Climate change strategic framework of programmes



Climate change strategic framework for programmes – Carbon mitigation

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Transport	Local Transport Plan 4	 Carbon from transport research complete – Identify measures most likely to achieve carbon reduction. Deliver tranche 2 emergency active travel scheme if bid is successful. All districts to have local Cycling Walking and Implementation plans. Agree new Active Travel design principles and implement. Develop an Electric vehicle strategy and action plan. Deliver Transforming Cities programmes. 		 National-level policy developments, for example centralised EV charging point or hydrogen refuelling station rollout by government. Through Point 4 of the Government's 10-point plan for a green industrial revolution, plans to ban the sale of petrol, diesel or hybrid cars have been brought forward again to 2030 at the latest. This ambitious target tees up further significant policy developments to support its realisation in the short term. £1.9bn funding has already been allocated as part of SR20 for charging infrastructure and consumer incentives. Post-Covid step-change to active transport or 'bounce back' to the use of private cars. Importance of connectivity and access considerations for new developments, to ensure the 'baking in' of car use is avoided where possible. 	2,368.92	75% reduction against 2019 transport sector. 28% reduction against 2019 total. In order to deliver the 'high EE' scenario, by 2030 there need to be: Petrol cars (485,531), Petrol LGVs (4,801), Petrol motorcycles (34,866), Diesel cars (288,342), Diesel LGVs (146,455), Diesel HGVs (17,924), Diesel buses and coaches (4,269), Electric cars (137,149), Electric LGVs (5,821), Electric motorcycles (24,602), Electric HGVs (250), Electric buses and coaches (129), Hydrogen HGVs (35), Hydrogen buses and coaches (9).	The impact estimate followed the emissions reduction pathway of the Clean Growth Strategy (CGS) between 2019-2032. This trend over the 13 year period was then extrapolated for a 29 year period – 2021-2050. The impact estimate is for the decarbonisation of transport (in line with the CGS) from LTP4 up until 2050.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Residential	Hampshire housing retrofit accelerator	 Map energy efficiency of Hampshire-owned housing stock and understand potential for improvement and target energy efficiency solutions. Establish framework for identifying which properties to prioritise focusing on EPC rated E, F, G properties. Design retrofit programme, making use of existing successful approaches (e.g. Energiesprong), and identifying potential pots of funding i.e. incentivising retrofit through council tax or business rate reduction. 	Funding National policy	 Continuation of Government funding beyond Green Homes Grants and other Post-Covid stimulus packages. This includes potential for further government funding flowing from the £100bn capital expenditure allocated to the 'infrastructure revolution' in the Spending Review 20. Through Point 7 of the Government's 10-point plan for a green industrial revolution, there are plans for the wide scale retrofitting of residential buildings. £1.1bn funding has already been allocated as part of SR20 for making homes and buildings netzero ready. Roll out of demonstrator projects as part of the Governments Social Housing Decarbonisation Fund. Rapid decarbonisation of the grid will accelerate the case for heat pump roll-out over very high energy efficiency retrofit. Point 7 of the 10-point plan aims for 600k heat pump installations per year by 2028. Transition from focus on Hampshire-owned stock to owner-occupied. How can Hampshire accelerate a self-sustaining market in the county? 	885.11	44% reduction against 2019 domestic sector. 10% reduction against 2019 total. In order to deliver the 'high EE' scenario, by 2030 there need to be this many homes fitted with: solid wall insulation (82,920), cavity wall insulation (31,892), loft insulation (267,894), underfloor insulation (232,813), double glazing (22,325), new condensing boiler (162,650), LED lights (328,993), air source heat pump (28,963).	We took the average electricity and gas consumption for an EPC Band D house in Hampshire, and compared it against an EPC Band B house to establish the level of efficiency improvement. The average reduction in electricity and gas consumption was then converted into an average emissions reduction per house. This was extended across the total proportion of Hampshire's housing stock to be addressed by the programme, which is assumed to be 80% of the stock by 2050.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
