

South Gloucestershire Climate Change Strategy – Low Carbon Plan

Progress Report, March 2015

South Gloucestershire Council

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1.0 Introduction

The South Gloucestershire Climate Change Strategy (Low Carbon Plan) was published in April 2013

<http://www.southglos.gov.uk/documents/climate%20strategyfinal.pdf>. It provides a strategic framework and short term action plans for reducing carbon emissions in South Gloucestershire and delivering the transition to a low carbon future.

The Climate Change Strategy includes two overall targets (on reducing carbon emissions and increasing generation of renewable energy) and six priorities with action plans to deliver the targets, as follows:

- Low Carbon Council
Reduce carbon emissions across the council estate and operations
- Low Carbon Homes
Reduce carbon emissions and energy consumption in our homes
- Low Carbon Travel
Reduce transport energy use and carbon emissions from transport
- Low Carbon Economy
Promote business resource efficiency and help low carbon and local businesses grow in South Gloucestershire
- Low Carbon Energy
Enable the development of secure supplies of renewable and low carbon energy
- Low Carbon Communities
Support and promote neighbourhood energy planning and community action for low carbon living

This progress report summarises:

- Overall progress against the targets
- Successes and challenges with the delivery of each of the six priorities
- Priorities for 2015

Appendix 1 sets out a detailed progress review with commentary on progress with each of the actions in the action plans and an indication of whether we (the Council and its partners) are on track to deliver them using a Green, Amber and Red scoring system:

- Green – on track to deliver the action as proposed
- Amber – broadly on track but the action (or an aspect of the action) has not been delivered fully; has not been delivered to the target timescale; or has not been as effective as envisaged
- Red – off track. Action has not been delivered or has not been effective

A stakeholder review meeting was held on 22nd October 2014 to discuss progress and seek views on potential collaboration and funding opportunities to enable delivery of the Low Carbon Plan into the future. Notes of the meeting are attached at Appendix 2.

Priorities for 2015 have been identified taking into account discussion at the stakeholder meeting and progress to-date. The summary of priorities also highlights new actions which are being proposed to take advantage of new opportunities.

If you have any comments on the progress report or ideas about action to reduce carbon emissions please email sustainability@southglos.gov.uk

2.0 Progress against Targets

2.1 Carbon Emissions

Our target is to reduce carbon emissions in South Gloucestershire by 80% by 2050 in line with the UK target with interim target reductions of 50% by 2025, 35% by 2020 and 29% by 2015.

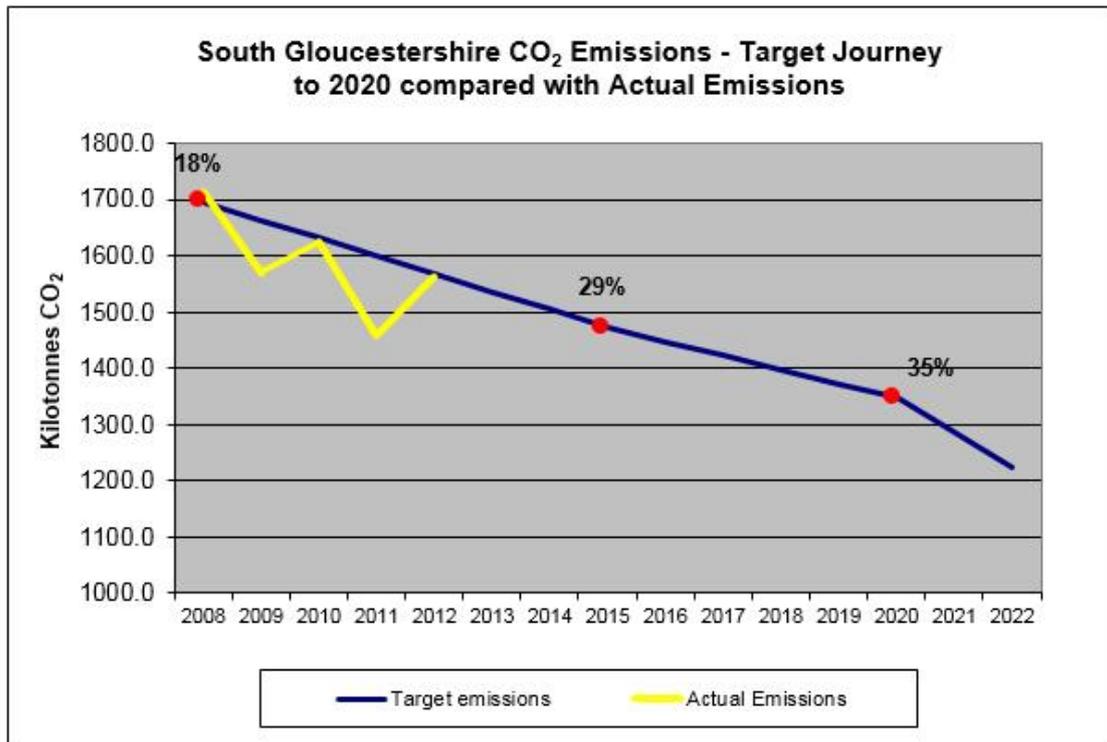
Annual emissions data from the Department of Energy and Climate Change (DECC) are available 2 years in arrears.

The data show a general decreasing trend for South Gloucestershire and we are currently on track to meet our emissions reduction target (see graph 1). Total emissions are now 25% lower than in 1990. There are occasional exceptions to this trend. For example, a slight increase in emissions was recorded in 2010 and the latest data (for 2012) show a 7.1% increase in emissions against the previous year. This included an increase of 11.4% from domestic sources, 9.6% from commercial sources and a decrease of 1.7% from transport.

It is thought that the most recent increase is a result of the cold winter, leading to increased domestic gas consumption. Additionally, emissions per unit of electricity increased due to a greater proportion of electricity coming from coal fired power stations in that year.

Variations in the weather and economic changes will continue to influence future energy consumption and CO₂ emissions and will be responsible for short-term fluctuations in emissions.

Graph 1



2.2 Renewable Energy

Our target is for the equivalent of 7.5% of South Gloucestershire’s total energy demand (i.e. electricity, heat and transport energy) to be generated from renewable energy installations in South Gloucestershire by 2020.

The amount of energy generated from renewable sources has doubled in the last 18 months to approximately 56,000MWh of renewable energy per year, which is about 0.8% of South Gloucestershire’s projected 2020 total energy demand.

If all the consented renewable energy schemes are developed, the amount of renewable energy being generated will be equal to 4.2% of projected 2020 total energy demand (18.9% of 2020 electricity demand and 1.9% of 2020 heat demand), which is more than half of the 7.5% target. Graph 2 and Table 1 show the amount of installed and consented renewable energy broken down by technology.

Graph 2

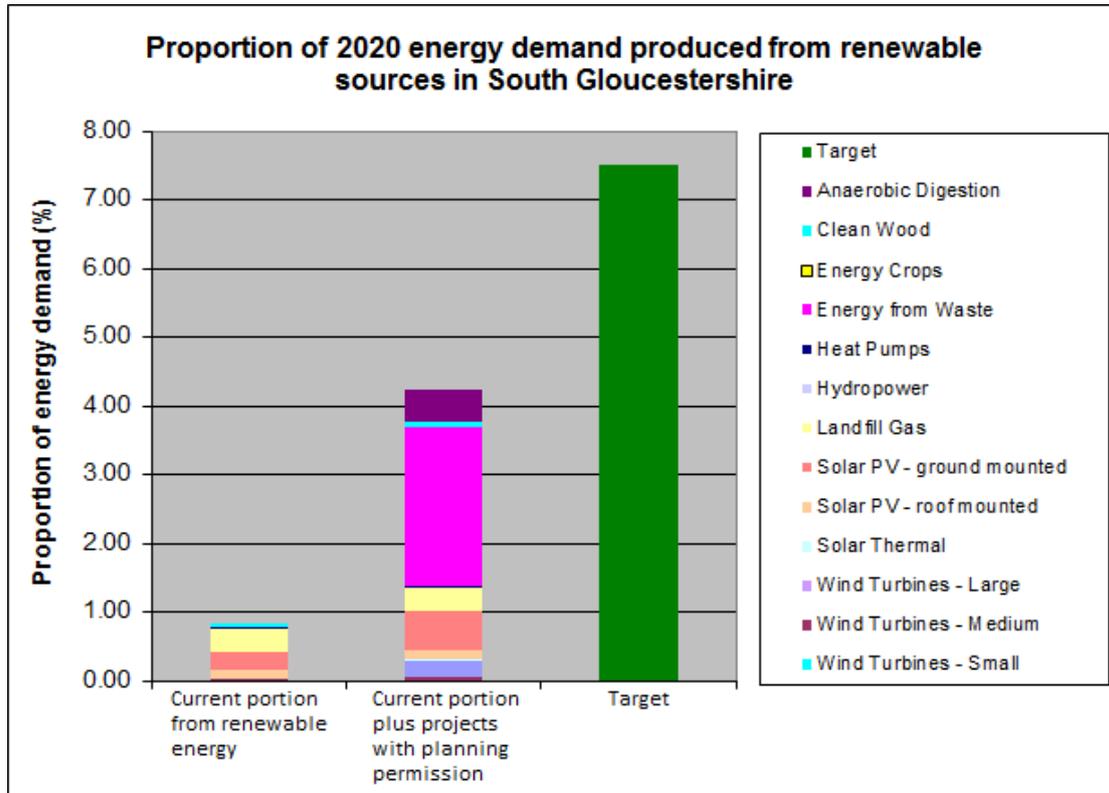


Table 1
Total energy output and percentage of 2020 projected energy demand from installed renewable energy projects and those with planning consent

Technology	total energy output (GWh)	% of total projected 2020 energy demand
Wind Turbines - Large	16.29	0.24
Energy Crops	0.00	0.00
Energy from Waste	158.00	2.34
Clean Wood	4.76	0.07
Heat Pumps	1.10	0.02
Solar PV - roof mounted	9.57	0.14
Solar PV - ground mounted	39.28	0.58
Solar Thermal	0.25	0.00
Anaerobic Digestion	32.00	0.47
Wind Turbines - Medium	3.10	0.05
Landfill Gas	22.08	0.33
Wind Turbines - Small	0.68	0.01
Hydropower	0.01	0.00
Combined Energy Output	287.12	4.24

3.0 Successes and Challenges

This section summarises overall progress with the delivery of the Low Carbon Plan actions based on the green, amber and red rating system, and sets out the successes and challenges with the delivery of each of the six priorities and action plans. All six actions plans contribute to the overall target on reducing carbon emissions. The Low Carbon Energy action plan is the main plan that enables increases in generation of renewable energy.

3.1 Overall Progress

There are 92 actions set out in the Low Carbon Plan. Of these, 64 (70%) have been rated green, 22 have been rated amber (24%), and none have been rated red. Six actions have not been assigned a green, amber or red rating, either because information on progress has not been made available or because the actions is about responding proactively to proposals where no proposals have been received.

For amber rated actions, corrective measures that have already been put in place have been summarised in the commentary in Appendix 1. In addition, the Priorities for 2015 (Section 4) include activities aimed at progressing actions which have not been fully delivered as originally planned (alongside new actions agreed to take advantage of new opportunities).

