

Carbon Reduction Strategy

Produced by: Economy, Environment and Housing directorate

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CARBON REDUCTION STRATEGY SUMMARY

This strategy sets out Harrogate Borough Council's priorities for tackling carbon reduction, in response to the climate emergency as outlined by the UN's Intergovernmental Panel on Climate Change. Our vision is that by 2038 the Harrogate District will have a net zero-carbon economy. The council will lead the district, by using our place-shaping powers, and by continually improving our own operations.

The district as a whole has a carbon budget of between 6.3 million to 9 million tonnes CO_2 . This is the maximum amount of carbon emissions we should emit between now and 2050 (the national date for net zero, set in the Climate Change Act 2008). However, the district is currently emitting around 1 million tonnes of CO_2 each year, so big and rapid changes are required.

Achieving net-zero and meeting our local carbon budget must involve the joint efforts of local authorities, businesses and industry, individual consumers and the rest of the public sector and national government. By pulling together partners and strategies, we can deliver a bigger impact than if we act alone. We are a founding member of Harrogate District Climate Change Coalition and we will work with our coalition partners on joint projects.

In preparing this strategy we carried out a general public survey on climate change in 2021, followed by a public consultation on the draft strategy (Dec 2021 – Jan 2022). All consultation responses have been noted and many findings have been incorporated into the strategy. We are grateful for the input from local individuals and organisations including the Harrogate District Climate Change Coalition and other groups in forming the strategy.

To deliver our part of the net-zero vision we are prioritising the strategic themes listed below. We will encourage partners across the district to tackle these priorities.

We have produced an action plan for the final year of Harrogate Borough Council's operations before the creation of the unitary North Yorkshire Council in 2023. Over £9 million has been identified to deliver this action plan.

While local government reorganisation is underway in North Yorkshire, we will continue to implement this strategy because urgent action is required. However, we recognise that the new council in time may update this and the other carbon reduction strategies that currently cover the North Yorkshire area. We are therefore working closely with the seven other local authorities directly affected by the reorganisation to make sure decarbonisation remains a priority.

The strategy was first adopted in 2018 and revised in 2019 and 2022. Harrogate Borough Council's Cabinet Member for Sustainability and Carbon Reduction is the lead councillor responsible for this strategy. The cabinet member receives regular updates, and we will publicly report our corporate carbon footprint every year.

To deliver the strategy, we are prioritising the following eight Strategic Themes. A detailed Action Plan covers measurable and specific actions within each of these themes.

Strategic Themes:

For Strategic Theme 1, **domestic energy demand reduction**, we will seek and make the most of available funding to retrofit housing within the district, and implement a plan to make council housing net-zero carbon.

On Strategic Theme 2: **sustainable transport,** we will work with North Yorkshire County Council, the local highway authority to facilitate new sustainable transport measures. We will enable the take up of Ultra Low Emission Vehicles (ULEVs) by improving the district's electric vehicle charging infrastructure.

Strategic Theme 3 is **land use and agriculture.** We will promote tree-planting initiatives across the district, and identify council land for woodland creation, and we will assess the council's land holdings for further decarbonisation opportunities.

To deliver Strategic Theme 4: **engaging businesses and public sector partners**, we will work closely with our neighbouring local authorities to ensure that climate impact assessments are embedded within the local government reorganisation process; we will provide funding and other support for the Harrogate District Climate Change Coalition to champion the local carbon budget, and raise awareness of decarbonisation, and transparently report our carbon reduction activities and emissions.

For Strategic Theme 5: **influencing new development** we will publish planning guidance to go alongside the Local Plan, outlining sustainable design requirements and use our influence to ensure sustainability is built into key developments in the district.

Under Strategic Theme 6, **council buildings and Harrogate Convention Centre**, we will incorporate energy efficient design into our public building construction projects and continually improve energy efficiency and sustainable energy in the council's building estate, and meet external industry decarbonisation and sustainability standards.

Under Strategic Theme 7, **operational and staff transport**, we will continually improve fleet efficiency and regularly review options for using cleaner technology for vehicles within the council fleet and pool cars, and continue to implement measures to increase take-up of sustainable transport options amongst staff.

For Strategic Theme 8, **working practices**, we will ensure councillors and council staff receive training on the council's environmental aims and policies, engage staff and encourage positive action on decarbonisation and implement other positive environmental policies.

PART 1. INTRODUCTION

Part 1 Summary

- The effects of climate change are being felt in the UK and abroad. The UK policy has legally-binding national carbon reduction budgets.
- The council has a corporate responsibility as both a large employer and a community leader to take action to reduce emissions.
- ➤ We have a positive vision of Harrogate District as a net-zero carbon economy by 2038, which will
- We support measures to address the climate emergency as outlined by the UN Intergovernmental Panel on Climate Change (IPCC), and we intend to meet IPCC targets and a final goal of carbon neutrality.
- The scope of this strategy is focused both on the wider district, where we have a vital place-shaping role, and our internal operations where have direct control.
- Reducing carbon emissions often also results more immediate local benefits such as lower energy bills, cleaner air, better quality housing and economic benefits.
- We will regularly review this strategy and action plan to ensure that it is up to date and continues to meet our needs.

1.1 OUR VISION: NET ZERO 2038

We have a positive vision that by 2038 the Harrogate District will be a net zero-carbon economy. The council will play a positive role enabling the wider district to achieve net-zero emissions by making the most of our vital place-shaping role. Our own operations will be clean and efficient and produce net-zero carbon emissions.

Snapshots from 2038

Homes are powered by clean energy from the national grid and renewable or hydrogen-fueled heating is commonplace.

Council houses have net-zero emissions thanks to an extensive retrofit programme.

Older housing is continually being improved by a knowledgeable and skilled workforce.

(Strategic Theme 1: Domestic Energy Demand Reduction)

Residents and visitors get around most often using good public transport links, walking and cycling. Internal combustion engines are rare, and local air quality is better.

Shared car ownership is widespread, enabled by a large car club fleet of ultra-low emission vehicles

(Strategic Theme 2: Sustainable Transport)

The district has enhanced its natural assets, more land is devoted to woodland and peatland is restored.

(Strategic Theme 3: Land Use and Agriculture)

Businesses are embracing new opportunities and have the skills and knowledge needed to do so.

The Climate Change Coalition is a well-established voice in the district, championing carbon reduction in all sectors.

| | (Strategic Theme 4: engaging businesses and public sector partners) |
|--|---|
| Developments such as the new settlement are livable places with green energy and sustainable transport built in from the outset. The successful Transforming Cities fund project has provided an attractive, welcoming low carbon entry point to Harrogate. (Strategic Theme 5: Influencing New Development) | Big council-owned sites such as the Hydro and HCC are powered by renewable energy. North Yorkshire Council's building estate is energy efficient and continually improving. (Strategic Theme 6: Council buildings and Harrogate Convention Centre) |
| Business travel is kept to a minimum, with remote meetings and hybrid working the norm. North Yorkshire council's fleet is cleaner than ever, delivering a huge range of services across England's largest local authority area. (Strategic Theme 7: Operational and Staff Transport) | North Yorkshire Council serves well over a million residents. All staff and councillors have up to date skills relating to carbon reduction, and the council's green working practices are a big attraction to new employees. Climate impacts are monitored and are a key part of decision making. (Strategic Theme 8: Working Practices) |

1.2 THE NEED FOR ACTION

Climate change is a long-term threat which is directly influenced by human activity taking place today. It is a critically important issue because our economy and infrastructure and natural environment are built around existing or historic climatic conditions.

There is an urgent need worldwide to decrease the release of greenhouse gases. Here in the Harrogate District we are committed to achieving net-zero carbon emissions by 2038. That is the key aim of this strategy.

The council first adopted this strategy in 2018 and it has been revised twice since, in order to reflect recent changes in national and regional policies and show how the council will use its place-shaping influence to encourage the district as a whole to decarbonise.

The council alone will not achieve the decarbonisation we need to see in the coming years. National government, local and regional organisations, business and industry, the transport sector and individual consumers will all need to be equally involved in the low carbon transition.

Climate change is having an effect on our environment and human populations. Climate scientists, observing real life data, are clear that the UK is already experiencing disruptive climate change. 2020 was third warmest, fifth wettest and eighth sunniest on record for the UK. No other year has fallen in the top-10 for all three variables in this country.

Globally, the World Meteorological Organisation reports that 2020 was a record-breaking year in several fieldsⁱⁱ. Concentrations of the major greenhouse gases - carbon dioxide, methane and nitrous oxide - continued to increase despite the temporary reduction in emissions in 2020 related to the impact of COVID-19. 2020 was one of the three warmest years on record. The past six years, including 2020, have been the six warmest years on record. The highest recorded temperature anywhere north of the Arctic Circle occurred in 2020. The trend in sea-level rise is accelerating and ocean heat storage and acidification are increasing, diminishing the oceans' capacity to moderate climate change. The Arctic minimum sea-ice extent in September 2020 was the second lowest on record.

These observations are borne out locally by residents and businesses. In our climate change surveys, carried out jointly with the Harrogate District Climate Change Coalition in March 2021, 38% of business respondents said they are already seeing climate impacts on their business, and 60% are concerned about future impacts. 85% of residents *strongly agreed* or *agreed* that climate change will have a direct impact on their livesⁱⁱⁱ.

91% of residents who completed the survey are concerned about climate change – over half of respondents are more concerned than 12 months ago. 84% wish to see immediate action to address emissions.

Perhaps the most visible impact of climate change in the Harrogate District is an increase in unstable weather conditions. We are seeing an increase in storms and flooding because warmer air can hold more water vapour, making rainfall more intense. The other side of the coin is that heatwaves will become more common, putting a strain on everyone, but particularly vulnerable residents through heat stress.

These impacts can harm biodiversity, damage property and crops, disrupt infrastructure and overwhelm existing drainage systems and have a negative impact on health and other local services. Over the long term, the Harrogate District will not be immune to wider changes such as population movements and changing economic conditions resulting from climate change.

The district as a whole produces over one million tonnes of CO_2 per year^{iv} and has a combined energy bill of over £400 million a year. The council is directly responsible for around 9,000 tonnes of CO_2 emissions each year through delivering our day-to-day services^v. The council pays around £1.5 million each year in energy and fuel bills.

The council has a corporate responsibility as both a large employer and a community leader to take action to reduce our own corporate carbon footprint. Activity carried out to cut carbon emissions has a number of positive impacts aside from reducing our energy bills, such as improved air quality, providing better working and home environments, encouraging innovation and opening up opportunities for commercialisation. Energy efficient homes have lower energy demand reduction, they are warmer, healthier and more affordable to run.

Carbon reduction goes hand in hand with good resource efficiency; it makes us use finite natural resources wisely, and look to future technological developments.

1.3 NET-ZERO 2038

The target year: net-zero by 2038

In 2019 the Tyndall Centre for Climate Change Research was commissioned to quantify the implications of achieving the Paris Agreement temperature targets for the Leeds City Region (of which Harrogate District is a part).

The Tyndall Centre apportioned the UK Carbon budget to the Leeds City Region (LCR). In 2015, Leeds City Region GVA was £62 Billion and the UK GVA was £1,650 Billion meaning LCR has a 3.8% apportionment of the UK Carbon Budget equating to 118 million tonnes CO₂.

The Tyndall Centre concluded that for the Leeds City Region to make its fair contribution towards the Paris Agreement, it needs to:

- a) Stay within a cumulative carbon dioxide emissions budget of 118 million tonnes ($MtCO_2$), for the period of 2018 to 2100. At 2017 CO_2 emission levels, the Leeds City Region would use this entire budget within 6 years from 2020.
- b) Initiate an immediate programme of CO₂ mitigation to deliver annual cuts in emissions averaging 14.5% to deliver a Paris Agreement aligned carbon budget.
- c) Reach zero or near zero carbon no later than 2038.

In 2019 the council signed a Leaders' pledge made jointly with our neighbouring councils to achieve this 2038 target.

2038 is sooner than the national target set by the Climate Change Act and the recommendation of the IPCC (both 2050). We believe our challenging target date reflects the urgency of the issue and is achievable with all partners acting together.

1.4 SCOPE OF THIS STRATEGY

The scope of this strategy covers both our influence on carbon reduction in the wider district, and our efforts to reduce energy consumption and carbon emissions from our own operations. The strategy is not intended to specifically address adaptation measures as the primary focus is on carbon reduction.

In practice many adaptation, resilience and biodiversity activity is carried out in other council activities and via other public agencies. Some examples of this work include:

- Peatland restoration projects in Nidderdale AONB which has benefits in terms of both carbon sequestration and flooding amelioration.
- Skell Valley project, being led by the National Trust and Nidderdale AONB, which will reduce the
 risks of damage to Fountains Abbey & Studley Royal from extreme flooding event, and the high
 level of silt that is deposited in the river which is threatening its ecology and heritage features.
- Harrogate Borough Council tree planting which will include the creation of enhanced new habitats such as woodmeadows.

When resources allow – most probably after the creation of the unitary North Yorkshire Council – consideration may be given to drawing up specific adaptation plans.

The Committee on Climate Change's (CCC) 2020 report *Local Authorities and the Sixth Carbon Budget*^{vi} highlights the vital role the council has locally in reducing emissions. The CCC's model of influence is shown in the diagram below (Fig. 1). Our strategy aims to include actions in all of the layers A to F.

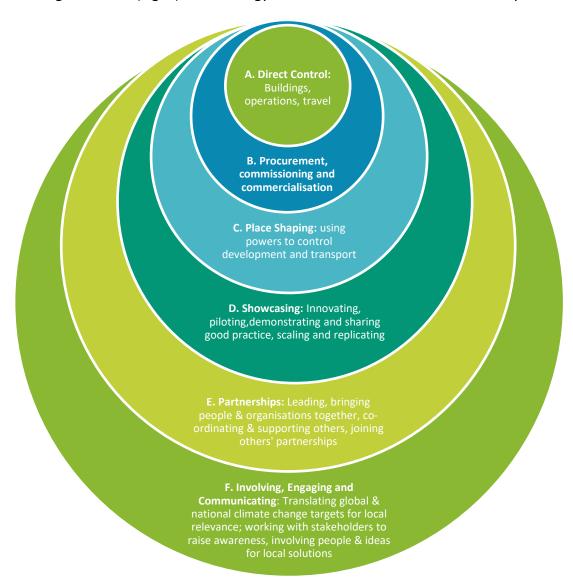


Fig. 1: How Local Authorities Control and influence emissions (Source: The Committee on Climate Change, Local Authorities and the Sixth Carbon Budget)

1.4 CONSULTATION ON THE SECOND REVISION

A series of consultation exercises were carried out in 2021 to aid the development of the revised strategy:

- A District Panel/public online survey to measure attitudes, awareness and understanding of the issue.
- A business survey to measure local business opinions
- Public consultation on the draft strategy document.
- Dedicated consultation sessions with Zero Carbon Harrogate and the Harrogate District Climate Change Coalition.

Appendix C is a consolidated report on all the above consultations and the council's response.

Following the district panel consultation, which received 742 responses, 80% replied that they are concerned about climate change. 68% are very concerned.

The vast majority want to see immediate action and are also willing to change aspects of their own lifestyle to achieve carbon reductions.

The business survey showed similar findings, including the clear opinion that positioning the Harrogate District as a leader in the green economy would benefit businesses of all kinds.

In December 2021, the council published a full consultation draft of this revised strategy, and we received over 100 responses during the six-week consultation period. Amongst the wide range of responses, some key themes emerged:

Costed targets within a timely action plan

This was a common desire, as the action plan (Appendix A) sits separately from the strategy itself and was not published as part of the consultation. Reflecting the consultation feedback, every action listed in the plan includes a carbon saving/cost analysis to ensure that the most effective actions are prioritised.

