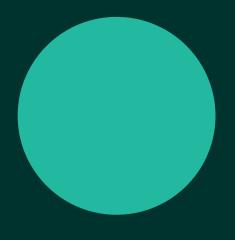
# Net Zero Carbon Action Plan

2040 Hart District Wide Target











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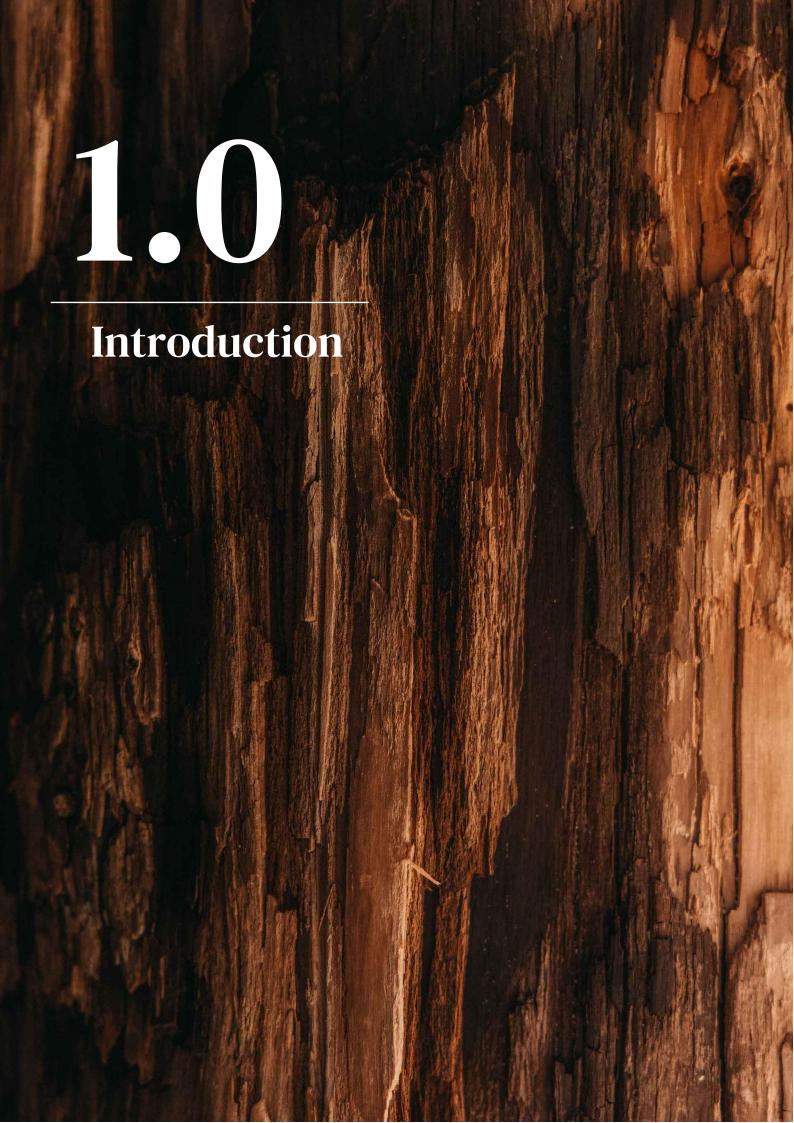
#### Disclaimer

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Hart District Council (HDC) commissioned Eunomia Research and Consulting Ltd. ('Eunomia') to produce a detailed carbon reduction district-wide action plan, to assist the Council with ascertaining how to meet HDC's target for becoming a Net Zero district by 2040.

HDC declared a Climate Emergency in April 2021. One of the key commitments as part of this declaration is to become a Net Zero district by 2040. Since the declaration, the Council has already taken several steps to reduce emissions, for example:

- Baselining carbon emissions;
- Requiring all reports to incorporate climate change considerations; and
- Establishing working groups of officers and Councillors to consider issues in detail and drive change.

This document aims to build on the work done to date, both planned and in train, and provide a clear roadmap for achieving HDC's district-wide Net Zero 2040 target.

The next sections set out the following:

#### Section 2.0 - A Net Zero Pathway for Hart to achieve Net Zero by 2040

- An indicative pathway demonstrating how Hart District could reach Net Zero in 2040;
- A summary of recommended interventions associated with the Net Zero pathway, required to decarbonise each key emission sector; and
- Discussion of the opportunities and risks for HDC in reaching its Net Zero district target.

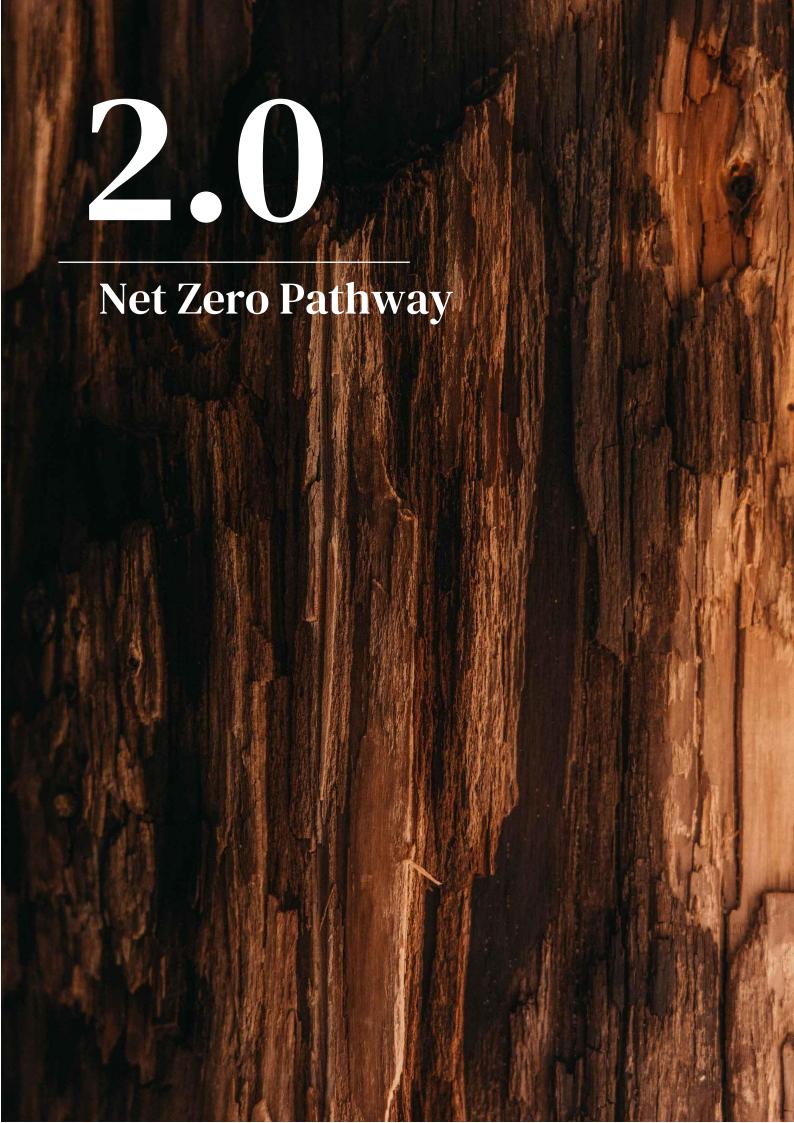
#### • Section 3.0 - Priority Actions

 A summary of the priority actions associated with the interventions where HDC has the greatest control/influence, with key objectives, timeframe, and co-benefits provided.

Two documents accompany this report:

#### • A detailed District-wide Net Zero Action Plan

- The action plan has been developed by Eunomia in consultation with HDC's sustainability officer, HDC's Member Climate Change Working Group and other relevant teams, managers and stakeholders; and
- A summary of financing opportunities



This section contains an indicative pathway which demonstrates how Hart District could reach Net Zero in 2040 and a summary of recommended interventions associated with the Net Zero Pathway, split by GHG emissions sector. The indicative pathway is a high-level demonstration of the decarbonisation trajectory required between now and 2040 to reach Net Zero. The key interventions outline, for each GHG emissions sector:

- The overarching steps required to reach Net Zero by 2035;
- Associated costs:
- Potential GHG emissions reduction;
- Timeframe: and
- · Co-benefits.

A full action plan to deliver these interventions is provided in a separate document.

