

Kirklees Council

Kirklees Climate Change Action Plan



FOREWORD

Welcome to our Climate Change Action Plan. This plan sets out our ambitions for the area of Kirklees in reaching the aim of becoming 'Net Zero and Climate Ready by 2038'.

Ever since we declared a Climate Emergency in 2019, the Council has been completing 'Phase 1' of our climate response – which has involved implementing measures to reduce both the Council's own operational emissions and the emissions from Kirklees as a whole. This Action Plan begins our 'Phase 2' response, outlining an integrated and collaborative approach to climate change, building on phase 1 work to reach our ambitious target.

This is a plan for climate change mitigation and adaptation, which covers a wide range of sectors across the district, linking with and addressing other existing Council plans and strategies such as the 'Clean and Green' shared outcome within Our Council Plan, our 'Resources and Waste Strategy' and our 'Air Quality Action Plan'.

Although it is a global issue, we have and will continue to experience the impacts of Climate Change locally in Kirklees, through events such as floods, wildfires, and heatwaves. As a result, we must not develop 'net-zero tunnel vision' and ensure that we are also 'Climate Ready', meaning that we are prepared and able to reduce, absorb and quickly recover from the negative consequences of climate change.

Local, collaborative climate action by all is essential to protect our environment and livelihoods for future generations. This action plan does not just outline actions for Kirklees Council, but measures that can be adopted by residents, businesses, agencies, organisations, and partners alike, as we all must be on this journey to a Net Zero and Climate Ready future, together.

Throughout the development of this Action Plan, we have engaged with and listened to residents and external partners, through surveys and workshops. We will continue to work with our allies as this plan is both developed further and ultimately delivered to ensure it is reflective of the diversity and unique characteristics of Kirklees.

Although the focus of this plan is to deliver actions that can reduce our greenhouse gas emissions and increase our resilience to the impacts of climate change, it also outlines the many co-benefits; social, economic, and environmental, that these actions can provide Kirklees. This is particularly pertinent due to the current cost of living crisis, the impacts of which could be reduced in a low to zero carbon Kirklees, through greater use of renewable energies reducing our reliance on natural gas, more energy-efficient homes bringing our energy bills down and a greater uptake of active or public transport options, reducing our reliance on diesel and petrol cars.

A low-carbon and resilient future is not the preserve of 'the few', but the right of everyone in Kirklees. It is our priority to ensure that the actions we suggest are realistic, pragmatic, and accessible, so that everyone, regardless of background can benefit from their outcomes. Furthermore, we will strive to educate, inform, and upskill our residents, giving you a helping hand in making the changes required to achieve our collective goal.

I invite you to join us on this path to a low emission and resilient future and allow us to lead the way locally in addressing this global issue.

Councillor Will Simpson

Cabinet Member for Culture & Greener Kirklees



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DRAFT

EXECUTIVE SUMMARY

This Climate Change Action Plan (CCAP) presents Kirklees Council's approach as to how the district of Kirklees can achieve its ambition to be Net Zero and Climate Ready by 2038.

In its creation, Kirklees Council has engaged with a diverse range of individuals and organisations from across the district to feed in the diverse range of perspectives and backgrounds from across the Borough.

Achieving this vision is not easy. Climate change is not restricted by jurisdictional boundaries, and neither is the solution. There is a reliance upon national level policy and a UK wide transition to Net Zero and becoming climate ready to truly see a comprehensive impact on both our emissions and our resilience to the impacts of climate change.

Kirklees Council is proud to present this action plan and are determined to lead the way in achieving our 2038 targets. However, the Council's determination to be net zero and climate ready by 2038 will not achieve this target by itself. This will only be achieved through a genuine collective effort by all organisations, businesses, and residents across the district.

This document is also a call for action, to those people who live, work, visit and invest in Kirklees, to join the Council in this exciting period of necessary transformation.

What the CCAP for Kirklees IS:

- The first step in our action planning journey and will be followed-up by a more 'detailed' action plan, outlining place-based priority actions that are accompanied with more specific details of required finance and expected emission reductions.
- An attempt to set out a list of 206 actions that could be put in place within Kirklees to achieve Net-Zero and Climate Ready by 2038, centred on an evidence base and public engagement.
- Built on an understanding that Kirklees can only achieve its targets if organisations, individuals, institutions, agencies, and regional and national government take responsibility and play their part.

What the CCAP for Kirklees IS NOT:

- **Perfect.** This is the Council's first iteration of the plan, developed through engagement across the district and informed by a comprehensive evidence base. A monitoring and evaluation strategy will be put in place with an expectation that this plan will evolve, based on further engagement activities and continuous feedback.
- **The only action plan within Kirklees.** It is acknowledged that other organisations will continue to have their own plans and strategies and that this plan should complement and enable those.
- **A list of firm commitments or instructions.** This plan sets out actions that can be taken by Kirklees Council, key partners, and members of the wider community to help deliver the districts net zero and climate ready target. It relies on a collaborative effort from these organisations and individuals to decide if, what and how they will change their own activities to help achieve a shared climate ambition. A firm list of commitments will be provided in Action Plan V2 (see pg. 18)
- **A Barrier:** This action plan is not intended to impose rules that stifle innovation and other work occurring across the district.

INTRODUCTION

This Climate Change Action Plan (CCAP) for the district of Kirklees, outlines Phase 2 of Kirklees Council's response to the Climate Emergency declared in 2019. Building on the work completed by Kirklees in Phase 1 of climate action, this plan sets out the district's aspirations to help address both climate change mitigation, by reducing carbon emissions and climate change adaptation, by improving the districts resilience to the impacts that a changing climate will incur.

In collaboration with stakeholders from across the district, this action plan is a call for action. It sets out the scale of the climate change challenge, a list of likely actions that will need to be taken and by whom, as well as highlighting the co-benefits that can be achieved by the actions outlined.

This action plan is a major strategic programme for the district and forms an important part of the Council's overarching 'Clean and Green' shared outcome within 'Our Council Plan 2021/23'¹.

"It is time for Kirklees to step up and show it believes in improving our environment and dealing with the climate emergency" (Political voice)

VISION AND PRINCIPLES

The overarching aim of this action plan is to set out the initial pathway to achieve Kirklees' Climate Vision of:

A Net Zero and Climate Ready Kirklees by 2038

To support this, the following five principles have been adopted in the development of the action plan:



Flexible

This strategy will evolve and adapt, monitoring, evaluating, and learning as it progresses.



Shaped by People

All residents and businesses within Kirklees are allies, with rights and responsibilities to deliver this strategy for Kirklees, working inclusively to ensure all aspects of Kirklees society are well represented.



Fair

Achieve a just and equal transition to our net Zero and Climate Ready future, highlighting co-benefits to be realised.

¹ Kirklees Council. 2021. *Our Council Plan 2021.23*. [Online] [Last accessed 1st June 2022] Available from: <https://www.kirklees.gov.uk/beta/delivering-services/council-plan.aspx>



Evidence based

Action will be rooted in a robust evidence base, utilising collective knowledge, and understanding to interpret and analyse how current systems and future actions are and will perform.



Mitigation and Adaptation focused

Developing actions that specifically contribute to Kirklees' Net Zero and Climate Ready by 2038 commitment.

“Make sure this vision is embedded in every aspect of life in Kirklees as a matter of urgency and importance” (Resident voice)

THE EMISSION REDUCTION TARGETS

The overarching mitigation target for Kirklees is to be:

‘Net-Zero by 2038’

Why 2038?

In August 2019, the Tyndall Centre for Climate Change Research produced a report for Kirklees Council outlining recommended climate change targets based upon the commitments in the 2015 Paris Agreement to stay “well below 2°C and pursuing 1.5°C” for global temperature rise, informed by climate science and defined in terms of science-based carbon budget setting.

This report recommended that Kirklees aim to “reach zero or near zero carbon no later than **2041**.”

Following the report from the Tyndall Centre, Kirklees set a more ambitious target to reach net-zero by 2038, aligning with both the West Yorkshire Combined Authority’s target, and the regional target for Yorkshire and Humber set by the Yorkshire Leaders Board.

In 2021, Kirklees Council commissioned the Place-based Climate Action Network team, based at the University of Leeds, to undertake a ‘Net-Zero Carbon Assessment’ for the district. This report outlined the science-based emission reduction pathway to achieving net-zero (see Table 1 below).

To stay in-line with this emissions pathway, Kirklees district will adopt the following, science-based, ‘stepping-stone’ carbon reduction targets (against baseline levels from 2000).

Table 1: Kirklees' Emissions Pathway to Reach Net-Zero - Adapted from 'A Net-Zero Carbon Assessment for Kirklees' (Gouldson et al., 2021).

Year	Target for Emissions Reduction
By 2025	63%
By 2030	78%
By 2035	87%
By 2040	92%
By 2045	95%
By 2050	100%

It is important to acknowledge that these stepping-stone targets are Kirklees-wide and that some areas within Kirklees will have a greater scope and opportunity, therefore a greater responsibility, to reduce carbon emissions than others, depending on relevant economic factors.

To achieve 'Net-Zero by 2038', Kirklees will may also be required to manage any residual emissions remaining after all planned actions have been implemented. This will be adopted as a last resort and may typically involve offsetting, which is a complex issue with challenges around fairness, financing, interventions, and carbon accounting - all of which will be considered in more detail as the district progresses towards to 2038.

All emission reporting and target setting for Kirklees is using CO₂ equivalent data.

Other, more qualitative sector based targets are also outlined by the 'Net Zero Carbon Assessment', found here: [A Net-Zero Carbon Assessment for Kirklees - A Technical and Economic Options Appraisal](#).

THE ADAPTATION TARGET

Kirklees' target for Climate Change Adaptation is to be:

Climate Ready by 2038.

Kirklees accepts that the large proportion of climate emissions released into the atmosphere by human activity are 'locked in', the consequence of which is already being felt by communities within Kirklees, the UK and across the world.

It is important that Kirklees therefore understands the impacts and opportunities climate change presents to the communities and business within the district, whilst developing measures that can be collectively implemented to protect the most vulnerable residents, alongside reducing the economic, environmental, and broader social impact that will be experienced. The risks facing Kirklees and its communities are outlined in the 'Climate Change Risk and Vulnerability Assessment (CCRVA)', which you can read on the Climate Emergency website [\[Insert link here once live\]](#).

ALIGNING WITH EXISTING STRATEGIES, PLANS AND TARGETS

In the development of this action plan, wherever possible, Kirklees Council has identified and aligned targets with existing government strategies and plans at a local and regional level.

Our Council Plan 2021 – 2023

Launched in 2021, 'Our Council Plan' sets out the Council's Vision, Approach and Values to be a place which combines a strong sustainable economy with a great quality of life.

Of the 9 shared outcomes detailed, the most relevant to this action plan are the shared outcomes for 'Clean and Green', 'Sustainable Economy' and 'Shared by People'. [Read the Our Council Plan 2021/23 | Kirklees Council.](#)

Kirklees Waste & Resources Strategy 2021 – 2030

Kirklees Council launched its Waste & Resources Strategy in 2021, setting out our ambitions for "a clean, green, sustainable future for Kirklees with zero waste to landfill and where waste is valued as a resource through re-use, recycling, and recovery."

Key targets from this strategy include:

- Achieve a recycling rate of at least 55% of collected municipal waste by 2025.
- Achieve a recycling rate of at least 70% at our Household Waste and Recycling Centres by 2025.
- Achieve 90% diversion from landfill by 2026.

