

**Meeting** Executive

**Portfolio Area** Environment and Performance;  
Communities, Neighbourhoods and Co-operative Council

**Date** 12 October 2023



## CLIMATE CHANGE – ANNUAL UPDATE OCTOBER 2023

### KEY DECISION

**Author** Zayd Al-Jawad

**Lead Officers** Zayd Al-Jawad, Rob Gregory, Steve Dupoy

**Contact Officer** Zayd Al-Jawad, 2257

### 1 PURPOSE

- 1.1 This report builds upon the update provided to the Executive at its meetings in June and October 2022 and provides Members with an overview of the action that Stevenage Borough Council is taking to address climate change. The report also outlines further action being taken by Stevenage Borough Council, in partnership at county level through the Hertfordshire Climate Change and Sustainability Partnership (HCCSP) and references the activities of the East of England Regional Climate Change Forum.
- 1.2 Further to this the report outlines the street level work and opportunities being undertaking to support local people to make a positive environmental change in their local area, reducing carbon and increasing support for behavioural change in local neighbourhoods.

- 1.3 Importantly the report also highlights the continuing need for further substantial legislative and financial support from Government to achieve the target for the town and Council to be net zero by 2030.

## **2 RECOMMENDATIONS**

- 2.1 That the progress being made to deliver the Climate Change Strategy and Action Plan be noted, and any related matters be highlighted for the attention of the Portfolio Holder for Environment & Performance and officers.
- 2.2 That the approaches to the three SBC Pathways, Fuel & Fleet; Buildings & Assets and People & Process, as outlined in Paragraphs 3.50 - 3.91 of the report, be agreed.
- 2.3 That officers be requested to prepare a business case for the Executive to consider relating to switching as much as possible of SBC's fuel to Hydrotreated Vegetable Oil (HVO), as detailed in Paragraphs 3.59 and 3.60 of the report.

## **3 CLIMATE CHANGE UPDATE Summary**

- 3.1 For the geographic area of Stevenage, including everyone and everything in it, there was a slight 2.90% increase in total emissions in 2021 compared to 2020 levels which most likely relates to the pandemic coming to an end. However, when compared to 2018, our baseline year, emissions are still 14.5% below those levels.
- 3.2 Pathway 1 has been developed looking at SBC's Fuel and Fleet carbon emissions. SBC have introduced a new EV van and got solar panels fitted to all seven of our refuse trucks. SBC have also detailed options for migrating the fleet to low or zero carbon, with options to changing the fuel to deliver a large carbon savings before 2030.
- 3.3 Pathway 2 Buildings and Assets and Pathway 3 People and Process is underway with a focus on bidding for capital low carbon investments.
- 3.4 Extensive work on carbon reduction has been undertaken across the region with the EELGA and HCCSP.
- 3.5 The first Topic Reference group is up and running, joining those with a technical interest in climate change with other key stakeholders to collaboratively work on solutions.). Three Dragon's Den local environmental improvement schemes have been approved.

### **Update**

- 3.6 Officers have been working with the Portfolio Holder for Environment and Performance to review the current Climate Change Strategy and Action Plan, the existing and potential engagement activities, projects and schemes which are underway or could be brought forward, and the overall steps that will be needed to accelerate our collective efforts to achieve the aim of a net zero town and Council by 2030.

- 3.7 At the heart of our efforts to tackle the climate crisis is a plan that recognises actions are needed at all levels, from coordinated international efforts such as those set out in COP27 and other global programmes, all the way through to individual actions and choices, and changes that can be made in places and neighbourhoods in which people live.
- 3.8 At the global level, significant funding commitments have been made, for both supporting countries to transition away from greenhouse gas emissions, and to investment in new low carbon technologies. The COP27 in Egypt ended with a breakthrough to assist vulnerable countries dealing with losses and damages caused by climate change. However, no substantial new initiatives were agreed at the summit to reduce emissions and limit temperature rise to 1.5°C.
- 3.9 On the other hand, a clear emissions gap between current national climate plans and what is needed to meet world’s target is broadly recognised. The Glasgow Climate Pact called on all countries to present stronger national action plans by 2024. 137 countries committed to halt and reverse forest loss and land degradation by 2030, backed by \$19.2bn in funding. Additionally, 103 countries, including 15 major emitters, signed up to the Global Methane Pledge, which aims to reduce methane emissions by 30% by 2030, compared to 2020 levels. Methane is responsible for a third of current global warming from human activities. Finally, over 30 countries, six major vehicle manufacturers and some cities, set out their determination for all new car and van sales to be zero-emission by 2040 globally and 2035 in leading markets.
- 3.10 This report highlights some of Stevenage Borough Council’s points of engagement and action, from reflecting global trends, through to actions in our local economy, and the active engagement needed in our local communities.

**Our new focus: The 9 levels for Climate Change Strategy**

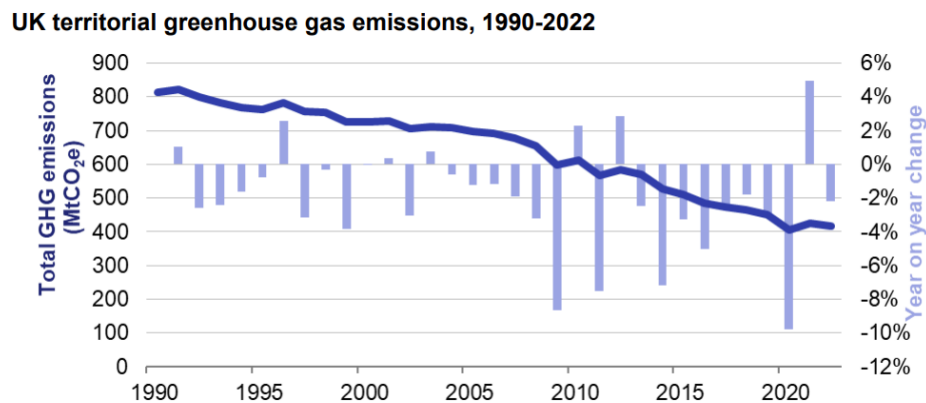


**Levels 1 and 2: Global and national level climate action**

- 3.11 The global pandemic and associated ‘lockdowns’ had a significant impact on climate change during 2020 – 2021. In fact, emissions declined at the fastest

rate on record in 2020, an estimated 13% drop. Despite increases in some emissions as a result of UK's ongoing recovery from the pandemic, 2022 presented a drop in emissions, owing mostly to a reduction in fuel utilisation to heat buildings. This was primarily due to 2022 being significantly warmer than 2021, although higher energy prices may also have played a role. Total GHG emissions in the UK are provisionally estimated to have decreased by 2.2% in 2022 compared to 2021, to 417.1 million tCO<sub>2e</sub>. Compared to 2019, the last pre-pandemic year, total GHG emissions in 2022 were down 7.4%, and 48.7% lower than in 1990. CO<sub>2</sub> emissions from the residential sector decreased in 2022, whereas CO<sub>2</sub> emissions from transport rised.

- 3.12 The long-term trend in UK territorial GHG emissions from 1990 to 2022 is outlined in the table below:



Source: Department for Energy Security & Net Zero, National Statistics

- 3.13 Continuous monitoring of these reductions allows us to see how much of these carbon savings can be maintained and further improved, in a way that does not exacerbate energy poverty to lower income households, or limit access to employment and good quality housing.
- 3.14 While it is challenging to forecast the implications of this in terms of energy consumption and carbon emissions in the medium-term, the dramatic increase in energy prices for individuals and businesses alike is likely to result in behavioural and production changes. While this may limit energy use in the short term, there will be profound effects on us all, particularly highlighting the urgent need for government-level initiatives to promote insulation, retrofitting, and energy efficiency as well as alternative forms of sustainable energy supply.
- 3.15 Early in 2023, the UK Government has released an independent review on its Net Zero Strategy to reaching net zero by 2050, and its responses to that review. This process has highlighted the important role of local authorities, communities, and individuals to deliver net zero, and the problems hampering them. These problems include lack of policy clarity, capital waiting for investible propositions, infrastructure bottlenecks and delays in the planning system.
- 3.16 Net zero is recognised as the critical growth opportunity of the 21<sup>st</sup> century, with more than 90% of global GDP currently covered by a net zero target. Global market opportunities of £1 trillion for British businesses and the potential creation of 480,000 jobs by 2030 have been identified.