3.2 Low Carbon Council Reduce carbon emissions across the council estate and operations

Successes

- 2013 Carbon Champion Outstanding Achievement Award from the West of England Carbon Challenge project, for reducing emissions by over 10% between 2009 and 2012
- Reduction in carbon emissions from council estate of 14.2% achieved between July 2013 and July 2014. Some of the savings are as a result of schools converting to academy status. Normalised figures show a saving of 4.6% per m² floor area
- Part night street lighting programme completed
- LED street lighting replacement programme has commenced with planned savings of 2500t CO₂e and £700k per year
- Assessment of Council sites for renewable energy completed. Four potential locations for solar PV and one for wind identified. Planning application submitted for a 705kW solar scheme at Moorend, and a 285kW scheme at Badminton Road
- Assessment of potential for use of biomass arisings from Council streetcare operations completed

- Avon fire and rescue service achieved a reduction in CO₂ emissions of 30% from a baseline year of 2008/9 ahead of their 2015 target
- MOD on track to deliver their target

Challenges

- Uptake of the schools £1 million revolving Invest to Save fund has been slower than anticipated.
- Grid capacity and connection issues have slowed down and affected viability of ground mounted solar PV work at 2 locations and there are contaminated land issues at another

3.3 Low Carbon Homes

Reduce carbon emissions and energy consumption in our homes

- Detailed information on house condition by ward has been compiled enabling a more targeted approach to marketing of energy improvement measures
- Satisfaction levels and conversion rates of energy efficiency advice line are good. Of the installations that were carried out in 2013/2014 through the Warm & Well programme, 98% said the advice line service was good or excellent and 93% said the home improvement service (installation of measures) was good or excellent
- Funding has been secured for a scheme to improve the energy efficiency of private rented homes, targeted at landlords, with £2m for spending in South Gloucestershire, North Somerset and Bristol.
- Innovative low carbon heating schemes have been implemented by Merlin Housing in off gas areas to replace oil.
- Low carbon policies have been adopted in the Core Strategy and included in the Supplementary Planning Document for Cribbs Patchway New Neighbourhood. Energy strategies are now required for all major planning applications.
- £200k has been secured from Hanham Hall development for pilot Allowable Solutions programme (off site carbon savings). Funded programmes are now being implemented and delivering carbon reductions. Learning from this will mean we are ready to secure funding and deliver projects under the new legislative framework in 2016.
- The Private Sector Housing Service have launched low interest Home Energy Loans to assist home owners to install and supplement their energy requirements from renewable sources.

Challenges

- Regular changes to government policy and rules in relation to green deal and eligibility for subsidies for householders has created confusion. As a consequence take up of installation of measures across the country fell by 62% for cavity wall insulation, 89% for loft insulation, 98% for solid wall insulation and 73% for boilers from 2012/13 to

2013/14. This trend was reflected locally with only 56 measures being delivered through the warm and well programme in 2013/14 compared with about 1000 the previous year (a reduction of about 94%) despite a well-structured and targeted local marketing programme.

- Regulated energy standards for new build are slow to change and have been diluted. Developers are generally unwilling to build to higher standards. Proposed zero carbon homes standard now makes provision for carbon saving off site.
- Meeting the energy demands of a growing population whilst reducing health inequalities, and reducing overall energy consumption.
- The Energy Act 2011, and 'Cutting The Cost of Keeping Warm' (the revised national Fuel Poverty Strategy published on 26 March 2015), change the requirements and expectations placed on Councils, and on the Private Sector Housing Team locally. While many of the changes will prove helpful, the new requirements and reporting processes, including those relating to Energy Performance Certificates, with both medium and long term targets for improved performance ratings, will need to be built into service design and delivery.
- Meeting the energy needs of rural areas and in particular off-gas properties remains a concern.

3.4 Low Carbon Travel

Reduce transport energy use and carbon emissions from transport

Successes

- Planning permission has been achieved for the North Fringe Hengrove Package
- Bus infrastructure improvements have been implemented including raised boarders, new shelters and real time information displays. All buses are now equipped with ITSO compliant ticket machines
- A TravelWest app was introduced with real time information on most bus services in the West of England
- On track to install 7 Electric Vehicle Rapid Charging points by March 2015
- Single occupancy car use has fallen to 50.2% amongst Suscom members
- The number of school children trained under the Bikeability scheme during 2014 is well ahead of target
- The West of England target to increase cycling is on track with the 2013/14 figure up 9% on the previous year
- Phase 1 of Rural Broadband project will be have delivered superfast broadband to almost 16,000 premises by March 2015

Challenges

- No major challenges

3.5 Low Carbon Economy

Promote business resource efficiency and help low carbon and local businesses grow in South Gloucestershire

Successes

- Low Carbon South West have taken over management of West of England Carbon Challenge and rebranded as Go Green
- The Environmental iNet has now delivered business assistance to 300 Small and Medium Enterprises in the South West (including 14 in South Gloucestershire) who are innovating for environmental benefit
- Business West supported 41 businesses in South Gloucestershire through the Improving Your Resource Efficiency (IYRE) programme
- 64 employers are now actively engaged in green travel planning via the Local Sustainable Transport Fund
- 3 shopping centres and 1 serviced office facility in South Gloucestershire have participated in the Night Hawks project to reduce out of hours energy use
- Low Carbon Industries has been identified as a priority sector in the West of England Strategic Economic Plan
- £1m has been secured for a new tidal blade test facility at the National Composites Centre and £2m to develop an advanced 'composite' footbridge structure on the A4174 ring road
- The West of England EU Structural Investment Fund allocation for 2014 – 2020 includes at least £5.87m to develop the low carbon economy
- The Council's Sustainable procurement guidance has been updated and reissued

Challenges

- Representation of South Gloucestershire businesses on the West of England Carbon Challenge was low - (6 out of 80 businesses).
- There has been no progress (nationally) on the Green Deal for businesses
- The Improving Your Resource Efficiency programme closed in June 2013

3.6 Low Carbon Energy

Enable the development of secure supplies of renewable and low carbon energy

Successes

- Heat distribution pipes are currently being installed at UWE with development of a campus-wide district heating scheme to follow, subject to sign-off of the business case.
- Indications are that the Core Strategy policies, SPD standards and research recommendations are influencing the developers' proposals. Recent proposals for Cribbs Patchway New Neighbourhood include the

intention to explore the option for nodal heat networks in areas of high density and high heat demand.

- Funding has been secured from DECC for a strategic assessment of the potential for a network of nodal district heating schemes in our growth areas, as recommended in previous work, and to develop a detailed business case for a heat network at Avonmouth-Sevenside to distribute waste heat from power generation in the Enterprise Area.
- A 17MW solar array has been constructed at Says Court Farm Westerleigh, an 18MW scheme is under construction at Grange Farm, Almondsbury, a 6.4MW scheme has been approved in Tytherington, and a 15MW scheme has been approved at Hammond Court Farm. A 400KW wind turbine has been constructed at the Warburtons site in Severn Beach. SITA has commenced work on its Sevenside energy from waste plant, which is due for completion in 2016.
- A Renewable Energy SPD was adopted in November 2014
- Tidal and marine energy has been identified as a business growth area by the LEP. The tidal test blade facility at the National Composites Centre received funding through the SEP.

Challenges

- There has been no progress on the development of the consented wind turbines at Alveston
- Grid capacity issues are affecting the ability to deliver renewable energy schemes east of Yate
- Developers are reluctant to go beyond minimum legal requirements on energy efficiency. Incentive schemes developed with solar city for integrated solar PV and on site solar have not yet received funding.

3.7 Low Carbon Communities **Support and promote neighbourhood energy planning and community action for low carbon living**

Successes

- Community energy profiles have been produced
- Sustainable Thornbury and Marshfield Energy Group are proactive in their local areas and a new group for Westerleigh has been formed and is planning action.
- Marshfield energy group has completed renewable energy viability studies with support of DECC funding and have an ambition for a community owned scheme.

Challenges

- Community energy profiles are not being actively used
- Community capacity to take community energy work forward is limited as is the availability of dedicated support, so progress has been slower than anticipated
- Grid capacity constraints mean that grid-connected local renewable energy projects in Marshfield are not possible

4.0 Priorities for 2015

This section summarises priorities for 2015 for each of the six priorities. The priorities have been identified taking into account progress to-date and new opportunities including those discussed at the stakeholder meeting.

4.1 Low Carbon Council

Reduce carbon emissions across the council estate and operations

- Continue to promote the revolving Invest to Save fund to schools. The scheme has now been extended to include solar PV
- Continue development of ground-mounted solar on Council sites
- Roll-out of LED street lighting replacement in line with agreed programme
- Trial of 2 new electric pool cars. Review potential for addition of further electric vehicles into Council fleet
- Solar PV to be installed on Kingswood Leisure Centre and on new buildings at Broad Lane, subject to viability assessment
- Discuss conclusions of the study into use of waste wood from council owned land and operations and agree next steps
- Evaluate energy and cost savings from pilot retrofit subways and underpasses with low energy lamps to inform further work

4.2 Low Carbon Homes

Reduce carbon emissions and energy consumption in our homes

- Continue to deliver the Allowable Solutions pilot project including loft clearance and insulation scheme for homes in and around Hanham
- Implement scheme (with Bristol and North Somerset) to improve the energy efficiency standard of the private rented housing stock
- Promote uptake of renewable heat incentive in off gas areas to enable people to convert from oil to alternative fuels
- Encourage uptake of green deal assessments to enable applications to be made quickly when limited funding / subsidies become available for household energy efficiency improvements
- Enable and promote use of the next round of ECO funding for solid walls
- Review approach to delivering energy efficiency in private sector homes in order to increase uptake of measures and to focus on areas of greatest concern. This will include targeted work to achieve greater efficiency and effectiveness; and emphasising fuel poverty as well as carbon emissions

- Merlin Housing, South Gloucestershire Housing Group and South Gloucestershire Council to develop a joint plan to improve affordable warmth, reduce carbon emissions and increase use of renewable energy in social housing

4.3 Low Carbon Travel

Reduce transport energy use and carbon emissions from transport

- Completion of the preliminary business case for MetroWest phase 2
- North Fringe to Hengrove Package major scheme (final funding decision expected soon)
- Currently awaiting the outcome of a number of grant funding bids including the Cycling City Ambition Fund and Go Ultra Low City Bid (which will become priorities if successful)

4.4 Low Carbon Economy

Promote business resource efficiency and help low carbon and local businesses grow in South Gloucestershire

- Promote 'Go Green' to businesses in South Gloucestershire and deliver the target for 30 new signatories in 2015
- Develop detailed business case for a heat network to utilise waste heat from energy generators in Avonmouth-Sevenside
- With partners, identify, develop and bid for funding for Low Carbon Economy projects

4.5 Low Carbon Energy

Enable the development of secure supplies of renewable and low carbon energy

- Deliver strategic assessment of the potential for a network of nodal heat networks in the growth areas. Depending on outcomes, work with developers to implement recommendations for viable schemes.
- Develop detailed business case for a heat network at Avonmouth-Sevenside to distribute waste heat from power generation in the Enterprise Area, and enable recommendations to be taken forward.
- Explore new models for enabling roof-mounted solar PV
- Investigate opportunities to bid for funding under the Horizon 2020 programme, eg funding for building-integrated solar PV and battery storage in new developments
- Assess viability of a local AD plant for domestic waste as part of the SGC Waste Management Team savings review
- Include strategic energy issues as a consideration in strategic land use planning