[Read the Kirklees Resources and Waste Strategy 2021 and beyond](#)

Kirklees Air Quality Action Plan (AQAP) 2019 - 2024

Produced as part of Kirklees' duty to Local Air Quality Management, this plan outlines the action that will be taken by the Council to improve air quality in Kirklees between April 2019 – March 2024. This includes, but is not limited to:

- Alternatives to private vehicle use
- Promoting low emission transport
- Public information, and.
- Policy guidance and development control.

[Read the Kirklees Air Quality Action Plan.](#)

White Rose Forest Action Plan 2021 – 2025

As one of England's Community Forests, the White Rose Forest is part of the largest environmental regeneration initiatives in England. Kirklees Council is the accountable body and, with support from the Community Forest Trust and other partners, manages a small core team to provide support and continuity across the partnership

Key targets for the White Rose Forest Partnership include:

- Plant 7 million trees across the North and West Yorkshire region.
- Increase total tree cover by 3500ha across the region.

[Read the White-Rose-Forest-Action-Plan-2021-25.pdf \(whiteroseforest.org\)](#)

West Yorkshire Climate and Environment Plan 2021 – 2024.

The combined authority declared a climate emergency for the West Yorkshire region in 2019, with a vision of “Growing our economy while cutting emissions and caring for our environment”.

This declaration included an ambition to become a “Net Zero carbon economy by 2038” and resulting in the publication of the WY Climate and Environment Plan 2021 – 2024. Within this plan, WYCA portrays their emission reduction pathway to 2038, whilst outlining a “Climate Ready” objective for climate adaptation.

[Read the west-yorkshire-climate-and-environment-plan.pdf \(westyorks-ca.gov.uk\)](#)

Targets from National Government

The UK national government has enshrined in law, a climate change mitigation target of achieving Net Zero by 2050, which is compatible with the Paris Agreement of limiting global warming to 1.5°C. In line with the UK Government’s Net Zero Strategy², by 2035, Kirklees will be required to contribute to achieving the following targets:

Powered entirely by clean electricity.

- To support the transition to low emission transport, the number of publicly available electric vehicle charging points will increase.
- Improve the energy performance of existing residential properties, to at least EPC Band C.
- Improve the energy performance of non-domestic buildings, supporting the standard of EPC Band B for rented commercial buildings by 2030³.

From an adaptation perspective, the government outlines its response to the second Climate Change Risk Assessment (CCRA) via the second National Adaptation Programme (2018 to 2023)⁴ with an overarching aim to achieve: “A society which makes timely, far-sighted and well-informed decisions to address the risks and opportunities posed by a changing climate”

² Department for Business, Energy and Industrial Strategy. 2021. *Net Zero Strategy: Build Back Greener*. Available from: <https://tinyurl.com/sjkbc23>

³ Department for Business, Energy and Industrial Strategy. 2020. *The Energy White Paper: Powering our Net Zero Future*. Available from: <https://tinyurl.com/wm27exnh>

⁴ Department for Environment Food & Rural Affairs. 2018. *The National Adaptation Programme and Third Strategy for Climate Adaptation Reporting*. Available from: [national-adaptation-programme-2018.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/national-adaptation-programme-2018.pdf)

BACKGROUND AND APPROACH

CLIMATE EMERGENCY DECLARATION AND PROGRAMME OF WORKS

A Climate Emergency was first declared for Kirklees at the full Council Meeting of January 2019⁵, considering growing global awareness of the detrimental effects of climate change on people and the environment worldwide

The declaration resolved to undertake various immediate measures such as a completing a full Environmental Audit, explore ways to increase the recycling rate and the setting up a cross-party Councillor-led Climate Emergency Working Party (CEWP) to investigate and report back. In November 2019, a report⁶ of these findings was published, which led to the formulation of Kirklees' two-phase approach to climate change action - outlined in Figure 1 below. Further information can also be found on the Council website here: [Climate emergency | Kirklees Council](#), with a list of actions undertaken in phase 1, seen in Appendix A.

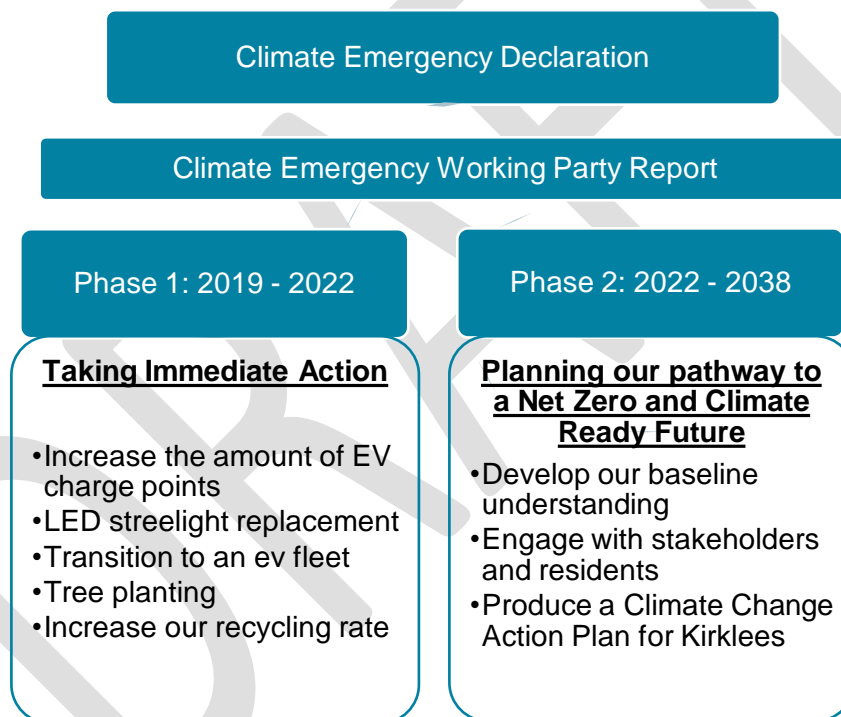


Figure 1: A flow diagram outlining Kirklees' two-phased approach to climate action planning, in response to the climate emergency declaration in 2019.

⁵ Kirklees Council. 2019. *Council and Democracy – Agenda Item: Motion Submitted in Accordance with Council Procedure Role 14 as to A Climate Emergency in Kirklees*. [Online] [Accessed on 27th July 2022]. Available from: <https://democracy.kirklees.gov.uk/mgAi.aspx?ID=10123>

⁶ Kirklees Council, 2019, *Climate Emergency Declaration and the Kirklees Air Quality Strategy and Five Year Air Quality Action Plan*. [Online] [Accessed on 27th July 2022]. Available From: <https://democracy.kirklees.gov.uk/documents/s32319/Item%207%20Kirklees%20Climate%20Emergency%20Report%20002.pdf>

WHY WE MUST ACT

“Just do everything you can to bring the dangers of climate change to everyone’s attention” (Resident voice)

Human activities are estimated to have caused approximately 1°C of global warming above pre-industrial levels, which is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate⁷.

We are already experiencing devastating impacts of 1°C warming, which is only expected to get worse. The science is clear: we need urgent action to reduce our global carbon emissions to limit temperature rise to below 1.5°C, preventing disastrous impacts in the longer-term.

Kirklees has already experienced impacts on the natural and human systems through increased moorland fires, flood events and storms. Climate related risks will impact Kirklees’ health and wellbeing, infrastructure, culture, leisure, and tourism, alongside housing and buildings, waste and water infrastructure and local biodiversity. These impacts will occur more often and become harder-hitting if emissions continue to rise, being experienced more keenly by the most vulnerable, disadvantaged, and marginalised groups within Kirklees.

It is vitally important that Kirklees acts to simultaneously reduce emissions and plan to reduce the impacts the district will experience because of a changing climate. This action plan provides the way forward for Kirklees to respond to this climate emergency, setting out the target and first step approach to delivering a net zero and climate ready society in advance of the national ambition.

Taking this integrated approach will enable Kirklees’ climate action to achieve so much more than net-zero emissions and a climate ready district, but in-fact achieve several social, environmental, and economic benefits. Working together as a district to take climate action can help improve public health, develop green skills and jobs, create a more equitable society, enhance public services, and reduce the cost of living.

PURPOSE OF THE ACTION PLAN

The purpose of the Action Plan is to build on the progress and actions made as part of Phase 1. It aligns with the approved recommendations made within the November 2019 Cabinet Report on the Council’s response to its Climate Emergency declaration, made in January 2019, in relation to ‘Carbon Reduction’, ‘Carbon Offsetting’ and ‘Adaptation’.

Furthermore, as a member of the Carbon Disclosure Project (CDP) and signatory of the Global Covenant of Mayors (GCoM), Kirklees is required to adhere to international best practice action planning, as outlined in CDP Cities 2022 Reporting Guidance, the GCoM Common Reporting Framework and C40 Cities Climate Action Planning Guidance.

⁷ IPCC. 2018. Summary for Policy makers. [Online]. [Accessed 24th July 2022]. Available from: [Summary for Policymakers — Global Warming of 1.5 °C \(ipcc.ch\)](https://www.ipcc.ch/summary-for-policy-makers)

DEVELOPING THIS ACTION PLAN

This action plan is being developed by combining a technical, data driven evidence base with extensive stakeholder engagement involving public, private, and third-party allies within Kirklees.

The below Figure 2 outlines both the steps taken and the upcoming journey in the work required in the Councils climate action planning process.

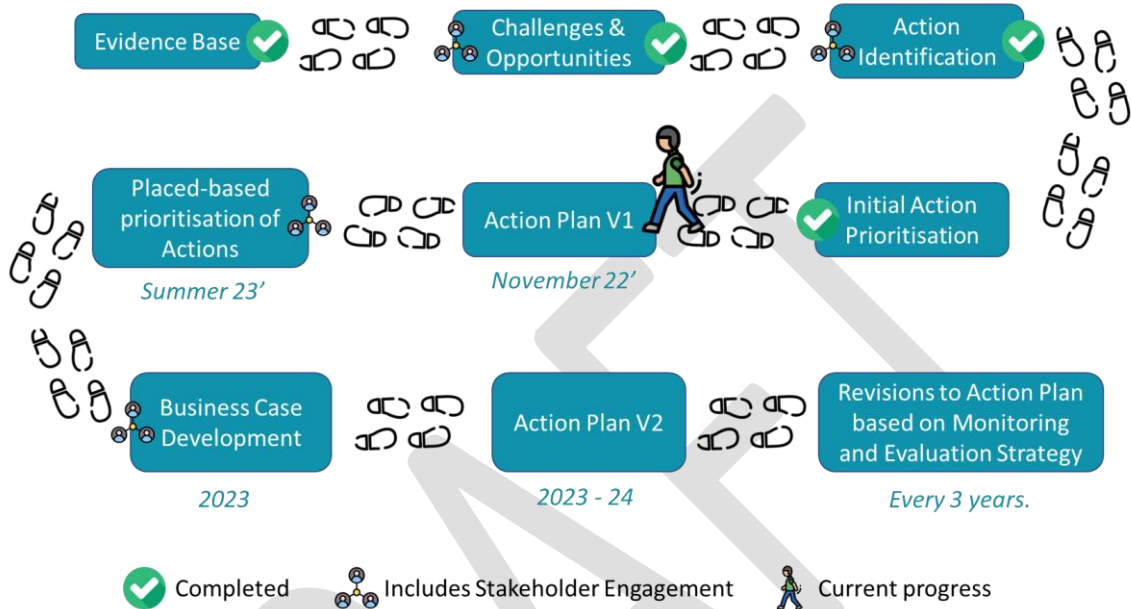


Figure 2: Kirklees' journey to an integrated Climate Action Plan

EVIDENCE BASE

A robust evidence base has been established to help inform the development of the Kirklees Climate Action Plan, consisting of the following components:

