice and contact information. As the Carbon Management Awareness Officer's remit has changed in that they will be engaging with not only staff but the public in carbon awareness promotion, re-branding is necessary to promote a fresh awareness campaign. An immediately recognisable logo/ theme is required to underpin all promotional merchandise.

Instil staff with a sense of optimism that the project will be successful and a sense of pride knowing that they can make a difference.

A copy of the Carbon Communication Plan is available on request

APPENDIX 6 ENERGY POLICY

GLASGOW CITY COUNCIL ENERGY POLICY 2014-2020

INTRODUCTION

The council is committed to continuous improvement in the efficiency with which energy is used, the avoidance of energy waste and raising awareness of the need to do so. We recognise that our use of energy impacts on local, national and global environments.

We will reduce levels of greenhouse gas generated from our operations while working in partnership with other agencies to raise awareness of the need to reduce Glasgow's overall emissions and plan for the anticipated impacts of climate change on the city. It is our objective to ensure that Glasgow meets and exceeds its carbon emissions reduction target for 2020. In reducing energy use we will support the achievement of Scotland's ambitious climate change targets.

The council will support and encourage staff and the wider community in improving energy efficiency for the benefit of the city.

We will also work towards our long term

vision of becoming the most sustainable city in Europe. This low carbon vision is part of the council's manifesto and is also the main objective of Sustainable Glasgow, a city wide partnership bringing together partners from higher education and the public and private sectors to work with local people, communities and businesses.

The evidence for climate change is overwhelming and the rate of change is increasing with the main contributor being rising levels of CO₂ emissions. Glasgow City Council recognises that in carrying out its daily business it has an impact on the local, national and global environment and seeks to mitigate the impact of climate change.

The scope of this policy covers all our buildings, processes and transport operations.

We expect staff and contractors alike to support our objectives and to co-operate actively in achieving them.

The Energy Policy contains the following key parts:

- Roles and responsibilities – this covers Elected Members, Senior Management, the Carbon Management Board, Working Group and Team as well the responsibilities of various services and sections and a general overview of the role of all staff and management.
- Monitoring and reporting – the Carbon Management Team will monitor energy consumption across all council services and will provide consumption reports on a regular basis to all Services and ALEOs.
- Procurement – the council will procure utilities in line with the Scottish Procurement contract. Consideration will also be given to the Government's Best Value framework.
- Training and development – staff with a specific energy role, e.g. caretakers, facilities management front line staff as well as training for all staff both PC and non PC facing.
- Energy management is not solely the responsibility of the Carbon Management Team. All employees and building users are responsible for energy efficiency and also for acting in the best possible way to promote energy aware behaviour to colleagues.

1. TARGETS

Glasgow City Council's energy and carbon reduction targets are set out in the council's Carbon Management Plan 2013-2020. There is an overall council target as well as individual annual service targets. The council target is to reduce carbon emissions by 30% by 2020 on a 2005/2006 baseline.

The council is working towards helping to achieve the Scottish Government's 2020 and 2050 targets set out in the Climate Change (Scotland) Act 2008 and is also committed to achieving Sustainable Glasgow's target to reduce the city's carbon emissions by 30% by 2020.

2. POLICY DRIVERS

1. CARBON MANAGEMENT PLAN

The council's Carbon Management Plan (CMP), which is supported by the Carbon Trust's Public Sector Carbon Management Programme, illustrates our commitment to reducing our carbon footprint. Phase 1 (2008-2013) aimed to deliver a 20% reduction in carbon emissions by 2013 based on a 2005/2006 baseline of 194,169 tonnes CO₂.

Phase 1 ended in March 2013; the actual reduction achieved was 9%, highlighting the need for council wide support to achieve future targets. The responsibilities section in this policy outlines the expectations of all staff across the council and ALEOs.

Phase 2 of the CMP runs from April 2013 to end of March 2020; the target reduction for this period is 30% on a 2005/2006 baseline.