• The impact of new development and the Local Plan

Many respondents discussed the number and type of new developments underway or in the pipeline. In response we note the current Local Plan documents on sustainable transport and energy, and the new work on developing a Development Plan Document for the new settlement, which is listed in the Action Plan. We also note that building regulations are outside the council's direct control, but national government policy is moving towards better low carbon standards.

Sustainable transport

This was a common theme, however a lot of the comments relate to County Council policy, and. However, we do have a proactive EV Charging plan which is funded and being rolled out, and have existing strong relationships with North Yorkshire County Council in facilitating a number of sustainable travel projects, and have provided other transport schemes. The strong concern on transport will feed into the work on local government reorganisation.

Some dedicated consultation meetings were held with Zero Carbon Harrogate and Harrogate District Climate Change Coalition. These discussion also helped in the revision and many points have been incorporated into the strategy.

The time and input of local individuals and groups is welcomed and has been constructive in developing the revised strategy.

PART 2. POLICY CONTEXT

Part 2 Summary

- > This strategy sits within a framework of national, regional and local policies relating to energy, emissions and climate change.
- The UK target is to reduce greenhouse gas emissions to zero by 2050.
- Emissions in the district as a whole have decreased in line with the national trend in recent years, but we have higher emissions per capita than average.
- ➤ The Harrogate District Climate Change Coalition is actively working towards a netzero district.
- The York and North Yorkshire Local Enterprise partnership and Yorkshire and Humber Climate Change Commission are implementing strategies setting the region on a course of decarbonisation.

2.1 UK POLICY AND INTERNATIONAL AGREEMENTS

The range of national legislation and policies covering carbon reduction is constantly evolving. This section provides a snapshot of some of the most significant (at the time of writing this document, October 2021).

Foremost, the Climate Change Act 2008 sets the legally binding UK-wide target to achieve net-zero carbon emissions by 2050, and sets the associated carbon budgets.

The UK has signed and ratified the United Nations Paris Agreement an international treaty that commits signatories to reduce carbon emissions sufficiently to limit global temperature increases to no more 2°C by the end of the century (considered a "safe level" of temperature increase), and ideally to limit the rise to 1.5°C. In 2018 at the request of Paris Agreement signatories, the Intergovernmental Panel on Climate Change (IPCC) published a special report into the impacts of a 1.5°C temperature rise, which showed the dangers of allowing temperatures to rise more than that amount^{vii}. Following this report, Parliament strengthened the Climate Change Act to implement the net-zero target.

The government has published the UK-wide strategy *Build Back Better: our plan for growth*^{viii} which outlines some key areas for decarbonisation including the commitment to invest and create new opportunities for net-zero carbon economic growth and jobs across the country, and to grow the country's current net zero industries and encourage new ones to emerge. This includes working with industry, aiming to generate 5GW of low carbon hydrogen production capacity and capture 10Mt CO2/year using CCUS by 2030, and ending the sale of new petrol and diesel cars and vans in 2030.

As a requirement of the Climate Change Act, the government published the Clean Growth Strategy in October 2017. This strategy has two key aims: To meet domestic emissions reduction commitments at the lowest possible net cost to UK taxpayers, consumers and businesses; and to maximise the social and economic benefits for the UK of doing so. The Clean Growth Strategy included a voluntary target for all the public sector to achieve a 30% greenhouse gas reduction by 2020 from 2009 levels, which we have exceeded.

2.2 RESPONDING TO THE CORONAVIRUS (COVID-19) PANDEMIC

Some low carbon behaviour occurred during the COVID-19 pandemic which is desirable to maintain or improve, such as new transport choices resulting in cleaner air; increased home working (which in most but not all cases sees a net decrease in emissions); reduced food waste and greater levels of recycling. It is also important to invest in the green spaces and woodlands that people valued so much under lockdown.

We wish to create a resilient, green recovery from COVID-19 and ensure measures to support the economy align with Net Zero.

More home working seems likely to become more commonplace - A CBI study suggests 93% of firms where home working is possible plan to adopt hybrid working models after the pandemic^{ix}. This makes it all the more important that homes across the district are as efficient as possible. Within the council's own operations, we are keen to maintain environmentally friendly practices, particularly in commuting and other travel.

2.3 CURRENT HARROGATE BOROUGH COUNCIL POLICIES AND OTHER LOCAL INITIATIVES

In April 2019, Harrogate Borough Council agreed a notice of motion, declaring the council's support for measures to address the climate emergency as outlined by the UN Intergovernmental Panel on Climate Change. This strategy is therefore designed to meet IPCC targets and a final goal of carbon neutrality.

Our Economic Growth Strategy stresses the importance of good growth within the district, which seeks to achieve a sustainable and resilient economy by 2035. The strategy is currently being refreshed and will add more emphasis on green growth.

Priority 6 of the York, North Yorkshire and East Riding Housing Strategy states that we will ensure all homes have a positive impact on health and wellbeing and are affordable to run, with a specific action to continue to deliver investment in Energy Efficiency works.

As required by the Home Energy Conservation Act 1995, we prepare and submit biennial reports setting out the practical, cost-effective measures, which are likely to significantly improve the energy efficiency of residential accommodation in our area.

On planning, Chapter 14 of the National Planning Policy Framework covers meeting the challenge of climate change. The council's Local Plan encourages all developments to reduce climate impacts and meet high standards of energy efficiency, by addressing the energy consumption and generation in new developments. Within the Local Plan, Chapter 7: Climate Change is the key section addressing this issue.

2.4 LOCAL GOVERNMENT REORGANISATION

In April 2023, a new unitary authority will be created covering the current North Yorkshire boundary. At that point, the existing district councils and county council will cease to exist.

All the councils in North Yorkshire are committed to achieving net zero emissions and have or are creating carbon reduction and climate change strategies like this one. We already have strong relationships with our neighbouring local authorities on decarbonisation, and work collaboratively on a

number of projects. We are confident that the priorities and actions listed in this strategy will remain relevant to this area after the new council is created.

We will continue to implement and review this strategy and work proactively with our neighbours on carbon reduction throughout the local government reorganisation process. We recognise that the new council in time may update this and the other carbon reduction strategies that currently cover the North Yorkshire area. In the meantime we will continue to pursue this strategy because of the urgent need for action.

During the preparation and transition to the unitary authority, a dedicated climate change officer group has been convened in order to advise the workstreams and prepare recommendations for the incoming administration. All workstreams will be carrying out climate change impact assessments as part of their planning.

2.5 REGIONAL AND SUB-REGIONAL POLICIES

Within this picture, the York and North Yorkshire Local Enterprise Partnership's (LEP) vision is that York and North Yorkshire will develop a greener, fairer, stronger economy, including the aim to become carbon negative, making a nationally significant contribution to the national target to reach Net Zero by 2050.

The LEP has developed a series of Carbon Abatement Pathways^x, covering the priority areas of transport, buildings and industry, land use and agriculture and the power sector.

The maximum ambition scenario within the Carbon Abatement Pathways will necessarily involve significant electrification of heat, transport and industry, supported by enabling technologies such as energy storage. Significant increases in low carbon power generation, with accelerated negative emissions technologies (e.g. BECCS) and ambitious forest planting rates will be required. The council alone cannot implement all these things but we can help to enable them and use our powers to promote them.

North Yorkshire County Council's target is to achieve net zero emissions by 2030 within their own estate, and whilst that target year is different to this strategy, the direction of travel is the same – we are committed to working together during the transition into a unitary authority (see Section 2.4).

At a regional level, the newly formed Yorkshire and Humberside Climate Change Commission is an independent advisory body that has brought together a wide range of public, private and third sector actors to support, guide and track the delivery of an ambitious climate action plan across the region.

The Commission's aims are to foster climate resilience and adaptation to climate risks and impacts; support rapid progress towards net zero carbon emissions; encourage a just and inclusive transition and climate actions that leave no-one and nowhere behind; and promote sustainability and climate actions that also protect nature and biodiversity. A 50-point regional Action Plan was launched in late 2021.

This carbon reduction strategy and its accompanying action plan complements the Commission's work. Many of our own actions directly contribute towards the regional plan or closely support it, and we will continue to refer to the regional plan in developing future activities.

PART 3. CARBON BUDGET FOR THE HARROGATE DISTRICT

3.1 CARBON BUDGET

Following an invitation from the council and the Harrogate District Climate Change Coalition, the Place-based Climate Action Network produced a report in 2020 outlining a district-wide carbon budget scenario to meet net zero emissions. In addition, the Tyndall Centre at Manchester University provides a carbon budgeting tool for local authority areas.

Using both methods, we can see that the carbon budget for the district lies within a range of 6.3 million to 9 million tonnes that can be emitted from 2020 to 2050. Government figures of emissions within the district boundary show that we currently emit around one million tonnes of carbon a year, meaning that the district would use up its carbon budget in just under 9 years.

The PCAN report highlights the fact that carbon emissions from Harrogate have fallen by 32% since 2005. With on-going decarbonisation of electricity, and taking into account population and economic growth, we project that Harrogate's 2005 level of emissions will have fallen by 48% by 2050, based on existing policies.

If it is to stay within its carbon budget, Harrogate needs to add to the 48% reductions already achieved to secure:

- 72% reductions on its 2005 level of emissions by 2025
- 86% reduction by 2030
- 93% reduction by 2035,
- 99% reduction by 2050.

This means that the majority of all carbon cuts need to be delivered in the next ten years.

3.2 CO₂ EMISSIONS IN THE WIDER DISTRICT

The latest position on the district's total carbon footprint shows that total carbon emissions continue to fall: in 2019, there was a reduction of 3.8% from the 2018 level, a 9.7% reduction from the previous five-year average. Per capita emissions were 5.7% lower than 2018, also 10.7% lower than the previous five-year average.

However, in the Harrogate District we know our per capita carbon emissions are higher than the national average. Over many years the domestic gas and electricity consumption in the district, although decreasing, have also been above regional and national averages.

This is the result of a number of factors, such as the rural nature of much of the district (requiring greater transport fuel consumption and more domestic heating oil consumption), alongside the relatively high income in many parts of the district, leading to increased consumption.

The overall decrease is driven primarily by the decarbonisation of electricity. This big reduction hides slight increases or a slow-down in the decline in other sectors, which will need to be addressed by national government, local government, businesses and individuals acting together. The Committee on Climate Change has warned that the national rate of reduction is slowing down, and the UK as a whole will miss the national carbon budgets without positive intervention.

Although the Harrogate District's emissions are decreasing, the fact that they are still higher than average highlights the importance of using the council's influence to encourage emissions reductions.

The most favoured action for the council to take that residents identified in the district panel survey (2021) is to promote home energy efficiency grants. As a result, this is highlighted as an action under Strategic Theme 1.

An area of concern in the district is road transport emissions, which are not declining like other sectors, mirroring the national trend. A significant cause of this is likely to be the swing away from the use of diesel vehicles towards higher-CO₂ petrol, with the increasing take-up of ultra-low emission vehicles (ULEVs) not yet counteracting this move away from diesel. Promoting EV use and expanding the charging infrastructure were high priorities in both the residents and business surveys conducted in 2021. Sustainable Transport is therefore listed as Strategic Theme 2 in this strategy, encouraging modal shift away from car use and facilitating the take up of ULEVs.

We are committed to promoting sustainable transport measures, including electric vehicles (EVs) and supporting clean bus technology. We have developed a separate EV implementation strategy, and we will seek to use the planning process to improve EV infrastructure, and mitigate the impact of new developments.

These activities have the double benefit of helping to improve local air quality, especially in the local Air Quality Management Areas.

There are many other variables that can affect year-on-year emissions trends and much of them are beyond the control of the local authority. However, we have a vital place-shaping and community leadership role and can influence developments within the district.

In other sectors, we will use our influence via the Local Plan to encourage the implementation of low carbon measures, in particular by seeking high energy efficiency standards in new development. We will continue to implement and monitor other schemes and activities to reduce emissions as described in the action plan.

It's essential the local people and businesses know the direction we are taking. We will provide funding and other support to the Harrogate District Climate Change Coalition CIO, and work closely with our coalition partners to champion carbon reduction measure and raise awareness and simulate action.

3.3 THE COUNCIL'S CORPORATE CARBON FOOTPRINT

The council has already met the voluntary public sector 30% reduction target for our internal carbon footprint, set out in the UK Clean Growth Strategy. Our aim is continue making improvements to meet the 2038 target.

Corporate decarbonisation progress

In implementing this strategy, we are building on decarbonisation activities that have been ongoing for many years. Both the council's own carbon footprint and the district's as a whole have been

decreasing year-on-year. We know the rate of reduction is no longer fast enough, hence the need for further action, but we have positive experiences to build upon.

The council convened the Harrogate District Climate Change Coalition, bringing together residents groups, businesses, environmental groups and politicians to promote carbon neutrality. The district's first ever Climate Action Festival, organised by the coalition, took place in October 2021 to showcase decarbonisation to the public and business via a series of events.

We hosted an electric vehicles conference and exhibition for businesses in September 2019. And despite COVID-19 restrictions on face to face events, we actively participated in online events like North Yorkshire LEP's Circular Yorkshire campaign in 2020.

The council's civic centre features an array of green and energy saving measures – solar PV panels, green roofs, super-efficient glazing, passive heating and cooling technology and electric vehicle rapid charging.

We are always looking for ways to improve the energy efficiency of our buildings. Recent measures, such as installing new LED lighting and other behind-the-scenes equipment upgrades at various sites are already saving hundreds of tonnes of CO₂.

Within our council housing stock, we ensured that double-glazed windows, energy efficient doors, cavity wall insulation and loft insulation were addressed in the stock during the 1980s and 1990s, with loft insulation top-ups carried out in the 2000s.

More recent carbon reduction measures in council housing have included the installation of external wall insulation to 530 solid-walled properties, 100 Ground Source Heat Pumps and 230 Air Source Heat Pumps installed in properties off the mains gas network, Solar PV panels fitted to 353 properties between 2015 and 2016.

For privately owned housing we promote government grant schemes whenever they are available and work very closely with other local councils and the energy efficiency industry to offer home improvements. Over recent years, hundreds of energy saving improvements have been made to local homes via council schemes alone. We also promote the installation on new EV charge points in new housing via the planning process.

The council has provided EV charging within its own estate at the Civic Centre in Harrogate, Conyngham Hall, Knaresborough and Phoenix Business Park, Ripon. Charge points are included in plans for other new developments and council car parks and depots as part of phase 1 in the council's ULEV implementation strategy.

In council housing, EV home charging points are now included in the void specification where properties are being rewired. This will also form part of the 30 year asset management plan under development.

Within the council's own fleet an electric pool car and hybrid pool cars (replacing diesel) are now used. Work is ongoing to look at alternative fuels such as electric or hydrogen. The market is still immature for some vehicle classes such as HGVs so we will carefully consider the impact of the likely significant additional costs. As well as vehicles the fleet consists of a wide range of tools and we are already converting to battery operated mowers and other equipment.

We work closely with North Yorkshire County Council on transport projects, to facilitate improvements. For example, work is underway to improve the town's wider cycle infrastructure, and the Transforming Cities Fund project is getting underway.

In 2020 we launched the Harrogate Car Club which encourages people to reduce the number of cars in their household as well as the dependency of owning their own car – the scheme has already saved over 40,000 car miles, and three tonnes of CO_2 . Prior to the COVID-19 pandemic, local residents were saving 800,000 miles and 180 tonnes CO_2 per year in our lift sharing scheme harrogatecarshare.com.

In recent years, 13,000 trees and hedgerow saplings have been planted via eight schemes covering about 12 hectares of land. We have recently identified three new council owned sites covering 17 hectares for new tree planting schemes. Other habitat types that have value such as grasslands and wildflower meadows and changing the mowing and maintenance regime aids carbon capture and reduces fuel use.

