READING CLIMATE CHANGE STRATEGY 2013-2020, ACTION PLAN 2018

Theme 1: ENERGY SUPPLY

The heavy dependence on fossil fuels to provide energy in the UK has been identified as our most significant impact on global climate change. It is therefore crucial that we consider how our energy is produced, supplied and consumed in order to reduce our impact on climate change and to meet the needs of our society in the long term.

To achieve this, we need to be efficient with the energy we use and find clean and 'green' ways of producing heat and electricity. Firstly, we must conserve energy by insulating our homes and reducing our consumption of electricity through switching off and improving the efficiency of our energy consuming devices. Secondly, we must generate a larger proportion of our energy from renewable sources like wind and solar. Thirdly, we must consider the right sort of infrastructure to provide energy locally. This will involve heat networks that provide low carbon heat directly to buildings and a smart grid where the right amount of energy is generated and little is wasted.

Vision by 2020: By 2020, Reading will use less energy and have cleaner, greener supplies of electricity and heat. We will have increased the amount of locally generated renewable energy. Local smart grids and power plants (decentralised energy) will start to be developed to offer more responsive, cost effective, low carbon energy to consumers. Smart meters will be installed across the borough to improve monitoring and control of local energy supply. Communities and businesses will work together to reduce their energy consumption and develop low carbon energy solutions.

SUMMARY OF STRATEGIC PRIORITIES

- Reduce energy consumption in Reading
- Decarbonise energy supply of Reading

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic priority 1: Reduce energy consumption in Reading					
T1SP1.1[1]	Produce report identifying the commercial and public sector electricity consumption in Reading and identifying key opportunities for energy efficiency		Report	RBC	University of Reading (Technologies for Sustainable Built Environment Centre)

---

[1] T = theme; SP = strategic priority

READING CLIMATE CHANGE STRATEGY 2013-2020, ACTION PLAN 2018

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T1SP1.2	Analyse report which identifies the commercial and public sector electricity consumption in Reading. Identify specific technologies that are commercially viable for increasing energy efficiency.	End of 2017	Report completed	Reading Borough Council (RBC)	University of Reading (Technologies for Sustainable Built Environment Centre- TSBE centre)
T1SP1.3	Develop and support a group of organisations to invest in their own energy efficiency programmes	End of 2017	First event planned for 02/17	RBC; UKCIC	University of Reading; Thames Water; large retail stores
T1SP1.4	- Deliver the Council Energy Plan Programme - Deliver BEEP	2020	- Low carbon Street lighting due for completion in Spring 2017- Delivery of BEEP	RBC	Public sector group
T1SP1.5	Continue to offer schools support on energy efficiency and renewable energy investment	2017-2020	- Encourage uptake of SEELS (SALIX Energy Efficiency Loans) funding for schools - Expansions complete to energy efficient standards - Reinstate Business Energy Management System - Support Energy Performance Certificates implementation and Air Conditioning Certification	RBC	Reading Schools
T1PS1.6	Encourage and increase the number of smart meters and other resource monitoring/ saving devices installed in buildings/households and other energy/resource using facilities across	2018-2020		RBC	University of Reading

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
	Reading. Encourage their use in Green Park, Apex Plaza				
Strategic priority 2: Decarbonise Reading's energy supply					
T1SP2.1	Produce a model that identifies where electricity loads in buildings can be reduced at peak periods		Engineering Doctorate Thesis with Technologies for Sustainable Built Environment Centre	RBC	University of Reading- TSBE centre.
T1SP2.2	Complete heat mapping exercise	August 2017	Completed report	RBC	RCCP/HNDU
T1SP2.3	Develop district energy projects in Reading amongst partners.	2020	- Initial report on options for specific sites - Business planning for sites or private sector driven through planning/investment - Encourage private sector investment into District Energy Networks in Reading through planning	RBC	Private sector
T1SP2.4	Disseminate information about complete district energy schemes	March 2016	University of Reading scheme	University of Reading	RBC
T1SP2.5	- Produce a renewable energy investment strategy to provide 8% of local power, identifying most investable renewable energy in borough. - Aim for 100% of Reading's energy to be produced through renewable sources by 2050	- 2020 - 2050	- Evidence base complete - Workshops with partners - Report to Reading Climate Change Partnership (RCCP) - Consider use of solar photovoltaics, solar thermal, ground source heat pumps, wind, anaerobic digestion, biomass and gasification processes, and hydropower	Thames Valley Energy	RBC

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T1SP2.6	- Deliver Council Energy Plan Programme – Renewable energy projects to achieve 15% of council energy use by 2020 - Includes Photovoltaic Solar panels and biomass heating.	2020	- 1st Biomass project March 2014 - Solar photovoltaic on housing Aug 2014 - Targets for photovoltaic and biomass TBC	RBC	Reading Sustainability Centre
T1SP2.7	Work with small businesses to encourage uptake of renewable energy	End 2018		RBC, Institute for Sustainability, European Projects	
T1SP2.8	Encourage local communities and businesses to support the development of renewable energy in their communities	July 2014	- Identify potential buildings and locations, and interested parties - Provide technical advice to interested groups	RBC; Reading Voluntary Action, Greater Reading Environmental Network, Transition Town Reading	
T1SP2.9	Create a number of community showcase facilities in Reading and run tours	2018	Identify potential buildings, Reading International Solidarity Centre (RISC) solar and Green Park wind turbine	RBC	Reading International Solidarity Centre; Green Education
T1SP2.10	- Identify planning sites that are suitable for decentralised energy networks. Implement policy to incorporate district energy into appropriate planning sites. - Incorporate these policies into Local Plan		Shortlist of suitable sites identified.	Reading Borough Council, Thames Valley Energy	Climate Berkshire
T1SP2.11	Produce RBC Energy and Carbon Management Policy		Report to Strategic Environment, Planning and Transport committee March 14	RBC	
T1SP2.12	Build local supply chains for technologies by building local skills and engaging local companies in larger contracts			RBC; Institute for Sustainability	Thames Valley Energy
T1SP2.13	Attract local and inward investment options for renewable energy development			RCCP	RBC