4.6 Low Carbon Communities

Support and promote neighbourhood energy planning and community action for low carbon living

- Agree a way forward in respect of a potential community energy organisation for South Gloucestershire
- Investigate opportunity for a joint venture between the council and the community for a renewable energy project on a council owned site
- Promote uptake of renewable heat incentive in off gas areas to enable people to convert from oil to alternative fuels

Appendix 1 – Detailed Progress Review

Council

Action	Measure:	Timescale	Who	Progress	Rating
Council – Improve the energy efficiency of our assets and operations; rationalise and share assets where appropriate					
Consolidate and rationalise the council estate, make better use of space and share/lease surplus space	Accommodation strategy implemented achieving an estimated saving of 25% of emissions from corporate buildings (which account for about 18% of the council's total emissions)	2009/10 - 2014/15	Property Services	<p>Carbon emissions from council buildings (excluding schools) reduced by 39% from 2009/10 to 2013/14.</p> <p>During 2012/13 the Council occupied accommodation at 12 sites (already a reduction from 22 buildings during 2009/10). This reduced to 7 by the end of 2013/14 and 6 during 2014/15.</p> <p>In addition, co-locating staff in two main office buildings has reduced travel between offices saving in both staff time and travel costs. Staff mileage costs have reduced from £1.30m in 2009/10 to £800k in 2013/14.</p>	
Monitor energy consumption and implement behaviour change and energy management	Minimum of one energy campaign a year	Annual	Property Services Corporate Sustainability	<p>'Systems Link' software is used to monitor energy consumption.</p> <p>Climate week event held in spring 2013, which raised awareness of energy issues amongst</p>	

Action	Measure:	Timescale	Who	Progress	Rating
programmes to deliver more efficient use of corporate buildings and schools				<p>staff and resulted in a slight decrease in printing during the campaign period.</p> <p>Office hours restricted to 7am to 7pm with occasional managed evening opening hours.</p> <p>Progress is rated amber as no energy campaign was held in 2014 due to targeting of staff resources to other priorities</p>	
£1 million revolving Invest to Save fund to be made available to schools for lighting, heating control and draught proofing improvements	Estimated saving of 837 tonnes CO2 per annum or 2.7% of total (2010/11) council emissions after full implementation	3 year programme (commenced 2012)	Property Services Children, Adults and Health	<p>The Invest-to-Save fund has been set up and is focusing on re-lamping schools using LED.</p> <p>Marketing to schools has been carried out but uptake has been low, so progress is rated amber.</p> <p>Schools re-lamping in the Hanham area is being supported by additional funding from the Allowable Solutions programme.</p> <p>To encourage full utilisation of the Invest to Save fund, the scheme has been extended to include solar on school roofs. This opportunity has been presented to schools by Property Services via a dedicated newsletter.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Invest £200,000 capital annually on energy improvements to the non-school estate where a satisfactory pay back is demonstrated	Annual programme delivered	Annual	Property Services	The annual fund has been spent or is now committed to: <ul style="list-style-type: none"> A trial of LED lighting in non-street light applications (ie subways, underpasses etc) at ten sites. Ground and roof-mounted Solar PV projects on the Council estate 	
Improve the energy efficiency of council ICT servers and communications equipment	Consolidation/ virtualisation, use of more efficient servers, sending servers into sleep mode when not in use.	Ongoing programme	ICT	ICT have reduced energy use by approximately 25% through a programme of server reduction, virtualisation and consolidation since 2011. This equates to a saving of £14.1k and 82t CO ₂ e per annum.	
Review and rationalise the street lighting and road signage stock and consider and further develop the case for LED bulb replacement Use the planning process to reduce extent of growth of external lighting and continue to roll out the part night lighting programme	Part night lighting rolled out across South Gloucestershire Column numbers rationalised and agreed improvement programme implemented	2013 - 2015	Street Care Street Care / Planning	Savings of approximately 2500t CO ₂ and £700k per annum are now being made compared to 2011 through a programme of part-night lighting and de-illumination of signs and bollards. The part-night lighting conversion was completed in 2013, and all signs have now been de-illuminated or converted to LED. A business case has been developed for LED street lighting and was agreed by committee in September 2013. This project is now in the implementation phase, with completion expected in 2024 Developers must confirm whether lighting is required at the planning stage. A small number	

Action	Measure:	Timescale	Who	Progress	Rating
				of sites have opted out of street lighting but the majority choose to install them. In these cases lighting designs are managed stringently to avoid over lighting any given development.	
Continue to review the potential to streamline and green the council's vehicle fleet and fleet operations	Reduction in emissions from fleet vehicles, 5% reduction in fleet size	Ongoing programme	Street Care	<p>A reduction of 9.3% in emissions from fleet vehicles was been achieved between 2012/13 2013/14.</p> <p>Work is on-going to reduce the overall size of the fleet and to rationalise vehicle types to reduce maintenance costs.</p> <p>The new MOT facility at Broad lane has reduced down time, mileage and emissions on fleet vehicles as MOTs can now be carried out on site rather than offsite.</p> <p>All new HGVs purchased are to the latest Euro emissions standards.</p> <p>Tracking systems have been up-graded in Council fleet vehicles to enable enhanced reporting and route planning leading to reduced mileage and emissions.</p> <p>Review of pool car fleet underway to identify options for greening the pool car fleet.</p> <p>Two electric vehicles purchased for pool car fleet, to replace three petrol cars.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Reduce the number of car journeys to and between offices through the implementation of the green travel plan and smarter working policies enabling staff to work remotely	Reduction in business mileage	Ongoing programme	All Directorates	<p>Rationalisation of the office estate and smarter working policies have enabled year on year reductions in business mileage. Business mileage fell 20% between 2012/13 and 2013/14 with a total reduction of 45% since monitoring began in 2009/10.</p> <p>Business mileage data is reported annually and data for 2014/15 will be available after March 2015</p>	
<p>Council – Develop renewable energy in council buildings and on council land where appropriate</p>					
Use Invest-to-Save fund to meet the over and above costs of installing biomass boilers rather than gas boilers in schools whose boilers require replacement	Installation of biomass boilers with associated CO2 savings. Estimated saving of 122 tonnes CO2 per annum	2013/2014	Property Services	<p>£360k set aside in Invest to Save fund for biomass boilers (in addition to the energy efficiency invest-to-save fund).</p> <p>Biomass boilers installed in two schools to date, yielding estimated savings of 87t/year. The third site originally planned was unsuitable and therefore we have delivered less carbon savings than planned.</p> <p>The fund has been retained to fund a further school when biomass is identified as the most suitable solution.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Review potential for development of community led wind energy projects on council owned land	Potential sites identified. Communities interested in community led energy projects informed of potential.	2013	Property Services Corporate Sustainability	<p>Two sites identified with potential for wind by preliminary studies. One has no grid connection. A grid connection assessment is currently being conducted for the second.</p> <p>Potential for ground-mounted solar also investigated and viability demonstrated at two sites. Planning applications were submitted for these in autumn 2014 and planning approval granted for the Moorend site. A further two sites are still under investigation.</p> <p>Options for community ownership are being explored as part of business case development.</p>	
Review costs and incentives for renewable and low carbon energy solutions, assess viability for inclusion in refurbishment, building and maintenance programmes, and seek to access funding for viable projects	Energy generation potential and carbon saving will depend on schemes developed	2013/14	Property Services	<p>Study into potential for fitting solar on school roofs commissioned by Property Services and was completed in Autumn 2013. The results were used to inform the decision to offer Solar PV to schools using Invest to Save funding.</p> <p>Property Services review opportunities for low carbon energy solutions and include them in new build or refurbishment projects wherever viable</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Explore potential for use of waste wood from council owned land and operations	Review completed and recommendations produced	2013/14	Corporate Sustainability / Community Spaces	Review completed. Demonstrates little opportunity for using waste wood in the council's biomass boilers. However, opportunities for disposal of logs and for separating clean and treated wood at sort-it centres have been identified.	
Council – Leadership and decision making					
Revise the sustainability appraisal process for use in procurement and decision making	Revised appraisal process agreed and member and officer training carried out	2013/14	Corporate Sustainability	Revised sustainable procurement and environmental appraisal guidance published and disseminated.	
Improve our understanding of the greenhouse gas emissions arising from outsourced products and services and use our influence to reduce them	Recommendations of carbon footprint study of waste management service implemented Other reviews undertaken as appropriate	2013/14	Waste Management All Services	Recommendations of carbon footprint study taken into account in procuring new waste management contract. Progress has been rated amber since no other specific reviews of the greenhouse gas emissions of outsourced products and services have been undertaken. A more systematic approach to procurement of low carbon infrastructure is being developed.	

Action	Measure:	Timescale	Who	Progress	Rating
Publicise the actions being taken by the council to mitigate climate change, why they are important and the effects of these actions in terms of money and CO ₂ saved	Information posted on SGC website	Ongoing	Corporate Sustainability / Corporate Comms	<p>Local Greenhouse Gas report and Carbon Management Plan published on SGC website. These reports set out information about actions taken to reduce emissions from the Council estate.</p> <p>Council-owned solar consultation conducted via website and local press coverage</p> <p>Streetcare pages discuss the Part-Night Lighting programme including cost and carbon savings</p> <p>Good press coverage for Carbon Champions Award and Invest to Save Fund</p>	
Council – Partners					
Avon Fire and Rescue Implement a programme of carbon saving measures across Avon Fire & Rescue Service to include the following elements: - Low Carbon	Achieve a reduction in CO ₂ emissions of 30% from a baseline year of 2008/9 by 31/3/2015	On-going to 2015	Avon Fire and Rescue Service Further Information: Avon Fire & Rescue Service Carbon	<p>Achieved the target of 30% reduction in emissions against the 2008/9 baseline.</p> <p>This has been achieved in the service's buildings by installing energy efficiency measures (improving heating and lighting systems, building insulation, building controls, etc), renewable energy installations and behavioural change programmes.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Buildings - Low Carbon Working - Low Carbon Fleet and Travel - Low Carbon Decisions - Low Carbon Communication			Management Plan	Overall transport emissions have fallen by more than 25% compared to the 2008 / 09 baseline. The greatest reduction is in business travel; which has been reduced by 50% cutting annual emissions by over 100 tonnes CO2 / Yr. Changes to operational procedures have contributed to a 20% fall in emissions from operational fleet use.	
Avon and Somerset Constabulary Implement a programme of carbon saving measures across the Avon and Somerset Constabulary service including: - Energy efficiency improvements and refurbishments - Energy management systems - Renewable energy projects - 4 new buildings built to BREEAM excellent standard - Computer upgrades - Sustainable procurement	Achieve a reduction in CO ₂ emissions of 30% from a baseline year of 2009/10 to 2016 from 19,126 tonnes to 13,388 tonnes	Ongoing to 2016	Avon and Somerset Constabulary Championed by Director of Finance and Sustainability Board	Awaiting information	

