Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
		Transport			
Electrically powered vehicles	4 engagement officers working with general public across Hampshire - attending events, meeting etc to raise awareness of Connect to Support Hampshire contributing to demand management for Adults' Health and Care. To minimise environmental impact these staff use electrical	Adults' health and care/public health	Economic, Brand advertising (on vehicle livery) Raising awareness of positive reputation of HCC Health benefits from reduced air pollution	May-19	Both
	Incentivise use of electrically powered vehicles when technology has advanced to guarantee effectiveness and reliability	Adults' health and care/public health	Increased availability of recharging infrastructure Health benefits from reduced air pollution		нсс
	ETE department to change all (suitable) diesel vehicles to Electric.	Highways (commissioning)	Economic, saving in running costs. Health benefits from reduced air pollution.		нсс
	Transition Skanska HHSC Operational fleet (3.5T, 7.5T 15T) to electric.	Highways (commissioning)	Economic, saving in running costs. Health benefits from reduced air pollution.		нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Transition Skanska company car fleet to hybrid and electric.	Highways (commissioning)	Economic, saving in running costs. Health benefits from reduced air pollution.		нсс
	Look at travel plans for site teams and personnel visiting site or provide electric pool vehicles for members of staff regulary traveling for work.	Travel planning	Economic, saving in running costs. Health benefits from reduced air pollution.		HCC
	Geotechnic and Land Survey vehicles to change to electric where appropriate (4x4 electrics not readily available).	Highways (commissioning)	Economic saving in running costs Health benefits from reduced air pollution.		нсс
	To explore the possibility of introducing an Ultra Low Emission Vehicles scheme across Hampshire County Council (HCC).	HR	The Ultra Low Emission Vehicles scheme would play a key role in contributing to and embedding HCC's Climate Change Strategy as it promotes an environmentally-friendly method of transport which reduces the carbon footprint. It also has financial benefits for both the employee and employer (Tax and NI) as it is administered via salary sacrifice. It is also possible to argue that it would form part of an employee's total reward package which may improve levels of engagement and act as a staff retention and motivation tool	Options being developed for consideration	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Working on smart mobility EV charging infrasructure. Align acitivity funding to smart mobility initiatives	EM3	Health benefits from improved air quality Reduced congestion Increased productivity		Both
	Default position to be electric vehicles as part of the fleet replacement transition.	CCBS	Economic, saving in running costs. Health benefits from reduced air pollution.	2028 (completion)	HCC
	Explore the possibility of EV charging points to be supplied by a 100% renewable supplier	CCBS		Dec-20	HCC
	Actively trial and promote new vehicle technology when it arrives on the market e.g. electric minibus	CCBS	Reduced air pollution	Ongoing	HCC
C Less travel	Provision of Technology Enabled care (TEC) services in people's own homes. Enables the reduction or delay of more intensive Home Care with relies on staff visiting sevice users at home, therefore a reduction on car/transport usage for staff.	Adults' health and care/public health	Reduced use of Home Care, Residential and Nursing care	Ongoing	нсс
LUGG HAVEI	Review and implement HCC's own Corporate Travel Plan to reduce car alone journeys for both commuter trips and business trips.	Travel planning	Staff attendance, reputation, physical health, mental health, congestion, improved local relations, air quality, life skills, road safety, financial savings (individual and corporate), carbon reduction, viability on local public transport services,	2019	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Through travel planning measures, support residential development on the reduction in car alone journeys on Hampshire's roads	Travel planning	Physical health, mental health, congestion, improved local relations, air quality, life skills, road safety, financial savings, carbon reduction, viability on local public transport services, crime reduction	2019	County-wide
	Through travel planning measures, support workplaces and other similar destinations (e.g. hospitals, retail, HWRC's) on the reduction in car alone journeys on Hampshire's roads	Travel planning/Strategic Planning	Staff attendance, reputation, physical health, mental health, congestion, improved local relations, air quality, life skills, road safety, financial savings, carbon reduction, viability on local public transport services,	2019	County-wide
	Using technology to route journey. As well as increasing productivity and cost effetiveness this also reduces emmissions and use of fossil fuel consumption in travel	Adults' health and care/public health	Reduced wear and tear on fleet	Apr-19	нсс
	Writing in service specifications that providers need to engage with service users through digital means (e.g. sexual health services) reducing the need for travel to clinics	Adults' health and care/public health	Health (providing timely care in a way that meets the patient's needs)	ongoing	Both

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Equipment prescribers to ensure items fully explained and accepted, prior to request Equipment prescribers to order all items for each person together to reduce multiple visits	Adults' health and care/public health	reduced transport pollution, costs and time		HCC
	Green scheduling of work/jobs to reduce carbon emissions through travel, winter maintenance	Highways (commissioning)	reduced transport pollution, costs and time	2 years	нсс
	First time fix avoid duplicate visits. Also multi-skilled gangs to avoid multiple visits.	Highways (commissioning)	reduced transport pollution costs and time		HCC
	Booking service users and carers into community hubs rather then social workers travelling to individual services	Adults' health and care/public health	Better community links, and impacts on socila isolation	May-20	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Comleting more customer facing tasks on the phone and online	Adults' health and care/public health	Quicker outcomes promoting prevention	Apr-21	нсс
	Transport and health needs assessment	Adults' health and care/public health	Health (increased physical activity)	In development	нсс
	Work with providers to develop provision according to needs within the Hampshire boundaries.	Childrens' services	Reduction in costs to travel budgets Increase in outcomes for children through greater variety of placements and placements closer to home Health benefits from use of public transport through encouraging walking to get to transport	May-20	нсс
	Increase the number of in house foster carers, and increase occupancy in the in house residential provision.	Childrens' services	Reduction in costs to travel budgets Increase in outcomes for children through greater variety of placements and placements closer to home Health benefits from use of public transport through encouraging walking to get to transport	Apr-20	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Consider the climate impact alongside safeguarding when making decisions about placements.	Childrens' services	Reduction in costs to travel budgets Increase in outcomes for children through greater variety of placements and placements closer to home Health benefits from use of public transport through encouraging walking to get to transport	Mar-20	нсс
	Increase the uptake of the use of pool cars when travelling outside of Hampshire and sharing of vehicles when staff are travelling to the same destination. Increase the use of public transport where possible and safe to do so	Childrens' services	Reduction in costs to travel budgets Increase in outcomes for children through greater variety of placements and placements closer to home Health benefits from use of public transport through encouraging walking to get to transport	Sep-20	нсс
	To provide community transport using a minibus for vulnerable older people who need transport e.g. for shopping, Doctors appointments. The communal transport provision reduces the need for individual trips e.g. via taxis	Adults' health and care/public health	Reduced social isolation supports independent living		County-wide
Active travel	Developing evidence on health benefits of alternatives for transport	Adults' health and care/public health	Physical health, mental health, air quality, life skills, road safety, financial savings		County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Active travel to schools including travel audits, transition from early years to primary and primary to secondary. This work is targeted to areas with poor air quality, higher deprivation and higher levels of obesity). Scootability training in schools. Also, the active travel team project to engaged with schools and local businesses (e.g segensworth) around drop-off and pick-up practices through monitoring air quality around the school site	Adults' health and care/public health	Physical health, mental health, air quality, life skills, road safety, financial savings	ongoing annually reporting	County-wide
	Supporting active travel team with community travel plans (White Hill and Borden new developments)	Adults' health and care/public health	Physical health, mental health, air quality, life skills, road safety, financial savings	ongoing	County-wide
	Encouraging staff to walk or cycle to workor use park and ride facilities	Adults' health and care/public health	Physical health, mental health, air quality, life skills, road safety, financial savings	Apr-19	нсс
	Support advise provided to developers on the routes to school on a new development to ensure it promotes active travel and reduced car alone journeys. A guidance document has been produced as a result summarising key issues as well as a fee structure for travel plan contributions.	Travel planning	Physical health, mental health, congestion, improved local relations, air quality, life skills, road safety, financial savings, viability on local public transport services, crime reduction, reduced no. of complaints	2016	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Deliver the reduction in GHG emissions from the integration of Couriers and County Supplies fleets	CCBS		Jun-21	нсс
	To explore the possibility of introducing a Cycle to Work scheme across Hampshire County Council (HCC). [n.b. Hampshire Fire and Rescue Service and Hampshire Constabulary already have a Cycle to Work scheme in place]	HR	Cycle to Work is a government initiative to encourage cycling as a means of transport to work. It reduces carbon emissions and promotes a healthy lifestyle. It also has financial benefits for both the employer and employee (Tax and NI) as it is administered via salary sacrifice	Options being developed for consideration	нсс
Public transport	To continue to offer staff incentives on public transport, such as discounts on railway/bus travel (i.e. South Western Railway currently offer discounts of up to 20% on season tickets)	HR	Offering staff benefits, including discount on public sector travel (i.e. South Western Railway currently offer discounts of up to 20% on season tickets) will continue to promote an environmentally-friendly form of transport (i.e.less travel by car) which will help to reduce carbon emissions.	In place for a number of years	HCC
	Partnerships with bus operators to improve vehicle emissions through new vehicle investment or retrofit existing buses with clean exhaust technology.	Passenger transport	Economic, air quality; healthier lifestyles	Ongoing	County-wide
	Improved public transport through improved infrastructure, information and promotion.	Passenger transport	Economic, air quality; healthier lifestyles	Ongoing	County-wide