PART 4. STRATEGIC THEMES

Part 4 Summary

- Our aim is to use our powers and influence to help both Harrogate District as a whole and the council's operations to be carbon neutral by 2038
- We have identified which sectors produce the most emissions, and where we can have the greatest impact. Alongside this we have surveyed the public and local businesses, and aligned our strategy with the priorities in the York and North Yorkshire Carbon Abatement Pathway and Yorkshire & Humber Climate Change Commission.
- The council cannot achieve decarbonisation on its own. An essential partner locally is the Harrogate District Climate Change Coalition CIO. We will provide funding and other support to the coalition, and work closely with our coalition partners to help it build capacity and deliver local projects.
- Within our own operations, we have already met the voluntary public sector 30% reduction target, set out in the UK Clean Growth Strategy. Our aim is continue making improvements to meet our 2038 target. As we have for district-wide emissions, we have identified priority themes where we can have the greatest impact.
- ➤ We will monitor carbon emissions from our own operations and publish these figures annually, and report on actions that contribute towards our aim to support carbon-reduction activity within the district as a whole.

Strategic Theme 1: Domestic energy demand reduction

Domestic energy consumption accounts for 34% of the district's carbon footprint.

Our strategy is to:

- Make the most of available funding to retrofit private sector housing with energy efficiency measures
- > Develop and implement a plan to make council housing net-zero carbon
- ➤ Use our powers within the planning system to address climate change and enforce high energy efficiency standards in new builds
- Continue enforcing the Domestic Minimum Energy Efficiency Standard (MEES) Regulations in private rented accommodation

Promoting sustainable home energy measures to a wide audience via our communications channels and in partnership with the Harrogate District Climate Change Coalition.

Strategic Theme 2: Sustainable transport

Transport emissions account for 31% of the district's carbon footprint.

Our strategy is to:

- ➤ Develop and implement sustainable transport initiatives with North Yorkshire County Council, including lobbying and influencing decisions.
- Facilitate the take up of Ultra Low Emission Vehicles (ULEVs) via a separate ULEV strategy.
- ➤ Work with partners including the Harrogate District Climate Change Coalition and others to promote alternatives to single car occupancy

Strategic Theme 3: Land Use and Agriculture

Agriculture accounts for 37 kt CO_2 emissions each year. However, the net effect of other land uses such as forestry is to remove 26 kt CO_2 from the atmosphere.

Our strategy is to:

- Promote tree-planting initiatives across the district, by identifying council land for woodland creation and encouraging other landowners to engage
- Assess the council's land holdings for further decarbonisation opportunities
- Support the Harrogate District Climate Change Coalition in other initiatives to engage landowners and promote sustainable land use

Strategic Theme 4: Working with partners

Commercial and industrial emissions account for 35% of the district's carbon footprint.

Our strategy is to:

Continue our active role within the Harrogate District Climate Change Coalition on engaging businesses in decarbonisation. We will provide funding and other support to assist the coalition in building capacity to deliver local projects.

- Work with the Harrogate District Public Services Leadership Board to coordinate carbon reduction activities within the public sector
- Work together on relevant projects with our neighbouring local authorities and Local Enterprise Partnership
- Promote circular economy principles the Local Enterprise Partnership
- Raise awareness of the need for decarbonisation, communicate our carbon reduction activities and transparently report our carbon emissions

Strategic Theme 5: Influencing new development

The district's population is expected to grow in coming years and 669 new houses are anticipated to be built each year of the Local plan period. To mitigate additional energy use and carbon emissions we will work with developers to ensure new homes are energy efficient.

Our strategy is to:

- ➤ Publish planning guidance outlining low carbon requirements for new developments and incorporate decarbonisation within the future Local Plan review
- Ensure that the Development Plan Document for the proposed new settlement includes decarbonisation as a priority
- Work with partners to ensure decarbonisation is embedded within the Ripon Barracks development
- > Use our influence to ensure sustainability is built into other landmark developments such as the Station Gateway project and lobby for wider national policy improvements

Strategic Theme 6: Operational council buildings and Harrogate Convention Centre

Gas and electricity consumption in our operational buildings including Harrogate Convention Centre (HCC) account for the vast majority of the council's internal carbon footprint.

Operational buildings include our offices, leisure centres, swimming pools, depots, museums, community centres, and many other small sites. The HCC estate incorporates a large auditorium, Grade II* Listed theatre, exhibition halls, conference spaces and car parks.

The success of HCC depends on the number of events held there, each of which increases the energy demand and carbon emissions. There is therefore a complex balance between maximising the number of events and minimising carbon emissions.

In future years we expect significant decarbonisation of electricity. The great challenge in meeting our 2038 target will be to decarbonise our heating supplies.

Our strategy is to:

- Incorporate energy efficient and low carbon design in all the council's public building construction projects. We will also:
 - Reduce unnecessary energy consuming equipment in new builds
 - When necessary, purchase only energy efficient equipment
 - Enhance buildings with the use of green energy technology
 - Comply with Building Regulations Part L. Increasing the required standards where we can
- Continually improve energy efficiency and sustainable energy in the council's existing public building estate by:
 - Actively reviewing assets to identify where energy efficiency improvements can be made
 - Identifying existing sites which could be suitable for green technologies
 - Considering energy efficiency as part of any reactive repair or refurbishment work
 - Complying with Building Regulations Part L. Increasing standards where practicable to do
 - Obtaining Energy Performance Certificates and Display Energy Certificates are required, and considering the recommendations from this process
- Seek opportunities for decarbonising heating in existing and new buildings.
- Continually review the HCC estate to ensure the HCC buildings and exhibitions are as energy efficient as possible
- Ensure that sustainable energy and low carbon technology is embedded in future development plans
- ➤ Work towards achieving the ISO:20121 sustainable events standard

Strategic Theme 7: Operational transport

Transport accounts for 20% or the council's internal carbon footprint.

The council runs a fleet of vehicles including heavy good vehicles, van and cars, to cover a wide range of operations. Authorised staff also use their own cars and public transport for business travel.

Our strategy is to:

- Continually improve fleet efficiency by
 - Ensuring our vehicle fleet purchases meet the highest EURO engine emission standards and are maintained to a high standard.
 - Optimising refuse fleet routes.
 - Ensuring all vocational Light Goods Vehicle drivers are trained as part of their Certificate of Professional Competence qualification in the ability to optimise fuel consumption.

- Regularly review options for using electric vehicles (EVs) within the council fleet, including pool cars.
- Encourage and incentivise staff to adopt sustainable transport options such as cycling and walking, car sharing, public transport and ultra-low emission vehicles.

Strategic Theme 8: Working Practices

Although not currently measurable in terms of CO_2 emitted, it is essential to ensure that the council's working practices help achieve our environmental aims. This can include how we select our suppliers how staff and councillors use our buildings and deal with waste.

Our strategy is to:

- ➤ Ensure all staff understand and work together on the council's environmental aims and policies via induction and development training, a staff green group, internal communications and other initiatives
- Provide training for councillors on decarbonisation
- Make sure major decisions take account of environmental and carbon impacts
- > Develop and implement sustainable procurement practices to promote decarbonisation
- Eliminate the use of single-use plastics from our premises where possible
- Reduce, reuse and recycle as much waste as possible from our own operations
- Communicate low carbon activities to local residents and businesses to encourage engagement

PART 5. MONITORING AND REPORTING

5.1. PORTFOLIO RESPONSIBILITY AND REVEW DATE

The council's cabinet member for carbon reduction and sustainability is the responsible portfolio holder for this strategy.

The Carbon Reduction Action Plan will be updated and reviewed regularly, to make sure that we deliver specific, measurable, achievable, relevant and time-bound actions covering all the strategic themes in this strategy.

The national policy context for addressing climate change is continually evolving, so we will review this strategy regularly to ensure that it continues to meet wider aims and our local priorities. The next review date is likely to be after the creation of the new local authority for North Yorkshire.

5.2 MONITORING INTERNAL EMISSIONS

For internal emissions we will continue to measure and publish our annual carbon footprint, the scope of which is defined as:

- Energy and fuel consumption in our public buildings and offices (where the council is the bill-payer) i.e. electricity, natural gas and other heating fuels. Monitored via automatic meter data and utility bills.
- Fuel consumption by the council's own vehicle fleet and machinery. Monitored via internal fuel records.
- Emissions from business travel carried out in employees' and councillor's own vehicles (the "grey fleet"). Monitored via payroll mileage claims.
- Fuel used in the council's pool cars. Monitored using fuel card data, and electric vehicle data.
- Consumption emissions (Scope 3 in the Greenhouse Gas Protocol) will be included where the data is available. We will look to increase Scope 3 reporting over time.

5.3 MONITORING DISTRICT-WIDE EMISSIONS

We will continue to use government statistics to monitor district-wide emissions trends and we will report on emissions when data is released

The government data used for CO2 monitoring is published at least 18 months after the year in question, so reporting on district-wide emissions always has at least this time-lag.

Targets in the action plan will generally be performance based, on a project-by-project basis.

CARBON REDUCTION ACTION PLAN 2022-23

| OVERVIEW | | |
|-----------------------|-----------------------------|--|
| | | Notes: |
| Action Plan approved: | 11 th April 2022 | Anticipated approval date |
| Action Plan Funding: | £9,490,000 | Where capital funding is required this is shown, funding is allocated from agreed internal and external budgets/grants. |
| Carbon savings: | 1,434 tonnes | Where known and where calculable, annual carbon savings are shown (CO ₂ e) All actions are likely to result in carbon savings, but in some cases exact figures are not known (e.g. behaviour change activity, feasibility or other studies, capital projects in planning stage, LGR planning activity) Figures may be updated as data becomes known. Cost carbon impact assessments. Potential carbon savings of each action have been estimated (if not already known), and compared to cost of delivery. Green: Good carbon saving/cost ratio, proceed Yellow: Medium savings, proceed following approval Orange: Poor expected savings, unlikely to proceed Red: Very poor savings, recommend do not proceed |
| Monitoring: | Q1, July 2022 | Quarterly progress reports to Cabinet Member (Carbon Reduction and Sustainability) |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|---|---|---|----------------------------------|--|--|
| 1 | Harrogate Hydro redevelopment | ST6: Council buildings and Harrogate Convention Centre | Decarbonisation measures including: Air Source Heat Pump, Solar PV, Battery storage, Chiller Upgrade, Building Energy Management System. Carbon savings c 570 tonnes CO ₂ p.a | Carbon Saving Low > > > > High | Strategic Property Funding: c.£2.3m, from Public Sector Decarbonisation Scheme | April 2022: Works underway on site |
| 2 | Implement sustainable transport measures within Transforming Cities Fund project | ST2: Sustainable Transport | Improve town centre public transport infrastructure, active travel infrastructure and public spaces | Carbon Saving Low > > > > High | NYCC, Leeds City Region LEP, Economy & Transport team Budgets to be confirmed following FBC | Summer 2022: Final Business case 2023: Construction works commence |
| 3 | Implement LAD3 energy efficiency scheme | ST1: Domestic Energy Demand Reduction | Energy efficiency measures installed in eligible homes. Allocations to be agreed amongst consortium | Carbon Saving Low > > > > High | Private Sector Housing, Strategic Property Funding: c.£2.8m Central government Local Authority Delivery scheme (shared across 4 consortium partners) | April 2022: Contract award May 2022: Scheme launch |
| 4 | Implement Phase One of net-zero carbon social housing project | ST1: Domestic Energy Efficiency | Commence a pilot scheme coving 85 archetype homes. Carbon savings: 688 tonnes CO ₂ saving | Carbon Saving Low > > > > High | Housing Funding: c.£2.3m across 2022/23 and 2023/24 from Housing Revenue Account | September 2022: Commence pilot phase installations 2024: End phase one, evaluation and roll out |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|--|---|--|----------------------------------|---|--|
| 5 | Better Homes Yorkshire – prepare successor scheme | ST1: Domestic Energy Demand Reduction | Agreement in place with consortium partners and scheme provider | Carbon Saving Low > > > > High | Housing, Strategic Property Long term budget from external funding tbc. Included in devolution deal. | Dec 2022: Expiry of current contract |
| 6 | Implement Carbon Reduction Fund programme | ST4: Engaging Businesses and Public Sector Partners ST6: Council buildings and Harrogate Convention Centre | Programme to be confirmed. To include further HCC decarbonisation works and potential community led projects | Carbon Saving Low > > > > High | Strategic Property £1.592m from reserves | June 2022: Agree funding programme. |
| 7 | Install public electric vehicle charge points | ST2: Sustainable Transport | 35 EVCPs installed in council car parks. | Carbon Saving Low > > > > High | Economy & Transport Funding: Existing HBC budgets | March 2023 complete first phase |
| 8 | Tower Street Car Park | ST6: Council buildings and Harrogate Convention Centre | Energy efficiency improvements: Rewiring, new plant room, LED lighting upgrade (phased approach) | Carbon Saving Low > > > > High | Strategic Property Funding: Existing HBC budgets | Feb 2022: Commence works |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|--|------------------------------------|---|----------------------------------|---|---|
| 9 | Increase membership of Harrogate Car Share scheme | ST2: Sustainable Transport | 100 new registrations Carbon savings: 127 t CO2 | Carbon Saving Low > > > > High | Strategic Property, Economy and Transport Funding: c.£5,000 from existing budget | October 2022: Liftshare Week |
| 10 | Local Government Reorganisation: Prepare carbon reduction recommendations for new council administration | ST8: Working Practices | Climate change and low carbon highlighted as priority for new administration. | Carbon Saving Low > > > > High | Strategic property LGR Partners Funding: existing resources/staff time | July 2022: Start preparing recommendations for new administration |
| 11 | Draw up climate change strategy for new settlement | ST5: Influencing new development | New Development Plan Document in place | Carbon Saving Low > > > > High | Planning, external consultants Funding: existing budgets | July 2022: DPD prepared for adoption |
| 12 | Incorporate low carbon principles in Clotherholme development | ST5: Influencing new development | Maximising opportunities for energy efficiency | Carbon Saving Low > > > > High | Planning, External Partners Funding: tbc | |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|---|------------------------------------|---|----------------------------------|---|--|
| 13 | Cycling, sustainable transport and accessibility improvement projects | ST2: Sustainable Transport | Installing infrastructure improvements at identified sites. Implementation plan to be agreed. | Carbon Saving Low > > > > High | Economy and Transport, NYCC Funding: c.£500k from existing budgets | Summer 2022 Implementation plan agreed; delivery of works thereafter |
| 14 | Sustainable procurement | ST8: Working practices | Ensure sustainable procurement guides are communicated internally and within LGR | Carbon Saving Low > > > > High | HBC officers, LGR partners Funding: existing staff resources | Incorporated within LGR workstreams |
| 15 | Expand car club in Ripon and Knaresborough | ST2: Sustainable Transport | Provision of shared low emission car fleet to subscribers | Carbon Saving Low > > > > High | Economy and Transport Budget tbc | |
| 16 | Draw up Local Area Energy Plan | ST5: Influencing new development | Local Area Energy Plan for Harrogate and Dales area, showing energy infrastructure needs and opportunities for future planning. | Carbon Saving Low > > > > > High | HBC officers, LEP, LEP, Energy Systems Catapult Funding: external Community Renewal Fund c£400k | July 2022: LAEP delivered to all partners |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|---|---|--|--|---|---|
| 17 | Commute Back Better Campaign | ST7: Operational and Staff Transport | Increase scheme registration by 10% Increase awareness and take up of sustainable travel options and incentives. Carbon savings 49 t CO2 p.a | Carbon Saving Low > > > > High | Internal Travel Action Group, Liftshare Funding: Allocated from existing budgets | May 2022: Run Commute Back Better campaign Oct 2022: Liftshare week |
| 18 | Local Government Reorganisation: Ensure that carbon impacts are considered in local government reorganisation workstreams | ST8: Working Practices | Climate Change Impact assessments completed across all workstreams | tso X Carbon Saving Low > > > > High | Strategic property LGR Partners Funding: existing resources/staff time | April 2022: Consolidate LA action list |
| 19 | Woodland creation: Horseshoe field Knaresborough | ST3: Land use and agriculture | New woodland/woodmeadow creation | Carbon Saving Low > > > > High | Parks and Environmental Services Funding: External funding forestry commission | March 2023, planting complete |
| 20 | Woodland creation: Bilton triangle | ST3: Land use and agriculture | New woodland creation at suitable sites | Carbon Saving Low > > > > High | Parks and Environmental Services, WRF Funding: forestry commission | |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|--|--|--|----------------------------------|---|---|
| 21 | Harrogate District Climate Change Coalition | ST4: Engaging Businesses and Public Sector Partners | Agree funding support for coalition implementation, including fund and governance arrangements | Carbon Saving Low > > > > High | Planning and development, HDCCC Funding: c.£10k from reserves | April 2022: Funding agreed HDCCC project plan agreed |
| 22 | Climate Action Festival 2023 | ST4: Engaging Businesses and Public Sector Partners | Development planning for CAFÉ 2023 | Carbon Saving Low > > > > High | HBC, HDCCC Unknown budget, mix of HBC and external sponsorship | CAFÉ event(s) Autumn 2023 |
| 23 | Implement staff green group action plan | ST8: Working practices | Increased staff engagement and environmental awareness | Carbon Saving Low > > > > High | Director or Corporate Affairs Green Group Members Funding: £10k allocated | Jul 2022: Green Group action plan review |
| 24 | Launch internal carbon awareness training module | ST8: Working practices | 250 staff to complete module | Carbon Saving Low > > > > High | Human Resources, Strategic Property Funding: c.£3k agreed from existing budgets | Apr 2023: Launch e-learning to all staff |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|---|--|---|---|---|--|
| 25 | Encouraging the creation of private employer car share schemes | ST2: Sustainable Transport | Increased take of car sharing, reduction in single occupancy vehicles | Carbon Saving Low > > > > High | Strategic Property, Economy and Transport Funding: Existing staff time | July 2022: Review situation regarding covid recovery |
| 26 | Promoting Resource Efficiency within business | ST4: Engaging Businesses and Public Sector Partners | Businesses engaged in RE-Biz scheme | tso / A / A / A / A / A / A / A / A / A / | Economy and Transport Leeds City Region LEP Funding: External funding | July 2022: Review take up |
| 27 | Communicate our internal carbon reduction activity to partners and the wider public | ST4: Engaging Businesses and Public Sector Partners | Planned communications on key messages, including – adoption of action plan, carbon budget, key actions, targeted schemes | Carbon Saving Low > > > > High | Communications team, Strategic Property Funding: existing staff resources | April 2022: Agree comms plan |
| 28 | Review internal environment policies | ST8: Working practices | Active contribution to local government reorganisation working group | Carbon Saving Low > > > > High | HBC officers, LGR partners Funding: Existing staff resources | Incorporated within LGR workstreams |