Action	Measure:	Timescale	Who	Progress	Rating
<ul style="list-style-type: none"> - Greening the fleet and green travel - Communication and awareness raising 					
<p>MOD Filton Abbey Wood</p> <ul style="list-style-type: none"> - Conserve energy and water through infrastructure improvement and behavioural changes - Minimise the amount we travel, especially by air and road - Ensure new facilities and equipment meet high standards for sustainability and energy efficiency 	Emissions from the estate and UK business travel reduced by 25%	By 2014/15 from 2009/10 baseline	MOD Filton Abbey Wood	<p>Energy - The site is confident reductions will be achieved by the target year.</p> <p>Travel – Reduction in emissions from travel have benefited from spending restrictions. The use of video conferencing and telephone conferencing to minimize travel wherever possible is being advocated.</p> <p>Water – The priority has been to reduce the total water consumption across the site and we are on course to achieve a 7% reduction by the end of the target period.</p> <p>Waste – Currently 90% of waste is recycled. Further progress on this measure is a challenge but total waste arisings are decreasing.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
<p>University of the West of England (UWE) Continual reduction in the carbon footprint of the University in line with the Carbon Management Plan (CMP).</p> <p>The CMP addresses the following aspects of University's carbon footprint:</p> <ul style="list-style-type: none"> - Space planning policy - Equipment procurement - Refurbishment policy - Energy saving measures in academic and residential premises - Longer term strategic actions 	<p>Absolute reduction from 2005/6 – 2020/21:</p> <ul style="list-style-type: none"> • 1.5% annual reduction • 2016 interim target: 16.5% total reduction • 22.5% total reduction by 2020/21 <p>The CMP includes Scope 1 & 2 emissions and is due to include Scope 3 emissions by 2014.</p>	<p>Ongoing to 2021</p>	<p>University of the West of England (UWE)</p> <p>Further Information: University of the West of England (UWE) Carbon Management Plan. Link: http://www2.uwe.ac.uk/services/Marketing/about-us/pdf/uwe-he-carbon-management-initiative.pdf</p>	<p>Awaiting information</p>	

Homes

Action	Measure:	Timescale	Who	Progress	Rating
Homes – Enable the installation of energy efficiency measures and improvements in existing homes					
Review and analyse available data to provide a record of the energy condition of the housing stock and to enable targeting and monitoring of the plan including people in fuel poverty, vulnerable people, high energy users and hard to treat homes	Data set produced and maintained	2013	SGC with support from DECC Green Deal Pioneers funding and Affordable Warmth Partnership	Dataset is completed and is used to inform targeted approach to energy efficiency improvements. Report is available at http://www.southglos.gov.uk/council-and-democracy/census/research-reports/ More granular information is being collated on a ward by ward basis to allow specific targeting. Profile completed for Filton and in progress for Yate. In addition EPC data has been collated for targeting new green deal funding to private rented sector.	
Make preparations and arrangements for the delivery of the Green Deal and Energy Company Obligation in South Gloucestershire and make sure local arrangements are in place for delivery	Partnership(s) with local green deal providers established Strategy for targeting and marketing green deal in place	Ongoing	SGC SWEA WoE Local Authorities	Current delivery arrangements are through the umbrella of the Warm & Well brand administered by Severn Wye Energy Agency who are a registered Green Deal Advice Organisation. They are able to signpost residents to the most appropriate schemes and are able to offer free Green Deal Assessments to vulnerable residents. Residents are able to make their own arrangements with a Green Deal provider if they choose to. However, regular changes to government policy and rules in relation to green deal and	

Action	Measure:	Timescale	Who	Progress	Rating
				<p>eligibility for subsidies for householders has created confusion and take up of installation of measures across the country fell by 62% for cavity wall insulation, 89% for loft insulation, 98% for solid wall insulation and 73% for boilers from 2012/13 to 2013/14. This was reflected locally with only 56 measures being delivered through the warm and well programme in 2013/14 compared with about 1,000 in previous years (a reduction of about 94%).</p> <p>Progress has been rated amber to reflect the low uptake of measures despite partnerships having been established. Plans are in place to review the Warm and Well programme and deliver a more targeted plan. Funding has been secured for a targeted programme in Hanham from the Hanham Hall Allowable Solutions fund.</p>	
Develop a low interest loan pilot scheme, 'Countdown' for funding housing retrofit measures (including renewable energy as an alternative Green Deal funding mechanism)	Pilot programme delivered and evaluated	2013	SGC Housing Team SWEA Wessex Re-investment Trust	The local Low Cost Loan scheme was launched in September 2014 and provides low cost finance for homeowners (4%) to make the installation of energy efficiency measure more affordable and attractive.	

Action	Measure:	Timescale	Who	Progress	Rating
Promote and provide energy efficiency information and advice	<p>Provide a free local energy efficiency advice service and dedicated line available and published</p> <p>Deliver annual marketing plan</p>	Ongoing	SGC and SWEA	<p>Free local energy efficiency advice line is available through the Warm and Well programme funded by South Gloucestershire Council. 456 enquiries were received between April and December 2013. Of these 155 resulted in referrals to a scheme.</p> <p>Of the installations that were carried out in 2013/14 through Warm and Well 98% of people said the advice line was good or excellent</p> <p>Face to face advice was given to 1450 residents though various events throughout the year</p>	
Develop work that will reduce barriers to retrofitting existing homes	<p>Installers Network – Link to Energy Project established</p> <p>Approach to retrofitting in conservation areas and listed buildings reviewed</p>	<p>2013 and ongoing</p> <p>2013/14</p>	<p>SWEA/SGC</p> <p>Explore additional work with West of England Authorities</p> <p>SGC</p>	<p>The Link to Energy Network continues to grow with over 125 regional SME's now members of the network. The service aims to support the local economy and provide a more personal service through recognised local suppliers.</p> <p>Work has not yet commenced on conservation areas or listed buildings.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Work with social housing providers to identify potential local schemes	Seek to include actions from social landlords in the next plan	By 2014	SG Housing Partnership	A range of new actions to improve the energy efficiency of social housing have been included in the revised Housing Strategy action plan.	
Include energy efficiency in annual appraisal with social housing providers	Annual assessment of average SAP rating for social housing	Annual	SGC Housing	<p>This approach has not proved effective. However, Merlin Housing have included commitments within the Housing Strategy:</p> <ul style="list-style-type: none"> • A stepchange in average thermal efficiency of Merlin homes by 2019 • Merlin to work towards target to achieve average SAP rating of 74 and smart meters in 20% of homes by March 2017. 	
Develop a programme to bring the private rented housing stock up to the legal energy efficiency standard	Programme agreed and delivered	2014 – 2015	SGC Housing	Funding secured from Government to support improvements to privately rented homes that fall short of the proposed legal energy efficiency standard. The £2million scheme was launched in October 2014 across Bristol, South Glos and North Somerset with a target to improve 686 F or G rated properties from the three areas.	

Action	Measure:	Timescale	Who	Progress	Rating
Work with community groups and Parish and Town Councils to help them deliver local community energy projects	Increased ownership and delivery of low carbon projects and wider roll out of Green Deal			See low carbon communities section	
Homes – Enable the installation of micro renewables in existing homes					
Review energy needs and issues in off gas areas and promote renewable energy solutions where viable	Review carried out and plan for implementation agreed	2013/2014	SGC – commission project	Specific targeting of low cost home loan in off gas areas has been undertaken. Merlin Housing has developed a number of innovative schemes in off-gas areas. Rated amber because further work is still required. This action will be further developed in 2015/16.	
Disseminate information on Government and Industry incentives	Targeted information delivered according to communications plan	Ongoing	SWEA/SGC	Promotional activity is carried out by the private sector housing team in partnership with SWEA	
Provide free planning advice for householders and apply permitted development rules	Free reliable advice available	Ongoing	SGC – Development Control Team	Ongoing	

Action	Measure:	Timescale	Who	Progress	Rating
Provide independent advice on domestic installation of renewables, run installers network and administer the low interest loan scheme (via Severn Wye Energy Agency)	Trusted information and suppliers available	Ongoing	SWEA Wessex Reinvestment Trust SGC	Independent advice provided through energy efficiency advice line and through targeted local marketing. Trusted local suppliers can be accessed through Link to Energy Network	
Homes – Enable the development of low carbon new communities					
Adopt the Core Strategy and implement the policies in the Local Development Framework for all developments	Policy framework in place for delivering low carbon communities	Adoption expected early 2013	SGC - Strategic Planning	The final version of the Core Strategy was adopted in December 2013. The policies in the Core Strategy relating to low-carbon communities are being implemented (CS1, CS3, CS4). The Policies Sites and Places DPD will be progressing to Proposed Submission (Reg19) stage in May 2015 with additional policies relating to onsite renewable and low carbon energy and embedding climate change adaption and mitigation into land use planning.	
Work with development partners through master planning, planning application and delivery process to	Low carbon solutions included in master plans for major schemes Low carbon	Ongoing	SGC – Strategic Planning	This work is ongoing through negotiations with developers. Energy strategies are required with each planning application. We are now starting to see some developers trying to implement more	

Action	Measure:	Timescale	Who	Progress	Rating
achieve low carbon new communities in the growth areas	assessments included in design statement for planning applications			<p>innovative solutions. The outline proposals for Cribbs Causeway presented by the Mall, BAE and Skanska have taken on board the principles in the SPD and the recommendations from various research studies. However developers are often unwilling to go over and above current legal requirements, and legal requirements are slower to change (nationally) than originally proposed.</p> <p>Funding has been secured from DECC to assess how the ambition for a nodal heat network can be achieved and the results of this work should move things on further. In addition UWE are now laying pipes for the first heat network in South Gloucestershire</p> <p>Progress has been rated amber because we are starting to see low carbon assessments and solutions for some but not all sites. We will continue to try and influence developers.</p>	
Adopt Supplementary Planning Documents (SPD's) for the growth areas that include low carbon communities criteria	SPD's produced for CribbsPatchway and Harry Stoke and formally adopt once the Core Strategy is in place	2013 (TBC)	SGC Major Sites team and PTSE Committee	The Development Framework SPD for Cribbs Patchway was adopted in March 2014. The Major Sites Team are currently working with the developers to prepare a collaborative masterplan for the East of Harry Stoke site.	