Pro	ject Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
		Transforming Cities Fund - Portsmouth & Southampton City Regions. Delivering Bus Rapid Transit, public transport ticketing schemes, cycling infrastructure; transport interchanges; mobility hubs; public realm improvements. A potential spin-off is the Future Mobility Zones (FMZ) project in the Solent area, including drones, PT ticketing, Mobility as a Service, Demand Responsive transport trials. FMZ is subject to funding bid.	Passenger transport	Air quality, comgestion reduction, health, economic		County-wide
	Fuel	Trial fuel additives / fuel alternatives to Skanska vehicles on HHSC. Possibly HCC vehicles as well?	Highways (commissioning)	Economic, saving in traditional fuel and possible maintenance costs. Health benefits from reduced air pollution		нсс
		Change the Skanska Dragon Patcher burners from Diesal to Kerosene.	Highways (commissioning)	Economic, saving in overall dragon patching costs.		нсс
		Trials of a Hydrogenated Vegetable Oil (HVO) bowser for County Supplies fleet and HVO supply to HTM Micheldever site. If HVO trials are successful, transition to a HVO fuel for the entire HCC fleet.	CCBS	Reduced air pollution	2021	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
HGV's	Ban the movement of HGV's on a Sunday on highways, except for recovery vehicles (as is done in Germany - for many years) along with other europian countries. Ban HGV's overtaking on motorways- as in Germany - to help implement heavy goods transporation corridors	Travel planning			County-wide
11010		Energy			
		l			
Renewable energy	Where effective, using solar panels to reduce energy consumption	Adults' health and care/public health	economic	Apr-20	нсс
	Install PV panels on ETE depot buildings.	Highways (commissioning)	economic		нсс
	Install PV panels on Trafalgar House building roof.	Highways (commissioning)	economic		HCC

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Install EV charging points in Trafalgar House Car Park.	Highways (commissioning)	economic		нсс
	All HCC instructed temporary site offices & messes to have PV panels and or wind turbines to be carbon efficient for medium sized sites (I.E. sites in excess of 4 months duration) or consider All sites	Highways (commissioning)	Economic, reduce air pollution		нсс
	Transition of energy supply for HCC estate to 100% renewables	CCBS		2025	нсс
	Provision of renewable energy supply to be added to the next energy frameworks by September 2020. Fully renewable energy to be included as optional in contracts for HCC & schools	CCBS		Sep-20	нсс
	Continue Energy Performance Programmes (battery storage, EV, charging, solar, schools solar)	CCBS		Ongoing	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Look at alternative energy sources for HCC building and utilising current assets to aid that. i.e building roofs for solar panels (south facing ones) or suitable sites for ground source heat pumps.	Travel planning	Economic		нсс
Energy efficiency	Using LED light bulbs to reduce energy consumption whilst maintaining safety	Adults' health and care/public health	Economic	Apr-19	нсс
	Providing advice and heating solutions for those who struggle to heat their homes, particularly those most vulnerable to the cold (Hitting the Cold Spots). Carbon savings achieved through practical measures, estimated at 120.72tCO2 for the quarter Jul - Sept 2019	Adults' health and care/public health	Improved health for those who are particularly susceptible to the cold. Improved economic situation where more cost effective heating solutions are identified. Reduced fuel poverty. Greater social support as more likely to have friends visit	2012, thought current contract started 1/4/19	County-wide
	Transition Skanska equipment / plant to electric	Highways (commissioning)	reduced transport pollution costs and time	5 years plus	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Retrofit LED lights in ETE depots and Skanska's Trafalgar House	Highways (commissioning)	Economic, employee wellbeing	2 years	HCC
	Skanska gangs to operate with electric powered electric tools only instead of petrol powered	Highways (commissioning)	Economic, reduce air pollution	Trial planned for early 2020	нсс
	Replacement of high-pressure sodium street lights with low energy LEDs	Highways (traffic)	Economic		нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Replacement of incandescent traffic signal lanterns with low energy LEDs (will in some cases require whole sites to be upgraded to ELV, not just the lanterns to LED)	Highways (traffic)	Economic	Requisite contractual ammendaments to the PFI project agreement being progressed that will provide for LED replacement programmes. Investment planned for 2020/21, 2021/22 and 2022/23 to replace 12,000 approx of 32,400 high-powered street lighting units on principal roads in Hampshire.	HCC
	De-illumination of traffic signs (where permitted in the Regs).	Highways (traffic)			нсс
	Installation of low energy LED street lights at new developments (policy in place and now to only accept LED lighting for new developments)	Highways (traffic)	Economic		нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	To deliver the Tri-LEP Energy Strategy	EM3	Health through more efficient and healthy homes Improved air quality		County-wide
	We have published a Heat and Power Strategy (see: https://solentlep.org.uk/media/2669/solent-lep-heat-and- power-strategy-and-action-plan-final-docx.pdf)	Solent lep			County-wide
	Conversion to LED lighting across all Countryside service maintained depots over next 5 years. New buildings to be fitted with LED Light fittings & PIRs	CCBS	contributes to carbon positive parks, economic	December 2024 (completion date)	нсс
	Completion of current LED programme (EPP4). LED lighting programme scheduled to continue for corporate estate buildings which did not meet EPP4 criteria.	CCBS	Economic	Mar-21	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Continuation of schools' Energy Performance Programme	CCBS	Econimic	Ongoing	нсс
		Infrastructure			
Buildings	Repairing, upgrading and investing in buildings	Adults' health and care/public health	Buildings operate effectively in extremes of temperature, lower energy consumptionn, more efficent heating		НСС
Roads	Providing input into local plans to promote walkable streets through creating safe, attractive and convenient routes	Adults' health and care/public health	Health (increased physical activity), social (decreased crime/anti-social behaviour)		County-wide
	Planning of asset location to accommodate future road work and maintenance implications - Already undertaken but could look at improving this with Developers.	Travel planning			Both
Materials	Change all (suitable) Hot machine laid materials to 'Warm Mixes' for use on the highway network.	Highways (commissioning)	Economic, saving in electricity costs.	Trials underway	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Increased incorporation of RAP (Recycled asphalt pavement) into all hot asphalt.	Highways (commissioning)	Economic, saving in electricity costs.		нсс
	Change all (suitable) Hot binder course materials to 'cold lay' for use on the highway network.	Highways (commissioning)	Economic, saving in electricity costs.		нсс
	Use HBM as base and binder course material wherever possible on highway network.	Highways (commissioning)	Economic, saving in electricity costs.	Underway on a small scale in haunching programme at present	нсс
	Explore use of Graphene in bituminous materials.	Highways (commissioning)	TBC		нсс
	Use recycled plastic kerbs and plastic gully covers for use on the highway network.	Highways (commissioning)	Reduced musculoskeletal injuries, economic	Trials underway for plastic kerbs	HCC