- **District-wide Emission Inventory - SCATTER tool:** which outlines Scope 1, 2 and 3 CO₂ equivalent emissions for Kirklees as a district. [The tool can be accessed on the SCATTER Cities – What is SCATTER? website.](#)
- **Net Zero Carbon Assessment:** An analysis outlining the pathway of CO₂ emission reduction required for Kirklees to achieve both the local Net Zero by 2038 and national Net Zero by 2050 target. [Read the 'A Net-Zero Carbon Assessment for Kirklees - A Technical and Economic Options Appraisal' on the climate emergency website.](#)
- **Climate Change Risk and Vulnerability Assessment:** Completed by WSP Ltd, this piece of work identifies and assesses the climate related risks and vulnerabilities that Kirklees is exposed to and experiences at current, 2030, 2050 and 2080 timeframes. Read the CCRVA on the climate emergency website. [\[Insert link to the CCRVA once live\]](#)
- **Indicator Database:** A non-exhaustive suite of indicators that help paint the picture for the current “state of play” within Kirklees, from a data perspective. This is a live database, that will be updated annually as part of the action plans Monitoring and Evaluation Strategy to track the impact of the actions.
- **Political Context Report:** A summary of the current political, social, and economic context within Kirklees, alongside an outline of who has control over what in relation to each of the action sectors (as outlined in Appendix E)

CHALLENGES & OPPORTUNITIES

Through stakeholder engagement and analysis of the evidence base, several challenges, and opportunities for climate change action, in Kirklees, were identified. These can be defined as:



An issue or a barrier, that the District of Kirklees could address through its Action Plan.



Endeavouring to gain more than we lose. What are the potential gains, **economically, environmentally** and **socially** that we could take advantage of through our Action Plan.

ACTION IDENTIFICATION

To address the challenges and take advantage of the opportunities on carbon reduction, alongside tackling the key climate risks identified as part of the CCRVA, a list of actions was then developed, informed by the evidence base of the CCAP and developed through a process of stakeholder engagement.

Each of the actions were then categorised into the following pre-defined ‘action types’:



Investment



Policy



Monitoring, data collection, analysis, assessment, research, and collaboration.



Behavioural, awareness-raising and capacity-building.



Strategies, plans and programmes

Alongside being assigned to one of the following Action Owners:



Actions for Kirklees MC: Organisational activity, council policy and strategy



Actions for Wider Community: Kirklees residents



Actions for Partners: National and regional governance, procured services, key anchor institutions, community groups and businesses.



Collaborative Action: Two or more of the action owners

Where actions require collaborations between the three pre-defined action owner types, this has been identified and allocated accordingly. All “Actions for Kirklees MC” will subsequently be allocated to the appropriate service line or team specific owner.

ACTION PRIORITISATION

Once collated and categorised, the actions were then initially prioritised against a pre-defined feasibility and co-benefits assessment to understand what else the actions would provide Kirklees other than carbon reduction potential and enhancing local resilience.

This assessment and the associated criteria used is based on the best practice approach action selection and prioritisation (ASAP) tool within the C40 Cities resource centre for Climate Action Planning⁸.

For feasibility, this looks at, Authority and Ownership, Support, Financing and Funding and Technology

For benefits, this looks at, Health and Wellbeing, Environment, Economic Prosperity, Essential Public Services and Inclusivity and Civil Society.

More detail on the feasibility and benefits criteria used, can be found in Appendix C

INTEGRATED STAKEHOLDER ENGAGEMENT

Multiple stakeholder engagement techniques have been applied to inform the development of this action plan, including:

- An online resident survey, which saw 1,499 respondents across each Kirklees Council Ward over a 4-week period.
- A virtual workshop for Kirklees Council Colleagues
- An in-person workshop with the Kirklees Climate Commission.
- Attendance at all political party group meetings to engage with Kirklees Councillors, prior to internal governance processes.
- A virtual workshop for 26 external stakeholders, incorporating residents, organisations, community groups, agencies, and businesses across Kirklees.

RESIDENT SURVEY – A SUMMARY OF FINDINGS

Completed between the 16th May and the 17th of June 2022, the following sections summarise the outcomes of the resident survey. A complete analysis of the findings can be found in Appendix D.

DEMOGRAPHICS:



⁸ C40 Cities. 2022. *Action Selection and Prioritisation*. [Online]. [Accessed 27th July 2022] Available from: <https://resourcecentre.c40.org/resources/action-selection-and-prioritisation>

The survey was published online and was advertised on the Council’s website and social media channels. Responses were received from across all of the Council wards within Kirklees, but with varying uptake, with Dewsbury West seeing 22 responses compared to 101 from Holme Valley South. Together with the demographic details, this signals that there is more work to do to engage young people and ethnic minorities to hear their views, as well as parts of North Kirklees.

VIEWS ON NET ZERO AND CLIMATE CHANGE

The good news is the vast majority of residents (80%) either support or strongly support our Net Zero target (Figure 3). 11% either oppose or strongly oppose, and the reasons given for this were mostly around the cost, that it was unachievable, or denying the existence of anthropogenic climate change itself (Appendix D).

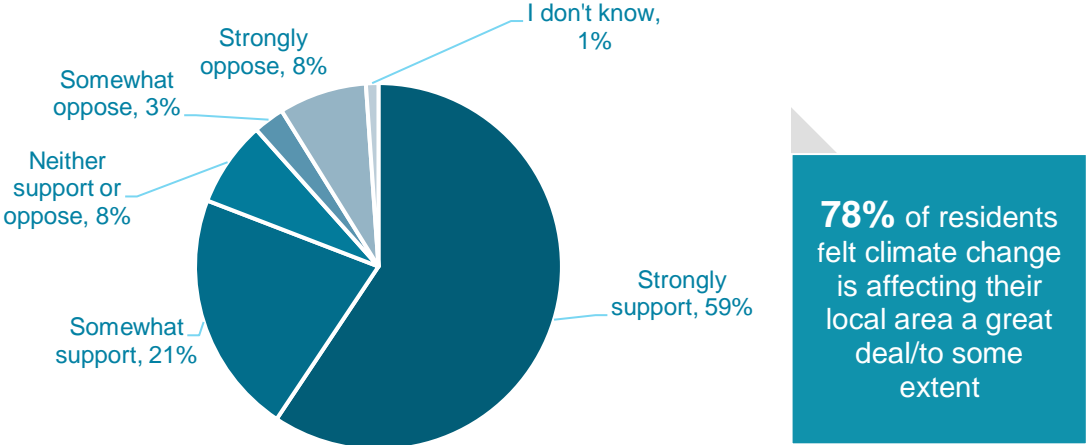


Figure 3: Resident survey response to the questions “To what extent do you support/oppose Kirklees’ Net Zero Target?”

Most respondents were concerned about climate change and felt all the institutions listed were responsible for tackling it (Figure 4). A vocal minority, as seen in the comments (Appendix D), chose to blame other countries, showing there is work to do in educating the public around historical emissions and the trend of outsourcing emissions to other countries.

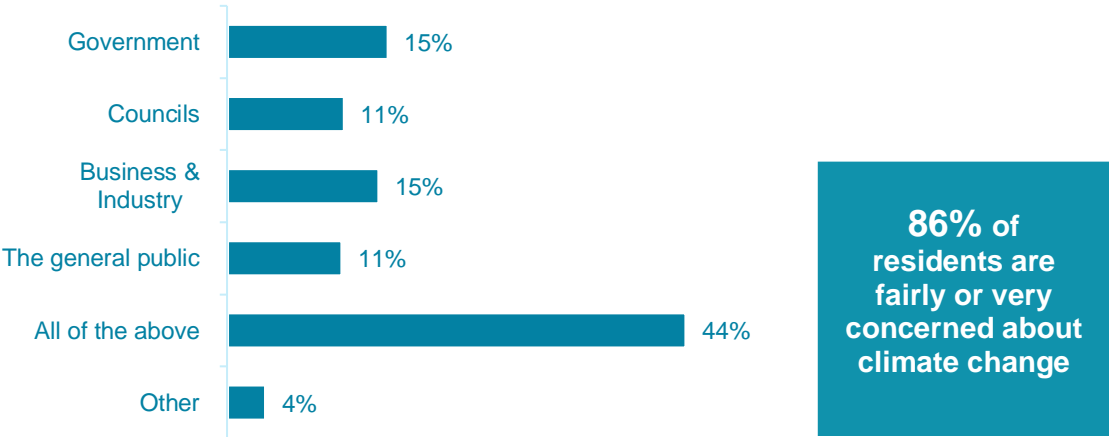


Figure 4: Resident survey response to the questions “Who do you think is primarily responsible for combatting climate change?”

CLIMATE ACTIONS AND BARRIERS

<p>Cost was the greatest barrier for residents to both improve energy efficiency (59%) and switching to renewables (71%)</p>	<p>Food was the sector with the largest proportion of people not interested (41%) in making changes to their behaviour</p>	<p>Top 3 barriers to sustainable transport:</p> <ul style="list-style-type: none"> • Lack of infrastructure (48%) • Too expensive (37%) • Poor road safety (33%) 	<p>91% of people already donate items to charity or a reuse shop, and 71% repair broken items where possible</p>	<p>58% face no barriers in reducing water usage</p>
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The rest of the survey focussed on a sector-by-sector basis of what actions (if any) residents currently undertake, and what barriers they face in acting towards further improvements. This was across Buildings (energy efficiency such as insulation), Energy (renewables), Food (eating habits), Natural Environment, Transport, Water and Waste (focus on reduce/reuse).

DO YOU HAVE ANY OTHER COMMENTS OR SUGGESTIONS FOR DEVELOPING KIRKLEES' CLIMATE CHANGE ACTION PLAN?

Certain themes and actions were popular of the 799 comments received. Several used this as a space to air climate-sceptical views and criticised the Council's approach. Full analysis of all the themes found, with examples of some of the comments received can be seen in Appendix D.

Of those comments which included suggestions of actions for the Council, the most popular are shown in the box on the right.

This illustrates the wide diversity of views across the borough and the challenge to bring everyone with us on this journey – from those sceptical on climate change and Net Zero to those who feel we are not ambitious enough in tackling climate change.

Top 5 suggestions of actions:

- Improved recycling
- Stop greenbelt development
- Glass recycling
- Better public transport
- More ambitious plan (<2038)

NEXT STEPS IN ACTION PLANNING PROCESS

Beyond the publication of this action plan, a series of future steps will be taken to continue to develop and enhance Kirklees' climate emergency response, developing a set of place-based, high priority commitments for carbon reduction and resilience building. This includes:

- **Placed based Action Prioritisation:** Stakeholder engagement with residents and organisations across Kirklees will be undertaken with the aim of coming to a final decision on prioritising which relevant climate actions best reflect the area of Kirklees' variation in characteristics regarding place, topography, and demographic.
- **Business Case Development:** Once the high-priority actions have been identified, a detailed business case for these actions will be developed. This will include a more detailed understanding of the required funding and financing.
- **Action Plan V2:** After the business cases have been developed, a second iteration of the Action Plan will be published, outlining a firm set of commitments in the form of the priority actions by place and the business cases for implementation of these actions.
- **Monitoring & Evaluation:** As outlined within the adaptation action plan, a 3 yearly cycle of monitoring and evaluation will be established for the climate change actions.

