
SOUTH
LANARKSHIRE
COUNCIL
South Lanarkshire Council
Carbon Management Plan
2014 Update

Contents

Section 1
Introduction

South Lanarkshire Council's first Carbon Management Plan (CMP) was published in July 2008. It was the outcome of the Council's participation in the Carbon Trust's Local Authority Carbon Management Programme and its signing of Scotland's Climate Change Declaration in 2006.

An update of the CMP was published in 2012 which provided a report of South Lanarkshire Council's progress against the carbon reduction targets. This update details what we aim to achieve over the next two years and explains the changes in each source of emissions since the baseline year of 2005-6.

Targets within the CMP are included in the following plans:

- South Lanarkshire Council Sustainable Development Strategy
- Community and Enterprise Resources Annual Plan
- Connect, the Council Plan
- South Lanarkshire Single Outcome Agreement

The Council Plan 'Connect 2012-2017' sets out what the Council intends to achieve by 2017. The Council's long standing vision to improve the quality of life of everyone in South Lanarkshire is supported by a number of objectives, some of which have been identified, through consultation with various stakeholders, as Council priorities. The Council's commitment to developing sustainability throughout both the Council and our communities is one of it's key priorities.

The first target of a 5% reduction was achieved by March 2009. Further reductions were achieved and by the end of 2012/13 the cumulative overall reduction was 10.6%.

Legislative context

The **Climate Change (Scotland) Act 2009** is the main legislative focus of our action on climate change. The Act creates a statutory framework for greenhouse gas emissions reductions in Scotland by setting an interim 42 per cent reduction target for 2020, and an 80 per cent reduction target for 2050.

The Act places climate change duties on Scottish public bodies. The duties came into effect in 2011 and public bodies are now expected to 'act in a way best calculated to contribute to the delivery' of the national targets set out in the Act. Scottish councils are specifically mentioned as being major players and having a key role to play in carbon reduction because of the size of their operations and estates and their scope to influence others.

The **Carbon Reduction Commitment Energy Efficiency Scheme (CRC)** which was introduced by the UK Climate Change Act in 2008 requires large energy users to pay tax on carbon emitted from energy use in their buildings. From 2011 those organisations were required to pay an allowance for every tonne of carbon emitted. From 2014 councils are also required to include energy use for street lighting within the scheme.

The CRC costs to South Lanarkshire Council have been and are projected to be -

- 2011/12 £636,564 £12 per tonne
- 2012/13 £738,960 £12 per tonne
- 2013/14 £675,036 £12 per tonne
- 2014/15 £1,065.932 (projected) £15.60 per tonne – forecast sale price

** changes to the CRC scheme from 2014/15 will result in emissions from street lighting being included*

Scotland's Zero Waste Plan contains a range of targets designed to assist the Scottish Government achieve its vision of a zero waste society. The Plan aims to recycle or compost 70% of all waste by 2025 with no more than 5% going to landfill. The Plan also introduced several pieces of legislation, the most significant for local authorities, being the **Waste (Scotland) Regulations 2012**. Specific duties for local authorities include the provision of separate collection services for key recyclables to households by 2014 and a duty to provide a separate food waste collection service to households by 2016. It also includes a ban on separately collected recyclable materials either being incinerated or landfilled from 2014 and a ban on biodegradable waste going to landfill from 2021.

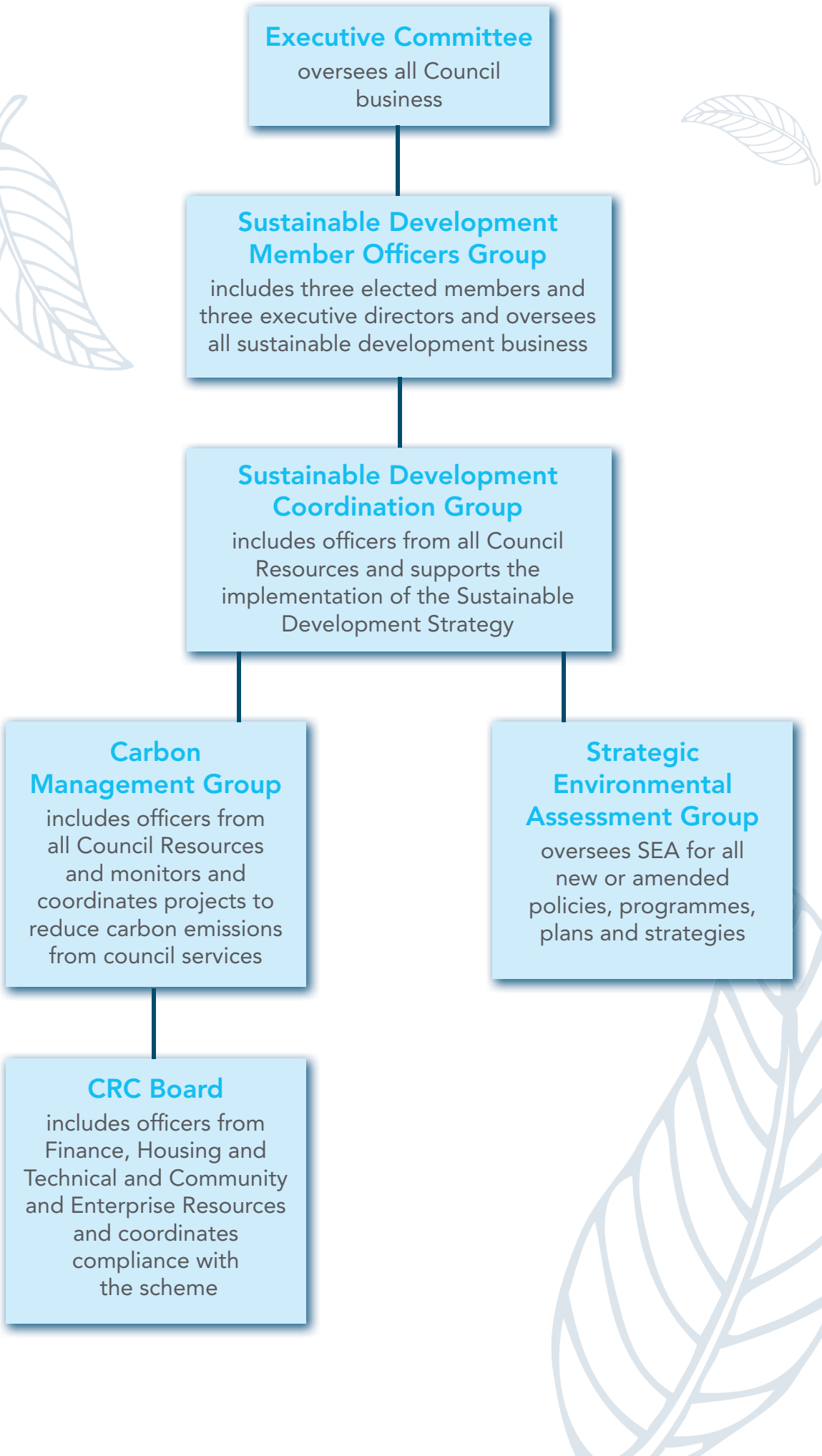
The steady increase in landfill tax is further incentive to reduce the amount of waste sent to landfill. Charges have risen from £7 per tonne to £80 per tonne since the tax was introduced in 1996.

Emerging issues

Further changes on how organisations manage carbon emissions are anticipated -

- **Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027.** The publication of this document in June 2013 (also known as RPP2) by the Scottish Government fulfilled one of its many obligations under the Climate Change (Scotland) Act 2009. It is in effect a route map listing plans, policies and proposals that will be taken forward in order to meet Scotland's ambitious climate change targets. The report states that 'by 2027, we will have witnessed a complete transformation in the way Scottish public bodies work and in how their estates are managed. This will be achieved through implementing and exceeding existing carbon management plans, adopting sustainable procurement processes and through supporting governance arrangements'.
- Also within Low Carbon Scotland there is an aspiration that all public sector vehicle fleets will be classed as 'low carbon' by 2025. What this specifically means for our fleet is not entirely clear but our Fleet Manager will continue to monitor our compliance.
- Fuel efficiency standards continue to be driven up as a result of European Directives for the manufacturing of new vehicles. This will help us in our continued efforts to operate a low carbon fleet.
- New regulations governing the requirement to light traffic signs are expected in the future, and we will work to provide this in the most energy efficient manner.
- The financial restrictions within local government are expected to continue for the foreseeable future with the Council expected to achieve further savings of over £33m during 2014-15 and 2015-16.

Governance Structure



Section 2
Targets and progress

Good progress has been made across all sources of our emissions with every area showing a decrease in carbon emissions since the baseline year of 2005-06. Many different initiatives and projects have contributed to these reductions and our understanding of how our activities affect the environment has increased.

To determine our carbon tonnages for each source of emissions we use conversion factors published by the Department of Energy and Climate Change (DECC). These enable us to calculate tonnages of carbon from consumption figures (eg. litres of fuel, kWhrs of electricity used etc). Emission factors for gas, electricity and waste were set at the baseline year and were not updated each year. This was done in order to understand the effect of the actions we were taking to reduce emissions without figures being affected by annual changes in emissions factors.

The tables below demonstrate the high level achievements in carbon reduction since the baseline year of 2005-06.

Figure 1 shows carbon emissions by source from the original baseline year to 2010-11. The target was to reduce by 5% by March 2011. This was met by a considerable margin (9.4%).

