Hertfordshire Climate Change and Sustainability Partnership

Strategic Action Plan for Carbon Reduction

April 2022

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Hertfordshire Climate Change and Sustainability Partnership: Strategic Action Plan for Carbon Emissions Reduction

1   Introduction

1.1. The Hertfordshire Climate Change and Sustainability Partnership (HCCSP) Carbon Emissions Reduction - Strategic Action Plan ('the Action Plan') has been developed to identify actions and areas of synergy where Hertfordshire's local authorities can work collaboratively to deliver on the shared ambition to deliver a net zero greenhouse gas emissions in the county by 2050.

1.2. The Action Plan has been developed by members of the HCCSP Carbon Subgroup. This group was formed by the HCCSP Board and consists of representatives from the local authorities in Hertfordshire along with the Hertfordshire Local Enterprise Partnership (LEP). Advice, information and feedback have also been sought from other local authority partners within HCCSP and external stakeholders.

1.3. The Action Plan has been developed in order to deliver the following strategic priorities:

- to identify clear, measurable and achievable actions to reduce the level of carbon emissions in Hertfordshire

- to develop strategic actions for carbon emissions reduction that can be adopted by all partners within the HCCSP and worked on jointly

- to deliver actions that guide, support and identify best practice to Hertfordshire's local authorities around how to reduce carbon emissions both in the immediate future and in the long term.

- to build the capacity and frameworks to facilitate determination, planning and implementation of infrastructure investment and other interventions to reduce carbon emissions.

2. Background

2.1.1. There is now clear scientific evidence that climate change is happening. The average temperature at the surface of the Earth has risen by about 1°C since pre-industrial period, temperature of the oceans is increasing, polar ice and glaciers are melting, sea levels are rising, and more extreme weather events are being seen around the world.

2.1.2. Recent climate change is largely a result of increased levels of carbon dioxide and other greenhouse gases trapping the Sun's energy and causing the Earth to warm.

2.1.3. The increase in carbon dioxide and other greenhouse gases in the atmosphere are almost entirely due to human activity including burning of fossil fuels for energy, agriculture, manufacturing of cement, chemicals and metals and deforestation.

2.1.4. The Emissions Gap Report 2020 estimates that 38 Gt of CO_2 were emitted across the globe in 2019, the highest number on record[1]. Current levels of carbon dioxide emissions from the burning of fossil fuels for energy are unsustainable with experts predicting that global warming could increase by in excess of 3 °C by the end of the century.

3. Policy Context

3.1. International

3.1.1. The Paris Climate Change agreement was adopted in 2015 by 197 countries to tackle climate change and its negative impacts. It set a legally binding international treaty on climate change with the goal to limit global warming to well below 2°C, preferably to 1.5°C, compared to preindustrial levels[2].

3.1.2. The primary purpose of this commitment is to decrease global carbon emissions such that countries reach peak emissions as soon as possible to reach carbon neutrality by 2050. This will require a global economic and social transformation.

3.2. National

3.2.1. In 2019, the UK became the first major economy to pass legislation to commit to a legally binding target of net zero greenhouse gas emissions by 2050. The UK government extended the target of the Climate Change Act (2008) to commit the UK to at least 100% reduction in carbon emissions relative to levels in 1990. This ambitious target is to be achieved by actively reducing greenhouse gas emissions and offsetting the balance via schemes for planting tree or using technology like carbon capture and storage[3].

3.2.2. Industry experts and leading scientific advisers recognise that in order to achieve the UK's commitment to be a 'net zero' emitter, the UK must actively decarbonise as a society, with the production of carbon dioxide from the burning of fossil fuels confirmed as the main contributor to the increase in greenhouse gas emissions. The four highest carbon emitting sectors are transport, energy supply, business energy consumption and residential energy consumption. It is understood that a combined approach between the private, public and voluntary

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[1] https://wedocs.unep.org/bitstream/handle/20.500.11822/34438/EGR20ESE.pdf?sequence=25
[2] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement
[3] https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

sectors must be adopted, in order to deliver change in these four key sectors.

3.2.3. In November 2020, the UK government outlined its 'Ten Point Plan for a Green Industrial Revolution', highlighting how the UK will deliver on its net zero targets by 2050[4]. The plan outlines the government's strategy for driving the growth of a decarbonised society by investing in sustainable infrastructure, carbon capturing technology, green energy production and regulations to underline a new commitment to sustainable development. Central to the delivery of this plan is the imbedding of decarbonisation plans across all sectors within society. The measurement of success for this programme is identified via metric tonnes of CO_2 equivalent ($MtCO_2e$) saved, with this prioritised alongside traditional policy success measurements such a cost efficiency and job creation. This indicates the essential role carbon reduction will play in meeting the UK's national objectives for delivering a sustainable society.