BASIS FOR THINKING

Throughout the work completed to deliver this action plan, several best practice 'basis for thinking' topics will be explored, understanding how they can help Kirklees, its business, partners, academics, and community groups, to develop a shared understanding and approach to address climate change. These are:

Circular Economy

Optimising resource use, the circular economy approach aims to increase the duration of a product's useful life, ensuring that materials are productively used, ultimately reducing waste.

By adopting circular economy principles in the appropriate actions within this action plan, Kirklees will align with Defra (Department for Environment, Food and Rural Affairs) Circular Economy package⁹.

Doughnut Economics

A way of thinking which can help tackle the complex local and global challenges of the 21st century, such as climate change, doughnut economics can form part of the bigger picture as to how Kirklees responds to Climate Change, whilst also considering other social, economic, and ecological aspects.

An example of how this thinking is being practically applied is the 'Leeds Doughnut'¹⁰,

Nature-based Solutions

Nature-based solutions (NBS) are actions that can be taken that are inspired by processes and functioning of nature. Applicable to multiple sectors and environments, from urban centres to moorlands, NBS actions protect, sustainably manage and restore natural and modified ecosystems, addressing societal challenges and effectively and adaptively, simultaneously generative multiple societal, environmental, and economic benefits.

By applying NBS within this Action Plan, Kirklees can help address the 'twin-crises' of biodiversity loss and climate change, including both emission reduction and building resilience to future hazards such as flooding, storms and extreme heat.

Planetary Boundaries

A long-standing concept outlining the nine planetary boundaries¹¹ within which humanity can continue to develop and thrive, this concept provides long-term context for what this CCAP can help to achieve, taking action that will contribute towards keeping humanity within the thresholds of the planetary boundaries.

⁹ Gov.UK. 2020. *Circular Economy Package Policy Statement. – Policy paper.* [Online]. Accessed on 27th July 2022]. Available at: [Circular Economy Package policy statement - GOV.UK \(www.gov.uk\)](https://www.gov.uk/circular-economy-package-policy-statement)

¹⁰ Climate Action Leeds. 2022. *Leeds Doughnut Economics – Welcome to the Leeds Doughnut.* [Online] [Accessed on 27th July 2022]. Available at: <https://www.climateactionleeds.org.uk/leedsdoughnut>

¹¹ Stockholm Resilience Centre. 2022. *The Planetary Boundaries Concept.* [Online] [Accessed on 27th July 2022]. Available at: <https://www.stockholmresilience.org/research/planetary-boundaries.html>

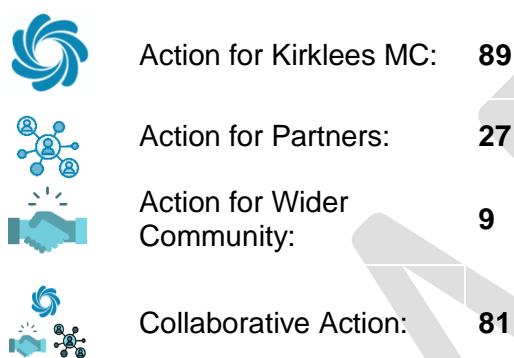
TAKING ACTION

The Climate Change Action Plan for Kirklees outlines mitigation and adaptation actions across 8 key action sectors.

For each sector, new actions have been identified with the following details: 'Action I.D', 'Action Title', 'Action Owners', 'Action Type', 'Mitigation (M) or Adaptation (A)', 'Timeframe for Delivery' and 'Co-Benefits'.

The total number of new actions outlined within this CCAP is **206**. Within each sector, 37 'headline themes' have been identified, under which the associated actions have been grouped.

Split by action owners, this equates to:



A complete list of actions by owner, can be found in Appendix B. Figure 5 shows the total number of actions split by action type:

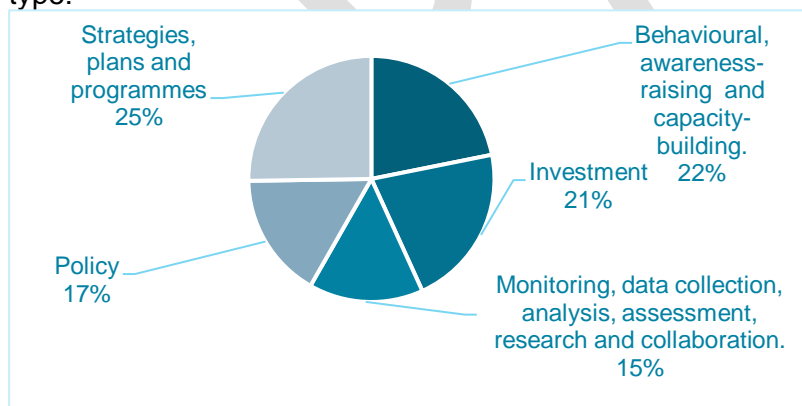


Figure 5: All CCAP actions by action type.

For a non-exhaustive list of existing or on-going climate related actions, please refer to Appendix A. This outlines several actions undertaken within Phase 1 of Kirklees Council's Climate Emergency response. It includes some but not all on-going or completed actions being implemented by partners and the wider community within Kirklees.

Action Sectors

Buildings

Energy

Natural Environment & Biodiversity

Sustainable Food and Agriculture

Transport

Waste

Water

Cross-cutting

Action Timeframe

Short-term: 0-5 yrs.

Medium-term: 5-10 yrs.

Long-term: 10+ yrs.

Co-Benefits

Health & Wellbeing 

Environment 

Economic Prosperity 

Essential Public Service 

Inclusivity and Civil Society 

For definitions of co-benefits please see Appendix C



BUILDINGS

The actions outlined in this section portray a way forward to reduce emissions and increase the resilience of Kirklees’ building stock. Covering both residential, commercial, and public buildings and with a considerable overlap with the energy sector, buildings are the second highest emitter of greenhouse gas emissions for Kirklees but with the largest emission reduction potential.

Taking steps to improve the energy efficiency of our buildings will both increase the resilience of residents to the impacts of climate change, such as overheating from heatwaves and hot spells, whilst generating numerous co-benefits, for instance, helping to reduce the cost of living and both providing and enabling more affordable better-quality housing for residents.

“We must have a huge increase in retrofitting, whilst building new houses fully insulated” (Resident voice)





<p>Climate Emissions:</p> <p style="text-align: center;">632,717.72 tCO₂e</p> <p><i>(SCATTER 2019 – Scope 1, 2 & 3, stationary energy - residential, commercial, and public buildings)</i></p>	<p>CCRVA Key Climate Change Risks:</p> <ul style="list-style-type: none"> • Overheating of buildings. • Increased requirement for retrofitting properties with cooling systems. • Risk to household energy demands from increased cooling/heating requirements. • Increase in risk of condensation, damp, mould growth, mildew and staining of buildings. • Changes in ground water levels. • Increase in risk of subsidence.
<p>Key Opportunities:</p> <ul style="list-style-type: none"> • Cost savings and reduced energy usage due to reduction in energy demand for heating in households • Reducing energy poverty across Kirklees • Improved solar PV gains and increase in uptake with the opportunity for upskilling from demand for retrofitting • Developing green skills and jobs for energy efficiency retrofitting. 	<p>Key Challenges:</p> <ul style="list-style-type: none"> • The power to implement energy efficiency measures sits with a landlord or the property is physically unsuitable for retrofit measures. • Apparent lack of available, trained / trusted companies for implementing changes to properties. • Upfront cost of energy efficiency measures with lack of financial support available. • Balancing the loss of green belt land and mature trees with the economic and social demand for new residential and commercial development as we progress towards 2038. • The reliance on national planning policy and buildings regulations to match net zero and climate ready ambitions.















The following objectives have set to help the building sector achieve the overall goal of Net Zero and Climate Ready by 2038:








- **Objective 1:** Significantly reduce carbon emissions and the energy consumption (heat and power) of buildings within Kirklees.
- **Objective 2:** Enhance the resilience of our buildings to the physical impact of climate change with a focus reducing the vulnerability of occupants.









In total, the CCAP process identified **37** Actions for the building sector outlined within Table 2. Of which, **20** are mitigation focused, **9** are adaptation focused, with **8** covering both aspects. This includes **17** actions for Kirklees MC, **1** for the Wider Community, **5** for Partners and **14** for collaborative action.









Table 2: Building Sector Actions





I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
B.1	Better manage and understand our buildings							
B1.1	Complete Heat Decarbonisation Plans (HDPs) for Council corporate estate, leisure centres, business centres and schools, building on the work undertaken for the Huddersfield District Energy Network.	Action for Kirklees MC	Monitoring, data collection, analysis, assessment, research, and collaboration.	M	X			
B1.2	Evaluate building management practices and systems to prioritise operational energy saving.	Action for Kirklees MC and Partners	Policy	M & A	X			
B1.3	Examine the current building use in the Councils corporate estate to see if they are correct, outlining plans to optimise where possible.	Action for Kirklees MC	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	X			
B1.4	Develop internal Council policy to ensure all maintenance and improvements made to the Council estate need to adhere to	Action for Kirklees MC	Policy	M	X			

	best-practice energy efficiency and broader sustainability standards.							
B1.5	Complete condition surveys on all commercial buildings, sharing the data on a centralized platform to inform future action by others	Action for Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M	X	X		
B1.6	Commit to evaluating and refining current building use and management to reduce operational energy demand.	Action for Partners	Strategies, plans and programmes	M	X	X	X	
B1.7	Carry out regular inspections of assets and ensure planned and preventative maintenance takes place, specifically to gutters, drains, gullies etc. Ensure specific attention is paid to any materials susceptible to temperature extremes.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	X			  
B1.8	Consider insurance against subsidence (and other geological risks identified in site/asset facilities information, ongoing monitoring, audits etc.).	Action for Kirklees MC, Partners, and Wider Community	Investment	A	X			   
B1.9	Consider creating a district-wide register for buildings at risk of severe weather events.	Action for Kirklees MC	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	X			 
B1.10	Ensure that more severe drought events are included as a specific risk in the Asset Management Plans.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	X			  