Theme 2: LOW CARBON DEVELOPMENT

The quality of the built environment is of crucial importance to our contribution to climate change, through reducing the amount of energy we use in our buildings. Insulating and improving the efficiency of our existing buildings and building highly efficient new buildings are both critical to reducing our energy consumption and carbon footprint, and to reducing energy costs and addressing 'fuel poverty'. To adapt to climate change and achieve sustainable development, long term economic, social and environmental strategies must continue to evolve and guide the revision of spatial development policies for the future.

Vision by 2020: By 2020, Reading will have reduced its energy consumption from buildings through the improved design, construction and refurbishment of existing buildings. Reading will have improved planning policies in place that reduce energy consumption and will have improved processes to ensure compliance in new-build and renovations. Council policies will emphasise local retrofit and renewable energy programmes and other ways to reduce emissions from the local area. Planning policies and standards for buildings will address energy use, and the local effects of climate change. Strategic planning will assess the long-term implications of development trends on reducing carbon emissions and adapting to the effects of climate change.

SUMMARY OF STRATEGIC PRIORITIES

- Continue to develop planning policies that support the reduction of greenhouse gas emissions directly and indirectly from the borough
- Retrofit energy efficiency measures into Reading's buildings
- Develop and implement adaptation measures to reduce the impact of high and low temperatures

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Continue to develop planning policies that support the reduction of green-house gas emissions directly and indirectly from the borough					
T2SP1.1	Ensure new buildings in Reading meet high standards of energy efficiency in design and construction & install the most appropriate on site renewable energy generating technologies; specifically, review available and emerging standards	Annual	- Sustainable planning policies in place -Number of renewable	Reading Borough Council (RBC)	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
			installations		
T2SP1.2	Research potential to promote high standards of energy efficiency such as Minergie or Passive House	September 2018	- Find appropriate funding - Develop a study	The Reading Sustainability Centre (TRSC); Tony Cowling	
T2SP1.3	Establish a 'Zero Carbon Homes' mechanism with a local carbon offsetting fund.	September 2019	Planning policies in place and fund established.	RBC	
T2SP1.4	Establish and maintain a local public register of Energy Performance Certificates in the Borough – to track progress and to celebrate success and assist with Home Energy Conservation Action (HECA) report	September 2018 and annual up-date	Register established	RBC (EST to be commissioned initially)	RCCP to fund bi-annual updates.
T2SP1.5	Derive targets for progress with energy saving measures in Reading – to 2020 and 2030 – in line with Climate Change Committee scenarios and evaluate options for retrofit	Initial draft September 2018	Report with recommendations	RBC	
T2SP1.6	- Continue to review strategic plans for economy, housing, population, industry etc. to ensure they are compatible with local and national emissions targets - Revise strategic plans to manage the amount, type, and location of housing and business development in and around Reading to deliver a low-carbon (and low-cost) economy	Ongoing	Consultation response from RCCP to Local Plan	RCCP	Climate Berkshire; Berkshire Local Nature Partnership
T2SP1.7	Revision of LDF to include policies on density, scale, location and distribution of development to deliver a low-carbon economy.	September 2019	Revision of planning policy documents	RBC	University of Reading
T2SP1.8	Promote research in the area of Energy and Built Environment, Low Carbon development etc.	On going	New research development	University of Reading	RBC

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T2SP1.9	Review policies on 'green roofs and walls' in LDF. Include guidance for developers, planners and public on their costs and benefits so that their relative merits for different policy objectives relating to climate change (and other benefits/dis-benefits) can be taken in to account in design and planning	September 2020	Planning policy review Revision of Sustainable Design and Construction SPD	Reading Borough Council	University of Reading
Strategic Priority 2: Retrofit energy efficiency measures into Reading's buildings					
T2SP2.1	Review guidance available for householders and businesses on retro-fitting renewable energy and energy-saving technologies, including technologies, financial assistance such as ECO scheme, and standards such as EnerPHit	December 2018	- Regularly updated web pages Information and links on Reading Climate Action Network(RCAN) - Active publicity campaign	Reading Climate Change Partnership (RCCP)	TRSC; Draught Busters; Tony Cowling
T2SP2.2	HECA report- use information to target energy saving activity and action	March 2019	HECA report	RBC	Housing associations and landlord groups
T2SP2.3	- Develop case studies and show homes networks that encourage renovation and re-use of empty buildings rather than building new homes - Explore links to refurbishments of older buildings	March 2019	Establish specific show homes in Reading through volunteers and/or where funding available - possible link to heritage open days	RCCP	Superhomes network; Reading community groups
T2SP2.4	Renovate existing Council properties to be very low carbon to recognised standards such as EnerPHit.	Ongoing	Report on numbers and standards achieved	RBC	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T2SP2.5	Evaluate options to encourage retrofit in domestic buildings	March 2019	Report on progress	RBC	
T2SP2.6	Provide service to help house holders – especially those most vulnerable to fuel poverty, and in particular those that are at imminent health risk - to access Energy Company Obligation (ECO) subsidies, energy efficiency improvements, guidance on behavioural change, and other services/funding available	Ongoing	- Continue Winter Watch initiative - 1 x staff available to provide service - Reach at least 100 households in need - Investigate flexible ECO	RBC	Energy companies and switching services; Draught Busters; TRSC
T2SP2.8	- Work with landlords, lettings and managing agents to ensure minimum EPC compliance and encourage improvements in the sector	September 2018	Propose actions to encourage early adoption and enforce compliance	RBC	
Ts2SP2.9	Monitor improvements in energy use achieved by retro-fit measures to Council-owned buildings.	Annual	Annual report	Reading Borough Council	
Strategic Priority 3: Develop and implement adaptation measures to reduce the impact of high and low temperatures					
T2SP3.1	- Assess care homes for risk of heat waves - implement measures to ensure that care customers are not at risk of hot conditions - develop low carbon cooling approaches for care homes	Ongoing	Inclusion in Business Continuity plans	RBC	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T2SP3.2	Ensure public spaces and park-areas have sufficient shade and places to rest to reduce risks of over-exposure to sun and potential health impacts, through implementation of Tree Strategy (see Natural Environment chapter and Action Plan)	Ongoing – six-monthly report	- 10% increase in canopy cover target from Tree Strategy - Evidence of CC-aware planning for shade	RBC	Tree wardens