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Use recycled plastic street furniture, and recycled plastic traffic management equipment for use on the highway network. Produce more locally sourced materials for use on highway network	Highways (commissioning)			нсс
	Use of alternative sensor types at traffic lights above ground - i.e. no loop detectors to minimise impact to maintenance and disruption to road users and number of site visits required and amount of desruction required	Travel planning			Both
	Cement and lime stabilisation, use where ground conditions are poor - reduction in requirement to bring materials into and off of site.	Travel planning			нсс
	Ensure technical teams have the appropriate training and skills to facilitate the development of low carbon solutions.	Highways (commissioning)	Economic, reduce waste		нсс
Minerals infrastructure	Establish baseline emission data and monitoring schemes for minerals infrastructure proposals.	Strategic Planning		Hampshire Minerals & Waste Plan - update (2021 onwards)	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
Waste Infrastructure	Review, baseline and develop plans. Emissions from throughput monitored daily, input material part of review. Consideration of regional infrastructure options.	Waste and resource management	Economic and health	Various - current estimated start 2022	нсс
		Waste and circular eco	onomy		
Reducing waste	Single use plastics will be eliminated from catering front of house of CCBS services.	CCBS		Apr-21	нсс
	Reduced printing	Adults' health and care/public health	Economic	Ongoing	нсс
	Winter Maintenance - route optimisation.	Highways (commissioning)	Economic (fewer salt-runs, less salt purchased/transported) health (reduced air pollution)		нсс
	Adopting paperless methods of record management	Adults' health and care/public health	Reduce demand for energy consumption associated with printing, storing, recycling paper based materials	Apr-19	нсс
Recycling	Decontaminating and recycling 90% prescribed equipment items	adults' health and care/public health	economic	ongoing	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Validation and analysis of waste collection data for CCBS services to establish their baseline waste generation and assess the realistic potential for recycling. Liaise with CCBS services to set targets.	CCBS		2020	нсс
Recycled materials	Create a recycled cold binder and base materials from planings/waste to use in the highway network.	Highways (commissioning)	Economic		нсс
	Create a recycled aggregate sub-base materials from waste to use back in the highway network.	Highways (commissioning)	Economic		нсс
	Safeguard exising recycing capacity and support new aggregate recycling proposals.	Strategic Planning	Economic and health.	In progress (Hampshire Minerals & Waste Plan)	нсс
	Already encourage use of recycled materials for pavement construction (roads and footways of new developments and major schemes) eg IBAA and Type 1 Materials, HBM, already in standard details but could emphasise.	Travel planning			нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	HBM and use of road chippings to be used back on new roads, and kept within Hampshire. i.e road surfacing chippings removed from roads, is used for HBM	Travel planning			нсс
Disposal methods	Review alterantive methods, consider longer-term feasibility and implementation within boundaries of exisiting contracts and future aims	Waste and resource management	Economic, health, social	Various - current estimated start 2022	нсс
	Review alterantive methods, consider longer-term feasibility and implementation within boundaries of exisiting contracts and future aims	Strategic Planning	Economic, health, social	Hampshire Minerals & Waste Plan - update (2021 onwards)	нсс
Collections	Work with WCAs through HWP/Project Integra to consider alternative whole system approaches, reducing carbon impacts and improving efficiency and compliance with Gov objectives (Env Bill and Resources & Waste Strategy)	Waste and resource management	Economic, health, social and wider environmental benefits	Various - current estimated start 2022	HCC
Food	Explore the feasibility of expanding food waste collections to Schools.	CCBS	Economic, health, social and wider environmental benefits	Sep-21	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Explore the feasibility of expanding food waste collections in CCBS' managed locations e.g. Offices, CCBS sites.	CCBS	Economic, health, social and wider environmental benefits	Jan-21	нсс
Reuse	Drive material up the hierarchy, enable reuse ahead of recycling; support local organisations that enable reuse	Waste and resource management	Economic, health, social and wider environmental benefits	Various - predominently ongoing with work currently underway	County-wide
Closed Landfill	Closed Landfill: Manage and monitor closed landfills incl landfill gas - reuse gas where feasible and minimise carbon impacts	Waste and resource management	Economic and wider environmental benefits	Various - predominently ongoing with work currently underway	нсс
		Economy			
Capital	Promotion of cardon reduction capital schemes through bid support work.	Travel planning			Both
	Divert resources to carbon reducing capital schemes: cycling, public transport, electric vehicle infrastruucture, walking. Contribute / support this work.	Travel planning			Both

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	We are investing in a Natural Capital study with Fawley Waterside to secure a baseline of Natural Capital in the New Forest	Solent lep			County-wide
	Develop a Natural Capital baseline for the LEP area	EM3			County-wide
Business support	Establish what our business membership and representative organisations are doing in relation to carbon reduction. Ask them to undertake inelligence of members, e.g. Carnival, Exxon Mobil to learn what those companies' priorities are and how we can work together on this shared agenda.	Economic development	Identify opportunities to collaborate and raise awareness amongst businesses of things they can do to mitigate impact and get support to adapt.	Autumn 2020	County-wide
	Support the businesses in our area that can support this transition and sieze the opportunity. We have recently completed a study on the extent of the low carbon sector within the EM3 area. This has shown that we have significant capability to help deliver the changes and technologies required.	EM3		Autumn 2020	County-wide
	Act as a strategic partner to the ERDF LoCASE project which will deliver business support, guidance and grant funding to SMEs	Economic development	The grants programme will support local SMEs to: improve their energy efficiency and resource use; support eco-innovative and low carbon solutions in ways that improve business performance in terms of resilience, profitability and competitiveness; and at the same time create jobs and contribute to the protection of the environment	Autumn 2020	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
Locally sourced food	Developing a Hampshire eating out heathily award which will incorporate a sustainaility element prioritising locally sourced food	adults' health and care/public health	Promote healthy and sustainable food. Support and highlight businesses that provide this.	Undergoing market testing.	County-wide
다. (구)	Establish a marine innovation 'catapult' at Fawley - a national centre of excellence for industry to develop low carbon solutions for the future.	Economic development Developing world-leading technologies and techniques to deliver low/no carbon products and services that can service the UK economy and be exported		2021-2022	County-wide
	Biod	liversity, tree planting a	nd re-wilding	•	
Country park	Create a Climate Positive Country Park. Implementing change going beyond net zero carbon emissions to create an environmental benefit. To include: Rewilding, carbon sink creation, energy generation and waste management	CCBS	Cost reduction, showcase HCC action, test new approaches for future schemes	2023 (completion date)	County-wide
Tree planting	Investigate green screen concept and include in schemes as appropriate.	Travel planning	Travel planning Social		County-wide
	Project to address a section of wasteland where currently fly tipping and re-purpose for allotments for people with physical disabilities	adults' health and care/public health	Benefit to people with physical disabilities in terms of access to green spaces, physical activity and social interaction	Feb-20	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Increase tree planting and re-wilding of appropriate areas, the goal being to increase canopy cover percentages and the associated carbon sequestration.	Highways (commissioning)	Carbon sequestration benefits of increased canopy cover. Reduced fuel usage due to less cutting.		Both
		Corporate policy	y		
Commissioning	Incentivise providers to safeguard wellbeing of service users, maintain them at home and reduce potential hospital admission	Adults' health and care/public health	Wider awareness, cultural change,	Apr-21	County-wide
	Encouraging / incentivising service providers to increase environmental awareness and record their approach	adults' health and care/public health	Wider awareness and cultural change		Both
	Develop climate related KPIs for existing suppliers and climate related contractual terms for new suppliers / contracts. Work with existing suppliers to implement KPIs. Apply new contractual terms to furure tenders once approved, to incorporate climate considerations into purchase of goods through County Supplies.	CCBS		2020 to start implementation (Will take 4 years to apply to all contracts)	HCC
	Low carbon suppliers to be factored into procurement of food and catering suppliers.	CCBS		2021/2022	нсс
Procurement	Develop the Council's procurement processes to accommodate the Council's Climate Change policy/strategy and associated Action Plan	Procurement	Potential for indirect local economic, social and health benefits	Within 6 months of Council's Climate Change Strategy/Policy being approved	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Update the Council's procurement strategy to incorporate the Council's Climate Change policy/strategy	Procurement	Potential for indirect local economic, social and health benefits	Within 12 months of Council's Cllimate Change Strategy/Policy being approved	нсс
	Update procurement guidance to ensure it signposts to relevant information on Climate Change considerations when procuring goods, works and services.	Procurement	Potential for indirect local economic, social and health benefits	Within 6 months of Council's Climate Change Strategy/Policy being approved	нсс
Policy	Update/Change all ETE technical guidance, surfacings options documents, Model contract docs, and all other Highway and infrastructure related policies, procedures, guidance and advise to specify carbon reduced materials, methods or working, use of recycled materials etc in all future projects/works and the like.	highways (commissioning)	Economic, saving in traditional fuel and possible maintenance costs. Health benefits from reduced air pollution?		нсс
	CTMP's implement the requirement for contractors to develop a CTMP for every scheme even if there is no planning permission required. Also change the way that CTMPs are reviewed, to also include an assessment of where the contractor sources materials (distances form site) and removal of waste products to minimise the amount of transportation.	Travel planning			нсс
	Changing policy for lighting new developments to reduce the extent to which street lighting increases over time	Highways (traffic)			нсс
	Change design guidance to promote walking or cycling. Contribute / support to this work	Travel planning			Both
	Active travel team project to supporting schools to develop active travel policies	Adults' health and care/public health	Health and educational benefits (increased physical activity, awareness envrionmental pollution)	Ongoing	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	A review of Hampshire Minerals & Waste Plan	Strategic Planning		Hampshire Minerals & Waste Plan update (2021 onwards)	County-wide
	To review existing policies and procedures (i.e. Flexible Working Policy, Expenses Policy) to ensure they align with HCC's Climate Change Action Plan and Strategy. For example, introducing a Climate Change Impact Assessment (similar to Equality Impact Assessment)	HR		To start from Q2 2020 (July-September)	нсс
Contracts	Carbon reduction from construction activity. Include some form of clause in tenber contracts that relates to climate change issues (recycled materials, geographic source of materials for example)	Travel planning			нсс
¥∴ ↓ Ó× Strategy	T21 estates review to include sustainabiliy	adults' health and care/public health	Economic	Ongoing	нсс
	Work with ETE to provide input into Hampshire's local transport plan and district movement strategies - give advice and guidance on air quality, active travel and health benefits	Adults' health and care/public health	Health (increased physical activity)	The local transport plan is due for review in 2020/2021	County-wide
	Supplementary Planning Document guidance on air quality and spatial planning (links with transport and environment)	adults' health and care/public health/strategic planning	Health		County-wide
	Calculate carbon footprint (scope 1, 2& 3) of HCC Corporate Estate annually, in a 'State of the Estate' report, in order to develop a targeted plan to tackle worst performing assets as a priority.	CCBS		Sep-20	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Review and update the Hampshire Minerals & Waste Plan and its policies to enable establishment of carbon baseline, monitoring and implementation of carbon reduction measures.	Strategic Planning	Health, Environment, Economic and Social	2021 onwards	County-wide
	Local Transport Plan (LTP) 4 - will set out HCC's transport strategy looking towards 2050. Will include strategies for several modes of transport - Bus, Rail, Ferry, Public Transport Information, Local Walking & Cycling Investment Plans (LCWIPs), Future Mobility Strategy	Passenger transport	More people using sustainable transport modes creates healthy lifestyles - increased walking & cycling. Improved mental health due to more community interaction. Sustainable Economic growth as a result of improved transport systems. Helps mitigate the impacts of housing growth and increasing population.		Both
	Transport for the South East - Transport Strategy to 2050	Passenger transport	Air quality, health benefits, economic benefits (reduced road congestion).		Both
	Our emerging Solent 2050 Strategy - one of our pillars is for the Solent is to be an engine for climate change adaptation and decarbonisation.	Solent lep			County-wide
	Review and refresh the Local Transport Plan and its associated action plan. Including actions, such as •Develop a new public transport Strategy •Develop and promote concepts for rapid bus inc. bus priority measures •Develop and interchange plan for rail stations •Enhance existing integrated ticketing system •Enhance bus stop infrastructure across Hampshire •Grant fund tap on tap off bus technology to improve the customer experience •Implement enforcement of bus lanes and use hypothecated income to subsidise public transport	Strategic transport	Health, Environment, Economic and Social	May 201	Both
	Strategy to commit to ensuring that all collateral is made from sustainable materials and wherever possible recyclable or biodegradable.	Childrens' services	Reduction in food costs Healthy eating Community participation	May-20	нсс