B1.11	Ensure planned and preventive maintenance is completed to buildings, trees, other infrastructure, to minimise risk of damaged and windblown debris.	Action for Kirklees MC	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	X	X	X	
B1.12	Identify organisational assets which are anticipated to be most vulnerable to severe weather (storms, flooding, overheating) and ensure that more severe weather is included as a specific risk criterion in the relevant Business Continuity Plans and in the Asset Management review process.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	X			
B.2	Revise Kirklees planning policy to align with the ambitions of achieving Net Zero by 2038							
B2.1	Consider revisions to local Kirklees local planning policy at the next Local Plan update to require the highest energy efficiency standards, where proposal are assessed through the planning process. This relates to new-build and retrofit developments; domestic, industrial, commercial, and public buildings.	Action for Kirklees MC	Policy	M	X	X		
B2.2	Consider revisions to local planning policy at the next Local Plan update to promote climate change measures and energy efficiency improvements in listed buildings without loss of significance.	Action for Kirklees MC	Policy	M	X	X		
B2.3	Consider revisions to local planning policy at the next Local Plan update to seek to strengthen approaches to encouraging the re-use of buildings and previously developed land.	Action for Kirklees MC	Policy	M	X	X		
B2.4	Ensure Town Centre Action Plans for buildings (domestic and non-domestic) and other flagship Council master planning projects, align with the ambitions of achieving Net Zero and Climate Ready by 2038.	Action for Kirklees MC	Strategies, plans and programmes	M & A	X	X	X	
B2.5	All new residential developments on Council-owned land to be designed to the highest possible energy efficiency standard, building on the work seen by the Liversedge Pilot Project (i.e., Passivhaus)	Action for Kirklees MC	Policy	M & A	X	X	X	

B2.6	Consider revising existing planning guidance and striving to ensure new planning guidance aligns with the ambitions of achieving Net Zero by 2038.	Action for Kirklees MC	Policy	M & A	X			
B2.7	Support and guide Parish Councils to strive to ensure that Neighbourhood Development Plans reflect the ambition and actions in this Action Plan in achieving a Net Zero and Climate Ready Kirklees by 2038.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	X	X		
B.3	Retrofit the existing building stock within Kirklees to be Net Zero and Climate Ready							
B3.1	Explore opportunities to provide more financial support to vulnerable residents living in privately-owned domestic properties for energy-efficiency improvements.	Action for Kirklees MC	Investment	M & A	X	X		
B3.2	Enforce minimum energy-efficiency standards in the private rented sector, working in collaboration with relevant housing associations.	Action for Kirklees MC and Partners	Policy	M	X			
B3.3	Explore opportunities to invest in energy efficiency improvements for community buildings and schools.	Action for Kirklees MC and Partners	Investment	M		X		
B3.4	Explore opportunities to improve the energy efficiency of your home i.e., insulation	Action for Wider Community	Investment	M	X			
B3.5	Launch a programme of retrofit for council-owned domestic properties using programme such as Energiesprong (or equivalent), building on the Abbey Road project.	Action for Kirklees MC	Investment	M	X			
B3.6	Consider options for the council to work alongside the private sector to encourage / enable owners of privately-owned commercial properties to improve the energy efficiency of their assets.	Action for Kirklees MC	Monitoring, data collection, analysis, assessment, research and collaboration.	M	X			

B3.7	Commit to energy reduction and climate resilience measures in organisational assets, including demand reduction, upgrade the building insulation, decarbonising the heating and incorporating passive or active cooling mechanisms.	Action for Partners	Strategies, plans and programmes	M	X			
B3.8	Upgrade all appliances to highest possible energy efficiency when at end-of-life.	Action for Kirklees MC, Partners and Wider Community	Investment	M	X	X	X	
B3.9	Consider developing outside respite areas (shaded, open to air currents, potentially with moving water) for people who live in premises at risk of overheating.	Action for Kirklees MC	Investment	A	X	X		
B3.10	Ensure specifications for new care homes and site selection considers temperature projections, with adequate cooling, ventilation, natural internal and external shading.	Action for Kirklees MC and Partners	Investment	A	X	X		
B.4	Kirklees shall have the necessary skills and knowledge in sustainable construction and retrofit practices.							
B4.1	Working in collaboration with local educational institutions, launch a local re-training scheme for sustainable construction in Kirklees, enabling workers to adapt to the demand for skills such as energy efficiency retrofitting.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x	x	x	
B4.2	Identify the funding sources, to assign an officer to work with local developers, construction firms and education centres to develop and launch a local retraining scheme for sustainable construction.	Action for Kirklees MC	Investment	M	x	x		
B4.3	Invest in the upskilling of employees, developing the necessary skills required for more sustainable construction practices.	Action for Partners	Behavioural, awareness-raising and capacity-building.	M	x	x	x	
B4.4	Develop a database of local tradespeople and resources that Kirklees residents and organisations can utilise to make homes/businesses more energy efficient.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x			

B4.5	Include greater climate change assumptions into EA information sources that are used in the planning process. Expand on existing liaison with EA.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	A	x			
B.5	Support and showcase best-in-class energy efficiency projects within Kirklees							
B5.1	Through the most appropriate mechanisms, i.e., planning provision, publicity or investment, support innovative building schemes and developments within Kirklees.	Action for Kirklees MC	Investment	M	x	x	x	
B5.2	Strive for new developments to achieve the highest possible energy efficiency standards.	Action for Partners	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	
B5.3	Publicly share and advertise case studies of energy efficiency and best-in-class developments.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x	x	x	



ENERGY

The actions outlined in this section portray a way forward to reduce emissions from and increase the resilience of the energy sector in Kirklees. Covering the generation of grid-supplied energy, and locally produced renewable electricity, with a considerable overlap with buildings, energy is the third highest greenhouse gas emitter for Kirklees, with a predominant reliance on the transition of the national grid to renewable energies to become Net Zero.

Taking steps to transition our energy to green and clean sources will heighten Kirklees' energy independence, increase resilience to the climate risks, whilst generating numerous co-benefits, including, reducing energy bills and associated energy poverty, and increasing access to green skills training and programmes on renewable technologies.

“All planning consents for new builds should make it compulsory to have solar or wind power. All extensions should have planning permission to include green energy” (Resident voice)

Climate Emissions:

441,565.16 tCO₂e

(SCATTER 2019 – Scope 1, 2 & 3, stationary energy - industrial buildings & facilities, fugitive emissions, and generation of grid-supplied energy – electricity-only generation, local renewable generation)

Key Opportunities:

- Increased generation from solar energy.
- Innovations around green hydrogen.
- Reducing energy poverty across Kirklees
- To couple the installation of renewable energy technologies on domestic properties with battery storage and energy efficiency retrofit.

CCRVA Key Climate Change Risks:

- Damage to energy assets (e.g., wind turbines, energy plant structures, reservoirs).
- Risk of gas supply infrastructure failure.
- Loss of external power supply.

Key Challenges:






- Absence of incentives and funding for renewable energy technologies for either new developments, private homeowners, or commercial interests.
- The cost of renewable technologies for domestic properties and an understanding of what is available and suitable for installation.
- The rising cost of energy bills and energy poverty.
- The limitations and constraints of energy generation and distribution infrastructure, such as lack of capacity to meet demand.
- Perceived lack of available, trained / trusted companies to install renewable technologies
- Unable to have smart meters due to location of electric meters.















The following objectives have set to help the energy sector achieve the overall goal of Net Zero and Climate Ready by 2038:









- **Objective 1:** Increase local renewable energy (heat and power) generation, diversifying our supply
- **Objective 2:** Enhance the resilience of our critical energy infrastructure.

In total, the CCAP process identified **21** Actions for the energy sector outlined within Table 3. Of which, **11** are mitigation focused, **2** are adaptation focused, with **8** covering both aspects. This includes **9** actions for Kirklees MC, **6** for Partners and **6** for collaborative action

Table 3: Energy Sector Actions

I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
E.1	Revise Kirklees planning policy to align with the ambitions of achieving Net Zero by 2038							
E1.1	Explore opportunities for renewable generation are identified in future iterations of the Kirklees Local Plan and Our Council Plan.	Action for Kirklees MC	Strategies, plans and programmes	M	X	X		
E1.2	Consider revisions to Kirklees local planning policy at the next Local Plan update about a potential requirement for new developments within Kirklees to complete an options assessment for renewable energy (heat and power) generation and storage.	Action for Kirklees MC	Policy	M	X	X		
E1.3	Consider revisions to Kirklees local planning policies at the next Local Plan update to encourage the development of renewable generation, aligning with the findings of a Local Area Energy Plan.	Action for Kirklees MC	Policy	M	X	X		
E1.4	Ensure Kirklees Council are involved in lobbying, review and development of new national and regional energy-related policies, plans and regulations.	Action for Kirklees MC	Policy	M	X	X	X	
E.2	Invest in renewable and zero carbon energy technologies							
E2.1	Complete a Local Area Energy Plan for Kirklees, working in collaboration with neighbouring authorities where appropriate.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M	X			

E2.2	Transition council-owned and operated buildings and schools to use locally generated low and zero carbon sources of energy (e.g., solar PV and district heat networks such as HDEN), coupled with appropriate storage mechanisms, where feasible, informed by the LAEPs and HDPs.	Action for Kirklees MC	Investment	M	X	X	X	 
E2.3	Support the development of solar farms and the installation of PV panels on buildings throughout Kirklees (where appropriate).	Action for Kirklees MC	Investment	M & A	X	X	X	  
E2.4	Switch to renewable energy tariffs and investigate options for on-site renewable energy (heat and power) generation and storage	Action for Partners and Wider Community	Investment	A	X	X		
E.3	Kirklees shall have the necessary skills and knowledge in renewable energy technologies							
E3.1	Working in collaboration with local educational institutions, launch a local re-training scheme for renewable energy technologies in Kirklees, enabling workers to adapt to the demand for skills.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	X	X		 
E3.2	Compile a library of appropriate "Toolbox talks" that can be utilised by contractors to upskill employees.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	X			
E3.3	Host drop-in Energy Advice Centres for residents within Kirklees	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	X			 
E3.4	Encourage and support supply chain upskilling in the Local Government Authority.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M		X		 
E3.5	Invest in the upskilling of employees, developing the necessary skills required for renewable energy technologies.	Action for Partners	Behavioural, awareness-raising and capacity-building.	M	X	X	X	
E.4	Encourage energy innovation							

E4.1	Explore opportunities in the district to support the expansion of green hydrogen production and/ or use.	Action for Kirklees MC	Strategies, plans and programmes	M	X	X	X	
E4.2	Through the most appropriate mechanisms, i.e., planning provision, publicity, investment or guidance, support community energy projects (e.g., shared heating and group buying schemes for PV))	Action for Kirklees MC	Investment	M & A	X	X	X	
E4.3	Invest in programmes of research into enhanced renewable energy (heat and power) generation and storage.	Action for Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M	X	X		
E4.4	Explore opportunities for alternative energy commissioning at a reduced cost or with subsidies to replace the existing dependency on gas.	Action for Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	X			
E.5	Improve energy infrastructure and energy management practices in Kirklees							
E5.1	Implement Northern PowerGrid's wide scale grid improvement plan.	Action for Partners	Investment	M & A	X	X		
E5.2	Assess current and future grid capacity, designing-in the need to cope with extra load and fluctuation that renewable energy technologies and enhanced electricity demand will create, especially for larger scale schemes. Links to the future Local Area Energy Plan.	Action for Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	X	X		
E5.3	Make representations to Ofgem and energy infrastructure providers where appropriate, to ensure Kirklees' energy infrastructure is climate ready.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M & A	X	X	X	
E5.4	Review and refine grid capacity management, ensuring that demand reflects actual use.	Action for Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	X	X	X	



NATURAL ENVIRONMENT AND BIODIVERSITY

The actions outlined in this section portray a way forward to improve the quality, carbon storage potential and the resilience of Kirklees' Natural Environment & Biodiversity. Addressing the climate emergency goes together with tackling the decline in biodiversity and the quality of our natural environments seen across the UK. Kirklees is fortunate to be home to many areas of natural beauty, the mismanagement of which could release carbon emissions and reduce resilience, rather than help store carbon and enhance resilience.