Theme 3: NATURAL ENVIRONMENT

The natural environment plays a key role in making our urban spaces liveable, both for people and wildlife. In response to climate change, communities of wild animals and plants will have to relocate from places that are becoming unsuitable for their survival to places where conditions are becoming more favourable. The way that open spaces and parklands are managed can have a significant impact on wildlife corridors and habitats and consequently on wildlife's ability to survive. Tree planting, for example, can help mitigate both the 'heat island' effect (where an urban area is significantly warmer than its surrounding rural areas due to human activities) and the emissions that impact on both climate change and air quality.

The natural environment should be managed and developed to respond to the threat of climate change, including establishing the role of the local community, to make Reading a better place for people and for wildlife.

Vision by 2020: By 2020, Reading will have a thriving and interconnected natural environment, with links and stepping stones, such as parks, back gardens and river corridors. Wildlife will be able to live in and move through the urban environment, allowing it to adapt to a changing climate. The people of Reading will be active guardians of our natural habitats, and the community will be more involved in the management of local green spaces.

SUMMARY OF STRATEGIC PRIORITIES

- Improve the quality and connectivity of natural habitats
- Encourage local community groups and businesses to become more involved in the management of local green spaces

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Improve the quality and connectivity of natural habitats					
T3SP1.1[2]	Review the Reading Biodiversity Action Plan and update the plan to take account of climate change	2020	New Biodiversity Action Plan in 2020	Reading Borough Council (RBC)	Nature Nurture, Outdoor Classrooms; Thames Valley Records Centre

---

[2] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T3SP1.2	Monitor the proportion of Local Wildlife Sites in positive conservation management in line with government guidance on Single Data List 160	Ongoing	- All RBC sites to be in positive conservation management by 2015 - RBC to encourage other landholders to manage their sites	RBC	Other landowners as appropriate. Econet; 'Friends of Parks' groups; Thames Valley Environment Record Centre
T3SP1.3	Keep under review, in light of climate change science: Tree Strategy, Orchard Project, Open Spaces Strategy, Thames Parks Plan and the document 'Reading Waterspace - A Vision for the Thames and Kennet'	Ongoing	Status report. Progress report on each project annually.	Reading Climate Change Partnership (RCCP)	RBC
T3SP1.4	- Identify areas of grass land of highest habitat value and manage as meadow - Align this action with National Pollinator Strategy; Coronation Meadows Strategy	Ongoing	- Staff training / awareness days - Statement about grass cutting policy on website	RBC	Private individuals and volunteer groups; Department for Environment; Food &Rural Affairs; Coronation Meadows
T3SP1.5	Help facilitate the work of the Berkshire Local Nature Partnership in respect of Reading sites	2020	Input to Berkshire Local Nature Partnership	RBC	Berkshire Local Nature Partnership
T3SP1.6	Undertake periodic ecological surveys of Reading's Local Wildlife Sites and review status in line with government and local guidance	Each site is surveyed as a minimum every 5 years	Annual review of surveyed site status	RBC	Thames Valley Environmental Records Centre; Nature Nurture
T3SP1.7	Periodically update the Berkshire phase 1 habitat map	2018	Periodic review approximately every 5 years, next due circa 2018	Thames Valley Environmental Records Centre	RBC; Nature Nurture

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T3SP1.8	- Raise awareness of Biodiversity Opportunity Areas and seek opportunities to engage with landowners and encourage them to manage land in accordance with the objectives for their area - Promote Green Park as a positive case study for its commitment to biodiversity	Ongoing	Progress report and plan	Berkshire Local Nature Partnership	Thames Valley Environmental Records Centre; RBC; Green Park
T3SP1.9	Encourage groups, individuals and organisations to share ecological data with relevant Research Centres so that this information can be used to inform studies into the effects of climate change on biodiversity Promote smart technologies and applications to increase ecological indicators (http://www.brc.ac.uk)	Ongoing	Annual report from Thames Valley Environmental Records Centre to RBC Update information about applications available to monitor ecological data	Thames Valley Environmental Records Centre	http://www.brc.ac.uk
T3SP1.10	- Assess adequacy of control over conversion of front gardens to parking - Align this work to the Royal Horticultural Society's 'Greening Grey Britain' campaign, information on arid and swales planting.	January 2020	Review of policy to committee with recommendations	Royal Horticultural Society	RBC
T3SP1.11	Raise awareness of the importance of green infrastructure for adapting to climate change and the economic benefits it provides	March 2020	Planning advice Produce a briefing for multi-agency use in publicity	RBC	University of Reading;; Nature Nurture, Reading Outdoor Classrooms