	Strategic Planning to support climate change	 Developing a consistent approach with districts for setting energy efficiency levels on both domestic and commercial developments. Develop practical guidance for planning authorities on how to leverage planning requirements to drive climate action. Encourage land use planning that take into account carbon sequestration, renewables, nature, agriculture and promotes net environmental gain. Encourage local authorities within the county to use their planning and procurement powers to support the development of the zero carbon homes market in the region. 	Effective joint working across LAs	 The consultation on the Future Homes Standard closed on 7 February 2020, it will be introduced in 2025. This will determine what the 'higher ambition' energy efficiency requirements will be, as well as detail whether Local Authorities will have the power to set their own higher standards. Point 7 of the 10-point plan states that the FHS will be implemented in the shortest possible timeline, and that there will be a consultation on increased standards for non-domestic buildings. What actions or considerations have district councils put in place, and how will this affect the wider group of councils. More broadly what change will the government bring in at the national level regarding 'joined-up' climate-aware planning, integrating water efficiency, energy efficiency, on-site waste use and transport connectivity, for example embedding the 15 minute city principle into planning. 	15.74	0.18% reduction against 2019 total	Using a similar approach to the above, however focused only on new constructions. The estimated started with average energy consumptions for domestic and commercial properties in Band D, and then applied a 60% assumed efficiency improved (resulting from more ambitious planning requirements). This provides the energy consumption of newly constructed properties, and therefore the energy reduction, which can be converted into emissions reduction. This was then applied for the number of new domestic and commercial properties built in Hampshire per year across the 2021-2050 period to give the total emissions reduction estimate.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Energy generation and distribution	Renewable energy generation accelerator	 Mapping of opportunities for renewable energy generation across the County, including for example, commercial and industrial large roof sites. Liaise with LEP's, Energy Hubs etc. to identify funding opportunities, partnerships and expertise. Identify key stakeholders, partners, business decisionmakers etc. for opportunities for joint working. Set up monitoring and reporting structure to identify how many feasibility studies are converted. 	Funding	 Tracking the decarbonisation of the national grid, and any potential incentives introduced, such as a replacement/expansion of the FiT. Removal of restrictions on the development of onshore wind, which is currently the cheapest renewable generation option. Development of grid constraints (potentially very acute) as the Hampshire grid has more renewables, storage and smart systems brought online. Keep a constant dialogue with neighbouring Local Authorities in order to track the development of renewable energy projects which may influence capabilities of the grid or provide opportunities for collaboration across 'boundaries'. Adapt any future accelerator programmes to the introduction and growth of 'smart' tariffs, for example for large commercial sites with expansive roof space. 	318.97	4% reduction against 2019 total	This estimate took the current total of renewables in Hampshire, and assumed a 3% year-on-year increase resulting from the programme's activities. The programme timeline was set at 21 years – the operational lifetime of solar PV products, and common PPA length. The cumulative growth of renewables year on year was combined with projected grid emissions factors to calculate the amount of grid emissions avoided through the use of renewables.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Energy generation and distribution	'Support and Scale' Community energy programme	1. Review outcome of Community Energy South project to identify opportunities going forward for new community energy projects, providing community resilience. 2. Design a targeted technical support programme around the findings, building awareness for community groups, and providing information or financing routes.	Funding	 Tracking the decarbonisation of the national grid, and any potential incentives introduced, such as a replacement/expansion of the FiT. Removal of restrictions on the development of onshore wind, which is currently the cheapest renewable generation option. Development of grid constraints (potentially very acute) as the Hampshire grid has more renewables, storage and smart systems brought online. Keep a constant dialogue with neighbouring Local Authorities in order to track the development of renewable energy projects which may influence capabilities of the grid or provide opportunities for collaboration across 'boundaries'. Public demand for greater democratisation and public ownership of energy generation. 	37.43	0.4% reduction against 2019 total	Similarly to the above, this accelerator programme took the current total of community energy in Hampshire and applied a 3% year-on-year growth rate. This cumulative growth was then combined with projected grid emissions factors to calculated the grid emissions avoided through the use of community renewables.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Energy generation and distribution	Energy Innovation Zone	 Identify critical local energy issues which could be addressed to unlock a more resilient energy system for Hampshire. Design the Energy Innovation Zone concept and proposal, securing buy-in from relevant parties. Submit funding application to Central Government. 	