- 3.17 Alongside the importance of new technologies and innovation, the review has highlighted the problems hampering the net zero delivery and has outlined strategies to face them. These strategies include defining clear plans and strategies; unblocking the planning system and reforming the relationship between central and local planning promoting place-based action; defining a comprehensive government financing strategy by the end of 2023, giving long-term clarity, and simplifying the current disjointed, unfair, and expensive local net zero funding landscape; and reviewing incentives from HMT for investment in decarbonisation, including via tax system and capital allowances.
- 3.18 In September 2023, the UK Government announced its decision to ease the transition to electric vehicles, allowing the sales of petrol and diesel cars and vans until 2035. Even after that, buying and selling those vehicles second-hand will be possible. In this announcement, the Government also stated that no measures will be imposed on replacing current gas boilers with heat pumps. The switch will only have to be made when replacing the boiler anyway, and even then, not until 2035. An exemption will be introduced for households for whom this switch will be hardest, so that they will never have to switch at all. On the other hand, the Government announced that the Boiler Upgrade Scheme, which gives people cash grants to replace their boiler, will be increased by 50% to £7,500. Finally, the Government specified that current plans on energy efficiency requirements for properties will be scrapped, and while the Government will continue to subsidise energy efficiency, no household would face compulsory upgrades.

### **Level 3 - Businesses**

- 3.19 Many of the large businesses in Stevenage are well on their way to meeting their own corporate objectives to be net zero by 2030 or even earlier. Previously we have surveyed businesses along Gunnels Wood Road, including GSK, MBDA, Fujitsu and Wenta. Local businesses including HCC and Flamingo Foods are investing significant amounts of money in Stevenage to lower their carbon emissions.
- 3.20 Case Study: The Institution of Engineering and Technology (IET) Stevenage, one of Stevenage's largest employers, has undergone a full redevelopment that makes it technologically smarter and more sustainable for the benefit of the 580 people who work there. The prominent red-bricked building situated at the entrance of Stevenage's leisure park was transformed top to bottom over the course of 2021-22.
- 3.21 The project started whilst employees were working from home during the pandemic, providing an opportunity to complete the work in a safe and efficient way, as well as speeding up the project timescale. The new-look building features innovative and technologically smart workspaces with accessibility, sustainability and employee well-being as a key focus for the plans.
- 3.22 Richard Mundy, Head of Facilities at the IET, said: *"The environment in which our colleagues work is really important to us as it underpins everyone's wellbeing and the inclusive, progressive culture we have. It is our*

*commitment to provide working space that brings out the very best in everyone and the work that they do. We wanted to design a building with the future in mind – one that gives our employees an intuitive, modern and fully accessible space in which they can thrive as well as playing our part to reduce our impact on the environment by ensuring our new building is built and run in a sustainable way”.*

- 3.23 During the decant, zero waste went to landfill, with items such as office furniture and building materials being sorted and recycled. The refurbishment achieved BREEAM (Building Research Establishment Environmental Assessment Method) certification to ensure construction is carried out sustainably. The Council is working with them to share best practice and learning.
- 3.24 Last year, the Council agreed to fund 100 Gold Memberships for a Wenta-run net zero programme (Action Zero Programme), which supports local small and medium sized enterprises (SMEs) to understand what can be done about climate change; identify the business opportunities and risks arising from climate change; and reduce their carbon footprint. It also helps SMEs calculate the business and climate benefits of net zero and understand what becoming “net zero” can mean for the future of their business. Action Zero forms part of the Council’s measures to help businesses to cut their emissions and support the town to be net zero by 2030. 94 business have already signed up to the programme.
- 3.25 Through the Community Renewal Funding programme, the Council has been supporting micro businesses and voluntary organisations through the provision of workshops to support sustainability planning and how to identify cost savings as well as running a ‘Meet the Buyer” campaign. By way of background the Community Renewal Fund was a UK Government fund which provided £220 million nationally as additional funding to help organisations prepare for the introduction of the UK Shared Prosperity Fund.
- 3.26 The Council is currently aiding the delivery of UK Shared Prosperity Fund supported activities to support local business investment and increase private sector investment in growth-enhancing activities, including new-to-firm innovation, and adopting productivity-enhancing, energy-efficient and low carbon technologies and techniques. The “Meet the Buyer” campaign should help businesses become more sustainable, increase their competitiveness, and better understand the sustainability needs of buyers so they can tailor their services to help businesses meet those needs. This process would enable the Council’s to meet its responsibility to promote sustainable development in the area and support efforts to reach its climate goals.

**Levels 4 and 5: Regional / Countywide - Hertfordshire Climate Change and Sustainability Partnership and at the East of England level.**

- 3.27 A crucial element of the Council’s approach is to work with other local government partners to help secure investment, develop business cases and to find ways to collectively reduce their carbon footprints and improve sustainability. This is a joint endeavour, bringing together our resources to help achieve the greatest impact.

- 3.28 The Hertfordshire Climate Change and Sustainability Partnership (HCCSP) was launched in 2020 and consists of all 10 Districts, the County Council, and the Local Enterprise Partnership (LEP). The Portfolio Holder for Environment & Performance attends these meetings with the Assistant Director for Planning & Regulatory Services.
- 3.29 SBC is a proactive participant on HCCSP, and the Chief Executive is the lead Officer sponsor at County level. The Council is supporting delivery in relation to five of the six priority themes (as set out below) for which detailed action plans have been developed and implemented:
- Biodiversity
  - Carbon reduction
  - Transport
  - Water
  - Behavioural Change
  - Climate Change Adaption
- 3.30 Much of the strategic work is being focused through HCCSP to harness the power of working together at county level. There are good linkages between the HCCSP and SBC key themes noting that one of the crucial aims of the HCCSP was to not duplicate efforts at local levels.
- 3.31 Some examples of work undertaken via HCCSP are set out below:
- Biodiversity Baseline – joint procurement and a county-wide reference point for the imminent development of the Local Nature Recovery Strategy and introduction of Biodiversity Net Gain.
  - Solar Together – joint communications and county-wide coordination of this solar panel scheme, facilitating domestic energy generation installations at scale.
  - Your Tree, Our Future – joint communications, logistical and funding support enabled over 46,000 trees to be given away to Hertfordshire residents in Year 1 of the scheme. Year 2 launched in mid-June 2023, expecting a further 59,000 trees to be available.
  - LEVI Funding - In September 2023 the Council, through HCCSP, also obtained LEVI funding to support EV charging in the borough.
- 3.32 Via HCCSP the Council has also obtained training and capacity-building for councillors and officers across a range of relevant subjects including sustainability for planning experts, adaptation, and climate change.
- 3.33 HCCSP is increasingly being looked to for coordination and leadership in the sustainability sphere.
- 3.34 Similarly, local authorities are being approached by businesses who wish to understand how they can fulfil statutory obligations (e.g., offsetting) and expecting local authorities to be at the forefront of these strategies.
- 3.35 Reflecting on these expectations and recognising the more fertile landscape for ambition and action outside of individual Local Authorities', HCCSP is proactively mapping the six identified priority themes shown at 3.29 to seek

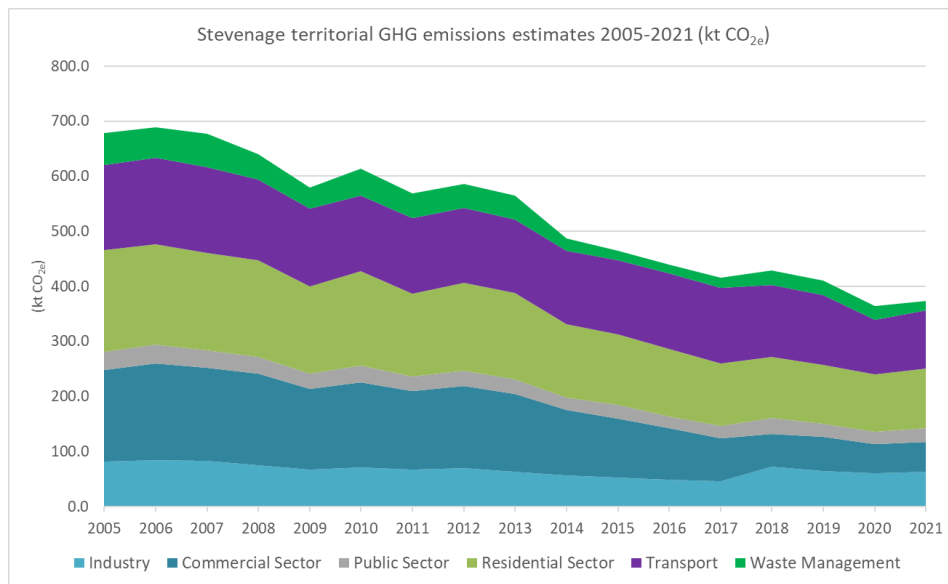
to identify the most appropriate organisation to deliver against specific objectives.