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T3SP1.12	Assess and seek improvement of waterways, river and canal banks as wildlife corridors	March 2020	Identify improvements to managed areas.	RBC	Environment Agency; Berkshire Local Nature Partnership; Canals and Rivers Trust; Thames Valley Record Centre; Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust

Strategic Priority 2: Encourage local community groups and businesses to become more involved in the management of local green spaces

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T3SP2.1	Sustain and grow local wildlife activities, especially for children	Ongoing	Wildlife community events (Estimated 94 meets in 2012)	Econet; Globe Groups	Connect Reading (businesses); Nature Nurture; Green Trees, Forest School Network; Food 4 Families
T3SP2.2	Encourage teaching about wildlife in schools	Ongoing	Provide training and information for teachers; look at expanding Reading's Outdoor Classroom.	RBC/ other partners	Nature Nurture; Green Trees Education; Conservation Volunteers Berkshire; Food4Families, RISC
T3SP2.3	Highlight and publicise guidance on wildlife gardening with assistance from partners	Jan 2020	- Guidance on website - Establish a channel for local expertise sharing	Econet; GLOBE groups (Oxford Road Community Gargen & Ridgeline)	Berks Bucks And Oxon Wildlife Trust; Econet; Green Trees, Royal Horticultural Society; Food4Families

Theme 4: WATER SUPPLY AND FLOODING

A changing climate is expected to mean more extreme weather events such as intense rainfall and floods, heat-waves and droughts. These impacts are predicted to increase over time, with winters getting warmer and wetter, while summers become hotter and drier. Hotter, drier summers will tend to increase demand for water and reduce supply, while more variable winter rainfall may increase the frequency of droughts despite the increase in average rainfall. As well as affecting water supply, this could also have significant impacts on biodiversity and the natural environment.

Action plans will set out measures to adapt to the threats to water supply and the risks of flooding.

Vision by 2020: By 2020, supply and demand for water will be managed so as to improve the projected 'supply demand balance', reduce the risks of 'temporary use bans' (e.g. hosepipe bans), and reduce the effects on wildlife of poor water quality and of damage to habitat through drought. The risks from changing patterns of rainfall and extreme weather events will be better understood and people will be well prepared with homes and businesses becoming increasingly resilient.

SUMMARY OF STRATEGIC PRIORITIES

- Manage demand for and supply of water, to reduce the expected impact of water shortages on consumers and on wildlife
- Reduce the risk of damage due to flooding
- Develop an adaption plan for Reading so we can plan for extreme events associated with the changing climate

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Manage demand for and supply of water to reduce the expected impact of water shortages on consumers and on wildlife					
T4SP1.1[3]	Share understanding of Thames Water's - Water Resource Management Plan	2020	- Make sure Thames Water (TW) understand and factor in Reading's growth estimates - Share the good work TW are doing to factor in	TW	Environment Agency (EA)

---

[3] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
			climate projections - add links to Reading Climate Action Network (RCAN) website		
T4SP1.2	Ensure plans are in place so that Reading is ready to respond to a drought situation	2020	- Make sure drought resilience options are included in TW's Water Resilience plan - Ensure we are planning for droughts that are extreme enough (factoring in climate projections of more extreme future low river flows) * Incorporate learning from EA lead work on 'Water efficiency in the Southeast'	EA	TW; Reading Borough Council (RBC)
T4SP1.3	Ensure that Reading's Local Plan is compatible with expected availability of water supplies	2018	- If funding can be found, do a water cycle study as part of current Local Plan development - Now the 'code for sustainable homes' has gone, follow Greater London Authority (GLA) recommendations for water efficiency (see Table 2.1 and 2.2 of Housing Standards document on .gov.uk)	RBC	TW; EA
T4SP1.4	Share information with homes and businesses about how to get hold of free water saving devices	2020	- Make links from TW to RCAN website - Help to promote at RCAN events	TW	
T4SP1.5	Incorporate water efficiency measures into RBC internal policies	2020	- Arrange meeting with TW water efficiency manager and RBC - Consider learning from Portsmouth & Southampton retrofit case studies	RBC	TW

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T4SP1.6	Make sure key organisations in Reading are prepared for the next drought	2018	- Communicate the EA 'incident management' approach to managing drought situations with all partners - Run a drought exercise with all partners, Local Resilience Forum (LRF) and key businesses - Consider linking the above with a Heat Wave Alert exercise (e.g. recent Manchester LRF exercise). - Share the learning on RCAN website	EA	TW; RBC; LRF
T4SP1.7	Share information and case studies to help homes and businesses reduce water use	2018	Add info and links to RCAN website: - EA water efficiency guide - TW recommendations for businesses (e.g. staff engagement) - Case studies, e.g. for Clear Water retro fit - TW water saving calculator - TW Water audits for businesses - RBC Carbon Plan - Info from RBC involvement in 'Liquid Assets programme (2006-8)'	TW	RBC; EA
T4SP1.8	Help to raise awareness amongst homes and business about 'how will a drought affect me?'	2020	- Create identifiable case studies - Signpost to EA and TW information on RCAN website - Develop code of conduct when drought is active	TW	RBC; EA
Strategic Priority 2: Reduce the risk of damage due to flooding					
T4SP2.1	Raise awareness of the EA Flood Warning service	2020	- Increase the number of homes and businesses, who are signed-up to receive Flood Warnings, to 70% over the next 3 years - Expand coverage of flood alert/warning service	EA	RBC