2. CARBON REDUCTION COMMITMENT (CRC) ENERGY EFFICIENCY SCHEME

The Carbon Reduction Commitment (CRC) Energy Efficiency Scheme is a UK wide mandatory energy saving and carbon emissions reduction scheme for all organisations that consumed over 6,000 MWh of electricity through Half Hourly (HH) meters in

the calendar year of 2008. The scheme came into force on 1st April 2010. As a participant of the scheme, the council established that their CRC related emissions for 2012/2013 required the purchase of credits for 82,284 tonnes of carbon at a cost of £12 per tonne, giving a CRC liability of £987,408. The cost per tonne increased to £15.60 in 2014/15.

The Carbon Management Team (CMT) in Land and Environmental Services (LES) is responsible for CRC reporting, however, CRC has now become a separate budget item and so offers an opportunity for additional financial savings through energy reduction. The CMT will calculate any savings through reduced CRC liability resulting from carbon reduction initiatives; savings will be included as part of the business case for future projects.

3. CLIMATE CHANGE (SCOTLAND) ACT 2009

Energy Efficiency and Renewable Energy are a requirement of the Climate Change (Scotland) Act 2009. The Act sets out the Government's plans for how Scotland makes the transition into a low carbon economy.

4. CLIMATE CHANGE DECLARATION

Scotland's Climate Change Declaration signed by the Chief Executive and Council Leader in January 2007 commits the council to tackling climate change. We published a Climate Change Strategy and Action Plan 2010-2015 which sets out the strategic measures and actions planned by the council to address the serious challenges the organisation faces as a result of global warming both now, and in the future. An aim of the Climate Change strategy is to reduce Glasgow's CO₂ emissions.

5. COVENANT OF MAYORS

The European Union Covenant of Mayors signed by the Lord Provost challenges the council to meet and exceed the 2020 carbon reduction target of 20% set out in the European Climate and Energy Package. Upon signing this, Glasgow committed to reducing their CO₂ emissions by 30%.

2.6 SUSTAINABLE GLASGOW

The council is one of the founding members of Sustainable Glasgow; a partnership of public and private sector organisations working towards reducing Glasgow's carbon footprint by 30% by 2020 on a 2010 baseline.

3. ENERGY POLICY

3.1 STATEMENT OF COMMITMENT

Glasgow City Council is committed through its corporate objectives and those set out in the Energy Policy to reduce carbon emissions and protect and enhance the environment. The council recognises that its use of energy impacts on local, national and global environments. Glasgow City Council is committed to limiting those impacts where possible.

As part of its Carbon Management Plan (Phase 2 2013 – 2020) the Council is committed to continual improvement in energy efficiency, to reducing CO₂ emissions across the council estate and ensuring the availability of information and of all necessary resources to achieve objectives and targets. As well as using energy efficiently, the council is dedicated to purchasing energy at the most cost effective price, through the Scottish Procurement contract and procuring energy efficient plant and equipment (including office equipment). The Council will consider life cycle costs when procuring new projects and invest in new technology where this meets investment criteria, including renewable energy sources.

GCC will optimise its position in the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme and comply with all applicable requirements (legally required or voluntarily agreed to by the organisation).

As well as energy use across the estate we will work to reduce environmental emissions associated with travel (including employee travel to work and business travel).

3.2 AIMS AND OBJECTIVES

Glasgow City Council's long and medium-term corporate goals are:

- Commit organisational resources to energy management
- Minimise CO₂ emissions
- Reduce consumption of energy by 30% on a 2005/2006 baseline by 2020
- Reduce our energy costs
- Give high priority to energy efficiency investments
- Consider life-cycle energy costs for all new projects
- Minimise environmental impact
- Where possible, use energy from sustainable sources
- Work towards achieving carbon neutrality across the council estate
- Develop a training programme for all staff and include energy efficiency in the Corporate Induction
- Specify energy efficient design of new buildings, and procure energy efficient plant and equipment

Glasgow City Council's short-term objectives are:

- Reduce environmental impact of fuels used by reducing our emissions
- Implement a regular programme of energy audits
- Set and publish performance improvement targets
- Report performance changes and improvements annually
- Increase staff awareness of the need to save energy and encourage staff to play a part in reducing emissions
- Nominate employees to act as departmental Carbon Champions
- Establish a monitoring and targeting process
- Provide regular management reports on costs and consumption to all services and ALEOs

4. HEATING

To ensure the efficient use of energy to provide heating during this period this section has been designed to provide guidance on the appropriate level of heating required in buildings. It also provides useful information to help minimise energy used for heating whilst ensuring the comfort of staff.

