Hampshire County Council Climate Change Annual Progress Report 2021- 2022

Executive Summary

This report provides an update on progress that has been made on climate change over the past 12 months, covering the reporting period July 2021 – July 2022.

During the 12 months of this reporting period, the focus has been on ensuring effective implementation of projects launched in the first year, whilst also undertaking research/development for other areas of priority such as energy.

This report provides an update on:

- Progress on ensuring corporate awareness and accountability on climate change
- Highlights of key programmes in Strategic Framework
- 2022 Year of Climate Resilience
- Progress on Networks and Partnerships
- Progress on Communications and Marketing

Alongside this report we are also publishing our first emissions baseline update since 2019 – see Appendix A.

From 2022 the Council will use greenhouse gas emissions data from BEIS, replacing the methodology developed with the Carbon Trust in 2020. This simplifies the process and aligns the Council with other local authorities and central government. However, given the close alignment of major emissions sources between the two methods, the strategic priorities for carbon mitigation and climate change resilience remain unchanged.

The change in approach was made in consultation with the Expert Stakeholder Forum on Climate Change which has endorsed the methodology and advised on future considerations and next steps.

Overall, the net county-wide carbon emissions estimates for Hampshire in 2019 were 6,482.93 ktCO₂. This includes -377.14 ktCO₂ accorded to sequestration through land use and represents a reduction of 40.88% since 2005 and 5.13% since 2017. The climate change team will continue to update the figures and include methane and nitrous oxide emissions in future baselines, using the latest data that is available from BEIS.

Appendices

Appendix A Baseline Emissions Report 2022

Appendix B Progress Update Action Plan 2022

Appendix C Progress Update Strategic Framework 2022

Section 1

Ensuring Corporate Awareness and Accountability on Climate Change

1.1 Climate Change Action Plan

The Climate Change Action Plan captures information on actions taking place across the whole of the County Council on climate mitigation and resilience, with every department represented in the Action Plan.

The action plan was developed as a way of embedding climate change into the DNA of the organisation. It is clear that two years on most of these actions are now part of BAU and in many cases form part of other reporting processes.

To monitor progress for this report, the climate change team have liaised with the action leads to provide updates on how actions are progressing, what outcomes have been achieved, any changes to the planned actions and to capture any new actions to be included within the Action Plan.

There are 238 actions contained within the Action Plan, consisting of 159 carbon mitigation actions and 79 climate change resilience actions.

Full updates on all actions are provided in Appendix B.

1.2 Embedding Climate Change

Climate Decision Tools

To ensure the Council held itself accountable and truly embraced climate change, two ground-breaking decision tools have been embedded as a mandatory part of our public-facing key decision reports, ensuring services are working to a common goal – our climate change targets. The tools have also been shared with all the Hampshire District and Borough Councils.

The tools were rolled out corporately on 1st April 2021, following a pilot phase within ETE from January-March 2021. The Climate Change team worked closely with Democratic Services to update the corporate template, which now includes a climate change impact assessment section for all executive member decisions. Collaborating with democratic link officers from each department has ensured a smooth roll-out across all departments.

The tools have now been active for over a year. To understand how staff feel about the tools, the Climate change team sent out a survey to report authors and also met with democratic link officers from each department. The survey results indicated that most report authors found writing a climate change impact assessment within a decision report easy, and 67% said that the process of completing the climate change impact assessment increased their awareness of carbon mitigation and climate change resilience.

The overall feedback from the annual review of the tools was that the impact assessment had been accepted smoothly across all departments and that no

negative feedback has been received. Despite the tools not always be applicable for use in all reports, such as for strategies, interest has been expressed for including high-level details of climate change considerations within the report, even if the more project-level tools were not applicable.

As the tools continue to be embedded and used at earlier stages than the decision stage, we expect to see increasingly greater impacts from using the tools.

The team will continue to provide guidance about the tools through internal channels, such as providing refresher training sessions. Spot checks will also take place to ensure that all the departments are on track and including detailed considerations about climate change within their reports.

Climate Change Board

To further support embedding climate change across all services a Climate Change Board was created, chaired by the Director of ETE and with representation from each County Council department. The Board has oversight on the delivery the Strategy and of key projects and actions.

Key areas discussed and proposed at the Climate Change Board have included:

- Green Recovery work with New Economic Foundation which led to the Retrofit Programme with Parity Projects
- Development of an Energy Strategy with University of Southampton
- Continued delivery of the Greening Campaign and Community Energy Pathways
- Establishment of the Revolving Community Energy Fund
- Key priorities for the County Council 2022-2025
- A pilot programme with Winchester University to assess the impacts of retraining incarcerated men in Winchester prison in rewilding skills.

Support to teams across HCC

The Climate Change team have taken opportunities to provide briefings to staff at various internal meetings across the authority. Two dedicated climate change workshops have also been supported by the team for Highways, Engineering & Implementation and Adults Health & Care.

Policy and Strategy

In January 2020, the County Council approved an early action to review all key policies and strategies from a climate change perspective as key priority area. Several policies have already been updated such the Local Flood and Water Management Strategy, Air Quality Management Plan, and the Highways Network Resilience Plan. The Hampshire Minerals and Waste Plan is currently being updated to include climate change as a key consideration.

Two new significant strategies are also currently being developed which will have climate change as a key priority – an Environment Strategy and Economic Strategy.

1.3 Hampshire County Council's Estate Emissions

This report focuses on the county-wide emissions and resilience activities, however it is worth noting that progress has also been made within our own estate emissions and resilience. This work led by CCBS and has a separate reporting cycle (see Greenhouse gas emissions | About the Council | Hampshire County Council (hants.gov.uk)).

After the County Council was successful in securing £29.3m from the Government's Public Sector Decarbonisation Scheme, work has been completed to install solar panels, double-glazed windows, and improved heating controls at more than 200 schools. Collectively, this action is expected to reduce annual emissions by approximately 6%.

The County Council has demonstrated leadership by piloting hydrotreated vegetable oil as a low-carbon alternative fuel to diesel. The 12-month pilot achieved a considerable reduction in emissions from fleet vehicles, with the potential to reduce emissions by as much as 90%. Separately, the County Council has continued to transition its fleet vehicles to electric in line with agreed policy change – 53 electric vehicles are now part of the fleet.