- 3.36 This revised approach would allow updates and progress reports to be shared with relevant stakeholders to improve navigation and awareness within what can be a complex multi layered operating environment.
- 3.37 At the June HCCSP meeting Members also considered the partnerships future role in the context of the emerging new county level “Missions” that are being drawn up by the Herts Growth Board (HGB) one of which is focused on Climate Change along with the Regional Climate Change Forum (RCCF) work programme (as shown at 3.38 below). It is important that the activities at local, county, and regional levels are as joined up as possible to ensure we are working as effectively and efficiently as possible. It is also important to remain cognisant with what is happening at national and international levels where there could be local impacts.
- 3.38 The Regional Climate Change Forum (RCCF) is organised by the East of England LGA. SBC’s Chief Executive is the lead officer for the region.
- 3.39 Post completing a regional baseline assessment the RCCF has published an Action Plan which includes eight priorities as set out below:
- Priority 1: Implement the RCCF regional 'switchboard' linking and facilitating the sharing of intelligence, requests, best practice, resources and opportunities
  - Priority 2: Explore with Officers opportunities for regional green inward investment and collateral
  - Priority 3: Share regional sustainable development best practice guidance for LA's Local Plans
  - Priority 4: Enable LA members to explore the widest range of opportunities to bring in funding for retrofit activity
  - Priority 5: Share best practice on climate resilience and emergency planning for extreme weather events
  - Priority 6: Explore opportunities for joint procurement and support the sharing of sustainable procurement best practice
  - Priority 7: Share best practice on effective public communication and behaviour change activity
  - Priority 8: Lead government lobbying and advocacy on behalf of the region
- 3.40 Hertfordshire is the nominated authority leading on the Adaptation workstream in relation to Priority 5 and is working alongside Suffolk and Cambridgeshire on Behaviour Change and Communication in relation to Priority 7.
- 3.41 The East of England Net Zero Conference took place on 20 September 2023 in Cambridge and was attended by the Portfolio Holder and SBC officers.



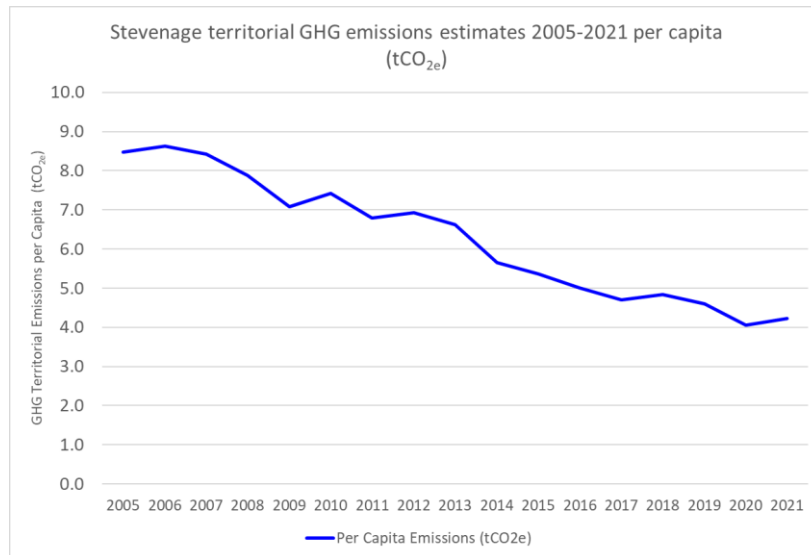
## Level 6: Stevenage Level

- 3.42 Central government data for Stevenage's own emissions for 2021 have been released and is shown below. Although the effect of the pandemic resulted in a sharper than average fall in emissions which was a benefit from a climate change point of view, the ensuing recovery has started to impact on the 2021 data. The 2022 figures will be release in the next 8-9 months and are likely to show further increases in emissions as economic activity further recovers as was the case after the 2008/2010 down turns.
- 3.43 Based on the last published information from the Department of Energy Security and Net Zero (DESNZ), updated on 29 June 2023, the territorial GHG emissions trajectory for Stevenage is shown below.



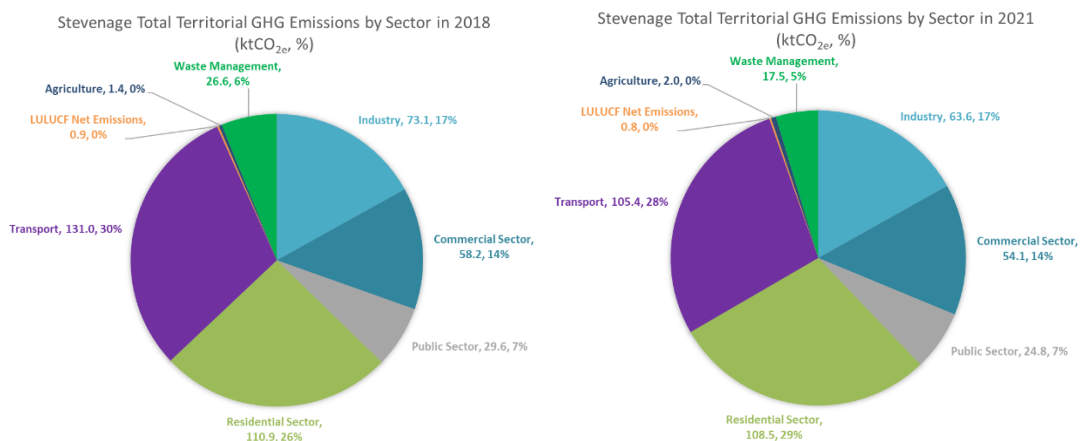
Source: Based on Department for Energy Security & Net Zero data.

- 3.44 The information shows a slight 2.90% increase in total emissions in 2021 (376.7 kt CO<sub>2e</sub>) compared to 2020 levels (365.8 kt CO<sub>2e</sub>), primarily driven by increases in the public (+8.8%), transport (+6.3%), industrial (+5.2%), domestic (+3.5%), and commercial (+3.1%) sectors. However, when compared to 2018, our baseline year, emissions (431.7 kt CO<sub>2e</sub>) are still 14.5% below those levels.
- 3.45 As noted above the figures for 2021 may well be affected due to the lockdown restrictions and subsequent decline in both industrial production and travel. These figures are produced by central government taking into account a complex array of energy use data and are about two years behind.
- 3.46 Total territorial GHG emissions (tCO<sub>2e</sub>) per capita showed a similar behaviour, with slightly deeper decrease in 2021 emissions levels compared to 2018 (-14.68%), as shown in the figure below.



Source: Based on Department for Energy Security & Net Zero data.

3.47 When 2021 Stevenage total territorial emissions are compared with 2018 levels by economic sector, no significant change can be identified, but a decrease in all the major emitters sectors is evident as shown below.



Source: Based on Department for Energy Security & Net Zero (ex BEIS) data.

3.48 The Stevenage Climate Change Strategy is based around 8 themes, reflecting the breath of services offered by the Council. The 8 themes are shown on the next page and detailed in paragraph 3.9The Council’s delivery against the key activities agreed by Executive against those themes is set out below. The traffic light colouring (red, yellow, and green) depicts the progress made against each one.

## Businesses

Lobby government to support our businesses and a green recovery.

Using our network's shared knowledge to support SMEs to adapt to climate change opportunities.

Share knowledge and improved ways or working across our business community to reduce carbon.

## Homes

Energy efficient housing and subsidies for public and private homes.

Planning Policy for zero carbon homes on all large scale developments.

Zero carbon development at the Station Gateway.

Fully electric/zero carbon heat and power on SBC lead developments.

## Construction & Regeneration

Design a carbon neutral new civic hub.

Work with regeneration partners that are committed to zero carbon operations.

Fully electric SG1 residential development.

Zero carbon state schools.

## Waste & Recycling

Develop a new Waste Strategy promoting reduction, reuse and recycling.

Zero waste to landfill or incineration.

With HCC produce biogas.

## People

SBC will produce a Climate Change Comms Plan to help education and inform our residents.