4.1 HEATING LEVELS

The Workplace (Health, Safety and Welfare) Regulations 1992 lay down particular requirements for most aspects of the working environment. Regulation 7 deals specifically with the temperature in indoor workplaces and states that:

‘During working hours, the temperature in all workplaces inside buildings shall be reasonable.’

However, the application of the regulation depends on the nature of the workplace, such as a bakery, a cold store, an office, a warehouse.

The law does not state a minimum or maximum temperature; however the temperature in workrooms should normally be 16°C or 13°C if much of the work is physical. Furthermore, the Health and Safety Executive has previously defined thermal comfort as:

‘An acceptable zone of thermal comfort for most people in the UK lies roughly between 13°C (56°F) and 30°C (86°F), with acceptable temperatures for more strenuous work activities concentrated towards the bottom end of the range, and more sedentary activities towards the higher end.’

The table below defines the heating levels, both minimum and maximum, for the various building types found throughout the council's services and ALEOs. These temperatures have been decided using guidance from the Carbon Trust, CIBSE and HSE.

It is recognised that there will be some zones in buildings which have very specific heating requirements which may cause it to differ from the guidance set out in this policy. Services and ALEOs must report these zones to the Carbon Management Team via email (energyefficiencyunit@glasgow.gov.uk) to be recorded as exceptions.

TABLE 1 – GLASGOW CITY COUNCIL HEATING LEVELS BY SITE TYPE

| Building Type | Min Temp | Ideal Temp | Max Temp |
|-------------------------------------|----------|------------|----------|
| Office Space | 18°C | 20°C | 22°C |
| Primary School Classroom/Office | 18°C | 20°C | 22°C |
| Primary School Corridor/Gymnasium | 14°C | 16°C | 18°C |
| Secondary School Classroom/Office | 18°C | 20°C | 22°C |
| Secondary School Corridor/Gymnasium | 11°C | 13°C | 15°C |
| Nursery School | 18°C | 20°C | 22°C |
| ASL School | | 21°C | 23°C |
| Enclosed Industrial Depot | 11°C | 13°C | 15°C |
| Stores | 13°C | 15°C | 25°C |
| Libraries | 18°C | 20°C | 22°C |
| Sports Centre – Changing Rooms | 21°C | 23°C | 25°C |
| Sports Centre – Sports Halls | 13°C | 15°C | 17°C |
| Sports Centre – Pool Halls | 26°C | 28°C | 30°C |
| Museums | 18°C | 20°C | 22°C |
| Care Homes | 21°C | 23°C | 25°C |
| Historic Buildings | 18°C | 20°C | 22°C |
| Community Centre | 18°C | 20°C | 22°C |

Table 2 below gives an alternate approach to winter heating set points which keeps to the same levels of heat but categorises by occupancy instead of building type.

TABLE 2 – GLASGOW CITY COUNCIL GENERIC HEATING LEVELS

| | Minimum Temp | Ideal Temp | Maximum Temp |
|------------|--------------|------------|--------------|
| Occupied | 18°C | 20°C | 22°C |
| Unoccupied | 11°C | 13°C | 15°C |

4.2 PORTABLE HEATERS

The use of portable heaters will only be permitted where the heating system is unable to provide sufficient heat or where an event has caused the heating to fail. In either of these instances the facilities staff will issue portable heaters and record their issue on a log sheet. As soon as the heating matter has been resolved the portable heaters will be reclaimed by the facilities staff and logged back in.