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
			to 100% of properties at risk by 2020 - Signpost on the RCAN website - Link to advice on flood awareness, flood prevention measures, evacuation guides, and information about the Flood Warning service		
T4SP2.2	Make sure that all 3 RBC Flood Plans incorporate the latest flood guidance	2018	- Confirm that work from Peter Brett, which is looking at revised EA flood guidance, is incorporated into Flood Plan revision (Oct 2017). - Update as appropriate: Flood Water Management Plan, Strategic Plan, and Flood Response Plan. - Consult or request advice from EA as appropriate	RBC	EA
T4SP2.3	Implement sustainable urban drainage systems (SuDS) in accordance with Planning policies and in delivery of infrastructure	2020	- Make sure all applications that need SuDS (which will be automatically triggered by Planning Application System) demonstrate that they have been successfully installed - Monitor the effectiveness of schemes in post-event debriefs - Ensure any learning points are added to appropriate plans	RBC	
T4SP2.4	Review updated flood maps, which are to be revised from 2018	2020	- Add notification to RCAN when they change - Add links to EA flood maps on .gov.uk 'What's in your back yard' - RBC & EA to check if the National Flood Risk Assessment (NARFA) flood bands have changed for homes / businesses in Reading, and communicate as appropriate	RBC	EA

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T4SP2.5	Ensure that drainage design is sufficient to allow for increased intensity rainfall in new developments and infrastructure construction/repairs	2020	- Make sure new EA guidance has been incorporated in RBC planning policy (e.g. for 20%-40% increase in rainfall intensity) - All new development designed to meet this - Agree target to fix percentage of existing problem areas	RBC	TW; EA; Scottish and Southern Electricity (SSE)
T4SP2.6	Share advice on being prepared for an incident	2018	- Share/signpost link to the "Thames Valley: Are you ready?" booklet on RCAN website - Link this with EA advice (from T4SP3.1)	RBC	EA
T4SP2.7	Control and minimise development on the floodplain	2020	- RBC will apply sequential test to confirm no alternatives are available outside of flood zones - RBC to consult the EA as appropriate	RBC	EA
Strategic Priority 3: Develop an adaptation plan for Reading so we can plan for extreme events associated with the changing climate					
T4SP3.1	Check environmental monitoring networks (e.g. river flow and rainfall) are fit for purpose, well maintained and producing quality assured data	2018	- Create map of monitoring - Publish on RCAN with links to EA/Centre for Ecology and Hydrology	EA	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T4SP3.2	Develop the first iteration of an 'Adaptation Plan for Reading'	2020	- Use 'pathways-based' adaptive planning techniques pioneered in the EA (TE2100 and Scenario Testing projects) - Include low flow (drought), surface and fluvial flood, and temperature (e.g. heat wave) indicators - Consider high climate change and growth projections - Plan to 2100	EA	

Theme 5: TRANSPORT

Every citizen's choice of transport impacts on climate change, as well as road safety, air quality, and noise pollution. An effective transport system is fundamental to building sustainable and thriving local communities. Reading's excellent links to national road and rail networks as well as Heathrow Airport, have contributed towards the town becoming a major population and employment centre within the South East. However, the ability to continue to attract inward investment into Reading, while at the same time reducing carbon emissions, depends on efficient management of the transport network as demand for travel grows. The challenge is to minimise transport's contribution to greenhouse gas emissions, through reducing the need to travel, encouraging the use of more sustainable modes of transport and alternative energy sources, and reducing congestion. The 'Transport' theme considers how people move around, including 'active travel' such as walking and cycling, public transport such as buses and trains and private transport such as cars and vans. It also reviews the infrastructure that allows people to travel, and the impacts of travel choices not only on climate change, but also on other aspects of the environment.

Vision For 2020: By 2020, we will have achieved targeted and measurable reductions in greenhouse gas emissions from transport and created an infrastructure network which supports and encourages low carbon travel, while improving air quality. Reading will have a healthier and more active population as more people choose to walk and cycle for short journeys whether to the town centre or other local destinations. The transport network will be less congested and safe for cyclists and pedestrians of all ages and abilities. People will use information which is easily accessible and provided in innovative ways to make smarter choices in the way they travel. Public transport will be efficient, reliable and affordable. Low carbon travel will be the preferred choice for people and goods moving around the town. Reading will have a reputation as a beacon for sustainable travel.

SUMMARY OF STRATEGIC PRIORITIES

- Develop and manage a transport infrastructure which supports low carbon travel options
- Reduce energy use and embodied energy in transport infrastructure
- Reduce the air pollution derived from motor vehicles

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Develop and manage a transport infrastructure which supports more low carbon travel options					

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T5SP1.1[4]	Build pedestrian cycle bridge		Procure, build, monitor use	RBC	Sustrans, landowners
T5SP1.2	Provision of cycle hire scheme	June 2017	Monthly use	Reading Borough Council (RBC)	Various
T5SP1.3	New and upgraded premier cycle routes	Ongoing	New links and new facilities	RBC; Local Sustainable Transport Fund (LSTF) partnership	
T5SP1.4	Support electric vehicle charging	2015	Quarterly usage stats	RBC; business	Car park operators
T5SP1.5	Apply best practice (from around UK) to road layouts	Ongoing during resurfacing programme	Reduction in injury accidents	RBC	
T5SP1.6	Improve pedestrian/cycle facilities at local destinations and local environment	Ongoing	New crossings; cycle stands installed; local area enhancements	RBC; LSTF partnership	Community; business
T5SP1.7	To implement MRT routes in South and East Reading	Ongoing	Increase in public transport usage	RBC	Thames Valley Local Enterprise Partnership
T5SP1.8	To deliver Reading Green Park Railway Station	December 2018	Encourage railway usage, reduce A33 congestion	RBC	Thames Valley Local Enterprise Partnership; Network Rail; Great Western Railway
T5SP1.9	Reallocate road space to public transport and cycling	Ongoing	By road or route	RBC	