Action	Measure:	Timescale	Who	Progress	Rating
Investigate the creation of an 'allowable/off site solutions' fund to assist developers meeting their CO2 reduction obligations and to deliver local renewable energy solutions	<p>South Gloucestershire Community Energy Fund set up</p> <p>Pilot carried out in Hanham</p>	2013/14	<p>SGC</p> <p>Barratt Homes</p> <p>Homes and Communities Agency</p>	<p>A pilot Allowable Solutions project has been developed at Hanham Hall. Barratt Homes have contributed £200k for off-site carbon abatement projects and a project Board will agree how the funds are to be spent. Final payment from Barratts will be in August 2015. This work will inform future approach to managing and delivering off site carbon abatement projects and payments subject to a legislative framework that enables local delivery. The legislative framework is going through parliament in Winter 2014/15.</p>	

Travel

Action	Measure:	Timescale	Who	Progress	Rating
Travel – Promote and support cycling and walking					
Continue to support and promote Community Based Walks to improve health and reduce car borne trips	The continued annual retention of circa. 40 volunteers and 400 walkers and the attraction of 200 further walkers annually.	Ongoing	Children, Adults & Health	LSTF has funded two part time walk to health officers and the programme is broadly on track with 46 walk leaders, and around 400 walkers (of which 114 were recruited in 2014)	
Through Bikeability DfT match funding, LSTF, School Sports Partnerships, and council resourcing, promote and advance the education of young bike riders to enhance future and current modal shift towards cycling.	<p>Bikeability: Train 2000 children per annum</p> <p>LSTF: Train to Level 1 600+children per annum; Level 2 100 children; Level 3 100 children</p> <p>School Sports Partnership: Work alongside The Grange Community School and John Cabot Academy to enhance bike awareness to level 3.</p>	Ongoing	Road Safety Team in Streetcare	<p>The DfT and council funding has provided Bikeability training for 400 Level 1 places 1950 level 2 places and 200 level 3 places during 2014-15.</p> <p>LSTF funding has provided a further 866 level 1, 400 level 2 and 300 level 3 training places during 2014-15.</p> <p>School Sports partnerships have provided a further 30 level 2 training and 20 level 3 training places at the identified schools.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Implement walking and cycling infrastructure schemes through the Local Transport capital programme and the Local Sustainable Transport Fund (LSTF)	76% increase in journeys by bike (2008 baseline to 2015/2016) (West of England target)	By 2016	Strategic Transport Policy Team	<p>The capital spend for LSTF on Walking and Cycling schemes (sustainable measures) is £0.9m in 2014/15 and the project is currently on track to deliver this spend.</p> <p>Key schemes include:- Yate Spur - a commuter cycle link Signalised crossing to M32 on slip 20 mph zone at John Cabot School and enhanced cycle parking at 3 schools</p> <p>The LTCP for 2015/16 is being considered by PTSE Committee in January 2015, and includes provision for a range of walking and cycling schemes funded through the LTP Integrated Transport block and the Local Growth Fund award from the LEP.</p> <p>The West of England target to increase cycling is on track, with the 2013/14 figure up 9% on the previous year</p>	
Travel – Promote and support bus and rail use and accessibility					

Action	Measure:	Timescale	Who	Progress	Rating
Install ITSO compliant ticket machines on buses to enable ITSO based 'Smart' ticketing on all registered bus services throughout South Gloucestershire.	All buses equipped with ITSO compliant ticket machines.	May/June 2013	Major Projects	100% of qualifying vehicles equipped by September 2014.	
Provide bus infrastructure improvements, through the introduction of raised bus boarders, shelters, public transport timetable information and real time information both on site and through mobile technology.	11% increase in bus passenger journeys across the West of England (2008 baseline)	2015/16	Strategic Transport Policy	<p>Infrastructure improvements were undertaken in 2013 & 2014 as part of measures resourced by the Better Bus Area Fund.</p> <p>Raised boarders and new shelters (featuring display cases) were provided at various bus stops in Filton, Bitton, Hanham, Kingswood, Oldland, Patchway and Warmley.</p> <p>Real time information displays were installed at key stops. Additionally a large real time departure display was installed near the Kings Chase shopping centre in Kingswood. A TravelWest app was introduced that channels real time information on most bus services in the West of England to users of smartphones.</p> <p>Data during 2012-13 had suggested a drop in passenger numbers (though questions were raised about the accuracy of this data). 2013-14 figures showed a return to very near the target with 54.1m bus passengers carried.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Develop and implement the North Fringe to Hengrove bus rapid transit scheme.	<p>Full approval for the scheme secured</p> <p>Increase in bus patronage of 11% by 2015/16 from 2008/09 baseline</p>	2014	Strategic Transport Policy	<p>Planning permission has been achieved for the NFHP in BCC and SGC and the Stoke Gifford Transport Link Compulsory Purchase Order Inquiry issues were resolved.</p> <p>Final funding decision expected from DfT in February 2015. If approved these works are expected to be completed by Late summer 2017.</p>	
Secure funding for rail improvements, including Bristol metro, to increase the rail network and improve multi-modal access to local stations and journeys by train	<p>Investment secured</p> <p>41% increase in journeys by train (2008 baseline)</p>	2019	Strategic Transport Policy	<p>Progress is good as described below, but has been rated amber as no deliverables have been identified to quantify the 'investment secured'. On track to meet the rail patronage figures.</p> <p>The delivery date for the MetroWest phase 2 package is 2021, but there is an aspiration to deliver ahead of this schedule, £3.2m has been allocated via the LGF (SEP) for development costs for this, with the preliminary business case for MetroWest phase 2 is due for completion in June 2015. Sustainable travel funding allocated via the LGF which includes the improvement of interchange facilities at Parkway in 2015/16. Access for all bid for accessible ramps at Patchway and the possibility of including this in the electrification project are being progressed.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
				A study to investigate the location of and requirements for stations and interchanges was completed and endorsed by Members in March 2014. LSTF will fund the provision of a 20 unit Brompton Dock facility at Parkway Station to provide a range of travel options to rail users and support sustainable travel. Is due to launch in December 2015	
Support development and implementation of electrification of the railways and other clean technology infrastructure projects	Electrification of mainline railway	2017	Strategic Transport Policy Network Rail	A working group has been established internally to provide NR with one point of contact for electrification discussions. There is work ongoing in StreetCare to assist the smooth roll out of the electrification bridge works and to gain additional benefit for South Glos where appropriate. A study assessing the potential roll out of electrification is close to reporting. Whilst this is progressing well the success or otherwise of this element will not be demonstrable until 2017. Short term milestones by year will need to be defined within the next 3 months to provide a framework to report against.	
Travel – Promote low carbon travel – Local Sustainable Transport Fund package					
Promote low carbon commuting through the Local Sustainable Transport Fund:	Reduction in single occupancy commuter journeys (annual snapshot travel survey)	2012-2015 (3 year programme)	LSTF Team	Work ongoing with businesses in the North Fringe to roll out the low carbon commuting programme, including; Regular engagement with employers and	

Action	Measure:	Timescale	Who	Progress	Rating
<ul style="list-style-type: none"> - Expand low carbon commuting programme working with employers on key commuter routes to equip staff with information and facilities to enable sustainable travel choices - Equip people with information and knowledge on low carbon travel choices at key transition points - Support low carbon travel choices in priority neighbourhoods - Implement relevant infrastructure to support low carbon travel 	<p>Reduce to 49% by March 2015 (amongst sustainable commuter club members)</p> <p>12 sustainable travel schemes agreed and delivered by 2015</p> <p>Network of 20 electric vehicle charging points installed</p>			<p>support from North Fringe Account Manager to engage staff and change travel behaviour. Support delivered to North Bristol Suscom, a coalition of the major employers and educational establishments in SG working on sustainable travel.</p> <p>On-site and off-site grants for solutions to barriers along key commuter routes. Grants deployed for Electric Vehicle Charge Points at key employment sites to enable sustainable business travel.</p> <p>WoE Sustainable Roadshow team fully deployed, providing people with sustainable travel info and route options. The LSTF website is working towards provision of up to date journey planning information.</p> <p>Annual commuter travel survey delivered as part of a detailed study in partnership with UWE.</p> <p>£480k of community led capital scheme to address barriers to sustainable travel have been agreed and due for completion in Dec 2014.</p> <p>Of the 20 charging points 16 have been delivered, and a further 4 are in progress. The first target has been met. Single occupancy has fallen to 50.2% amongst Suscom members. The 12 sustainable travel schemes are on track by 2015. The network of 20 electric vehicles is on track for delivery by project end (March 15)</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Travel – Reduce the need to travel					
Implement policies in the Core Strategy that locate new homes, work and community facilities close together and provide for low carbon transport infrastructure	Appropriate sustainable travel measures are included in concept statements and master plans for new developments.	Ongoing	Strategic Planning	The Core Strategy was adopted in December 2013. The SPD has been developed and adopted for the CPNN which furthers the commitment to the Core Strategy policies. East of Harry Stoke SPD is currently under development.	
Improve access to broadband for residents and businesses in South Gloucestershire by gap funding and project managing the installation of a wholesale broadband network, from which internet service providers can sell faster broadband services	Ensure that 94% of all premises are able to access superfast broadband and that all premises are able to access a standard broadband service by March 2017	2013-2017	Chief Executive's Office	Phase 1 of Rural Broadband project will be have delivered superfast broadband to almost 16,000 premises by March 2015. SGC is investing a further £1m in Phase 2 – Superfast Extension Programme to get more premises connected to superfast broadband.	

Action	Measure:	Timescale	Who	Progress	Rating
Work with employers to encourage a shift to smarter working	Outcome measure to reflect LSTF target when agreed (TBA)	Ongoing	LSTF Team	North Fringe Account Manager providing advice on reducing single occupant car use to major employers. Sustainable Travel Roadshow team providing information to commuters on reducing car use through teleconferencing, car sharing and electric vehicles. Annual travel to work survey in March 2015 showed a 2.5% reduction in single car use since 2013.	
Support and promote the success of town and neighbourhood centres	(See Low Carbon Economy Action Plan)		Economic Development Team		
Travel – Low Carbon Development					
Work with developers to secure transport infrastructure that maximise sustainable transport modes, through implementation of on and off-site footway and cycleway links and public transport interchanges and routes.	All planning applications to be considered against the modal (user) hierarchy, as proposed within DfT's Manual for Streets; i.e. Pedestrians, Cyclists, Public Transport Users, Specialist service vehicles (e.g. emergency services, waste etc), other motor traffic.	Ongoing	Transport Development Control Major Sites Team	Transport Development Control provide comments on planning applications and the Manual for Streets forms the basis of these comments. This is an ongoing function.	

Action	Measure:	Timescale	Who	Progress	Rating
Secure appropriate mitigation in the form of Section 106 works, travel planning or funding, or Community Infrastructure Levy, to offset traffic generation impact against modal shift.	Mitigation secured from all relevant planning applications, in accordance with the CIL Regulations 2010 and local policy direction.	Ongoing	Transport Development Control	This is happening on an ongoing basis. Contributions are realised wherever possible.	
Travel – New actions not covered above					
Action	Measure:	Timescale	Who	Progress	Rating
Take advantage of funding opportunities to install relevant infrastructure to support low carbon travel	7 Electric Vehicle Rapid Charging points installed for public use throughout South Gloucestershire	2015	Strategic Projects	<p>Funding for Rapid Charging Points secured from OLEV. Five RCP's installed, two others are programmed for installation by March 2015.</p> <p>Bids are in preparation for funding from other grant opportunities announced by Government since December 2014, including:</p> <ul style="list-style-type: none"> - Cycle City Ambition Fund - Go Ultra Low City - Low Emission Buses - Low Emission Taxis 	

Economy

Action	Measure:	Timescale	Who	Progress	Rating
Economy – To influence resource-efficiency improvements in South Gloucestershire business premises and operations					
Deliver the West of England Carbon Challenge in South Gloucestershire (delivered by Low Carbon South West)	Number of businesses signed up to the Challenge and setting an annual carbon reduction target of 2%	Annual programme – subject to funding	Low Carbon South West	<p>Management of the West of England Carbon Challenge was taken over by Low Carbon South West (LCSW) from Forum for the Future in July 2013. To support the future of the project, LCSW secured funding from Bristol 2015 Ltd to develop the WECC programme to become the primary business engagement tool for Bristol Green Capital, and to roll it out on a larger scale to a wider audience. The initiative is being re-branded as 'Go Green' and LCSW is partnering with Business West to develop and promote it.</p> <p>There are 80+ current business members but just 6 of them are located in South Gloucestershire, hence the amber rating. The scheme is now supported under the 2014/15 Service Level Agreement between SGC and LCSW, and there is a target to recruit 30 new businesses to the scheme within SG.</p> <p>LCSW partnered with DECC to run a high profile business event in South Gloucestershire in November 2014. The event provided a platform to introduce Go Green (as well as</p>	