A large number of projects are underway or completed as part of the two-year £1.2m climate change programme. The County Council has awarded grant funding to improve the energy-efficiency of community buildings. Money from the County Council's Parish and Town Council Investment Fund has been awarded to 12 projects, to date, for improvements to village halls and community buildings which include solar photo-voltaic panels, LED lighting and insulation. Other projects include tree planting across country parks and other sites, a food waste station at Royal Victoria Country Park, electric power tools at Sir Harold Hillier Gardens and Hampshire Outdoor Centres, and investment in low-carbon technology at River Hamble Country Park.

The County Council is strongly positioned to influence staff and service users. A number of behaviour change interventions/campaigns have been delivered to encourage 'pro-environmental' behaviours. These include a seasonal food campaign during British Food Fortnight, trialling changes to menus to encourage sustainable food choices, and raising awareness of sustainable behaviours at libraries across Hampshire.

Section 2

Highlights of key programmes in Strategic Framework

The Strategic Framework was developed to bridge the significant gap between the Action Plan and meeting the targets set. To tackle the key sources of emissions and build resilience, new significant programmes are needed.

The Strategic Framework to 2025 focuses on high sources of emissions including transport, residential emissions, energy generation and distribution alongside key areas for building resilience such as infrastructure and environment. As a result of the impact of the pandemic on the economy, the green economy was then added a priority area.

Highlights of progress in key priority areas are provided below and focuses very much on residential emissions and energy as the current priority areas for action.

The full update across all programmes within the Strategic Framework is provided in Appendix C.

2.1 Residential Emissions, Energy Efficiency & Generation

Through the baseline emissions work we know that residential emissions accounts for almost 25% of the Hampshire county-wide emissions.

The County Council recognises that our residents and our communities have a critical role to play in building resilience and reducing emissions in their own homes and through lifestyle choices, or as communities taking local action together.

Community engagement is therefore a key component of our climate change work and significant progress on this has been made this year.

In July 2020 we launched four community projects:

- 1) The Greening Campaign
- 2) Building a Community Energy Network
- 3) Freephone Advice Line for Residents on Energy and Sustainability
- 4) Solar Together Bulk Buying Scheme

In November 2021, the County Council was successfully awarded over £200k from the Community Renewal Fund (CRF) to continue the work with the Greening Campaign and Community Energy South.

Key progress highlights for each project are provided below.

The Greening Campaign

The Greening Campaign (GC) offers a blueprint for stimulating grassroots community engagement, behaviour change, sustainability, and adaptation to climate change. The GC supports Communities to take meaningful action to reduce their effect on climate change through different interventions:

 Phase 1 - Engage and Energise your community – this takes communities through a programme which helps to inspire the community and help them take action on climate change. Using specialist cards as a visual method to activate the community, alongside detailed support, this method has now been used by over two hundred communities.

Phase 2

- Nature in your community with specialist support from the Hampshire & Isle of Wight Wildlife Trust, communities are supported to create space for nature and to improve biodiversity within their community area.
- Reduce carbon emissions from homes and reduce household bills providing specialist support from The Sustainability Centre to help communities reduce emissions being produced by homes and save money on household bills.
- Health and wellbeing of residents providing specialist support from a Health Professional to help communities understand and reduce the impact of climate change on the health of their community.

Progress made on Phase 1 since July 2021

- 11 new communities have signed up to Phase 1 making the overall total 37.
- Five communities, from the CRF funded area, have so far completed phase 1, delivering 9362 cards to households, with 977 households subsequently engaging by choosing carbon saving behaviours and placing the card in their window.
- An estimated 818.25 tonnes of carbon have been saved by the 5 communities, with an approximate annual cost saving of over £300,000.

Progress made on Phase 2 since July 2021

- A new training pack for Phase 2 has been created and shared with all communities who have signed up.
- Nine new communities have signed-up to Phase 2 making the overall total 14.
- Nature 10,788m² have been given over to wildflowers: 450m² of private gardens and 10,338m² of private land. More potential sites are also being mapped by the Hampshire Wildlife Trusts.
- Household emissions a local supplier of retrofit materials has been identified and is hosting a mobile unit display across two events. A retrofit survey is being used to get a picture of the communities' housing stock.
- Health a New Forest community is running a full day about health and wellbeing at the Carnival event. The other groups have activities in the pipeline, such as a photography and art competition.

Overall Progress

- A community event was held in Winchester to share experiences and learning.
 Over 30 community members attended the event.
- A web developer has been appointed to improve the accessibility and navigation
 of the webpage. This will help communities and new groups to easily find their
 local greening campaign group, identify upcoming events, and resources.

Building a Community Energy Network

One of the major gaps in Hampshire is the limited amount of renewable energy generated in the County which is currently less than 5%. The opportunity to generate our own energy that is low carbon and local is significant however the path to viable, funded schemes is complicated and not that simple to navigate without extensive experience.

Community energy can have a significant impact on the generation of renewable energy, to enable and support this the County Council launched a project in 2020 with Community Energy South (CES) to develop a pathway to community energy in Hampshire.

Since July 2021 CES have been working with five of the most advanced community groups in Hampshire to take renewable energy projects from concept to fruition:

- 1) Loddon Valley Community Energy, Basingstoke and Deane: has formed as a Community Benefit Society and is now undertaking engagement and feasibility assessment of a number of sites looking at the potential for community owned rooftop solar PV, including at the Anvil Theatre, a local hospice and school. CES have been working with the group to start to develop an energy champions service for the area including coordinating funding bids and volunteer recruitment.
- 2) Test Source Community Energy, Basingstoke and Deane: CES are supporting the group to identify new project opportunities in the area and recently they have been undertaking feasibility assessments at three sites. The share offer for a 350kW solar PV project at Laverstoke Park Farm is in the final stages of being agreed and CES have been supporting the group to get additional funding.
- 3) Energy Alton, Alton: work currently underway on a Revolving Community Energy Fund funded study to look at the feasibility of developing a microgrid at a local community (see further details below). Feasibility study of a local builder's merchant has been completed which shows that a community energy project may be suitable at these sites. The group has agreed to work with Energise South Downs to deliver community renewable projects whereby Energy Alton will identify and originate projects and Energise South Downs will deliver and own them. SSEN have also agreed to fund a Microbusiness Energy Advice Service that will allow Energy Alton to employ an administrator to develop this course, pilot it and train the other groups.
- 4) Energise South Downs, Petersfield, Hambledon, South Harting and Buriton: group now formed as a Community Benefit Society with representation from a wide range of communities across East Hants and Winchester. Currently undertaking a feasibility study at The Petersfield school to understand potential for a community owned solar PV project. The group has developed an extensive pipeline of projects so CES have supported the group to make bids to Meadow Blue communities fund for a number of additional feasibility studies and also to the South Downs National Park Trust which would enable ESD to fund a development officer post.
- 5) Romsey Transition Town, Test Valley: CES had previously been working with West Solent Solar Coop, but unfortunately the group decided that they did not have the capacity to proceed with any new projects. However, CES had already built connections with Romsey Transition Town. They have a core group of people that

are interested in forming a new community energy group, including with residents in Andover, to develop projects in the Test Valley and surrounding area. Test Valley Borough Council are supporting.