---

[4] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T5SP1.10	Management of transport related assets	Ongoing	Faults, repair rates, response in extreme weather	RBC	
T5SP1.11	Give appropriate advice for new development to encourage sustainable travel	Ongoing	To be developed	RBC	Developers
T5SP1.12	Develop financial and non-financial incentives to use sustainable travel methods (e.g. challenges, promotions)	Ongoing	Participation, mode shift	LSTF; various	RBC
T5SP1.13	Parking/bus lane enforcement (including camera car)	Ongoing	To reduce illegal usage of bus lanes/parking restrictions	RBC	
T5SP1.14	Promote travel information website and open data server	Ongoing	Measure use and app development	RBC	Media, business
T5SP1.15	Variable Message Signing (VMS) expansion	Complete	Installation of new VMS displays	LSTF partnership	
T5SP1.16	Introduce a 'smart' ticketing system	January 2017	Increase sustainable travel	RBC; Reading Transport Ltd	Various
T5SP1.17	Planned extension of 20mph speed limits/zones as appropriate to local conditions	ongoing	New schemes annually	RBC; Police	
	Improve traffic signal operation		By junction	RBC	
T5SP1.18	Management of transport related assets		Faults, repair rates, response in extreme weather	RBC	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 2: Reduce energy use and embodied energy in transport infrastructure					
T5SP2.1	Expand low energy lighting and control (e.g. dimming)	Ongoing	Monitor energy use	RBC; LSTF partnership	Scottish and Southern Electric (SSE)
T5SP2.2	De-illuminate street furniture	Ongoing	Monitor energy use	RBC; LSTF partnership	SSE
Strategic Priority 3: Reduce air pollution derived from motor vehicles					
T5SP3.1	Extend park and ride	Ongoing	New park and ride southeast, south & west	RBC; Wokingham Borough Council	West Berkshire Council; LSTF partnership and train operating companies, Business
T5SP3.2	Parking management	Ongoing	Restrictions, enforcement by road or route	RBC	
T5SP3.3	Reduce carbon footprint of public transport		Improve Euroclass and increase number of lower carbon buses to fleet	Reading Transport Ltd	
T5SP3.4	Personalised travel planning (arranging travel plan for individuals)		Take customers through questionnaire - conversations held	RBC	Businesses
T5SP3.5	Social media use for travel planning		More reliable journey planning	Community, business	
T5SP3.6	Journey time monitoring system		Journey time reliability	RBC; LSTF partnership	

Theme 6: PURCHASING, SUPPLY AND CONSUMPTION

The purchasing, supply and consumption of goods affects climate change in a variety of ways, both directly through the emissions of greenhouse gases from the manufacture and transport of goods, and more indirectly by affecting the resilience of the town to a changing climate by boosting local supply of products and services and the 'green economy'. If we are to meet the challenge, all sectors of Reading's community will need to adopt more sustainable PSC practices and behaviour. This means basing our choice and use of goods and services on maximising benefits to the environment, the economy and society, for both ourselves and the wider community, rather than on a purely private cost-benefit analysis. Over time, the market will respond by offering products that match these preferences. Our consumption of products and food and our business activities also produce waste, which impacts on climate change in numerous ways. 'Zero waste' is the process of using all of our waste as a resource for other purposes, thus avoiding land-fill and improving resource efficiency.

Vision For 2020: By 2020, people and organisations in Reading will understand the need for action on climate change and adjust their purchasing, supply and consumption choices accordingly, both individually and collectively. A substantial number of Reading residents and local communities will have made real change to their PSC behaviour, with the results accurately recorded through proven, credible carbon measurement and monitoring techniques. The majority of large (public and private) organisations based in the Reading area, plus a significant number of local small and medium sized enterprises (SMEs) and other small organisations, will have a detailed understanding of sustainable purchasing, supply and consumption principles; they will have formal practice and procedures embedded into their activities. Reading will also have significantly reduced its waste going to landfill, through producing less waste, expanding the market in the recycling and re-use of products, and by generating energy from waste. Surplus material will be viewed as a resource for others to use rather than categorised as waste.

SUMMARY OF STRATEGIC PRIORITIES

- Support and encourage local purchasing and the development of local supply chains
- Promote and encourage new business models focused around the 'circular economy'
- Develop standards and the commitment to sustainable procurement in both the public and private sectors

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Support and encourage local purchasing and the development of local supply chains					

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T6SP1.1[5]	Establish a forum for sharing ideas	March 15, then on going	Forum launch	Reading Voluntary Action	Reading International Solidarity Centre (RISC)
T6SP1.2	Gather information on best practice		Publish best practice from delivery group on RCAN website	RBC	
Strategic Priority 2: Promote and encourage new business models focused around the 'circular economy'					
T6SP2.1	Organise regular seminars on key subjects such as circular economy	Ongoing	First seminar; 1 per annum	RCCP	
T6SP2.2	Establish a group of organisations that have an interest in exploring 'circular economy' approaches	Ongoing	Group established	Kyocera Document Solutions (UK) Ltd	
T6SP2.3	Investigate ways of collaborating with other groups that aim to build a sustainable future for Reading	2017		Kyocera Document Solutions/ Reading Borough Council (RBC)	Vibrant Reading, Reading 2050
T6SP2.4	Use networks and variable communication methods to inform /encourage reduction, reuse and recycling, peer- to-peer lending and collaborative consumption	2018	Information made available through web and other media		Sue Ryder; Transition Town Reading; Share & Repair café
Strategic Priority 3: Develop standards and the commitment to sustainable procurement in both the public and private sectors					
T6SP3.1	Explore the potential to develop an accreditation scheme with Reading businesses	Mar 15	Initial feasibility	Kyocera Document Solutions (UK) Ltd	Other champions identified through group

