

Climate Change & Energy Security Framework 2012-15

The framework sets out 19 broad strategic activities and these are set out below. Under these there are then 65 more specific actions that are presented in the following table.

Buildings

1. Deliver energy efficiency & integrated renewable energy programmes for the city's buildings
2. Reduce emissions from the council's building & operations by 40% by 2020 including schools from 2005

Sustainable Energy Supply

3. Plan & implement sustainable energy for Bristol, such as district heating, wind, solar & biomass installations
4. Integrate sustainability & carbon & energy targets into all council projects, programmes & strategies.

Planning

5. Create & implement a low carbon & energy resilient planning policy framework & development management process

Green Digital Economy

6. Use our strategic influence & partnerships to help create a low carbon economy & promote national & local business resource
7. Work with public sector organisations to reduce their direct & supply chain carbon emissions & to capitalise on opportunities to develop a low carbon economy
8. Develop Bristol as a Smart City by strengthening digital infrastructure & using smart technologies to deliver carbon savings & economic benefits
9. Promote & develop Bristol's environmental technology, innovation & services sector

Transport & Travel

10. Implement citywide travel & transport programmes, plan land use & deliver integrated, sustainable transport systems to reduce transport energy use & carbon emissions in Bristol
11. Develop & deliver our corporate travel & transport policies

Adaptation & Resilience

12. Review the vulnerability of all council services to peak oil, energy security & climate change & improve their resilience
13. Work with organisations in Bristol on climate change & peak oil response
14. Work with partners to review the vulnerabilities of Bristol's food systems by increasing their resilience & enhancing their adaptability

Communities & Culture

15. Support action by individuals, communities, Neighbourhood Partnerships & community, voluntary & social enterprises on climate change & peak oil response
16. Work with schools to improve their sustainability through physical infrastructure, management systems & curriculum development
17. Work with our cultural partners to improve their carbon performance & raise awareness of climate change issues

Waste & Recycling

18. Increase resource efficiency by helping residents reduce, recycle & compost their waste, developing waste treatment innovations & improving sustainability of BCC trade & street waste collection & disposal services
19. Increase efficiency of the Council's internal waste management, including procured goods & services

Climate Change & Energy Security Framework 2012-15

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO₂ emissions (t)
Buildings								
1. Deliver energy efficiency and integrated renewable energy programmes for the city's buildings	1. Support the Energy Advice Centre to provide energy advice to residents, particularly vulnerable groups	Energy Saving Trust	Nick Hooper	Dave Cowley	Reviewed annually	N/A	Within Service Budget	Indirect savings
	2. Support private sector insulation initiatives e.g. DIY Loft Insulation	NPower, Wolseley, RockWool, CSE	Nick Hooper	Dave Cowley	Started Sept. 2011	Pending programme completion	Within existing private sector insulation budget	Pending
	3. Actively support community energy networks in the City of Bristol	Centre for Sustainable Energy	Stephen Hilton	Alex Minshull Graham Starmer	2011-2013	Number of community-sustainable energy & projects	£40k Catalyst Fund	Pending
	4. Plan and deliver an energy efficiency retrofit programme to ensure all council housing stock is low carbon by 2020.	Energy Suppliers Homes & Communities Agency (HCA)	Steven Barret/ Mary Ryan	Dave Cowley Mareike Schmidt	2011-2020	Via internal reporting mechanisms	TBC Likely to £60M+	Pending program. commencement
	5. Create a local Energy Services Company		Will Godfrey	Mareike Schmidt Alex Minshull	Autumn /Winter 2011 - Summer/ Autumn 2012	None	Whole programme: £2.5m revenue (BCC £250k)	Indirect savings associated with Actions 3 & 6
	6. Pursue Green Deal opportunities for energy efficiency of social & private housing		Will Godfrey Nick Hooper	Dave Cowley Mareike Schmidt Alex	Autumn/ Winter 2011 - Autumn/ Winter 2013	NI186/ Housing (2005-08 Data set) NI187/ Fuel	Capital: £10.4m	1,900