Action	Measure:	Timescale	Who	Progress	Rating
				being the South West launch for the new government Energy Savings Opportunity Scheme.	
Promote the Improving Your Resource Efficiency (IYRE) programme to SMEs in South Gloucestershire	Number of businesses receiving support (overall programme target 134 a year across Business West area)	Annual programme - subject to funding	Business West	<p>IYRE supported 41 businesses in South Gloucestershire who received more than 12 hours of support each and claimed 15 grants totalling £167,000.</p> <p>The IYRE project came to an end in June 2013 having achieved its targets. As well as growth in GVA, jobs, cost savings and additional sales for supported businesses, the programme saved 37,791 tonnes of CO2 equivalent emissions, at a cost of approximately £186 per tonne.</p> <p>Business West are now collaborating with Low Carbon South West to develop and promote the Go Green initiative, with a target to involve 1,000 businesses across the West of England area.</p>	
Explore possibilities to run waste exchange events as part of National Industrial Symbiosis Programme (NISP)	Two waste exchange events in South Gloucestershire (subject to NISP support)	2013/14	SGC	Opportunities for support via NISP have been affected by cuts to their funding, and the Council is not resourced to take this forward on its own. This action has therefore not been progressed and it will not be possible to deliver it in the near future.	
Maximise support to South Gloucestershire businesses via Local	Number of businesses receiving support a year	2012 – 2015	SGC	64 South Gloucestershire employers are now actively engaged in green travel planning via the LSTF. Of these: 11 are large employers (1000 – 12,000	

Action	Measure:	Timescale	Who	Progress	Rating
Sustainable Transport Fund support on green travel planning				employees). 19 are medium employers (250 – 1000 employees) 34 are SMEs (up to 250 employees) Work has been carried out to support businesses in running a range of targeted staff engagement campaigns, implement improvements to staff facilities, and integrate sustainable travel solutions into their business practice.	
Provide climate change advice and project support to farmers and rural businesses in the Cotswolds AONB and provide financial support through the Climate Change Project Demonstration Fund	Supported businesses more self-sufficient in terms of their energy and resource requirements and overall resilience to the impacts of climate change.	2012 – 2014	Cotswolds Conservation Board	Funding for this programme has come to an end. A final progress report has not been made available.	
Use planning influence to deliver new buildings with high standards of energy efficiency	Number of commercial buildings achieving BREEAM excellent	Ongoing	SGC	Work is underway and being implemented through the Core Strategy. Examples of commercial buildings developed since the adoption of the Climate Change Strategy and achieving high standards of environmental performance include the new police custody suite and offices at Filton (BREEAM Excellent), and Phase 2 of the National Composites Centre at the Science	

Action	Measure:	Timescale	Who	Progress	Rating
				<p>Park (Designed to target BREEAM 'Very Good' with an aspiration to achieve 'Excellent'). The number of commercial buildings achieving BREEAM excellent is not currently being monitored. However, progress has been assessed as 'green' since the council is using its planning influence to encourage high standards of energy efficiency in new commercial buildings within the limits set by national legislation</p>	
<p>Promote Green Deal to businesses to improve energy efficiency of existing commercial buildings</p>	<p>To be agreed once scheme is introduced</p>	<p>TBA</p>	<p>TBA</p>	<p>The Green Deal is now available to finance energy efficiency improvement works and renewable energy installations in commercial properties as well as domestic properties. However, various analyses have indicated that take up amongst commercial property owners is likely to be low since potential energy improvement measures will fail to meet the Green Deal 'Golden Rule', and there are often complexities in how owners / managers / occupants of commercial properties pay for their energy. From 2018, there will be an obligation on commercial landlords to bring their property up to a defined threshold before it may be let again, and DECC has advised that this threshold is likely to be an E in the EPC, thus properties with an F or G may be subject to improvement works. This might stimulate increased take up of Green Deal financing for energy improvements to commercial buildings.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
				In the meantime, given the extent of scepticism (nationally and locally) about the attractiveness of the Green Deal for commercial buildings, no resources have been put into promoting the Green Deal to local businesses to-date. Progress has been assessed as 'amber' and further action is on hold until we are confident that the Green Deal provides an attractive offer for commercial properties.	
Implement Nighthawks project – out of hours energy switch off project for retail parks and shopping centres	Outputs include training sessions, energy audits and site specific action plans and PR campaign	April 2013 – Oct 2015	Funded by Intelligent Energy Europe – Lead Agency SWEA Support from SGC	SWEA are leading on the Night Hawks project with some financial support from SGC. This is an EU partnership project and the initial project development phases have been completed. 3 retail parks and shopping facilities and 1 serviced office facility in SG have taken part in the programme so far with identified savings of over £20,000 out of a total energy spend of £94,000. SWEA are working to recruit more retail parks and commercial outlets in SG into the programme.	
Economy – To help low carbon businesses grow in South Gloucestershire by increasing demand for goods and services, improving skills and creating the right environment for investment					
Support the delivery of the low carbon skills training programme (funded through Regional Growth Fund)	Training programme delivered by local colleges in conjunction with Local Enterprise Partnership.	From Autumn 2012	Lead college – City of Bristol	Awaiting info	

Action	Measure:	Timescale	Who	Progress	Rating
Support the delivery of the environmental technologies growth plan for the Avonmouth/ Severnside enterprise area	New industries and businesses attracted to Severnside	Ongoing	Low Carbon South West	LCSW are working with the LEP to support the growth of Low Carbon Goods & Services (LCEGS) companies and promoting Avonmouth/Severnside enterprise area as a growth area for environmental technologies. SGC have secured funding from DECC for development of a detailed business case for a heat network to utilise waste heat from energy generators in Avonmouth-Severnside. Carbon8 (an industrial waste and contaminated soils treatment company that captures CO2 in their treatment process) have submitted a planning application to develop a facility in the Severnside area.	
Develop Smart City Approach to Growth Areas – ensuring appropriate digital infrastructure and smart energy, water and transport infrastructure deployment	Multi-utilities Study for North Fringe planned and undertaken	2013/14	SGC commission report and work with utilities and developers to implement recommendations	This work is ongoing through negotiations with developers. Multi-Utility Sustainable Infrastructure Strategy completed for Cribbs/Patchway and research has been funded by DECC for SGC to investigate the business case for district heat networks with a focus on Cribbs/Patchway. The results of these studies will inform a strategic approach to the planning and design of low-carbon solutions across our major development schemes.	
Run workshops for local businesses including public sector suppliers to support local green business supply chain	Two workshops	2013	Low Carbon South West	Two events were held as planned with attendance by approximately 20 companies.	

Action	Measure:	Timescale	Who	Progress	Rating
development.					
Deliver the Environmental Technologies i-Net business plan & work with other i-Nets to integrate low carbon objectives (£2million project over 3 years)	Business plan objectives delivered	South West targets over 3 years ending September 2013	UWE, Regen SW, University of Bristol and University of Exeter	The Environmental iNet has now delivered business assistance to 300 Small and Medium Enterprises in the South West (including 14 in South Gloucestershire) who are innovating for environmental benefit. The Environmental iNet is funded until June 2015 and is on track to achieve the business plan objectives.	
Enable the development of secure low carbon energy supplies, retrofit of buildings and develop and support the local supply chain	Energy efficiency and renewable energy installers network established	Ongoing development	SWEA and Regen SW retrofit project	(See low carbon homes)	

Action	Measure:	Timescale	Who	Progress	Rating
Review Total Place Low Carbon Project recommendations for the West of England	Future actions agreed by Local Enterprise Partnership	2013	Local Enterprise Partnership – Lead authority B&NES	Findings of Total Place project summarised in a short communications document called Pathways to Prosperity and draft Low Carbon Economy Strategy developed by Low Carbon Industries group to inform the work of the LEP Low Carbon industries identified as a priority sector in LEP plan and clearer strategy for WOE being developed - £6m funding available through EU Structural Investment Funds for Low Carbon projects.	
Economy – Support and promote local production and consumption of goods and services					
Use planning influence to encourage local patterns of production and consumption	Policies in Core Strategy implemented	Ongoing	SGC	Policies implemented in accordance with the Core Strategy	
Strengthen local supply chains and promote the use of local goods (including food) and services within the parameters of procurement legislation	Criteria included in specifications for contracts	As appropriate	SGC and Public Sector Organisations	This is an ongoing policy commitment for South Gloucestershire Council and is built into contracts where possible along with other appropriate environmental criteria. The Council's Sustainable Procurement Guidance has been updated in 2014 and encourages development of local supply chains and the use of local goods and services within the parameters of procurement legislation.	

Action	Measure:	Timescale	Who	Progress	Rating
Incorporate the Local Food 'Taste' festival into the new South Gloucestershire Discover Festival	Local food events included in Discover festival	Annual event	SGC	Workshops promoting local food and tasting sessions were integral to the 2013 Discover Festival and the 2014 Discover Festival (currently underway) includes a number of food events. The future of Discover is uncertain because of planned efficiency savings	
Protect high quality land for food production and enable dialogue on opportunities for increasing productivity of land for food production in South Gloucestershire	At least one event held	TBA	Lead organisation to be identified	The adopted South Gloucestershire Core Strategy sets a strong policy context for the protection of the best and most versatile agricultural land (grades 3a and higher) (Policy CS9). However this is considered in the round with other sustainability objectives and some 3a land has been lost to development. Work is underway through the West of England LEP to secure funding from the Rural Development Programme for England for projects that strengthen the local food sector including commercial and community enterprises. If this is successful it will provide a resource for leading the local food agenda in the WOE. No resource is available within SGC and no event has been held (hence the amber rating). Beacon Farms group were developing proposals for a community led project on high grade land in SG. Negotiations for the land failed but they are now looking for another site.	
Support an increase in productive woodland and the preservation and	To be developed	2013/14	Area for development in discussion with key	Streetcare has undertaken an audit of council land and identified sites with potential for new tree planting. Planting has been undertaken on some sites.	