4.3 FANS AND AIR-CONDITIONING UNITS (ACU)

During periods of excessive heat (see section 4.1) the use of portable fans and ACUs will be permitted with the express permission of building facilities management. When agreed, units will be supplied and placed in the most appropriate locations ensuring certain conditions are met, for example where ACUs are deployed, windows should be closed.

The use of personal equipment is not permitted since these will not have been assessed in accordance with the council's statutory health and safety obligations.

4.4 RESPONSE TO SEVERE WEATHER

Severely cold weather presents a significant risk to buildings operational abilities and frozen water pipes can lead to bursts, forcing sites to be closed for expensive repairs. There are various different heating systems in place throughout the variety of sites in the GCC estate and the ability of these buildings to cope with freezing temperatures varies.

In a site where frost protection exists, it must be set no higher than 5°C unless a specific building assessment identifies a different set level. Where a site does not have frost protection it may be necessary to turn the heating on to manual control to override the time clock and ensure the heating is running. If the situation demands switching to manual this must be done in tandem with resetting the thermostats to maintain the minimum temperature required to prevent freezing. Any site identified as not having frost protection should be immediately surveyed and priced for the installation of frost protection equipment.

4.5 OPERATION OF HEATING SYSTEMS

All facilities management/janitorial/curatorial staff should be fully trained in the operation of their heating systems, including the operation of the Building Management System (BMS) front end control panel (where applicable). Services and ALEOs must ensure that sufficient training has been provided to the relevant staff and record which members of staff have completed the training satisfactorily.

A BMS must have its zones set to the appropriate heating parameters set out in table 1; the BMS will then maintain the temperature within those parameters. Manual over-riding of a BMS is only permissible in the event of an unscheduled occurrence. Any such occurrence must be recorded in the buildings register.

Instruction manuals for the operation of heating systems and BMS controls are to be stored next to systems to ensure that facilities management/janitorial/curatorial staff are able to operate heating systems in sites other than their own.

Timer settings for heating systems must be set to reflect the working hours of the staff in each building. Heating should come on one hour before sedentary staff commence work unless a building assessment has identified the requirement for an extended warm-up period. Similarly the heating should switch off when core staff finish working. The residual heat in the building will be sufficient for active staff such as cleaners. It is not permissible to have the heating on until the last person leaves as this will result in the building being heated for hours after it is empty.

4.6 BUILDING ENVELOPES

Opportunities to improve the energy efficiency of the building envelope (i.e. heat loss via leaking windows) should be notified to the facility manager and the service/ALEO Carbon Management Working Group representative.

4.7 BUILDINGS REGISTER

The heating set points and times that have been agreed, together with the rationale behind these settings, will be recorded in the buildings register. Any exceptions to the standard guidelines set out above should be explicitly recorded in the Register. This will ensure that an auditable record of heating times and settings exists.

5. ROLES AND RESPONSIBILITIES

Figure 1: Carbon Management Structure for Glasgow City Council Family

The roles and responsibilities of various individuals and groups are outlined below.



5.1 COUNCIL LEADER

- Support the council Energy Policy and related documents
- Support the council's energy efficiency aims and objectives
- Promote the council's energy projects and actions to Glasgow citizens and to other cities

5.2 CHIEF EXECUTIVE

The Chief Executive is ultimately responsible for the implementation of the Energy Policy and other public commitments made by the council.

The Chief Executive is expected to:

- Provide visible support for the implementation of the Energy Policy
- Ensure that they receive regular updates and reports on the status of the targets referred to in the policy

5.3 ELECTED MEMBERS

Elected Members are expected to support the council's Energy Policy, Carbon Management Plan and related documents.

Elected Members should also:

- Consider how their behaviour impacts on the council's carbon footprint
- Act responsibly and use energy efficiently
- Complete training programmes relating to energy on GOLD or alternative
- Support management and the CMT in their awareness work
- Encourage colleagues to be energy aware and to take action to reduce consumption
- Promote the council's energy efficiency projects

5.4 ENERGY AND CARBON WORKING GROUP

The Energy and Carbon Working Group is chaired by an elected member of the council and consists of a cross section of political groups. The chair of the Energy Officers Group reports on the progress of Carbon Management projects and consumption information.