Other Progress:

- CES delivered two well attended workshops (60 delegates at each) aimed at start-up groups in Hampshire and beyond. This included one on 'developing business plans' and another on 'good governance and best practice.'
- CES are in the process of developing a list of suppliers and installers which they will then begin to survey on supply chain issues.
- Test Valley DC have submitted a proposal to the Shared Prosperity Fund to establish a community energy group.

Revolving Community Energy Fund

A 'Revolving Community Energy Fund' that will invest up to £25,000 for any individual community project was launched in May 2022 as part of the Community Energy Pathways project.

The aim of the fund is to stimulate significant community investment in renewable energy across Hampshire. Investment in a share offer will enable a community to operate a renewable energy scheme and earn income. Once a scheme is operational, it should then attract additional shareholders and/or secure borrowing against the assets of the existing scheme, enabling it to be extended to a wider community base.

Any profits that result from community schemes will go back into the Revolving Community Energy Fund (RCEF) for investment in other community schemes, making it a sustainable funding mechanism for the long-term.

The RCEF will build on the work of the Community Energy Pathways programme, being delivered by Community Energy South, to establish a thriving Community Energy (CE) network across Hampshire, with communities setting up local energy projects that are funded by the community for the benefit of the community.

Community Benefit Policy

Hampshire County Council proposed the development of Community Benefit Policy with CES. Through this new policy all surplus income from the community energy projects will be allocated to a Community Benefit Fund or donation facility established by the Community Energy organisation which is constituted as a Community Benefit Society.

Through the Community Energy Pathways Steering Group the following criteria have been agreed by the groups, whereby the funding must meet at least one of the criteria:

- Funds / donations must benefit vulnerable people within the local community
- Funds / donations must support education on climate change and raise awareness of the importance of energy efficiency
- Funds / donations must support the development of renewable energy within the local community alongside biodiversity enhancement

This policy and its implementation from 2022 onwards will ensure that the CES Community Energy Pathways work in Hampshire will support the vulnerable and help make energy affordable for all.

Climate Change/Sustainability Advice

Hampshire County Council partnered with The Environment Centre (tEC) to provide free, trusted, and straightforward advice about climate change and sustainability over the phone and online.

This project is seen as key support for the other community projects, linking with the offered approaches by the GC and CES and iChoosr. The project has also been extremely timely in being able to respond to enquiries around the cost-of-living energy crisis.

Progress since July 2021:

- 120 calls were made to the advice line, mostly regarding insulation and renewable energy generation.
- On average, tEC's website receives 442 views a month and over 60,000 were engaged over their social media channels, which demonstrates the importance of developing and refining the webpages further.
- A new website is being designed that will help better engage with and disseminate information whilst also encouraging greater use of web-based tools such as webchat.
- The new website will also directly support the ongoing work on retrofit alongside helping to signpost residents to upcoming grants/funding and how to access them and provide guidance on the most appropriate financing for their circumstances.

Hampshire Solar Together Bulk Buying Scheme

Solar Together Hampshire was launched in 2021 offering high-quality solar photovoltaic (PV) panels and battery storage. The scheme brings Hampshire homeowners, and small-to-medium sized enterprises, together to get solar panels at a competitive price. Hampshire County Council is working with independent and trusted experts, iChoosr, to help make the switch to clean energy as cost effective and easy as possible.

Solar Together offers residents a hassle-free way to begin powering their homes through renewable energy. Choosing an installer can be quite daunting, but with Solar Together residents can be reassured that they are getting a high-quality product and service, and because of the power of group buying, at competitive prices too. The scheme is cost neutral to Hampshire County Council.

Progress in the current scheme

The 2021 Hampshire Solar Together Scheme launched in March 2021. 7,054 residents registered for solar PV and 755 for retrofit battery storage. This translated into a strong acceptance rate (~20%), with 1,567 customers accepting their quote and paying a deposit to begin the process.

Following delivery issues with the original supplier during the installation phase for the 2021 Hampshire Solar Together Scheme, a new offer was secured from an alternative pre-approved installer with a proven track record of delivering in Solar Together schemes in the south and southeast of England.

Since appointing the new supplier, Infinity Renewables, in February 2022, the scheme has been progressing smoothly. As of 1st July 2022:

- 848 (69%) of the original customers chose to continue with Infinity Renewables.
- 684 customers have received their roof survey so far, and a further 99 have a survey appointment booked. However, 50 customers chose to cancel at the survey stage.
- 156 customers have so far received an installation of solar panels/batteries (of which 38 were completed by the previous supplier EEC).
- 551 customers have an installation date scheduled for the coming months.
- Approximately 1,800 panels will have been installed by the end of this scheme.
- An estimated 4,000 tonnes of carbon will be saved over 25 years (guaranteed system lifetime) which is equivalent to more than 2,000 cars off the road.
- There is the potential for over £1m in private resident investment to be realised by the end of this scheme.
- To date, 31 enquiries have been received by iChoosr's helpdesk, which only represents 3% of customers. A handful of customers have also contacted the climate change team directly. They were looking for clarification on the process or a further explanation about why the installer had been changed. Upon receiving a response, the majority of customers were satisfied.

Although we cannot guarantee that this scheme will be cheaper than all installers on the market, on average, the scheme can deliver discounts most commonly between 15-34%, depending on the number of panels/batteries quoted.

Following consultation with several other County Councils, who are also working with iChoosr, the consensus is that it is extremely worthwhile for local authorities to offer schemes like this to our residents who are very interested in installing solar panels using a trusted scheme backed by a council.

Other authorities have faced similar issues with installers but iChoosr have responded well to issues and developed solutions quickly, as they have in Hampshire.