Continue to work with youth groups, Youth Council and local schools to help both understand their climate change concerns and also empower them to make changes.

## Biodiversity

Tree protection and planting strategy.

Biodiversity Plan and Actions.

Plant over 4000 trees by 2030.

Construct at least 6 new lakes or ponds by 2030.

## Transport

Electric taxis and support to drivers to transition their fleet.

Electric buses, with expanded routes and frequencies.

With HCC, introduce workplace parking charges.

Living Streets trials.

Decarbonising the SBC fleet before 2030.

Bike and e-bike hire.

## Energy & Water

Promote cross-county purchase of renewable energy supply.

Identify opportunities for local renewable energy generation.

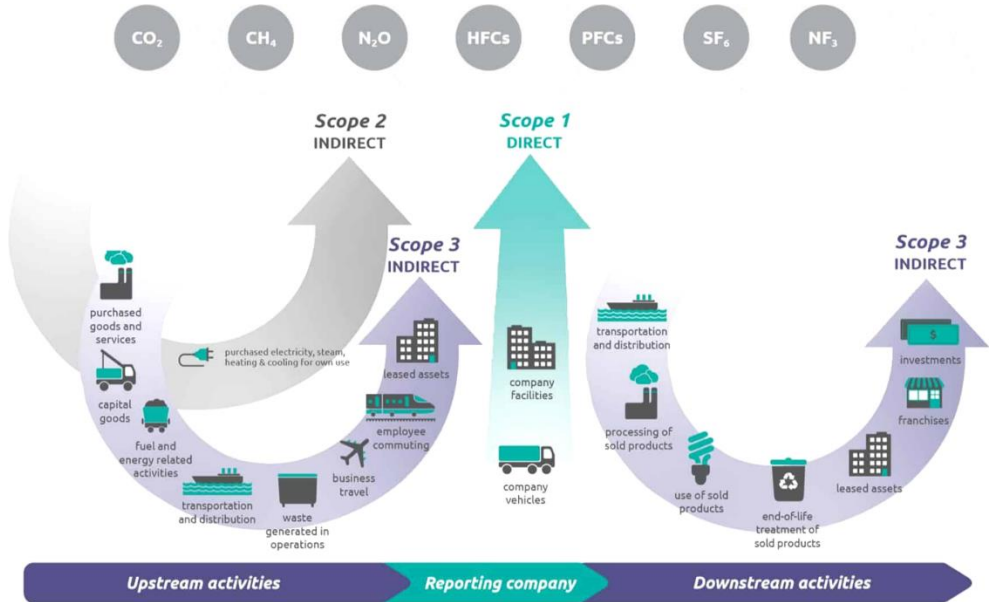
Test a Combined Heat & Power station as part of new swimming pool development.

With Affinity Water & HCC, support their move to zero carbon

3.49 Much work has been done on establishing 3 SBC pathways to zero carbon, which covers a significant amount of the Council’s direct emissions. More detail is provided in the appendix, but some summary information is set out below:

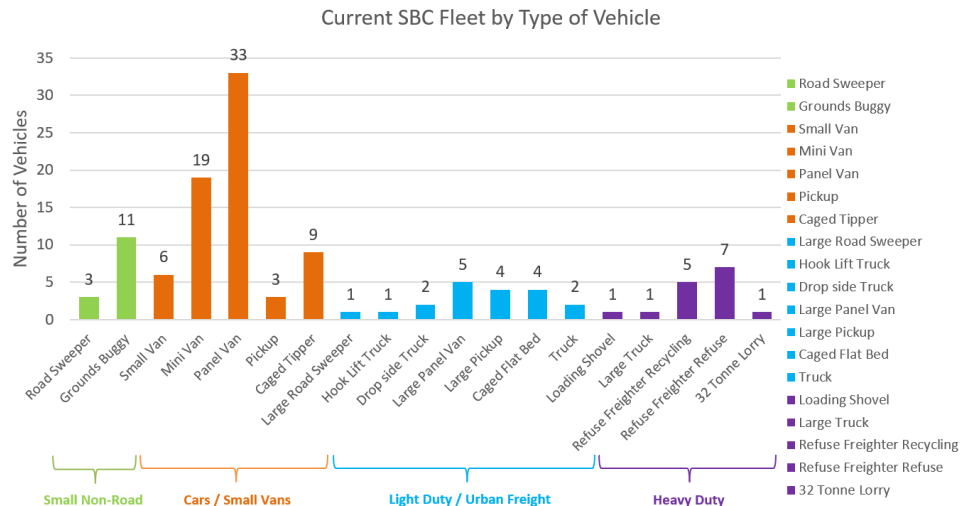
**Pathway 1 – Decarbonising fuel and fleet: highlights**

- 3.50 The transport sector accounts for about 28% of GHG emissions across Stevenage. The transport sector is the UK’s largest GHG emitter, and its emissions have increased after the COVID-19 pandemic.
- 3.51 As part of Stevenage’s target to be net zero by 2030, SBC has set a target for decarbonising its fleet before 2030. SBC’s fleet accounted for approximately 23% of total Scope 1 and 2 emissions of SBC based on the 2018 emissions baseline.
- 3.52 Scope 1 covers emissions from sources that an organisation owns or controls directly, for example from burning fuel in our fleet of vehicles or gas for heating our buildings. Scope 2, in turn, are emissions that an organisation causes indirectly and come from where the energy it purchases and uses is produced, typically the emissions produced from electricity generation. On the other hand, Scope 3 emissions encompasses emissions that are not produced by the organisation itself and are not the result of activities from assets owned or controlled by them, but by those that it is indirectly responsible for up and down its value chain. A summary on emissions scopes is shown below.

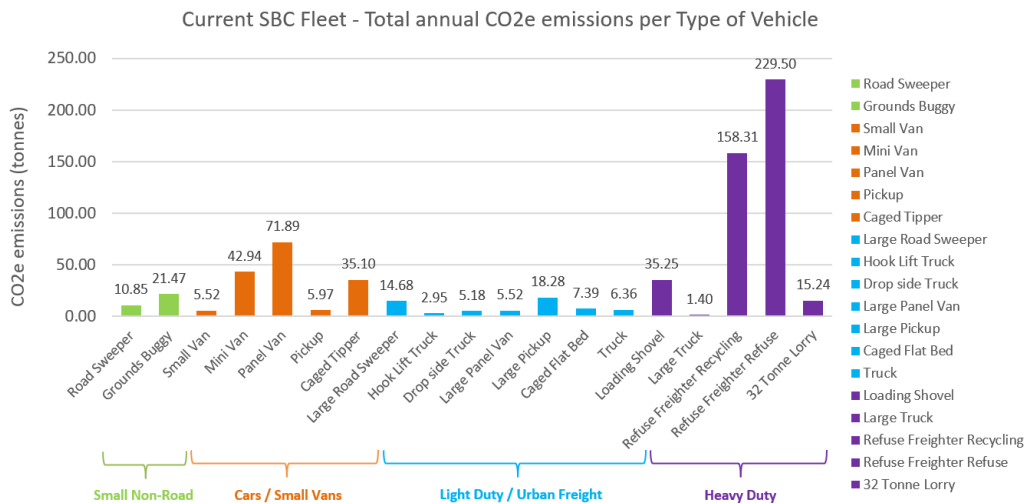


Source: GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard

3.53 Currently, SBC operates a mixed fleet including around 104 road vehicles and more than one hundred non-road machinery and plants. The current SBC owned fleet composition by type of vehicle is shown below.



3.54 Around 63% of the emissions of SBC’s owned fleet come from heavy-duty vehicles, primarily refuse collection. The detail of the total annual tonnes of CO<sub>2e</sub> emissions per type of vehicle is presented in the next figure.



3.55 Decarbonising SBC transport-related emissions includes reducing carbon emissions across our own fleet, the grey fleet SBC uses for business travel, and the modes of commuting of our workforce. Decarbonising SBC fuel utilisation also involves making a transition in non-road machinery and plants. SBC have introduced a new electric van, and our seven refuse vehicles now have solar panels on their roofs. The solar panels are the Trailer Refuse 480w model. These are designed to supply power to the onboard electrical systems which means that the alternator is not required as much. Not using the alternator saves 10-15 brake HP from the engine which in turn saves fuel. It is estimated that over the course of a year each lorries solar panels will save up to 1,100 litres of diesel fuel, reducing CO<sub>2</sub> emissions and saving money. The Council will target small fleet first where the technology is more available and look to fuel changes until heavy goods vehicle technology is there.