## 2.1 Indicative Net Zero Pathway

Hart's net footprint in 2019/20 was 458 ktCO<sub>2</sub>e. This is based on sectoral GHG emissions figures produced by the UK Government's Department for Business, Energy and Industrial Strategy (BEIS), which includes domestic, commercial, industrial and transport related emissions. Transport related emissions account for the largest proportion of emissions at 234 ktCO<sub>2</sub>e. This dataset (and therefore the footprint) excludes emissions from commercial, industrial and municipal waste, plus emissions from flights taken by HDC residents. Waste and aviation are key economic sectors whose GHG emissions HDC should seek to include in the future to improve the accuracy of the district wide footprint. The scale of the challenge for Hart to reach its Net Zero target would be larger if the GHG emissions from these additional activities were taken into account. Taking the national GHG emissions from aviation and applying this to HDC on a perperson basis would increase GHG emissions for the district by approximately 60 ktCO<sub>2</sub>e.<sup>1</sup>

Figure 2-1 shows an indicative Net Zero pathway for Hart District. The pathway is based on the Net Zero definition recently provided by the Science Based Target Initiative (SBTi), although it goes beyond the minimum reductions required. SBTi requires that organisations reduce their greenhouse gas (GHG) emissions by a minimum of 4.2% per year compared to baseline for the first 10 years. This means reducing from 485 ktCO $_2$ e in 2019 to a minimum of 383 ktCO $_2$ e in 2029. SBTi requires that organisations reduce their GHG emissions by at least 90% compared to baseline beyond 10 years. Whilst SBTi is used for organisations, it is the most thoroughly developed definition of Net Zero and can be used to guide action in a region. If this is done for Hart District, this means reducing from 485 ktCO $_2$ e in 2019 to 49 ktCO $_2$ e in 2040. The remaining 10% of GHG emissions need to be offset/balanced. This is shown in

<sup>&</sup>lt;sup>1</sup> UK Climate Change Committee (2020) *The Sixth Carbon Budget – Aviation*, <a href="https://www.theccc.org.uk/wpcontent/uploads/2020/12/Sector-summary-Aviation.pdf">https://www.theccc.org.uk/wpcontent/uploads/2020/12/Sector-summary-Aviation.pdf</a>

<sup>&</sup>lt;sup>2</sup> Science Based Targets (2021) SBTI Corporate Net-Zero Standard, <a href="https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf">https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf</a>

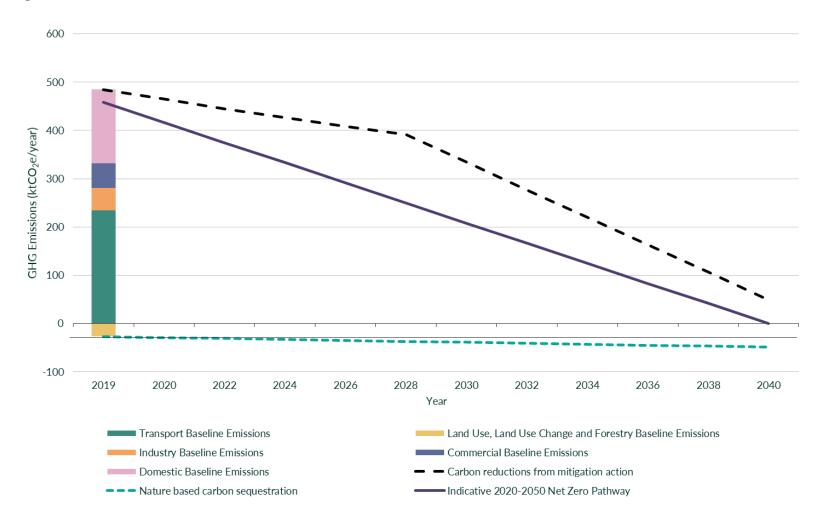
#### Figure 2-1 as follows:

- The **black** dashed line shows the **minimum** emission reductions required from mitigation action for Hart to reach Net Zero emissions by 2040, as per the Science Based Target Initiative's (SBTi's) definition.<sup>3</sup>
- The **teal** dashed line shows the **maximum** nature-based carbon sequestration required for Hart to reach net Zero emissions by 2040, as per the SBTi's definition. This is an increase from 27 ktCO<sub>2</sub>e in 2019 to 49 ktCO<sub>2</sub>e in 2040.
- The solid purple line shows the indicative Net Zero Pathway 2019-2040 recommended.
- Each coloured segments demonstrate Hart's 2019 baseline emissions for each core emissions source.

The pathway is purely illustrative to demonstrate both the scale of change required for Hart to reach Net Zero by 2040 and how Hart could reach Net Zero.

<sup>&</sup>lt;sup>3</sup> A steady reduction has been assumed.

Figure 2-1: Indicative Net Zero Pathway for Hart District<sup>4</sup>



<sup>&</sup>lt;sup>4</sup> 2019 is selected as the baseline year because this is the most recent 'business-as-usual' year that is unaffected by the Covid-19 pandemic.

## **2.1.1 Monitoring Progress**

Table 2-1 outlines possible key performance indicators (KPIs) which the Council could use to monitor progress against its district-wide Net Zero target. The KPIs demonstrated are in total net GHG emissions per annum. The calendar year and the reporting year is provided for each KPI, this is to reflect that district-wide emission reporting has a two-year delay. Relevant **national** policies and targets are also listed. This demonstrates external policies and targets to the Council which may influence emission reductions.

Table 2-1: Key performance indicators and relevant local and <u>national</u> policies and targets

Calendar Year	Reporting Year	KPI - total net GHG emissions (ktCO₂e per annum)	Relevant <u>national</u> policies and targets
2026	2024	326	Start to replace oil, coal and gas heating with low carbon alternatives in non-domestic buildings  Free separate food waste collections for households <sup>5</sup>
2027	2025	307	Over 1,000 miles of safe and direct cycling and walking networks  Planting rates up to 30,000 hectares per year  At least 35,000 hectares of peatlands in England restored

<sup>&</sup>lt;sup>5</sup> This will depend on the availability of infrastructure for food waste. This is currently under discussion and will form part of the new waste collection service contract.

Relevant <u>national</u> policies and t	KPI - total net GHG emissions (ktCO₂e per annum)	Reporting Year	Calendar Year
Start to replace oil, coal and gas heating with low carbon alternatives in dor	287	2026	2028
Increased yearly heat pump install Privately rented homes to Biodegradable municipal waste to landfill elimin	267	2028	2029
End of sale of new petrol and diesel cars and Increased average road vehicle occu Increased low carbon hydrogen production ca Heat pumps as cheap to buy as gas bounded in the same of the	207	2030	2032

 $<sup>^{\</sup>rm 6}$  This is already the case in Hampshire. The only waste landfilled is bulky waste.

Calendar Year	Reporting Year	KPI - total net GHG emissions (ktCO₂e per annum)	Relevant <u>national</u> policies and targets
2037	2035	108	All vehicles required to be 100% zero emissions  All electricity to come from low carbon sources  Phased out installation of new and replacement natural gas boilers  85% of farmers engaged in low carbon practices
2042	2040	0	All diesel-only trains removed and more railway lines electrified

### 2.1.2 A note on offsetting

SBTi defines Net Zero as "at least 90% emissions reductions", with the remaining 10% neutralised i.e., "the permanent removal and storage of carbon from the atmosphere", for example through nature-based activities, such as woodland planting, or engineering projects, such as direct air carbon capture and storage. This means that under current definitions, if there are residual emissions of up to 10% in 2040, these will need to be 'offset' in some way so 'Net Zero' can be claimed. This constitutes the 'Net' of 'Net Zero'. Achieving Net Zero will therefore require HDC to financially support or physically deliver GHG removal projects. This is a quickly evolving area of environmental activity, which means simple answers are not immediately available regarding the best solutions to pursue. The approach selected by HDC will require weighing up a range of factors, such as the types of projects supported, their locations, costs, and reputations.

It will also require assessment of who is responsible for those offsets and how they can be accounted for. For example, do offsets purchased by Hart-based organisations count towards the districts offsetting? These questions are at present unanswered, and it is important that Hart monitors how this situation develops over time to determine how it might best balance residual emissions from 2040.

## 2.2 Key Interventions

The key interventions recommended to decarbonise each emission sector (buildings and energy, transport and waste), and measures to offset remaining emissions in line with the indicative Net Zero pathway shown in Figure 2-1, are summarised in the tables below. The interventions which HDC may wish to prioritise are detailed in Section 2.3 and their associated priority actions are discussed in more detail in Section 3.0.

Similar analyses to the one presented in these tables often include the 'cost of marginal emissions abatement' (£ per tonne  $CO_2e$  reduced). In short, this metric aims to capture the cost of reducing one tonne of  $CO_2e$  via a particular intervention. This value is not presented here, for the following reasons:

- 1) These values are highly variable and context-specific because they depend on the current, emitting activities that need to be abated. Take the hypothetical intervention 'install LEDs in all buildings where not currently present'. Replacing inefficient incandescent light bulbs with LED bulbs is cheap and will 'abate' a reasonably high quantity of future emissions. This means that the marginal emissions abatement cost is quite low. If the building uses fluorescent lamps currently however, replacing these with LEDs would be more expensive and result in a lower (but still beneficial) emissions saving. The intervention's marginal emissions abatement cost is therefore higher. In this way, the intervention 'install LEDs in all buildings where not currently used' is highly context dependent and the information needed to understand this context is not available. It is therefore impractical to offer marginal abatement costs in this report.
- 2) Marginal abatement costs are useful for choosing *which* emissions to tackle when *not all* emissions need abating (i.e. if the district had an 80% emissions reduction target). As defined by the Net Zero target, all (or very nearly) emissions must be abated, limiting the benefit of comparative marginal abatement costs.

The tables below present the 'indicative cost' of each intervention, and the 'indicative potential reduction in GHG emissions'. These metrics are still context dependent in the way described above. However, they can be categorised into broad ranges, providing Hart with a method to compare interventions for their costs and impacts (see Section 2.2.6). The indicative cost of each intervention refers to the capital cost of its implementation. This does not take into account the likely operational cost savings which may occur following the implementation of interventions, nor any funding for or cost savings arising from investment in natural capital. In some instances the cost may be borne by the Council, but in many instances the cost will need to be met by the community and individuals. The indicative potential reduction in GHG emissions is categorised into low, medium, and high as follows:

- Low = <2% emissions;</li>
- Medium = 2-20% emissions: and
- High = >20% emissions.

Interventions which are enabling and are not associated with direct emission savings, for example electricity distribution network upgrades, are labelled as such. As although their direct emission savings for the district could be classed as 'low', they are a key enabler to 'unlock' significant emission savings in other areas. Likewise, some interventions will not lead to any emission savings, such as the development of an offsetting strategy, but are vital to achieving a Net Zero target. These interventions are listed as 'none', although their importance should not be dismissed.