Taking steps to preserve and enhance our natural environment and biodiversity will not only address the climate emergency, but also generate numerous co-benefits, for instance, helping reduce the stress / anxiety levels of residents who spend time in Kirklees' green spaces.

“Local residents are passionate about the natural environmental (and climate emergency) and feel that protecting this is protecting part of their personal identity” (Political voice)

Climate Emissions:

-12,683.69 tCO₂e

(SCATTER 2019 – Scope 1, 2 & 3, AFOLU - land use)

CCRVA Key Climate Change Risks:

- Risk to terrestrial species and habitats.
- Increase in pests, pathogens, and invasive species.
- Damage to Sites of Special Scientific Interests (SSSI).
- Damage to soils (e.g., due to periods of drought).
- Drying out of blanket bog.
- Bare peat from past industrial pollution at risk of erosion/being washed away.
- Limitations in the window for peatland restoration work (e.g., due to extreme weather events)

Key Opportunities:

- New/alternative species becoming more suitable resulting in opportunities for agriculture and forestry productivity.
- Opportunities for natural carbon stores and sequestration which can reduce the amount of carbon in the atmosphere.
- Opportunities for landscape character change, with new/alternative species becoming suitable due to a changing climate.

Key Challenges:













- Lack of green infrastructure, nature-based solutions and green space considerations in master planning and new developments.
- Balancing the loss of green belt land and mature trees with the economic and social demand for new residential and commercial development.
- Perception that the quality and safety of green space within Kirklees is declining over time.
- Reducing and reversing habitat fragmentation
- Restoring Kirklees moorland / peatlands to prevent loss of carbon storage and reduce the occurrence of wildfires.








The following objectives have set to help the Natural Environment and Biodiversity sector achieve the overall goal of Net Zero and Climate Ready by 2038:







- **Objective 1:** Conserve, enhance, and invest in our natural environment and biodiversity.
- **Objective 2:** Prioritise green infrastructure and nature-based solutions to restore and improve our natural environment







In total, the CCAP process identified **24** Actions for the energy sector outlined within Table 4. Of which, **2** are mitigation focused, **2** are adaptation focused, with **20** covering both aspects. This includes **15** actions for Kirklees MC, **1** for the Wider Community, **3** for Partners and **5** for collaborative action

Table 4: Natural Environment and Biodiversity Sector Actions

I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
NEB.1	Restoring nature within Kirklees							
NEB1.1	Consider declaring an ecological emergency for Kirklees and/or equivalent policy measures to address the wider environmental challenges faced by the district.	Action for Kirklees MC	Policy	M & A	x			
NEB1.2	Explore opportunities for small-scale woodland creation across Kirklees	Action for Kirklees MC	Strategies, plans and programmes	M & A	x	x	x	 
NEB1.3	Establish a rewilding programme for appropriate areas of Kirklees Council controlled and managed land.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			 
NEB1.4	Rewild your gardens; plant trees and wildflowers to encourage and support local wildlife.	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	  
NEB1.5	Consider transforming urban parks and play areas to provide resilient Nature Based Solutions and re-wilding, planting more drought resistant vegetation, creating more shaded space, and undertaking	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			   

	habitat improvements e.g., SuDs, bio-Swales, and wildflowers.							
NEB1.6	Working with the White Rose Forest, assess and research innovative ways to meet sapling and bulb demand more locally, i.e., sustainably harvesting saplings from existing mature forests and re-planting in a nursery.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x	x		
NEB1.7	Consider implementing rewetting initiatives - Infrastructure and techniques already exist but funding is needed for initial capital works e.g., gully blocking, sphagnum planting, bunding.	Action for Partners	Investment	A	x			
NEB.2	Improve our management of the natural environment							
NEB2.1	Create a mandate within the council to dedicate appropriate officers to focus on work required around protecting and enhancing the natural environment.	Action for Kirklees MC	Investment	M & A	x			
NEB2.2	Evolve how council-owned and managed land e.g., parks and open spaces, is managed, with a focus to increase biodiversity and restore habits, including through reduced pesticide use and increased re-wilding programmes.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
NEB2.3	Through Moors for the Future Partnership and other regional partners and statutory agencies, begin to jointly develop detailed peatland management/restoration plans for Kirklees in co-ordination with ongoing restoration efforts.	Action for Kirklees MC and Wider Community	Strategies, plans and programmes	M & A	x	x		
NEB2.4	Review all Green Infrastructure and publicly owned land in terms of climate resilience	Action for Kirklees MC	Investment	A	x			
NEB.3	Inform and educate people on the natural environment and biodiversity							
NEB3.1	Create and share information about the environmental benefits of woodlands through the White Rose Forest partnership and small-scale woodland creation.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	x			

NEB3.2	In appropriate re-wilding locations across the district, install visible information about what visitors can observe and the benefits that re-wilding generates.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	x			
NEB3.3	Run a district-wide educational campaign on responsible upland behaviour, focusing on dry conditions and wildfire risk.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	x			
NEB3.4	Develop internal training to educate and inform council colleagues about the value of biodiversity and actions they can take to enhance local biodiversity.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M & A	x			
NEB3.5	Work with schools within Kirklees to educate children around the current biodiversity crisis and its links with the climate emergency.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	
NEB3.6	Providing residents with information on individual gardening practices and behaviours that they can adopt. Link to the ecological emergency, cost of living and climate crisis e.g., micro allotments, rewilding, tree planting.	Action for Partners	Behavioural, awareness-raising and capacity-building.	M & A	x			
NEB.4	Align all plans, strategies and natural environment and biodiversity related policies with Net Zero and Climate Ready by 2038 goal							
NEB4.1	Consider revisions to Kirklees local planning policy at the next Local Plan update to seek to ensure that new developments in Kirklees, including any public realm and supporting infrastructure, shall achieve the highest standards of design for the natural environment and local biodiversity, seeking to ensure that the development enhances Kirklees natural capital and provides ecosystem services through green infrastructure and nature-based solutions.	Action for Kirklees MC	Policy	M & A	x	x		

NEB4.2	Commit to a programme of tree protection and planting; requiring developers to appropriately establish trees and wildlife areas within new developments, alongside protecting or replanting mature trees, as opposed to felling. Where tree loss is deemed to be acceptable, developers will be required to submit a detailed mitigation scheme.	Action for Kirklees MC	Policy	M & A	x	x	x	
NEB4.3	Continue to develop and map out a strategic green infrastructure network for Kirklees, considering options how the protection of its function could be strengthened within the network in a future Local Plan update, including considering how new developments and land-use change respect, coordinate with, and enhance the network.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x	x		
NEB4.4	Develop internal Council policy to ensure all works undertaken on Council-owned and managed land, assets and infrastructure, that are not bound by planning policy, adhere to the highest standards of design for the natural environment and local biodiversity.	Action for Kirklees MC	Policy	M & A	x			
NEB4.5	Seek to ensure that new commercial and residential developments achieve the highest standards of design for our natural environment and biodiversity.	Action for Partners	Strategies, plans and programmes	M & A	x			
NEB.5	Understand the carbon potential of our natural environment							
NEB5.1	Working with appropriate partners and landowners, undertake an assessment to accurately understand the amount of carbon that is both sequestered and emitted by the natural vegetation and landscapes within Kirklees. Repeat in-line with the Monitoring and Evaluation process of this CCAP.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M & A	x			
NEB5.2	Consider how existing work on the Kirklees biodiversity net-gain land-bank, can be evolved to incorporate potential future carbon offsetting requirements.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			



SUSTAINABLE FOOD AND AGRICULTURE

The actions outlined in this section portray a way forward to creating a more sustainable, low carbon and resilient agriculture sector and sustainable food network. Covering both livestock and the stationary energy required to by the sector, agriculture is the fourth highest emitter of greenhouse gases out of the seven core sectors.

Taking steps preserve and evolve our agriculture sector whilst championing sustainable food options and attitudes, will not only address the climate emergency, but also generate numerous co-benefits, for instance, providing access to quality local jobs, whilst improving the physical health of residents who achieve a more balanced, sustainable diet.

“I avoid foods grown in distant countries when out of season here.” (Resident voice)

Climate Emissions:

63,786.78 tCO₂e

(SCATTER 2019 – Scope 1, 2, & 3, AFOLU - livestock and stationary energy - Agriculture)

CCRVA Key Climate Change Risks:

- Increased need and water consumption (food, medicine, crops etc.)
- Increase in waterlogging in soils
- Increase in pests, pathogens, and invasive non-native species
- Shift in crop growing seasons
- Crop damage / failure
- Prolonged dry periods resulting in degradation and loss of topsoil

Key Opportunities:

- New/alternative species becoming more suitable resulting in opportunities for agriculture and forestry productivity.
- An enhanced demand for locally grown foods: rural or urban.
- Coupling progress on healthy school meals with locally grown, sustainable choices.
- Addressing food poverty.

Key Challenges:






- The cost-of-living crisis and the lack of affordability of more sustainable, low carbon food choices.
- Lack of interest in behaviour change and evolving long-standing diets and food choices.
- There is a huge demand on land within Kirklees for multiple different uses, with limited opportunity and suitability to grow food locally.
- High levels of uncertainty in the agricultural sector due to recent and expected changes in subsidy payments and environmental policy.
- Damaging the local agricultural industry by reducing meat and dairy consumption.
- Policies and practises which undermine efforts to reduce food waste, such as sell-by dates, cosmetic standards, and overproduction/over-ordering.









The following objective has been set to help the Sustainable Food and Agriculture sector achieve the overall goal of Net Zero and Climate Ready by 2038:






- **Objective 1:** Promote and facilitate sustainable, low-carbon and resilient local food supply, consumption, and agricultural practices

In total, the CCAP process identified **18** Actions for the energy sector outlined within Table 5. Of which, **8** are mitigation focused, **4** are adaptation focused, with **7** covering both aspects. This includes **8** actions for Kirklees MC, **2** for the Wider Community, **1** for Partners and **7** for collaborative action