3.3. Local

3.3.1. In Hertfordshire, all local authorities have committed their organisations to adopting sustainable practices, policies and plans to help reduce carbon emissions.

3.3.2. All local authorities have completed or are committed to identifying and delivering a sustainability/climate action plan. Central to all such sustainability/climate change planning is the commitment to reduce carbon emissions, both as an organisation and within the wider community.

3.3.3. Local authority policy on the delivery of the climate change and sustainability agenda in Hertfordshire outlines a shared commitment to identifying collaborative opportunities to deliver a decarbonised society. Outlined within the Hertfordshire County Council's Sustainable Hertfordshire Strategy[5], for example, is a countywide commitment to enable and inspire a sustainable county, delivering the infrastructure to support a zero-carbon county and imbedding a culture of sustainability and resource efficiency across all local authority boundaries in Hertfordshire. This approach underlines the core principal of collaborative action; a partnership between Hertfordshire residents, local authorities and the business sector to deliver a sustainable society through infrastructure provision and the commitment to delivering behavioural change.

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[4]

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf

[5] https://democracy.hertfordshire.gov.uk/documents/s16858/Late%20Report-Item%204-App%20A-Sustainable%20Hertfordshire%20Strategy%202020.pdf

3.3.4. The policy of reducing carbon emissions is further underlined and supported by the Hertfordshire Growth Board[6]. Included within the Board's Memorandum of Understanding is the core objective of delivering infrastructure funding to "reduce our carbon footprint and plan for active and sustainable travel". This highlights how Hertfordshire as county is looking to deliver good, sustainable growth for its residents via the provision carbon reducing infrastructure. This marks a stated commitment by Hertfordshire local authorities to contribute to the health and wellbeing of its residents, without compromising their future environment.

3.3.5. The soon to be published Hertfordshire LEP's Clean Growth Strategy builds a way forward for green clean economic growth, by futureproofing and supporting our businesses as they transition to meet the UK Net Zero targets and challenges and by accelerating enterprise and innovation, collaboration, and skills development to grow and attract a low carbon economy and create new jobs.

4. Defining the problem

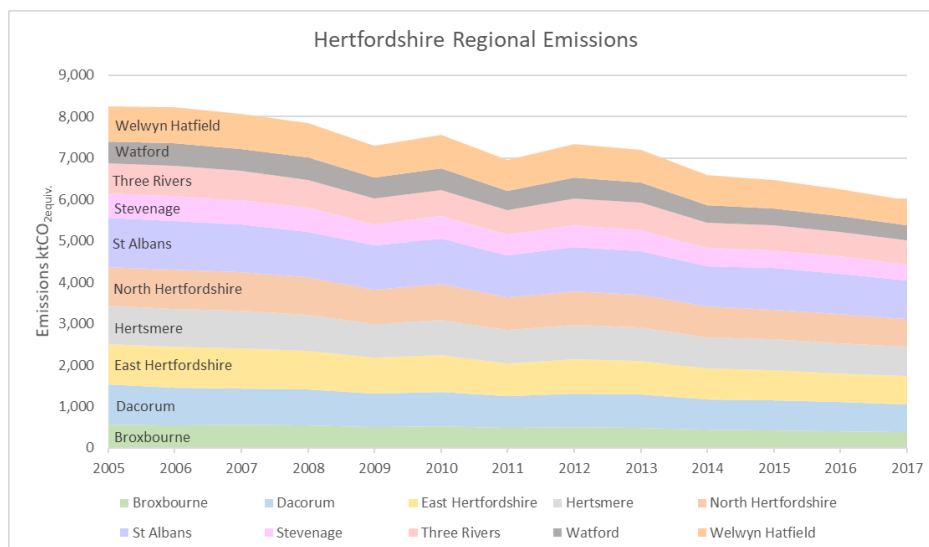### 4.1. Countywide Carbon Emissions

4.1.1. In keeping with energy consumption norms across the UK, Hertfordshire is a carbon based economy, heavily reliant on use of fossil fuels. As of 2018, annual emissions across Hertfordshire were estimated to be 5.61 $MtCO_2e$, based on energy consumption data across the county. This level of energy consumption is primarily focused in three key sectors: business and industry usage, residential energy usage and transportation emissions (Figure 1). This indicates the extent at which carbon-based energy consumption is imbedded within Hertfordshire society, with essential needs such a heating and transportation powered by unstainable means of energy production.