| Ref. | Action | Carbon Reduction Strategy Theme | Planned Outcome (Incl. estimated carbon savings if known) | Carbon/Cost Impact assessment | Delivery partners and budget | Milestones/update |
|------|--|--|--|----------------------------------|--|---|
| 29 | Commission housing stock energy performance modelling study | ST1: Domestic Energy Demand Reduction | Stock modelling to provide evidence base on areas for action and targeted engagement. Supporting the development of housing and decarbonisation strategies and policies. | Carbon Saving Low > > > > High | Private Sector Housing. Funding: c.£30k, allocated from central government LAD development fund. | Mar 2022: Complete procurement July 2022: Receive modelling report |
| 30 | Enforcing Energy Efficiency Standards in private rented sector | ST1: Domestic Energy Demand Reduction | Properties raised from EPC grade F to D | Carbon Saving Low > > > > High | Private Sector Housing Funding: Existing HBC budgets | Ongoing work |
| 31 | Implement Our Planet Your World festival | ST4: Engaging Businesses and Public Sector Partners | Environmental awareness raising events to increase town centre footfall | Carbon Saving Low > > > > High | Destination Harrogate, external provider c.£50k UK Gov Welcome Back Fund | Spring 2022 implementation |
| 32 | Launch electric vehicle salary sacrifice scheme | ST7: Operational and Staff Transport | Year 1: 2% take up within eligible group | Carbon Saving Low > > > > High | Organisation Development and Improvement Funding: Cost neutral to council apart from officer time | Apr 2022: Contract sign up Launch |

APPENDIX B: STRATEGY CONSULTATION RESPONSE

The council carried out a public consultation on the draft strategy in Dec 2021-Jan 2022. The following appendix shows the comments received and the council's response:

Overview

- 1) Do you have any general comments about the draft carbon reduction strategy?
- 92 respondents provided comments to this question, providing many key themes about the draft carbon reduction strategy. All free text responses can be found at the bottom of this analysis. Further written submissions were provided by other groups, and the council held consultation sessions with the Harrogate District Climate Change Coalition and Zero Carbon Harrogate

| Themed comments | No. of comments | Themed comments | No. of comments |
|----------------------------|-----------------|---------------------------|-----------------|
| Reporting targets and | 30 | Other comments | 5 |
| implementation | | | |
| Disagree with the strategy | 23 | Nature, including tree | 5 |
| | | planting | |
| Support the strategy | 20 | Business influence | 4 |
| Sustainable transport | 19 | Working with stakeholders | 4 |
| Traffic calming measure | 16 | Flaws in the consultation | 3 |
| Planning decisions | 15 | No further comments | 2 |
| Education of residents | 6 | School traffic | 1 |

2) Are you aware of additional opportunities for carbon reduction not already covered in the draft carbon reduction strategy?

79 respondents provided comments to this question, providing many themes about additional opportunities. All free text responses can be found at the bottom of this analysis. Harrogate and District Cycle Action also provided separate comments which have been incorporated into this analysis, their full reply can be found as appendix A to this analysis report.

| Themed comments | No. of comments | Themed comments | No. of comments |
|--------------------------|-----------------|---------------------------|-----------------|
| Sustainable transport | 22 | Business influence | 10 |
| Planning decisions | 18 | Reporting targets and | 8 |
| | | implementation | |
| Traffic calming measures | 15 | Using local nature spots | 8 |
| Education of residents | 14 | Other comments | 7 |
| Council influence | 13 | Working with stakeholders | 6 |
| No comments | 11 | International action | 1 |

All comments have been read and noted, and in many cases the strategy text has been amended to clarify queries that emerged from the consultation.

The council's responses below cover many of the specific suggestions and comments received during the consultation. Note however that some comments do not have a dedicated reply if the topic is covered elsewhere or suggestions relate to normal practice or are out of scope of the strategy, or where the comment does not address a specific point.

1) Need to outline specific measurable and budgeted actions

This was a common comment, because the action plan sits separately from the strategy itself and was not published as part of the consultation. Reflecting the consultation feedback, every action listed in the plan, which will require approval alongside the revised strategy, includes a carbon saving/cost analysis to ensure that the most effective actions are prioritised.

2) Encourage and enable more sustainable transport measures

A lot of the comments relate to County Council policy, and this point has been made in response. The Harrogate Borough Council's strategy in this area is to maintain our strong relationships with NYCC in facilitating a number of sustainable travel projects, using our influence and backing where possible. We do have a proactive EV Charging plan which is funded and being rolled out, and have various other existing sustainable transport projects. The emphasis on active travel has been increased within the strategy document. The strong concern on transport will feed into the work on local government reorganisation.

3) Impact of housing developments and Local Plan policies

Many respondents expressed concern about the number and type of new developments underway or in the pipeline. In response, the strategy and action plan specifically notes the current Local Plan documents on sustainable transport and energy, and the new work on developing a Development Plan Document for the new settlement. The point is also made that building regulations are outside the council's direct control, but national government policy is moving towards better low carbon standards.

Consultation comments

Reporting targets and implementation (30 comments)

Comments

A revision of the local carbon reduction strategy at this time is very welcome, and it is good to see that the council accepts its role in not only reducing its own emissions, but also as a vehicle for reducing emissions in the district as a whole. It is also good to see proposals to report annual government data for the region as it becomes available. In this context it would be useful to provide targets for each strategic theme as described in the document so that the success of different approaches can be monitored. Estimates of costs for achieving targets and how these would be met should also be included.

The document acknowledges the work that the Yorkshire and Humber Climate Change Commission (YHCCC) are doing in this area and states that the Harrogate strategy will closely align with the regional action plan. However, from a transport perspective, this does not appear to be the case. Strategic Theme 2 on sustainable transport appears to prioritise the uptake of ultra-low emission vehicles which alone are not a suitable solution as they still have a high carbon emissions and reliance on them runs the risk of delaying the reaching of carbon reduction targets (https://www.research.ox.ac.uk/article/2021-06-14-obsessing-over-electric-cars-is-impeding-the-race-to-net-zero-more-active-travel-is-essential).

Furthermore, this is a significant deviation from the YHCCC strategy which prioritises promotion of public transport, enabling active travel such as walking and cycling, minimising private car use and development of 20 minute neighbourhoods. Minimising private car use and the concept of 20 minute neighbourhoods are not mentioned at all in the Harrogate strategy.

Council Response

Where the data is available, the strategy states the proportion of the district's carbon footprint under each category. We do not intend to provide a sector by sector breakdown because of the cost required to do this. Individual actions with attached budgets, milestones and carbon savings (where known) are included in the action plan.

Comments on active travel noted – the draft strategy does show that sustainable travel is part of the transport theme, and minimising private car use is a central aim.

Note that Accept that this needs to be strengthened within the strategy. Wording has been amended to and relevant actions included in the action plan.

ULEV take-up is seen as a key part of the strategy, there is high and growing demand so this will remain a key element of the strategy.

Linked article has been shared with Economy and Transport team

Still on transport, the document claims that travel accounts for just 31% of carbon emissions in the district. This is much lower than other estimates such as the PCAN report for the area which puts emissions at 44%.

The document talks of successes with cycling infrastructure, claiming the success of the Otley Road cycle path which still has no final delivery date, 4 years after it was originally meant to be completed. The Follifoot cycle way is a mud track connected to Harrogate by fast roads which, as a confident cyclist, I feel nervous about using at the best of times.

Overall, the document is not fit for purpose and lacks ambition. It seems to have been written from a business as usual perspective, and relies heavily on voluntary organisations such as HDCCC. It gives no evidence of the potential carbon savings of any of the projects mentioned, gives no timescales and no recognition of what projects would have maximum impact and should therefore be prioritised. In addition, there are no specific actions in the document, just vague nonspecific actions. Thus, the strategy appears to have no ambition or rigour.

Breakdown of carbon footprint taken form annual Office for National Statistics (ONS) data release. Discrepancies from once data source to another (for example ONS, university research, campaign organisations, charities) are likely to occur because different methodologies and definitions may be applied. For monitoring we use the ONS data and will continue to do so.

Comments on action plan, timescales and prioritisation noted. The carbon reduction action plan is a separate live document.

Comments on Follifoot cycle way have been passed on to the relevant team (considered out of scope for this consultation).

All sounds positive but I think there needs to be greater urgency in implementation. Specifically there need to be more EV rapid charge points now. The latest research I have ready suggests that tree planting has to be used carefully and selectively, sometimes it is better to allow land to regenerate naturally. Pease keep up to date with the latest thinking and best practice

EVCP roll-out is underway in HBC owned sites.

Tree planting sites are assessed to ensure the right trees are planted in the right places, and that sites of existing habitat value are protected or enhanced (e.g. proposed mix of tree planting and wood meadow at Horseshoe Field, Knaresborough).

co2 isn't the only pollutant that we should be looking at. re strategic themes - why quote %s (adding up to 100) for themes 1,3 and 4 - but then quote a kt co2 for agriculture and land use? How can anyone compare? Are you ignoing methane production? Also planting trees is all very well, but they are a store of carbon - long term impact depends on what happens to the timber when the trees are felled.

Actually enforce insulation standards - Anyone going past the many development projects in the district can easily see how badly insulation is being installed - both in terms of quantity of insulation and quality of install. Within the council fleet you have 'an electric car' - just one? really? And are the hybrids plug in or standard hybrids (ie petrol cars)?

I am unclear what is included in the carbon budget for the district, eg does it just include the direct emissions or the total emissions cause by consumption of goods(eg cheap fashion) and services(eg flying)? It is also unclear whether having to deal with a rural area affects apportionment (eg easier in a city to have more public transport, district heating etc).

This will has been clarified in the strategy text

There is no special allowance for rurality, but it is taken into account within the strategy text.

I am surprised planning rules are so weak that you can only encourage rather than insist on EV points, solar panels, house design more towards passive eg in housing. If the developer appeals then it squarely sits on government shoulders what happens.

In reality the local authority will not existing for most of this strategy, why wasn't is done in collaboration with the other LAs in the area of the new authority which comes in April 2023?

We are already working with our neighbouring local authorities, both on specific projects and strategically planning how the different carbon reduction strategies might come together once the new council is formed. Not to have an up to date strategy and action plan in the final year of Harrogate Borough Council's existence and going into the unitary authority is not desirable.

I am very pleased to see the carbon reduction strategy being identified and developed as a key strategy for the council. The framework and objectives are good, but the devil is in the detail. Beware of greenwashing! For example, electric vehicles are only effective if the energy used to charge them is from a sustainable source.

The council should commit to being transparent about the energy contracts and equipment used to recharge our buses and other council vehicles.

As stated in the strategy, the corporate carbon footprint is calculated and reported publicly. Energy contracts re procured openly under the council's contract procedures. Note that buses are not council operations.

I think that it is highly unlikely that large reductions of CO2 emissions will be made in the first 10 years as required by the plan. The strategy relies heavily on Carbon Capture Use and Storage (CCUS) but fails to give any details. My understanding is that Carbon Capture is in its infancy with nearly all projects failing to deliver on the promises made. Would we not be better to spend time and money on activities that are currently known to work as we cannot afford to have major projects fail.

The main focus of current activity is on known technology and understood practices.

It all looks sensible, although the target of a 72% reduction vs 2005 by 2025 is clearly not possible, if the latest figure today is a 32% reduction.

It could be more ambitious by reducing time lines to bring forward carbon reductions

It is a good start, especially to put targets in place but it should be much more ambitious. I would in particular like to see much more atteention to this in the planning process with more rigorous targets set in this area and environmental impact being made a top priority when looking at planning applications with requirements for higher environmental standards purt in, I would like to see a programme of alternative energy put in in all council owned facilities eg solar panals etc. Ground source heating at the hydro utilising all teh outdoor space to lay pipework would be great. More promotion of cycling, cycle storage, lock points in town and electric charging points to be much more readily available in the town centre. this would have the effect of encouraging electric car owners to shop in Harrogate and to stop for a coffee or a meal while the car charges and would encourage spending in the town. I would also like to know how this will be monitored and assessed and the results fed back. Also how will the council be held accountable for this?

The desire is to keep the timescales ambitious and manageable. Shortening the time line is not likely to be possible.

Many of these points are dealt with in the 2022-23 action plan, including investing in renewables in council facilities, roll-out of EVCPs in HBC car parks. Some elements are out of scope of the strategy (e.g. building regs which are a national policy).

Accountability is via the cabinet member for carbon reduction and sustainability, although as noted in the strategy, the direct control is with the council's own operations, within the wider district the council will use its

influence to create the required carbon reductions.

It is pleasing to see that the revised strategy:

- Uses reliable datasets to outlines the scale of the challenge (eg: 72% reduction from 2005 by 2025) and to explain that at current rate and volume of emissions Harrogate District will exceed its carbon budget in under 9 years.
- Accepts the responsibility for HBC to go beyond HBC's own operations to include influencing Harrogate district.