3.56 It is hoped that SBC, leading by example and decarbonising its fleet and reducing its fossil fuel consumption, will inspire and encourage others to do

the same across Stevenage whilst also identifying some synergies to support that transition, especially in developing infrastructure, as shown below.



3.57 Actions to decarbonise transport include avoiding or reducing the need for travel, shifting to more environmentally friendly modes of transport, switching to clean fuels, and upgrading the technology of the fleet with Zero Emissions Vehicles (ZEVs). These measures will require infrastructure and skills development.



3.58 Four scenarios have been modelled to analyse decarbonisation pathways for SBC-owned fleet, ranging from optimistic scenarios where all vehicles are replaced with ZEVs when they are due to be replaced, to scenarios where diesel is kept as the main fuel for vehicles until 2030.

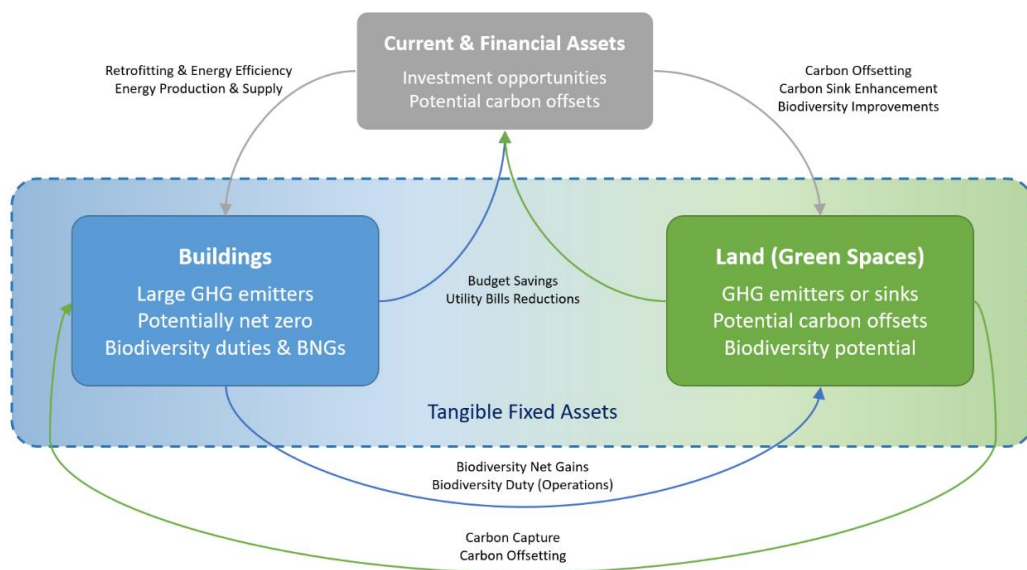
3.59 A proposed pathway includes the possibility to switch from diesel to HVO (Hydrotreated Vegetable Oil), a biowaste-based fuel, as soon as possible

and using Battery Electric Vehicles (BEVs) as a replacement for cars and small vans (since 2025) and light-duty (since 2027). For heavy-duty vehicles, the switch to HVO can also be considered, along with ZEVs for fleet renewal since 2027, considering electric and hydrogen alternatives depending on the technology readiness.

- 3.60 A further set of actions has been designed for different categories within the fuel and fleet decarbonisation challenge. For the SBC-owned fleet, the switch to HVO has been analysed and suggested, and analyses of ZEV/Ultra Low Emissions Vehicles (ULEV) alternatives are planned to be conducted on a regular basis. For the grey fleet, the Council is currently working on a characterisation of driving patterns is identified as necessary before further decarbonisation measures and incentives are proposed. For workforce commuting, the Council is conducting an updated staff travel & work survey during 2023, the first one after the pandemic, as an initial step to estimate our Scope 3 emissions related to staff commuting and to upgrade our current Workplace Travel Plan.
- 3.61 Other transport-related measures for decarbonisation include the promotion of an EV-car club pool scheme available since 2023 for our staff business travel requirements, and the planning of a borough-wide hire to cycle scheme across Stevenage, which is expected to be operating by 2024, whose infrastructure related improvements could also have important synergies with business travel and commuting for SBC.

**Pathway 2 – Decarbonising assets and buildings: highlights**

- 3.62 Pathway 2 refers to SBC buildings emissions reductions, SBC land (green spaces) carbon capture, and financial assets support to decarbonisation actions, as shown below. To meet net zero virtually all heat in buildings needs to be decarbonised.



- 3.63 Stevenage Climate Change Strategy, Stevenage Local Plan and SPDs have incorporated renewable generation, energy efficiency criteria and principles. Our Local Plan has incorporated principles of sustainable development and



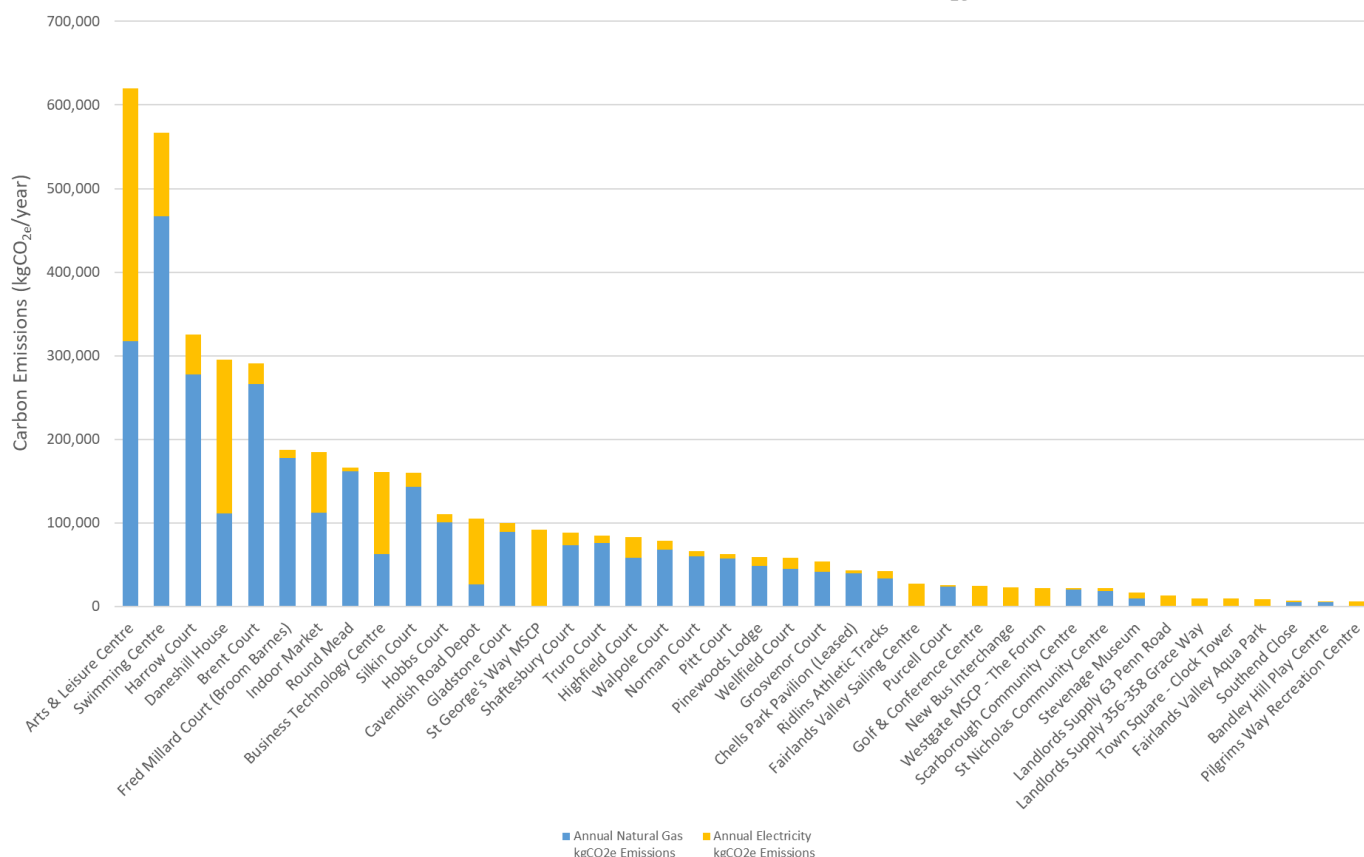
climate change impact reduction, aiming to ensure that all new developments are energy efficient. Planning permission is then granted where proposals demonstrate how they make high-quality buildings and spaces and how they are proactive about buildings energy performance (e.g., by including low carbon local energy generation and energy efficiency measures, where practicable). The Council encourages any development to improve upon the fabric of existing buildings, and to improve the energy efficiency of the building stock. Developments should also take advantage of natural light and heat from the Sun to minimise the need for additional energy. Stevenage Local Plan mentions the options of using PV panels, micro wind generators, and Ground Sourced Heat Pumps. Furthermore, the Council has adopted the Stevenage Design Guide SPD (January 2023) that provide guidance on matters introduced or strengthened by the SBLP, including encouraging developers to build and design energy efficient buildings, and carbon neutral specifications.