## 2.2.1 District-Wide Buildings and Energy

Table 2-2: Buildings and Energy Recommended Interventions

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Retrofit of all relevant buildings with energy efficiency measures such as insulation of external walls, lofts, roofs, floors, and installation of double glazing (BE.1a)	Insulation and other energy efficiency measures reduce the total amount of energy required. This in itself is beneficial, but it also makes the installation of heat pumps more viable. It plays a large role in a long-term cost-effective solution. It also reduces exposure to future increases in energy costs and lowers the risk of fuel poverty. It is also important to future-proof buildings during retrofit, for example taking account of possible climate change impacts such as heatwaves and considering the need for adequate ventilation and cooling.	£10,000- £100,000 (per building)	High (per building)	2022-2030	Low

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Replacement of existing heating systems within buildings with heat pumps (BE.1b)	This needs to be done in combination with demand reduction, hot water storage and appropriately sized radiators. This should be implemented in buildings where this has a lower whole-life cost than connection to a heat network. In the majority of cases these will be air-source heat pumps. In some cases, ground-source systems will be viable, and in a small number of cases water-source heat pumps may be an option.	<£10,000 - £100,000 per building	High (per building)	2025-2035	Low
Connection to zero carbon heat distribution networks (BE.1c)	Heat networks can provide an output similar to that provided by a gas combi-boiler. They should be deployed wherever they represent a lower cost solution than individual heat pumps.	£10,000- £100,000 per building	High (per building)	2025-2040	Medium
On suitable buildings, installation of solar PV (BE.2a)	Targeted installation of solar PV alongside insulation and heat pumps where all three approaches are technically appropriate will reduce overall heating costs.	<£10,000 - £100,000 per building	Low-Medium (per building)	2022-2035	Low

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
A focused programme to fund the retrofit of homes with households at risk of fuel poverty (BE.1d)	The transition to net zero can only occur if every household is able to make the change, and in the case of many households this will require dedicated support.	£10,000- £100,000 per building	High (per building)	2022-2050	Medium- High
Ensure new buildings are carbon neutral and climate resilient (BE.1e)	This will ensure that new buildings meet high standards of insulation and will not need retrofitting in the near future.	<£10,000 per building	Medium (per building)	2022 -2050	High
Nationally significant renewable projects (BE.2b)	Hart can maximise its impact on decarbonisation of the national electricity network by working with developers on nationally significant renewable energy infrastructure with Hart district.	>£100,000 per site	Medium (for the district)	2022-2050	Medium- High
Electricity distribution network upgrades (BE.2c)	The network will need to be able to cope with higher peak loads caused by the electrification of heating and transport and so greater capacity needs to be built in to be able to cope with greater demand.	>£100,000 per site	Enabling	2022-2050	Low

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Energy efficiency measures (BE.1f)	Ongoing energy efficiency improvements in industry, appliances and lighting will keep the demand for electricity as low as possible, minimise the expansion needed in grid capacity and ongoing running costs and reduce the additional renewable generation capacity required to meet net zero.	£10,000- £100,000 per building	Medium (per building)	2022-2035	Low
Roll out of smart meters across the district (BE.1g)	Smart meters provide the data that enables households to participate in flexible tariffs and services and facilitate flexible demand management at grid level.	<£10,000	Low (per building)	2022-2030	Low
Demand Flexibility (BE.2d)	Electricity storage, smart meter data and flexible energy tariffs will enable the electricity network to cost-effectively accommodate the extra demand associated with electrification of heat and transport.	>£100,000	Enabling	2025-2050	Low
Purchasing from renewable tariffs (BE.2e)	Ensure that every household, business and public building in Hart is powered by genuine 100% renewable energy tariffs.	N/A (not capital)	Low-Medium (per building)	2022-2030	Low- Medium

Recommended Intervention Detail	Indicative Indicative Potential Cost Emissions Reduction	Time-frame	HDC's Level of Control
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#### Co-benefits:

- Energy efficiency measures can reduce energy bills by lowering the overall need for heating
- Energy efficiency measures and retrofit of more vulnerable homes can lead to health benefits by keeping homes and their occupants warm when it is cold and cool when it is warm
- Investing in energy efficiency, solar power and heat pumps can lead to local economic growth through development of supply chains
- Improving energy efficiency and decarbonising heating can improve air quality by reducing gas combustions and associated emissions of nitrous oxide and carbon monoxide
- Demand flexibility and electricity distribution network upgrades can increase local energy security and reduce exposure to volatility in wholesale electricity prices

#### 2.2.1.1 Case Study Examples

#### Liverpool City Council's Landlord Engagement Campaign

Liverpool City Council has mapped privately rented homes in the city to identify the poorest EPC ratings and target these for energy efficiency improvements. The Council is taking two actions to achieve this: an engagement and enforcement campaign for landlords, funded through BEIS and facilitated by the Midlands Energy Hub; and 5-year selective licensing designation, whereby standards for privately rented homes will increase. The engagement campaign included raising awareness of the EPC system, how to improve EPC performance, and webinars run by local landlords to get owners on board. The 'enforcement' campaign followed if landlords did not engage and comprised compliance notices and fines. The project was **funded** through competition facilitated by the Midlands Energy Hub, through which Liverpool City Council gained £70,000 from BEIS for the engagement and enforcement campaign. The licensing scheme was cost-neutral so did not receive any funding. The **impact** of Liverpool City Council's work has been that of 1960 properties with an EPC rating below E, 467 were targeted for the engagement and enforcement campaign, and 108 improved the EPC rating to an E or above. **Liverpool City Council notes that** positive engagement needs to be a priority for licensing projects, providing information to facilitate action. By supporting landlords, the project can save time and money on enforcing compliance later on.

#### Hastings Borough Council's Warm Homes Service

Hastings Borough Council partnered with councils in East Sussex to improve the energy efficiency of low-income homes.<sup>8</sup> The Council offered numerous services to low-income private sector homes to reduce costs and improve efficiency, such as the East Sussex Warm Homes Check Service. The service includes a free home visit and free upgrades – from improving insulation to fitting more efficient boilers. The project was **funded** through multiple streams, including the local NHS Clinical Commissioning Group, the government's Green Homes Grant, and the affordable warmth component of the Energy Company Obligation. The **impact** of the project has been that 990 Warm Home Checks were carried out, resulting in 300 homes with significant upgrades to their energy efficiency. A study carried out in Hastings and Rother concluded that the upgrades had **co-benefits** for people's wellbeing and health, with wider positive impacts by reducing stress and isolation. **Hastings Borough Council notes that** working closely with other local authorities within the county was essential to overcoming the lack of a national strategy to cut fuel poverty.

#### Reading Borough Council's Standards for New Developments

Reading Borough Council has updated its Local Plan to require that new residential developments meet Net Zero standards. These standards require new developments to be built with low carbon materials, and high energy efficiency. Where Net Zero standards are not possible, the developments must be at least 35% less carbon-intensive that the UK standard – and the developers must pay a significant carbon cost to fund offsetting in Reading. Reading Borough Council has limited resources to assess the standards of new developments – there is one in-house expert on home energy efficiency, and no capacity for that person to support the planning department. The council contracted Element Energy as consultants to support this project, **funded** by the developers. The **impact** of updating the Local Plan has been that 165 homes have gained planning permission in line with the new standards, with the number expected to rise to 16,000 homes by 2036. **Reading Borough Council notes that** the key to the success of this project has been Reading's viability

 $<sup>^{7} \, \</sup>text{Climate Action (2022)} \, \textit{How landlord engagement and licensing created warmer homes in Liverpool}, \\ \underline{\textit{https://takeclimate-action.uk/climate-action/how-landlord-engagement-and-licensing-created-warmer-homes-liverpool}}$ 

<sup>&</sup>lt;sup>8</sup> Climate Action (2022) How Hastings is cutting energy use and combatting fuel poverty, <a href="https://takeclimateaction.uk/climate-action/how-hastings-cutting-energy-use-and-combatting-fuel-poverty">https://takeclimateaction.uk/climate-action/how-hastings-cutting-energy-use-and-combatting-fuel-poverty</a>

Glimate Action (2022) How Reading uses planning to deliver new zero-carbon homes, <a href="https://takeclimate-action.uk/climate-action/how-reading-uses-planning-deliver-new-zero-carbon-homes">https://takeclimate-action.uk/climate-action/how-reading-uses-planning-deliver-new-zero-carbon-homes</a>

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consultant, who assumed a 1% increase in build costs; energy efficient homes can yield a higher price, meaning that increases in building costs should not prevent new developments being built.

For more case study examples, see below:

- Wiltshire Council's housing energy efficiency programme
- Cornwall Council's whole house retrofit project
- North East Derbyshire District Council's upgraded council homes

#### 2.2.1.2 Case Study Examples

#### Barnsley's Community Energy Scheme

Barnsley Council is backing a community energy project which provides hundreds of houses with solar panels, batteries, peer-to-peer trading, and demand-side response to reduce GHG emissions and alleviate fuel poverty. Through the project, 320 homes had solar PVs installed, 600 have had air source heat pumps installed, and 80 homes (a mixture of council-owned and privately owned) have had batteries installed. The project cost £2,000,000 and was **funded** by £1,200,000 through a loan from Charity Bank and £800,000 raised through the Barnsley Solar Bond. The Bond funding structure facilitated individuals to invest in the project and receive 5% interest per annum, demonstrating financial **cobenefits** of this funding model. The **impact** of the solar PV installations alone has been that tenants saved a total of over £40,000 on their electricity bills in the project's first year, reducing GHG emissions by 3,000 tCO<sub>2</sub>. The GHG emissions reductions over the project's lifetime are expected to reach 18,000 tCO<sub>2</sub>. **Barnsley Council notes that** the falling cost of solar panels and strong community engagement were key to the scheme's success.