Funding	 The EIZ will address a specific problem in Hampshire, however it will be important to remain focused on how this issue evolves in a rapidly changing energy system. EIZs are to integrate the aims of the Industrial Strategy and Clean Growth Strategy with the devolution agenda, however these could change depending on future government decisions. EIZs are to address policy and regulatory barriers, however these will both change over time (in part due to pressure and evidence from EIZs), in which case, realignment and new problems will be required. EIZs are funded by government, it is not yet clear how much funding is available, or till when. In this regard, business models that deliver financial self-sufficiency are essential. Point 10 of the Government's 10-point plan focuses on green finance and innovation. It commits to raising total R&D investment to 2.4% of GDP by 2027. To accelerate, this government is launching £1bn net-zero innovation portfolio across ten priority areas, including £100m for energy storage and flexibility innovation challenges. 	252.99	3% reduction against 2019 total	Due to the difficulty in calculating the emissions impact of an EIZ when the specific innovation or problem has not been defined, this calculation estimated the impact of Phase 1 & 2 of the Tysley EIZ, the only operational EIZ in the UK. This includes the avoided grid emissions of a waste wood biomass plant over 21 years, a hydrogen bus refuelling station serving 20 buses over 12 year vehicle lifetimes, and a refuelling station.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Waste and circular economy	Work with districts within HWP to transition towards a carbon- driven waste system	TBC		 UK Government Our Waste, Our Resources strategy was published in 2018. Its key milestones/ targets are: 50% recycling rate for households (2020), deposit return scheme (2023), mandatory separate food waste collections (2023), eliminating food waste to landfill (2030), eliminate avoidable waste of all kinds (2050), double resource productivity (2050). Much of this is echoed in the Clean Growth Strategy. Will the UK government set a national carbon price, or will Hampshire County Council set an internal carbon price? Either will have impacts on how HWP transforms Hampshire's waste economy. Implicit in the move to a zerowaste economy is circularity being introduced into the business models of all businesses operating in the county. A wasteregister in order to link up waste with potential productive uses has been tried, however ran into data quality issues. 	88.81	225% reduction against 2019 waste sector 1% reduction against 2019 total	This estimate took the total waste emissions of Hampshire in 2018 and applied an average annual reduction figure based on overachieving in comparison to average annual reduction in UK waste emissions 2013-18. This annual reduction was then extrapolated over 29 years to 2050.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Natural environment	Carbon sequestration opportunities	1. Understand the role of carbon sequestration and agree a monitoring and measurement framework. 2. Map out all potential areas for action. 3. Maximise appropriate opportunities for tree planting, rewilding, and biodiversity net gain etc. to support carbon sequestration.	Funding National policy	 Hampshire has already committed to planting 1 million trees, the success of this programme will be crucial to determining the level of opportunity, and ambition, for this programme. The Government's 25 Year Environmental Plan will be a crucial guiding force, for example in the area of 'embedding a natural capital approach', which includes accounting for natural capital in decision-making. The Government set aside budget in 2018 for planting 11 million trees by 2022, however with huge Covid-related budget strains, focus may shift away from tree planting to economic stimulus, unless alternative business models can be developed. Point 9 in the Government's 10-point plan aims to protect and expand the natural environment – aiming to improve/protect 30% of UK land by 2030. Part of this will include the creation of new National Parks and Areas of Outstanding Natural Beauty, and will receive funding through a £40m second round of the Green Recovery Challenge Fund. The government is also planning to establish 10 landscape recovery projects, and deliver a series of Environmental Land Management pilots. 	601.21	7% reduction against 2019 total. It has been estimated that Hampshire's natural capital is valued at £1,939,006,604	We took the land use of Hampshire and divided it across cropland, grassland, forestland and settlement. We then allow the council to set the rate of change between different land use types. Each land use type has an associated carbon factor, set by the IPCC. The total estimate is the total emissions reduction between 2021-2050 from changes from emitting to sequestering land use types.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Business & green economy	Energy Efficiency in SMEs	 Identify SMEs and networks. Scope out resources and information already available, to produce information about energy efficiency aimed at businesses. Working group with businesses to establish where Hampshire County Council can support. Set up apprenticeship and training schemes. Link with local energy efficiency businesses. Establish how to set up a measurable baseline in order to set up a voluntary emissions reduction target. 	