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[6] https://democracy.hertfordshire.gov.uk/documents/s14691/Item%205-Herts%20Growth%20Board%20MoU.pdf
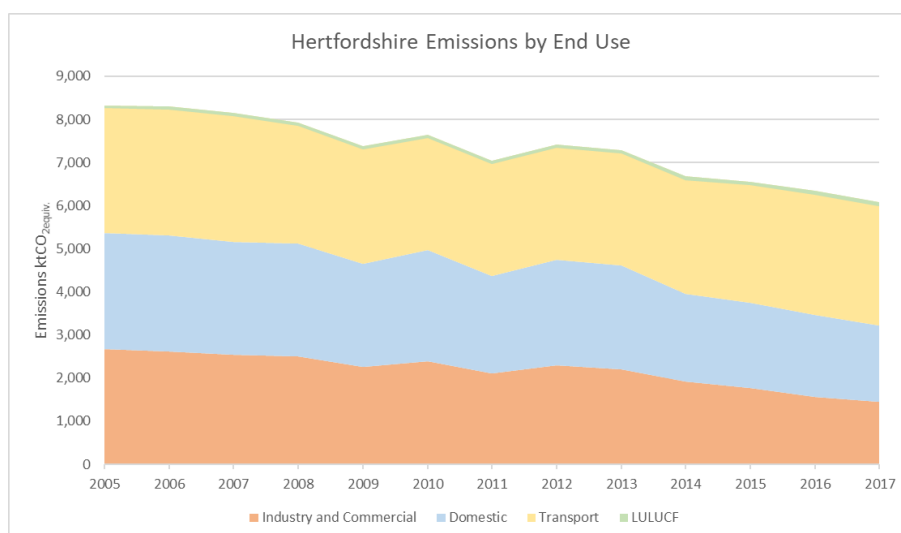
4.1.2. Figure 1: Hertfordshire Emissions by End Use. *Data configured for Countywide Carbon Impact Assessment: WSP*

4.1.3. Average regional CO_2 emissions across Hertfordshire indicate a predominately carbon-based energy consumption model across all regions in Hertfordshire. Whilst the data progression in Figure 2 indicates a decrease in emissions from 2005 through to 2017 across all regions, this is mainly due to external energy consumption factors rather than progressive policy decisions made by Hertfordshire local authorities.
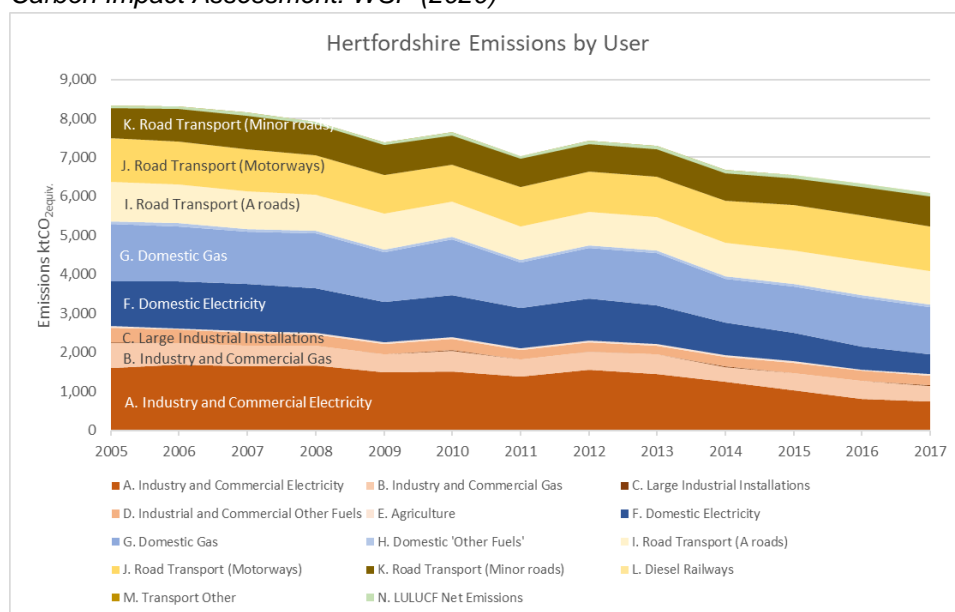
Figure 2: Hertfordshire Regional Emissions Usage (2005 – 2017). *Data configured for Countywide Carbon Impact Assessment: WSP*

4.1.4. Figure 3 highlights that most carbon-based emissions in Hertfordshire come from transport and domestic energy usage, with a decline in industry and commercial energy consumption between 2005 and 2017.