#### Stroud Council's Renewable Energy Generation Assessment

Stroud Council commissioned the Centre for Sustainable Energy and Land Use Consultants to assess the suitability of sites within the district for renewable energy generation over the next two decades. The findings of these assessments were used to update the council's Local Plan with a 'policies map' that shows all land viable for renewables. This is especially important for the encouragement of onshore wind generation, which is tightly regulated in the UK. The **impacts** of the assessment are first and foremost that the council has legal backing for wind and solar generation within the district, and further that the council now has four wind turbines in operations with another three developments having received approval. The £20,000 cost of commissioning the consultants was **funded** by the council itself and required some input from officers during the assessment. Integrating the findings into Stroud's Local Plan incurred no additional costs, because the Plan is a requirement for all local authorities. **Stroud Council notes that** national policy in support of wind power is poor, so proper assessments that are legally sound in relation to wind generation are necessary.

<sup>&</sup>lt;sup>10</sup> UK100 (2020) Energise Barnsley, <a href="https://www.uk100.org/projects/knowledgehub/energise-barnsley">https://www.uk100.org/projects/knowledgehub/energise-barnsley</a>

<sup>&</sup>lt;sup>11</sup> Climate Action (2022) How Barnsley's pioneering community energy scheme tackled fuel poverty, <a href="https://takeclimateaction.uk/climate-action/how-barnsleys-pioneering-community-energy-scheme-tackled-fuel-poverty">https://takeclimateaction.uk/climate-action/how-barnsleys-pioneering-community-energy-scheme-tackled-fuel-poverty</a>

<sup>&</sup>lt;sup>12</sup> Climate Action (2022) How Stroud council is encouraging renewables in its local plan, <a href="https://takeclimateaction.uk/climate-action/how-stroud-council-encouraging-renewables-its-local-plan">https://takeclimateaction.uk/climate-action/how-stroud-council-encouraging-renewables-its-local-plan</a>

## 2.2.2 District-Wide Transport

**Table 2-2: Transport Recommended Interventions** 

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Demand reduction measures (T.1)	Includes incentives for remote working, sustainable spatial planning, enabling low-traffic neighbourhoods, car free days and reduced motorised private vehicle parking.	<£10,000 - >£100,000 (per project)	Medium	2022-2050	Medium
Active travel and car-sharing promotion and facilitation measures (T.2)	Includes walking and cycling interventions and infrastructure upgrades, for example through the ongoing development of a Green grid strategy.	<£10,000 - >£100,000 (per project)	Medium (per project)	2025-2032	Medium
Public transport measures (T.3)	Such as upgrades to bus services and any necessary upgrades to rail.	>£100,000 (per project)	Medium (per project)	2028-2050	Low
Design of new developments with sustainable/low carbon transport in mind (T.4)	For example, setting up of soft infrastructure such as bicycle repair shops at new developments, designing sites with focus on pedestrian access and reduced private car parking.	£10,000 - >£100,000	Medium (per site)	2025-2032	High- Medium

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Decarbonisation of vehicles and public transport (and other alternative fuels) (T.5)	Includes electrification of private vehicles in Hart and the public transport network. While aviation is currently outside the scope of the HDC's baseline footprint, the Council has the potential to influence the decarbonisation of airports in the district.	£10,000- £100,000 (per vehicle)	High (per vehicle)	2022-2035	Medium
Freight consolidation (T.6)	Through introduction of consolidation centres and freight delivery and service plans (DSP), enabling safe, clean and efficient deliveries to local businesses.	>£100,000 (per project)	Medium (per project)	2025-2040	Low

#### Co-benefits:

- Improving public transport and active travel will reduce private transport use, making active travel safer and improving local air quality by reducing emissions of particulates, nitrous oxide and ozone
- Increasing the use of active travel can promote better mental health through spending time outside and better wellbeing through being active
- Increasing the use of active travel and public transport can generate more social equity because each individual can have equal access to transport modes and routes

#### 2.2.2.1 Transport Case Study Examples

#### Gloucestershire County Council's Settlement-Linking Cycle Route

Gloucestershire County Council has begun construction of a cycle route linking the two major urban centres of the county – Gloucester and Cheltenham.<sup>13</sup> The cycle route aims to be significantly safer than the existing A road linking the centres, reduce journey times compared to buses or cars at peak travel times, and be suitable for all levels of physical ability. £30,000,000 has been **funded** by primarily National Highways through their cycling infrastructure fund The **impact** of the cycle network on anticipated reduction in road traffic accidents involving cyclists also contributed to the council being able to secure this funding though National Highways Strategic Road Network plans. Sustrans also supported the development of the project and provided **funding**. The projected **impact** of the network is that cycling across the county will increase from 4-6% to 15-29%. **Gloucestershire County Council notes that** the first design of the cycle route did not comply with new national cycle design guidance, so route compliance should be carefully compared to the design guidance and have public support.

#### **Edinburgh City Council's Electric Vehicle Framework**

Edinburgh City Council's Design guidance includes an Electric Vehicle Framework requiring electric vehicle charging points (EVCP) in all residential developments with 10 or more parking spaces. These developments are mandated to have one fast EVCP for every six spaces, with the capacity for new houses with parking but without an EVCP to be able to have one in future. Updating this guidance required negligible **funding** because this was carried out by Edinburgh City Council's own resource capacity. This is a recent change, meaning that **impact** in terms of GHG emissions is yet to become apparent. However, this case study demonstrates an *enabling action* being taken with the capacity to facilitate future GHG emissions reductions. **Edinburgh City Council notes that** infrastructure for charge points must include consideration of the electricity distribution capacity, as well as the security for rapid charge points e.g. through installing CCTV and other safety measures.

For more case study examples, see below:

- Waltham Forest's funding for active travel
- Southwark Council's support of active travel
- Stroud District Council's new development transport planning
- Durham County Council's electric vehicle charge point installations

<sup>&</sup>lt;sup>13</sup> UK100 (2022) Gloucestershire County Council's new G2C cycle route, <a href="https://www.uk100.org/projects/knowledgehub/gloucestershire-county-councils-new-g2c-cycle-route">https://www.uk100.org/projects/knowledgehub/gloucestershire-county-councils-new-g2c-cycle-route</a>

<sup>&</sup>lt;sup>14</sup> Ashden, Climate Solutions in Action, Chapter 4 – Resilience and Adaptation: Edinburgh City Council, <a href="https://cobenefits-toolkit.ashden.org/resilience-and-adaptation/5-4-examples/">https://cobenefits-toolkit.ashden.org/resilience-and-adaptation/5-4-examples/</a>

## 2.2.3 District-wide Waste Management

**Table 2-3: Waste Recommended Interventions** 

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control <sup>15</sup>
Waste prevention measures (W.1a)	Reducing the materials sent for treatment directly reduces CO <sub>2</sub> e emissions and is one of the most impactful changes that can be made. This is particularly relevant for fossil-fuel based waste.	£10,000- £100,000 (per measure)	Medium (per measure)	2022-2050	Medium
Improve kerbside recycling rates (W.1b)	Increasing the amount of material that is recycled starts at the point of collection. Making it easier for material to be collected in a form that can be recycled is a crucial step to increasing recycling rates. Once again this is particularly relevant for fossil-fuel based waste.	>£100,000 (per measure)	Medium (per measure)	2025-2050	Medium

<sup>&</sup>lt;sup>15</sup> It should be noted that the waste collection service is managed by Basingstoke and Deane Borough Council as the administration authority with the Joint Waste Contract. Although HDC can work with Basingstoke and Deane, no direct action can be undertaken by HDC. Any actions which require changes to the scope of the existing service, or future service where a shared arrangement exists will need to be ratified between the councils for inclusion in the contract. It should also be noted that as the waste disposal authority, any changes to disposal of waste (and subsequently the associated waste collection requirements) are reliant on actions and decisions taken by Hampshire County Council.

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control <sup>15</sup>
Removing more plastics from residual waste stream before incineration (W.2a)	Even with waste prevention and higher recycling rates, some plastics will enter the residual waste. In the absence of carbon capture technology being used at incineration facilities, removing the plastic waste before incineration by pre-sorting is necessary to avoid the associated emissions.	>£100,000 (for an MRF) <sup>16</sup>	High	2022-2025 <sup>17</sup>	Low
Separate collection of food waste and treatment via anaerobic digestion (W.2b)	The separate collection of food waste will remove another major portion of waste from incineration whilst also providing low-carbon energy.	>£100,000¹8	High	2022-2025	Medium

#### Co-benefits:

- Reduced costs on Council for waste collection resulting from waste prevention measures
- Further opportunity for financial savings from improved, more efficient recycling systems with greater participation
- Improved local air quality by increasing recycling and reducing incineration of residual waste, especially fossil fuel-intensive plastics
- Treating food waste through anaerobic digestion can lead to the creation of biogas, which can replace other fossil fuels and further reduce GHG emissions and other pollutants

<sup>&</sup>lt;sup>16</sup> This cost would be borne by Hampshire County Council as the disposal authority.

<sup>&</sup>lt;sup>17</sup> Already planned for 2024

<sup>&</sup>lt;sup>18</sup> Current estimates suggest c.£250,000

#### 2.2.3.1 Waste Case Study Examples

#### Wales Local Authorities' Support for Reuse

Local authorities in Wales publish advice for reusing waste items on their websites. <sup>19</sup> The advice relates specifically to 'bulky waste', including furniture and white goods, and has been promoted by the campaign Fly-tipping Action Wales, which is run by The Chartered Institute of Waste Management Cymru with funding from the Welsh government. Updating these websites requires minimal **funding** because it was carried out by internal council resource. 49 reuse options are offered by 22 Welsh local authorities – 20 of which are local reuse projects. One such local reuse project is Pembrokeshire's "the Green Shed", a furniture reuse hub. <sup>20</sup> The hub has **co-benefits** for supporting local employment by providing training and work for individuals with mental health difficulties or disabilities. The Green Shed is also the office a local Zero Waste Champion. **Pembrokeshire County Council notes that** the Green Shed concept is scalable and could be replicated in every local authority in Wales.