Government information, advice and guidance, plus funding.	 National-level policy developments, both in terms of business support (particularly in terms of Covid and post-Covid stimulus) and energy efficiency will be crucial determinants of step-change in the efficiency of SMEs in Hampshire. The case for energy efficiency as an economically productive activity will be key as stimulus is focused on re-growing the economy and revitalising businesses. National-level support for apprenticeships and training schemes which encourage skills development across green technologies. Rapid decarbonisation of the grid will reduce the case for high energy efficiency retrofit. To what extent can energy efficiency (circularity) be promoted together, making the efforts part of a fundamental ethos shift on the part of businesses, as opposed to a discrete activity they complete. 	118.34	3.6% reduction against 2019 industry & commercial sector 1.4% reduction against 2019 total	This estimate took the total number of SMEs in Hampshire, assumed 75% of them would be engaged over the lifetime of the programme (until 2050), and accounted for a 30% drop-off rate. It then set a average energy reduction rate owing to efficiency, and applied then to the average electricity and gas consumption of an average SME. The resulting figure showing consumption post-reduction, and therefore the electricity and gas consumption savings. These were converted into carbon emissions and multiplied by the total number of businesses engaged by the programme.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Business and green economy	Developing a Hampshire green economy	1. Working with SMEs etc., including those in rural areas, to understand the opportunities to develop a green economy in Hampshire.	Leveraging business networks	 The programmatic area will be driven in part by the successful delivery of other programmes, such as waste, renewables and energy efficiency. These programmes will plant crucial seeds for Hampshire's green economy, unearthing new business models, providing green energy for productive use and creating new markets. In order to maximise their impact on the direction of Hampshire's economy, a joined-up strategic approach towards a green economy will be required, identifying where markets, strengths and opportunities exist for Hampshire. Additionally, this programme will be heavily steered by nationallevel Government policy. In getting to Net-Zero by 2050 the UK's economy will need to transform into a green economy, and the Government will introduce policies, incentives and regulations to facilitate this, and meet its overall target. Post-Covid stimulus could play a key role in kick-starting this transformation, however in 2025 and beyond it is not guaranteed that such stimulus or any incentives are carried forwards. 	Size of 2019 green economy: £1,056,561,086 Size of 2050 green economy: £33,249,977,376 Size of 2050 green workforce: 160,056		This estimate took the UK-level green economy and employment figures, and used the comparative size of Hampshire's total economy versus the national economy to map them to the Hampshire-scale. Once estimates were established for the size of the 2019 green economy and workforce in Hampshire, the national green economic growth trend figure was applied (4.9%) year on year to 2050.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations	Carbon impact estimate (ktCO2e)	Baseline comparison	Calculation summary
Business and green economy	Retrofit training	1. Engage with Hampshire Futures etc. to help set up construction and engineering training on retrofitting i.e. commissioning and maintenance of heat pump systems.	National policy, interventions and funding	 Rapid decarbonisation of the grid will reduce the case for high energy efficiency retrofit. In order to justify large-scale retrofit training or apprenticeship programmes, sufficient retrofit demand will be required. This will in turn depend on government funding allocations, as it is unlikely Local Authorities can afford to support large-scale retrofit programmes independently. The training process could be introduced alongside vocational training for electricians, plumbing, carpentry, etc. in colleges. This will integrate energy efficiency into the core skills curriculum and 'normalise' it. National-level support for apprenticeships and training schemes which encourage skills development across green technologies e.g. heat pump technology. 	Total newly-trained jobs created to service Hampshire domestic retrofit: 80,597		It is assumed that this retrofit training programme will mainly service the substantial retrofit demand of the ambitious 'Hampshire housing retrofit accelerator'. It is assumed that newly trained contractors will service 50% of the total number of houses to be addressed by the programme (640,000). This is hugely dependent on the current capacity of Hampshire's retrofit market. An average investment required for retrofitting each house gave a figure for the total investment required. The job creation figure for energy efficiency from the 2020 Stern paper was then applied to the total investment required to provide an estimate of the total FTE jobs created.