Given these schemes are:

- cost neutral to the County Council,
- there is a clear demand from our residents for us to operate these types of schemes especially when energy prices are so high,
- delivering tangible outcomes of increased renewable energy generation and carbon savings,

it is worthwhile for Hampshire County Council to continue offering these schemes.

We are therefore in the planning stages for delivering a second scheme in the Autumn.

Second Solar Together Scheme – Autumn 2022

Registration for the second scheme will open at the end of August 2022. Using Mosaic data, letters will be sent to approximately 90,000 targeted households in early September.

Half the number of letters are being sent compared to the previous scheme. This is because the acceptance rate has been much higher in the past months for other local authorities. This means we should expect to see a similar number of households participating despite a lower direct mail volume.

District councils will continue to support this new scheme alongside the County Council by promoting the scheme via social media channels.

Schemes such as this are always complex to deliver, but iChoosr are putting in place additional measures to ensure the scheme runs as smoothly as possible, including the potential to appoint two suppliers to cover the County and manage the high demand.

Energy Generation & Distribution and Green Economy

Energy in the Hampshire-wide context is a new area of activity for the County Council, and an extremely complex and challenging one. It is becoming widely recognised that decarbonising national and local energy systems will be crucial to the successful achievement of the County Council's targets at both the national and local levels.

It is also clear that this would be best achieved through local open energy systems that enable all 'community' stakeholders to participate in a full range of trading opportunities. Although this will be a significant challenge, it also presents opportunities for local post-COVID 'green' investment, skills capacity growth and wider socio-economic co-benefits such as improved air quality and associated health. Ensuring that these opportunities are realised through decarbonising national and local energy systems requires a systemic approach to a future energy strategy.

Hampshire Evidence & Research to date

In June 2021, the University of Southampton (a member of the Climate Change Expert Forum) were commissioned to undertake a review of the current and future energy landscape for the wider Hampshire area. The report's three headline findings were:

- 1. Average domestic electricity consumption was found to be higher in rural areas and lower in cities. Without large intervention in rural areas to incentivise increasing energy efficiency and new technologies such as heat pumps, this difference is only set to increase.
 - a. High electricity usage in rural areas is likely to increase. The focus needs to be on increasing efficiency and distributed generation to avoid capacity

- problems. This is also true in urban areas where electricity demand for heat and electric vehicle charging will increase.
- b. With more efficient electric heat and better insulation, more comfort can be obtained with less electricity, decreasing the electricity needed.
- c. Grid-edge technologies such as solar panels or battery systems allow rural households to generate and sell their own electricity
- 2. Areas of deprivation were found to have lower gas consumption; this suggests that in order to reduce the gas consumption of the area the focus needs to be on the more affluent or "able to pay market."
 - a. Despite the name "able to pay" it does not currently make economic sense for these households to invest in retrofitting and low carbon technology such as heat pumps to support the electrification of heat. From April 2022 it is possible to receive a £5,000 grant towards the cost of a heat pump. However, this would cover less than 50% of the cost and is limited to those replacing gas boilers. There are only 90,000 grants available over three years nationally a fraction of what is required.
 - b. The installation of heat pumps often requires additional work on the existing building fabric to ensure it is compatible. This brings further costs.
- 3. There is no correlation between % over 65s and % households living in fuel poverty suggesting that those living in fuel poverty are younger.

In parallel, work was also commissioned with the New Economics Foundation and Parity Projects to look into the Green Economy. Two key priority areas were identified through this work

- 1. Financing the investment needed to tackle emissions, housing deprivation, and fuel poverty.
 - This looks at how finance can be mobilised to address housing deprivation in Hampshire, which is derived from housing in poor condition, lacking central heating, etc.
- 2. Tackling skills deficits in low energy construction.
 - This focuses on the supply side, looking at how young people can enter the construction workforce and gain the requisite skills to fill the sector's requirements in the coming years, including in relation to specific skills for decarbonisation work.

With an estimated 25% of Hampshire's greenhouse gas emissions coming from residents living in their homes (construction emissions excluded), action on both of these areas is key to reducing county emissions.

Parity Projects were simultaneously engaged to undertake a thorough assessment of the investment required to decarbonise Hampshire's housing stock, and the related income profile and tenure of property occupiers, to inform an analysis of appropriate financing options. A preliminary estimate puts the cost of decarbonising housing in Hampshire at £20-30 billion, creating approximately 2000+ job per year to 2050. This shows that there is a real opportunity to create thousands of high-quality green jobs if done correctly.

Energy Programme – 2022-2025+

In summary, based on all the work undertaken to date, we now have a clear evidence base for the focus of a Hampshire energy programme for the next 3-5+ years. The key areas for action that are now in progress include:

- Work with Parity projects on developing a business plan for a Hampshire-wide retrofit programme – this will focus on reducing energy consumption in the more affluent communities/areas - the able to pay market to tackle retrofit of privately owned housing to help overcome the barriers to retrofit and tackle the skills deficit and maximise opportunities for employment.
- Building on the evidence base, with University of Southampton to develop a
 Hampshire Energy Strategy to cover generation, distribution and efficiency and
 guide future programmes and investments by all key stakeholders in the
 Hampshire area to meet the Net Zero targets.
- Continue to support communities in Hampshire to engage on energy issues from efficiency to local community renewable energy generation with Community Energy South and the Greening Campaign.
- Provide trusted advice to residents on a range of issues including Government's Green Homes Grant schemes, energy efficiency and renewable energy generation to support behaviour and lifestyle changes in partnership with The Environment Centre.
- Continuing to support the installation of solar panels, batteries (and potentially air source heat pumps) in partnership with iChoosr.

Funding and capacity are key issues for all local authorities, including Hampshire County Council. The County Council successfully won funding from the Community Renewal Fund to support the ongoing work with Community Energy South and the Greening Campaign (approx. £200k). However, further time and resources need to be dedicated to exploring funding and financing options to ensure the work can continue sustainably.

Economic Strategy

An Economic Strategy is currently being developed with a draft presented to the Hampshire 2050 Partnership in July 2022.

The Strategy will cover the Hampshire County Council area, though recognises the important links elsewhere, particularly with Pan-Hampshire partners, many of whom represent the Hampshire 2050 Partnership.