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				Minshull		Poverty (2005-08 Data set) [New ELENA Metrics]		
	7. Plan and deliver a micro district heating investment programme		Will Godfrey	Paul Isbell Mareike Schmidt Alex Minshull	2012-2015	CapEx (£), Number of Measures, Energy and CO ₂ savings	Capital: £24m	27,500
2. Reduce emissions from the council's building and operations by 40% by 2020 including schools from 2005	8. Increase the energy efficiency of Municipal buildings using the Salix fund	Contractors	Will Godfrey	Paul Isbell James King	Ongoing	Energy, cost and CO ₂ savings	Ongoing, revolving-fund typically c. £3-500k pa	800
	9. Install 10 biomass boilers in Council buildings	Contractors	Will Godfrey	Paul Isbell Paul Barker	2011-2014	Installations and tCO ₂ saved	Capital: £4 m	600
	10. Install 35 Solar PV systems in schools	Contractors	Will Godfrey	Paul Isbell James King	Launched 03/2011, completion due in 2012	Installations, installed capacity, CO ₂ savings and spend	Capital: £1m	c.150
	11. Accredit the Children, Young People & Skills Directorate of the council to the Eco Management & Audit Scheme		Craig Bolt	Claire King Steve Ransom	Commenced Sept. 2011; target completion date: End 2012	EMAS targets CYPs accredited to EMAS	Within Service budget	Pending project commencement
	12. Plan and deliver advanced energy efficiency & renewable energy measures for	Bristol Public Sector Organizations	Will Godfrey	Paul Isbell Mareike Schmidt Alex Minshull	2012-2015	CapEx, Energy Savings. Renewable Energy	Capital: £37m	8,500

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO ₂ emissions (t)
	Council buildings					generation, CO ₂ savings		
Sustainable Energy Supply								
3. Plan and implement sustainable energy for Bristol, such as district heating, wind, solar and biomass installations	13. Adopt a Bristol sustainable energy plan and promote Bristol as an investment opportunity for sustainable energy	LEP, LCSW, UK Trade & Industries	Stephen Hilton	Ian MacDougall Paul Isbell Alex Minshull Kieran Highman	Early 2012	Installed capacity	Within Service Budget	Indirect savings
	14. Promote solar PV update through an online rooftop solar resource map	Blom UK & Sun Area Bristol Solar Group	Stephen Hilton	Steve Marriott Kieran Highman	Ongoing	Number of PV installations in Bristol	Revenue £35k ext. funded	Indirect savings
	15. Procure the construction of 2 large wind turbines at Avonmouth	Wind farm developer	Alun Owen	Paul Isbell Indira Norton	On-going	Energy generated, CO ₂ saved, financial return.	Capital: £9.4m	6,600
	16. Modernise street lighting by installing more efficient, higher quality white light systems in Bristol's 34,000 streetlights.	Named contractor	Peter Mann	Adam Crowther Steven Thomas	Phase 1 April 2011- Oct. 2012	Energy, financial and CO ₂ savings	Capital: £4m	Full programme 4, 800
4. Integrate sustainability and carbon & energy targets into all council projects, programmes and strategies.	17. In new build and / or refurbishment projects, meet the adopted Schools Sustainability Specification, including a requirement to reach BREEAM 'very good' as a minimum, &	Local Education Partnership CYPS SCANSKA	Craig Bolt	Mick Branaghan Bob Rutherford (LEP)	Ongoing	Schools energy data Sust. Design Spec. KPI's 15, 17, 28 Asset Management Team data	Capital: £500k	Savings will vary for each new project

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO ₂ emissions (t)
	'excellent' where possible							
	18. Develop standards for BCC developments & disposals, including contractor standards, and implement through the design and procurement process		Alun Owen	Alex Minshull Geoff Robinson John Thompson Christine Storry	TBC	Number of developments meeting standards	Within Service Budget	Unquantifiable
Planning								
5. Create & implement a low carbon & energy resilient planning policy framework & development management process	19. Deliver the Bristol Core Strategy and integrate energy, carbon and adaptation into all planning decisions		Zoe Willcox	Sarah O'Driscoll Celia Beeson	Ongoing	LDF Annual Monitoring Report	Within Service Budget	Savings will be indirect
	20. Deliver the Bristol Central Area Action Plan, including action on Climate Change & setting standards for sustainable construction		Zoe Willcox	Sarah O'Driscoll Mike Wilberforce	Consultation in Feb. 2012; Adoption in late 2013	Local Development Framework Annual Monitoring Report	Within Service budget	Savings will be indirect
Green Digital Economy								
6. Use our strategic influence & partnerships to help create a low carbon economy & promote national & local business resource	21. Act as a conduit for the Local Enterprise Partnership (LEP) to help Bristol achieve its' carbon targets, including the Enterprise Zone	West of England LEP	Stephen Hilton	Paul Taylor	Ongoing	TBC	Pending outcome of 2012 LEP discussion	Indirect savings