Table 5: Sustainable Food and Agriculture Actions

I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
SA.1	Enabling community driven food production							
SA1.1	Use the planning process to promote land for food production including as part of new developments where justified.	Action for Kirklees MC	Policy	M	X			
SA1.2	Providing guidance/signposting to community organisations regarding legal issues of establishing community gardens / allotments / orchards.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	X			
SA1.3	Develop a support system to help community food-based projects	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	X			
SA1.4	Take ownership over local allotments and district farms, establishing an open and accessible membership / volunteer system to manage the land effectively and sustainably.	Action for Partners and Wider Community	Strategies, plans and programmes	M	X	X	X	
SA.2	Support and deliver opportunities for non-traditional farming innovation within Kirklees							
SA2.1	Look at how the planning provision can be used to encourage the development and growth of	Action for Kirklees MC	Policy	M & A	X			

	innovative, modern farming practices, particularly in the urban environment, within Kirklees.							
SA2.2	Seek to develop and support a demonstrator / pilot project for Agri-tech, such as urban/vertical farming within the district.	Action for Kirklees MC and Partners	Investment	M & A		X		
SA.3	Adopting more sustainable, resilient, and healthy food habits and practices							
SA3.1	Continue to develop the Sustainable Food Cities Programme for Kirklees, building community food knowledge resource projects and alter catering and food procurement towards more sustainable and healthy habits.	Action for Kirklees MC	Policy	M & A	X	X	X	
SA3.2	Adopt more sustainable and healthy food habits, achieving a balanced diet, eating more seasonal, locally sourced foods.	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M & A	X			
SA3.3	Consider planning for the revision of back-up and alternative food supplies in cases where supply chain of foodstuffs is hindered, disrupted, or even halted.	Action for Kirklees MC	Investment	A	X	X	X	
SA3.3	Support and supplement vulnerable people and families, e.g., free school meals, family food funds for healthy eating.	Action for Kirklees MC and Partners	Investment	A	X	X	X	
SA.4	Keeping Kirklees' food miles low and make sustainable, locally produced food more accessible.							
SA4.1	Establish initiatives to connect local growers and suppliers.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M & A	x			
SA4.2	Work with food suppliers / producers and private-sector investors to develop proposals for produce distribution hub(s). Support with planning provision.	Action for Partners	Strategies, plans and programmes	M & A		x	x	
SA4.3	Buy sustainably and locally produced food where possible	Action for Wider Community	Behavioural, awareness-raising and	M	x	x	x	

			capacity- building.					
SA.5	Involve, inform, and support the local farming community and organisations							
SA5.1	Engage and encourage the participation of farming stakeholder groups within Kirklees in the Climate Conversations.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x	x	x	
SA5.2	Strive to ensure the local planning policy, at the next Local Plan Update, allow/facilitate farmers to be able to adapt to future challenges through diversification in land-use and practices.	Action for Kirklees MC	Policy	M	x	x		
SA5.3	Ensure Kirklees are involved in lobbying, review, and development of new national and regional level farming incentives.	Action for Kirklees MC	Policy	M	x	x	x	
SA5.4	Explore opportunities, in collaboration with regional and national government and the private sector, to financially support more sustainable agricultural practices in the Kirklees farming community.	Action for Kirklees MC and Partners	Investment	M	x	x	x	
SA5.5	Support a shift in how farmland is managed to make it more resilient. Consider how incentives/subsidies can be used and how councils can influence these mechanisms	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x	x		



TRANSPORT

The actions outlined in this section portray a way forward to creating a low-carbon and resilient transport sector. Covering all modes of mobility across the district, transport is the highest emitter of greenhouse gas emissions for Kirklees, with the second largest emission reduction potential. These transport actions align with and builds upon measures which encourage and facilitate low-carbon transport options within Kirklees' Air Quality Action Plan 2019 – 2024.

Taking steps to evolve our transport sector will not only address the climate emergency, but also generate numerous co-benefits for Kirklees. This includes increasing the proportion of the population within walking distance of accessing a mode of transit, reducing exposure to poor air quality, and improving the physical health and mental wellbeing of residents.

“In a rural ward with very poor public transport, residents are often reliant on personal vehicles” (Political voice)

Climate Emissions:

1,075,088.29 tCO₂e

(SCATTER 2019 – scope 1, 2 and 3, transportation - on-road, rail, waterborne navigation, aviation, off-road)

CCRVA Key Climate Change Risks:

- Damage to transport infrastructure (e.g., road melt, damage to retaining walls supporting highways, damage to street lighting and traffic signals).
- Increase in local accidents on motorways and major trunk roads.
- Delivery issues due to road closures.
- Disruption to public transport.
- Damage to retaining walls supporting transport infrastructure or land above infrastructure.

Key Opportunities

- Adopting more active modes of transport will improve the health and wellbeing of residents.
- Leverage and collaborate on action tackling air quality to also reduce greenhouse gas emissions associated with transport.
- To work collaboratively with WYCA and neighbouring authorities

Key Challenges





- Lack of appropriate infrastructure to facilitate transport modes that are an alternative to private combustion engine vehicle use.
- Costly and dis-connected public transport offering, especially in rural areas.
- Active modes of transport such as cycling is unsafe on most Kirklees roads.
- Kirklees topography and rural geography limits the uptake of active modes of transport i.e., too hilly.
- Contradictions of approach: free EV parking encouraging private vehicle use therefore enhancing congestion.
- High congestion on Kirklees Roads; standing polluting vehicles and a barrier to modal shift.
- EV cars and e-bikes are not currently affordable to most residents.








The following objectives has been set to help the Transport sector achieve the overall goal of Net Zero and Climate Ready by 2038:

- **Objective 1:** Reduce carbon emissions from transport, enabling the use of public transport, low/zero-carbon alternatives, and active modes of travel.
- **Objective 2:** Develop all existing and future transport infrastructure and assets so that they are 'climate ready'









In total, the CCAP process identified **36** Actions for the transport sector outlined within Table 6. Of which, **25** are mitigation focused, **4** are adaptation focused, with **7** covering both aspects. This includes **17** actions for Kirklees MC, **1** for the Wider Community, **5** for Partners and **13** for collaborative action








Table 6: Transport Actions


I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
T.1	Align all plans, strategies, and transport related policies with Net Zero and Climate Ready by 2038 goal							
T1.1	Develop a Kirklees Transport Strategy that is consistent with the outcomes of this CCAP and the Net Zero and Climate ready by 2038 goal.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
T1.2	Work with WYCA to deliver the Bus Service Improvement Plan vision in Kirklees, aligning with Net Zero by 2038, including an enhanced network, clearer fares, improved customer support, bus priority and greener bus fleet.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M	x	x	x	
T1.3	Consider revisions to Kirklees local planning policy at the next Local Plan update to aim to ensure sites for new housing and commercial developments that can be served by quality public transport links and active travel (walking and cycling). Explore the concept of low traffic or car-free development.	Action for Kirklees MC	Policy	M	x			
T1.4	Review the Kirklees local planning policy to ensure new transport infrastructure is designed to align with the Net Zero and Climate ready by 2038 goal.	Action for Kirklees MC	Policy	M	x			

T1.5	Review event management policies in Kirklees to require event management plans to outline active and public modes of transportation that can be taken to the event location.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x			
T1.6	Review taxi vehicle license policy to encourage and incentivise the use of 'cleaner' ULEV vehicles.	Action for Kirklees MC	Policy	M	x			
T.2	Modify Kirklees' traffic management system							
T2.1	Building on Kirklees' Air Quality Action Plan, consider smart UTMC (Urban Traffic Management Control) system which allocates 'green lights' according to emissions produced by vehicles, giving consideration for modal shift towards active travel.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x	x	x	
T.3	Encourage active and micro-mobility modes of transport across Kirklees							
T3.1	Develop a Local Cycling and Walking Infrastructure Plan for Kirklees that identifies high priority routes and informs future investment decisions, whilst continuing to improve and expand both traffic-free and on-highway cycling infrastructure.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M & A	x			
T3.2	Review data on how people move around Kirklees and take steps to optimise the transport network, giving priority for sustainable, shared, and active models of travel.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x			
T3.3	Investigate the development of active/liveable neighbourhoods in Kirklees.	Action for Kirklees MC and Partners	Investment	M	x	x		
T3.4	Increase the amount of secure bicycle parking throughout Kirklees that is appropriate for different uses and locations.	Action for Kirklees MC	Investment	M	x	x		

T3.5	Develop and deliver communications and engagement programmes to encourage sustainable and active travel in Kirklees.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x	x	x	
T3.6	If legalised, incentivise the safe uptake of E-scooter hire companies in urban centres within Kirklees, alongside encouraging private E-scooter use for short journeys.	Action for Kirklees MC	Strategies, plans and programmes	M	x			
T3.7	Choose walking, cycling or public transport for short journeys instead of a car	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M	x	x	x	
T3.8	Support and encourage employees to cycle, walk or run to work by providing secure cycle storage, changing rooms and lockers.	Action for Partners	Investment	M	x	x		
T3.9	Implement sustainable travel initiatives for employees and consider reducing the availability of onsite parking to service only those with accessibility needs.	Action for Partners	Behavioural, awareness-raising and capacity-building.	M	x			
T3.10	Investigate how the Council and other organisations procurement policies could encourage the use of ULEV vehicles and bicycles (E-bikes and cargo bikes) including demand for freight consolidation centres.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M	x			
T3.11	Assess the feasibility of implementing low/zero emissions zone across Kirklees, linking with clean air zones.	Action for Kirklees MC	Policy	M	x			
T3.12	Extend WYCA Car Club to cover E-Bikes.	Action for Partners	Policy	M	x			
T.4	Encourage behaviour change towards more sustainable modes of transport							
T4.1	Develop a strategy for behaviour change in relation to transport for the district of Kirklees. Potential to integrate with the transport strategy.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	x			

T4.2	Assign and officer to work with residents and local organisations to help facilitate and implement behaviour change initiatives in transport for Kirklees.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M	x			
T4.3	Continue to implement anti-idling policies across the district, focusing on schools, train stations etc.	Action for Kirklees MC	Policy	M	x			
T4.4	Assist residents with upskilling in order to take advantage of sustainable transport employment opportunities.	Action for Kirklees MC	Investment	M	x			
T4.5	Continue to invest in travel training for all school children across Kirklees to promote the use of active and shared transport	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x			
T.5	Creating a climate ready, inter-connected transport system							
T5.1	Continue to work with WYCA to develop a Mass Transit system in West Yorkshire	Action for Kirklees MC and Wider Community	Strategies, plans and programmes	M & A	x	x		
T5.2	Consider collaborating with neighbouring districts, such as Calderdale, on the potential for park and ride schemes to large urban centres such as Huddersfield and Dewsbury.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
T5.3	Continue to develop the EV charging infrastructure across Kirklees, giving core consideration for on-street charging and access to charge points for private-hire companies, whilst not negatively impacting on the cycling and pedestrian user experience.	Action for Kirklees MC	Investment	M & A	x			
T5.4	Organisations and businesses with fleets (HGVs, buses coaches, waste collection vehicles, vans or taxis), to develop renewal strategies that align to Net Zero by	Action for Partners	Monitoring, data collection, analysis, assessment,	M	x			

	2038, being more fuel efficient and becoming ECO Stars members.		research and collaboration.					
T5.5	Identify and bid for funding opportunities to implement a programme of improvements to the Penistone railway line to improve journey times, frequency and improve active travel connections to the train stations.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M	x	x		
T5.6	Bring transport stakeholders together on a semi-regular basis, to ensure all are aware of the work others are doing,	Action for Partners	Monitoring, data collection, analysis, assessment, research and collaboration.	M	x			
T5.7	Develop and deliver major transport schemes (Transforming Cities Fund, WY+TF and City Regional Sustainable Transport Settlement) that will provide new infrastructure including cycling, walking and bus priority across Kirklees.	Action for Kirklees MC	Investment	M	x	x	x	
T5.8	Consider undertaking a cross-organisational joint mapping exercise to determine roads particularly vulnerable to flooding and plot alternative routes. Ensure route plans are distributed to ensure services can still efficiently reach those in need of care.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research and collaboration.	A	x			
T5.9	Develop a district approach to providing shaded walking / cycling routes for hotter weather, particularly in urban areas.	Action for Kirklees MC	Investment	A	x	x		
T.6	Encourage innovation in transport							
T6.1	Explore opportunities in the district for supporting the expansion of low carbon and zero carbon fuel alternatives for private, public and freight vehicles, such as green hydrogen and synthetic fuels.	Action for Kirklees MC and Partners	Strategies, plans and programmes	M	x	x	x	
T6.2	Consider developing a sustainability strategy for maintaining transport assets, ensuring it aligns with ambitions of this CCAP, outlining the use of more innovative, sustainable methods and materials.	Action for Kirklees MC	Policy	A	x	x		

T6.3	Further build on current academic partnerships to develop and test innovative transport solutions.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x	x	x	
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WASTE

The actions outlined in this section portray a way forward to creating a low-carbon and resilient waste sector, building on the work outlined within Kirklees Waste Strategy 2021 – 2030, ensuring that the actions in the strategy align with the ambitions of a Net Zero and Climate Ready Kirklees. This action plan does not duplicate actions covered by the waste strategy, which includes but is not limited to, glass and food waste kerbside recycling collection initiatives for residents.