However, it is not fit for purpose because it appears to have been written from a 'business as usual' perspective, lacking ambition & rigour. General points which would help make the strategy more effective include:

- 1. It should indicate that HBC has made the budgetary commitment needed to increase the council's capacity and skills for the vital visioning, research, communication, carbon & cost accounting work which is both urgent & essential.
- 2. It should indicate that HBC has made the political commitment to lead internal change rapidly and address any potential reluctance from departments which might perceive change as difficult.
- 3. The strategy needs to be much more rigorous.
 - Timescales (routemap) should be given for any future projects.
 - Quantified potential carbon savings should be provided for any future projects so we can understand if the scale and pace of HBC's strategy will address the problem.
 - Scope and timetable of monitoring activity should be indicated.
 - The estimated cost of the work should be provided, with an indication of how HBC intend to fill any shortfall in funding.
 - It could explain what "decarbonisation" and "sustainability" include eg in theme 5 around new development.
 - It should explain how HBC intend to deal with high emitting local facilities they own (eg: HBC/Brimham Leisure swimming pools) as well as those which they use (eg Allerton Park Waste Recovery Park) and trunk roads (eg TfN road building proposals).
 - It should indicate how HBC and NYCC will work together prior to the establishment of the new unitary authority eg on highways, cycleways.
- 4. It should openly acknowledge that the Local Plan needs to be changed because it is not fit for the purpose of reaching net zero by 2038. For example, paragraph 7.36 explicitly states that HBC does not support wind turbines of a size which could help to significantly increase local generation of the renewable electricity we are going to need in future. Paragraph 7.35 is out of date in its implied assumption that the

Many of the points in this response are addressed by revisions to the text within the strategy document, and in the action plan which lists actions, timescales, accountability, carbon impacts and budgets.

New funding has been identified to deliver the 2022-23 action plan and to move beyond business as usual.

Enhanced section on local government reorganisation included both in the strategy and action plan, to clarify what is happening in this area.

The Local Plan is now adopted, although there is an opportunity for a review in the short term and these points are noted. Other opportunities exist to ensure decarbonisation is embedded within key developments which are listed within the strategy and action plan (for example a new Development Plan Document for the new settlement).

Divestment is noted but is not an action plan priority for 2022-23 (final year for Harrogate Borough Council), but will be raised with low carbon working group for local government reorganisation.

Climate communications is part of the action plan, including working with the Climate Change Coalition. The coalition was initially convened by the council and is a relatively new organisation, it has now recently established as an independent charity. They have already delivered the Harrogate District Climate Action Festival in 2021 with a series of residents and business events, including the national Race to Zero business awareness campaign, and have a programme of activity lined up for the future.

very limited extent of potential areas of wind energy development The council is supporting the coalition identified some years ago is sufficient for the new and urgent purpose. via funding, and secretariat support (as well as being a member ourselves). 5. It should refer to the HBC pension fund and other investments which must be divested from fossil fuels. As HBC do not seem to be celebrating success with divesting from fossil fuels, I assume that HBC's arrangements support companies who profit from producing fossil fuels & destroying our habitat. 6. The strategy needs to be much better informed by up-to-date research. Some things which could help to improve it are: It should recognise the need to reduce overall demand for energy as well as the need for local generation of renewable energy. It needs to recognise that EVs have a higher carbon footprint than readily available forms of shared transport or active travel (lifetime emissions from an EV are approximately half that of a petrol car). It should strongly recognise that national government policies – even after COP26 - are severely limit local action towards net zero in key sectors such as transport and heating. It should refer to the need for decarbonisation activity to take place at the same time as local planning for climate resilience, adaptation and biodiverse habitats. 7. It does not say how HBC plan to use their influence to effect behaviour change amongst residents. It reads as if the Harrogate District Climate Change Coalition are expected to have a big role - but who are they, and how is HBC supporting them? The coaltion's website is out of date, which does not make me think they will be able to do much. HBC communications and pace of action on climate must be much improved in order to avoid any repeat of the largely avoidable backlash against potentially helpful initiatives such as the Beech Grove LTN, Station Gateway and Otley Road cycleway. It sounds nice but the language is all a bit fluffy. There is little in the way Specific targets and action are in the of specific targets and trajectories to have any sort of meaningful 2022-23 action plan. accountability make sure your ideas work ie test evaluate dont just go for show The action plan includes measurable outcomes More detail required on initiatives to reduce carbon emission on new The action plan contains specific actions builds and sustainable transport on these points. Sadly, I find it lacks the necessary urgency and ambition. I deeply regret The council supports efforts to address that HBC is not one of the 300 councils which have declared a climate the climate emergency as outlined by emergency, and that the target date for net zero emissions in 2038. the IPCC. More ambitious councils have targeted 2030. The strategy should specify annual targets for reducing CO2 (and other greenhouse gases). The strategy contains the justification The strategy says lots of good things - we will facilitate this, encourage for 2038 as the target year. This is that, use our influence to ensure sustainability is built intoetc. - but already a challenging target and we do not consider 2030 to be realistic. it lacks rigorous targets to give these good intentions real substance. The strategy should include data or graphs showing how much each of

the main contributors to climate change needs to reduce year on year Actions and targets are included in the to achieve net zero by a. 2038 and b. 2030. That would give a action plan meaningful sense of the radical changes we need to make over the coming months and years which the draft strategy does not do. I see that www.climateemergencyuk are producing a scorecard for local authority action plans in January 2022. It will be interesting to see how HBC scores. As Harrogate is not one of the 300 councils which have declared a climate emergency I anticipate a low score. Many of the points I would make have already been made by Zero Carbon Harrogate, Harrogate District Cycle Action (and no doubt other environmentally aware organisations). I support the responses of both groups. As a cycling campaigner I'm particularly disappointed that there's very little mention of cycling, and none at all about the potential to develop a first class cycling infrastructure in Harrogate and district which an ambitious strategy would include. There is reference to current projects, the Station Gateway, Active Travel Fund and Otley Road, and interestingly the 'Follifoot cycleways'. The Follifoot cycleways don't exist. Please tell me what you are referring to? The aims are laudable, but there is an obvious danger of the aims Monitoring and reporting is included disappearing with the wind. There needs to be strong oversight, within the strategy. transparency and reporting. The draft carbon reduction strategy is not specific; there are no The action plan contains measurable measurable targets. There are some laudable aims in the draft document but the rhetoric is The council proactively works with the not being matched at the moment by HBC actions in some areas: private bus operators, including electric buses are few and far between; tree planting is very slow and supporting bids for electric buses. not covering enough land or roadsides; refurbishing of older council buildings is being largely ignored (see the proposed development of Knaresborough pool) so that carbon emission control is not taking place; green spaces are being eroded (Knaresborough pool site and greenfield land being built on); We need to do the right thing long term not just jump to the lastest The strategy is intended to take a long greed fade as they are not as green as some of things been claimed. term view. Targets are included in the action plan. Yes, No targets for specific reductions in for example modal transport shift or what energy efficiency improvements you wish to bring about in planning for new build or retrofit. Without targets, timescales and commitments to net zero this is meaningless waffle. Although it's good to see that HBC has produced this document, it's Targets are included in the action plan, worryingly short on actual targets and real measures to achieve these. focusing on immediate action, before 2038. 2038 is far too far in the future to achieve this reduction if the council is serious about mitigating the worst effects of climate change. It's particularly worrying that, in the section about transport there is no Note that transport remains the remit of commitment to a rapid introduction of an integrated public transport NYCC. Until the new council is formed, plan, and a real commitment to active travel opportunities. HBC's role will be to continue to facilitate schemes and work closely with county of transport projects. I'm concerned that there is little about peatland management given the Nidderdale AONB contains peatland amount of peat uplands in the area. I'd also like to see HBC working management within their Management actively with developers of all kinds who have a real commitment to Plan. carbon neutrality in all new buildings.

Whilst the strategy document is to be welcomed, as it stands it comes The action plan that goes alongside the strategy contains deliverable in the over as a series of aspirational statements. There needs to be a greater emphasis on action plans and deliverables. One example relates to the immediate term. level of housing developments being proposed for the Harrogate district. Much of this is being done on a business as usual basis and the strategy does not make clear how the carbon effects of such housing numbers will be mitigated against. Just on the western side of Harrogate alone, something in the region of 4000 houses are being proposed, and the strategy document seems to be isolated from such issues. The document would appear to be well thought out, however, it is very The action plan contains specific targets. light on actual data and facts or specific targets for the local authority to In terms of energy, the targets are achieve in terms of reduction. For example, the document says the based on CO2 reduction. council pays around £1.5 million each year for energy, however it does not split this down into electricity, gas, or other fuels. How these are going to be reduced, by how much, and by when. Under 5. Monitoring and Reporting. How many of the council's current Various sites have are closely assets has real-time energy monitoring installed? Not just meter monitored, and a new BEM system is readings and half-hourly data? Without this, how can the council being installed at the Hydro, one of the accurately measure the savings in reduction? council's largest emitting sites. There is no mention of the local plan being changed to incorporate The Local Plan is agreed and adopted, renewable energy generation in terms of Wind Turbines, Solar PV, and however a Local Plan review is due Hydro generation in the local rivers. There is a large focus on within the next two years which may be decarbonizing heating, and vehicles but no mention at all about green an opportunity to raise these points. hydrogen being used as a fuel for HGV and other fleet vehicles or as a green zero carbon heating gas. Much of this is covered by Building The document says that we need to have another 660 houses, yet does not specify if these are to be built as net zero carbon buildings or Regulations which are a national policy. Where we can exert a strong influence Passive house. The current properties that have been built by private developers in the region have no renewables and as the channel 4 we are doing so (for example vi a new program proved the new houses on Harlow Hill are very energy settlement Development Plan inefficient despite costing nearly £600,000 each. The council must take Document). a stand against these poor building standards, and not give planning permission to developers unless the property are meeting the highest Sustainable/active transport and EV provision is included in planning for new standards of insulation and energy generation on the actual site where the homes are being built. Using rain water harvesting and green sites. electricity microgrids so that the impact on the local infrastructure is minimized. These developments should also be made to have safe cycle paths and EV charging points that are mounted in the street, preventing the need to run cables across pavements. The rural community needs to be better served by public transport, Bus provision is the responsibility for more busses with timetables that facilitate commuters from these NYCC. areas. BY allowing the development of renewable microgeneration in these Many of these points are covered in the areas it will have a dramatic impact on the region's carbon footprint. action plan and strategy, some fall This must include wind turbines as well as micro-hydro and solar PV. within the remit of North Yorkshire Local industrial estates must be incentivized or forced to put PV on the County Council, or are out of scope of roofs of the buildings. Making more of the town's roads accessible and this plan.

safe for cycling and discouraging car owners from driving into the town. Encouraging parents not to drive their children to school, but to walk or cycle instead. This would have a big impact on air quality in the town and surrounding areas.

The following comments are submitted on behalf of Harlow and Pannal Ash Residents Association (HAPARA). Rather than address all the elements of the draft strategy our comments concentrate on one or two key areas, using the excessive developments being proposed on the western arc of Harrogate to provide a focus. It is to be welcomed that HBC have drawn up such a strategy but, in our view, there needs to be greater clarity of action plans and deliverables. These will undoubtedly be amended over the course of time, as the whole climate change agenda is a fast moving one, but as things stand there needs to be far more substance to this strategy.

This whole document comes over as process driven, and, as it stands, reads as a series of aspirational statements. We have also recently seen the Prime Minister address the COP26 Climate Conference, where he has used a form of words that indicates that we are close to the point of no return in terms of global temperature changes. The HBC Carbon Reduction Strategy does not, we feel, reflect the urgency of the situation.

The extremely short timescale for responses means that local groups have had insufficient time to prepare responses. This is a serious shortcoming, and will have an impact on the qulity of the consultation outcome. The strategy:

- fails to make clear the need for urgency and the serious implication of reaching the key aim of attaining zero by 2038.
- fails to see the serious implication of the evidence available, that for example, the 72% reduction from 2005 by 2025 has been 'low hanging fruit', having no significant impact on lifestyles, while the next steps will require an enormous modification to how we live and work. There is also an error in interpretation, in that, by keeping to the 2005 base, it has not been made clear that the next proportional changes are vastly greater than before.

The strategy needs to be much more ambitious & rigorous. Some things which could help to improve it are:

- Timescales should be given for any future projects. And quantifiable targets must be included, as otherwise the evaluation process is impossible o Quantified potential carbon savings should be provided for any future projects so we can understand if the scale and pace of HBC's strategy will address the problem.
- Scope and timetable of monitoring activity should be indicated.
- The estimated cost of the work should be provided, with an indication of how HBC intend to fill any shortfall in funding.
- It could explain what "decarbonisation" and "sustainability" include e.g., in theme 5 around HBC using its influence through the planning system for new development.
- It should explain how HBC intend to achieve net zero from high emitting facilities such as HBC swimming pools and the Allerton Waste Recovery Park.

Many of these points are covered by the accompanying action plan.

Allerton Waste Recovery Park is out of scope.

The consultation period was six weeks.

Time bound and costed projects are listed within the action plan.

The focus remains on local council influence.

It should recognise the need to reduce overall demand for energy as well as the need for local generation of renewable energy. It should strongly recognise that national government policies – even after COP26 - are severely limit local action towards net zero in key sectors such as transport and heating. There therefore should be a commitment to inform national government of the need for support at a local level o It needs to recognise that EVs have a higher carbon footprint than readily available forms of public transport, shared transport or active travel It should refer to the need for decarbonisation activity to take place at the same time as local planning for climate resilience, adaptation and biodiverse habitats The Strategy does not inspire confidence that the new unitary authority Further information on local will be able to move Harrogate District swiftly to net zero, because government reorganisation is now there is little about how the two councils will work together. Aspects included which require joint work include infrastructure such as reducing speed limits, cycleways and footpaths, as well reducing the very high emissions from Allerton Waste Recovery Park There is no reference to how HBC expect to use their influence to effect Addressed throughout the strategic themes. Actions and priorities are aimed behaviour change amongst residents. at enabling, facilitating, encouraging behaviour change. Some good intentions, but not formulated into any actions actually The associate action plan and budget reflective of the urgency of the situation. (The strategy uses the word reflects this. 'emergency' only twice. There seems little or no attempt to align with NYCC, and no practical Further information on local sense of how you will ensure that your good intentions carry forward government reorganisation is now into the new local authority. You should be blazing a more ambitious included. trail. One of the main ways - if not THE way - you are able to effect change is through influencing development. But you don't acknowledge, or at any point question, the overall effect of your Local Plan. (You don't even get your own numbers right - the housing figures still include the error pointed out during the Examination.) (It's 637 not 669 houses per annum.) What is the total carbon cost of the Local Plan? How have you calculated the population and economic growth figures used in your strategy? How much of the Local Plan is for housing need, and how much for economic growth? The choice of growth policies underpinning the Local Plan, and alternatives, should be modelled. Note response above. You should declare a Climate Emergency. All policies should have Climate Emergency as a Required Assessment (cg Equality, Risk etc.) It is reassuring to see that this strategy recognises the pressing need for carbon reductions in the Harrogate District. The plan also uses reliable datasets to outline the scale of the challenge (e.g. 72% reduction from 2005 by 2025) and to explain that at current rate and volume of emissions Harrogate District will exceed its carbon budget in under 9 years. However, I strongly believe that the plan does not go far enough. Some suggested improvements include:

- Recognising that energy demand should be reduced, not just the need for local generation of renewable energy.
- An acknowledgment that Central Government policies even after COP26 - severely limit local action towards net zero in key sectors such as transport and heating.
- Recognition that EVs have a higher carbon footprint than readily available forms of shared transport or active travel

Referral to the need for decarbonisation activity to take place at the same time as local planning for climate resilience, adaptation and biodiverse habitats.