---

[5] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T6SP3.2	Identify examples/case studies (Reading and beyond) of innovative approaches to waste reduction, recycling and reuse	Ongoing	- Sign post case studies in RE3 - Coordinated waste minimisation activities with Re3 staff	RBC	WRAP; Community sector
T6SP3.3	Nominate commercial and public sector "champions" in Reading area to highlight best practice		Recruit champions in each sector	RBC	Environment Agency, NHS, Kyocera Documents Solutions UK ltd, Connect Reading
T6SP3.4	Develop local diverse, flexible supply chains and work with them to improve environmental standards of procurement		- RE-Start Local Project - Work with 60 Small and - Medium sized Enterprises to outline public sector opportunities and standards	RBC	Institute for Sustainability

Theme 7: EDUCATION, COMMUNICATION AND INFLUENCING BEHAVIOUR

Meeting Reading's targets for minimising the effects of climate change will depend on significant long term changes in everyone's behaviour across the borough, from individuals and communities to businesses and the public sector. How we behave is determined by many factors, such as our habits, beliefs about how we should behave in a given context (social norms), and cultural expectations, as well as by incentives. Although changing our behaviour and habits can sometimes feel challenging and complex, changing our social norms can have great benefits. This can be demonstrated through the popular growth of initiatives such as fair trade and recycling. These initiatives have developed through the communication of consistent and clear information.

Changes in behaviour will contribute to Reading's residents adopting more energy efficiency measures. Reading's workers will need to develop skills in a variety of technical and specialist areas, particularly in the building trade, to enable the development of a 'green economy' –from plumbers and builders to architects and chartered surveyors. Education, communication and influencing behaviour can lead on and support action on climate change.

Vision For 2020: By 2020, people and organisations in Reading will understand the reasons for urgent and ongoing action on climate change; we will be aware of what we can collectively achieve and the contribution we can make through our own actions and through influencing others. We will support joined up action on climate change across the public, private and voluntary sectors. People of all ages will be equipped with knowledge and skills that will increase awareness of opportunities within the local 'green economy'.

SUMMARY OF STRATEGIC PRIORITIES

- Integrate sustainable behaviour promotion and practice throughout schools and colleges, homes, businesses and workplaces
- Raise awareness (with the stakeholders mentioned above), of the range of opportunities, initiatives, successes and challenges relating to climate action across Reading

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic priority 1: Integrate sustainable behaviour promotion and practice throughout schools and colleges, homes, businesses and workplaces					

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T7SP1.1[6]	- Encourage each sector to develop activities to enhance education, communication and behaviour change on climate change - Use opportunities such as funding from RCCP to aid initiatives which support target audiences in taking climate change action - Encourage organisations across the sectors in Reading to become members of Reading Climate Change Action Network (RCAN) and pledge actions on climate change – support them to deliver education and communication outcomes through their action	Ongoing	Identify opportunities and establish relevant educational resources, activities and support	RCCP	School leads colleges and University of Reading; Workplace employers; landlords, health agencies; RCAN members
Strategic priority 2: Raise awareness (with the stakeholders mentioned above), of the range of opportunities, initiatives, successes and challenges relating to climate action across Reading					
T7SP2.1	- Develop communications messages for the climate change strategy targeted at and tailored to all relevant audiences	Ongoing	- Strategy delivered - Communications plan delivered	RBC	Environment Agency (EA), University of Reading, Reading UK CIC
T7SP2.2	- Engage partners in identifying potential communication channels for the various activities within the strategy and agreeing how these can be utilised	Ongoing	Implement communication strategy with relevant organisations to expand participation	RCCP	EA; University of Reading; Reading UK CIC
T7SP2.3	- Identify and support climate change schemes in the borough that meet the Strategic Priorities of the strategy; help to improve image of	Ongoing	Establish list of schemes and their hosting groups and organisations	RCCP	RBC

---

[6] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
	schemes and enhance uptake				
T7SP2.4	- Develop a website to communicate updates on the action plan & actions that are relevant to the strategy aims - Aimed at individuals/groups with existing interest in environment	On going	Establish list of schemes and their hosting groups and organisations	RBC; RCCP	Strategy theme leads; RBC
T7SP2.5	- Build a '…thriving network of businesses and organisations who will be at the forefront of developing solutions for reducing carbon emissions and preparing for climate change….'	Ongoing	- Establish list of schemes and their hosting groups and organisations	RCCP Board; RBC	
T7SP2.6	- Work with the building industry, professional bodies and educational establishments to identify and further develop training or guidance on low-carbon construction and renovation skills - Share existing best practice	Ongoing	- Inclusion of this target in Economic Growth Plan for Reading 2015-2018 will ensure that report on uptake of training/ apprenticeships in low-carbon construction will be included in reporting for the Economic Growth Plan	RBC; RCCP	RBC; New Directions; Trades Associations; Reading College; Theme leads
T7SP2.7	- Encourage businesses and public sector to incorporate environmental sustainability into appropriate job descriptions, identifying appropriate training where needed	Ongoing	Assessment of senior management jobs at RBC	RBC; RCCP	Theme leads

Theme 8: COMMUNITY

Communities can play a central role in developing a more sustainable way of life that reduces the impact that our lifestyles have on the global climate. This can be achieved through individuals being more self-sufficient, sharing resources, campaigning collectively and through a strong local business community. Working with Reading's existing strong community sector, including a number of environmental groups, will particularly benefit local action taken on climate change. To reduce our ecological impact, prepare for inevitable climate change and build high quality low carbon lifestyles, we will need to reconsider our interpretation of 'success' to include factors relating to our overall quality of life. Our quality of life is dependent on much more than increasing our material wealth, as currently dominates our GDP, but on the contribution of our local environment and our social interactions. To this effect, we should be working towards building sustainable communities.