The Energy and Carbon Working Group is expected to:

- Consider how their behaviour impacts on the council's carbon footprint
- Act responsibly and use energy efficiently
- Support management and the CMT in their awareness work
- Promote the council's energy efficiency projects
- Request updates on the council's Carbon Management Programme and support carbon reduction projects

5.5 CORPORATE MANAGEMENT TEAM AND CARBON MANAGEMENT BOARD

The Carbon Management Board is made up of members of the Corporate Management Team and has responsibility of the service and ALEO targets set out in the Carbon Management Plan. The Board are committed to support the necessary actions required to achieve the targets. Each service/ALEO has one nominated member on the Carbon Management Board who should attend the quarterly meetings.

Within the Corporate Management Team the Executive Director of LES, who is the council's Carbon Champion, has responsibility:

- For the delivery, review and development of the Energy Policy
- To provide feedback, strategic advice and guidance to the CMT
- To request and provide regular updates on any related Energy Policy issue
- To enforce, where necessary, compliance of the roles and responsibilities set out in the Energy Policy
- Support the work of the Carbon Management Team

5.6 CARBON MANAGEMENT WORKING GROUP

The Carbon Management Working Group (CMWG) is made up of representatives from all council services/ALEOs. The members of the CMWG are responsible for:

- Developing a carbon action plan for their Service
- Setting up and managing a network of Energy Champions within their service or ALEO
- Ensuring roll out of energy communications and awareness projects across their service
- Providing feedback to the Carbon Management Team (CMT) on the status of their awareness raising and GOLD training figures
- Reviewing the consumption data provided to them by the CMT and providing information on sites that are high/low consumers
- Providing CRC related information when requested by the CMT
- Representing their service at the CMWG meetings held every quarter
- Validating site lists when requested by the CMT
- Supporting and promoting external energy/carbon events within their Services
- Holding update meetings to discuss energy saving queries, issues and opportunities, report back to CMWG (Carbon Management Working Group)

5.7 CARBON MANAGEMENT TEAM

The Carbon Management Team is the key group with responsibility for the day to day delivery of the council's Energy Policy objectives through the development and implementation of the Carbon Management Plan and Energy Policy across the council family. The CMT should encompass the following functions:

- Monitor and report energy use, energy cost and related carbon emissions through the use of appropriate energy metering, monitoring and analysis
- Benchmark building performance, identify exceptions in performance and plan/manage related projects and actions

- Ensure validation of utility bills
- Process utility bills prior to payment by Customer and Business Services (CBS)
- Carry out energy audits across the Council estate, identify energy saving opportunities
- Create audit reports and send to City Building, ACCESS and the relevant Service contact
- Project manage identified opportunities to implementation
- Maintain an up to date register of energy saving opportunities
- Keep up to date with relevant government regulation and policy
- Manage and keep track of Central Energy Efficiency Fund (CEEF) funding applications
- Promote the carbon awareness campaign to all staff
- Deliver and organise the council's staff energy awareness projects
- Develop energy training/update programmes for staff
- Communicate project updates, external events and energy saving tips for home and work to staff via Connect, Insider and the Corporate Brief
- Provide energy management services, support, training and advice to Services and ALEOs represented in the CMWG
- Liaise with services and ALEOs to request updates, implement projects and the Energy Policy
- Request site validation information from relevant service and ALEO contacts
- Provide site information and consumption data for the Scottish Procurement contracts
- Liaise with utility suppliers, Services, ALEOs and CBS to ensure consumption, billing and site queries are resolved
- Liaise with ACCESS and services/ALEOs to ensure shut down procedures are followed through and that relevant information is passed to suppliers
- Request information from Services and ALEOs as required for CRC and other statutory obligations
- Contact the relevant service in regards to Service Reform projects when appropriate
- Provide an advisory role to DRS and City Building Glasgow for new build projects