Figure 1 Carbon emissions by source 2005-2011

Year (emissions in tonnes CO_2 equivalent)						
Emissions source	**2005-6 Baseline**	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
Buildings (electricity, gas, oil)	69,427	66,480	67,573	67,691	69,512	67,914
Waste	61,320	60,015	57,824	54,876	50,711	48,928
Fleet	10,418	10,290	10,210	9,710	10,039	10,032
Street Lighting (electricity)	13,005	13,155	13,957	13,564	12,932	12,962
Employee Travel	1,795	1,941	1,772	1,783	1,638	1,428
Totals	**155,965**	**151,882**	**151,337**	**147,623**	**144,832**	**141,265**
Variation against baseline		**-2.6%**	**-3.0%**	**-5.3%**	**-7.1%**	**-9.4%**

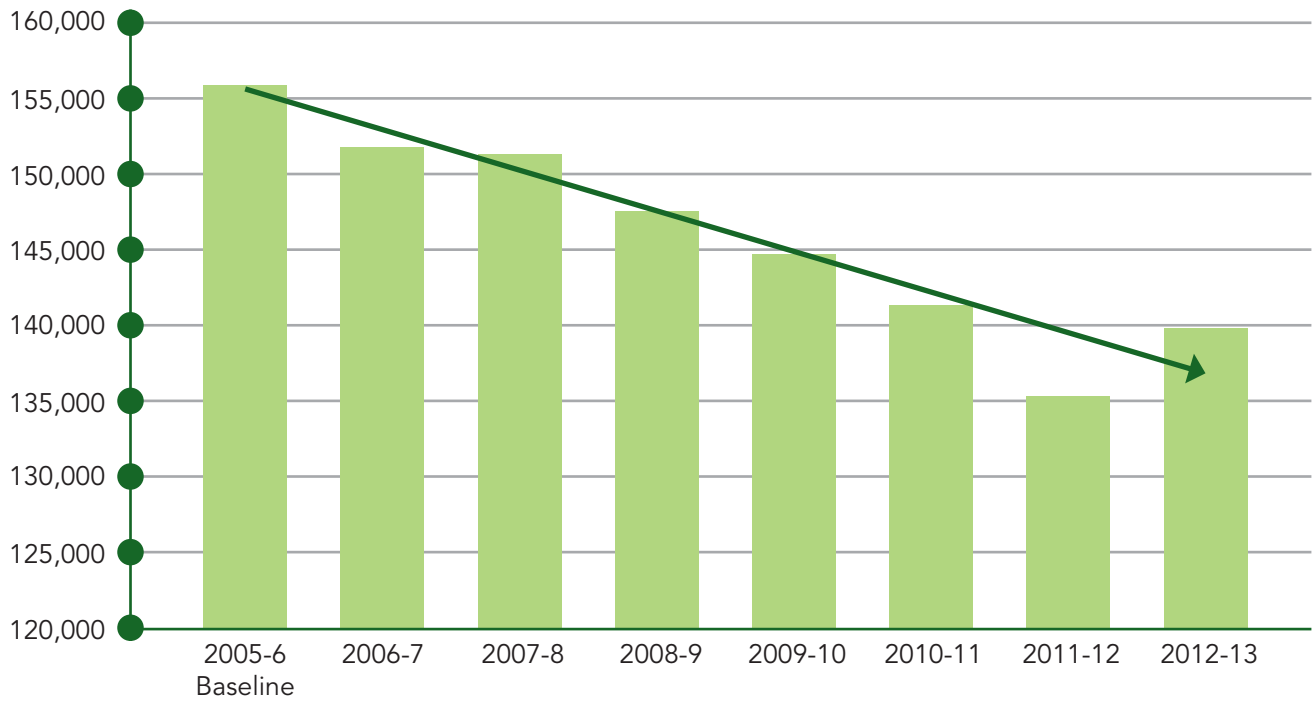
Figure 2 shows the carbon emissions by source from 2010/11 until 2012/13. The target was to reduce by 2% each year from a baseline year of 2010/11. This was met and exceeded in 2011/12 (4.3%) but was not met in 2012/13 due to increased energy use in our buildings because of cooler temperatures throughout the year. Most other sources continued a trend in decreasing carbon emissions.

Figure 2 Carbon emissions by source 2011-2013

Year (emissions in tonnes CO_2 equivalent)						
Emissions source	**2010-11 Baseline**	**2011-12**	**change prev year**	**2012-13**	**change prev year**	**change baseline**
Buildings	67,914	64,901	-4.4%	70,857	9.2%	4.3%
Waste	48,928	46,741	-4.5%	45,334	-3.0%	-7.3%
Fleet	10,032	9,272	-7.6%	8,855	-4.5%	-11.7%
Street Lighting	12,962	12,986	0.2%	13,020	0.2%	0.4%
Employee Travel	1,428	1,354	-5.2%	1,375	1.2%	-3.7%
Totals	**141,265**	**135,254**	**-4.3%**	**139,441**	**3.1%**	**-1.3%**
Target		**138,440**	**-2%**		**-2%**	**-4%**

Figure 3 shows the decreasing trend in carbon emissions since the original baseline year of 2005/06.

Figure 3 Emissions Trend



Figures 4 and 5 demonstrate how our emissions look having reset the emission factors each year since the baseline year of 2005/06. The emission factors used are detailed in Appendix 1.

Figure 4 Carbon emissions by source 2005-2013 (reset emission factors)

Emissions source	2005-6 Baseline	2006-7	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13
Buildings	69,427	66,121	67,244	68,265	70,186	66,943	63,911	63,878
Waste	61,320	60,015	57,824	54,876	50,711	48,928	46,741	45,334
Fleet	10,418	10,290	10,210	10,255	10,613	10,614	9,789	9,109
Street Lighting	13,005	13,155	13,957	13,740	13,124	12,662	12,686	10,801
Employee Travel	1,795	1,941	1,772	1,783	1,638	1,428	1,346	1,361
Totals	**155,965**	**151,522**	**151,008**	**148,919**	**146,272**	**140,575**	**134,473**	**130,482**
Cumulative reduction		**-2.59%**	**-2.92%**	**-4.26%**	**-5.96%**	**-9.62%**	**-13.55%**	**-16.11%**

Figure 5 Emissions Trend (reset emission factors)

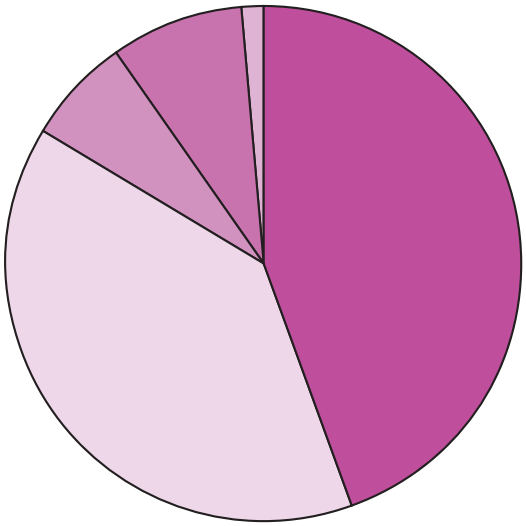
Section 3

Sources of our emissions

Figures 6 and 7 show the breakdown of each of the sources of carbon emissions at the baseline year of 2005/06 and in 2012/13.

Figure 6 Our Carbon Footprint 2005/06

Carbon footprint
155,965 tonnes

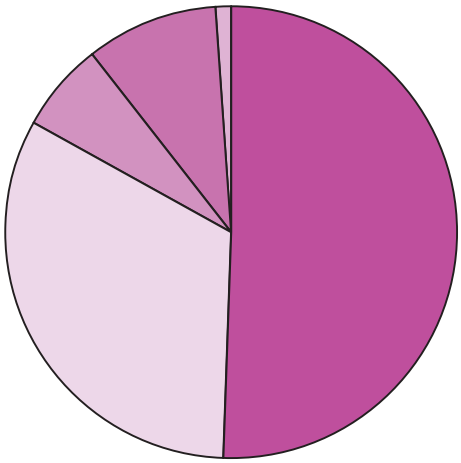


SLC emissions 2005/06

Buildings 43%	
Waste 39%	
Fleet 7%	
Street Lighting 8%	
Employee Travel 1%	

Figure 7 Our Carbon Footprint 2012/13

Carbon footprint
139,441 tonnes



SLC emissions 2005/06

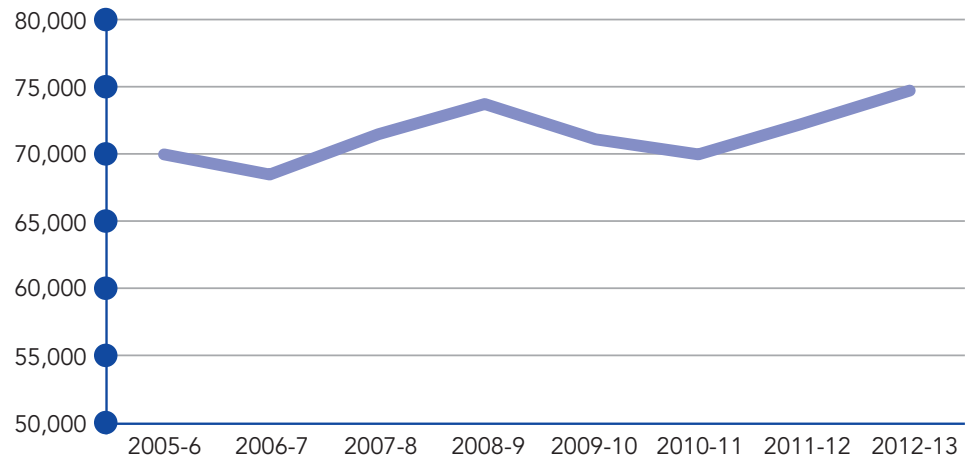
Buildings 51%	
Waste 33%	
Fleet 6%	
Street Lighting 9%	
Employee Travel 1%	

Our carbon footprint has changed significantly over the years. As well as reducing our overall emissions the proportion coming from each of the sources has changed. This allows us to target priority areas when making decisions on how to progress.

Buildings

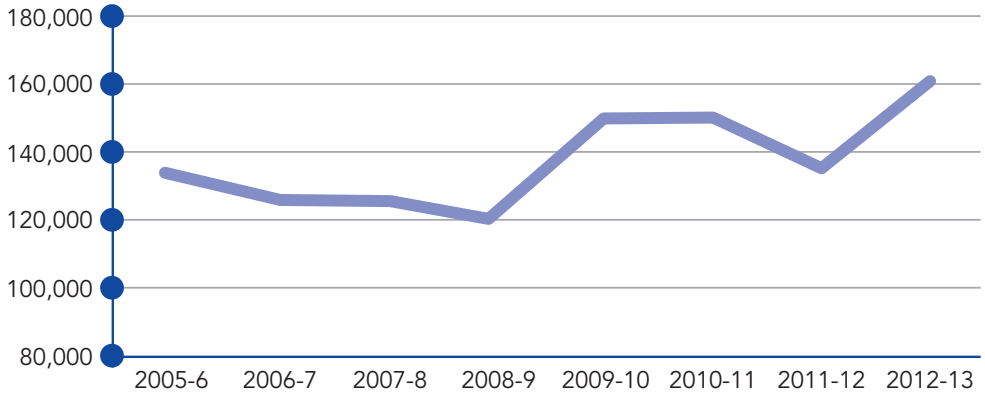
Energy used in buildings costs approximately £12m each year and is responsible for around 67,000 tonnes of our measured carbon emissions each year.