After what the council have done over the last 10 years I find any carbon reduction strategy to be pure hypocrisy. It all looks good on paper, planting trees and using energy efficient non polluting vehicles but isn't it a little late when you consider that during the last 10 years the council have totally destroyed Harrogate and the surrounding towns and villages and the worst part is; it is still going on. The building of thousands of new houses has brought onto the roads 1.5 new vehicles per house, all extra polluters. Most of this building has been on greenfield sites which can NEVER be replaced. Trees have been cut down to enable the building of these houses and trees are the key to preventing pollution. Areas are being considered today for building on a flood plain, one area in particular was refused in the 60's for this very reason so what is different know! It would appear today that if the 'paperwork' is in order you can build anywhere you want. Will the Stray be next? Congestion on the roads is causing gridlock and all the new roundabouts and traffic lights along with the extra vehicles is sending pollution out of control. All these new houses require electricity which has to be manufactured increasing the carbon footprint. All these new houses require water; a finite product, how long before we are told their is a water shortage? All these new houses require refuse collection, postal services repairs and maintenance all which adds to the carbon footprint. So my general comment is 'Why Bother' you have shown beyond any doubt you do not care. don't bother

Note response above on local plan policies.

I think the draft carbon reduction strategy is neither ambitious nor comprehensive enough to address the scale and speed of the emerging climate emergency.

It feels like somewhat superficial greenwash. The focus on ULEVs completely ignores the face that congestion will become untenable in Harrogate with all the new and planned developments which are predominantly on the edges of the town. With almost half current peak journeys less than a 30 minute walking distance, there should be far more emphasis on alternatives to the car, eg. walking and cycling. Similarly there are vague words about carbon standards for new developments but nothing said about using denser housing, closer to centres, the concept of 20 minute neighbourhoods reducing the need for motor travel, and the need for good quality infrastructure to enable safe alternatives too car travel. The current trend for isolated, low density dormitory developments around the edge of town with little built in facilities and no active travel infrastructure is going to push

Note response above relating to sustainable transport.

| carbon generation in completely the wrong direction, dwarfing any impact of improved housing design. | |
|---|--|
| It's an excellent managerial document that commits to nothing | |
| loads of words, no graph showing how the current "budget" of 9 million tons between now and 2050 would be achieved. This is "bad science". | The proposed local carbon budget is presented within the text. |
| Not expansive enough about domestic problems | |
| Not radical enough for the severity of the problem | |
| You should declare a Climate Emergency. All policies should have Climate Emergency as a Required Assessment (cg Equality, Risk etc.) | The council debated and adopted the notice of motion as outlined in the strategy. |
| Thank you for the opportunity to comment on the draft carbon reduction strategy. It is a good that it has been revised but it does not go far enoughTo meet the 86% reduction in emissions by 2030 specific and measureable strategies need to be in place rather than unquantified intentionsAn integrated travel plan is also needed for Harrogate District to promote active travel. There is too much emphasis on electric vehiclesPlease include a strategic theme of communication to explain more clear the often complex issues around climate change mitigation and adaptionCommunicate the impact of the decisions and council plans clearly and often e.g. by using visuals such as the Climate Change Impact Assessment tool used by Chesterfield Borough Council or something similarThe time to put plans into place for carbon reduction within the available carbon budget is limited. Please do not allow the upheaval of the administration change in 2023 to distract from this urgent work. | Note response above on sustainable travel. |
| The draft carbon reduction strategy is not specific; there are no measurable targets. | Note adoption of the associated action plan. |
| The draft strategy is not fit for purpose as it stands as it fails to focus the Council's activity in this crucial area and reflect, as the draft strategy notes, that the vast majority of the population's requirement for immediate action to counter climate change. As a local resident, I try and make as much of a reduction to my impact on the planet as I can, and I engage with local organisations that take this issue seriously. But as individuals and voluntary bodies there is a limit to what we can each achieve. I expect my local authority to set a clear lead putting significant measures into place which support and work alongside individuals and organisations to enable us to pull together to tackle this existential crisis. That lead is totally lacking in the draft strategy. I want to see bold actions that are quantified, costed and programmed, and adequately resourced by the current Council and its successor authority. I have been sorely disappointed by the draft, and would strongly request a set of actions for the years ahead, in support of an adequate long-term strategy. | Comments noted – see above relating to action plan. |
| The 'Plan on a Page' Summary sets out the scale of the challenge. We can emit 6-9 M tonnes of CO2, but are emitting 1M tonnes per year. Therefore, by 2027-2030, we will have exhausted the carbon budget. | This strategy is clear that it alone will not achieve the necessary savings (e.g., third paragraph of the summary) |

| The Strategy itself is not ambitious, and does not represent the 'big, | |
|---|---|
| ambitious changes' the Summary says are needed. It will fail. | |
| There is no way that the proposed strategies will allow the area to meet | |
| the goal of "net zero". I fundamentally disagree with statements such as | |
| "the district is already experiencing disruptive climate change". Why | |
| does, for example, more sunny days equate to an emergency? | |
| does, for example, more samily days equate to an emergency. | |
| Waste of time and money | |
| | |
| What a joke that you publish this draft whilst at the same time propose | Energy efficiency is being built into the |
| to build a new pool in knaresborough which will be gas fired boilers! | Knaresborough pool plans. |
| Your cabinet member, Phil Ireland really doesn't understand what | |
| carbon reduction means at all - he is incompetent. | Big tree planting sites have been |
| | identified on council owned land. |
| Great to plant trees but why it them down as you propose in | |
| Knaresborough? Plant ten times more. Don't pussyfoot around with the | |
| climate. It's an emergency HBC not a party. | |
| | |
| Whilst HBC's carbon reduction strategy recognises that the climate | Note response on the action plan above. |
| breakdown situation requires urgent action it does not fully reflect the | The respondence on the decion plan above. |
| level of that urgency. The opportunity still remains for a more ambitious | The primary focus of this strategy is |
| and rigorous stance to be taken. In particular the strategy needs to | carbon reduction, rather than |
| | |
| define step by step(dated) clear measurable targets in all sectors and | adaptation. Acknowledge the |
| step by step (dated), clear measurable actions in the same sectors. | importance of adaptation activity. This |
| Without these HBC will fail to achieve its net-zero position. Moreover, | may addressed in more detail when |
| to ensure public support, all the targets and actions should be clearly | resources allow (most likely after the |
| communicated to the general public and businesses. Additionally the | creation of the unitary North Yorkshire |
| strategy should include the urgent identification of ALL the likely climate | Council). |
| breakdown impacts that are inevitable as they are already in the | |
| pipeline. There has to be a recognition that so called "Net Zero" does | |
| NOT reverse the 420 ppm of carbon dioxide. Hence it is of the utmost | |
| importance for HBC to produce a detailed climate resilience strategy | |
| clearly defining necessary adaptations. Once again it will be essential to | |
| fully communicate this strategy across public and private sectors. By | |
| developing a resilience strategy and communicating widely support will | |
| be gained for the many challenging actions that HBC will have to | |
| , , , | |
| implement. I am glad to see that HBC has now recognised that its role | |
| goes well beyond its own operations. It has a significant role to play in | |
| influencing the speed of change, the extent of change and public | |
| perception of the way forward. Now given the extreme urgency pease | |
| speed up. extend out and communicate more fully. | |
| CPRENY are very supportive of the Council's aims as set out in the | |
| strategy in order to reach net zero by 2038 and are encouraged that the | |
| , , | |
| strategic themes, once implemented should help achieve this | |
| Good to see some progress. | |
| APPEARS COMPREHENSIVE | |
| Pleased Council is taking carbon emissions reduction seriously in | |
| | |
| principle | |
| principle Rather late so hurry up and get implementing it | |

The Harrogate Labour Party welcomes the revised Carbon Reduction Note associated action plan. Strategy and the recognition of the size and speed of the reduction task and the aim of net-zero by 2038. We welcome the range of strategies listed and the examples of past success. There are, however two main omissions in the strategy: the first is a lack of indication as to exactly how the various policy aspirations will be achieved and at what cost; the second is the absence of any timescales or milestones to indicate progress. Indeed there are only two dates in the document (apart from those in the past) and they are the 2038 net-zero target and the 2050 of maximum emissions. In the absence of any measurable targets prior to those dates it will not be possible for residents to be able to gauge the success, or otherwise, of the strategy. The absence of any budget forecast detracts from the realism of the policy aspirations The Starbeck Residents' Association welcomes the Strategy as a way of demonstrating that our area is focused on the vital importance of tackling climate change, but feels that more focus is needed around addressing current transport hotspots and promoting sustainable alternatives, promoting sustainable business and ensuring new building developments are not built on greenfield sites and are sustainable when they are approved. It is good that there is a sense of urgency and a well-defined targets and Greater emphasis on active transport criteria for meeting the net zero aim. It would be good to see more now being made within the text recognition of active transport and the need to have an integrated transport system. Often, good intentions to use alternatives to car transport are practically and financially challenging. Private ownership of EVs will not move us fast enough to net zero and although the car club is a good initiative, it is not one that I have found practical personally and I am highly motivated to try and use it. There is also much that could be done with the planning system to try and develop housing that encourages active transport and also to drive up standards of energy efficiency and reductions. More consideration should be given to the role of nature conservation and biodiversity management as an intrinsically-linked part of carbon reduction, for example reducing flood risks and the associated carbon costs of defences or rebuilding work Getting the vehicles off Harrogate's roads is my main concern. Yes Note response on sustainable transport because they pollute however they also do far more than that in terms above. of destroying our ability to enjoy our town, walk, cycle and play. Lowemission vehicles do not solve this. More detail required on initiatives to reduce carbon emission on new Note response on sustainable transport builds and sustainable transport above. The promotion of EV whilst clearly better than petrol/diesel is not stopping congestion. Fewer cars on the road would be of far more benefit as EV still produce emissions. Also, in a town such as Harrogate (with hundreds of terraced houses with no allocated parking), how are there ever going to be enough charging points? If a congestion charge was brought in for people living in HG1 area (many of whom use cars for 5 minute journeys) and this money was used to give cheaper bus travel, I feel that would be a greater benefit. With fewer cars on the road, more cycling could be encouraged on the roads that we already have. Building new cycle paths is great, but as a

daily commuter cyclist, I use the roads and genuinely do not feel the need for specialist tracks, but do agree that I would feel far safer with few cars whizzing past me! We really do need to penalise those who CAN walk/cycle and free up the roads for those who can't and the visitors that we need to our town. Perhaps Park and Ride has/should be considered, but whatever we do, we MUST make it harder for those who just jump in their cars for ridiculously short journeys with no thought. Habits can be broken, but they take time and a bit of discomfort first and I feel there needs to be a much tougher stance. More and more towns and cities are now pedestrianised in the centre, so we JUST need to follow their examples for the benefit of all. Driving less has been shown to make the most difference to climate change and it's something most of us can do quite easily. The transport section is too focused on cars, you need to consider other Note response on sustainable transport forms of transport such as the promotion of public transport and active above. travel options. There is a real lack of ambition in this respect. Electric vehicles do have a purpose but are not as effective in carbon reduction as mass adoption of public transport and active transport would be. The wish to switch people to ULEV's does not address overall pollution from vehicles (brake disc particles, tyre debris) nor does it consider the urgent need to reduce the number of vehicles on the roads. If you make it more attractive to walk / cycle (by reducing the number of vehicles) you will improve the general health of the population and make more of an impact in reducing emissions. Very lightweight on specific measures, particularly transport There's no mention of a cycle path or footpath installation for Kingsley road. The only way to access the cycle route safely from Kingsley road is to make a large detour through Starbeck. A country lane is not safe for children, prams, walkers or nervous cyclists. Please can improvement with access to current cycle ways be included in the strategy. Writing as an ex-cyclist, I'm sure that cycling will always be limited to a Note response on sustainable transport above. small percentage (1-5%) of journeys because actual & planned cycle lanes are too fragmented leaving dangerous sections on busy roads. Better local bus services & a 'call a bus' service like Yorbus are needed as an alternative to cars. Park & Ride should reduce the number of car commuters but little progress has been made to date this is not enough of a step towards carbon neutral harrogate, Note that highways, transport and everything possible needs to be done to reduce car use in harrogate. active travel are primarily a county Please do all you can to reduce car travel across the whole and increase council function. Harrogate Borough active forms of travel Council's strategy role is to facilitate It does not go far enough in reducing car use in Harrogate and projects and work together with NYCC encouraging public transport, walking and bicycle use. Protection of on delivering schemes locally. The green belt and woodland and all green space is essential to maintain air picture will change after the formation quality and biodiversity. Not enough is written about the wider risk of of the single unitary council for North ecocide. Yorkshire. A lot of the traffic calming measures will cause congestion.

| As a Knaresborough resident, I cannot believe that we have no recycling bins in our town. That is a basic need to start educating the town's population about improving waste disposal. Secondly, there is far too much housing being built on green belt land. This housing is not affordable and increase traffic use on single roads. It is noticeable how much traffic in the morning - both local and into Leeds - is one user only. This needs to stop, Every bus and Leeds bound train goes to Harrogate from Knaresborough yet still there is far too much car traffic. Dedicated bus lanes should be built which would mean buses by-passing cars between Knaresborough and Harrogate. Pressure should be put on Northern to (a) reduce fairs between Knaresborough and Leeds/York (b) increase services - i.e. better Leeds to Knaresborough services past 9.30pm and (c) increased penalties for delays and cancellations. Commuters need to be encouraged to use the trains. Cut and enforce speed limits. Reduce temperature in public buildings. My living area is at 16.5 degrees. That is adequate. Encourage residents to draw the curtains at nightfall, to conserve heat even in houses with double glazing. | |
|--|--|
| It's a start and I would like to see it doing more particularly around transport. Vehicles (all vehicles including electric) wreck our quality of life as we move around Harrogate. | |
| The planning process should be required to include a traffic impact statement for all new builds and extensions relating to business premises. Where businesses are located away from main roads and or require travel through rural areas with little other traffic pollution they should be required to justify why they are not more appropriately located near a trunk road or rail line. Expansion in areas poorly served by arterial roads or transport links should be discouraged. | |
| It doesn't go far enough and has no real intention to drastically reduce the use of private cars and reduce the use of gas in housing by ensuring new housing is truly energy efficient by ensuring all new houses are built to be zero emissions and existing housing is brought up to standard. | New builds must comply with national building regulations, a UK wide policy. |
| The wish to switch people to ULEV's does not address overall pollution from vehicles (brake disc particles, tyre debris) nor does it consider the urgent need to reduce the number of vehicles on the roads. If you make it more attractive to walk / cycle (by reducing the number of vehicles) you will improve the general health of the population and make more of an impact in reducing emissions. | Noted, emphasis added to active travel modes. |
| More detail required on initiatives to reduce carbon emission on new builds and sustainable transport No plans to make builders supply only renewable energy to all new properties in the area. Pointless expansion of the town by taking away green spaces make this plan obsolete before it even starts. See Strategic Theme 5: influencing new development we will publish planning guidance to go alongside the Local Plan, outlining sustainable design requirements and use our influence to ensure sustainability is built into key developments in the district. Why is this guidance not in place already? The largest building programme since the Victorians is | Some of these points fall outside the scope of council influence (e.g. national building regs). Note actions in the plan on new DPD for new settlement. |

| happening in Harrogate, why are we not building energy efficient homes? The houses being built here are not energy efficient and not future proofed so we will be having to find money for retrofitting the houses that are being built now. See Strategic Theme 1, domestic energy efficiency, we will seek and make the most of available funding to retrofit housing within the district, and ensure that council housing is as energy efficient as possible. | |
|---|--|
| New homes will increase car use and carbon. This should be addressed. | |
| It needs to embrace new technology to help the Towns people embrace, understand and engage correctly. More needs to be done to cut emissions in general No time to read it but suggest notices are put up, at and near the level crossing at Starbeck, asking drivers politely to consider turning their engines off rather than leaving them idling as so often happens - VERY polluting! Would also save them money. | |
| It takes no account of external emissions. A return flight to say Benidorm amounts to 0.5 tonnes CO2 per person. Annual CO2 emissions by China amount to 9004 million tonnes (6.6 tonnes per capita). Those from the UK are 390 million (6 tonnes per capita). Much of the Chinese emissions are caused by making goods for the West using coal for power. Without everybody reducing their purchases of goods in addition to the measures described in the Draft carbon reduction strategy the world with not succeed in keeping global temperature rise below 1.5 degee C. I think every resident should be encouraged to make their personal calculation of their CO2 emissions. | |
| Its good to at last see some aspirations on this issue, but I wish to state that I am appalled at the lack of vision displayed by HBC over the 7 years Ive lived here, and the slowness of HBC to do anything of significance about these issues. We need to do more Please consider food caddies as part of your waste reduction schemes | Section 3.3. outlines some of the recent council-run decarbonisation projects. |
| I agree with planting more trees. Everything else will have little effect I do not think there is enough emphasis on nature recovery, and the role that blue green infrastructure can play in mitigating the effects of climate breakdown. | |
| All businesses like Royal Mail Emsleys cranes if they are to stay in town lower emission and noise reduced engines or relocate all to edge of town ie Flaxby moor to clear air for residents in towns Emsleys don't even work in Harrogate they work out of town so why clutter up roads etc!?? Reduce schools traffic introduce buses again | |
| We have two shops 'the refilling station' and 'jarfull' that offer this service and I believe M & S will also be offering a refilling reducing not only plastic waste but packaging waste as a whole. OK with help towards replacing gas-fired central heating plant. | |

| if anything the council is over reacting and policies will make people's lives worse. The council is being pressurised by self interest groups such as cyclists who form a small minority of the population but a vocal one with a retired council officer a notable member. Such groups are able to mobilise their cohort to respond to surveys and so distort them. | |
|---|--|
| This consultation is rubbish! Where are there any questions to enable constructive input? | |

Q3. Are you aware of additional opportunities for carbon reduction not already covered in the draft carbon reduction strategy?