- 3.64 Decarbonising the Council buildings could help realise positive synergies with broader Stevenage decarbonisation targets, again through leading by example, but also directly contributing to the decarbonisation of the public sector, residential sector, and commercial sector across the town. These interactions are shown below.



- 3.65 In 2022, the Council moved to a zero-carbon tariff for electricity, allowing us to avoid about 1,578 tCO<sub>2e</sub>/year from electricity supply.
- 3.66 Reducing and phasing out natural gas use at SBC sites (about 3,002 tCO<sub>2</sub>/year) is the main remaining challenge for SBC buildings decarbonisation.
- 3.67 All new developments led by SBC (e.g., new civic hub) should consider efficient energy design, zero carbon heat and power, and the whole-life carbon of projects, including embodied carbon, aiming to be net zero.
- 3.68 The top 40 SBC sites with highest emissions related to energy consumption represent 94.4% of the total SBC buildings' emissions. Decarbonisation projects should prioritise these sites.

Top 40 Highest Carbon Emissions SBC Properties (kgCO<sub>2e</sub>/year)



- 3.69 Some actions already taken in this regard include the upgrade programmes of our Multi Storey Car Parks. St George's MSCP has LED lighting and motion sensors installed to reduce the electricity consumption. The Council has also got experience by installing and operating a PV system on the Railway North MSCP, and it is currently analysing further solar installations on its car parks.
- 3.70 Officers are also currently monitoring the electricity demand profile of 11 SBC sites, through a digital meter explorer created by Grid Edge since May 2023, as a first step to smart energy savings.
- 3.71 Moreover, officers have carried out energy audits at three of SBC's main buildings: Daneshill House, Cavendish Road Depot and the Indoor Market, identifying a set of actions that can be taken to reduce their energy consumption and support further decarbonisation. The details of the actions recommended can be seen in the Pathway 2 report included as an appendix (Table 5).
- 3.72 Based on the results of these energy audits and the new emissions baseline, a subset of SBC sites is proposed for funding applications such as the Public Sector Decarbonisation Scheme (PSDS) (e.g., Cavendish Road Depot, Indoor Market, Business & Technology Centre). Local authorities must contribute PSDS funding with a minimum of 12% of total project costs. Although this is primarily a gas heating system replacement scheme, it also includes a whole building approach, combining energy efficiency with low carbon heating.

- 3.73 The Council is currently working with the new leisure management contractor, Everyone Active, the contract for which included a set of sustainability-related actions to support the energy reduction and decarbonisation of our leisure facilities. Since they took over these facilities in April 2023, they have conducted works related to replacement of lighting, Building Management Systems (BMS) upgrades and reconfigurations, and insulation enhancement actions.
- 3.74 In terms of green spaces, to implement a bottom-up process to estimate carbon storage and sequestration on SBC green spaces has been proposed.
- 3.75 A set of principles to be included in considering SBC financial investments is being defined. These principles include an ESG positive screening approach, the promotion of carbon “insetting” to finance projects along SBC’s own value chain and the exploration of energy-related activities such as local generation.
- 3.76 To support a study to comprehensively analyse local energy generation opportunities across SBC sites, evaluate potential rent-a-rooftop schemes for SBC solar generation, and create a framework for local offsetting is suggested.
- 3.77 As a major housing provider, the Council has been keen to drive the decarbonisation of its own housing stock of almost 8,000 council homes. SBC has pledged that all our social homes will achieve an EPC rating of C by 2030.
- 3.78 The Council has been successful in obtaining grants for decarbonisation projects and actions across its housing stock. From March 2021 to May 2022, the Local Authority Delivery Scheme 1B (LAD1B) was delivered, targeting properties in an EPC band D or below. 150 properties were included in this programme involving the installation of solar panels at 123 properties, loft insulation at 9 properties and cavity wall insulation at 45 properties. The delivery of these measures increased the EPC score of all these properties to an EPC C or above. It is also estimated to have saved approximately 142.6 tCO<sub>2</sub> a year. The Council is preparing a bid to the future rounds of this scheme to further drive this work and deliver to further eligible properties. This will be factored into the Housing Revenue Account (HRA) Business Planning process to consider future match-funding requirements from the HRA.
- 3.79 The Council has recently secured additional funding from the UK Government Social Housing Decarbonisation Funding Wave 1 and Wave 2.2. The SHDF is a £3.8bn Government commitment over a 10-year period to improve the energy performance of socially rented homes. The aim is to get social homes to an EPC rating of C. At present Stevenage have approximately 40% of their housing stock with EPCs of D or lower meaning the funding as well as being of great benefit to the Stevenage residents providing energy savings with fuel costs soaring and warmer properties and helping to try to reduce fuel poverty, it will also reduce carbon emissions and help towards Stevenage achieving net zero by 2030.
- 3.80 SHDF Wave 1 involved £1.8m plus SBC match funding of £918,273 for the project to improve the energy efficiency of a further 399 homes. Its

implementation has retrofitted 209 SBC social homes to an EPC Band C or B by using a fabric first approach. Energy efficiency measures included loft insulation, ventilation, and low energy lighting at all the homes, 95 cavity wall insulations, and 105 solar PV panel installations. SHDF Wave 1 upgrades sought to ensure energy usage in tenant's homes is more efficient, reducing the cost of tenants heating bills and lowering carbon emissions.

- 3.81 SHDF Wave 2.1 secured a total grant funding of £2.62 million. It will be used to improve 239 homes to an EPC Band C or B, by taking the fabric first approach, as a criterion laid out by the funding body, and targeting properties that are the least energy efficient. SHDF Wave 2.1 measures will also include external wall insulation, cavity wall insulation, loft insulation, energy efficient lighting, solar PV, and associated ventilation. SHDF Wave 1 included houses only whereas Wave 2 will include houses and some of SBC's flat blocks. As part of SHDF Wave 2.1, environmental monitors will be installed to some homes to monitor damp and condensation risks, energy usage, air quality, cold home risk and heat loss risk.
- 3.82 Additionally, currently, a review is taking place in some of the high-rise blocks of SBC's housing stock, and this will include analyses of energy consumption and performance at the block, and exploration of best ways to improve this.
- 3.83 An Intelligent Energy System has also been implemented to monitor our housing stock. Officers will shortly explore options to implement a similar system to all SBC properties to track energy demand reductions and decarbonisation progress.

### **Pathway 3 – People and Processes: highlights**

- 3.84 A third decarbonisation pathway is under development at SBC, covering emissions related to people and processes across our operations and services.
- 3.85 Water utilisation monitoring at different SBC sites has started to be gathered, in order to include the carbon footprint of water supply in the baseline of SBC GHG emissions. Additionally, water utilisation in the context of climate change adaptation is planned to be assessed.
- 3.86 Climate and transformation teams are also working in new ways of working strategies, primarily in preparation for SBC staff to move to the new civic hub in due course. This assessment would include new ways of using the offices and providing Council services, digitisation of activities, and the associated behavioural change needed from internal and external stakeholders, aiming to introduce further related carbon reductions.
- 3.87 The pathway also covers the need to develop strategies for becoming a less resources intensive organisation, for example, by promoting the switch to cashless and paperless processes and services.
- 3.88 A trial to introduce an Impact Assessment Tool integrated into the decision making for all SBC projects (starting with a subset of prioritised projects) is being developed.
- 3.89 A new Staff Commuting and Mode of Work survey is being developed and applied during 2023. This is the first survey conducted in this regard after the pandemic, aiming to gather proper information to estimate Scope 3

emissions related to staff commuting and business travel and to update our Workplace Travel Plan. Additionally, further analyses have been started to assess the grey fleet and business travel related low-carbon incentives.