Electricity MWh



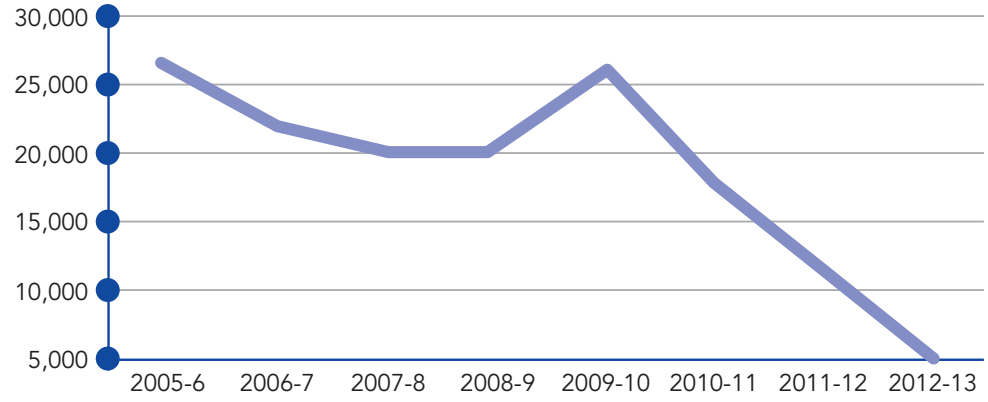
Fluctuating electricity consumption is due to changes in our buildings portfolio. Many initiatives have ensured increases have not been more significant

Gas MWh



Increases in gas consumption is due to weather and changes in our buildings portfolio and a programme of removing oil based heating systems and replacing with other heating types such as gas

Oil kWh



Reductions in oil consumption is due to a scheduled programme to replace oil based heating systems with other, more efficient systems

Up to March 2012, annual carbon emissions related to energy consumption in buildings decreased by 6.5% compared to the baseline year of 2005/06. Our building emissions in any one year are affected by weather conditions and in 2012/13 our emissions increased by 4.3% due to the exceptionally cold weather. Despite this and a changing building portfolio there is a clear downward trend. We have developed a strategic approach to the reduction of energy consumption and carbon emissions. This includes -

- continually reviewing our portfolio to ensure assets are being utilised efficiently
- ensuring that capital investment delivers energy and carbon efficient buildings
- undertaking a progressive planned maintenance regime to ensure the continued efficiency of plant and equipment
- monitoring consumption and investing through Central Energy Efficiency Fund (CEEF) in energy efficient technologies on a stand alone basis and in conjunction with other capital or revenue projects
- engaging with staff to ensure there is an energy conscious culture throughout the Council

Asset management

We continue to review our assets on an ongoing basis to ensure that services are delivered through energy efficient properties which are effectively and efficiently utilised. This is achieved through a matrix of corporate and departmental Asset Management Plans which detail the condition, utilisation and energy efficiency of each property. This helps us ensure we make optimum use of our assets.

In addition to Asset Management Plans, we have regular asset management meetings to deal with property and energy related issues and to consider options to improve the portfolio. Regular cross departmental reviews of property are held to consider efficiencies which can be achieved in the portfolio.

A review of assets identified properties extending to 10% of current floorspace which are capable of being closed. It is not yet possible to quantify the potential impact in terms of carbon emissions.

New builds and refurbishments

All projects for new builds and refurbishments meet Building Standards Section 6 in respect of energy consumption and CO_2 emissions with recent new builds achieving EPC ratings of B. The target for future builds is to meet Building Standards Sections 6 and 7 (Silver Sustainability Label). Our current designs incorporate enhanced levels of thermal insulation, solar energy microgeneration, triple glazing and mechanical ventilation with heat recovery.

All renewable technologies are considered when projects are in the early stages of design development. The solution selected is that which is appropriate for the project/site circumstances in respect of fuel availability, access, space, etc while also taking into account the Council's wider sustainability considerations i.e. air-quality management, and availability of renewable energy incentives.

To date renewable technologies implemented for new builds and refurbishments include biomass, ground source heat pumps, air source heat pumps, photo voltaics and LED lighting.

In response to changes to the building standards in 2010 a prioritisation strategy was established for the use of biomass boilers and other renewable technologies. This strategy is currently under review in consideration of the proposed 2013 changes to the building standards, now deferred for implementation by the Scottish Government until 2015. However, the current technical performance requirements stipulate a presumption for the inclusion of PV panels and LED lighting in capital projects.

The Schools Modernisation Programme began in 2007 and has led to a significant change in our building portfolio. The current projects are monitored in respect of their sustainable design performance using our in house Green Profile assessment tool. 34 new schools have been built in the last two years and 31 are planned for the next two years.

Woodpark Primary School, Lesmahagow

St Mary's Primary Lanark

St Cadoc's Primary Cambuslang

Planned maintenance

The Council has recognised that to deliver effective energy and carbon management, it is necessary not only to invest in efficient buildings and technologies but also to ensure that they are well maintained. To achieve this, a model of planned maintenance has been implemented across all operational properties to ensure the performance of plant and equipment is at its optimum. Spend in 2013/14 on planned maintenance was around £3.5m which will rise to £4.4m in 2014/15. Funding is in place for future years to allow strategic forward planning.

Central Energy Efficiency Fund

We have invested in a range of technologies and measures to reduce our energy consumption from within our buildings. The projects were initially funded by the Scottish Government's Central Energy Efficiency Fund (CEEF). The fund which was established with a one off grant of £800,000, self replenishes through payback of energy savings over a number of years. We have subsequently increased the CEEF fund by a further £500,000.

A variety of technologies have been funded through the CEEF programme –

- Voltage optimisers - to date we have installed 34 voltage optimisers which are saving electricity and carbon in many of our corporate offices, leisure centres and secondary schools.
  Payback on investment has been found to typically be 2-4 years. The technology optimises the incoming site voltage to a level such that electrical equipment runs more efficiently and consumes less energy. Energy savings have varied between 5% and 12% dependant on each site.
- Building Energy Management Systems (BEMS) – there are 82 BEMS enabled sites remotely connected to the central BEMS computer. There are daily checks and periodic adjustments made to ensure that energy is being used as efficiently as possible. To date there have been 84 corrective interventions which has resulted in significant energy avoidance at these sites. Most of our BEMS systems are in our primary school estate and it is anticipated that payback will be 3-7 years. Our specialist BEMS Engineer and Maintenance Team use the opportunity for early intervention when plant performance reduces.
- LED energy efficient lighting – to date there have been eight lighting replacement projects. Up to 90% savings can be achieved by replacing standard lighting with LED with no reduction in performance. Payback on this type of investment is very quick and savings are assured as well as a maintenance benefit as LED bulbs last markedly longer than their halogen counterparts thereby saving on re-lamping costs.
- Boiler optimisers – there have been ten installations of boiler optimisers. The anticipated payback for this technology is 3 – 5 years dependant on the host building's hours of operation. The technology works with existing

boiler controls by using self learning intelligence that can determine if and when a boiler should fire and for how long. The boiler optimiser ensures that the boiler does not fire unnecessarily thereby saving energy without compromising levels of comfort.

- Combined heat and power units (CHP) – Four CHP units have been installed in council properties with an expected payback of 3-5 years. The units use natural gas which drives an electrical generator. The waste heat from the CHP is piped into the building's boiler system so that the boilers do not have to fire as often to maintain the same temperatures. Additionally the electricity produced by the electrical generator is cabled directly into the buildings electrical system thereby reducing electricity bought in from the national grid.
- Biomass boilers – we currently have 47 sites with biomass boilers which burn naturally grown wood for heating and hot water systems. Because wood is considered a renewable fuel it helps the government achieve carbon reduction targets and attracts incentive payments from the renewable heat incentive (RHI). RHI payments are growing as more sites pass a rigorous accreditation process. The total RHI income for biomass received to date totals £143,000. Biomass is installed after consultation with planning colleagues and taking air quality into consideration.
- PV and Solar arrays - we currently have solar PV arrays fitted on ten buildings. As a renewable technology it can qualify for feed in tariff (FIT) payments from the government. To date all ten sites are in the process of gaining accreditation for FIT payments to be made over the next 20 years. Solar photovoltaic (PV) cells generate electricity from sunlight using a silicon semi-conductor material. Solar PV systems are most viable on any flat roof or southwest, south or southeast facing pitched roof provided that the roof structure can withstand the additional weight of the solar panels.

The combined CEEF and recirculation capital fund provides on average £400,000 of investment each year. Since it's inception in 2005/06 over £3m has been invested in energy saving measures and technologies resulting in investment lifetime savings of £17.3m and lifetime carbon savings of over 103,000 tonnes of carbon.

Solar panels, St Leonard's Primary School

Energy champions

A team of energy champions have been appointed to implement a structured staff energy awareness programme. Building users are encouraged to adopt better working practices that reduce wasted energy consumption. Comprehensive quarterly reports are produced which compares actual consumption with targets for each individual building. This ensures energy champions understand which buildings require extra effort to keep on target. Over 200 employees have undertaken training to help equip them to identify and correct wasteful consumption of energy in their workplace. A Learn On-Line course has been developed to ensure training is both relevant and specific to any employee looking to increase their awareness.

A reduction of 9% has been achieved over a three year period and further target of 2% over the next year has been set. Plans to move away from fixed energy reduction targets to building specific targets using benchmarks for building types and sizes are in place for the near future.

IT and print strategy

The Council's ICT Strategy contains a Green ICT plan which considers the impacts from the manufacture, transport, use and disposal of ICT equipment. The systematic refreshing of office IT equipment has ensured all our pcs are low energy users. A similar programme is underway for Education pcs.

We encourage equipment that

- is sustainably produced
- lasts longer
- wastes less energy
- is used in an efficient way
- is disposed of responsibly

A global switch off at 6pm every workday ensures that any pc inadvertently left on will be switched off remotely. A global switch off in our schools takes place at the start of the summer holidays which also ensures we minimise wasted energy.

The introduction of multifunctional devices rather than desktop printers has greatly reduced our ink and paper consumption. They have also reduced our energy consumption as they have various settings and modes to ensure they are not powered when they are not in operation.

Eco schools

Most schools and nurseries within South Lanarkshire are registered in the international 'eco schools' programme. Pupils and staff promote energy efficient behaviour and encourage walking and cycling as well as recycling in school and at home. The global 'switch off' during prolonged school holidays ensures energy is not wasted unnecessarily.

Use of weather corrected data

Weather correction is an established methodology where the effects that outside air temperatures have on heating consumption are factored out. Many internal energy reports detail energy consumptions with and without weather correction applied to put into better context improvements made from one year to the next in our energy performance.