The complexity and interconnectedness of the modern economy has become increasingly apparent over the last five years. A series of events, including the vote to leave the European Union, the Covid-19 pandemic, and the Russian war on Ukraine have each revealed connections between commodity markets, population patterns, trade movements, and the prices faced by consumers.

And increasingly, environmental crises around the world are a reminder of how much economic damage natural disasters can cause. Designing an economic strategy for Hampshire needs to respond to this complexity.

Having a clear sense of what we want to achieve for our economy and how we will deliver that is essential, alongside a better understanding of our existing and potential assets.

This strategy will help guide and shape our decisions to ensure that Hampshire continues to thrive and support the wellbeing of all our residents and our unique place.

2.2 Transport Emissions and Resilience

Transport is a large contributor of CO2 emissions in Hampshire. Recent BEIS figures calculate this to be 51% of all emissions in Hampshire. Much of this is from our dependence on the private car. It is a key priority area for reduction.

The impacts of climate change places increased pressure on the maintenance and resilience of our transport network, and without suitable adaptation and mitigation will result in more frequent and severe disruption to the movement of people and goods.

Hampshire County Council has a statutory requirement to have a Local Transport Plan (LTP) which sets out its vision for future transport and travel infrastructure. The current Local Transport Plan (LTP3) was developed in 2011 but is under review in light of changing challenges and opportunities.

The new Local Transport Plan (LTP4) will supersede the current LTP and will form the primary transport policy for Hampshire County Council to 2050.

Over the course of the last two years a new draft Local Transport Plan (LTP4) has been developed which

- describes our transport vision for 2050, the key transport outcomes we are seeking to achieve, and the principles that would guide future investment and decision making in relation to transport and travel.
- sets out transport polices covering all aspects of transport planning, delivery, and operation (i.e., the 'rules' about how we would do things and how we want others to do things).
- presents our approach to delivering the Plan 'making it happen', setting out a roadmap to 2050 and how we would prioritise, fund and deliver interventions, and monitor our progress; and
- supports the County Council's wider strategies, plans and priorities.

The draft LTP4 undertook extensive scoping and stakeholder engagement work and was presented for formal consultation, to identify whether any further changes are required before it is considered for adoption. The consultation was open from 4 April 2022 and closed on 26 June 2022. In initial analysis of the consultation replies indicate string support for the plan but a lack of confidence that it will receive the funding it needs to make it deliverable.

Since undertaking this work the Government have advised that they will be asking all local transport authorities to review their LTPs and that they will issue guidance by early 2023. It is expected that the new LTPs will reward those authorities that show evidence of decarbonising the transport system and penalise those that do not. The County Council will now await the guidance before formally adopting a new LTP.

Highways Maintenance Emissions and Resilience

Highways continue to look for new and innovative solutions to reducing the carbon impact of highways maintenance whilst ensuring the network is resilient to climate impacts. Some examples of best practice are provided below.

Hampshire Highways are working with the term contractor, Milestone Infrastructure, to increase the use of recycled materials in highway functions, such as Hydraulically Bound Materials (HBM) and cold recycled bituminous bound materials (CRBM) in the construction of carriageways and footways. These materials help reduce the impact of quarrying virgin materials and reduce carbon emissions produced during the manufacturing and transportation stages. There has also been an increase in the use of warm mix/cold lay asphalt for resurfacing schemes which will provide carbon reductions in the manufacturing process.

Micheldever Recycling Facility continues to provide a sustainable approach for Hampshire County Council to recycle its own network and reuse waste material into roads and footways. The facility is a leading example of what can be achieved and as well as winning awards ¹ has also attracted interest from others within the construction industry. Whilst innovation is ongoing and new methods and material are constantly being looked at, the plant continues to focus on taking hazardous tar bound planings and turning them into a reusable material for the road construction industry.

Most Technical Guidance Notes are now published and these, in conjunction with the Asset Management scheme consultation process, ensure that new highway infrastructure (added from the capital programme or developer led schemes) consider the lifecycle of the new asset and are designed to limit whole life costs and future maintenance requirements which will reduce the carbon footprint of the highway service and limit network disruption.

There are a number of ongoing trials of biodiversity initiatives on highway land including:

- Wildflower verges trialling several sites for rural locations with Milestone and some urban sites with the districts.
- Cut and collect for rural areas cut vegetation is being removed from site to be turned into compost. Removing the mown vegetation allows the verge space for wildflowers to grow, promoting pollinator populations and increasing biodiversity.
- Improved data on Road Verge of Ecological Importance to also protect and retain biodiversity.

¹ Green Apple 2021 - Awarded (for Environmental Best Practice); Construction News 2022 – Shortlisted. Category - Low carbon projects of the year; Highways Awards 2022 – Shortlisted (awards in October). Category - Highways partnership for 2022.

Two Asset Management policies have been developed for LTP4 (currently in consultation phase).

- Sustainable maintenance approach to new infrastructure This policy will be
 pivotal in ensuring that new infrastructure projects consider the future impact on
 maintenance and the whole life costs of new assets. It will ensure that a
 'designing for maintenance' approach is adopted by all stakeholders responsible
 for delivering transport schemes or new developments. New infrastructure that is
 designed to be maintainable will reduce the whole life costs of new assets,
 reduce the carbon footprint of highway operations by minimising the need for
 future maintenance, and provide a highway network that is safe and more
 resilient to the effects of climate change
- Managing and maintaining the existing highway asset This policy seeks to
 ensure that our approach to managing and maintaining the highway asset
 delivers long-term value for money programmes of work that aim to maximise the
 life of the asset and improve the resilience of the network, reduce the carbon
 outputs of highway operations, and reduce waste through increased use of
 sustainable products and processes and recycled materials.

Other Innovation and trials that are ongoing include:

- Plastic kerbs
- Low emission line marking machine
- Gully sensors trial will commence in November more effective routine cleansing, less visits, less waste, less journeys
- Carbon calculation models

The shift to electric for both fleet and tools is underway. All routine maintenance vegetation operations, such as hedge trimming, leaf blowing, and minor tree-clearance works, are now being carried out with battery-powered strimmer's, chain saws, leaf blowers and the like. Larger types of plant are becoming available, and we piloted the use of a new-to-market electric dumper which provides more than an 85% reduction in CO2 emissions. A new battery electric loader and an electric plate compactor have also been trialled in one of the depots.