Carbon impact estimate total: Reduction against 2019: 4,687.52 ktCO2e

54.84%

Climate change strategic framework for programmes – Resilience

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations
Transport	Highways Infrastructure (Management)	 Identify and map highway assets most at risk from weather fluctuations. Develop existing highway asset data sets to identify required maintenance interventions. Identify appropriate material treatment and/or mitigation measures. Identify appropriate design standards and materials for new capital infrastructure. Embed life cycle and investment planning across all assets to optimise resilience of the network. 		 As climate impacts change in type and severity over the time period, this work stream will need to adapt and have in-built flexibility. The last governmental 'Transport Resilience Review' was completed in 2014. It is unknown when the next will released, however Government steer and drive behind this area will be a crucial determining factor. For example in decisions regarding the strategic road and rail networks. National-level policy developments, for example centralised EV charging point or hydrogen refuelling station roll-out by government, will be determining factors for how this programmatic area will progress beyond 2025. As well the possibilities of a post-Covid step-change to active transport or 'bounce back' to the use of private cars.
Residential	Hampshire housing retrofit accelerator	 Map energy efficiency of Hampshire-owned housing stock and understand potential, ensuring resilience to overheating etc. is considered. Establish framework for identifying which properties to prioritise in terms of installing resilience measures such as SuDs and providing shading. Identify low regrets adaptation measures which can be easily integrated with typical energy retrofits. 	Funding / national policy	 Although there is considerable funding being made available currently for energy efficiency as part of post-Covid stimulus, this doesn't currently include the resilience of homes. Although this will increasingly enter the frame, it is unlikely as much funding will be made available, even in the medium-term. As climate impacts change in type and severity over the time period, the accelerator will need to adapt the scale of ambition, the prioritisation of certain areas and measures, and also potentially change some measures. Transition from focus on Hampshire-owned stock to owner-occupied. How can Hampshire accelerate a self sustaining market in the county?

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations
Buildings and infrastructure	Urban resilience targets	Engage with district councils on urban resilience, understand their current level, planned activities and general appetite.	Effective joint working across LAs	 UK Government strategy and direction will be hugely influential, especially if national-level targets or mandatory risk-reporting is introduced. Periodic updates to the UK Climate Projections will need to be considered and integrated. Budget constraints on Local Authorities following emergency Covid spending will likely hamper efforts for some years, this will impact planned activities as well as 'general appetite', and will require national funding pots to be made available.
Buildings and infrastructure	Flood risk zoning	Open discussion with district councils and developers regarding new developments on flood risk land.	Effective joint working across LAs	 As potential floods change in risk profile and severity over time, discussions with developers and planning authority councils will need to be aware and adapt. Flood risk regulations are set nationally, with analysis and information made available by the Environment Agency. Whether flood risk is dealt with from the local government level or central government will influence the scope of activity local authorities will be able to undertake. Working in collaboration with neighbouring authorities will be important to ensure a regional approach to flood risk is taken. It is estimated that the average annual risk exposure for public and commercial buildings in Hampshire under extreme rainfall is £5,693,628. Public health and productivity impacts are estimated at £13,365,456 annually.
Buildings and infrastructure	Strategic Planning to support climate change	 Encourage local planning authorities to create an evidence base of existing green corridors as well as potential urban heat island. Establishing a framework to minimise the impacts of climate change (flooding, overheating etc.) on both domestic and commercial developments. Develop practical guidance for planning authorities on how to leverage planning requirements to drive climate action that addresses resilience. 	Effective joint working across LAs	 What actions or considerations have district councils put in place, and how will this affect the wider group of councils. Potential to encourage the group to set higherambition requirements as part of planning requirements for developers. Although the Future Homes Standard is due to be introduced in 2025, this focuses on low carbon heating, energy efficiency and ventilation, as opposed to resilience. There is however some mention of overheating, and may well be opportunity to broaden the scope. This will likely require some lobbying of central government. Close attention will need to be paid to the UKCP updates, as these will reflect the changing hazards and severities facing developments in Hampshire.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations
Energy generation and distribution	'Support and Scale' Community energy programme	 Review outcome of Community Energy South (CES) project to identify opportunities going forward for new community energy projects, providing community resilience. Design a targeted technical support programme around the findings of the CES project, building awareness for community groups, and providing information or financing routes. 		 Tracking the decarbonisation of the national grid, and any potential incentives introduced, such as a replacement/expansion of the FiT. Removal of restrictions on the development of onshore wind, which is currently the cheapest renewable generation option. Development of grid constraints (potentially very acute) as the Hampshire grid has more renewables, storage and smart systems brought online. Public demand for greater democratisation and public ownership of energy generation.