- 3.90 In terms of waste collection services, analysis has been conducted on the commercial waste collection proposing actions to assess the efficiency of the service, the related logistics and efficiency, and the search of potential improvements to reduce its carbon footprint while enhancing the competitiveness of the service provided.
- 3.91 Finally, initial analysis to develop Sustainable Procurement actions across SBC have been outlined, particularly in its relationship with Social Value considerations. As mentioned earlier in this report a Meet the Buyer event in this regard has been organised by SBC as an initial attempt to understand the sustainable needs of big buyers across the town and to know the potential sustainable services that can be provided by local suppliers.

### **Levels 7- 9: Local Engagement**

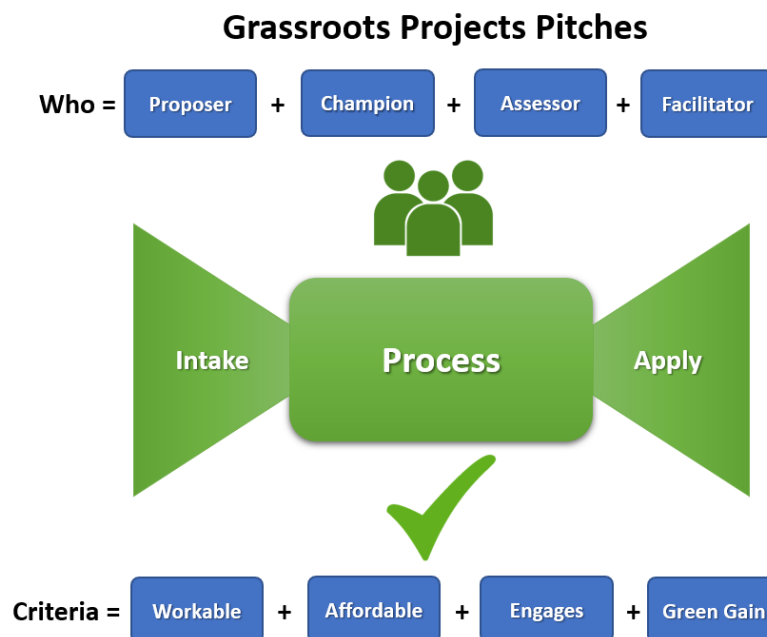
- 3.92 As the Council has refreshed its approach to the Climate Strategy and Action Plan, a renewed focus on neighbour and local level changes has been made.
- 3.93 To inform the strategy and action plan, extensive consultation has taken place. An open consultation in 2019/2020 achieved wide and broad engagement across the town, with 1,600 responses helping shape the strategy. Key priorities identified by residents included making a change to their method of travel and eating habits.
- 3.94 Further work on engaging with young people through the Green Schools network is being explored, alongside work with North Herts College. Youth Mayor and Youth Council will also work with the Council to ensure the Borough's younger voices are heard and empowered into action.
- 3.95 The Environment and Economy Select Committee have committed to reviewing the delivery of the climate strategy and action plan over a two-year period. Through this Committee, technical work has been undertaken with the University of Hertfordshire along with extensive discussions with stakeholder groups.
- 3.96 There is a cross-party member led group within the HCCSP, Hertfordshire Infrastructure and Planning Partnership, Hertfordshire Waste Partnership, which Cllr Speller will attend and contribute towards.
- 3.97 Over the last two years, a significant amount of preparation work has been undertaken to engage residents and businesses, work with partners and focus on deliverable actions that can achieve the goals of the Stevenage Borough Council Climate Strategy. The Council is working closely with partners through Stevenage Together, to share experiences on climate change, speak with a single voice to government and support its residents and customers to reduce their emissions.
- 3.98 The webpage will be regularly updated to inform residents about the work being undertaken and to seek their views. Currently it is more focused on

sharing information and providing education, but it will be expanded to including more interactive features and further detail updates on key projects.

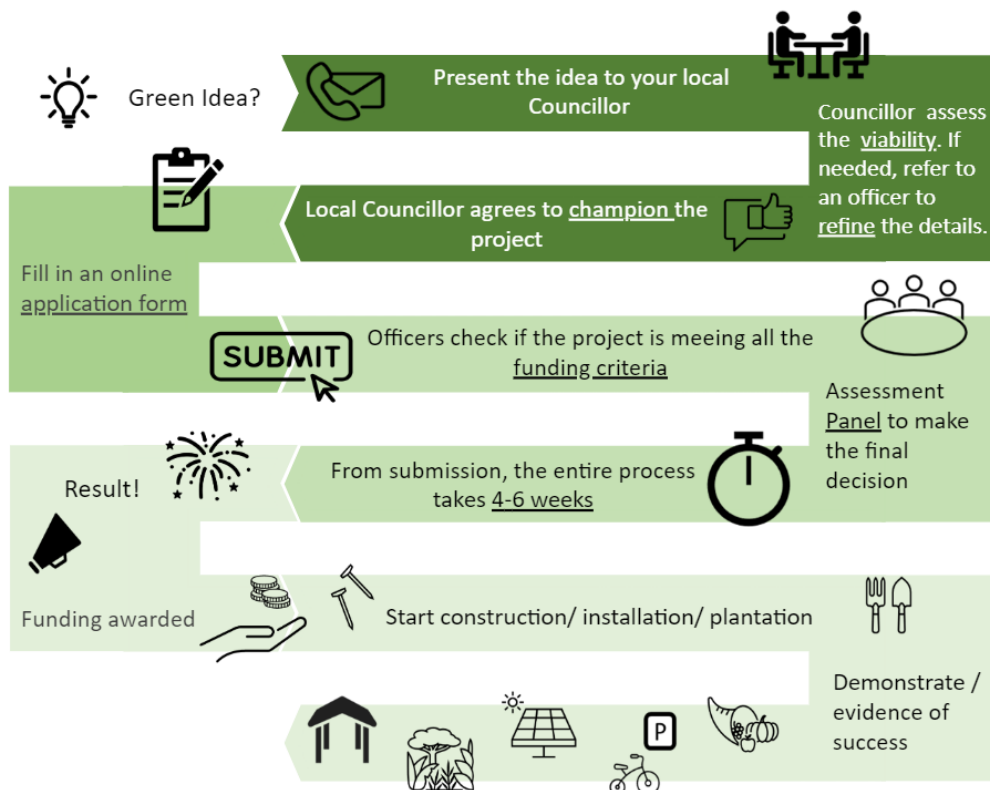
- 3.99 The Council is developing a new reporting platform for internal and external use with a company specialising in climate change reporting. The system is being tested at the moment and hope to have a live version ready in the new year. It is designed to be user friendly and easier for the public to see how SBC is performing in its climate change ambitions.
- 3.100 Furthermore, for the first time, the Council took part in Stevenage Day in June 2023 with a specially dedicated stand about climate change, aiming to create awareness and to engage residents into climate action.

### Neighbourhood and street level working

- 3.101 One of the new approaches which was driven by the Portfolio Holder is that ideas from local people for greening their street or local area, can be submitted via our website, and with officer support, then taken to the Climate Change Progress Group (CCPG) for a 'dragon's den' style consideration.
- 3.102 A framework has been considered for grassroots projects pitches as shown below.



- 3.103 Money from local Community Infrastructure (CIL) and other funding streams could be used. Projects which had more community ownership, support, and potentially reduced costs for SBC while green a local street would be supported. £7,500 per ward per year is available for these CIL climate change improvements, through the Dragon's Den (Climate Change Community Fund). This will be alongside Member's access to their own Local Community Budgets. This will provide some opportunities for investing in projects that support climate change ambitions.
- 3.104 The process for the Dragon's Den is graphically outlined below.



- 3.105 In September 2023, the Coventry Close community project, led by Deborah Pullen from Waste Not Want Not and championed by Councillor Sandra Barr, was approved by the Climate Change Progress Group under the Dragon's Den scheme. The project aims to create a community garden for residents in the adjacent houses to socialise, create a gardening group, and improve local environmental factors such as air quality and biodiversity. The current 16x14m garden will be transformed to include 13 fruiting and flowering bushes, clustered perennials, and spring-flowering bulbs to provide a more diverse habitat for birds and insects, especially pollinators. Additionally, raised beds for vegetable planting and wooden benches built locally from donated wood will foster improved community relations, while the addition of compost, soil conditioner and wood chip will improve soil health. The project is expected to take a month for initial completion, with additional planting in spring of 2024. The species were chosen based on easy maintenance and with future climate change taken into consideration.
- 3.106 Working with the Portfolio Holder for Co-operative Council and Neighbourhoods, the Council is committed to securing Members and officer buy in with much work undertaken in this regard over the last few months, the next stage is listening and responding to our residents. The first Dragon's Den schemes are highlighted below.