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
Flexible working	Consider greater use of tele-conferencing to reduce time wasted travelling to/from meetings and vehicle use anyway.	highways (commissioning)	Reduce electricity/fuel costs, more efficient use of staff time at work, congestion benefits, better work life balance.		нсс
	Consider HCC managed Design working at home to reduce commuting in and out of Winchester.	highways (commissioning)	Reduce electricity/fuel costs, more efficient use of staff time at work, congestion benefits, better work life balance.		HCC
	Flexible working practices including teleconferencing, the use of drop-in centres and working from home	adults' health and care/public health	Reduce electricity/fuel costs, more efficient use of staff time at work, congestion benefits, better work life balance.	Ongoing	HCC
	Reduce reliance and demand for energy consumption in static buildings as well as reduce fossil fuel consumtpion in travel to specific office base	adults' health and care/public health	Reduce electricity/fuel costs, more efficient use of staff time at work, congestion benefits, better work life balance.	Apr-19	нсс
	Embed a culture of working flexibly through the use of devices, Microsoft Teams, conferencing, Skype etc.	Childrens' services	Reduction in costs to travel budgets Increase in outcomes for children through greater variety of placements and placements closer to home Health benefits from use of public transport through encouraging walking to get to transport	Mar-20	нсс
	Look at development of residential work hubs to build into new housing developments, alongside childcare facilities etc to help accommodate working from home alternatives and reducing traveling distances.	Travel planning	Reduction in travel costs		County-wide
	Using technology including telephone conference calls to enable flexible working whilst reducing emmisions and avoiding fossil fuel consumption in travel Using mobile technology as an alternative to home visits	Adults' health and care/public health	Family friendly employment practices; less reliance of office space	2021	нсс
		Behaviour chang	e e		
Encouraging behaviour change in staff	Participate in the annual Green Office Week in May.	Childrens' services	Reduction in food costs Healthy eating Community participation	2021	HCC

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Promoting and incentivising materials recycling culture for staff and service users	Adults' health and care/public health	economic	Apr-19	нсс
Encouraging behaviour change in residents	Adjustment of Outdoor Service provision towards educating on Climate Change issue. Currently evaluating a new approach for Runway's End Outdoor Centre, rebranding as an Eco-Centre, aiming to be carbon neutral.	CCBS		2023 (completion date)	Both
	Identify or develop and deliver resources to support children to engage with the climate change discussions and to encourage each to make one commitment.	Childrens' services	Reduction in food costs Healthy eating Community participation Wider environmental benefits	Sep-20	County-wide
Active travel	Support on the reduction in car journeys to school through the engagement with schools on travel planning measures to promote active and sustainable modes, using the national Modeshift STARS accreditation scheme as a recording mechanism of activity and achievement.;	Travel planning	Physical health, mental health, congestion, air quality, life skills, road safety, financial savings, carbon reduction, viabiilty on local public transport services, crime reduction, partnership working between the LAs, reputation of HCC	2003	County-wide
	The use of a localised active and sustainable travel brand, My Journey, between HCC, PCC and SCC including a one-stop shop website with journey planning tool and various social media channels.	Travel planning	Physical health, mental health, congestion, air quality, life skills, road safety, financial savings, carbon reduction, viability on local public transport services, crime reduction, partnership working between the LAs, reputation of HCC	2012	County-wide
Energy	Education of staff, carers and children to be developed and rolled out to ensure all aware of individual responsibilities and impact.	Childrens' services	Reduction in energy costs	Sep-20	Both
Food	Ambassadors of Climate Change to be identified for the Children's Homes and foster carers to lead on changing shopping habits to utilise food waste where available in communities and reduce all waste.	Childrens' services	Reduction in food costs Healthy eating Community participation Wider environmental benefits	Sep-20	County-wide