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Figure 3: Hertfordshire Emissions by Sector (2005 -2017). *Data configured for Countywide Carbon Impact Assessment: WSP (2020)*

4.2. Organisational Carbon Emissions

4.2.1. Local authorities across the county and, the UK overall, have recognised that there is a need to decarbonise their own operations, identifying sustainable solutions for the continued delivery of services to residents and support for their staff.

4.2.2. Local authorities in the United Kingdom are estimated to contribute 2-5% of their local area's emissions. The significance of action lies in the role of authorities in setting an example for their residents, businesses and organisations to follow. Local authorities can directly make changes in the buildings owned and operated by them such as corporate offices and estates, street lighting, business transport, Council fleet, and procurement of products and services.

4.2.3. Local authorities in Hertfordshire have recognised the challenges and the problems caused by carbon emissions and have generated strategies and action plans to deliver their organisational goals. Organisations must identify the delivery timetables for their actions, identifying how these ambitions have reduced their carbon emissions and how these actions will be monitored moving forward.

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5. The Solution

5.1. In 2020, Climate Change Committee published the 'Local Authorities and the Sixth Carbon Budget'. It acknowledged that the Government, regional agencies and local authorities would need to coordinate efforts to achieve the Sixth Carbon Budget[7]. The report highlights that the four key elements to delivering a collaborative approach are:

- development of a framework to deliver collaborative national and local action plan
- long term financing to support local authorities
- flexibility to allow for unique local circumstances and use of local knowledge
- coherent policy and powers for facilitation of delivery.

5.2. The report noted that local authorities have powers or influence over roughly a third of emissions in their local areas. More than half the emission cuts needed rely on people and businesses taking up low carbon solutions. These decisions are taken on the local and individual level and need to be supported with infrastructure and systems, local knowledge and networks. The report further identified that local authorities can control and influence emissions through:

- Direct control: buildings, operations, travel
- Procurement, commissioning, and commercialisation
- Place shaping: using powers to control development and transport
- Showcasing: innovating, piloting, demonstrating and sharing good practice, scaling and replicating
- Partnerships: leading, bringing people and organisations together, co-ordinating and supporting other, joining others' partnerships
- Involving, Engaging and Communicating: translating global and national climate change targets for local relevance; with stakeholders to raise awareness, involving people and ideas for local solutions.

5.3. A collaborative, countywide approach is needed across Hertfordshire to support further reductions in carbon emissions and, to deliver on the county's decarbonisation programme for our transport and energy consumption sectors. This can be delivered with investment in sustainable infrastructure, ensuring sustainable new development, enabling extensive behavioural change and creating opportunities for production and consumption of low carbon/renewable energy. This will be delivered as a result of partnership working across the private, public and voluntary sectors in Hertfordshire, delivering shared carbon reduction and sustainability ambitions.

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[7] https://www.theccc.org.uk/wp-content/uploads/2020/12/Local-Authorities-and-the-Sixth-Carbon-Budget.pdf

5.4. As a principle, the group has agreed that reduction of carbon emissions should be prioritised and pursued over offsetting. Only unavoidable emissions should be offset and as a last resort. Both reduction and offset should be done in the closest proximity to the source before looking elsewhere, in district, in county, out of county, UK and abroad.

Following this principle, the Action Plan addresses different pathways to achieving carbon emission reduction within Hertfordshire. However, the group recognises that there may be unavoidable emissions. These emissions may need to be offset to achieve net zero targets.

6. SMART Actions and Targets

As is the case with sources of carbon emissions, the scope for reduction of carbon emissions is wide and ranges across every section of society in many different ways. The actions identified in the Strategic Action Plan are those that will benefit from the collective resources and economies of scale offered by the Partnership. This Strategic Action Plan is written to provide a starting point to collaborative climate action amongst members of HCCSP and can be renewed at agreed timeframes.