Action	Measure:	Timescale	Who	Progress	Rating
enhancement of existing woodland for biodiversity and wood fuel			delivery partners – Forestry Commission, Woodland Trust, Forest of Avon, NFU and Country Land Owners Association	<p>An assessment of the potential for use of biomass arisings from Council streetcare operations has been completed.</p> <p>Forest of Avon Trust has secured New Homes Bonus funding for a pilot project working with the un-parished urban area of the SG to involve the local community in protection of trees and new tree planting.</p> <p>Further work is required to develop a strategic approach to supporting an increase in productive woodland, hence the amber rating. However there are no resources available to progress this at the present time.</p>	
Support and promote the success of town and neighbourhood centres and village shops and post offices	<p>Vacancy rates in ten main centres</p> <p>Level of membership of local chambers of trade and commerce</p> <p>Footfall of Yate, Kingswood, Thornbury and Bradley Stoke town centres</p>	Annual monitoring proposed		<p>Work has continued to support town and neighbourhood centres and there is are now dedicated webpages for South Gloucestershire businesses.</p> <p>Membership of the business networks for Hanham, Downend, Yate and Chipping Sodbury has increased by around 10% year on year. Filton and Patchway networks are still at an embryonic stage and Kingswood and Staple Hill are currently dormant.</p> <p>Data on retail vacancy rates from the South Gloucestershire Annual Retail Audit (undertaken in August 2014) shows a small improvement in 2014 compared to the previous</p>	

Action	Measure:	Timescale	Who	Progress	Rating
				<p>year. The vacancy rate for the ten main centres was 4.3% in 2014 and 4.5% in 2013 based on square metres of A1 retail floor space, and 9.4% in 2014 compared with 10.2% in 2013 based on number of A1 retail units.</p> <p>Data on footfall in town centres is not currently available.</p>	

Energy

Action	Measure:	Timescale	Who	Progress	Rating
Energy – Increase decentralised heat and power production and develop heat networks where viable					
Publish results of heat network viability study for the Bristol North Fringe and North Yate and explore further opportunities for financially viable networks as part of new developments	CHP and District Heating considered as an option in new developments and energy reviews of existing estates	Ongoing	SGC and developers through the planning process	<p>Study concluded that a nodal approach to heat networks was potentially possible focusing on the areas of new development with high density and high heat demand. A heat network was considered viable at the UWE campus subject to demonstration of a satisfactory business case. UWE have carried out further work and are laying pipes for the first heat network in South Gloucestershire as part of the redevelopment of the Frenchay campus. This will provide the opportunity for development of a localised heat network serving non UWE owned premises, if business cases can be proved and funding secured.</p> <p>Further detailed work was carried out for the CribbsPatchway New Neighbourhood to promote a site wide approach to utilities planning. The recommendations include the ambition for a nodal heat network and development proposals coming forward include the intention to explore this option in areas of high density and high heat demand. Funding has been secured from DECC to assess how the ambition for a nodal heat</p>	

Action	Measure:	Timescale	Who	Progress	Rating
				network can be achieved and the results of this work should move things on further.	
Produce Heat Network study for Avonmouth and Severnside to maximise use of waste heat from industrial operations and energy from waste plants	Report published recommendations considered and actions agreed	Within 6 months of publication of report – expected mid 2013	Low Carbon South West	A final draft of the Heat Grid Study for Avonmouth and Severnside has now been completed. The report has been used to inform a successful bid to DECC for development of a detailed business case for a heat network to utilise waste heat from energy generators in Avonmouth-Severnside.	
Energy – Optimise the use of local renewable energy resources and maximise benefits for local communities					
Continue to send municipal solid waste to the mechanical and biological treatment facility at Avonmouth for materials recovery and generation of energy from residual refuse derived fuel	MWh energy generated per annum from South Gloucestershire's refuse derived fuel (estimated to be 9,065MWh/ year at the present time)	Ongoing to 2020	SGC Waste Management Team	Waste is sent for energy recovery through the wood waste stream and the residual waste stream. The contractor reports tonnage of waste handled but does not report the energy output from these waste streams. Tonnages for 2013-14 are 40,178 tonnes to MBT, 1,814 tonnes to energy from waste and 6,725 tonnes of wood.	
Increase the proportion of food waste recovered from municipal waste and sent for anaerobic digestion.	Tonnage of municipal food waste sent for AD. Target to increase tonnage by 2,700 tonnes from 2012 to 2014	Ongoing to 2020	SGC Waste Management Team	Food waste recovered in 2012-13 was 5,344 tonnes and in 2013-14 was 5,146. The level of participation has been relatively low (measured at 33% in July 2014 and falling short of the target – hence the amber rating). Corrective measures have now been put in place to increase participation. As of Autumn 2014,	

Action	Measure:	Timescale	Who	Progress	Rating
				residents can use ordinary plastic bags to line their food recycling caddies and it is hoped that this will promote an increase in food recycling.	
Explore opportunities for increasing energy generated from anaerobic digestion of commercial food waste and agricultural slurries produced in South Gloucestershire, and for increasing energy recovery from non-recyclable commercial waste	Meet with Environment Agency and agree approach	2013	SGC Sustainability Team	<p>SGC Waste Management Team are conducting research into the potential for a local AD plant for domestic waste as part of their savings programme (during winter 2014/15). They will develop a high level business case to determine whether or not to proceed with further detailed study (and will involve the Environment Agency as appropriate).</p> <p>Marshfield Energy group received funding from DECC for an AD study for Marshfield and are currently considering the recommendations</p> <p>New Earth Solutions has planning permission to construct an AD plant at Hallen which will generate energy from food waste (predominantly from commercial sources).</p>	
Utilise local wood resources for production of energy in biomass boilers	<p>Review potential for waste wood / forestry residues from council owned land and operations carried out</p> <p>Potential for managing private woodlands, and recovering waste wood</p>	2013	SGC Street Care and Sustainability Team	<p>Review completed for council operations. Demonstrates little opportunity for using waste wood in the council's biomass boilers. However, opportunities for disposal of logs and for separating clean and treated wood at sort-it centres have been identified.</p> <p>Potential for recovering wood from private woodlands has not been explored and there are</p>	

Action	Measure:	Timescale	Who	Progress	Rating
	explored			no resources to carry out further work on this at the present time.	
Explore the potential for new woodlands through green infrastructure policies		2014	SGC Street Care and Sustainability Team	Streetcare has undertaken an audit of council land and identified sites with potential for new tree planting. Planting has been undertaken on some sites. The Climate Adaptation Plan, Core Strategy, Draft Policies Sites and Places Plan, and Supplementary Planning Documents promote the protection and enhancement of woodland and trees through green infrastructure policies.	
Keep under review the potential for growing biomass crops in South Gloucestershire – not at the detriment of food production	No market at present time – keep under review	Annually	SGC	No market at present - will continue to keep under review	
Investigate potential for community led renewable energy projects on council owned land and support the development of community led projects if potentially viable	Sites with potential identified and follow up actions agreed	2013	SGC Property Services and Sustainability Team	All SGC-owned land has been reviewed for potential for renewable energy. A number of sites have been identified with potential for wind and/or solar. SGC will submit planning applications to develop solar on two small council-owned sites and are investigating potential for renewables at two other sites, subject to availability of grid connection. One of these sites may provide the opportunity for a joint venture project.	

Action	Measure:	Timescale	Who	Progress	Rating
Enable the installation of micro renewables in existing homes	<p>The Climate Change Strategy contains a number of indicative scenarios which demonstrate how 7.5% of South Gloucestershire's projected 2020 energy demand could be met from renewable sources by 2020. These scenarios allow for the following domestic scale installations (in existing homes):</p> <ul style="list-style-type: none"> - 13625 Solar PV - 13625 Solar Thermal - 5600 heat pumps - up to 1777 20kw (domestic & small commercial) biomass boilers - up to 10 micro wind - up to 6 micro hydro 	2020		<p>As of March 2014 a total of 3,235 domestic renewables systems had been installed. These comprised:</p> <ul style="list-style-type: none"> - 2863 Solar PV - 133 Solar Thermal - 189 heat pumps - 39 biomass boilers - 7 micro wind - 1 micro hydro <p>These figures are taken from installations that have had some form of government funding or subsidy so may not present a completely accurate picture.</p> <p>Based on installations to date it would appear that micro-wind and Solar PV are the only technologies that may approach the levels allowed for in the Climate Change Scenarios (currently at 70% and 21% respectively). The other technologies are currently at 10% or below of the scenario, with heat pumps, biomass boilers and solar thermal at 3%, 2% and 1% respectively). Levels of installation are heavily dependent on government payments for production of renewable energy.</p> <p>We are actively promoting micro renewables in new development and through the domestic green deal programme including renewable heat incentive in off gas areas.</p>	

Action	Measure:	Timescale	Who	Progress	Rating
Enable the development of low carbon communities projects and energy projects for community benefit	See low carbon communities			See low carbon communities	
Energy – Implement planning policies on low carbon and renewable energy					
Adopt the Core Strategy and implement the policies in the Local Development Framework for all developments	Policy framework in place for delivering low carbon communities	Adoption expected early 2013	SGC - Strategic Planning	The final version of the Core Strategy was adopted in December 2013. The policies in the Core Strategy relating to low-carbon communities are being implemented (CS1, CS3, CS4). The Policies Sites and Places DPD will be progressing to Proposed Submission (Reg19) stage in May 2015 with additional policies relating to onsite renewable and low carbon energy and embedding climate change adaption and mitigation into land use planning.	
Work with development partners through master planning, planning application and delivery process to achieve low carbon new communities in the growth areas	Low carbon solutions included in master plans for major schemes Low carbon assessments included in design statement for planning applications	Ongoing	SGC – Strategic Planning	This work is ongoing through negotiations with developers. Energy strategies are required with each planning application. We are now starting to see some developers trying to implement more innovative solutions. The outline proposals for Cribbs Causeway presented by the Mall, BAE	

Action	Measure:	Timescale	Who	Progress	Rating
				<p>and Skanska have taken on board the principles in the SPD and the recommendations from various research studies. However developers are often unwilling to go over and above current legal requirements, and legal requirements are slower to change (nationally) than originally proposed.</p> <p>Funding has been secured from DECC to assess how the ambition for a nodal heat network can be achieved and the results of this work should move things on further. In addition UWE are now laying pipes for the first heat network in South Gloucestershire</p> <p>Progress has been rated amber because we are starting to see low carbon assessments and solutions for some but not all sites. We will continue to try and influence developers.</p>	
Develop Smart City Approach to Growth Areas – ensuring appropriate digital infrastructure and smart energy, water and transport infrastructure deployment	(See Economy & Growth Action Plan)			(See Economy & Growth Action Plan)	

Action	Measure:	Timescale	Who	Progress	Rating
Adopt renewable energy Supplementary Planning Document to guide renewable energy planning decisions	Renewable Energy SPD adopted	2014	SGC PTSE Committee	The SPD was adopted by PTSE Committee in November 2014.	
Provide free planning advice for householders and apply permitted development rules	Free reliable advice available	Ongoing	SGC Development Control	Free reliable advice provided by SGC Development Control as to whether permitted development covers renewable proposals on householder development	
Set up an 'allowable / offsite solutions' Community Energy fund to assist developers meeting their CO2 reduction obligations and to deliver local renewable energy solutions.	Pilot project carried out in Hanham and Local Carbon Fund established.	2013	SGC	A pilot Allowable Solutions project has been developed at Hanham Hall. Barratt Homes have contributed £200k for off site carbon abatement projects and a project Board will agree how the funds are to be spent. Final payment from Barratts will be in August 2015. This work will inform future approach to managing and delivering off site carbon abatement projects and payments subject to a legislative framework that enables local delivery. The legislative framework is going through parliament in Winter 2014/15.	
Energy – Respond to applications for National Energy Infrastructure Projects					
Action	Measure:	Timescale	Who	Progress	
Support the development of tidal energy technologies	Fully considered responses submitted to tidal energy proposals	As required	SGC Members	Tidal and marine energy has been identified as a business growth area by the LEP. The tidal test blade facility at the National Composites	