5.8 CORPORATE FINANCE

- Manage/keep track of energy spend and budgets for Services (and ALEOs)
- Report energy spend to Council Management Team
- Support CMT in their efforts to reduce the council's energy spend
- Work with the CMT to set energy budgets for each Service and ALEO

5.9 CORPORATE PROCUREMENT

- Manage the Scottish Procurement utilities contract
- Escalate supplier or billing contract issues with Scottish Procurement
- Procure goods and services in line with relevant council and Government policies and guidance

5.10 FACILITIES MANAGEMENT ACCESS AND CORDIA

Management/Decision Makers

- Liaise with the CMT on relevant projects, e.g. training opportunities for front line staff or energy saving measures, such as window sealant, to be implemented
- Report energy issues/opportunities to CMT
- Follow shut down procedures for closed sites and provide the relevant information to the CMT
- Where appropriate, liaise with the CMT to discuss staff role profiles

5.11 FRONT LINE STAFF

- Complete energy efficiency training offered to them by their service/ALEO or by the CMT
- Be energy aware in their working
- Report issues, failures, incidents that may lead to energy waste to their manager to pass to the CMT
- Ensure that shut down procedures are carried out (e.g. lights off, windows closed, room booking monitors switched off)

5.12 ICT – ACCESS

- Specify low energy rated equipment and facilities, e.g. ICT equipment should have a rating which complies with Scottish Procurement specification guidelines as a minimum
- Support CMT to ensure energy saving features of equipment are understood, enabled and used by all staff
- Support specialist IT applications as required for energy management, e.g. PC Shutdown software
- Involve the CMT in relevant projects to ensure energy issues are fully addressed

5.13 HR AND ORGANISATIONAL DEVELOPMENT

- Support the CMT in developing online training programmes including courses on GOLD
- Support the CMT in the creation and roll out of an energy training package to non PC facing staff, e.g. LES Toolbox Talks
- Include energy performance/carbon reduction criteria in job descriptions where relevant
- Include in job specifications that it is the responsibility of all staff to reduce energy consumption and act responsibly
- Include in PDP

5.14 CUSTOMER AND BUSINESS SERVICES – MANUAL INVOICES

The Manual Invoices team in CBS is expected to:

- Upload information provided by CMT into SAP
- Pay utility bills within timescales set out in Procurement Scotland contract
- Liaise with CMT to resolve any billing queries relating to the utility bills, e.g. missing cost codes, calculation errors

5.15 CITY BUILDING

- Support the CMT as agreed in the CBG/CMT SLA
- Provide updates to CMT on energy efficiency works

- Engage with CMT as required during building works

5.16 DEVELOPMENT AND REGENERATION SERVICES (DRS)

- Engage with CMT during design and specification stages of building works
- Liaise with CMT when investigating technological solutions to energy efficiency
- Consult CMT during policy and strategy reviews

5.17 SERVICE REFORM

- Inform the CMT of proposed and planned projects with a potential carbon implication

5.18 ALL SERVICES (ENERGY BILLING CONTACTS)

Energy billing contacts in all services and ALEOs (where applicable) are expected to:

- Check billing files and invoices received by them from the CMT and verify costs, sites billed and cost codes – inform CMT of any errors or of sites that have not been billed
- Advise CMT of new sites that should be added to the Scottish Procurement contract
- Advise CMT of sites which are closing or being transferred to another Service or ALEO
- Advise CMT of sites which are being billed outwith the Scottish Procurement contract, e.g. invoices are sent directly to site or finance team. Contact CMT to add these sites to the contract
- Validate, when requested, the site list sent to them by the CMT for contract or CRC purposes

5.19 ALL SERVICES (MANAGEMENT)

Managers in all services are expected to:

- Support Carbon Champions within their Service in their awareness work
- Set an example to staff
- Encourage staff to be energy aware and to take action to reduce consumption
- Request updates from the CMT regarding consumption data and issues to be raised