#### Bristol City Council's Reduction in Food Waste

Bristol City Council is taking three routes to reducing food waste in the city – prevention, reuse and recycling, and biogas.<sup>21</sup> Prevention includes council-linked food services requiring a plan for reducing food waste, and a Bristol Eating Better Award for those that do so. Reuse and recycling includes public education campaigns – "Slim My Waste, Feed My Face" encouraging uptake of food bins and "Stop Bin-digestion" providing advice on buying, storing, and disposing of food properly. Biogas is Bristol City Council's alternative to incinerating food waste – food waste in the city is sent to an anaerobic digestor, and the biogas produced is used for electricity and to run a "Bio-Bus". The **impact** of these measures combined has been that 250 Bristol Eating Better Awards have been given, 290 tonnes of additional food waste were collected following the Slim My Waste, Feed My Face campaign, equating to 174 tCO<sub>2</sub>e saved and producing enough biogas to power 180 homes for a year. **Bristol City Council notes that** collaboration between community groups, universities, and external companies is crucial if the whole city is going to reduce its food waste. The council achieved this, in part, by applying for a Sustainable Food City award to get political buy-in.

For more case study examples, see below:

Pembrokeshire County Council's share, repair, and reuse network

<sup>&</sup>lt;sup>19</sup> Resource (2019) Local Authorities In Wales Champion Reuse, <a href="https://resource.co/article/local-authorities-wales-champion-reuse-13076">https://resource.co/article/local-authorities-wales-champion-reuse-13076</a>

<sup>&</sup>lt;sup>20</sup> Resource (2018) Reuse Next Step in Welsh Zero Waste Strategy, <a href="https://resource.co/article/reuse-next-step-welsh-zero-waste-strategy-12745#greenshed">https://resource.co/article/reuse-next-step-welsh-zero-waste-strategy-12745#greenshed</a>

<sup>&</sup>lt;sup>21</sup> Climate Action (2022) How Bristol City Council is reducing food waste, <a href="https://takeclimateaction.uk/solutions/how-bristol-city-council-reducing-food-waste">https://takeclimateaction.uk/solutions/how-bristol-city-council-reducing-food-waste</a>

## 2.2.4 District-wide Land Management and Offsetting

Table 2-4: Land Management and Offsetting Recommended Interventions

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Better use of existing green infrastructure (LMO.1)	Solutions that will make the most of these areas include tree and shrub planting (taking account of constraints with regard to prevalence of heathland), increasing connectivity of parks, restoring natural watercourses and changing land management practices.	>£100,000 (across the district)	Low	2022-2027	Medium
Creating new green infrastructure (LMO.2)	This could include sustainable urban drainage systems (SuDS) in new developments or replacing existing drainage schemes with SuDS, creating new water bodies, designing corridors for wildlife migration, and targeted tree and shrub planting in new areas as per the Tree Strategy which is in development.	>£100,000 (across the district)	Low	2022-2027	Medium

Recommended Intervention	Detail	Indicative Cost	Indicative Potential Emissions Reduction	Time-frame	HDC's Level of Control
Continue development of an offsetting strategy and implementation plan (LMO.3)	Following the exploration for local habitat creation and a review of broader-market opportunities for credit purchasing or new project creation, continue to explore an offsetting strategy and a practical plan for implementation.	>£100,000 (across the district)	None	2022-2035	High
Create a climate adaptation plan (LMO.4)	Reduce the impact of climate change on Hart.	>£100,000 (across the district)	None	2022-2025	High

#### **Co-benefits:**

- Creating habitats for the purposes of climate change adaptation and carbon offsetting can improve biodiversity and urban safety for wildlife
- Climate change adaptation can lead to increased connectivity of parks through green corridors and enhanced green infrastructure
- Improved biodiversity, carbon offsetting approaches, and green corridors can produce more resilient pollinators
- Tree planting for carbon offsetting and climate change adaptation can result in urban cooling through increased tree canopy coverage and improved flood management
- Wellbeing and mental health benefits from increased access to nature

#### 2.2.4.1 Land Management Case Examples

#### Wirral Council's Tree Protection and Planting Strategy

Wirral Council has developed a Tree, Hedgerow and Woodland Strategy which includes an aim of planting 21,000 trees a year for 10 years. After coming into force in 2020, planting began in January 2021 – the earliest planting seasons after the strategy became official. The council is already ahead of target, having planted over 24,000 trees in the first year, despite the difficulties of the pandemic. Writing the strategy needed no funding, and its implementation is being **funded** by £250,000 from the government's Urban Tree Challenge Fund (which the council also matched), and £24,000 from the Mersey Forest Trees for Climate budget. The **impact** of the project will be to increase tree canopy cover in the Wirral from 13% to 25%, sequestering 222 tonnes of carbon. The project is already having **co-benefits** by improving community links – several groups have sprung up associated with the planting, including Wirral Tree Wardens, Friends of Wirral Parks Forum, and The Wirral Society – and will have further benefits in future for physical and mental health, reduced noise pollution, and increased house values. **Wirral Council notes that** the right tree needs to be planted in the right place, and existing trees store considerably more carbon than new saplings, so protection is as, if not more, important as planting.

#### London's Green Screens

Several projects across London are complete or underway that encourage community garden creation or planting of 'green screens' that act as a barrier between school playgrounds and polluted roads.<sup>23</sup> These projects have been **funded** first by the Mayor of London, who provided £2,390,000 to 131 community projects in 2019-2020, and later by the Grow Back Greener fund, which provided £1,400,000 to 45 community projects in 2020-2021. The **impact** of the project has been a reduction in pollution in school yards, with research by the Air Quality Expert group finding that pollution levels are half as much behind a green screen, as well as **co-benefits** for children's education about environmental and climate change issues. These projects were made possible by the help of over 5,000 volunteers and trainees.

For more case study examples, see below:

- Bath and North East Somerset Council's strategic green infrastructure plan
- Burnley Borough Council's innovative park management
- Newcastle City Council's green infrastructure delivery framework

<sup>&</sup>lt;sup>22</sup> Climate Action (2022) How Wirral's tree strategy will plant 210,000 trees by 2030, <a href="https://takeclimateaction.uk/climate-action/how-wirrals-tree-strategy-will-plant-210000-trees-2030">https://takeclimateaction.uk/climate-action/how-wirrals-tree-strategy-will-plant-210000-trees-2030</a>

<sup>&</sup>lt;sup>23</sup> Ashden, Sustainable Towns & Cities, Chapter 6 - Equity and Social Cohesion: Funding for green screens, <a href="https://cobenefits-toolkit.ashden.org/equity-and-social-cohesion/6-4-examples/">https://cobenefits-toolkit.ashden.org/equity-and-social-cohesion/6-4-examples/</a>

## 2.2.5 Monitoring, Reporting and Communications

Table 2-5 Monitoring, Reporting and Communications Recommended Interventions

Recommended Intervention	Description	Indicative Cost	Indicative Potential Reduction in Emissions	Timeframe
Overall strategy management (MRC.1a)	To successfully follow this report, HDC will need to address some common barriers to implementation. Actions include establishing a sign-off process from senior staff members and updating service plans with key actions.	<£10,000	Enabling	2022-2023
Develop and execute a climate change communications strategy (MRC.1b)	Develop and execute a climate change communications strategy that covers internal staff engagement and action, and external community education, engagement, and action. Focus on areas within the council/community's influence such as transport, home heating and diet/agriculture.  Community communication and engagement is a key area which HDC can drive forward and take the lead on. The success of many district-wide decarbonisation actions will rely on them being supported by an effective communication and engagement campaign.	£10,000 - £100,000	Enabling	2022-2023

#### 2.2.5.1 Monitoring, Reporting and Communications Case Study Examples

#### Cornwall Council's Environmental Impact Decision Wheel

Cornwall Council has developed a decision wheel based on Kate Raworth's Doughnut Economics model, with social and economic issues in the centre and environmental issues around the outside.<sup>24</sup> The purpose of the wheel is to embed climate change and biodiversity into council decision-making, starting with high-level decisions but with the aim to expand to budget setting, commissioning, and low-level decisions. The **impact** thus far has been that many council officers are using the wheel and including it in reports accompanying decision-making processes, enabling a holistic systems-based approach. This work has wide-reaching **impacts** for the council, with the wheel having been picked up by Amsterdam, using the wheel for its Covid-19 response. **Cornwall Council notes that** the tool was developed in collaboration with Carbon Neutral Cornwall, Cornwall Council services, and other Cabinet members to ensure the wheel is useful for its purpose, and the tool has been refined using feedback after its initial implementation.

#### **South Somerset's Environment Champions**

South Somerset District Council has established a Parish Environment Champions Network, made up of Environment Champions nominated for each parish and town council in the district.<sup>25</sup> The Champions are responsible for communicating climate and environmental action within the district to the communities they represent, and the goal is to accelerate community action on climate change and biodiversity. Projects the Network have worked on include energy efficiency tips, a solar PV discount scheme, and a nationally recognised thermal-imaging camera loan trial. The Network is **funded** through the District Council's existing Environment Strategy budget of £350,000 – which also covers the employment of 5 full-time staff members. No additional funding was required. The **impact** of the Network has been wider dissemination of advice for communities to lead their own decarbonisation efforts and of the Council's own progress. **South Somerset District Council notes that** not every parish or town has engaged with the Network, meaning some have not nominated an Environment Champion. The success of the scheme could be improved by making engagement with the Network and statutory requirement.