2.3 Natural Environment

Environment Act

Hampshire's natural environment is a significant and valued asset, helping Hampshire to be an attractive and prosperous place to live, work and visit. Although the state of the natural environment has been reported as being in decline, there is an increasing weight and attention being given to this subject with the concept of "natural capital" underpinning the Government's 25 Year Environment Plan and the Environment Act

The County Council has a commitment to protecting and enhancing the natural environment that can be traced back over a number of years and through numerous initiatives. These include long standing support for the Hampshire Biodiversity Information Centre, which is celebrating its 20th Anniversary in 2022, work with the Local Nature Partnership, research and preparation of the State of Hampshire's

Natural Environment report, publication of the Hampshire Tree Strategy, management of its own estate and establishing the Parish Pollinator Pledge.

The Environment Act, and other recent changes, have significant implications for the role, duty and powers of the County Council, the way that it works and its relationship with others, and how it uses its resources, which include:

- Legally binding targets, including a 2030 target to halt species decline
- Mandatory provision for biodiversity net gain to be a condition of planning permission in England, meaning that that housing and development, including new roads, will need to achieve at least a 10 per cent net gain in value for biodiversity.
- Introducing Species Conservation and Protected Site strategies to protect and restore species and habitats at risk while enabling development.

The Environment Act introduces a requirement for Local Nature Recovery Strategies (LNRSs) for England to be prepared and published by "Responsible Authorities." The County Council is the provisional Responsible Authority for the Hampshire LNRS and will be collaborating with a wide range of stakeholders in its preparation. The Strategies will identify the opportunities and priorities for enhancing biodiversity and supporting wider objectives such as mitigating or adapting to climate change in an area.

The strategies will have a key role in the land use planning system and be an important source of evidence for local planning authorities to use in the preparation of their Local Plans. They are also intended to support the delivery of wider environmental objectives and each LNRS will map specific opportunities for taking priority action for nature recovery and the use of "nature-based solutions."

Of all the provisions of the Environment Act, the preparation of LNRSs is expected to have the most significant impact on planning for the natural environment at a strategic level and, through the participation of partners, process, and outcomes.

Environment Strategy

In July 2021, the County Council committed to prepare an Environment Strategy that would create a shared vision and outcomes across the County Council that will help tackle key challenges and opportunities through collaboration, embedding environmental issues, considerations and thinking in all that we do.

It will recognise Hampshire's environment's fundamental importance to our economy and productivity, health & wellbeing, and climate resilience. It will identify key objectives and outcomes which will be delivered through existing or emerging strategies (e.g., economic strategy, Local Nature Recovery Strategy etc.).

The development of the Environment Strategy has begun but has been slightly delayed as it needs to be informed by the raft of new requirements to protect and enhance the environment introduced by the Environment Act (2021) the details of which are still pending. It is anticipated that a draft Environment Strategy will be ready for external engagement by the end of 2022.

2.4 Buildings & Infrastructure

Following on from the Hampshire 2050 Commission, a framework for guiding the future of Hampshire's built infrastructure and natural environment has been developed.

Towards 2050 - a framework to guide the future of Hampshire's built infrastructure and natural environment first identifies a baseline structured around 10 key themes: biodiversity; landscape and seascape; water environment, soils, water resources; transport; air, light and noise pollution; minerals and waste; energy; and telecommunications and broadband.

Working closely with a range of partners, the Framework then identifies a number of strategic opportunities and enabling principles in relation to natural environmental and infrastructure considerations for the period up to 2050. The framework seeks to encourage policy and behaviours across the county to accommodate future sustainable growth in a way which secures improvements to key infrastructure and protects and enhances the role and function of the natural environment.

The framework will be officially launched at a Hampshire 2050 event later in 2022.

2.5 Public Health

New programmes are being developed to be included within the Strategic Framework on Public Health. Following discussions with the Director of Public Health and the recognition that Public Health is a key cross-cutting area that should sit within the Strategic Framework, the following new programmes have been added:

- Through the Health and Wellbeing Board, agree joint priorities between partners that both benefit health and mitigate climate change, including air quality, active travel and healthy homes.
- Use a data-driven approach to identify the most significant inequalities in relation to climate change.
- Take a system approach to climate change with the NHS, working through the Integrated Care System's new structures to identify shared priorities

These new programmes will be progressed and reported on in future monitoring reports.

Section 3

2022 Year of Climate Resilience

The County Council set a target for climate resilience acknowledging the significant impact of climate change on our communities, our infrastructure, and the services we deliver. Climate resilience is crucial, in light of impacts being felt in Hampshire and around world such as rising temperatures, increased flooding and more extreme weather events, such as the July 2022 heatwave.

Climate change does not just cause physical or financial damage, it can also have much deeper, longer-term effects on health and wellbeing. For these reasons, the County Council is not only focused on reducing emissions but also on building resilience. In recognition of the importance of building resilience, the County Council declared 2022 the "Year of Climate Resilience". This provided an opportunity for the County Council to increase awareness of the importance of resilience, promote our unique approach and the actions we are taking to build resilience.

During the Year of Climate Resilience, raising awareness of what is climate resilience and how everyone has a role to play was a key outcome. The target audiences were staff, partners and professional networks and residents.

Staff

To embed climate change considerations across all key decisions and ensure that departments within Hampshire County Council are also considering how they can increase resilience to climate change, all Decision Reports now must include a climate change impact assessment. The climate adaptation decision tool allows staff to assess the vulnerability of their projects to climate change impacts, such as heatwaves and flooding. The purpose of the tool is to help staff understand what the potential climate impacts on their projects could be and help them consider what can be done to adapt them to help build resilience both now and in the future. Project leads have been highly motivated to use the tools, seeing them as adding value to their projects.

Partners and professional networks

Action is being taken across Hampshire County Council to make sure the services we provide, and our county is resilient to the changing climate. We also know that joined-up partnership working will be vital to achieving this, for example through nature-based solutions to flooding, looking after public health, woodland creation and generating local renewable energy.

A video highlighting all the excellent work being undertaken across the County Council has been developed and was launched at a Hampshire 2050 event in July 2022. The video can be seen here Why are we acting on climate change? Hampshire County Council (hants.gov.uk). The video will also be shared across all the professional networks the County Council are working with (see Section 4)

We are also currently in discussion with Friends of the Earth and climate charity Ashden to develop a case study on our resilience work as part of their case studies celebrating local authority climate action.