Suggestions and comments below have all been noted, and in some cases new actions included in the 2022-23 action plan, or wording clarified within the strategy.

Where suggestions below are outside the scope of current council activities or the strategy, or are currently undeliverable we have noted them for future discussion, including future work with under the new unitary authority for North Yorkshire.

Sustainable transport (22 comments)

From a travel perspective, I raise the following opportunities: An integrated network of cycle ways that give bicycles priority over vehicles at junctions and roundabouts. Secure cycle storage at both the main transport hub at the bus and train station and at other train stations in the area, and at main bus stops. This should also be suitable for scooters and, if they are legalised, electric scooters E-bike hire schemes that will enable one way travel between the centre of town and surrounding areas where people live and work as well as the convention centre..

Get the vehicles out of Harrogate. 20mph everywhere. Single carriageways. Cycle lanes up both sides of every road (including one-way streets). For now, just paint them on. This enhances walking as moves cars further from the pavements. Allow cycling everywhere including the Stray. Widen paths all over the Stray. So walkers and everyone can enjoy it. Currently most of it is a marsh. And not a pretty one. More buses. And much much cheaper. Subsidise them all. For all.

more partnership working to move food to have a lower carbon footprint(eg school meals), increase carbon lock up in land(farming practices), better public transport to encourage people not to use cars/taxis to move to EVs by licence conditions etc. You just can't get hold of some trades to move housing to lower carbon(eg gas to elec, heat pump etc) so working with training for numbers and technical skills to do it cheaper

My attempts to suggest practical measures to make walking and cycling in Knaresborough have met with a blank wall from NYCC. Bond End is still polluted and dangerous for walkers and cyclists, and there are no proposals to encourage people out of their cars

Paint white lines for cyclists down the side of every single road in Harrogate. This benefits pedestrians too by moving cars further away. All dual carriageway stretches to one Lane with other side for cyclists. Paint cycle box before all junctions. Permit cycling on the stray. And everywhere. Just do all the obvious and cheap things NOW. Make buses all super cheap and easy and plentiful.

Park & Ride facilities would reduce the number of cars coming into the centre without impacting on accessibility. Have you considered making Harrogate a low emission zone?

Proper cycling and walking infrastructure to ensure that people reduce or eliminate car use .

Re above - commitment to deliver extensive park and ride and install range of smaller public transport vehicles able to access more residential areas.

Commitment that all new builds and extensions have no gas heating and electriccharging points as mandatory stop cycle lanes - you are paving over green space!

Theme 2: more emphasis on active travel, and less on electric vehicles. Transport emissions account for 49% of the total in Harrogate District, so unless you tackle them, you can't succeed. Electric cars only represent a 50% reduction in CO2. Theme 2: Idling. Parking officers have powers to stop idling, but don't use them. Vehicles are constantly idling while parked around Harrogate - often on double yellow lines, with the driver keeping the engine running to "prove" they haven't parked. HBC does nothing about it - not even asking people to stop. Theme 2: there's no real communication of the climate problem we have, and of the need to travel differently. This is a failure of political leadership by Councillors. One of them needs to have the courage to start a conversation with the people of the District. Theme 2: SUVs. The DfT's Decarbonising Transport plan (July 2021) states that nationally transport is the biggest single source of emissions, and emissions have remained flat for the last 30 years because although engines have become more efficient, SUVs have become more popular. SUVs are a major reason for the failure to reduce transport emissions, but this is not acknowledged by the HBC Strategy. Thinking of ways HBC could influence choice of vehicle, an obvious one is to put a weight limit on HBC town centre parking spaces, or charge much more for heavier vehicles. Similarly, very large vehicles that don't fit in spaces should be given parking fines. Theme 2: reduce the number of car parking spaces. Theme 3: grouse moors. Stop burning of heather on grouse moors. Also, work towards stopping the practice altogether, and using the land positively in terms of nature/wildlife/biodiversity as well as climate. ULEZ: locations of new developments and active travel infrastructure. All recent developments are on the edge of town, and 100% car dependent: Castle Gate & Trinity Fields Knaresborough, King Edwin Park, huge developments at Killinghall, Dunlopillo Pannal, A59 Skipton Road. None of them has any useful cycle infrastructure. Further developments are envisaged, especially W of Harrogate, as at Windmill Farm. It looks as though it will be business as usual. NYCC are refusing to extend the Otley Road Cycleway to Windmill Farm. They say building junctions for cars, and building no cycle infrastructure, amounts to balancing the interests of different road users". You can't keep doing this - you've got to sort yourselves out. Otherwise people will think the Plans and Strategies aren't worth the paper they are written on. Theme 5: at the proposed HBC commercial development on A61 Pannal, use the opportunity to open up the trackbed of the old Leeds & Thirsk Railway to create a greenway route from Pannal to the Yorkshire Showground. Themes 7 & 8: ask your employees not to idle the engines of HBC vehicles around town. In the last couple of weeks, I've seen a yellow HBC truck parked and idling at Victoria Square while the driver had lunch, and an HBC idling on the pavement near the Yorkshire Hotel while flowers in the beds there were changed.

There is not enough thought on weaning people off driving everywhere in cars as though electric vehicles will magically reduce our emissions. In the next 10 years many of the petrol and diesel vehicles (especially larger commercial ones) currently in operation will still be driving on the roads. Building more roads or improving traffic flows will encourage more vehicle use and therefore not reduce CO2 emissions. Introduce more community car sharing schemes, especially those using electric cars or hydrogen to provide electrical power. There is only mention of trying to persuade Staff to walk or cycle. What about improving the walking and cycling options for everyone? Most of our housing stock is old and not well insulated, current building regulations produce better insulated homes but even these are not insulated well enough. We have a massive hill to climb to get poorly insulated houses improved which needs investment in education, training, and the use of proven low carbon sustainable products. Introduce more clean air zones to reduce the burning of coal on open fires. Ask for help from the Centre for Alternative Technology in Wales who have done a lot of work on Zero Carbon Britain.

ULEZ? improved public transport park/ride schemes

Yes, get people out of their cars. Reduce public transport fares to make it realistic that it is used by all. Whilst tree planting is important (as long as the trees are the right kinds in the right places) it should be in addition to ensuring that our existing woodlands are not lost to yet more building developments. The focus should be on brown field - not green field - site development. Additionally - there needs to be a move to encourage people to recycle as much of their waste as possible. i.e. NOT charging people to use certain parts of the recycling centres (this encourages fly tipping); including the recycling of all soft plastics (currently this is left to supermarkets such as the Co-op to do but not everyone who lives in the outlying rural areas can get to such places); adding Terracycle facilities to the recycling centres (luckily my local church has set up a Terracycle base but there are not many of these around.) The use of a wheelie bin for recycled waste (as is the case in Liverpool and Birmingham), rather than the kerbside boxes and bags) would also be a welcome move. Currently a lot of plastic is being lost from the bins

on windy days - this is NOT good for the environment on a number of levels! Public transport is not something that is realistic for those of us who live in Nidderdale. The service has been cut to every 90mins so does not encourage people to leave their cars at home.

There are particular traffic bottlenecks within our area (eg Starbeck level crossing) and there are opportunities to promote alternatives ie the trains and buses from the station and to work with the community to encourage drivers to switch engines off. Simple signage would help. Further engagement is needed with our local public transport providers: bus companies, taxis and train operators. There are opportunities to work with local schools and businesses. Green spaces should be promoted as safe and sustainable places for people to use. This could include greater use of solar powered lighting to make ours parks etc feel safer and the planting of more diverse environments to encourage wildlife. Again, local schools could be involved in this, something Starbeck Primary Academy has done in the past.

Building on greenfield land should be minimised. Where this is not possible, the most stringent sustainability criteria should be enforced, including traffic alleviation measures and adequate drainage.

2.1 Domestic Energy Efficiency Whilst reference is made to energy efficiency measures, this will be interpreted by many as relating to actions such as installing loft installation, wall and underfloor insulation, LED lighting and efficient appliances. Whilst these actions are important on the basis of 'every little bit counts' there ought to be more focus on how to design a truly net zero carbon property, or at least show a pathway towards such an objective. Talking about 'energy efficiency measures' runs the danger of a continuance of business as usual. In looking at all the houses that are currently being built within the Harrogate district, it is hard to find a single example of where an aggressive implementation of a net zero carbon approach is being pursued on a major site. Everything will end up being done on a retrofit basis, which is expensive and often hard to do. There needs to be a stronger commitment and ownership shown to significantly reducing the current levels of domestic energy. 2.2 Sustainable Transport The current Harrogate district Local Plan (LP) proposes levels of housing development that will substantially increase the size of the town. Much of this development is on the edge of the town, and the majority of the sites that make up the LP will be hugely car dependent. Whilst this strategy makes reference to sustainable transport, in no way does it seem to recognise the scale of what is being proposed. On the west of Harrogate alone approximately 25% of the total LP will be built, and so far, very little in the way of sustainable transport mitigation has been proposed. Cycle and pedestrian paths are all very well, but they will not tackle the levels of additional traffic, and to a degree the increased pollution, that will result. As things stand sustainable transport plans need to be rooted more in the reality of the problems that exist, or will arise, and show clear actions and objectives to overcome them. Very little in this strategy document seems to relate to what is actually happening on the ground. 2.3 School Journeys Another factor to be considered relates to school miles. As things stand the excessive housing developments being proposed for the western arc can be expected to increase the number of school miles, unless clear actions are taken to ensure that people do not use their cars. Again, the strategy needs to encompass the situation on the ground. A recent initiative to tackle this problem was led by NYCC and to the best of our knowledge nothing has been achieved. We are not even sure if the initiative is still ongoing, which is one reason why we have concerns in terms of actions and deliverables arising from this carbon reduction strategy. 2.4 Influencing New Development If one draws an arc on the western side of Harrogate that extends from Pannal & Burn Bridge to Penny Pot Lane then we are looking at a sector of the town where 25% of the LP new housing allocations will be built - in the region of 4000 new houses. So far everything that is being proposed is on a business-as-usual basis, and whilst the strategy make reference to influencing developers, other than the aspirational statement, no indication whatsoever is given as to how this will be achieved. This strategy document states that a 93% carbon reduction on 2005 levels will need to be achieved in order for Harrogate district to deliver its target/s. Yet the majority of what is happening with all the housing developments indicates that developers and builders are carrying on as normal. No major renewable energy initiative is being proposed, the building techniques themselves seem to be the same as has been historically the case, and green landscaping seems to be the minimum that can be gotten away with. Given that the current LP runs until 2035, when according to this strategy most of the carbon reduction needs to be achieved, then this document is almost silent on how this will be done. This strategy needs to make it far clearer how exactly new development will be influenced, especially when set against the 'political' background of delivering housing numbers no matter what. One thing that is becoming increasingly clear is that the LP is in urgent need of a 'carbon reduction' piece to be added to it, especially as

sustainability is the underlying principle of the whole plan. Otherwise (largely car dependent) house building will carry on as normal. 3. Portfolio Responsibility and Review This strategy document does not make clear the overall ownership of the deliverables. Whilst there is currently an HBC cabinet member who is responsible for all matters relating to climate change, the whole subject needs to be owned by all parts of the HBC operation, and there needs to be a clear indication of the team structure that will need to be put in place to deliver this carbon reduction strategy. This whole aspect of the strategy document comes over as very weak.

No mention is made of a Park & Ride scheme. Driving individual behaviour to reduce the consumption of throwaway items and encouraging the manufacture and sale of repairable, sustainable items is necessary. Providing infrastructure for shared or active transport is not enough without giving incentives for people to switch to lower-emission transport. It is necessary to lead from the top and acknowledge the role that government and corporations have in facilitating change, but it is also necessary to cultivate a mindset in all citizens that they have a part to play. Just as with Covid 19, government spending secured vaccines, but government messaging and individual behaviour ensured the collective responsibility that secured a broad take-up.

there are numerous other ways to reduce carbon in renewable energy, active forms of travel and pedestrianising harrogate.

Need to go further in reducing car usage

BUSINESSES HBC could provide support to SME's (small and medium-sized enterprises) with their plans towards net zero.

ENERGY HBC could encourage local generation of energy at new developments as well as at existing business and residential premises.

HBC could purchase a renewable electricity contract for use in HBC premises. HBC could facilitate the purchase of bulk renewable electricity contracts for businesses and residents.

NEW BUILDINGS & DEVELOPMENTS HBC could work with NYCC and others to ensure all new developments are '20-minute neighbourhoods.' HBC could work with NYCC and others to ensure all new developments include local energy generation and integrated sustainable transport infrastructure, such as footpaths, bike lanes, car clubs and bus routes, before the houses are occupied. HBC could proactively approach developers who seek to build properties that reflect new, sustainable, net zero lifestyles.

TRANSPORT HBC fleet could be fully electrified and maximum possible use made of shared, public and active travel modes for HBC business. HBC could work with NYCC and others to develop an integrated travel plan for Harrogate district which encourages a vast reduction in car miles per person which includes public transport, shared transport (car clubs and car sharing), active travel (walking and cycling), recognition of the last mile(s). HBC could work with NYCC and the police to reduce the speed limit to "20s Plenty" in all urban areas. This would reduce emissions per mile and would also improve road safety for pedestrians and cyclists, thus increasing take up. Reduced speeds limits to 60mph on the A1M and 50mph on A-roads would cut emissions by 10% on these roads. LAND USE & AGRICULTURE HBC could work with landowners in the Harrogate District to improve the carbon capture potential of upland peat, farmland, grassland and woodlands. RESOURCES & WASTE HBC could introduce electric bin lorries in urban areas. HBC could work with NYCC to develop alternatives to the Allerton Waste Recovery Park, because this is where much of the waste HBC collects goes and it is the district's largest emitter of CO2. HBC could provide relevant information to the public about consumption emissions to help residents stop exporting around half of current emissions to the places where the stuff we buy is manufactured (often China and other countries in the Asia).