For more case study examples, see below:

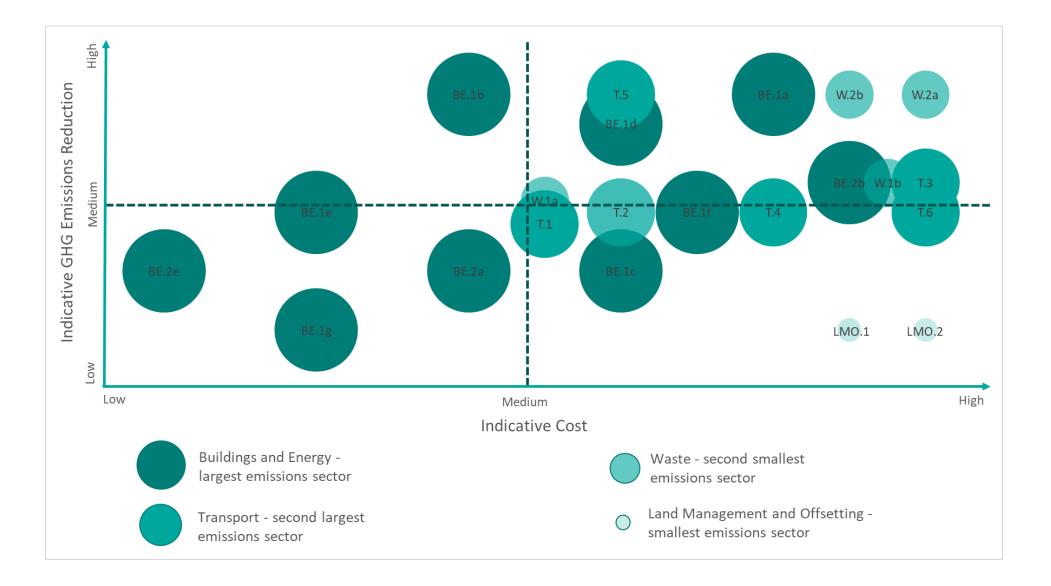
- Wiltshire Council's public consultation on its climate strategy
- Cornwall Council's Carbon Neutral Cornwall Hive for sharing climate actions
- Cheshire West and Chester's online platform for sharing climate actions

#### 2.2.6 Intervention Cost-Benefit Overview

The indicative GHG emissions reductions and indicative cost for the interventions listed in the above tables are visually summarised in Figure 2-2. Please refer to the reference number for each intervention within the recommended intervention column. It should be noted that enabling interventions and those with no direct emissions saving potential are excluded. The size and colour of the circles indicates the emissions sector which that intervention seeks to address, and its relative size. As can be seen many of the interventions with a medium-high indicative GHG emissions reduction potential also have medium – high indicative costs associated with them.

<sup>&</sup>lt;sup>24</sup> UK100 (2020) Cornwall Council Decision Wheel, <a href="https://www.uk100.org/projects/knowledgehub/cornwall-council-decision-wheel">https://www.uk100.org/projects/knowledgehub/cornwall-council-decision-wheel</a>
<sup>25</sup> UK100 (2022) South Somerset District Council: Engaging with Local Communities on Climate Action,
<a href="https://www.uk100.org/projects/knowledgehub/south-somerset-district-council-engaging-local-communities-climate-action">https://www.uk100.org/projects/knowledgehub/south-somerset-district-council-engaging-local-communities-climate-action</a>

Figure 2-2: Indicative Cost-Benefit Analysis



## 2.3 Opportunities and Risks

This section contains a discussion of the opportunities and risks for HDC in reaching its district-wide Net Zero target and identifies interventions which HDC may wish to prioritise. It is recognised that HDC, as a local authority, has limited resources to implement the key interventions identified in Section 2.2. Additionally, not all interventions can be undertaken at once.

HDC has different levels of control for each of the interventions recommended in Table 2-2. The interventions which have a medium-high indicative potential emission reduction and over which HDC has a **medium-high** level of control, as laid out in Section 2.2, present a **good opportunity** to support HDC in reaching its district-wide Net Zero target.

In contrast, the interventions which have a medium-high indicative potential emission reduction, and over which HDC has a **low** level of control, present a risk to Hart District reaching the 2040 Net Zero target. In GHG accounting terms, the consumer of electricity and fuels accounts for GHG emissions in their Scope 1 and 2, while the owner of the building or asset accounts for GHG emissions in their Scope 3. However, in decarbonisation delivery terms, the asset owner is likely to be the party who pays for the action, in collaboration with any lessee. Therefore, in the case of **low** control interventions, their successful implementation will predominantly **rely on the action of external agents**. In these instances, HDC's role will therefore focus on partnership creation and lobbying and influencing external agents. The associated interventions are listed below.

- Good opportunities for intervention:
  - A focused programme to fund the retrofit of homes with households at risk of fuel poverty;
  - Ensure new buildings are carbon neutral and climate resilient;
  - Nationally significant renewable projects;
  - Design of new developments with sustainable/low carbon transport in mind;
  - Electrification (and use of other alternative fuels) of vehicles and public transport;
  - Improve kerbside recycling rates;26 and
  - Development of an offsetting strategy and implementation plan.
- Interventions reliant on action by external agents:
  - Retrofit of all relevant buildings;
  - Replacement of existing building heating systems with heat pumps;
  - Electricity distribution network upgrades; and
  - Removing more plastics from residual waste stream before incineration through mechanical pre-sorting.<sup>27</sup>

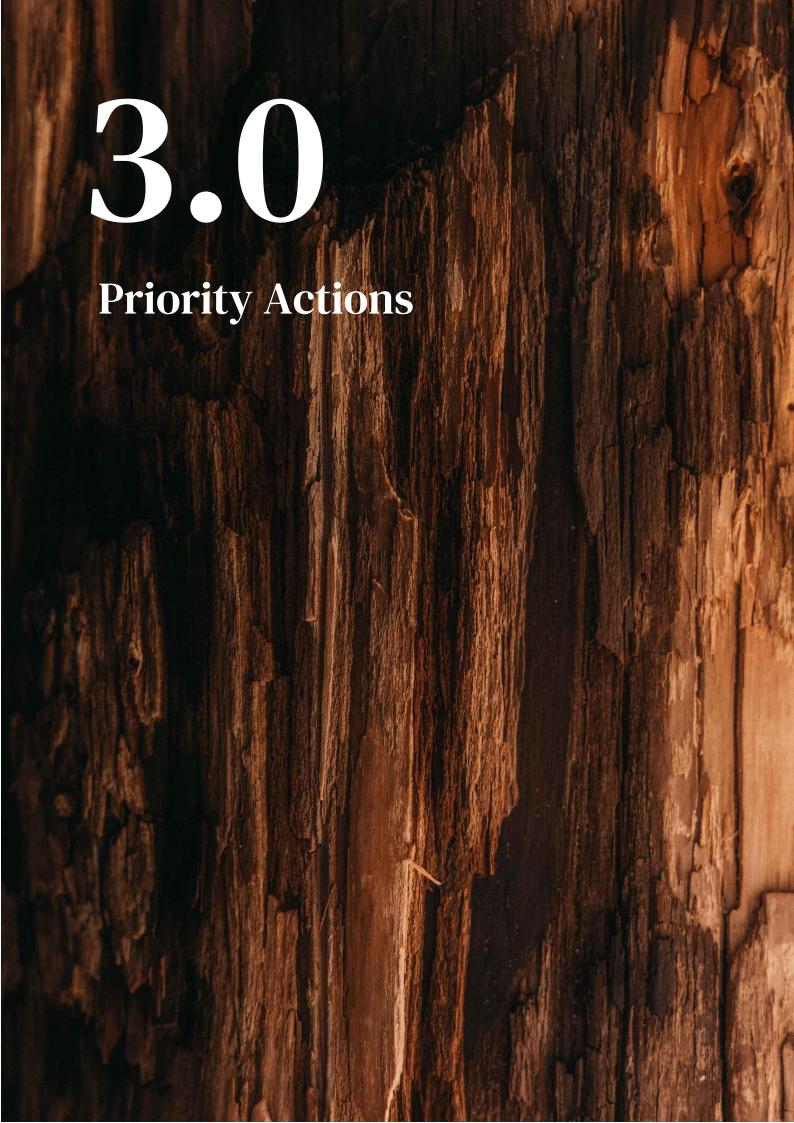
Hart District will also be heavily reliant on the decarbonisation of the national grid in line with the UK government's commitment to have Net Zero electricity by 2035. There is a risk that the national grid does not decarbonise at the pace or scale required for HDC to meet its Net Zero target by 2040. HDC therefore may wish to take steps to limit the reliance on the national grid decarbonisation in order to increase the likelihood of Hart District reaching Net Zero by 2040. Other challenges HDC will have to overcome to meet its district-wide target is a lack of funding and supportive Government policy.

<sup>&</sup>lt;sup>26</sup> It should be noted that the waste collection service is managed by Basingstoke and Deane Borough Council as the administration authority with the Joint waste Contract. Although HDC can work with Basingstoke and Deane, no direct action can be undertaken by HDC. Any actions which requires changes to the scope of the existing service, or future service where a shared arrangement exists will need to be ratified between the councils for inclusion in the contract.

<sup>&</sup>lt;sup>27</sup> It should be noted that as the waste disposal authority, any changes to disposal of waste (and subsequently the associated waste collection requirements) are reliant on actions and decisions taken by Hampshire County Council.

HDC should prioritise those interventions which present a strong opportunity to support HDC in reaching its district-wide Net Zero target. The priority actions associated with successfully implementing these interventions are described in Section 3.0.