Project Name	Ward	Councillor	Community Member	Approval Status	Project Status	Funding Amount	Output/Expected Output
Repair Café	Bedwell	Lyn M-Hall	Terry	Approved	Operational	£ 400.00	A space where members of the community can go to repair their broken items. Avoids items going to landfill and promotes a more sustainable mindset within the community.
Baddley Close Garden Patch	Shephall	Rob Broom	Tracey Dorkin	Approved	On hold	£ 1,000.00	Aim to create two sensory gardens and one vegetable patch. Funding will be spent on fencing, water-butt construction, plants and compost. Cost reduction of £200 for the council- based on twice a year mowing of the central grass area. Residents will plant own fruit and vegetables, re-use water, and improve local biodiversity with 'better soil mix'.
Leys Primary School Garden	St Nicholas	Sandra Barr	Alison Barr	Approved	Waiting for payments	£ 1,390.00	School garden that will enable the running of gardening clubs for small groups of children. Wormery used for food waste and compost bins for leaf/garden waste. Funding for shed, wheelbarrows, compost bins, worms, compost caddies, water butt, wellies and plants/watering system from WNVN.
Coventry Close Community Garden	St Nicholas	Sandra Barr	Deborah Pullen	Approved	Waiting for payments	£ 600.00	Community garden for residents in the adjacent houses to socialise, create a gardening group, and improve local environmental factors such as air quality and biodiversity. 13 fruiting and flowering bushes, clustered perennials and spring-flowering bulbs to provide a more diverse habitat. Raised beds for vegetable planting and wooden benches built locally from donated wood. Addition of compost, soil conditioner and wood chip to improve soil health.
Peartree Shops Water Butt	Shephall	Rob Broom	Robert Clark	Waiting for finalised info/form	Application pending	TBC	Leaking pipe from flats in Peartree shops - Robert has asked for a waterbutt that will conserve the rainwater and be used to water the flowerbeds in front of the shops.
Peartree Shops Flowerbed Regen	Shephall	Rob Broom	Robert Clark & Sarah Mead	Waiting for finalised info/form	Application pending	TBC	Visually improved flowerbed area that can provide colour all year round. Better soil health and encouragement of pollinators.
Bedwell GNP	Bedwell	Conor McGrath	David Bundy	Waiting for finalised info/form	Application pending	TBC	To explore the creation of a Green Neighbourhood Plan for Bedwell and outline key asks/projects that CCCF can aid.
<b>Total</b>						<b>£ 3,390.00</b>	

3.107 The approach is that through a series of street meets and walkabout, ideas from local people about what might improve their 'pocket neighbourhood' can be heard, and officers and local ward councillors working together can see how these re-greening improvements can be made. Much of this way of working will be embraced corporately as part of our Co-operative Neighbourhoods approach. Bedwell is currently the first area to trial this approach.

3.108 Topic Reference Panels have been set up for sustainable travel (ATLEE) to hear from both those with an interest in Climate Change and those without it, about what climate change means to them and what the Council can do. The first group has been running for 6 months, ATLEE. In co-operation with interested technical groups relating to sustainable transport the Council has developed an effective working group across the sector to listen to concerns, develop joint initiatives and support our collective ambitions for sustainable transport.

3.109 The Climate Change Progress Group (CCGP) group was established in early 2023, led by the Climate Change Programme Lead, to report quarterly clearly on SBCs performance in meeting its climate change commitments. This high-level group of officers and Portfolio Holders will keep a track on performance and highlight achievements and areas which require addition support and resources.



## **4 IMPLICATIONS**

### **Financial Implications**

- 4.1 The costs associated with producing and consulting on the climate change strategy have been met from the agreed departmental budget. A number of projects referenced within this report have secured third party funding from government and other sources, such as S106 agreements, to be able to pilot initiatives, or to improve sustainable travel assets. Local CIL funding may also be available to support improvements to local infrastructure that reduce the carbon emission in an area such as new tree, better lighting and footway improvements.
- 4.2 SBC funding for permanent Head of Climate Action, the recruit taken place and the officer is now in the role.
- 4.3 It is recognised that a move to net zero and sustainable travel could mean reduced income, for example related to car parking income, which is used to fund other services, and will need to be continually reviewed through the Medium Term Financial Plan process. There are likely to be significant reductions in income to the Council linked to changes in the way people commute and use the Council's car parks. This will need to be carefully managed to ensure the services and provisions for sustainable transport the income funds can continue. As the report identifies, for councils to meet net zero, by 2024, significant funding will be required from central government and/or third parties to fund the cost of large scale projects, such as implementation of Electric Vehicle charging networks, retrofit of council housing stock and commercial and operational buildings.
- 4.4 As the Council works on options and future projects to achieve the ambition of being a net zero carbon Council and town by 2030, Officers will need to bring forward a number of business cases. If the government does not step in to support the local government sector and the Council is required to provide the investment then a significant reprioritisation of other projects and activities would be required to progress highly complex projects to absorb increased revenue and capital costs.

### **Legal Implications**

- 4.5 There are no direct legal implications associated with adopting the Climate Change Strategy, however it is likely the Government will begin introducing stricter targets with legal implications for those councils that are not meeting carbon reductions.

### **Risk Implications**

- 4.6 The greatest risks associated with this work are failing to secure sufficient support from residents, businesses and government to protect us all from the effect of climate change.

### **Policy Implications**

- 4.7 The Annual Update on Climate Change supports the Council's own Climate Change Strategy and wider corporate ambitions for a low carbon future.

### **Climate Change Implications**

- 4.8 This report highlights the risks, challenges and opportunities that the Council has to address, not only carbon emissions but its wider climate change aspirations.

### **Equalities and Diversity Implications**

- 4.9 Climate change affects those in most need both in the UK and around the world. Those in deprivation, hunger or unwell are both most affected by climate change and least able to address it. Therefore, the Council is duty bound as one of those in the world that are more able to act, to act now.

### **BACKGROUND DOCUMENTS**

None.

## **Appendix 1: Climate Change Strategy Themes**

### **Theme visions**

- 4.10 The priorities above help deliver priority areas identified within the 2019 Climate Strategy and Action Plan, which is based on 8 priority areas. A summary of the vision for each theme (from 2019) is set out below.

#### **People**

- 4.11 The only way we can achieve the goal of carbon zero by 2030 is if everyone plays their part. Through educating, engaging, supporting, listening and communicating with our residents from all background, positions, ages and interests can we collectively make the required changes to our behaviour.

#### **Biodiversity**

- 4.12 Ensuring our biodiversity is improved as part of the carbon reduction measures will ensure we have a holistic approach to the wider sustainability impacts we as humans are having on our local ecology. Using nature's natural way of addressing the human impact of climate change is the most effective method of taking action. Ensuring that one area of improvements does not undermine the other is vital.

#### **Transport**

- 4.13 Making up nearly a third of our emissions Transport is a key area for us to address, and one that behaviourally we as residents, employers, employees or visitors make every day. Big changes and support from the Transport Authority can have huge transformational impacts not only on our carbon outputs, but also health and employment opportunities.

#### **Energy & Water**

- 4.14 The source and use of energy has the opportunities to make significant changes in our carbon emissions relatively quickly, particularly while we are still trying to change behaviours. It is expected that the general electrical grid will be fully re-carbonised by 2050 which is too late for our targets, so encouraging all energy users to not only consider where they source their energy from but how much is used, is one of the first major actions. As our temperature increases, our water usage increases and availability decreases. Hertfordshire is already one of the driest regions in the UK yet we use twice as much water as people in places like Manchester. Actions to address leakage and chalk stream sourcing need to also be considered.

#### **Businesses & Homes**

- 4.15 Industrial and residential users make up nearly two-thirds of carbon emissions, investment in de-carbonising industrial processes, and home heating / energy use are key areas to support and educated our businesses and residential to make the changes. Government financial support will be required too.

### **Construction & Regeneration**

- 4.16 As a leader in building new home sand regenerating the town centre the Council will have significant powers and opportunities to build better buildings and places, which are designed in sustainable ways, in sustainable locations.

### **Waste & Recycling**

- 4.17 Reducing, reusing, then recycling need to be at the heart of what we do as a Council collecting and processing waste but also in educating our residents and businesses.