Action	Measure:	Timescale	Who	Progress	Rating
that are not detrimental to the ecological value of the Severn Estuary ecosystem and viability of Bristol Port				<p>Centre received funding through the SEP and consideration is being given to the further development of this project by the LEP Low Carbon Industries Group.</p> <p>Responses to tidal energy proposals will be developed as and when they arise.</p>	
Respond to an application for the development of a new nuclear power plant at Oldbury on Severn, secure significant community benefit from this and any other significant energy infrastructure project and request developers to explore potential for utilising waste heat.	Response to proposals submitted and community benefits secured	As required	SGC Members	<p>The project promoter is concentrating efforts on their lead site Wylfa Anglesey. No further information on the timetable is available at the moment.</p> <p>Responses will be made to this and any other significant energy infrastructure projects as and when they arise.</p>	

Communities

Action	Measure:	Timescale	Who	Progress	Rating
Communities – Enable the development of neighbourhood energy plans and low carbon community projects					
Develop & implement a strategic approach to neighbourhood energy planning so that communities can understand and plan for their future energy needs and so that the best energy efficiency and renewable energy solutions are delivered	Energy profiles produced for all parishes and non parished areas and targeted programme of support agreed Pilot project carried out in Thornbury	2013/2014	Sustainability Team will develop plan and signpost support	Energy profiles have been produced for all parishes and non parished areas and are available via the Energy Hub web site. Currently groups in Marshfield, Thornbury and Westerleigh are developing and implementing local energy projects. Marshfield Community energy project have received funding for renewable energy viability work and are developing proposals for community ownership of energy projects. A targeted programme of support and a pilot project would require additional funding and have not been possible to date so progress has been rated amber.	
Promote the availability of energy audit schemes for village halls and community buildings	Number of community halls and buildings improved	Ongoing	SGC SWEA	Information on where to get independent energy advice has been provided by the council. SWEA provide a cost effective audit service and several hall management groups have commissioned energy audits from them to inform a programme of energy efficiency	

Action	Measure:	Timescale	Who	Progress	Rating
				improvements. However we have not had the resource to collect data on the condition of halls and the number improved.	
Provide networking, learning, influencing and project development opportunities through the Environment Forum, appropriate events and activities.	At least three events a year	Ongoing	SGC Sustainability Team	Environment Forum meetings have continued to be planned and held three times per year. In addition, Member and parish briefings on solar PV and community energy; and community energy networking and project planning sessions have been held.	
Provide a focus for action and dialogue through the local promotion of and participation in national and regional low carbon and sustainability events and campaigns	Annual low carbon communications plan agreed and implemented. Minimum of two events/campaigns a year	Annually	SGC	Green doors open day held in Thornbury with Private Sector housing team support and a programme of home energy events is ongoing. There have been insufficient resources to develop a communications and events plan for national and local campaigns as priority has shifted to strategic project development and delivery, hence the amber rating. It is unlikely that this can be resourced from within the council in the near future.	
Communities – New actions not covered above					
Explore options for a South Gloucestershire Community Energy Company and provide		By April 2014	SGC and Community reps	Research on community energy ownership models has been undertaken. Two active community energy organisations are already operating in SG (Bath and West Community	

Action	Measure:	Timescale	Who	Progress	Rating
seed funding of £15K if sufficient community interest and capacity to develop a group				Energy and Bristol Community Energy). Marshfield energy group have received DECC funding to further their renewable energy ambitions and as part of this work will be reporting on potential models for community energy ownership in South Gloucestershire. Options will be developed in 2015 but progress has been rated amber since the target date has not been met.	

Appendix 2

South Gloucestershire Climate Change Strategy

Notes of Stakeholder Review Meeting 22nd October 2014

Present:

Amy Robinson	Network Director, Low Carbon South West
Mike Johns-Turner	Energy Manager, Merlin Housing
Mark Letcher	Director, Climate Works
Nick Spicer	Operations Director, Your Power
Ian Brooks	Business Support Manager, Environmental i-Net
Mike Brain	Head of Business Services, Severn Wye Energy Agency
Jonathan Platt	Architect
Ian Preston	Head of Household Energy Services, Centre for Sustainable Energy
Jane Thompson	Strategic Environment and Climate Change Projects Manager, South Gloucestershire Council
Paul Knuckle	Environment and Climate Change Officer, South Gloucestershire Council
Jane Antrobus	Senior Environment and Climate Change Officer, South Gloucestershire Council

Domestic Sector

Green Deal

The Green Deal Home Improvement Fund (GDHIF) released in June 2014 was exhausted in 7 weeks. A new round of the GDHIF is being launched in November 2014. Having a completed green deal assessment shortens the process for applying for funding if and when it becomes available. **Need to encourage people and/or fund people to have green deal assessments completed for when *ad hoc* funding becomes available.**

Very small uptake of Green Deal in SG reflects the national situation. The Green Deal has some significant flaws and doesn't work in the rented sector. However, we need to be reporting on all installed measures – not just those completed under the Green Deal / Warm and Well. **Obtain information on numbers of measures from installers / National Insulation Association.**

ECO

ECO will be coming back on-stream in March when new round of targets come in for suppliers. There is likely to be funding for solid walls (to deliver the Government target for insulation of 100,000 solid walls (minus approx. 26,000 already completed)). Actions that could be taken to prepare for this:

- **Identify where the solid walls are in SG**
- **Demonstrate to DECC that some of the complexities have already been addressed eg sort out planning issues on an areas basis**

(providing permitted development rights, or allowing group applications to be submitted), or demonstrate green deal assessments already completed

- **Build relationship with DECC and utilities companies so that they know who we are and that we are ready to go**

Awareness & Education

There is a lot of scepticism amongst householders about energy efficiency measures and installers as a result of issues (nationally) with cold calling etc. **The Council could play a role in raising awareness about the benefits of making homes more efficient, getting those who have done it to talk to others, etc. Merlin tenants could act as advocates.**

Merlin Housing Society

Merlin is improving sub-standard properties regardless of funding availability (but using funding where available). Main areas of work this year and next in off-gas areas – Iron Acton and Hawkesbury. Merlin are installing air source heat pumps (air to water) and replacing boilers that are more than 10 years old. **This will result in demonstration communities and the results and lessons can be shared.**

Energy Company / Energy Trading

Seed funding is available from the Council for a SG energy company. Setting up an energy company requires enthusiastic local people who want to do it, and is not something that can be easily pushed by local authority.

There are large risks and complexities associated with local authorities acting as energy suppliers. There are less rules / risks involved with being an energy wholesaler. The Council could potentially discount rates to South Gloucestershire customers by 20% and still cover costs

Partner Projects

- CSE promoting smart pre-pay to low income households with better functionality, more ways to pay and different payment structures compared with traditional pre-pay.
- Jon Platt working on tower block over-cladding project and looking for a partner to monitor effectiveness. **Suggested that UWE are approached**
- The Hanham Hall Allowable Solutions Board have requested a project to identify why some houses at Hanham Hall are high energy use and some low, and use the results to work with residents on changing behaviour with lessons learnt feeding into new build.

- SWEA funding bid to build on work with domestic residents (£200 per household), providing recommendations on how to use buildings more efficiently.

New Build

If Government permits Allowable Solutions money to be retained and spent locally, we have a potential fund in South Gloucestershire of approximately £1m per year.

Large developers are starting to submit energy strategies with their planning applications. Actions that could be taken to encourage developers to go over and above minimum requirements:

- **Use influence over Registered Providers to encourage high standards of energy efficiency**
- **Work with active community groups who are interested in self-build and 'extreme low energy'**
- **Use influence over council-owned land being disposed of for development (eg using conditions of sale)**
- **Encourage parishes to demand high standards in rural exception sites in off-gas areas**

Example in Belgium of simultaneous development of market and supply chain for very low carbon construction eg heat recovery systems and triple glazing. **Construction skills for extreme low energy buildings need to be promoted locally.**

Low Carbon Economy

The new Go Green initiative being developed by LCSW and Business West will replace the West of England Carbon Challenge and will provide a toolkit for all businesses to engage with the environmental agenda, using Bristol 2015 as a springboard. Go Green will provide signposting to information, events and other initiatives targeted according to the needs and interests of individual members. 2015 will be the first year of a 3 year programme. Go Green will be marketed across the WoE region but the expectation is that most uptake in 2015 will be from within Bristol, with a greater focus on the rest of the sub region in 2016 and 2017. If EU SIF money is secured to promote Go Green this will be used across the sub region. **SGC to meet with LCSW to agree how Go Green will be promoted in SG.**

SWEA is looking to expand a number of areas of activity with businesses:

- Night Hawks (working with retailers to cut out-of-hours energy use).
- A 'Smart Investors Agreement' bid has been made under the EU Horizon 2020 programme to subsidise detailed survey work and recommendations with businesses. SWEA are currently awaiting confirmation of funding. If successful, this will be promoted in SG.

- A further bid has been made under the EU Horizon 2020 programme to pilot shared energy managers to deal with multiple SMEs who can't afford their own energy manager. SMEs contribute 10% of their energy bill savings to fund the energy manager. **If successful, investigate opportunities in SG high streets.**
- SWEA is rolling out a programme with 50% subsidy for non-domestic energy surveys in Stroud. Lots of enquiries have been received in response to a letter from SWEA and several businesses (especially in the health sector) have signed up to receive a Green Deal assessment and EPC with follow up support / recommendations.

LCSW will be holding events with property firms and their lawyers to raise awareness about the Energy Act requirement for leased commercial premises to be improved to a specified EPC grade (likely to be E) unless the landlord has carried out all measures that can be funded under the Green Deal. **SGC to liaise with LCSW to ensure economic development team is aware of the requirement and to discuss dissemination of information to businesses in SG.**

Low Carbon South West is developing a project proposal to work with key areas of carbon-generating activity (such as construction) to look up and down the supply chain at where carbon emissions are generated and can be managed.

Renewables

Lots of installers are willing to install PV for free but it is usually possible to secure better benefits than just free electricity. Your Power is exploring new models eg:

- Use of bonds (for repayment, with short life interest) which enable retention of ownership and income but no up-front costs.
- Concept based on rent-a-roof but using a 20 year contract rather than a lease. The homeowner is given the PV system and retains the tariffs but enters into a contract with the provider to pay on a quarterly basis for energy they have generated. This could also work in the commercial sector.
- Built-in solar PV (schemes 10kw upwards) at the point of roof replacement. This would involve a contract between the building owner and an investment company using a Power Purchase Agreement. There are lots of options about the route to market, including coordination by local authority or an arm's length company to identify schemes (eg voluntary sector buildings) to assist the investment company in aggregating the investment in return for a percentage enabling fee. (British Gas are trialling a £5m investment in community renewable energy schemes with an £80k fee being paid to the enabler).

Action to investigate these options and work on the development a portfolio of potential projects. Use networks to assist this eg CVS, village halls network, and identify links with other funding streams especially lottery.

Delivering renewables on a community scale rather than on individual dwellings can help enable private investment and secure community tariffs (like the OVO community tariff). For example, if a number of new homes are being developed in a village and a ground-mounted solar scheme is developed (rather than PV in each property), this enables the existing and new residents to buy into reduced rates for the next 20 years. There is an example of this in Exeter. Marshfield also looking into it?

Marshfield has now completed a viability study looking at potential for AD, solar PV, and a wind turbine. There is a lack of grid capacity to export energy from Marshfield village but there may be potential in the wider Ward area. **It may also be worth exploring options to resolve export capacity issues such as matching consumption and supply, or using battery storage.**

PV can offset heating demand where immersion heaters act as a sink for unused electricity generated by the solar panels. This is easy to deploy and well understood.