However, it is important to note that to reach Net Zero by 2040, all district-wide GHG emissions sources will have to be decarbonised at some point. Therefore, HDC's focus on interventions over which it has a higher level of control should not deter action – especially preparatory action – being taken in other areas. This is especially true for interventions over which HDC has a low level of control and rely on action by external agents but which result in medium-high emission reductions. For example, the removing of plastics before incineration. A lack of action in these areas present a risk to Hart District not reaching the 2040 Net Zero target. HDC should therefore also seek to prioritise actions which support the successful implementation of such interventions, increasing HDC's influence and encouraging action in these areas to reduce reliance on third parties alone. For example, lobbying Hampshire County Council through partnership working via Project Integra. This will help to minimise the risk to the district-wide Net Zero target. These actions are also detailed in Section 3.0.

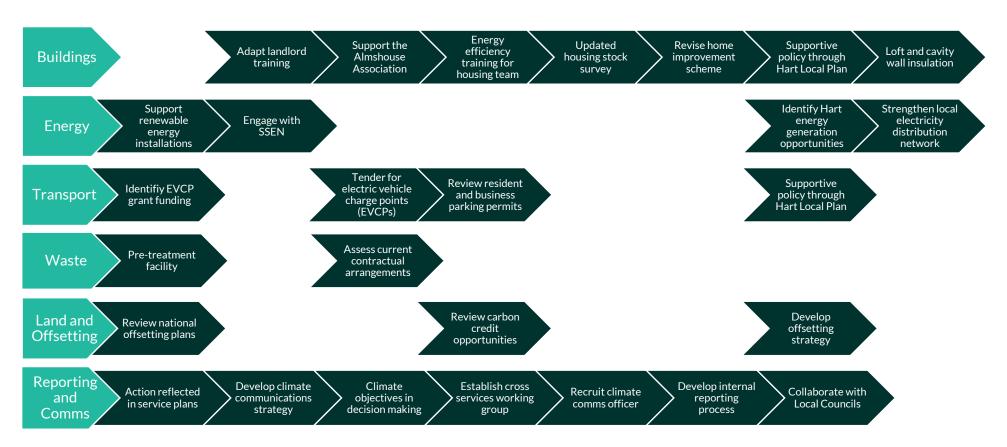


This section outlines the priority actions associated with the priority interventions highlighted in Section 2.3. The key objectives, KPIs, resource implications, costs, co-benefits, and timeframe are clearly outlined for each action. The reference number for each priority action is provided – this corresponds to the detailed action plan provided separately.

A flowchart is provided in Figure 3-1 which demonstrates the priority order for these actions over time.

### Figure 3-1: Priority Order for Actions

The dates provided indicate when the Council should aim for the associated action to be **completed**, in order to achieve Net Zero by 2040. The year provided should be viewed as a **deadline** and work should commence on each action ahead of this.



### 3.1 Buildings and Energy

### 3.1.1 Buildings

### 1) Adapt landlord training (BE.1.1)

Adapt landlord training to include energy efficiency improvements guidance and information exchange. Noting the likely increase of EPC requirements for rented properties

**Objective/KPI**: Landlord training adapted and implemented **Resource Implications/Costs**: <£10,000 (internal – revenue)

**Timeframe**: Short term, <5 years

**Co-benefits**: Better clarity for landlords; better uptake and implementation of changes to landlord requirements

### 2) Support the Almshouse Association (BE.1.4)

Identify the appropriate contact with local Almshouse Association and establish regular communications. Subsequently, create a strategy for how the Council can support Almshouse in delivering energy efficiency/low carbon heat improvements in affordable housing.

Objective/KPI: Communication patterns with Housing Associations established; supporting strategy developed

Resource Implications/Costs: <£10,000 - £100,000 (internal - revenue)

**Timeframe**: Short term, < 5 years

**Co-benefits**: Better clarity for and oversight of Housing Associations

## Energy efficiency training for housing team (and other relevant HDC officers) (BE.1.5)

Commission an external training provider to delivery energy efficiency training for the housing team and other relevant HDC officers.

Objective/KPI: Energy efficiency training commissioned and carried out Resource Implications/Costs: <£10,000 - £100,000 (commission)

**Timeframe**: Short term, < 5 years

**Co-benefits**: Career progression and skills development for housing team

## 4) Investigate recruiting an energy efficiency expert into the housing team (BE.1.6)

Investigate creating a job description and advertise for a new officer to join the housing team with retrofit/energy efficiency knowledge and experience and/or funding application experience. The recruit may not be housing team specific. Investigate if there is a need for funding support in other HDC teams.

Objective/KPI: Job description created and advertised

Resource Implications/Costs: <£10,000 (internal - revenue)

**Timeframe**: Short term, <5 years

Co-benefits: Investment in local economy through job creation

### 5) Commission updated housing stock survey (BE.1.8)

Continue to work with the Energy Hub to commission an updated housing stock condition survey to identify priority housing.

**Objective/KPI**: Housing stock condition survey commissioned **Resource Implications/Costs**: £10,000 - £100,000 (commission)

**Timeframe**: Short term, <5 years

**Co-benefits**: Better oversight of housing stock condition

### 6) Revise the owner-occupier home improvement scheme (BE.1.17)

Investigate the possibility of revising the home improvement loan scheme for owner-occupier property retrofit, currently run by the Parity Trust, in order to increase uptake and support the decarbonisation of owner/occupier homes.

**Objective/KPI**: Owner-occupier home improvement scheme revised

Resource Implications/Costs: <£10,000 (internal – revenue)

**Timeframe**: Short term, <5 years

**Co-benefits**: Improved comfort and better health outcomes for residents

by improving housing condition

### Continue to drive supportive policy improvements through the Hart Local Plan and Supplementary Guidance (BE.1.15)

HDC to continue with ongoing policy which supports sustainable spatial planning through the Local Plan, Technical Advice Notes and Supplementary Planning Documents. Working within the current restrictions of wider Government policy. For example:

• Tightening the lighter energy efficiency expectations currently placed on extension planning applications.

**Objective/KPI**: New developments adhere to Hart Local Plan

Resource Implications/Costs: <£10,000 - £100,000 (internal - revenue)

**Timeframe**: Short to Medium term, <5 years to 8 years

**Co-benefits**: Local air quality improvements by reducing fossil fuel use; greater public awareness and understanding of climate change; improving home comfort in new housing under planning applications

#### 8) Loft and cavity wall insulation (BE.1.9)

Ensure every property that still requires loft and/or cavity wall insulation has it installed, prioritising fuel poor households with EPC ratings D or below. HDC should convene key players and drive take up campaign.

**Objective/KPI**: Prioritisation of housing established; key players convened; progress tracked through time; all housing properly insulated

Resource Implications/Costs: >£100,000 (external)

**Timeframe**: Medium term, 5-8 years

**Co-benefits**: Improved home comfort in better insulated homes; cheaper

running costs; improved air quality by reducing gas combustion

### **3.1.2 Energy**

### Support installation of nationally significant renewable energy projects in Hampshire (B.E.2.4)

Engage industry and Hampshire County Council to develop solar farms resources in Hampshire, including continuing to be supportive of solar farm developments within the district<sup>28</sup>. This should include the consideration of Power Purchase Agreements in conjunction with future solar farm developments in the district. These projects are of national significance and carbon savings will be accounted for at grid-level. Opportunities for onshore wind within the district should also be explored.

**Objective/KPI**: Renewable energy projects installed; wider opportunities explored

Resource Implications/Costs: <£10,000 (internal - capital)

**Timeframe**: Ongoing

**Co-benefits**: Autonomy over electricity supply; demonstrable commitment of HDC to climate change action; wider support to grid

decarbonisation

#### Engage with SSEN (B.E.2.5)

Engage SSEN in discussions around heat zoning proposals and rollout of smart meters, flexible energy tariffs etc. to ensure the electricity grid can accommodation the electrification of heat and transport and to enable peak demands associated with electrified heating and EVS to be managed and reduced effectively.

Objective/KPI: Discussions held with SSEN

Resource Implications/Costs: <£10,000 (internal - revenue)

**Timeframe**: Ongoing

**Co-benefits**: Greater communication with SSEN and improved understanding of potential for decarbonising electricity; greater

autonomy over and consistency of electricity supply

#### 3) Identify energy generation opportunities across Hart (B.E.2.8)

<sup>&</sup>lt;sup>28</sup> A Power Purchase Agreement (PPA) is a long-term contract under which a business agrees to purchase electricity directly from a renewable energy generator.

Commission an updated evidence base to identify energy generation opportunities across Hart.

Objective/KPI: Energy generation study commissioned

**Resource Implications/Costs**: £10,000 - >£100,000 (commission)

**Timeframe**: Medium Term, 5-8 years

Co-benefits: Greater electricity autonomy, reduce reliance on grid

decarbonisation

### 4) Strengthen local electricity distribution network (B.E.2.2)

Work with SSEN to identify areas where distribution network needs to be strengthened to support increases in renewables and electricity demand.

Objective/KPI: Local distribution network improvements identified

**Resource Implications/Costs**: <£10,000 (internal – revenue)

**Timeframe**: Medium Term, 5-8 years

**Co-benefits**: Improved consistency of electricity supply

### 3.2 Transport

## 3.2.1 Design of new developments with sustainable/low carbont transport in mind

1) Continue to drive supportive policy improvements through the Hart Local Plan and Supplementary Guidance (T.4.1)

HDC to continue with ongoing policy which supports sustainable spatial planning through the Local Plan, Technical Advice Notes and Supplementary Planning Documents, working within the current restrictions of wider Government policy. Considerations to include:

- Sites being designed with focus on pedestrian access and less on parking and car entrance;
- Setting up car clubs at big developments;
- Setting up soft infrastructure at new developments E.g., cycle fix shops; and
- Creation of low traffic/20-minute neighbourhoods.

Please note site size will often impact the viability of these measures.