- Contact the CMT with energy saving opportunities for their workspace

5.20 ALL STAFF

All council staff and contractors are expected to:

- Where appropriate, consider the carbon impact of their current projects/activities
- Consider how their behaviour impacts on the council's carbon footprint
- Act responsibly and use energy efficiently
- Complete training programmes relating to energy on GOLD or alternative
- Support the CMT in their awareness work
- Encourage colleagues to be energy aware and to take action to reduce consumption

6 . MONITORING AND REPORTING

Reports produced include:

- Annual update for Carbon Management Board
- Six weekly reports for Carbon Management Working Group for monitoring purposes
- Staff will also be informed through the Insider and Corporate Brief

These reports will be produced by the Carbon Management Team. Their aim is to provide a mechanism for the ongoing review of progress against the policy objectives, and to maintain engagement with the recipients of the reports.

The reports sent to the Carbon Management Working Group are for monitoring purposes and allow services to check their progress against target. The reports will highlight buildings, services and ALEOs with high energy consumption. These will be required to explain the level of consumption and undertake assessment exercises to establish potential causes, if one is not known.

The council's energy management software STC allows monitoring, targeting and production of reports on energy consumption and carbon emissions. The detail of these reports can vary from an individual property level, to a group, service and corporate level. These are available to individual Services and ALEOs via a named user through the online system. Access to the online system can be requested by contacting the Carbon Management Team (CMT).

The CMT has access to the energy management system, this allows the team to report at corporate level. Reports will be produced by the CMT on a quarterly basis for the CMWG. Annual reports will be sent to the CMB and Directors.

7. INVESTMENT STRATEGY AND BUDGET

The council has a Central Energy Efficiency Fund (CEEF) budget of £1 million for investment in measures with less than a seven year payback or ten years for renewable projects.

Money from CEEF can only be spent on:

- Measures which reduce energy consumption and carbon emissions
- Projects on the local authority's/Scottish Water's/Health Board's property
- Projects which have a simple payback of 7 years for energy efficiency or 10 years for renewables

Up to 10% of the fund's value at the start of each year can be spent on running costs which are directly related to the running of the fund. These include:

- Training
- Promotional activities
- Wage costs of new posts created to support the Fund
- Improving energy management information

Other funding sources include:

- Salix Finance, a not for profit company that is funded by DECC and the Scottish Government - provides interest free loans for a broad range of energy efficiency projects and is another funding option available to the Council
- Capital funding – including voltage optimisation funding of £1.1 million
- Gain share projects – include lighting
- Energy Performance Contracting – from Scottish Futures Trust, an investment of £40 million over 12 years will lead to £67 million savings
- Feed in tariffs
- CRC savings – savings made in the CRC are available to use for future energy efficiency projects
- Prudential Borrowing – offer low interest loans

BUDGETS

- The budgets for CRC and utilities are held by each department.
- The budget for each Service is determined by Corporate Finance in Financial Services.

8. PROCUREMENT

There are two main aspects of procurement that are relevant to energy management:

- Procurement of utilities
- Procurement of energy consuming goods and services

The procurement of utilities and energy consuming goods and services falls under the remit of the Corporate Procurement Unit (CPU) within Corporate Services.

8.1 UTILITIES

As a result of increased collaboration in procurement following the publication of the McClelland report, utilities procurement for the whole of the public sector in Scotland is now carried out by the national centre of procurement expertise (Scottish Procurement). The CPU manages the utilities contract in collaboration with the CMT who have the responsibility of maintaining an accurate database of all council utility supplies across the estate. The overall process is managed by the CPU who ensures an effective procurement process and subsequent contract and supplier management.

8.2 GOODS AND SERVICES

In response to the Scottish Government Action Plan, the Corporate Procurement Unit, (CPU) has in consultation with council services and ALEOs, developed a Sustainable Procurement Policy and Action Plan for Glasgow, addressing the 10 key themes defined within the Scottish Government Action Plan and linked them to the Council's key objectives, its Climate Change Strategy and Action Plan and the recommendations from the McClelland review of Public Procurement in Scotland.