Residents

Work is also underway to develop a resilience campaign aimed at residents which will be launched later in 2022. General awareness of what resilience to climate change is and the actions that can be taken are low, in comparison to carbon mitigation. The campaign will focus on clear actions that residents can take to prepare for different forms of climate impacts such as heatwaves, flooding, drought, extreme weather.

A new webpage has also been developed for the Year of Climate Resilience. See here Why are we acting on climate change? | Hampshire County Council (hants.gov.uk).

Section 4

Progress on Networks and Partnerships

4.1 Expert Forum

Twenty organisations are now formal members of this forum, chaired by Councillor Warwick (Executive Member for Climate Change and Sustainability), including universities, utilities, activist groups, community groups, and other stakeholder organisations.

Since the formation of the forum, quarterly meetings have provided multiple benefits to the council by a) guiding the climate change team's work against the strategic framework, b) acting as a conduit for disseminating news to those groups and communities best placed to deliver on or promote the council's work, and c) generating collaborative action across sectors.

In the last 12 months, the forum has built on previous outcomes as well as generating new streams of work. Key outcomes include:

- The University of Southampton have acted as an expert guide in the development of the latest baseline emissions update (see appendix A).
- The University of Southampton produced a report mapping the energy landscape in Hampshire, which has led to further work providing an evidence base for a Hampshire Energy Strategy to 2050.
- The University of Winchester have been funded to run a pilot scheme with Winchester Prison on rewilding skills for incarcerated men. This project combines carbon mitigation with social justice and further benefits such as reduced recidivism.
- Members of the forum have been key participants in the ongoing engagement work around the development of a Hampshire-wide retrofit programme.
- Collaboration between members has also yielded positive results: SSEN have collaborated with Community Energy South to support the development of a Microbusiness Energy Advice Service.

The forum has also been a place for innovative ideas with members currently exploring the potential for a Hampshire Citizens Assembly, and the possibility of a Climate Twinning project with partners overseas.

In June 2022, the Terms of Reference were updated to better reflect the role of the forum in guiding the council's actions in delivering against the strategic framework and to avoid duplication with other fora.

4.2 National/Regional Networks

The County Council continues to actively engage and work with a wide range of national networks including e.g. Defra's Local Adaptation Advisory Panel and the Association of Directors for Planning, Environment and Transport. More recently Hampshire County Council have been invited to be part of the new Local Net Zero Forum's Task and Finish working group on Data and Reporting.

These networks have provided opportunities to showcase the work the County Council is leading on through presentations, blog posts or case studies. These networks also provide invaluable opportunity to learn from and exchange best practice on key areas such as energy and procurement.

4.3 Local Partnerships

Engagement with our District and Borough partners is critical to ensuring a comprehensive approach to climate change across the Hampshire area. Different service streams are increasingly engaging with district and borough partners on the issue but there are several working groups that are specifically for addressing climate change. The latest progress in each of the key groups is outlined below:

- Hampshire Climate Change Officers Group made up of the 14 Districts, Boroughs and Unitaries – focuses on county-wide carbon mitigation and resilience:
 - Retrofit the group has frequently discussed how to align our approach to the retrofit challenge and has supported the council's work with Parity Projects.
 Nine authorities contributed financially to the Parity Projects housing stock analysis and is using this to shape their own approach to the challenge.
 - Renewable energy generation this network has been invaluable in the promotion and execution of the Solar Together scheme and has increasingly engaged with Community Energy South to support community energy in Hampshire.
 - Emissions reporting the best way to report emissions has been debated in this group and there is a strong consensus to align reporting methods for better comparison and collaboration.
 - Education and behaviour change actions being taken across Hampshire schools has been discussed and sharing behaviour change campaigns and promotions has been a common topic.
 - Carbon offsetting this has been discussed in the context of the hierarchy of mitigation in which offsetting is the last action to be taken.
- Public Sector Sustainable Development Group includes representatives from across the public sector and looks at wider sustainability issues:
 - Behaviour change discussion around common actions across all sectors to encourage engagement with sustainability.
 - Circular economy how it can be implemented in the different branches of the public sector and where crossover lies.
 - Best practice sharing learning and best practice between sectors has proven efficient and avoids duplication where possible.

- Hampshire Energy Efficiency Partnership chaired by the Environment Centre, this group brings district, borough, county and Unitaries together to focus on energy:
 - Retrofit many in this group are directly involved in the Local Authority Delivery (LAD) of energy efficiency upgrades for low-income households.
 - This group is knowledgeable and is proving a useful forum for developing energy and retrofit related programmes.
 - The Environment Centre uses this group to disseminate information on funding opportunities, which may help fund future work in this area.
- Hampshire and Isle of Wight Planning Officers Group Sustainable Design Subgroup – includes representatives from Local Authorities and aims to share best practice, promote, and inform sustainability through planning:
 - Water neutrality following guidance from Natural England the group discussed the impact on the Itchen catchment especially Winchester, parts of Eastleigh, South Basingstoke, and Test Valley.
 - Building regulations the group coordinates on climate requirements for new building to ensure lobbying to central government is coherent.

Section 5

Progress on Communications and Marketing

5.1 Insights-led behavioural change

A significant part of our behavioural change communications to residents continues to be insight-led. The climate change and behavioural insights report produced by the County Council's Insight and Engagement Unit in 2019, reflects findings from surveys and focus group data, indicating Hampshire resident's willingness to perform 23 different carbon-saving actions, including travel, energy use and consumption.

The insights continue to inform campaigns and will be pivotal in shaping the targeting and messaging for the upcoming climate resilience campaign which aims to raise awareness to residents about actions that can be taken at home in varying degrees of complexity, ranging from universal, free and easy actions to more ambitious actions. The aim is to develop year-round content which can be used at pivotal moments via social media when people are most likely to respond, such as during a heatwave or flood event.

Informational adverts

Energy price cap increase

In September 2021, a social media advert was used to inform residents about the upcoming energy price cap increase, and to sensitively advise on ways to be energy efficient and save on bills. Over 50,000 were reached, with over 800 continuing to click through to visit the website.

The Greening Campaign

The climate change team worked with corporate marketing to produce an animation to raise awareness about the Greening Campaign over the spring, as part of the community renewal fund. Over 100,000 were reached, with a strong 4% engagement rate. This demonstrates a keen interest in the campaign. See here for the video: <a href="https://greening.com/greenin

5.2 Climate Change Website

The climate change website is continually updated with our progress to provide a resource for the public as well as the County Council staff. The strategy, action plan and strategic framework have dedicated webpages. Altogether, the climate change webpages have received over 11,000 unique views from July 2021 to July 2022.