Project Area	Action	Service delivering	Co-benefits	Delivery start date	Emissions addressed
	Prevent and reduce waste arisings, incl food waste in particular through active public engagement. Activities include home composting, recipes for leftovers, correct food storage and menu planning.	Waste and resource management	Reduction in food costs Healthy eating Community participation Wider environmental benefits	2017	County-wide
	Drive GHG emissions reductions by positively influencing customer food consumption and disposal behaviours e.g. customer meal choice and active use of recycling facilities.	CCBS	Reduction in food costs Healthy eating Community participation Wider environmental benefits	Dec-20	Both
	Increase number of low carbon (vegetarian and plant- based) meal options on the menu's provided by CCBS services.	CCBS	Health	Sep-21	нсс
	Shift red meat-based meals to lower carbon carnivorous options (pork, poultry, fish) on the menu's provided by CCBS services.	CCBS		Sep-21	нсс
	Re-arrange layout of CCBS services' menus to promote low carbon options at top / early on.	CCBS		Apr-21	нсс
		Health			
Air quality	Optimise traffic control assets to minimise stops and delay	Highways (traffic)	Health (decrease in acute and long term conditions due to poor air quality)		County-wide
	Raise awareness and enable communities to take steps to improve air quality	Travel planning	Health (decrease in acute and long term conditions due to poor air quality)	2016	County-wide

Project Area	Action	Service delivering Co-benefits		Delivery start date	Emissions addressed
	Provide accurate and timely travel information enabling people to vary their travel time, route and mode to minimise congestion	Highways (traffic)	Health (decrease in acute and long term conditions due to poor air quality)		нсс
	Enhance on-street parking and loading controls to reduce congestion	Highways (traffic)	Health (decrease in acute and long term conditions due to poor air quality)		County-wide
	Shaping air quality communication messages and campaigns	Adults' health and care/public health	Health (decrease in acute and long term conditions due to poor air quality)	Ongoing	County-wide
	Developing an air quality position statement to increase dialogue between ETE and public health	Adults' health and care/public health	Health (decrease in acute and long term conditions due to poor air quality)		HCC
	AQMA - districts produce action plans that we provide advice, guidance and data	Adults' health and care/public health	Health (decrease in acute and long term conditions due to poor air quality)	Ongoing	County-wide
	Air quality sub group of the Environmental Health Chief Officers group - we presented data and PHE toolkit on health benefits for every district	Adults' health and care/public health	Health (decrease in acute and long term conditions due to poor air quality)	Ongoing	County-wide
	Developing an Strategic Environmental Assessment for the STP and Sustainability Appraisal for the HWMP incorporating air quality	Adults' health and care/public health/strategic planning	Health (decrease in acute and long term conditions due to poor air quality)	Hampshire Minerals & Waste Plan - update (2021 onwards)	Both

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
		Resilient buildings and non-highway infrastructure				
HCC owned buildings	Buildings that children are living in/visiting become too hot leading to dehydration and health impacts for children and staff Buildings becoming flooded and inaccessible	Education of staff, families and children Include impact of a 2 degree rise in temperature in health and safety audits now to plan for the future Work with providers to educate around climate resilience to ensure that buildings can cope with an increase in temperature Consider flood action plans in risk management in children's homes Educate staff and carers about potential risk of increased flooding in the future and encourage thinking about mitigations or actions should it occur.	Childrens' services	Health benefits (from increased fluid intake)	Sep-20	Both
	Risk of damage to buildings from extreme weather events e.g. flooding, storm damage, etc, and risk that buildings become unfit for use due to climate change e.g. excess heat making occupation of a school / care home dangerous	Develop the measures for building resilience to the impacts of a 2degC global temperature rise as part of a State of the Estate report	CCBS	Economic	Sep-20	нсс
Planning	Built Form: Building styles may change in the future to adapt to climate change and climate change policies; Air quality in and around cities may decline due to increased temperature, also impacting on visibility; Surface Water Flooding: More intense bursts of rainfall are expected, leading to increased flooding – would be exacerbated by summer droughts, and also past and present house building programmes on floodplain land. Increasing damage to domestic properties, farmland, infrastructure, cultural heritage etc; Urban Heat Island effect - increase in summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water pollution; Infrastructure development: Possibility of more sustainable energy infrastructure - wind turbines, solar panels.	RPB1 (also incorporating RPB2) - Preparation of design guides and bulletins for land release / development sites - establishing parameters that encourage robust GI, connectivity for walking/cycling routes etc, and promoting the benefits offered by landscape and biodiversity for ameliorating climate within urban areas.	Planning and Environment	Environmental (E), Economic (Ec), Social (S), Health (H), Biodiversity (B)	2020/2021	County-wide
		RPB5 - Work with the Environment Agency, local planning authorities and other partners to develop the planning skills and capabilities to advise developers on how adaptive approaches should inform strategic local plans, and enable climate resilient places.	Planning and Environment	Economic, social, health, wider environmental benefits	2020/2021	County-wide
		Review Hampshire Minerals & Waste Plan policies to ensure suitable consideration given to location of minerals and waste infrastructure to be resilient to climate change.	Strategic Planning	Economic, social	2021	County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
Landscape		RPB3 - Review and update Landscape and Development Checklist - To include requirement for development to demonstrate a net environmental gain	Planning and Environment	Social, mental health	2021/2022	County-wide
		RPB4 - Review and revise Hampshire Townscape Character Assessment to assess sensitivity to climate related changes.	Landscape		2022/2023	Both
Historic buildings	Sea level rise and coastal erosion will endanger historic maritime landscapes, structures, buildings and archaeology. Increased flood defence infrastructure could also place specific sites under threat	Commitment to maintaining the HER as the evidence base to monitor the state of the historic environment, and any decline and the efficacy of any intervention/project /strategy. Engage with Environment Agency and coastal programme managers to ensure that Heritage Assets are given a 'value' in the cost benefit analysis. Support Citizan programme or equivalent (community based archaeological recording of archaeology revealed in erosion)	Specialist environmental services	Economic, social, health, wider environmental benefits	1. Ongoing 2 & 3 2020/21	Both
	More frequent and severe flooding may cause direct damage to some historic buildings, create difficulties in obtaining insurance, or make buildings uneconomic to occupy and maintain.		Specialist environmental services			нсс
	Changes in hydrology in coastal areas, estuaries, rivers may put buried archaeological remains at risk e.g. dry sites becoming wet; wetland archaeology becoming dry.	Identify and map areas of wetland with this potential, map on to HER. Programme of precautionary palaeo environmental sampling before loss.	Specialist environmental services	Social, mental health	2021/22	County-wide
	Alteration of agricultural practices, resulting from changes in crop or stock viability could pose a risk to some landscapes and buried archaeological sites.	Ensure that Defra have an active policy regarding historic landscape resilience (and within their stewardship schemes) and understanding and measuirng change. Ensure designated landscapes (National Parks and AONBs) have an active policy as above	Specialist environmental services	Social, mental health	2020/21	County-wide
Waste Infrastructure	Waste infrastructure: HWRCs, MRFs, ERFs, Transfer stations, Composting sites and closed landfill sites: Susceptible to increased temp and decreased precipitation (i.e. increased drying) resulting in infrastructure impacts for ERFs, MRFs, HWRCs and open windrow composting sites - large concrete aprons cracking/subsiding. ERF heights with roofs being unable to be supported if structural damage to walls. Fires at sites (as a result of decreased rainfall, increased dryness and increased wildfires); waste being set alight at HWRCs - lightening, drier conditions. Environmental damage as a result of flooding i.e runoff from some sites into the open environment (water courses, etc) as a result of increased rainfall intensity	Review, baseline (where we are now) and develop appropriate plans. Use previous work undertaken on NI188 to help identify risks and mitigations	Waste & resource management	Economic, wider environmental benefits, social and possibly health	(2020) Ongoing programme of resilience improvement	нсс
waste infrastructure		illiant transport systems which adjust to the changing environme	ont .			