Water

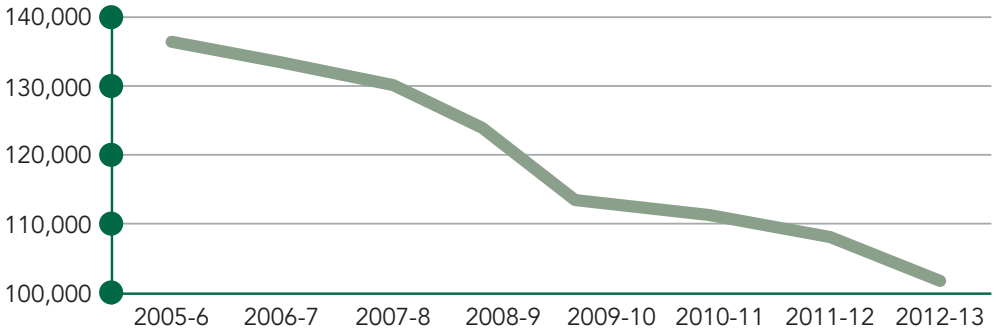
All of our water meters have been surveyed to record their location and serial number. A manual reading has been taken and submitted to our water suppliers. A further reading has been taken approximately 12 months later to form a base year consumption for each site. Concurrently an increasing number of our water meters were fitted with automatic meter readers (AMRs) which automatically reads the water meter and texts the water company's billing team. These greatly reduce uncertainties caused by prolonged periods of estimated bills and therefore provide a viable basis on which to gauge progress in reducing water consumption waste.

Emissions arising from water use were excluded from the original base line because of the poor quality data available at that time. We are progressing towards the development of a system to establish baseline figures and measure and reduce water use. To date 101 AMRs have been fitted to our water meters.

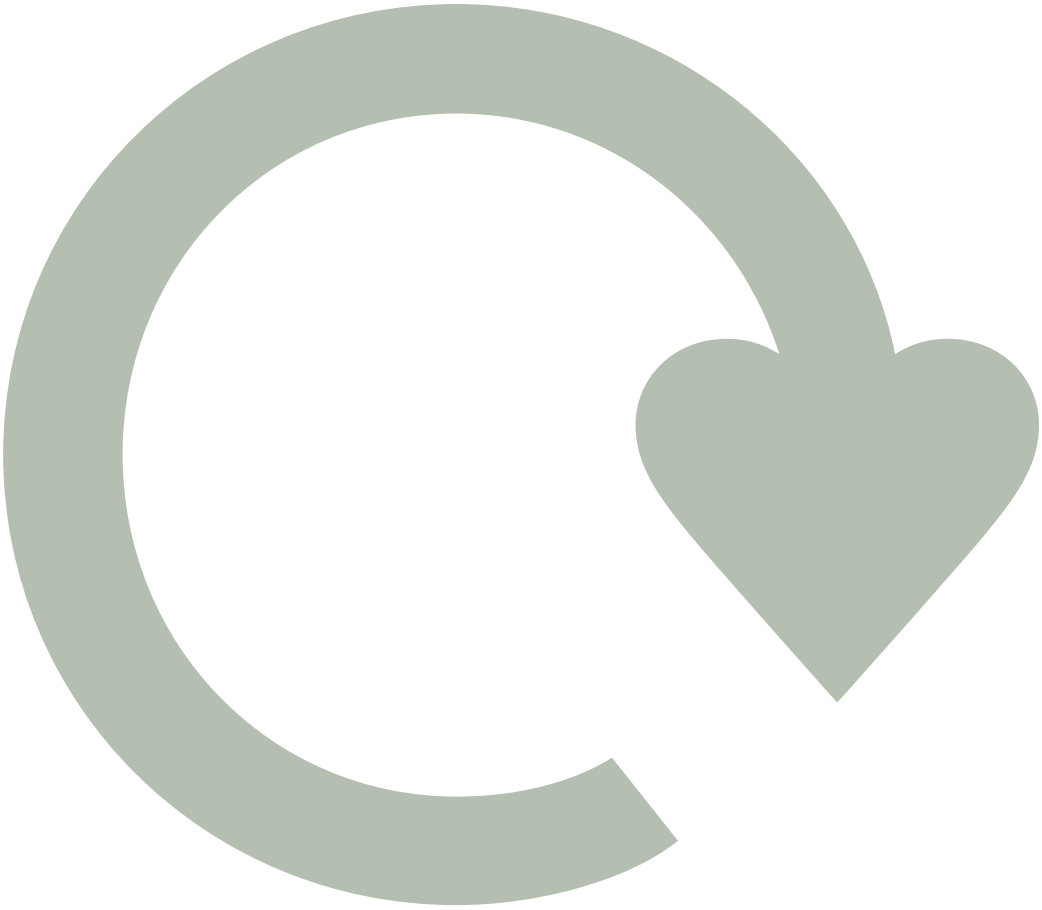
Waste

The Collection and disposal of domestic waste costs the Council £24m each year, around £6m of which is the cost of landfill tax. Domestic waste is currently responsible for 45,000 tonnes of our measured carbon emissions each year

Landfill waste tonnes



The steady reduction in waste going to landfill is due to increased waste awareness, changes in householders' behaviour, a reduction in packaging and the fragile economy



Since 2005/06 emissions related to household waste have reduced by 26%. The reduction is a consequence of a variety of measures to reduce the amount of household waste collected by the Council which goes to landfill sites. Further reduction in emissions is anticipated over the next few years as the Council takes action to meet the challenges set by the Waste Scotland Regulations 2012.

Household waste

The tonnage of waste produced by South Lanarkshire households has consistently reduced since 2005/06 despite an increase in both population and households across the area. Although we cannot be certain of the precise reasons, a variety of factors are thought to be behind this trend, including smaller and more durable household goods and reduced packaging. The down turn in the economy has led to a reduction in consumer purchasing of new goods.

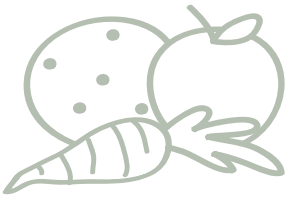
Segregated waste collections

New waste collections systems designed to increase recyclable material have been introduced which has contributed to the reduced level of landfill. These include kerbside glass and composting material collections and the extension of mixed recycling services (plastics, metal and paper) to all areas and house types.

Current recycling opportunities for multi occupancy and tenanted properties are restricted due to design and access limitations. However a recent review has resulted in the extension of alternative communal and individual recycling services for over 10,000 households which will be rolled out during 2014.

In 2013

- Over 6,000 tonnes of kerbside glass was diverted from landfill
- Almost 5,000 tonnes of composting material was collected from households
- Over 5,000 tonnes in bulky uplifts were carried out



Food waste collection

Food waste uplifts will be in place for our households by 2016 and it is expected that a large proportion of current residual waste will be diverted from landfill and instead will be recycled or treated.

Although not included within the scope of this CMP, food waste pilots operated in 27 of our schools and nurseries throughout 2013 in order to provide an accurate estimate of quantities of food waste. Full roll out of food waste uplifts was put in place for over 80 of our schools in early 2014. It is anticipated that this will divert over190 tonnes of waste from landfill each year. Further roll out to the remaining schools and other Council properties which have a kitchen will take place in 2016.

Civic amenity sites and recycling points

Within South Lanarkshire there are six civic amenity sites and a network of recycling points throughout the area. This allows residents to recycle items normally disposed of in their residual waste bins.

In 2013

- Over 24,000 tonnes of waste was collected at our civic amenity sites and subsequently recycled
- Over 1,000 tonnes were collected from local recycling points

Internal

At present internal waste forms part of the commercial waste stream within the Council area and is therefore not included within the scope of this CMP. Due to the current collection system, internal, domestic and business waste may be collected on the same route making it difficult to identify the volume of internal waste generated by the Council. However there are plans to re-launch the recycling facilities in all office properties to encourage as much recycling as possible.

Landfill tax and waste contract

Landfill tax cost around £6m in 2012/13 but as the tax levels increase each year so does the cost to the council.

A new short term waste contract was recently awarded which aims to increase the amount of waste being diverted from landfill. Work is ongoing to procure a long term contract which will provide landfill diversion to allow us to comply with the landfill ban which comes into operation in 2021.

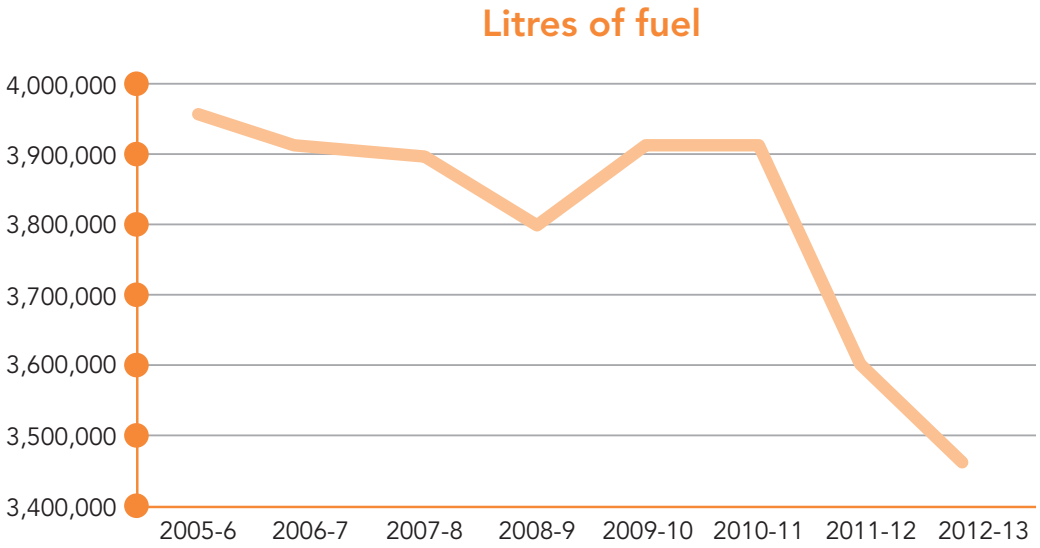
Communications

The council has a waste education team which works with residents, schools and community groups to promote good waste behaviour. They offer advice, promote and encourage participation in recycling schemes throughout the authority.

Currently the carbon associated with waste disposal is calculated using the emission factor published in 2008, which is detailed in Appendix 1.