Other webpages from across the organisation are linked to the website, to demonstrate the work happening across the County Council on climate change, and to provide residents with the resources to act themselves.

The latest addition to the webpages is the 'Year of Climate Resilience,' which includes a showcase of what departments across Hampshire County Council are doing to build climate resilience, as well as information for residents on how they can take action at home. See new webpage here Why are we acting on climate change? Hampshire County Council (hants.gov.uk)

5.3 Hampshire 2050 Event – Environment Act and Energy

The Partners and Commissioners of the Hampshire 2050 Commission of Inquiry attended a virtual Hampshire 2050 Partnership event on the 2 February 2022.

The event focused on the Environment Act 2021 and the energy landscape in Hampshire. Both these issues have significant implications for Hampshire, in how we navigate through the next 30 years to reach our carbon neutral and resilience targets whilst enhancing and strengthening our environment, economy and society. These two areas not only present challenges in terms of changing the way we live, our choices and behaviours but also provide opportunities to develop skills and create new jobs for a greener, stronger Hampshire.

The first presentation was from Ruth Chambers from the Green Alliance's Greener UK unit. Ruth spoke about the opportunities and challenges that the Environment Act presents across a wide spectrum of priorities. The presentation explored different sections of the Environment Act and outlined the new independent office that will hold the government accountable for development and implementation of current and future environmental policy.

The second presentation was a joint presentation focusing on energy in Hampshire. Dr Ben Anderson, a Principal Research Fellow on Energy and Climate Change at the University of Southampton, spoke about the current energy landscape in Hampshire and the main challenges the county faces in becoming carbon neutral.

Christian Jaccarini, a Senior Consultant with the New Economics Foundation, provided a summary of the report "A Green Economic Recovery for Hampshire," which focuses on the challenge of taking Hampshire's private housing stock to carbon neutrality.

Ollie Pendered - Chief Executive of Community Energy South - spoke about the journey being taken by communities in Hampshire to create their own energy projects.

The Hampshire 2050 Partnership event provided a timely update on progress that is being made on complex issues, such as energy, despite the challenges faced over the last two years.

All four presentations can be found below. The briefing papers and full report from the New Economics Foundation can also be viewed on the website Hampshire 2050 Partnership | About the Council | Hampshire County Council (hants.gov.uk).

5.4 COP26 Hampshire County Council Events

In November 2021, Glasgow hosted the 26th anniversary of the Conference of the Parities (COP26). This was a two-week conference where 200 countries from around the world came together to discuss the issues facing the climate, and what actions are needed to tackle the problems the world faces. Over the two weeks, new financial plans were created, treaties were signed, and targets set. The purpose of these outcomes was to keep temperature warming to 2-degrees, improve biodiversity, increase research and development, and protect those most vulnerable to the impacts of climate change.

During COP26, Hampshire County Council hosted a two-day event at Queen Elizabeth Country Park, to promote the work that is happening within the County.

The first day of the event focused on businesses within Hampshire. Over 40 people attended and speakers from Marwell Zoo, Amiri, Lionel Hitchen, and powerQuad outlined how they were striving to become more sustainable and reach climate targets. The event provided an opportunity for businesses to network and build relationships to support one another in achieving carbon neutrality and sustainability within the Hampshire businesses.

The second event was for members of the public. Service leads from within the County Council (flooding, waste, and transport) and community groups (tEC, CES, and the Greening Campaign) showcased what they are doing to help residents engage with and take action on climate change. The event provided an opportunity to share with the public the breath of work that is taking place throughout the County and inspire them to get involved.

Further details on both events can be seen here <u>COP26 Event | Hampshire County</u> Council (hants.gov.uk).

Section 7 Summary & Next Steps

7.1 Summary

Overall considerable progress has been made on the delivery of the Climate Change Strategy, Action Plan and Strategic Framework as outlined in this report.

Within the Strategic Framework, progress made on energy and residential emissions in particular has been significant. Significant work has helped build a robust evidence base to support the development of a clear programme for energy, a major priority area. The work underway to develop a county-wide retrofit programme is a very important step towards tackling one of the highest emission sources and also to support residents through the energy prices and cost of living crisis.

Continuing to engage and support residents on behaviour and lifestyle changes has been another focus area for the last 12 months. Securing funding from the Community Renewal Fund to allow the Greening Campaign and Community Energy South to deliver programmes in Hampshire has been critical. Delivering insight-led communications and marketing campaigns and events have also been a key priority.

July 2022 is just over halfway through the Year of Climate Resilience, and to date a lot of the evidence gathering has taken place to help showcase resilience to a range of audiences. The resilience videos are an innovative and compelling tool that will help to raise awareness of how to build resilience and how important it is to our future.

7.2 Next Steps

Based on the research and analysis undertaken over the last 12 months the key areas identified as priorities going forward are energy, behaviour change and resilience.

- Develop an energy strategy that can provide the framework for future generations; including distribution; efficiency; guidance for future programmes and investments by all key stakeholders in the Hampshire area to meet the Net Zero target.
- Develop a Hampshire-wide approach to retrofit.
- Continue to support communities in Hampshire to engage on energy issues from efficiency to local community renewable energy generation through existing programmes like Community Energy South Pathways and Solar Together.
- Develop a better understanding of the commercial opportunities available through Green Finance.

- Continue to deliver outcomes and raise awareness during the Year of Climate Resilience.
- Continue to work with the Greening Campaign and Community Energy South to deliver on-the-ground actions to support residents to make lifestyle and behaviour changes.
- Continue to deliver Solar Together schemes to support residents to install Solar PV at no cost to the County Council helping them make lifestyle choices that build their energy resilience.
- Explore new and innovative funding opportunities.
- Continue to deliver targeted insight-led communications and marketing campaigns.

There has been considerable progress made on actions and programmes to reduce emissions and build resilience.

In 2023 there will need to be a stronger focus on inequality. This aligns with pressures on all our services and the energy and cost of living crisis. It will be important to ensure that the most deprived and vulnerable members of our community do not inevitably become the most impacted.

Climate Change continues to be a top priority for the County Council, and this is reflected in the work set out in this report and the future plans for the next year of implementation.