Resilient transport systems which adjust to the changing environment

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
$\bigotimes_{\mathbb{N}}$	Weather fluctuations effecting asphalt quality	Use of graphene-enhanced asphalt	Highways (commissioning)	Economic, reduced maintaince	1-2 years	нсс
Materials	New capital infrastructure fails increasing maintenance burden for HCC.	Amend design commissioin Task Orders to include a Climate Change section requiring design for effects of climate change (higher temperatures for longer periods / more intense rainfall / costal erosion).	Travel planning			нсс
Highways maintenance		Improve Drainage systems as issues are identified	Highways (commissioning)	Economic	Ongoing	County-wide
	Flooding, greatest frequency of soakaway/SUDs maintaince	Increase capacity of soakaways / SUDs	Highways (commissioning)	Economic, social		County-wide
	Flooding,	Consider use of new and emerging sensors to help manage just in time cleansing of gullies etc	Highways (commissioning)			County-wide
Highways design	Reduction of soil moisture content will lead to shrinkage of clay subsoils.	Consider design of new schemes to ensure long-term durability of carriageways and footways in clay soil areas	Highways (commissioning)	Long-term benefit to maintenance costs		County-wide
Emergency planning	Widespread tree fall due to more severe weather events	Identification of routes on the highway network prone to treefall. Include in Network Resilient Plan and Weather Emergency Plan. Develop mitigation measures	Highways (commissioning)	Increased safety for highway users and reduction in network disruption		County-wide
	Increase in severe winter weather (ice and snow) leading to network disruption	Ensure Winter Emergency Plan is fit for pupose and link to the Network Resilient Plan (review both regularly). Indentify hotspots on resilient network and develop mitigation measures.	Highways (commissioning)	Increased safety for highway users and reduction in network disruption		County-wide
	Increased flooding events on highway infrastructure	Ensure flooding events and high risk areas are recorded on GIS. Data collection, routine cleansing and schemes to be prioritised accordingly. Develop and implement a Network Resilience Plan	Highways (commissioning)	Minimise disruption on the highway network and limit the number of highway claims relating to flooding		County-wide
	Widespread ground water issues due to more severe weather events and more prolonged wet weather periods.	Identification of routes on the highway network prone to groundwater flooding. Include in Network Resilient Plan and Weather Emergency Plan. Develop mitigation measures	Highways (commissioning)	Increased safety for highway users and reduction in network disruption		County-wide
Monitoring	Carriageway heat damage due to increased exposure to higher temperatures. Bleeding of bitumen is likely to increase amount of slippery road surfaces	Potentially increase SCRIM and other technical survey frequency to monitor impact and risk	Highways (commissioning)	Increased safety for highway users		County-wide
	Increased bridge scour compromising the integrity of the structure. Due to more severe weather events and more prolonged wet weather periods.	Consider increasing survey regime in potentially affected structures	Highways (commissioning)	Increased safety for highway users		County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
	Increase in coastal erosion causing damage to highway infrastructure due to rising sea levels and more severe weather events.	Consider increase in surveys/monitoring and cross party collaboration with EA and other appropriate bodies	Highways (commissioning)			County-wide
	Increase in landslips due to prolonged periods of rainfall	Identification of embankments and assessment of slope stability and establish routine surveys	Highways (commissioning)	Increased safety for highway users		County-wide
Claims	Increase in claims due to all key risks identified above	Review claims processes and procedures. Review Insurance type and cover.	Highways (commissioning)	Minimise highway authority's liability and reduction in payouts		нсс
Roadside equipment	Overheating roadside electronic equipment leading to equipment failure	Upgrade/modify susceptable equipment/install fans	Highways (traffic)	Economic		нсс
	Insect/spider infestation in roadside cabinets	Enhanced base seals/fit mesh to air vents	Highways (traffic)	Economic		HCC
	Water ingress to roadside cabinets	Enhanced base seals/raise cabinets	Highways (traffic)	Economic		HCC
	Water creating dangerous electric circuit	Upgrade electrical installations to extra low voltage	Highways (traffic)	Economic		нсс
Scheme programming	Inefficient scheme delivery based on old weather / ecology patterns	Investigate impact of climate change on scheme programming (ecology windows / weather / temperature)	Travel planning			County-wide
		We have funded a range of sustainable transport projects including (you can find further details on these here: https://solentlep.org.uk/whatwe-do/solent-growth-deal/solent-growth-deal/: Station quarter north (Southampton), Hard interchange (portsmouth), cowes floating bridge (IOW)	Solent lep			County-wide
= 0		RTS1 - Project development - Review and update Good Governance / Gateway process to recognise importance of Climate Change adaptation / mitigation objectives	Travel Planning and Environment	Economic, social, health, wider environmental benefits	2020/2021	нсс
Governance						