Fleet

Fuel for our fleet costs approximately £4.5 million and is responsible for around 9,000 tonnes of our measured carbon emissions each year



A number of fuel efficiency projects have helped achieve significant savings in fuel despite a growing fleet and changes in service delivery across all Resources.

Fleet Services manage all aspects of the Council's vehicle fleet including the procurement and disposal of vehicles and road going plant. Fleet Services currently have 1,339 vehicles and 459 road going plant.

A number of challenging fuel efficiency projects has ensured a reduction in vehicles emissions despite fleet growth over the last two years. This is due to increased pool vehicles and changes in service delivery requirements.

Telematics

The progressive implementation of a fleet telematics system provides robust management information in respect of vehicle utilisation, fuel consumption and efficiency, carbon emissions and other performance data. It also provides real time information in respect of vehicle location and routing. To date the system has been installed in 273 of the fleet's large vehicles and 156 pool cars. It is expected that the provision will be extended to include further classes of vehicle in the future, dependant on individual service requirements.

Electric vehicles

Fleet Services has played a central role in the introduction of zero carbon electric vehicles to the Council's fleet. The Council currently operate 16 small electric cars, three electric vans and two electric precinct sweepers. Since their introduction approximately 140,000 miles have been travelled in electric cars. This has resulted in over 124,000 litres of fuel saved and 43 tonnes of carbon saved if these miles had been travelled in personal employee cars.

The electric sweepers alone have the potential to save around £7,000 worth of fossil fuel, which equates to 15 tonnes of carbon. The introduction of the electric sweepers has also allowed the release of heavier diesel powered sweepers to deal with major routes.

Euro 5 and Euro 6

Standards for vehicle emissions have been set by the European emissions standards. Within our commercial fleet over 3.5 tonnes, 66% are Euro 5 rating and 9% are Euro 6.

Speed limiters

Speed limiters are installed in all vehicles where technically possible and when purchasing new vehicles they are 'right sized' to their function to ensure the most fuel efficient vehicle is being made for each journey.

Training

A programme of fuel efficient driver training via the driver assessment process has ensured our drivers are adequately skilled to get the most out of our vehicles.

The electric charging infrastructure in South Lanarkshire is at the forefront of Scotland's electric vehicle roadmap with 70 charging points strategically placed throughout the area. Plans for another 20 charging points are planned during 2014/15.

A specific target for Fleet Services was to reduce Council wide transport emissions by 10% over the three year period 2011-2014. The target was exceeded by 2013 with an 11.7% reduction. A further target of a 3.3% reduction over the next year has been set.

We will continue to implement the Fuel Strategy in order to decrease our emissions further and will continue to fit speed limiters, telematics and fuel control measures for all new vehicles. We also have plans to reduce the amount of 'casual hires' thereby making our in house fleet more effective to meet service needs. Fuel management reports and reports from the fleet telematics system will be used more effectively in future to help services understand fleet use and improve their efficiency.

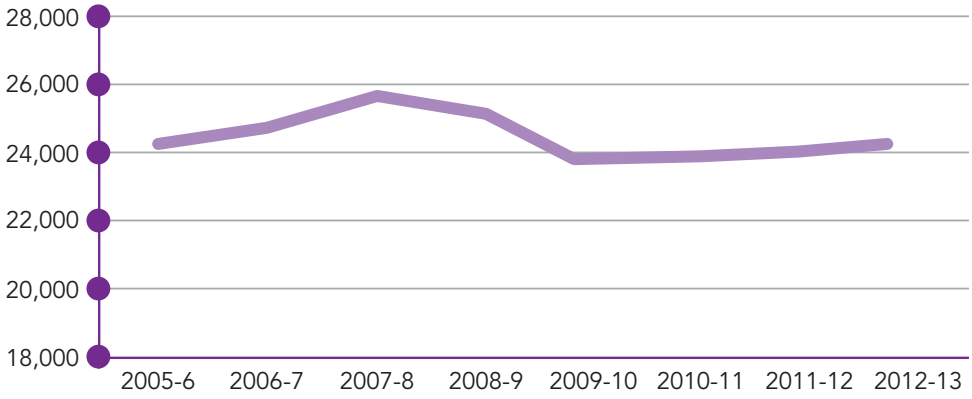
We will expand and improve our fleet of electric and low carbon vehicles and have plans for more electric sweepers and vans to replace conventionally fuelled vehicles.

New technologies, such as engine mapping systems are constantly being considered, piloted and implemented where possible.

Street Lighting

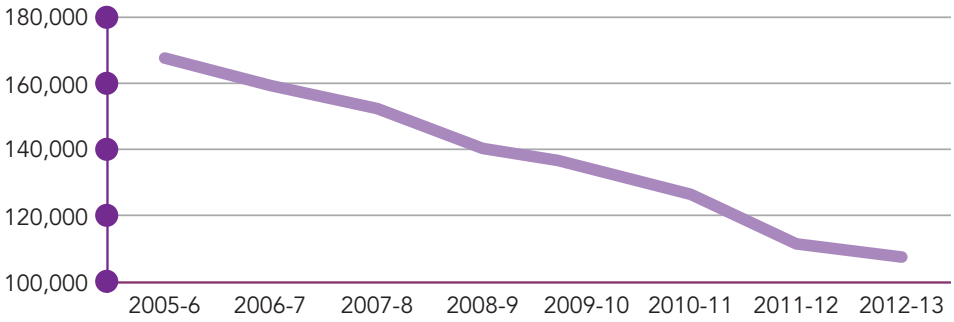
Energy to power our street lighting, festive lighting and road signs costs approximately £2.5m and is responsible for around 13,000 tonnes of our measured carbon emissions each year.

Street lighting MWh

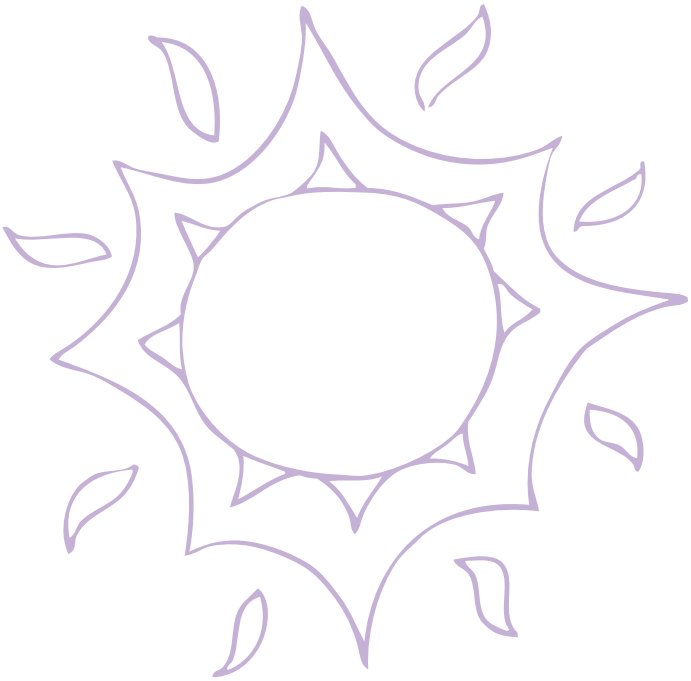


Low energy technologies have kept energy consumption for street lighting fairly consistent despite an expanding network.

Festive lighting kWh



Our festive light replacement programme has ensured the consumption of energy has steadily reduced.



The electricity used for street lighting has remained relatively static since the baseline year despite the expansion of our network. All new developments have new technologies with low wattage LEDs installed and planning regulations have changed to ensure that when developers are installing street lighting they also use low energy options. Reductions in consumption have been due to various initiatives such as dimming luminaries (Hamilton Beatock Wynd), timer clocks, low energy lamps (Hamilton Broughton Place), and LEDs (Larkhall Chestnut Grove and Duke Street Car Park).

Huge savings have been made within our festive lighting with reductions of over 38% since 2007/08. This has been realised by systematically working through a replacement programme to install LEDs on our decorations and strings of lights.

Lighting costs over £2.5m each year and options for replacing the street lighting estate with low energy technologies are actively being considered. The programme, if approved, is expected to take place over a number of years due to the complexity and scale of such a project.

Solar and/or wind power is used to illuminate over 300 of our vehicle activated road signs. As and when new signage is required we consider all new technologies and take advice from neighbouring authorities on what works well. Many of our traffic signals have been fitted with LED lamps rather than the traditional incandescent lamps. A policy is in place to ensure all new signals or those needing repaired are fitted with LED.

The need to be more energy efficient within our street lighting estate is becoming more important now that the consumption falls within the CRC scheme (see Section 1 for more information).

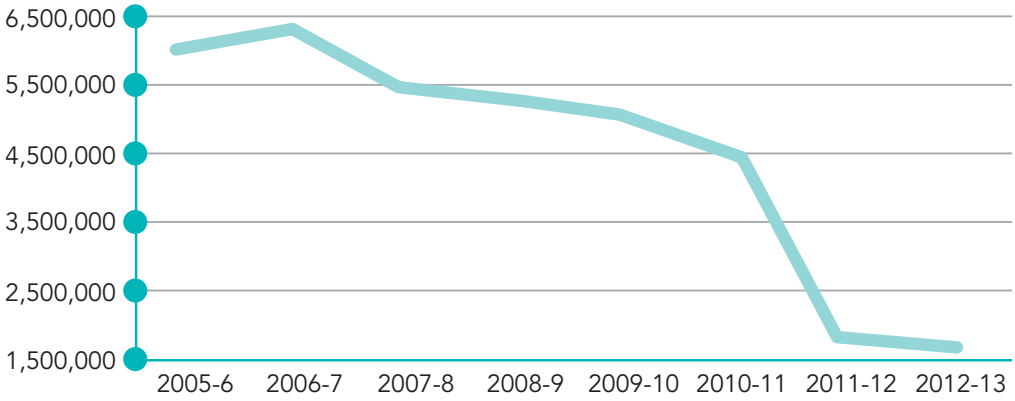
Duke Street car park
before lighting project

Duke Street car park
after LED lanterns were fitted

Employee Travel

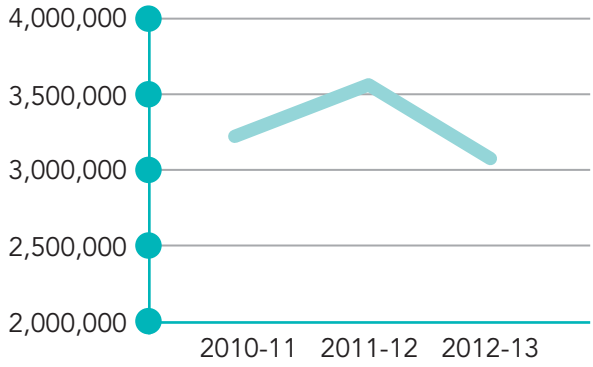
Fuel for employee travel is responsible for around 1,500 tonnes of our measured carbon emissions each year

Staff miles claimed



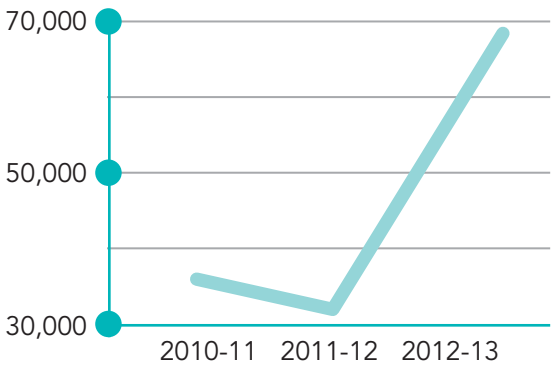
Staff mileage has reduced dramatically since the introduction of pool cars and other initiatives such as learn on line

Pool car miles



The large majority of staff mileage is now travelled in super efficient pool cars

Electric car miles



The number of miles travelled in electric cars has increased as the electric fleet has grown. Access is no longer restricted to targeted groups of staff.