8.3 SUSTAINABLE PROCUREMENT POLICY

The aim of the Sustainable Procurement Policy is to embed sustainability principles (social, economic and environmental) into all procurement within the council and its ALEOs; it will be updated annually and will be published on the council's website.

8.4 SUSTAINABLE PROCUREMENT POLICY ACTION PLAN

The action plan defines how the Sustainable Procurement Policy will be delivered. The action plan benchmarks the council against national best practice and sets out the plan and actions for further improvements. It has a number of outcomes that will be measured, and enables the council to report on National Best Practice Indicators (BPI) and allows for the monitoring of the Procurement Capability Assessment (PCA), as reported to the Scottish Government.

9. TRAINING AND DEVELOPMENT

The behaviour of all staff and users of council buildings has an impact on energy performance. An energy and carbon training programme will be developed by the Carbon Management Team. This training should be included in the induction package to ensure that all new staff receive information covering:

- Glasgow City Council's energy and carbon targets and commitments
- The environment and climate change
- How individuals can make a difference and the actions that they can take
- Sustainable development and sustainable procurement (separate programmes)

An online training programme from the Energy Saving Trust is currently available on GOLD under Core Programmes. The Carbon Management Team will review this course and consider updating to a newer course or create one specific to the council.

As well as the GOLD course there is an online energy walkthrough for staff on Glasgow Online. The walkthrough features various Tomorrow's Office areas and highlights where staff can contribute to energy savings. The CMT will look at developing this walkthrough to include a quiz, a resource area for relevant plans and documents and a pledges section. There is also scope to include waste and recycling and staff travel plan information.

The CMT will work with Organisational Development to update GOLD and include an energy section in the staff induction package.

10. MAINTENANCE

When reactive maintenance is required on building fabric and services then the energy efficiency of the building should be maintained, or, preferably enhanced. For example:

- Controls – if a lighting or heating controller fails then it must be replaced with an equivalent or superior controller and not simply bypassed/removed.
- Boilers – regular checks should be carried out in line with legislation and manufacturers requirements.
- Ventilation systems – these systems should be included in regular maintenance checks
- Heating systems – if valves or pumps on heating and hot water systems are being replaced, the connecting pipe work and the valves should be insulated. Any short sections of un-insulated pipe work identified should be insulated at the same time.
- Lighting –if lighting is to be replaced, a replacement that is more energy efficient should be fitted. There should also be regular checks of lighting to ensure light fittings are clean, free of dust and not broken.
- Windows and doors – windows and doors should be included in regular maintenance

checks; any gaps or broken seals should be reported to ACCESS.

- Catering equipment – regular checks should be carried out to ensure the equipment is operating efficiently. Checks should include monitoring for broken seals; ensuring vents are free from dust and temperature monitoring.
- Other plant – e.g. compressors: manufacturers recommended maintenance checks should be carried out.

11. BUILDING MANAGEMENT SYSTEMS (BMS)

The council and ALEOs have Building Management Systems (BMS) installed in some but not all buildings. Remotely managed BMS are installed in all Glasgow Life sites and in all secondary schools.

The BMS allows many systems including heating, lighting, ventilation and cooling to be controlled centrally allowing them to work together. This ensures that systems are only used when they are needed allowing for improved comfort levels within a building as well as reduced energy wastage.

Some of the BMS within council properties are being refurbished or are planned to be refurbished depending on the current condition of the BMS and the lifespans of the buildings. Work has commenced in some buildings and the program is expected to continue such that we have greater remote control of these systems.

For sites that do not have BMS installed, the minimum control should be time controlled with a seven day time clock with the facility for programming holidays. There should also be a regular review of the settings, e.g. at start and end of British Summer Time, holiday periods and when there is a change of building operating hours. These systems should also be fitted with a frost protection facility. Storage heaters should be weather and time controlled.