By 2020, people will have an understanding of how their local environment contributes towards a better quality of life; they will have the commitment and community capacity to support each other to lead more sustainable lives. Reading's neighbourhoods will be places where success is measured by the uptake of life-styles centred on self-sufficiency, sustainable consumption and sharing of resources. Quality of life will include not only wealth and employment, but will also consider physical and mental health, education, recreation and leisure time, as well as the effects of the built and natural environment on their well-being, and the social attachment they feel. People will be empowered to influence local and national decision makers and businesses through well-developed local networks.

SUMMARY OF STRATEGIC PRIORITIES

- Build community activity relating to sustainable communities
- Build community resilience to climate change: collective and individual
- Reduce consumption by building a 'sharing economy'

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
Strategic Priority 1: Building community activity relating to sustainable communities					

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T8SP1.1[7]	Support groups carrying out activities supporting sustainable communities in Reading to join Reading Climate Action Network	Ongoing	- Groups collated in database and invited to join RCAN and apply for grants – reviewed bi-yearly. - Contact maintained through RCAN newsletter, events, and website updatesm as well as personal contact where they are a deliverer	- Reading Climate Change Partnership (RCCP) Board Community and Greater Reading Environmental Network (GREN) representative; RCAN support worker	
T8SP1.2	Provide networking opportunities for community and 'environmental' community organisations by improving links between groups contributing to tackling climate change	2020	- Support community events - Communications of local news / activity through RCAN website, newsletter, and social media - Promotion of RCAN grants and news stories of successful projects funded by RCAN	RCCP Board Community and GREN representative; RCAN support worker	- Key environmental groups (TBC) - Options include GREN, Transition Towns Reading, Econet, Globe Groups - Reading Voluntary Action (RVA)
T8SP1.3	Investigate approaches to engage wider community on climate change action	2020	- Proposal presented– August 2017 - Funds, paid worker and delivery partner in place – Feb 2018 - Program delivery – 2018 – 2020 and beyond	RCCP Board Community Representative to lead	TBC – approached will be RVA, TTR, GREN, RBC and more
Strategic Priority 2: Build community resilience to climate change: collective and individual					

---

[7] T = theme; SP = strategic priority

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T8SP2.1	- Build uptake of energy efficiency, renewable energy and energy cooperatives - Engage appropriate asset holders and develop local schemes	Sept 2014 and ongoing	Seek new opportunities to install renewable energy and food growing	RBC; Reading Community Energy Society; Food4Families	TTR; GREN; RVA; GLOBE groups; Food4 Families; Reading Community Energy Society
T8SP2.2	Communal food growing together and learning; continuation of Food4Families; support allotment and food growing activities	2020	- Provision of allotment space in accordance with Allotment Strategy 2011 - Establish 15 Food4Families food growing gardens - Establish networks / events that help promote food growing and local food	RBC; Food4 Families / Reading Food Growing Network	TTR (orchard and bulk buying sub-groups); organisations with buildings/ grounds
T8SP2.3	Continue with current communal food pilot in Whitley where people can learn about growing food, and develop personal skills	March 2014	- Research viability of city farm site in Reading - Focus on referrals where benefits of growing food are closely linked to improving mental health issues	Green Health Reading	
T8SP2.4	Map and promote a network of accessible self-sufficient community buildings and projects supporting skill development to become more self-sufficient and resilient to climate change	June 2018 and ongoing	- Complete mapping exercise of community buildings / projects - Promote facilities / network available through RCAN website via case studies or news stories - Support these projects where possible	Lead delivery partner sought – RCAN worker; RCCP community / GREN board reps	RVA

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T8SP2.5	Build householders' and individuals' resilience in a number of ways: growing food, generating energy, insulating homes, planting trees, installing rainwater harvesting and composting food/garden waste	Sept 2014 and ongoing	- Increase numbers of households adopting measures - Design suitable messages / talks to target particular groups of householders – including specific projects	Draught Busters, Reading Sustainability Centre, Reading Food Growing Network	
T8SP2.6	Influence government policy to favour and link local food growers to commercial organisations	Ongoing	Obtain funding, conduct research (surveys)	University of Reading	RISC, Food Growing Network
Strategic Priority 3: Reduce consumption by building a 'sharing economy'					
T8SP3.1	Build and maintain 'share and repair' movement, increasing skills in the community and reducing waste	March 2015 and ongoing	Identify community champion(s) to create new projects	TTR; Reading Repair Café' Reading Bike Kitchen, Reading community and businesses	GREN; RVA
T8SP3.2	Promote 'donating instead of disposing' and 'repair instead of replace' in Reading's business and residential community	March 2016 and ongoing	- Connect Reading: no. of items donated to charities from businesses - Repair Café: no. of items repaired instead of disposed - Reading Bike Kitchen: no. of refurbished cycles (organisations will have their own targets)	Connect Reading; RVA; RCAN	

Ref	Action	Timescale	Target & measure/ milestone	Lead delivery partner(s)	Other delivery partners
T8SP3.3	Support local economy to explore methods used in UK towns and cities to increase local identity and build number of local businesses	December 2017	- Build research group of interested organisations/ individuals - First meeting - Compile independent business directory - Share findings with RCAN for promotion	Transition Town Reading	
T8SP3.4	- Promote Reading's individuality, including its independent businesses and thriving cultural scene - Alt.Reading website: magazine focussing on independents, culture and opinion related to Reading	- Jan 2014 - TBC Ongoing	- Launch website - Continue to bring together all appropriate local activity in one website to promote the non-corporate side of Reading	Alt.Reading	