The Council's pool car scheme, currently extending to 156 small cars, is coordinated and maintained by Fleet Services. The use of modern fuel efficient vehicles has contributed to a significant reduction in carbon emissions when compared with the emissions that the same mileage completed in employee owned vehicles would have produced.

The average efficiency rating of the pool car fleet are either VED Zero (electric) or A rated meaning that they all emit less than 100gCO_2e/km – 37% more efficient than the UK average. Miles travelled in employee owned vehicles has reduced by 71% since the introduction of pool cars and now only accounts for 4.5% of fuel use across all Council transport resources.

On line training has greatly reduced the miles travelled to get to training events. Courses which are still provided within our training unit include instructions for employees to use pubic transport or car share where possible.

The Cycle to Work Scheme has been running for employees since 2011 and has two intakes each year. Approximately 2.5% (366) employees have participated and although encouraging employees to commute by more sustainable means does not affect our reported travel emissions it helps reduce overall emissions in the area. Employee commuting miles are not included in our reported emissions as it is difficult to obtain useful data on this. Facilities such as cycle shelters, showers and lockers have been installed in many of our buildings to encourage as many staff as possible to take part.

Section 4

Carbon Management Vision

Overall objective: 2% annual reduction in the Council's carbon emissions compared to 2010/11	
Action	**Outcome**
Improve the Council's carbon management maturity (CMAT)	Increased capacity to achieve carbon reduction
Promote local sustainability issues and national campaigns	Increased staff awareness on carbon reduction
Support the requirements of the carbon reduction commitment (CRC)	Demonstration of compliance of scheme
2% annual reduction of buildings energy consumption with regular reports to Resource Energy Champions	Reduced carbon emissions from energy use in our buildings
Develop capital programme proposals to meet energy efficient standards in our buildings	Increased energy efficiency standards and increased renewable energy generation
Develop a system for monitoring water consumption and costs	Reduced carbon emissions from our water use
Provide services and engage staff to recycle in the workplace	Increased recycling and reduced waste sent to landfill
Procure long term waste treatment contract, including food waste collections and raising awareness within local communities	Reduced landfill waste in line with the requirements of the Waste (Scotland) regulations
3.3% annual reduction in carbon emissions from the Council's fleet	Reduced carbon emissions from our fleet
Continue to replace/improve street and festive lighting with low energy technologies	Reduced carbon emissions from energy use for our street and festive lighting
Continue to promote use of pool cars and walking/cycling for business journeys	Reduced carbon emissions from our business mileage

Vision

South Lanarkshire Council's vision remains the same as before – to become a low carbon Council. The Carbon Management Plan has a key role to play and the changing national legislation and challenging financial climate make it more important than ever to use our resources more effectively.

The Council wishes to maintain a downward trajectory in its emissions and our target is to reduce emissions by 2% on average each year for the next two years.

Progress is reviewed by the Carbon Management Group which reports to the Sustainable Development Coordination Group. The high level actions are monitored using the council's IMPROVe system and progress is reported via the sustainable development update report to the Council's Executive Committee on an annual basis.

There are other Service specific targets which will contribute to the overall carbon reduction target and these are detailed throughout section 3.

Strategic Environmental Assessments (SEAs) are carried out for all new or amended policies, programmes, plans and strategies. The assessments take account of various environmental factors including waste, air, water and transport.

South Lanarkshire's Local Transport Strategy, Air Quality Strategy and the Sustainable Development Strategy 2012-17 all reference and mirror the objectives of the Carbon Management Plan and can be accessed via the South Lanarkshire Council website www.southlanarkshire.gov.uk

Carbon reduction target

Despite the uncertainties about current trends it is considered that an annual average carbon reduction target of 2% in overall emissions is achievable. The target is considered to be consistent with the Council's new public sector duties under the Climate Change (Scotland) Act 2009, and will help ensure a favourable position for the Council within the CRC scheme.

CMAT

In 2009 a joint assessment was made by the Carbon Trust and members of the carbon management group to determine the maturity of the Council's approach to carbon management. The Carbon Trust's Carbon Management Matrix Tool (CMAT) was used to do this. The assessment was based on a range of measures including policy, information and data and monitoring and evaluation and was used to determine where gaps exist. The matrix is shown in Appendix 2 and indicates our assessment of maturity level across each of the assessment criteria. Current scores are as follows and are used to inform our action plan and identify priorities -

Vision and strategic direction	55%
Performance management and improvement	50%
Governance and accountability	55%
Embedded within organisation	45%
Use of resources	55%
Short term projects register	55%
Combined score	52%

The Council's carbon management maturity level will continue to be assessed on an annual basis. Our last target was to improve our score from 40% to 50% which has been achieved with an overall score of 52.5%. We will seek to further improve this score.

Scope

No changes to the scope of emissions covered by the plan are proposed. However, one of our objectives is to review the quality of data available on water consumption as this has improved to some extent since the first CMP.

Governance and reporting

The governance and delivery of the actions within the CMP will continue as before, specifically using the carbon management group to co-ordinate, deliver and report on carbon reduction and will continue to report to the sustainable development coordination group.

The new Sustainable Development Strategy which was published in 2013 details the Council's sustainable objectives over a five year period. The CMP very much supports and contributes to this strategy. The Council's overall level of emissions is a key Council Plan indicator and will continue to be reported annually to Executive Committee. They will continue to be published in the annual report on action taken in relation to Scotland's Climate Change Declaration.

The CMP is designed to respond to a key risk identified in the Council's high level risk register –

Key Risk 21 Tough carbon reduction and sustainability targets

Employee engagement

Employee awareness sessions are run via email, intranet and the 'Works' magazine. National and international campaigns such as Earth Hour, Energy Saving Week and Recycle Week are supported. An internal generic email address is available for staff to use for comments or queries relating to carbon reduction save_carbon@southlanarkshire.gov.uk

By engaging with staff it is hoped that carbon management will be embedded in a variety of posts as well as encouraging general good carbon behaviour.

News

Carbon Corner

Recycle Week 16 - 22 June 2014

Recycle Week - now in its 4th year - is organised by Zero Waste Scotland under the Recycle for Scotland brand and is delivered to the public by a range of partners across the country. It aims to encourage people to recycle more things more often and explains the importance of recycling good quality materials and reducing contamination.

The Council's Waste Education team is using the opportunity to improve recycling in our buildings, with the re-launch starting in Council HQ in Almada Street, Hamilton. Look out for new recycling bins with pictures of what should and shouldn't go in each bin. We have increased the number of recycling collections from our buildings in recent years but we would like to do more. With the costs of landfill tax increasing each year there's a huge financial saving to be had by diverting our waste from landfill sites.

We recently introduced food waste collections in many of our schools. More than over 80 school kitchens are currently using food waste bins instead of general waste bins or in-sink macerators. Pupils are also helping by separating their waste at lunch and break times in dining areas. Pupils at East Milton Primary (above), took part in the pilot and were really enthusiastic. Pilots are also running in Leisure and Social Work kitchens to see how much more food waste could be diverted from landfill.

Waste Manager, Charlie Kelly, says "Your continued support to help work towards the government target to recycle 70% of all waste would be greatly appreciated. It's important to recycle as much as possible at home and at work as this reduces our greenhouse gases as well as costs to the Council."

For more information on Recycle Week go to www.recycleforscotland.com

Contact

If you have any comments or ideas of what you like to see featured in future Carbon Corners please contact save_carbon@southlanarkshire.gov.uk

Top Tips

Reducing food waste not only helps the environment, it is good for your pocket too. Why not try these tips?

Batch cooking

Some dishes lend themselves to batch cooking. Cooking casseroles or pies in bulk can save you money and time. You can use fresh ingredients up at once, rather than risk them going off before you use them, and buying in larger quantities is often cheaper. Use one portion for dinner and freeze the rest for the coming weeks.

Eat more vegetables and local meat/fish

Vegetables can be versatile, cost-effective and long-lasting ingredients to have around the kitchen. Vegetables are more carbon friendly than meat although eating meat and fish that's reared locally can be a greener choice as the supply chain it travels through is likely to be shorter. Growing your own vegetables is another possibility – potatoes, carrots, onions and leeks are all quite hardy and handy to have around. If you buy local or grow your own you are less likely to over-buy or over-harvest.

10

Sustainable South Lanarkshire

News

Carbon Corner

Wild about Wildflowers

Wildflowers are very important within our environment as they help maintain a balanced, healthy eco-system. They are also very important to insects that help pollinate plants we rely on for our food. Some of these insects are under threat and as a result could affect how we produce food in the future.

We can all help a little by growing some wildflowers in our garden. It doesn't need a lot of work, just choose a small sunny corner of the garden and cultivate a fine soil bed.

Once most of the original vegetation has been cleared you're ready to plant. Wild flower seed is now readily available from shops and garden centres and can be bought fairly cheaply.

Species like corn marigold, corncockle, corn flower and poppy are ideal to start with and will attract a multitude of insects to your garden. Once you have sown your wildflower seed, rake in to the soil and water.

Then it is just a case of waiting. These flowers don't need fertiliser or a lot of looking after.

In the autumn why not involve the children or grandchildren to pick the seed heads so that planting can take place next Spring? Once you have harvested the seed, store in a cool, dry place until ready to use.