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO₂ emissions (t)
	22. Deliver Think Future Now – a collaborative project to green Bristol's creative industries	Bristol Media, Forum for the Future, South West Screen, Creative Industries i-Net	Stephen Hilton	Lorraine Hudson	Runs to August 2012	No. of companies signed up to scheme	Revenue: £35k	Indirect savings
	23. Green Capital Partnership support for business action on environmental performance improvement	Green Capital Partnership Forum for the Future	Stephen Hilton	Darren Hall Simon Billing (F4F)	2012/2013	Green Capital & W of E Carbon Challenge membership data	£10k	Pending project completion
	24. Commission a resource efficiency advice & support programme for Bristol small businesses	DCLG & Contractor	Stephen Hilton	Robin McDowell Steve Marriott	Sept 2011 – March 2013	100-200 businesses to be assisted	£300k (inc. EU contribution)	1,400
	25. Review Total Place Carbon Project recommendations & identify actions to take forward	WoE LEP, WoE Local Authorities	Stephen Hilton	Alex Minshull	Action plan by March 2012	TBC	TBC	TBC
7. Work with public sector organisations to reduce their direct and supply chain carbon emissions and to capitalise on opportunities to develop a low carbon economy	26. Disseminate reports of our procurement carbon foot-printing project via our website, including guidance for local authorities & other public sector bodies	South West Sustainable Procurement Network, DECC	Will Godfrey	Christine Storry	Website Launched Autumn 2011; ongoing	None	Within Service budget	Indirect savings
	27. Develop a carbon reduction strategy for		Will Godfrey	Christine Storry	Commenced October	Via 2011 report on	Within Service	Pending Programme

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO ₂ emissions (t)
	BCC commissioning & procurement (See also Strategic Activity 19)				2011; ongoing	corporate contracts	budget	commencement
	28. Engage with key suppliers in respect of carbon management, both within BCC's corporate contracts & identified priority areas	Key suppliers	Will Godfrey	Christine Storry	Commenced January 2012; ongoing	Via 2011 report on outsourced services	Within Service budget	Pending Programme commencement
	29. Develop the 'Alternatives to Travel' pilot scheme	JMP Consultants Ltd.	Will Godfrey	Ian Parr Lisa MacCuish	Planning stage to be completed by March 2012	TBC	TBC	Not quantified at this stage of the project
8. Develop Bristol as a Smart City by strengthening digital infrastructure & using smart technologies to deliver carbon savings & economic benefits	30. Develop Smart City action plan		Stephen Hilton	Lorraine Hudson Mhairi Ambler	July 2012	CO ₂ savings from projects	Dependent on projects selected	Pending program commencement
	31. 'Smart Grid' project	Western Power Distribution, Toshiba, University of Bristol & University of Bath	Stephen Hilton	Lorraine Hudson Paul Barker Dave Cowley	Commenced Jan 2012; will run for 3 years	Will deploy technology in 10 schools, 30 homes & 1 office	Funded by: Ofgem £2,204,000 Project partner: £280,000	Pending program commencement
	32. Deliver innovative ICT solutions (incl. smart metering) in social housing to save energy, shift consumption to off-	Knowle West Media Centre, IP Performance Ltd, Toshiba	Stephen Hilton	Kevin O'Malley	2010-2013 - 36 month program, full live roll out January/	Energy, cost and CO ₂ savings	Project funded under CIP-PSP-ICT programme European	20% savings in energy use with corresponding carbon emissions

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	peak & reduce carbon	Research Europe Ltd, other European Partners.			February 2012		Commission has granted a total of €263,540 to BCC to cover staff time. €128,867 received to date	[and costs] reduction
	33. Deliver BCC's Green ICT Strategy and share best practice with other organisations through Bristol Green Addict		Paul Arrigoni	James Spreadbury	2011-2014	See Green ICT Strategy document for details	Part of ICT investment budget	750
	34. Deliver 'Source Bristol' electric vehicle infrastructure projects	Local businesses	Stephen Hilton	Pete Fryer	Due for commissioning completion by end March 2012	Carbon emissions associated with electricity consumption, off-set by fossil-free generation	£80k £550k 2012-2015	Pending start of all projects Commenced January 2012
9. Promote & develop Bristol's environmental technology, innovation & services sector	35. Grant fund LCSW to enhance Bristol's environmental & low carbon technologies & services sector	Low Carbon South West	Stephen Hilton	Robin McDowell Amy Robinson LCSW	Sept 2011 – Aug 2012	Agreed targets	£20k	Indirect savings
	36. Deliver the Environmental Technologies i-Net business plan & work with other i-Nets to integrate low carbon objectives	UWE, RegenSW, University of Bristol & University of Exeter	Stephen Hilton	Ian MacDougall Robin McDowell Steve Marriott	South West targets over 3 years ending Sept 2013	TBC	Total £2m (BCC £0.07m)	Pending via businesses assisted
	37. Support solid wall	Energy	Steven	Dave	Sept. 2011	No of	£5m	Part of