Actions to be delivered by partners to make change to their own assets, premises or services

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
C1	To increase consistency in carbon emissions accounting across HCCSP members	To produce a guidance note to provide advice on carbon accounting for local authority operations. Follow up with training for HCCSP Officers requesting assistance in implementation	HSOG	Adoption of guidance note across HCCSP members	2020/21
C2	To imbed the practice of low carbon procurement within HCCSP	To produce guidance notes to demonstrate best practices in Local authority renewable energy/energy efficiency procurement	HSOG	Adoption of guidance note to demonstrate best practices across HCCSP members Confirmed commitments from HCCSP members	2022/23 Financial Year

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
				to ensure carbon reduction is considered in individual procurement practices, policies and statements	
C3	To imbed the practice of low carbon procurement within HCCSP members	To produce guidance notes to demonstrate best practices in Sustainable procurement policies	HSOG		2021/22
C4	To imbed the practice of low carbon procurement within HCCSP members	To produce guidance notes to demonstrate best practices in Sustainability Impact Assessments in decision making	HSOG		
C5	To imbed the practice of low carbon procurement within HCCSP members	To produce guidance notes to demonstrate best practices in Utilisation of BEIS's Energy Technology List	Hertfordshire LEP		2021/22
C6	To imbed the practice of low carbon procurement	To develop joint procurement	HSOG		

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
	within HCCSP members	frameworks where these can best achieve more effective action for delivery of carbon reduction			
C7	To brief local authority staff and members on importance, role and delivery of environmental sustainability and mitigation of climate change	HCCSP to arrange for delivery of training to local authority staff and members, providing education on climate change and sustainability initiatives to be adopted at work/ delivering services where requested by LA members	Julie Greaves	Delivery of staff training to all HCCSP member organisations	2021/2022 - ongoing
C8	To brief local authority staff and members on importance, role and delivery of environmental sustainability and mitigation of climate change	Deliver a web based version of training that is easily accessible for all staff	HSOG	To monitor uptake on initiatives and staff behaviour change	
C9	To increase training opportunities to ensure that HCCSP members are in	To investigate provision of regular technology/best	HSOG	Analysis of managerial take up of training	To begin in the 2021/22 financial year

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Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
	the position to adopt new carbon reduction technology and best practices when applicable	practice briefings for facility managers and planners for new and existing technologies such as heat pumps, energy efficiency measures, and other renewable energy technologies		opportunities	and to be ongoing
C10	To increase training opportunities to ensure that HCCSP members are in the position to adopt new carbon reduction technology and best practices when applicable	Recording best practices and learning from projects in a central repository	HSOG	Reduction in consultation fees to support in the evaluation and management of new technology	To begin in the 2021/22 financial year and to be ongoing
C11	To maximise the purchasing power of HCCSP members to deliver low carbon, sustainable infrastructure	To identify opportunities for bulk purchasing agreements for local authorities	HSOG	Delivery of proposal to HCCSP member organisations	2021/2022 Financial Year
C12	To maximise the purchasing power of HCCSP members to	To identify opportunities for bulk purchasing	Sarika Jain	Installation and monitoring of shared county	2021/2022 Financial Year

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
	deliver low carbon, sustainable infrastructure	agreements for local authorities		platform for the investment in collaborative sustainability projects	
C13	To identify new forms of financing major regeneration and sustainable low carbon infrastructure development projects	To prepare a report detailing market analysis and make recommendations for potential benefits from utilisation of financial instruments such as green municipal bonds for Hertfordshire local authorities	HSOG	Delivery of report to HCCSP members regarding feasibility of various sustainable financial instruments in Hertfordshire Confirmation at HCCSP Board over next steps upon completion of report	2022/2023 Financial Year

Actions requiring others to act in response to partners' use of their regulatory powers

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
C14	Priority: To seek to standardise planning regulations/policies for HCCSP members to encourage low carbon, sustainable development	To develop a checklist of climate change and carbon reduction criteria for potential agreement and implementation by all HCCSP members	HSOG/ Hertfordshire Planning Group/Development Managers	To review engagement with HCCSP members with the coordination of template To review the adoption of agreed climate change and sustainability practices among HCCSP member planning authorities	Agreement by 2022/2023 Financial Year, implementation as per local planning timelines
C15	To seek to standardise planning regulations/policies for HCCSP members to encourage low carbon, sustainable development	To develop a template for a sustainability SPD which can be adopted by LPAs, if required	HSOG/ Hertfordshire Planning Group/Development Managers	To review the adoption of agreed climate change and sustainability practices among HCCSP member planning authorities	

Actions which rely on partners' encouraging, influencing or facilitating others to change