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
Data		RTS2 - Adopt Ecosystems Services tool to establish baseline value of existing natural environment assets e.g. CAVAT	Travel Planning, Highways (Commissioning - Arboriculture) and Environment	Economic, social, health, wider environmental benefits	Started	County-wide
Vegetation		RTS3 - Advocacy for retention of existing vegetation in preference to a removal / replacement approach. Refer also Action RPB3	Highways (Commissioning) and Environment	Economic, social, health, wider environmental benefits	Ongoing	County-wide
		RTS5 - Ensure sufficient resources are in place to secure management, maintenance and benefits of ecosystem services i.e. new planting and grass, for at least a period equivalent to that required in planning approval.	Highways (Commissioning), Travel Planning and Environment	Economic, social, health, wider environmental benefits	Ongoing	County-wide
Strategy		RTS4 - Ensure Local Transport Plan integrates countywide GI Strategy	Highways (Commissioning), Travel Planning, Planning and Environment	Economic / Social / Health	To coincide with LTP timetable	County-wide
v.		Improved water resource and infrastructure management				
Water recycling	avalbility of water during periods of draught	Grey water recycling in ETE depots	Highways (commissioning)	Economic		нсс
→ → → → → → → → → →	Increased drainage demand on new developments due to higher design criteria	SUDS - use of open drainage systems, to encourage greener space, bio diversity and tie in the LLFA's also to plan layout with regards to flood events.	Travel planning, Planning and Environment	Social, mental health	Ongoing	County-wide
	Additional flooding, reduced space open attenuation due to demand to deliver high numbers of properties per area available	Tree pits/attenuation built into one system along side of highways	Travel planning			County-wide
Behaviour change	Decreased water available to meet everyone's needs	Education of staff, families and children about the impact of climate change on the availability of water supplies and encouragement of water saving strategies across all settings (eg. Turn tap off when brushing teeth).	Childrens' services	Reduction in water costs through more efficient use	Sep-20	County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
Landscape	Water storage or transfer infrastructure: Increased demand may lead to different/more infrastructure for storing water such as regional reservoirs, or local reservoirs e.g. on-farm reservoirs for summer irrigation. There may be increased pressure for water transfer solutions to shortages between different regions; Groundwater depletion: Due to more droughts in the southeast; more erratic rainfall - more intense bursts of rainfall leading to flooding rather than evenly spread rainfall that slowly percolates into groundwater supplies; decreasing groundwater levels; greater rates of evaporation from reservoirs and soils; Demand management: Hotter summers combined with drought may lead to increasing summer water demand from the public (sprinklers, swimming pools), agriculture (irrigation) and other businesses. Exacerbated by high predicted rates of housing growth; Water Quality: Increased evaporation, less frequent rain and resulting lower flows decreases the dilution of diffuse and point-source pollution, causing increased concentration of pollutants. The concentration of natural substances dissolved in water would also increase, causing changes to water chemistry and biology. Water quality in lakes, ponds and small streams could deteriorate in warm, dry summers as water temperatures rise and oxygen levels in the water decrease	WR1 - Planting trees: increase shading, reduce temperatures, increase evapotranspiration, increase water infiltration, reduce speed of overland flows, improve biodiversity etc. Refer also Action L3 and RTS3	Highways (Commissioning) and Environment	Economic / Social / Health	Ongoing	County-wide
		Review Hampshire Minerals & Waste Plan policies to ensure minerals and waste proposals include, where relevant, adaptation measures such as water/energy reduction, use of heat and power etc.	Strategic Planning	Economic / Social / Health	2021+	County-wide
		Managing natural environment				
Biodiversity	Higher summer temperatures and milder winters - leading to low flows in rivers with resulting deterioration in habitat quality, water quality and oxygen levels, drying out of wetlands and ponds, and changing phenology (species and their requirements being out of sync) - all leading to overall net loss in native species and likely increase in native & alien pest & pathogen species. Increased fire risk especially on heathland	To protect all remaining areas of priority habitat, and to restore and recreate new areas of native habitat and green infrastructure to improve overall resillience to climate change through being 'more, bigger, better, joined up'; ensuring a more permeable landscape of sufficient habitat connectivity and quality to facilitate species dispersal and adaptation as their climatic space moves, to improve capacity of land to absorb more carbon, and to provide cooling and improved air quality in urban areas	Specialist environmental services	Economic - more attractive place to live and work, Social/health - wellbeing - more accessible habitats & greenspace to visit, to absorb/spread recreational disturbance, improved water and air quality	On-going, likely to accelerate with the Environment Act & Biodiversity Net Gain	County-wide
		Contributing to the South Downs Joint Accord - preserving national parks and encouraging physical activity	Specialist environmental services	Health (increased physical activity), social (increased cohesion amongst people living in rural communities)	ongoing	County-wide
		Review Hampshire Minerals & Waste Plan to ensure restoration policies given suitable consideration to climate change resilience e.g. flood attenuation storage, green/blue infrastruture networks etc.	Strategic Planning	Social and health benefits.	2021+	County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
	Changes to habitat and species communities. Habitats in Hampshire considered to be of high sensitivity include; coastal saltmarsh, saline lagoons, standing water, lowland fen, rivers and streams.	Increased resilience through expanding and connecting habitats. Opportunities for nature recovery and rewilding identified. Adaptive and updated management practices reviewed through updated management plans. Adopted Pollinator Action Plan	CCBS	Economic - more attractive place to live and work, Social/health - wellbeing - more accessible habitats & greenspace to visit, to absorb/spread recreational disturbance, improved water and air quality Public awareness, support and action re: Pollinators	started (to be completed by 2025)	County-wide
Re-wilding		Re-wilding of Highway Verges (Planting wild flowers and the like)	Highways (commissioning) and Environment	Economic - more attractive place to live and work, Social/health - wellbeing - more accessible habitats & greenspace to visit, to absorb/spread recreational disturbance		County-wide
Waste	Disposal of waste - decision of what to do and agreement with EA	Cut and collect trails of grass verges.	Highways (commissioning)	Social and health benefits.		County-wide
	Closed landfill: Sea-level rise and coastal flooding; caps on landfill being damaged as a result of drying	Review, baseline (where we are now) and develop appropriate plans. Use previous work undertaken on NI188 to help identify risks and mitigations	Waste & resource management	Economic, social, health, wider environmental benefits	(2020) Ongoing programme of resilience improvement	нсс
Tree planting	An increase in the likelihood of tree pest and disease infestations to our tree stock resulting in - tree death, tree failure reduced canopy cover, increased maintenance costs, increased risk to HCC from damage, injury, death.	Increase appropriate standard tree planting Highway and non-highway land)	Highways (Commissioning) and Environment	Economic - more attractive place to live and work, Social/health - wellbeing - more accessible habitats & greenspace to visit, to absorb/spread recreational disturbance Urban cooling, shading, flood attenuation	Started	County-wide
	Impact to health due to footpaths and cycle ways being next to roads -	look at seperating them out and crafting corridors of trees to filter polutants from cars	Travel Planning, Highways (Commissioning - Arboriculture) and Environment		Started	County-wide
Behaviour change	Increasing air pollution and associated health conditions, particularly for vulnerable members of society.	Work with schools, workplaces and communities to raise awareness of air quality issues and what can be done to reduce exposure to pollutants through the routes taken, green walls, turning engines off and so on.	Travel planning	Physical health, mental health, congestion, air quality, life skills, road safety, carbon reduction, efficient and cleaner vehicles,		County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
Green infrastructure		We have funded a green infrastructure scheme (see here: Solent Recreation and Mitigation Partnership)	Solent lep			County-wide
Farms	Changes in disease risks to livestock, crops and grazing management in servicing HCC Countryside estate and attractions	Adaptive management practices, review of cropping, livestock type and disease resistent varieties / breeds / crops. Animal health status set up.	CCBS	Improved animal health /zoonotic control.Public health.	started (to be completed by 2022)	нсс
Coastal areas	Risk of coastal flooding and sea level changes impacting on habitats and species in Countryside reserves and sites	Joint departmental / long term strategic planning to prioritise key sites for change including those holding the line, managed retreat etc.May include need for adaptation and mitigation measures on reserves and/or adjacent/local sites and coastal access. Long term strategy required.	CCBS	Access to the coast providing health and social benefits.	started (to be completed by 2025)	нсс
	Sea level rise and more intensive winter storms are leading to increased coastal erosion and greater flooding resulting in loss of internationally important coastal habitats such as mudflats, saltmarsh, vegetated shingle, eel grass beds and reedbeds, and associated breeding & overwintering wildfowl and waders, plus short-term inpacts in river valleys causing displacement of flocks of over-wintering wildfowl and waders, ground nesting birds and waterlogging of species rich grassland.	To protect undeveloped areas of coastline & estuary from development to; allow 'managed retreat', 'managed realignment', and restoration/recreation of coastal habitats, to allow habitats to 'roll back' and link to others to improve overall resillience through being 'more, bigger, better, joined up'; will reduce nitrates levels reaching coastal waters; and improve capacity of land to absorb more flood water and carbon. More natural habitats such as wetlands and woodland have the potential to soak up water and mitigate flooding elsewhere	Specialist environmental services	Economic - more attractive place to live and work, Social/health - more attractive and accessible for coastal visits/exercise - more habitat to absorb/spread recreational disturbance, improved water quality	On-going, likely to accelerate with the Environment Act & Biodiversity Net Gain	County-wide
	Landform and Geology: Loss of some features – particularly coastal, and alteration of coastline. Losses could include some well-known features that are a key focus of that landscape. Land physically lost to sea via managed realignment or non-protection; land take for habitat mitigation and improved access; Settlement Form: Potential coastal change - move away from building on floodplains and coastal areas; coastal properties could loose value; subject to change via planning policies as much as climate change itself; Increased demand for access to the coast set against loss of existing routes and access points to sea level rise. Loss of recreation assets e.g. country parks; higher demand for marinas, sailing, watersports, beaches, walking, waterside cafes and restaurants; Build-up of sea-defences in urban areas may lead to increasingly 'unnatural' coastline; flooding of land; direct loss of land and features; changes to erosion/deposition patterns also likely to alter the shape and location of natural features such as beaches and headlands. Coastal Squeeze;	CO1 - Understanding of impacts of sea level rise and climate change on the Hampshire coastline and landscape character areas. Refer also Action L1	Environment	Economic / Social / Health	roader joint departmental / lon	County-wide
		CO2 - Raise awareness and understanding of the impacts of Climate Change on the Solent and appropriate mitigation, resilience and adaptation measures (Solent Forum Business Plan: Objective 6)	Environment	Economic, social, health, wider environmental benefits	Ongoing.	County-wide
		CO3 - Plan for and accommodate landscape, biodiversity and access needs on the south coast within a highly built up area characterised by very little natural coastline, and few coastal open spaces	Environment	Economic, social, health, wider environmental benefits	2020/21 and to tie into broader joint departmental / long term strategic planning.	County-wide
		CO4 - Collaborate on review of strategically important Shoreline Management Plans where significant infrastructure and HCC landholdings are implicated e.g. Hayling Island, Hurst Spit, Calshot etc	Environment and CCBS	Economic, social, health, wider environmental benefits	2020/21	Both