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	insulation and PV sectors through the SDEEMS project.	Saving Trust	Barret/ Mary Ryan	Cowley Mareike Schmidt	– March 2014 (tbc)	installations, energy, carbon & cost savings	50% EU funding	savings under Action 4
	38. Develop a sustainable construction & energy efficiency skills & supply chain initiative	Energy Saving Trust, Re-Fit consortium, City of Bristol College	Stephen Hilton	Karen King Darren Perkins	Ongoing	Companies & jobs rather than carbon	£183k	N/A
	39. Develop a Hydrogen Action Plan for Bristol	Green Capital, LCSW, Auriga, Bristol Port	Stephen Hilton	Robin McDowell Kieran Highman	Ongoing	N/A	£10k	Indirect savings
Transport & Travel								
10. Implement citywide travel & transport programmes, plan land use and deliver integrated, sustainable transport systems to reduce transport energy use and carbon emissions in Bristol	40. Deliver the schemes & strategies in the Joint Local Transport Plan (JLTP) 3	West of England Local Authorities/LEP	Peter Mann	Alistair Cox	2012 – 2015	CO ₂ reduction	£12m (BCC) Indicative integrated transport block grant over 3 yrs. Also included in action 43	81, 000 tonnes over 3 years for Actions 40 & 41; 27, 000 tonnes first year saving
	41. Deliver Local Sustainable Transport Fund projects (First part of bid successful [£5 M]; pending outcome of bid remainder)	West Of England Partner Authorities, Health Authority, LEP & key stakeholder	Peter Mann	Alistair Cox	2012-2015	CO ₂ reduction	£50m (Joint gross cost incl. D f T funding and local contrib.)	

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		s in the private & third sectors						
	42. Deliver Ashton Vale to Temple Meads & Bristol City Centre Rapid Transit	North Somerset Council	Peter Mann/ Alun Owen	Bob Fowler (SRO)	Commencing 2015	CO ₂ reduction	£49.9m (Joint gross cost incl. DfT funding & local contrib.)	18,583 tonnes overall. 1,400 tonnes first yr. saving
	43. Deliver North Fringe to Hengrove Package	South Gloucestershire Council	Alun Owen	Chris Sane (S. Glos.) SRO	Commencing 2016	CO ₂ reduction	£102m (Joint gross cost incl. DfT funding and local contrib.)	46,515 tonnes overall. 3,500 tonnes first year saving (based on 8% discounting)
	44. Deliver South Bristol Link	North Somerset Council	Alun Owen	Karuna Tharmananthar (NSC) SRO	Commencing 2016	CO ₂ reduction	£44.6m (Joint gross cost incl. DfT funding & local contrib.)	19,264 tonnes overall. 1,500 tonnes first year saving (based on 8% discounting)
	45. Enhance local rail services through the new Great Western Franchise	Network Rail DfT	Peter Mann	Alistair Cox	Commences 2012	CO ₂ savings	Within DfT Franchise	tbc
	46. Review Residents Parking		Peter Mann	Terry Bullock	Commencing 2012/2013	CO ₂ savings	£750k	c. 1,000 tonnes overall
11. Develop & deliver our corporate travel & transport policies	47. Develop a Corporate Travel project to address Fleet usage & emissions		Peter Mann	Andrew Clements	Ongoing	Based on annual Council fleet emissions of 2,000 tonnes & 1% p.a. reduction	Within Service budget	20 tonnes CO ₂ reduction p.a.

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	48. Work to achieve the European Green Public Procurement Policy Core requirements for Vehicle Purchasing	Vehicle & equipment suppliers	Peter Mann	Nick Gingell	Commenced Feb. 2012; ongoing	Vehicle & Equipment specifications and KPI's	Within Service Budget	See Action 49
Adaptation & Resilience								
12. Review the vulnerability of all council services to peak oil, energy security & climate change & improve their resilience	49. Manage climate change threats & opportunities using the Climate Change Risk Register, Corporate Risk Guidance & Eco-Impact Assessment. Production of a Climate Adaptation Annual Report.	Public Sector Agencies	Stephen Hilton	Lucy Darkin	Climate Change Risk Register, reviewed annually; Climate Adaptation Annual Report, reviewed annually	Climate Change Risk Register Corporate risk guidance Climate Adaptation Annual Report	Within Service Budget	Indirect savings
	50. Include peak oil & energy security criteria in Eco-Impact Assessments		Stephen Hilton	Steve Ransom Mark Leach	Ongoing	Updated Eco-Impact Assessment loaded onto The Source	Within Service Budget	Indirect savings
	51. Update Bristol's Emergency Plans, Business Continuity process & Critical Services Plans with reference to peak oil, energy security & climate change		Rick Palmer	Simon Creed James Gillman Lucy Darkin Claire Craner-Buckley	Ongoing, reviewed annually	Critical Services review data Number of Critical Service Plans taking account of extreme weather events	Within Service Budget	Indirect savings
13. Work with	52. Work with service	Local	Tracey	Colleen	Ongoing	Percentage	Within	Pending