Energy generation and distribution	Energy Innovation Zone	 Identify critical local energy issues which could be addressed to unlock a more resilient energy system for Hampshire. Design the Energy Innovation Zone concept and proposal, securing buy-in from relevant parties. Submit funding application to Central Government. 		 The EIZ will address a specific problem in Hampshire, however it will be important to remain focused on how this issue evolves in a rapidly changing energy system. EIZs are to integrate the aims of the Industrial Strategy and Clean Growth Strategy with the devolution agenda, however these could change depending on future government decisions. EIZs are to address policy and regulatory barriers, however these will both change over time (in part due to pressure and evidence from EIZs), in which case, realignment and new problems will be required. EIZs are funded by government, it is not yet clear how much funding is available, or till when. In this regard, business models that deliver financial self-sufficiency are essential.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations
Waste and circular economy	Work with districts within HWP to create a more resilient waste system	 Identify critical points of vulnerability in the waste collection and treatment process. Identify where circular practices and principles can be adopted or adapted to reduce their exposures. This includes looking at potential synergies and efficiencies across district boundaries. 		 UK Government Our Waste, Our Resources strategy was published in 2018. Its key milestones/targets are: 50% recycling rate for households (2020), deposit return scheme (2023), mandatory separate food waste; collections (2023), eliminating food waste to landfill (2030), eliminate avoidable waste of all kinds (2050); double resource productivity (2050). Much of this is echoed in the Clean Growth Strategy. This programme will need to be aligned with this timeline. Circular business models are more resilient by their nature. Although a waste-register in order to link up waste with potential productive uses has been tried previously but ran into data quality issues, this could be attempted on a county scale using smart digital solutions. As climate risks change over time, the waster system will need periodic reassessment for new vulnerabilities.
Natural environment	Green infrastructure opportunities	 Understand the role of green infrastructure in reducing climate impacts (e.g. minimising flooding and overheating) and agree a monitoring and measurement framework. Maximise appropriate opportunities for tree planting, rewilding, and biodiversity net gain etc. to support benefits such as habitat creation and flood management. 		 Hampshire has already committed to planting 1 million trees, the success of this programme will be crucial to providing learnings and momentum for further green infrastructure, and will demonstrate a workable monitoring and measurement framework. The Government's 25 Year Environmental Plan will be a crucial guiding force, for example in the area of 'embedding a natural capital approach', which includes accounting for natural capital in decision-making and ensuring at every stage of project development opportunities for tree planting and rewilding are considered. The Government set aside budget in 2018 for planting 11 million trees by 2022, however with huge Covid related budget strains, focus may shift away from tree planting to economic stimulus, unless alternative business models can be developed. It will be crucial that the co-benefits of green infrastructure are measured and communicated, as well as translated into economic benefits. National-level policy and support to encourage reafforestation and tree planting as an effective mechanism through which to alleviate flood risk.

Key policy area	Programme	Key milestones	Dependencies	Longer-term (2025-2050) steps and considerations
Business and green economy	Developing a resilient Hampshire green economy	 Research existing evidence and consult SMEs etc., including those in rural areas, to understand the opportunities and barriers to developing a resilient green economy in Hampshire. Off the back of this, leverage partner organisations' activities and plan targeted interventions to support Hampshire's SMEs in taking on ambitious steps to improve resilience, and in the process, drive innovation. 	Funding, potentially Hampshire County Council, LEP or national government.	 National-level policy developments, both in terms of business support (particularly in terms of Covid and post-Covid stimulus) and resilience will be crucial determinants of step-change in the resilience of SMEs in Hampshire. Following Covid the case for resilience is strong, however with growing debts and shrinking budgets national funding will be required. The essential long-term position should be that resilience preserves more than enough economic value in the long-run to justify investment. Requirements for post-Covid stimulus to be 'resilient investments' and regulations mandating risk assessments could play a key role in kick-starting this transformation, however in 2025 and beyond it is not guaranteed that such stimulus or requirements will be carried forwards due to wider economic pressures. A key part of this programme will be adapting to the changing risks by leaning on Hampshire's constantly developing strengths and shifting decision-making to favour a long-term view. Understanding how climate risks and projections will vary depending on the location of businesses across the region (rural vs urban impacts) and the effect this will have on developing a green economy in Hampshire.