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
		CO5 - Support Regional Flood and Coastal Committees for Southern, Thames and Wessex regions	Environment	Economic, social, health, wider environmental benefits	Ongoing	County-wide
Flood and water management	Surface Water Flooding: More intense bursts of rainfall are expected, leading to increased flooding – would be exacerbated by summer droughts, and also past and present house building programmes on floodplain land. Increasing damage to domestic properties, farmland, infrastructure, cultural heritage etc	FWM 1 - Publication and application of new Local Flood and Water Management Strategy and surface water policies to ensure development is designed to reduce flood risk i.e. Policies written to ensure that only developments which can prove they have enough attenuation on site for a 1% probability rainfall event plus a 40% upgrade for climate change (guidance from EA re percentages for different sites – anywhere between 20 and 40%); Undertake research for Defra (current).	Environment	Economic, social, health, wider environmental benefits	2020/2021	County-wide
		FWM 2 - Develop 18 prioritised Catchment Area Action Plans - Working with communities to highlight flood and water management issues; Support for Parish Lengthsman schemes	Environment	Social, health and wider environmental benefits	started	County-wide
		FWM 3 - Promote delivery of biodiversity, tree planting programmes and landscape enhancement to support flood risk reduction outcomes; Use of landholdings for flood attenuation; online storage, reed bed systems (flood attenuation and filtration) e.g. Education Estate, County Farms, Country parks etc; application of Natural Flood Management principles e.g. Watercress and Winterbournes project. Refer also Action L3	Environment	Social, health and wider environmental benefits	Started	County-wide
		FWM4 - Implement and adopt Sustainable Drainage Systems (drainage hierarchy) to reduce flood risk, reduce maintenance and increase ecology and biodiversity. Promote better management / control through policies in new Local Flood and Water Management Strategy and Catchment Management Plans.	Environment	Social, health and wider environmental benefits	Started	County-wide
		FWM5 - Refresh and relaunch Hampshire Strategic Flood and Water Management Partnership Board as annual FWM conference	Environment		2020 / 2021	County-wide
		FWM6 - Advising riparian owners on maintaining and managing watercourses; Regulation and consent for work on Ordinary Watercourses	Environment	Economic, social, health, wider environmental benefits	Ongoing	County-wide
		FWM7 - Plan, develop and deliver flood risk and coastal defence schemes	Environment		Ongoing	County-wide
		Review of Hampshire Minerals & Waste Plan to ensure steady and adequate supply of aggregates to ensure availability of material for flood event materials e.g. sand bags, beach replenishment etc.	Strategic Planning	Social	2021+	County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed		
Landscape	River valley landscapes - vulnerability to variable water table levels e.g. winterbournes drying out, low flows. Reduced rainfall, drier hotter summers may increase problems in rivers and streams, drying out of wetland areas; Soils: increased soil erosion - particularly if soils become drier in summer, followed by periods of rapid rainfall; changes to soil moisture; Biodiversity: Loss of species characteristic within the landscape e.g. ash; Land use: Subject to change from changing societal patterns and demand – e.g. for recreation and tourism. Land use	L1 - Review and revise Hampshire Integrated Landscape Character Assessment to assess landscape sensitivity to climate related changes.	Environment	Social, health and wider environmental benefits	2021/2022	County-wide		
	planning policies responding to climate change may also change land use – e.g. allocation of land, SUDS, positive planning; Agriculture: Climate space' changes: opportunities to grow different crops e.g. sunflowers, navy beans, soya, lupins, ib borage, apricots, walnuts, peaches, grapevines & evening primrose. Different market opportunities: biofuels, wood fuel, energy crops, wind 'farms'. Alteration of agricultural practices, resulting from changes in crop or stock viability could pose a risk to some landscapes. Cultural and experiential impacts: Loss of features e.g. coastal via direct loss, loss of characteristic habitats or features, loss of local products	L2 - Develop countywide Green and Blue Infrastructure Strategy integrating Ecological Network mapping and Nature Recovery Networks etc	Environment	Economic, social, health, wider environmental benefits	2021/2022	County-wide		
		L3 - Develop and implement Tree Strategy including 1 million trees on the Highways project. Refer also Action L2, RTS3 and WR1	Environment	Economic, social, health, wider environmental benefits	commenced	нсс		
Homes		Providing input into local plans including the design of new build homes and their heating, cooling and ventilation systems as well as influencing the role of community development workers and how this may link with emergency planning	Planning and Environment	Health (to ensure housing is designed to be healthy	ongoing	County-wide		
		Conducting a healthy homes needs assessment which includes considering whether homes are fit for purpose and environmentally sustainable		Health (to ensure housing is designed to be healthy	ongoing	County-wide		
Policy	Finite land resource & growing population (increased demand) Increased flooding risk Agriculture / agricultural sustainability Biodiversity loss Increased concrete reliance Nutrification (nitrate, phosphate) - See all of the above sections Re: Transport, infrastructure, natural environment & communities! Unsustainable development patterns and transport systems. Current planning system fails to respond to climate change challenge. National and local planning policy is ineffective and difficult to enforce & monitor. Housing delivery controlled by Housing industry and major housebuilders. Lack of evidence & information - relating to relative impacts, opportunities, costs/benefits, natural capital, energy options etc.	HCC Policy - Better implementation of HMWP Climate Change Policy (validation), increased emphasis on recycled aggregates / DM event - highlight policy requirements / Review and update of HMWP Climate Change policies / Plan as a whole (e.g. net gain) / Seek formal consultation response from Climate Change experts? HCC Influence on Local Plan making and major development proposals - encourage and promote use of smart and challenging planning policies with CC emphasis that are enforced. HCC provided data/evidence (demography, land supply, HBIC, HE, transport etc.) HCC State of the Environment report and HCC Spatial Framework to better inform decision making.	Strategic planning	A successful planning system (planning policies) should deliver Economic, Social and Environmental benefits as envisaged in the NPPF. Quality of place - natural & built environment - should improve health and wellbeing, create a sense of community and reduce the need to travel etc.	Ongoing. 1) 2020 Review of HMWP 2) Update of Hampshire Minerals & Waste Plan (2021+) 3) Review of Validation Checklist for early 2020 (greater emphasis on addressing current CC policy) 4) State of the Natural Environment Report underway	County-wide		
Resilient businesses and communities								

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
Emergency planning		Emergency planning for a range of events that may occur secondary to climate related adverse weather conditions that can impact on health such as: heatwaves; cold weather; mosquitos; ticks; and flooding. This also encompasses providing information about the physical and mental health effects of emergencies such as flooding.	Adults' health and care/public health	Health (to protect from physical and mental harms of adverse weather events)	ongoing	County-wide
Flood protection		Working with Portsmouth City Council to invest in the Southsea Flood Protection scheme.	Solent lep			County-wide
	Flooding on roads leading to children being unable to access school, staff being able to get into work and social workers unable to visit children and families	Visits are prioritised according to need and risk Business continuity plans are updated regularly for priority services Alternative, flexible working arrangements are embedded so more local travel is possible Where appropriate, other methods of contact such as Skype are used to engage with families	Childrens' services	Reduction in travel costs Children's wellbeing is promoted through contact via digital methods where physical contact is not possible Children remain well	Mar-20	нсс
Health	Risk of sunburn and heat exhaustion particularly for young children	Education of carers and staff to ensure appropriate use of sunblock and increased fluid intake				County-wide
	Increased risk of health problems for any outside workers caused by longer exposure to stronger sunrays in summer months.	Reduce exposure by i) using more efficent protective clothing ii) consider greater use of evening/overnight working in summer months.	Highways (commissioning)	Reduced risk to health of outside workforce		нсс
Investment		Published Infrastructure Investment Plans for Gosport and Isle of Wight, which consider climate change adaptation (see: https://solentlep.org.uk/media/2543/gosport-infrastructure-investment-plan-feb-2019.pdf and https://solentlep.org.uk/media/2324/15735-iiip-final-report-300518.pdf) Recently commissioned an Infrastructure Investment Plan for Havant Borough, and shortly to commission one for New Forest District	Solent lep			County-wide
Businesses	Businesses not understanding mitigation opportunities and requirements.	Initiate roundtable discussions with key business leaders to discuss their role in working with us to maintain local economic resilience whilst adapting to climate change impacts and putting in place preventative and mitigating measures. Engage with FSB and Chamber of Commerce and others to reach SMEs	Economic development	Businesses are able to continue to operate and or adapt operations without adverse impact on or disruption to the business, staff and customers	Summer/Autumn 2020	County-wide

Project Area	Key risks	Action	Service delivering	Co-benefits (economic, social, health etc)	Delivery start date	Emissions addressed
	Businesses understanding potential risks, mitigation opportunities and requirements but taking no action.	Encourage businesses, through our partner networks, to recognise the longer-term benefit and business sense of adapting to lower dependency on fossil fuel energies, adopting rainwater harvesting, swithching off the lights,	Economic development	Businesses become more resilient to potential climate change impacts, save money in the longer term to reinvest in the business and continue to serve their customers and retain staff	Autumn 2020	County-wide
Communities		Plans include measures to mitigate effects of global warming such as extreme weather and personal resilience	Adults' health and care	Wider awareness, cultural change, improved wellbeing	Apr-21	County-wide
Communities	Individuals have reduced resilience as unable to access food.	Meals on Wheels service delivering hot nutritious meals who need support to manage and maintain nutrition. Procedures in place to deliver accessible meals to these individuals even in severe weather and highlight if support is required from local friends or relatives	Adults' health and care/public health	Supporting customers to manage and maintain their nutrition has significant health benefits. In addition, the interaction with the driver provides social contact and the opportunity to carry out a wellbeing check, with any concerns raised and addressed. Action taken to address loneliness where identified	2013. Current contract started 1/10/18	County-wide