Over the past two years South Lanarkshire has planted up a number of areas to promote wildflowers and the pollinators we rely on. Look out for these sites all over South Lanarkshire.

If you want to know more please contact save_carbon@southlanarkshire.gov.uk and you could be sent a copy of the wildflower pack and some seed.

Cycling in South Lanarkshire

The council's Local Transport Strategy 2013-23 recognises the role that emissions from transport play in reducing local air quality and contributing to climate change. The strategy includes actions to help us travel more sustainably.

A new cycling partnership has been set up to ensure that the existing cycling networks integrate with the surrounding transport network. It aims to provide links to other sustainable transport modes, including train stations and main bus stops.

The council has invested £2.7million over the past three years on cycling infrastructure including more than £550,000 this financial year. The partnership will raise and promote the profile of cycling in South Lanarkshire and help contribute to the Scottish Government's aim for 10% of everyday journeys to be made by bike.

More info is available on our website www.southlanarkshire.gov.uk

Contact

If you have any comments or ideas of what you like to see featured in future Carbon Corners please contact save_carbon@southlanarkshire.gov.uk

10


carbon
petrol
source
direction
oil
vision
CO2
target
performance
projects
waste
resource
diesel
embed
gas
strategic
Emission
accountability
management
improvement
factor
reduction

Appendices

Appendix 1 Emission Factors

Used in Figures 1, 2 and 3

Emission Type	Emission Factor	CO_2 units	Source
Electricity	0.537	kg CO_2/kWh	DEFRA Guidelines
Gas	0.185	kg CO_2/kWh	
Burning Oil	0.268	kg CO_2/kWh	
Waste	447	kg CO_2/tonne	
Diesel and Bio Diesel	2.6304 then 2.55 from 08/09	litres	
Petrol	2.3154	litres	
Gas oil	2.674	litres	

Used in Figures 4 and 5

Emission Type	Emission Factor	CO_2 units	Source- DEFRA Guidelines
Electricity	0.537	kg CO_2/kWh	2008
	0.544		2009
	0.545		2010
	0.5246		2011
	0.44548		2013
Gas	0.185	kg CO_2/kWh	2008
	0.184		2009
	0.185		2010
	0.1836		2011
	0.18404		2013

Emission Type	Emission Factor	CO_2 units	Source- DEFRA Guidelines
Burning Oil	0.268	kg CO_2/kWh	2005
	0.252		2007
	0.277		2009
	0.275		2010
	0.27857		2011
	0.27176		2013
Waste - landfill	447	kg CO_2/tonne	2008
Diesel	2.6304	litres	2008
	2.669		2009
	2.672		2010
	2.6676		2011
	2.6008		2013
Petrol	2.3154	litres	2008
	2.331		2009
	2.322		2010
	2.3117		2011
	2.2144		2013
Gas oil	2.674	litres	2008
	3.029		2009
	3.021		2010
	3.0595		2011
	2.9343		2013

(CMAT 1) – Vision and Strategic Direction

2012 assessment 2014 assessment

Level ↓↓↓	Reduction Targets	Management Plans	Carbon reduction contributions	Near term planning	Communications Strategy
4	Organisation has a clear view of its desired long term (2050) and interim (2020 and 2030) carbon footprint, and how it will deliver its share of national reduction targets through strategic decision making	Organisation has a long term management plans that quantify and schedule carbon reduction implications / opportunities arising from 100% of its carbon footprint 1 linking to carbon management plan and long term targets	Organisation understands the relative contribution of energy efficiency and on-site renewables and has calculated the potential carbon reduction from each to help meet interim and long term carbon reduction targets and has factored in implications of decarbonised energy supplies2	Organisation has quantified and funded (with sign off by finance manager and corporate management team) 1 and 2 year plans within the overall short term plan (5 yrs) which contains sufficient projects to deliver 125% of the stated reduction target	Organisation has a robust carbon reduction communication's strategy, for all parts of the organisation and the wider area, which has components to enable the effectiveness of awareness raising measures and communications to be quantified
3	Organisation has a clear view of its desired interim (2020 and 2030) carbon footprint, and how it will deliver its share of national reduction targets through strategic decision making	Organisation has a long term management plans that quantify and schedule carbon reduction implications / opportunities arising from 75% of its carbon footprint 1	Organisation understands the relative contribution of energy efficiency and on-site renewables and has calculated the carbon reduction gains potential from each to meet interim and long term carbon reduction targets	Organisation has quantified and funded 1 and 2 year plans within the overall short term plan (4 -5 years) which has sufficient projects to deliver 100% of the stated reduction target	Organisation has a robust carbon reduction communication's strategy, for all parts of the organisation which has components to enable the effectiveness of awareness raising measures and communications to be quantified
2	Organisation has a clear view of its desired carbon footprint, over the next 10 years and how it will deliver its share of national reduction targets through strategic decision making	Organisation has a long term asset management plan that quantifies and schedules carbon reduction implications / opportunities arising from renewal and refurbishment of buildings.	Organisation understands the relative contribution of energy efficiency and on-site renewables but has not calculated the carbon reduction potential from each to meet interim and long term carbon reduction targets	Organisation has quantified and funded short term plan (4 -5 years) that has sufficient projects to deliver over 75% of the stated reduction target	Organisation has a robust carbon reduction communication's strategy but no formal measure of effectiveness is undertaken
1	Organisation has 5 year carbon reduction target but has not considered how it will deliver its share of national reduction targets.	Organisation has a long term building asset management plan without quantified carbon reduction implications / opportunities.	Organisation has plans to assess the relative contribution of energy efficiency and on-site renewables and calculate the carbon reduction potential from each	Organisation has short term plan (4 -5 years) that has sufficient projects to deliver over 75% of the stated reduction target but lacks detail & not quantified.	Organisation communicates carbon reduction issues to employees but this is done on an ad hoc basis.
0	Organisation has no carbon reduction target	Organisation has no long term asset (building) management plan	Organisation has not considered the relative contribution of energy efficiency and on-site renewables	Organisations short term plan has insufficient projects to meet 50% of started target.	Organisation has no an ad hoc system for communication of carbon reduction issues

* Shading indicates position of SLC following self assessments in 2012 and 2014

(CMAT 2) – Performance Management and Improvement

2012 assessment 2014 assessment

Level ↓↓↓	Emission data collection	Emissions reporting	Operational management	Performance Reporting	Improvement
4	Organisation has externally verifiable data collection regime that allows 'best practice' collation1 of 100% (including scope 3, embedded and outsourced) of organisations carbon emissions on a monthly basis	Organisation issues detailed individual monitoring reports covering 100% (energy, waste and transport) of carbon footprint to all Departments and Lead Carbon Sources 2 on a monthly basis.	Service Directors and Operational Managers have designated carbon reduction targets relating to their operational area as one of their key performance indicators with documented evidence of ongoing actions being taken to ensure short term carbon reduction targets are met.	Carbon Management performance report with detailed emission data and project updates reported to: Full Council - Annually Staff/Stakeholders - Half Yearly SMT3 - Quarterly	Carbon Manager or equivalent reviews carbon performance against CO_2 reduction targets and following consultation with specialist agencies develops a carbon management improvement programme of actions supported and signed off by Corporate Management Team
3	Organisation has externally verifiable data collection regime that allows routine 'best practice' collation 1 of 100% of organisation's carbon emissions quarterly.	Organisation issues detailed individual monitoring reports on energy use in buildings to all Departments and Lead Carbon Sources on a monthly basis.	Service Directors and Operational Managers have designated carbon reduction targets relating to their operational area as one of their key performance indicators	Carbon Management performance report with detailed emission data and project updates reported to: Staff/Stakeholders - Annually SMT 3 - Half Yearly	Carbon Manager or equivalent reviews carbon performance against CO_2 reduction targets develops a carbon management improvement programme of actions supported and signed off by Corporate Management Team
2	Organisation has data collection regime that allows quarterly collation of 75% of organisation's in scope carbon emissions on a monthly basis	Organisation issues detailed individual monitoring reports on energy use in buildings to all Departments on a bi - monthly basis.	Service Directors have designated energy reduction targets relating to their operational area.	Carbon Management performance report and project updates reported at least annually to senior management, staff and stakeholders.	Carbon Manager or equivalent reviews carbon performance against CO_2 reduction targets develops a carbon management improvement programme of actions
1	Organisation has data collection regime that allows quarterly collation of 75% of organisation's in scope carbon emissions	Organisation issues detailed individual monitoring reports on energy use in buildings to all Departments on a quarterly basis.	Organisation has a documented energy reduction target	Carbon Management performance report with emission data and project updates reported to on an ad hoc basis	Carbon Manager or equivalent reviews carbon performance against CO_2 reduction targets takes actions to improve performance on an ad hoc basis
0	Emission data produced and available on an ad hoc basis	Detailed monitoring report issued annually.	Organisation has no documented energy reduction target	Carbon Management Reports produced on an ad hoc basis	No review of performance against targets take place

* Shading indicates position of SLC following self assessments in 2012 and 2014

(CMAT 3) – Governance and Accountability

2012 assessment 2014 assessment

Level ↓↓↓	Political Commitment	Chief Executive Accountability	Senior Management Accountability	Devolution of responsibility	Scrutiny and Audit
4	Elected Members have placed emission reduction at the core of the organisations key objectives and hold officials to account for carbon reductions against stated targets in Council Plan, Departmental Service Plans and specific Key Performance Indicators of managers	Chief Executive accepts overall accountability for carbon reduction targets in the organisation and chairs quarterly meeting to review progress against targets, project updates and future plans	Service Directors accept overall accountability for carbon reduction targets in their department and chairs quarterly meeting on data review, projects update and future plans of their department to show clear commitment / leadership to employees	Carbon budgets are devolved to Departmental Directors, Group Managers and Team Leaders. All have designated emission reduction responsibilities and control over the emissions in their operational area / network	Carbon Management performance reports detailing progress against target formally audited by an external qualified body and reviewed by the organisation's Executive Committee quarterly
3	Elected Members have placed emission reduction at the core of the organisations key objectives and hold officials to account for carbon reductions against stated targets in Council Service Plan and Departmental Service Plans	Chief Executive accepts overall accountability for carbon reduction targets in the organisation and twice annually chairs meeting to review progress against targets, project updates and future plans	Service Directors accepts overall accountability for carbon reduction targets in their department and twice annually chairs meeting on data review, projects update and future plans of their department to show clear commitment / leadership to employees	Carbon budgets are devolved to Departmental Directors and Group Managers who have designated emission reduction responsibilities and control over emissions in their operational area / network	Carbon Management performance reports detailing progress against target formally audited by an external qualified body and reviewed by the organisation's Executive Committee twice a year
2	Elected Members have placed emission reduction at the core of the organisations key objectives and hold officials to account for carbon reductions against stated targets in Council Plan	Chief Executive has overall accountability for carbon reduction targets and has signed climate change declaration	Service Directors accepts overall accountability for energy / carbon reduction targets in their department and data review, and projects update are covered at management tram meetings	Carbon / energy budgets are devolved to Departmental Directors and Group Managers who have designated emission reduction responsibilities but limited opportunities to actually control these emissions.	Carbon Management performance reports detailing progress against target formally scrutinised by the appropriate scrutiny committee/s of the organisation at least annually.
1	Elected Members have placed emission reduction at the core of the organisations key objectives	Chief Executive has formally committed to carbon reduction through signing climate change declaration	Service Directors accepts overall accountability for energy / carbon reduction targets in their department	Plans are in place to estimate individual departments carbon / energy budgets and to devolve these to Service Directors	Carbon Management performance reports detailing progress against target scrutinised on an ad hoc basis.
0	Elected members have not placed emissions at the core of the organisations objectives	Chief Executive has not engaged in any way with carbon management.	Service Directors not accountability for energy / carbon reduction targets	No plans to devolve Carbon budgets	No formal scrutiny or audit takes place