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
C16	To identify mechanisms to deliver carbon reduction/major energy efficiency improvements through establishment of joint working partnerships between local authorities and delivery agencies	To identify and deliver carbon reduction improvements to the domestic housing sector through establishment of joint working partnerships, contracts and projects to deliver on the ground action through economies of scale upon securing funding	Local authorities /HSOG/Housing Associations/BRE	Number of homes/businesses receiving energy efficiency measure/ improved EPC rating Number of exemplar projects and case studies	Starting 2021/22 with delivery as mechanisms arise
C17	To support and encourage the uptake of existing energy efficiency and renewable energy generation schemes across Hertfordshire	HCCSP to assist in promotion and marketing of government schemes such as ECO-Flex and Low Carbon Workspaces in Hertfordshire	HSOG/Hertfordshire LEP	Analyse residential and business uptake in the provision of energy efficiency measures and renewable energy generation infrastructure	Starting 2021/2022 Financial Year, ongoing action
C18	To encourage Hertfordshire's public, private and third sector	To support a carbon reduction pledge that businesses and	HSOG/ Hertfordshire LEP/Hertfordshire	Completion of pledge that could be adopted by	2022/2023 Financial Year – initial launch

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
	commitment to making substantial changes to reduce their carbon footprint	organisations can sign up to, committing themselves to take 3 strong actions	CVS Group	Hertfordshire private and third sector.	
C19	To facilitate development of green skills in Hertfordshire to ensure local community and business sector are "low carbon ready"	To facilitate partnerships between renewable energy/low carbon companies, education providers, youth and community centres, professionals and industries based in Hertfordshire to identify gaps in green skills and develop way forward to ensure that local business economy is ready to transform and deliver low carbon solutions and infrastructure	Hertfordshire LEP/Hertfordshire Youth Connexions	Analysis of green skills gaps in Hertfordshire and engagement with skills providers to deliver skills linked to low carbon priorities. Analyse take up of education supporting low carbon environment goods and services	2021/2022 Financial Year– for initial roundtable discussions
C20	To help Hertfordshire businesses to transform, reduce carbon and meet climate change targets by	To seek to deliver a 'Net Zero Business' campaign for businesses - Work with	Hertfordshire LEP	To monitor local business engagement with the 'Net Zero	To begin in 2021/2022 upon lifting of Covid-19

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Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
	delivery of relevant supportive information and access to green related funding information	business support network partners, the LEP and Hertfordshire Growth Hub to develop a 'Net Zero Low Cost' campaign that will signpost businesses to the Growth Hub for green support and advice		Business' campaigns	restrictions
C21	To engage with key high energy using businesses keen to transform for quick business zero carbon wins	To set up a local business forum, with an energy expert facilitator, to design and deliver a Hertfordshire wide focussed zero carbon key action checklist	HSOG/Hertfordshire LEP	To monitor local business engagement with the local business forum	To begin in 2022/2023 upon lifting of Covid-19 restrictions
C22	To engage with key high energy using businesses keen to transform for quick business zero carbon wins	To establish a High Energy Users Group – to enable sharing of exemplar energy reduction initiatives/best practice between high energy	HSOG/Hertfordshire LEP	To monitor the impact of the forum on delivering a reduction on carbon emissions	To begin in 2022/2023 upon lifting of Covid-19 restrictions

Note: Grey indicates completed action	Priority to address	Action	Organisation(s) who will deliver the action	Targets or indicators means of measuring progress	Timeframe for delivery inc. intermediary milestones where appropriate
		users			
C23	To support and grow the low carbon environmental goods and services (LCEGS) businesses in Hertfordshire	To encourage green growth inward investment by actively promoting the opportunities for green businesses into our sector clusters and clean tech incubator space	Hertfordshire LEP	To analyse green growth investment in Hertfordshire	To begin in 2022/2023

7. Funding

7.1. It is expected that the primary cost associated with these actions will be in the form of officer time; that of the HCCSP Coordinator and relevant County/District Council officers.

7.2. It is likely that review of internal operations of the local authorities such as procurement policies and projects such as bulk purchasing schemes will require capital funding from the authorities. It is likely that a wide range of potential funding options and sources will need to be considered on a project to project basis.

7.3. It is anticipated that work shall engage with and involve partner organisations. Where appropriate contributions, both direct and in-kind, will be requested.

7.4. There may be appropriate grants and loans which can be accessed as well as partnership working with local businesses. These will be subject to specific research.

Version Control

Version Number	Summary of amendments	Approved by HCCSP
Version 1.1	Upload first version to website	September 2021
Version 1.2	Amendments to align numbering scheme for actions across HCCSP; Updating timelines and achievements	March 2022