Objective/KPI: New development adhere to Hart Local Plan Resource Implications/Costs: <£10,000 - £100,000 (internal – revenue) Timeframe: Short Term to Medium Term, <5 years to 5 – 8 years Co-benefits: Improved air quality by decreasing use of private transport; better mental and physical health outcomes through greater uptake of active travel; improved safety of active travel through decreased use of private vehicles; decreased noise pollution by increasing active travel

## 3.2.2 Decarbonisation of vehicles and public transport

1) Identify EVCP grant funding (T.5.5)

Complete application for Office for Low Emission Vehicles (OLEV) grant funding for off-street electric vehicle charging in HDC owned car parks and continue to review grant funding options.

**Objective/KPI**: grant funding identified; OLEV grant funding applied for **Resource Implications/Costs**: <£10,000 (internal – revenue)

Timeframe: Ongoing

Co-benefits: Decreased noise pollution and improved air quality as a

result of greater uptake of EVs

### Tender for electric vehicle charge points (EVCP) to be installed on a concession contract (T.5.1)

HDC has already assessed the current charge points available within the district and work has already been undertaken looking at further EVCP feasibility. The Council should now send out the planned tender to install EVCPs on a concession-based contract. These installations should be used as a pilot and their impacts monitored.

Objective/KPI: Tender for concession based EVCP installation sent out Resource Implications/Costs: £10,000 - £100,000 (internal – capital)

**Timeframe**: Short Term, < 5 years

**Co-benefits**: Greater control of EVCP rollout; decreased noise pollution and improved air quality as a result of greater uptake of EVs

### 3) Review resident and business parking permits and fees (T.5.4)

Review resident and business parking permits and fees. Introduce a price differential between zero, low and higher emission vehicles for resident and business parking permits in controlled parking zones and for all pay and display parking bays in order to help incentivise a shift towards lower emission vehicle.

Objective/KPI: Parking permits and fees reviewed

Resource Implications/Costs: <£10,000 (internal – revenue)

**Timeframe**: Short Term, < 5 years

Co-benefits: Decreased noise pollution and improved air quality as a

result of greater uptake of EVs

### 3.3 Waste

### 3.3.1 Improve kerbside recycling rates

1) Assess current contractual arrangements to understand what aspects need to be amended (W.2.1)

The Council currently has a joint waste contract with Serco in partnership with Basingstoke and Deane District Council. HDC should work with Basingstoke and Deane to assess the current contract, in particular the KPIs, to understand where improvements can be made to improve recycling rates and decarbonise the service. This should include changes to recycling collections (where the infrastructure provided by Hampshire County Council allows) and the bottoming out of the environmental/carbon impacting baseline year data. Although the waste contract stipulates 32% CO<sub>2</sub>e reduction by 2026 (contract end) there is an issue with the environmental/carbon impacting baseline data – the Council should seek to resolve this immediately so Serco can be held to its carbon reduction obligations. HDC to conduct the assessment of contractual arrangements in partnership with Basingstoke and Deane District.

**Objective/KPI**: Contract with Serco assessed; improvements identified; issue with baseline data resolved

Resource Implications/Costs: <£10,000 (internal – revenue)

**Timeframe**: Short-term, < 5 years

**Co-benefits**: Greater clarity over waste management contracts;

improved oversight of baseline data

## 3.3.2 Removing more plastics from residual waste stream before incineration

1) Development of pre-treatment facility (W.3.1)

Continue work with Hampshire County Council through Project Integra on the development of an advanced pre-treatment facility within Hampshire (subject to confirmation of the financial implications). This should build on the feasibility study already carried out which considers economic, technical, and timing factors. The advanced pre-treatment facility would be implemented to remove plastic film from the residual waste stream.

Objective/KPI: Pre-treatment facility implemented

Resource Implications/Costs: >£100,000 (internal - capital)

Timeframe: Ongoing

**Co-benefits**: Improved air quality by reducing the incineration of plastic in the residual waste stream; investment in local economy by creating jobs for the facility

# 3.4 Land Management and Offsetting

## 3.4.1 Continue development of an offsetting strategy and implementation plan

1) Review national offsetting plans and funding availability (LMO.3.1)

Review national plans for offsetting to take advantage of emerging research and/or policy positions. Review funding sources available to promote to residents/businesses or to utilise for free tree giveaways.

**Objective/KPI**: National offsetting plans reviewed; preferred funding sources identified

Resource Implications/Costs: <£10,000 (internal - revenue)

**Timeframe**: Ongoing

**Co-benefits**: Improved mental health for residents through tree planting projects and time spent outdoors; urban cooling through increasing tree canopy coverage

2) Review broader-market opportunities for carbon credit purchasing or new project creation (LMO.3.2)

Test broader market-based approaches for purchasing carbon credits or delivering new projects to understand strengths, weaknesses, opportunities and threats. Currently the only carbon credits HDC are looking at are the woodland carbon code, but there are some schemes such as hedgerow carbon code, that HDC could look at to add as and when they become available.

**Objective/KPI**: Market opportunities for carbon offsetting reviewed **Resource Implications/Costs**: <£10,000 - £100,000 (internal – revenue) **Timeframe**: Short Term to Medium Term, <5 years to 5 – 8 years **Co-benefits**: Opportunity to be at the leading edge of national offsetting projects in novel areas; biodiversity improvements and creation of green corridors through hedgerow projects

Continue to develop an offsetting strategy (LMO.3.3)

Bring the outcomes of the previous actions together to form an offsetting strategy, currently being explored. The Natural Environment Investment Readiness Fund (NIERF) grant funding has been received to develop a carbon and biodiversity offsetting strategy.

Objective/KPI: Offsetting strategy developed

Resource Implications/Costs: £10,000 - £100,000 (internal – revenue)

**Timeframe**: Medium Term, 5 – 8 years

**Co-benefits**: Opportunity to be at the leading edge of national offsetting projects in novel areas; urban cooling through increase in tree canopy coverage; better mental health and safety for wildlife by increasing

biodiversity through habitat creation

# 3.5 Monitoring, Reporting and Communications

### 3.5.1 Monitoring and Reporting

1) Relevant action to be reflected in each service plan with agreed targets (MRC.1.2)

Service plans to be updated and reviewed annually to reflect relevant climate action.

**Objective/KPI**: Service plans updated; annual review established **Resource Implications/Costs**: <£10,000 (internal – revenue)

Timeframe: Ongoing

**Co-benefits**: Staff satisfaction through better understanding of requirements placed on them; potential for career progression for individuals taking ownership of actions

 Embed climate change objectives within Cabinet decision making process (MRC.1.4)

Continue to amend all report templates to include climate change objectives and 'climate emergency compliance' checklist.

Objective/KPI: All report templates amended

Resource Implications/Costs: <£10,000 (internal - revenue)

**Timeframe**: Short term, < 5 years

**Co-benefits**: Clarity for all staff over requirements placed on them when producing reports; greater staff satisfaction; demonstrable commitment

of HDC to climate action

3) Establish a cross services working group (MRC 1.5)

HDC to establish a cross services climate action working group. More communication between service areas and teams is required to enable a holistic and efficient approach to climate action.

**Objective/KPI**: Cross services working group established **Resource Implications/Costs**: <£10,000 (internal – revenue)

**Timeframe**: Short term, < 5 years

**Co-benefits**: Greater staff satisfaction; improved communication

between service areas

4) Develop an internal reporting and monitoring process (MRC 1.11)

Develop an internal reporting and monitoring process to ensure decision making linked to responding to climate emergency can be taken quickly and efficiently. For example, establish a system by which heads of service can propose new climate actions/projects monthly to the climate change working group for sign off and approval. This system would include the bimonthly update of existing projects/actions through a RAG rating. I.e. green – progressing as planned, amber – some issues encountered but still on track, red – not started and/or significant hurdles encountered, not progressing as planned.

Objective/KPI: Internal reporting and monitoring process developed

Resource Implications/Costs: <£10,000 (internal – revenue)

**Timeframe**: Short term, < 5 years

**Co-benefits**: Greater staff satisfaction through easier communication with key decision makers; potential for career progression by individuals

taking ownership of bi-monthly updates

### 3.5.2 Communciations

### 1) Develop a climate change communication strategy (MRC 1.8)

Develop a climate change communications strategy and behaviour change communications campaign to share advice and expertise with communities and encourage climate action. Promote climate change and sustainability in Hart through improved website, events and Council communications. Adapt existing Council climate change webpage to become an information hub, showcasing action by HDC, climate targets and plans and signposting resources and funding opportunities to residents/businesses. Utilise Britain Talks Climate Toolkit to target messaging. <sup>29</sup> This is a core action and should be heavily prioritised. The communication strategy, although an individual action here, could have its own extensive action plan. For waste this would need to link with the Joint Communications Strategy being drafted at present and includes Project Integra and Hampshire County Council work.

Objective/KPI: Climate change communication strategy developed;

Council webpage adapted

Resource Implications/Costs: £10,000 - £100,000 (internal – revenue)

**Timeframe**: Ongoing

**Co-benefits**: Upskilling of residents on the topic of climate change; motivate wider action in the district; more accessible webpage

### Collaborate with Local Councils, schools and other large entities in the district (MRC 1.6)

Set up a collaborative working group with Hart Town and Parish Councils to drive climate action forward on a community scale. Reach out to Parish

<sup>&</sup>lt;sup>29</sup> https://climateoutreach.org/reports/britain-talks-climate/

and Town Councils, local schools, environmental groups and RAF base etc. to find out what action they are already taking and how the Council could support further action.

Objective/KPI: Collaborative working group set up

Resource Implications/Costs: <£10,000 Timeframe: Short-medium term (<5-8 years)

Co-benefits: Upskilling of key stakeholders on the topic of climate

change; motivate wider action in the district