* Shading indicates position of SLC following self assessments in 2012 and 2014

(CMAT 4) – Embedded within Organisation

2012 assessment 2014 assessment

Level ↓↓↓	Carbon Appraisal	Procurement	Embedded in outcome commitments	Embedded in strategies, policies and procedures	Staff competencies
4	100% of projects that are subject to financial appraisal are subject to carbon appraisal - including whole life costing and consideration of alternative low carbon methods of project delivery	Consideration of both embedded and ongoing operational CO_2 emissions is standard practice during procurement processes for 100% of goods, services and contracts1 through whole life costing and consideration of alternatives	Carbon reduction targets and actions are contained in the Community Plan, Single Outcome Agreement, the Council Plan, Departmental Service Plans and Group Work Plans show clear vision and strategic direction throughout the organisation.	All new plans, policies, procedures strategies and committee reports are checked for compliance with carbon management plans by qualified specialist to assess any potential impact on both short and long term CO_2 reduction targets	CO_2 reduction part of competency requirements of 100% of employees job descriptions with specific responsibilities designated to staff appropriates to the carbon intensity of their job function
3	75% of projects that are subject to financial appraisal are subject to carbon appraisal - including whole life costing and consideration of alternative low carbon methods of project delivery	Consideration of both embedded and ongoing operational CO_2 emissions is standard practice during procurement processes for 75% of goods/services through whole life costing and consideration of alternatives	Carbon reduction targets and actions are contained in the Community Plan, Single Outcome Agreement, the Council Plan and Departmental Service Plans	All committee reports are routinely scrutinised for compliance with carbon management strategies and plans by qualified specialist to assess any potential impact on both short and long term CO_2 targets	CO_2 reduction part of competency requirements of 75% of employees job descriptions with specific responsibilities designated to staff appropriate to the carbon intensity of their job function
2	Selected capital projects contain an assessment of carbon emissions associated with the project. Plans in place to introduce more robust whole life costing	Whole life costing and / or consideration of low carbon alternatives for selected goods and service that are determined to have high carbon impact / implications	Carbon reduction targets and actions are contained in the Community Plan and the Council Plan.	All committee reports contain an requirement to consider environmental implications of new proposals but reviewers have limited knowledge of carbon / environmental management issues	Formal plans are in place to introduce CO_2 reduction as part of competency requirements for selected staff with high carbon intensity job function
1	Carbon assessment only carried out for large building projects with no plans to introduce more robust whole life costing	Procurement strategy contains commitment to consider more sustainable options but no documented evidence of being action actually being taken	Carbon reduction targets and actions are contained in the Council Plan.	Selected committee reports consider environmental implications of new proposals but this is done on an informal and ad hoc basis	Informal plans are in place to introduce CO_2 reduction as part of competency requirements for selected staff with high carbon intensity job function
0	No carbon assessment takes place	No consideration of low carbon options / alternatives	CO_2 reduction objectives not contained in the Council Plan.	Committee reports do not cover environmental considerations	CO_2 reduction not determined to be appropriate for competencies

* Shading indicates position of SLC following self assessments in 2012 and 2014

(CMAT 5) – Use of Resources

2012 assessment 2014 assessment

Level ↓↓↓	Low Carbon Funding Policy	Designated Responsibility	Energy management capability	Site champions	Employee Training
4	Additional funding is routinely made available and embedded as business as usual policy for low carbon building specifications and carbon reduction projects through linkage of capital costs and longer term running costs	Organisations has a designated carbon manager to monitor, and recommend, CO_2 reduction measures who is supported by a network of departmental and technical champions who have adequate time available to provide support across the organisation	Minimum of one full time Energy Manager / Officer per 2 million pounds spent annually on energy to provide technical support and advice across the organisation.	Site / network champions appointed at all large premises (with half hourly data) or service delivery networks and given sufficient time, training and control to disseminate / embed low carbon policies and practices across their own site and nearby smaller premises / networks.	100% of staff training / induction packages reviewed to consider CO_2 implications and where these are identified (building / fleet managers, janitors etc) training is provided to enable emission reduction projects to be delivered and info' disseminated to others
3	Additional funding is made available for low carbon specifications and carbon reduction projects but only those with 10 yr financial paybacks	Organisations has a designated carbon manager to monitor, and recommend, CO_2 reduction measures who is supported by a network technical champions who have adequate time available to provide support across the organisation	Minimum of one full time Energy Manager / Officer per 4 million pounds spent annually on energy to provide technical support and advice across the organisation.	Site / network champions appointed at all large premises (with half hourly data) or service delivery networks and given sufficient time, training and control to disseminate / embed low carbon policies and practices. across their site or operation.	50% of staff training packages reviewed to consider CO_2 implications and where these are identified (building / fleet managers, janitors etc) training is provided to enable emission reduction projects to be delivered and info' disseminated to others
2	Additional funding is occasionally made available for low carbon specifications and carbon reduction projects but only those with 5 yr financial paybacks	Nominated senior manager in charge of emission reduction across organisation with an identified team to provide support but with limited authority and time.	Minimum of one full time Energy Manager / Officer per 6 million pounds spent annually on energy to provide technical support and advice across the organisation.	Informal group of site / network champions exists for most large premises (with half hourly data) but limited by time and training to disseminate / embed low carbon policies and practices	Selected staff training packages reviewed to consider CO_2 implications and appropriate CO_2 reduction awareness training has been introduced
1	Additional funding is only made available for low carbon specifications where 5 yr paybacks	Nominated officer in charge of emission reduction across organisation with ad hoc support and limited authority and time available	Minimum of one full time Energy Manager / Officer per 8 million pounds spent annually on energy to provide technical support and advice across the organisation.	Plans to establish site / network champions at all large premises (with half hourly data) or service delivery networks to disseminate / embed low carbon policies and practices	Staff Induction contains information of energy reduction measures but no other formal training packages cover energy / fuel reduction.
0	No linkage of capital and review budgets	No nominated officer in charge of carbon management across organisation	Insufficient energy management expertise available to provide technical advice across the organisation.	No plans to establish site / network champions to disseminate / embed low carbon policies and practices	No staff training packages include information or guidance on energy use or carbon reduction

* Shading indicates position of SLC following self assessments in 2012 and 2014

(CMAT 6) – Short term Projects Register

2012 assessment 2014 assessment

Level ↓↓↓	Project cost	Quantified Emissions	Project implementation date	Project Finance	Regular review of project register
4	Project register has portfolio of practical projects, 100% of which are fully costed though discussion with suppliers / service providers and financial paybacks calculated using best available projections of changes in utility charges and other costs	100% of projects within the project register have firm estimated emission reduction figure using best specialist data available.	100% of projects within the short term carbon management plan have a firm implementation date that has been established thorough consideration of procurement, staff resourcing and other relevant factors.	100% of required finance has been formally committed and signed off by Finance Manager to allow fulfilment of plan objectives over course of short term (4-5 years) programme.	Short term project register updated every year with review and update approved by Executive Committee and Corporate Management Team. Designated manager / officer identified for each project to ensure accountability
3	Project register has portfolio of practical projects, 75% of which are fully costed though discussion with suppliers / service providers and financial paybacks calculated using best available projections of changes in utility charges and other costs	75% of projects within the project register have firm estimated emission reduction figure using best specialist data available.	75% of projects within the short term carbon management plan have a firm implementation date that has been established thorough consideration of procurement, staff resourcing and other relevant factors.	75% of required finance has been formally committed and signed off by Finance Manager to allow fulfilment of plan objectives over course of short term (4-5 years) programme.	Short term project register updated every year with review and update approved by Executive Committee and Corporate Management Team.
2	Project register has portfolio of practical projects but these have all been costed through informal review of suppliers / service providers.	50% of projects within the project register have firm estimated emission reduction figure using best specialist data available.	50% of projects within the short term carbon management plan have a firm implementation date that has been established thorough consideration of procurement and other factors	50% of required finance has been formally committed to allow fulfilment of plan objectives over course of short term (4-5 years) programme.	Current short term project register available with stated intention to develop update and get sign of from Corporate Management Team
1	Short-term carbon management plan has limited portfolio of practical projects with plans to formally cost them in the future and work out exact payback periods	25% of projects within the project register have firm estimated emission reduction figure using best specialist data available.	25% of projects within the short term carbon management plan have a firm implementation date that has been established thorough consideration of procurement and other factors	25% of required finance has been formally committed to allow fulfilment of plan objectives over course of short term (4-5 years) programme.	Current short term project register available with no firm intention to develop new / updated plan in final year of existing plan
0	Short term plan has portfolio of projects but they have been costed	No emission reduction figures have been calculated using best specialist data available	No projects within the short term carbon management plan have a firm implementation date.	No funding has been formally committed to allow fulfilment of plan objectives.	Current short term project register out of date with no review planned

* Shading indicates position of SLC following self assessments in 2012 and 2014

If you need this information in another format or language, please contact us to discuss how we can best meet your needs.

Phone: 0303 123 1015

Email: equalities@southlanarkshire.gov.uk

www.southlanarkshire.gov.uk

Produced for Community and Enterprise Resources by Communications and Strategy. 027183/Jan16