BEHAVIOUR CHANGE & COMMUNICATION HBC needs to ensure all teams, but particularly those with outward facing communications roles, have sufficiently up-to-date and skilled capacity to address public concerns and bring the public with them whilst avoiding known problems which can arise through inappropriate phrasing and emphasis. HBC communications and pace of action on climate could be much improved in order to avoid any

repeat of the largely avoidable backlash against potentially helpful initiatives such as the Beech Grove low traffic neighbourhood (LTN), Station Gateway Project and Otley Road cycleway.

You don't mention or prioritize bikes or active travel in any form enough or in any detail! School streets for every School. Consider your wider area not just Harrogate town. I live in Ripon. An integrated network of cycle ways that give bicycles priority over vehicles at junctions and roundabouts. Secure cycle storage at both the main transport hub at the bus and train station and at other train stations in the area, and at main bus stops. This should also be suitable for scooters and, if they are legalised, electric scooters E- bike hire schemes that will enable one way travel between the centre of town and surrounding areas where people live and work as well as the convention centre.

As stated above, an active travel network, integrated with public transport is desperately needed to reduce travel carbon emissions which account for 44% of emissions in the district. This will also have the effect of reducing other pollutants, improving health through greater activity, and will help reduce the chronic levels of traffic congestion in and around the town. This should include: § An integrated network of cycle ways that give bicycles priority over vehicles at junctions and roundabouts. § Secure cycle storage at both the main transport hub at the bus and train station and at other train stations in the area, and at main bus stops. This should also be suitable for scooters and, if they are legalised, electric scooters § E-bike hire schemes that will enable one way travel between the centre of town and surrounding areas where people live and work as well as the convention centre.

§ Greater emphasis on reducing traffic speeds and more 20 mph zones so that cycling appears safer. § A cargo bike hire scheme so that people can transport large items by bicycle. § Development of 20 minute neighbourhoods with priority over walking and cycling. § Prioritisation of building active travel networks between new developments and the main transport hubs in the centre of town. Execution of projects such as the delayed Otley Road cycleway have wasted time and do not give confidence that the local authorities can deliver on these schemes. § Expansion of public transport provision with more places served including areas outside of Harrogate, and a greater frequency of service. Improved fare structures to encourage visitors to the town centre would also help to reduce car traffic.

Planning decisions (18 comments) district heating for new housing

I have not seen reference to solar panels for current (sometimes old) private homes. There is a current HBC policy which prohibits solar panels on certain houses the roofs of which are visible from places like the stray. Ie, they are deemed unsightly. Therefore home owners wishing to install solar panels are not allowed to do so. This is not in synch with our need to decarbonise and I very much hope to see this policy changed.

Listed buildings must be allowed to undertake works which will reduce their carbon footprint and make them more sustainable.

Re above - commitment to deliver extensive park and ride and install range of smaller public transport vehicles able to access more residential areas. Commitment that all new builds and extensions have no gas heating and electriccharging points as mandatory

We are missing a HUGE opportunity to make the homes being built now energy efficient with state of the art technology to future proof them. See Strategic Theme 5: influencing new development we will publish planning guidance to go alongside the Local Plan, outlining sustainable design requirements and use our influence to ensure sustainability is built into key developments in the district. Why is this guidance not in place already? The largest building programme since the Victorians is happening in Harrogate, why are we not building energy efficient homes? The houses being built here are not energy efficient and not future proofed so we will be having to find money for retrofitting the houses that are being built now. See Strategic Theme 1, domestic energy efficiency, we will seek and make the most of available funding to retrofit housing within the district, and ensure that council housing is as energy efficient as possible.

The Council would benefit form having a flagship residential development to show what was possible in terms of environmental credentials and carbon reduction. The scheme for 9 Eco houses at Flaxby (Planning Ref: 21/04716/OUT) would be the ideal scheme to showcase what was possible and to act as a catalyst for greener development across the District. Particularly in relation to priority areas 5, 6 and 8. Priority area 5 - Domestic energy efficiency - the Flaxby homes are intended to be Passivhaus, so ultra insulated, be airtight, use solar gain, and generate the own electricity through solar power - all reducing energy demand, and be carbon positive in an

operational capacity. Priority area 6 - Sustainable transport - the Flaxby development intends to make use of shared Electric Vehicles and Electric Bikes, be located near 3,000 new jobs at Flaxby Green Park, and generate onsite opportunities for child-care, leisure, health and leisure to reduce the need to travel. Priority area 8 - influencing new development. What better way to influence development, than the Council supporting an Eco development itself. Other developers will see that the Council is forward-thinking in this regard and this will serve as the spark that ignites greener development across the District.

Yes, commit to not allow new build by Harrogate Springwater on Rotary Wood.

Yes. I do not think Danone should be allowed to go ahead with expansion of their operation as it eliminates many trees in Rotary Woods and increases throughout of large vehicles and encourages increased production of a useless product, the packaging of which damages the environment

There are many opportunities for carbon reduction which are not already covered in the draft strategy. For example:

Please ensure that all new development has renewable energy arrangements, stop using noxious chemicals, and encourage biodiversity everywhere. Sustainability should be the template through which all decisions are made by government bodies, and this has been obvious for decades.. Please watch the film Dont Look Up. See comments re Local Plan. A more ambitious set of policies re: housing within the current town-centres.

Education of residents (14 comments)

Ban ALL wood burning stoves. Knaresborough is like walking in the 50's after lunchtime as people light their stoves. Most people have no idea on wood management, we live next to a chimney that does not clear our house, so wall is black, we cannot open windows or hang washing out after 12 as neighbours burn everything/anything everyday. New report out that shows more cancers caused by wood burning than cars needs to be taken very seriously. Having read through the Strategy I find no reference to the Railway Crossings at Starbeck and Forst Lane. On any day (when there are two trains...one from each direction) there can be in excess of 40/50 cars either side of the crossing 75% of which have their engines idling, including buses and council vehicles. If ever you want to reduce carbon emissions surely this area requires immediate attention. Is it not against the law to sit with a vehicle engine idling??

It is against the law to have vehicle engines idling (for more than about 2 minutes) when not moving and yet everywhere I go drivers are doing this, mostly when looking at their mobile phones. Is it possible to enforce this law by fining these people?

Many students get to schools by car as seen by the massive reduction in traffic during school holidays. A local schools minibus service and more car sharing should be promoted.

There are schemes that show where a house is losing its heat. I would find that useful.

Need to encourage every aspect of recycling. Need to consider carbon footprint of all aspects of waste management including moving to zero burning of waste and changing collection lorries. Need to support every attempt of households and businesses to move to renewables. Encourage businesses to keep doors self-closing at end of pandemic.

Council influence (13 comments)

There are many opportunities for carbon reduction which are not already covered in the draft strategy. For example: Businesses: • HBC could provide signposting and support to SME's with their routemaps and plans towards net zero. • HBC could proactively seek opportunities for green investment and jobs & share good news of decarbonisation success stories from companies whose aims are aligned to net zero. Energy: • The Local Plan needs to be revised to encourage & support significant new wind generation, plus solar & hydro. • HBC could encourage local generation of energy at new developments as well as at existing business and residential premises. • HBC could provide relevant information to the public about consumption emissions to help residents stop exporting around half of our current emissions to the places where the stuff we buy is manufactured.

Business influence (10 comments)

more partnership working to move food to have a lower carbon footprint(eg school meals), increase carbon lock up in land(farming practices), better public transport to encourage people not to use cars/taxis to move to EVs by licence conditions etc. You just can't get hold of some trades to move housing to lower carbon(eg gas to elec, heat pump etc) so working with training for numbers and technical skills to do it cheaper

The strategy needs to be more explicit about positive and proactive measures to encourage green jobs into the Borough and to celebrate the success of businesses and organisations that achieve net-zero while still employing high quality workplace practice. Opportunities for local electricity generation (e.g., solar PV on rooftops and local community wind projects) and bulk renewably generated purchase agreements which could both reduce emissions and reduce fuel poverty should be pursued. The Allerton Waste Recovery Park is one of the largest contributor to CO2 emissions locally and HBC should recognise the need to reduce levels of waste sent there and work with NYCC to reduce its impact. The expense of buying electric vehicles brings an urgency to work with the bus and train providers to improve and enhance the supply of affordable public transport; shared transport and active travel routes need to be readily available. There is widespread support in the community for these kinds of policy initiatives, residents need to be assured by local authority actions that they are being actively pursued.

Yes. Strategic theme 3 on land use and agriculture is pretty thin, with an emphasis on tree planting. Its first point about promoting tree planting initiatives across the district is fine as far as it goes, but reference should be made to White Rose Forest and supporting its current action plan and any subsequent iterations. In the remaining two points there is no reference made to nature depletion, which is part of the same climate problem, nor to nature recovery specifically. Since this is a strategy document, from which action plans emerge, then care is needed to make sure nothing is missed, and I think nature recovery is not getting the attention needed in this strategy document. I am recommending that there is an explicit commitment to support, and facilitate, nature recovery, and work in partnership with organisations (eg. White Rose Forest; Yorkshire Wildlife Trust; North Yorkshire Local Nature Partnership; Northern Upland Chain LNP, of which Nidderdale AONB is a part; Yorkshire Peat Partnership; Woodland Trust; Zero Carbon Harrogate; Long Lands Common; etc.) towards that aim of nature recovery. Just as one example (not mentioned in the draft strategy), that our district has significant peatlands (within Nidderdale AONB, and part of the Northern Upland Chain LNP), and these peatlands need to be brought into brought into correct management, repairing the damage that has been done to them. Peatlands are massively important carbon sinks and it is crucial the carbon stays where it is. Damaged peatlands emit carbon. Well managed peatlands store carbon. Northern Upland Chain LNP does have a peat strategy, so does DEFRA. These should be referred to in our district's carbon reduction strategy, with a commitment to help in any way possible. Example wording: HBC will support and help facilitate nature recovery. The UK has, for long standing historic reasons, a very nature depleted landscape, which makes the UK more vulnerable to the effects of climate change. Nature recovery is as essential as decarbonising the economy in resolving the climate crisis. This is because greater biodiversity means ecosystems services, which regulate the natural environment, as well as delivering primary production and nutrient recycling, are more resilient and have greater capacity to deliver their services, such as metabolising atmospheric carbon back into the landscape, helping with flood management, and improving air, soil and water quality. Strategic theme 5, influencing new development, I cannot see anything there about blue green infrastructure (BGI), and I think there should be. Words to the effect that any development (new build, and/or upgrading/replacing existing infrastructure) must apply BGI principles for resilience, to be able to handle the greater amounts and rates of precipitation; also to mitigate the urban heat island effect; there is also a well-being aspect BGI brings to the urban environment.

The CO2 production by the Allerton Park incinerator, the largest producer in HBC is not fully addressed. Waste minimisation has to be the most important way forward. The continued applications by Harrogate Spring Water to increase the size of their bottling plant must be seen as counter to any attempt to move to carbon neutrality. They are a plastic bottle producer - all aspects of this technology produce both CO2 and waste materials (see comment above about AP incinerator). Finally, giving all residents up to date and accurate information about how they can reduce emissions would be very valuable. In particular all residents need to be aware that buying most things is

exporting the emissions produced by that item abroad. Continuous growth on a finite planet is not possible and this message must be made often.

Expansion of public transport provision with more places served including areas outside of Harrogate, and a greater frequency of service. Improved fare structures to encourage visitors to the town centre would also help to reduce car traffic.

Need to encourage every aspect of recycling. Need to consider carbon footprint of all aspects of waste management including moving to zero burning of waste and changing collection lorries. Need to support every attempt of households and businesses to move to renewables. Encourage businesses to keep doors self-closing at end of pandemic.

Reporting targets and implementation (8 comments)

A dashboard of progress towards each strategy in the HBC website could demonstrate greater transparency on progress made vs needed.

Auditing local services and facilities to discover gaps in local provision which if filled can reduce the need to travel. In terms of car use, there may need to be disincentives to the use of inefficient vehicles (e.g. SUVs) as well as incentives to use ULEVs. Differential car park charges for example, or on-street parking that is only for smaller vehicles?

I've looked at a couple of other councils' strategies and note these examples. There must be many more. - buy only renewable electricity - awards programme for projects tackling climate change - Identify potential for renewable energy generation on public sector land and set a 2025 target and these from Cheltenham The Harrogate Standard, a visionary statement for setting a benchmark for low-carbon living Lead by Example, a programme of demonstration projects to help break down barriers to the adoption of zero carbon solutions Community Engagement, building capacity for local people to be fully involved Climate Champions, inspiring communities and enterprises to find new solutions Zero Carbon Hubs, decentralised futureproof centres promoting zero emission mobility a competition for developers to demonstrate leadership and innovation to build carbon positive The draft strategy generally covers the ground, but it is the depth of coverage rather than the scope which makes it totally inadequate. One area which it fails to cover is the need for much greater attention to the generation of renewable energy. The framework provided by the local plan in this respect is totally lacking, Every property owner potentially has a role to play here, and larger scale developments to generate electricity should be being attracted by the policy of the local authority, not put off by an absence of a local policy. Otherwise, I fully support the response of Zero Carbon Harrogate, which I feel does a very thorough job in highlighting in some detail the shortcomings of the draft strategy.

Most of the opportunities seems to be covered, but upon reading the strategy it could apply to anywhere. One does not get the feeling that it relates to the Harrogate district. It comes over as a generic document, and the problems and opportunities relating to Harrogate need to be clearly brought out.

Carbon capture and replacement strategies. More long term solutions to reduce car use for short journeys such as school runs, especially from new housing

Using local nature spots (8 comments)

Could the River Nidd provide some hydro electric power? There are several old weirs along the stretch from Birstwith to Knaresborough (and no doubt elsewhere) that could be restored to provide a suitable site for small hydro power points.

Develop the importance of the ancient Royal Forest of Knaresborough being in the developing White Rose Forest The forest area embraces 16 free woodland walks ideal for residents well being

Quicker and more extensive tree planting; encouraging more people to walk in the area (maybe a footbridge from horseshoe field to the north side of the Nidd would allow people to walk further without having to use a car or walk along the busy Ripley road to Nidd Gorge as one example); dedicated cycle lanes are still pathetically non existent rendering cycling dangerous; roads are full of Speedo g traffic - introducing slow roads in the cities could reduce pollution (put bumps on York place in Knaresborough for eg and reduce the speed limit here to 20 mph). Theme 3: Yorkshire is blessed with peat moorlands. These are one of our most valuable carbon sinks. The management and improvement of our peat wetlands should be included in this strategy.

Yes. Nature recovery will increase biodiversity. This in turn will make ecosystems services more resilient, and they will have greater capacity to deliver their regulating services, which metabolise carbon back into the landscape, as well as helping with flood management.

Working with stakeholders (6 comments)

Auditing local services and facilities to discover gaps in local provision which if filled can reduce the need to travel.

more partnership working to move food to have a lower carbon footprint(eg school meals), increase carbon lock up in land(farming practices), better public transport to encourage people not to use cars/taxis to move to EVs by licence conditions etc. You just can't get hold of some trades to move housing to lower carbon(eg gas to elec, heat pump etc) so working with training for numbers and technical skills to do it cheaper

HBC could provide relevant information to the public about consumption emissions to help residents stop exporting around half of current emissions to the places where the stuff we buy is manufactured (often China and other countries in the Asia).

International action (1 comment)

By comparison with China and China we are going too much.

APPENDIX C: REFERENCES

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