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO₂ emissions (t)
15. Support action by individuals, communities, Neighbourhood Partnerships & community, voluntary & social enterprises on climate change & peak oil response	56. Work with public sector partners through the Bristol Partnership, on carbon reduction, adaptation & resilience programmes	Bristol Partner-ship Public sector partners	Stephen Hilton	Steve Marriott	Ongoing	See May report card for latest available info.	Within Service Budget	Indirect savings
	57. Green Capital Partnership support for community action through grant funding & workshop support	NP's Green Capital Partnership Pride of Place project team	Stephen Hilton	Darren Hall Elaine Ashley	2012/13	Number of successful projects	Within Service Budget	Indirect savings
	58. Develop a Green Volunteers Programme	Bristol Natural History Consortium (Leading/Savita Custead)	Stephen Hilton	Steve Marriott Graham Starmer	03/2011 – 03/2013	1000 volunteers to be recruited by 03/12	£41k BCC £13k	Pending project completion
16. Work with schools to improve their sustainability through physical infrastructure, management systems and curriculum development	59. Deliver the 'Green Finger' schools project & 'Smart Spaces'	Energy Management Unit. Resource Futures, Greenpath Solutions, Sustainability Team; Systemslink	Paul Isbell Michele Farmer	Ian Watkins Roddy Black Russell Tanner	Green Finger ongoing; Smart Spaces 3 years commenced 01/01/2012	Amount of energy [and corresponding carbon] saved	Green Finger: EMU £7,000, Green Capital Funding £7,000, Sustainability Team £3000; Smart Spaces: €138,000 (EU	Schools emissions included in municipal buildings data

Strategic Activity	Action	Delivery Partners	BCC Lead	Delivery Contacts	Timescale	Metrics	Budget	Savings in annual CO ₂ emissions (t)
							Contribution)	
17. Work with our cultural partners to improve their carbon performance and raise awareness of climate change issues	60. Work with the Cultural Consortium to develop an environmental improvement programme for the cultural sector	Cultural Consortium	Graham Sims	Louise Baker	Ongoing	Number of organisations signed to environmental improvement programmes	Within Service budget	Savings profile pending agreement of program details
	61. Develop a Green Tool Kit to support delivery of public events		Peter Holt	Peter Holt Peter Watts Tanya Saker Events Manager (tbc) BCC Graduate Trainee	Ongoing	Events Licensing data Bond Scheduling data Number of events for which Tool Kits issued	Within Service budget	Indirect savings
	62. All organisations granted Key Arts Provider (KAP) status will agree to work to meet BCC Baseline Standards including environmental criteria; this will be tested via Service Level Agreement Performance Indicators (PI's)		Graham Sims	Louise Baker Gillian Douglas	Ongoing in 3-yearly rounds	Key Arts Funding data Performance of successful applicants against environmental performance criteria	Within Service budget	Pending - savings likely to be indirect
Waste & Recycling								
18. Increase resource efficiency by helping residents reduce, recycle &	63. Deliver the BCC Headline Waste Strategy on citywide waste, with a focus on		Tracey Morgan	Pam Jones Giovanni Lopresti John	Ongoing	NI data Various data associated with delivery	New waste collection contract: £13.8 m/p.a	Pending bi-annual data reviews

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compost their waste, developing waste treatment innovations & improving sustainability of BCC trade & street waste collection & disposal services	biological waste issues			Whelan /Dave Wright Simon Graham		of Headline Waste Strategy. Contractor data. Use DEFRA CO ₂ for Waste excel calculator	New waste disposal contract: £5 m/p.a.	
19. Increase efficiency of the Council's internal waste management, including procured goods & services	64. Reduce waste arisings & increase reuse & recycling levels within BCC buildings, depots & operational teams	Waste contractors	Christine Storry	Sylvia Martin Steve Ransom	Ongoing	CO ₂ from waste produced		Pending bi-annual data reviews
	65. Work with existing & new contractors to reduce waste arisings resultant from BCC procured goods & services through specifications, and contract management.	Goods & services contractors	Christine Storry	Christine Storry Steve Ransom Giles Liddell Matt Sands	Ongoing	None		