Taking steps to create a net zero and more resilient waste sector will not only address the climate emergency, but also generate numerous co-benefits. This includes increased access to green skills training and programmes alongside helping to reduce the level of pollution into our natural environment.

*“Please concentrate more on helping people to cut down on their consumption rather than the bias towards buying things”
(Resident voice)*

Climate Emissions:

9,850.50 tCO₂e

(SCATTER 2019 – Scope 1, 2 & 3, waste – solid waste disposal, biological treatment and incineration and open burning)

CCRVA Key Climate Change Risks:

- Increase in wet waste.
- Increase in weight of waste due to saturation
- Reduction in the efficiency of energy plants due to overheating (cooling steam to generate electricity).
- Bin collections disrupted due to severe weather
- Waste seepage into water supply (e.g., leaching from closed landfill)

Key Opportunities:

- Shifting focuses onto a circular economy approach.
- Increased demand for low waste products and re-use / upcycling shops.

Key Challenges:






- It is predominantly cheaper to buy new than repair items.
- More durable, higher quality products are less affordable.
- Achieving a transition to reducing waste and adopting more sustainable consumer practices without compromising economic growth.
- Evolving consumer behaviours to reduce waste – such as fast fashion.
- Evolving construction industry practice to adopt circular economy principles and reduce waste.
- Lack of appropriate food and glass waste collection and disposal infrastructure and mechanisms.











The following objective has been set to help the Waste sector achieve the overall goal of Net Zero and Climate Ready by 2038:






















- **Objective 1:** Adopting circular economy principles, becoming more responsible producers and consumers

In total, the CCAP process identified **24** Actions for the energy sector outlined within Table 10Table 6Table 5. Of which, **16** are mitigation focused, **2** are adaptation focused, with **6** covering both aspects. This includes **9** actions for Kirklees MC, **3** for the Wider Community, **4** for Partners and **8** for collaborative action.

Table 7: Waste Actions

I.D	Action Title	Action Owners	Action Type	M o r a	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
WAS.1	Align all plans, strategies, and waste-related policies with the Net Zero and Climate Ready by 2038 goal.							
WAS1.1	Be ready to update the current Resource & Waste Strategy 2021 - 2030, associated activities and assets, to align with emerging Government policy and the Kirklees climate ambition of being Net Zero and Climate Ready by 2038.	Action for Kirklees MC	Strategies, plans and programmes	M	x			
WAS1.2	Refine Kirklees local planning policy to require all new development, including any public realm and supporting infrastructure, to incorporate circular economy measures into all aspects of the design, construction, and operation process. These will be reported via a Circular Economy Statement.	Action for Kirklees MC	Policy	M	x			
WAS1.3	Develop guidance outlining how to prepare a Circular Economy statement to accompany planning applications.	Action for Kirklees MC	Policy	M	x			
WAS1.4	Ensure Town Centre Action Plans and other flagship Council master planning projects adopt circular economy measures in all aspects of the design, construction, and operation.	Action for Kirklees MC	Strategies, plans and programmes	M	x	x	x	
WAS1.5	Ensure new developments adopt circular economy measures in all aspects of the design, construction, and operation.	Action for Partners	Strategies, plans and programmes	M	x	x	x	

WAS1.6	Adopt organisational targets for waste reduction and recycling rates, integrating circular economy principles and measures into day-to-day practices.	Action for Partners	Strategies, plans and programmes	M	x			
WAS.2	Facilitate and invest in behaviour change and more sustainable and resilient waste practices							
WAS2.1	Develop capacity building training and guidance to upskill Council staff on circular economy principles and measures, and how these can be applied in the councils' operations across appropriate service directorates.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	M & A	x			
WAS2.2	Publicly share and advertise case studies of best-in-class waste management, waste behaviours and application of circular economy principles and measures within Kirklees, the West Yorkshire region and nationally.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	
WAS2.3	Better communicate the on-going education campaigns in Kirklees schools, colleges, and universities in relation to waste management and circular economy principles, making it available for a broader audience of Kirklees residents.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	
WAS2.4	Develop and publicise an inventory of businesses and shops within Kirklees that implement best-practice circular economy or waste hierarchy principles, i.e., charity shops, vintage shops, refill shops, repair providers.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x			
WAS2.5	Consider expanding trade and commercial waste collection and disposal to incorporate glass and food waste.	Action for Partners	Investment	M & A	x			
WAS2.6	Investment into staffing/grant funds to assist local businesses on waste reduction and reuse	Action for Kirklees MC and Partners	Investment	M & A	x	x		
WAS2.7	Investigate and refine the waste/resources associated with procurement	Action for Kirklees MC	Policy	A	x	x		
WAS2.8	Continue to integrate formal re-use systems into all of Kirklees' HWRCs.	Action for Kirklees MC	Investment	M & A	x	x		
WAS2.9	Look at establishing a home composting system for food waste.	Action for Wider Community	Investment	M	x			

WAS2.10	Reduce household waste; including food waste and single-use plastics.	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M	x			
WAS2.11	Consider adapting your consumer behaviour and the impact it can have on waste; making conscious decisions to avoid fast fashion, avoid single-plastics and to purchase the best-quality product you can afford.	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M	x			 
WAS2.12	Where waste management assets are closed, ensure communication procedures are in place to alert potential users and visitors.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	A	x			 
WAS.3	Encourage innovation and collaboration in waste management and consumer behaviour							
WAS3.1	Research the feasibility of implementing a network of industry symbiosis within Kirklees and the broader WY region (i.e., waste from one industry becomes a resource for another)	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M	x	x		  
WAS3.2	Mattress innovation hub - supporting mattress manufacturers to be more sustainable in design, production, and end-of-life considerations.	Action for Partners	Investment	M	x	x		  
WAS3.3	Consider introducing 'Green Fashion hubs' within Kirklees, involving established and aspiring stakeholders in the fashion industry, including schools and young people.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x	x		  
WAS3.4	Consider piloting 'zero-waste zones' within Kirklees to test and implement practices and policies that support Kirklees' ambition to be net zero by 2038.	Action for Kirklees MC	Investment	M	x	x		 
WAS3.5	Consider implementing a 'just-in-time' ordering system at high-schools across Kirklees, in-line with that used in primary schools to avoid food waste.	Action for Kirklees MC and Partners	Policy	M	x			 
WAS3.6	Explore opportunities to research, investment and take advantage of opportunities for innovative and emerging technical solutions for waste treatment, alongside the potential for the generation of heat and power (as per HDEN and the EfW plant).	Actions for Kirklees MC	Monitoring, data collection, analysis, assessment, research, and collaboration.	M	x	x	x	  



WATER

The actions outlined in this section portray a way forward to creating an efficient and resilient water sector. Covering flooding, drought and water efficiency measures, the actions outlined can have a broad impact on the social, environmental, and economic state of Kirklees.

Taking steps to address the climate emergency within the water sector will also generate numerous co-benefits for the district. This includes improving the water quality and management approach of our water resources, reducing the risk of and impacts associated with surface or river flooding and helping to address the social disparities that flooding exacerbates.

*“I don't see water shortages as a big issue in our area, given the amount of rainfall we have.”
(Resident voice)*





<p>Climate Emissions:</p> <p style="text-align: center;">8,001.99 tCO₂e</p> <p><small>(SCATTER 2019 – Scope 1, 2 & 3, waste – wastewater treatment and discharge)</small></p>	<p>CCRVA Key Climate Change Risks:</p> <ul style="list-style-type: none"> • Water supply interruptions due to drought. • Reduction in flood retention/capacity • Increased storm water volumes overwhelming combined sewers and sewerage pumps. • Flooding of vulnerable assets (e.g., buildings in flood zones) - such as schools, care homes, children's homes & centres etc. • Flooding of rivers (Calder and the Dearne) leading to evacuation requirements. • Flooding of homes. • Closure of businesses. • Loss of livestock.
<p>Key Opportunity:</p> <ul style="list-style-type: none"> • The ability address challenge, impacts and risks across multiple sectors; buildings, transport, natural environment and biodiversity 	<p>Key Challenges:</p> <ul style="list-style-type: none"> • Lack of motivation and awareness to implement water saving measures and why this is necessary. • Upfront cost of water efficiency measures with lack of financial support available. • Flood protection and water efficiency measures are not in the control of the occupant due to living in a rented property. • Belief that water efficiency should not be a concern in Kirklees due to the amount of rainfall we receive. • Absence of a whole water cycle management approach.









The following objectives have been set to help the water sector achieve the overall goal of Net Zero and Climate Ready by 2038:

- **Objective 1:** Manage our water and its environment sustainably.
- **Objective 2:** Increase our resilience to flood risk helping to reduce the vulnerability of residents.

In total, the CCAP process identified **20** Actions for the water sector, outlined within Table 8. Of which, **14** are adaptation focused, with **6** covering both adaptation and mitigation. This includes **7** actions for Kirklees MC, **1** for the Wider Community, **1** for Partners and **11** for collaborative action

Table 8: Water Actions

I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
WAT.1	Taking care of Kirklees' waterways and infrastructure							
WAT1.1	Promote, develop opportunities, and consider volunteering to help clean up local waterways across Kirklees.	Action for Wider Community	Behavioural, awareness-raising and capacity-building.	M & A	x			
WAT1.2	Work with partners to divert grey wastewater from waterbodies (i.e., rivers and reservoirs)	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
WAT1.3	Consider the feasibility of implementing appropriate land-management techniques in high-risk areas of Kirklees to divert surface water run-off away from stormwater infrastructure and overburdened surface water drains.	Action for Kirklees MC, Partners and Wider Community	Investment	A	x			
WAT.2	How to reduce Kirklees' water consumption							
WAT2.1	Design and deliver district-wide guidance and educational campaigns on water saving techniques.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x	x		

WAT2.2	Install water butts on domestic properties where feasible.	Action for Partners and Wider Community	Investment	M	x	x	x	
WAT2.3	Consider the potential for communal water harvesting/ reuse schemes.	Action for Kirklees MC and Wider Community	Investment	M	x	x		
WAT2.4	Develop a plan to improve the water use and efficiency in the Council's operational estate i.e., rainwater harvesting and grey water recycling.	Action for Kirklees MC	Strategies, plans and programmes	M	x	x		
WAT2.5	Consider retrofit measures such as rainwater harvesting, grey water recycling and measures on commercial and residential buildings to reduce water demand and use.	Action for Partners and Wider Community	Investment	M	x	x		
WAT2.6	Upgrade all appliances to the highest possible water efficiency when at end of life	Action for Kirklees MC, Partners, and Wider Community	Investment	M	x	x	x	
WAT2.7	Develop and implement a watering regime cognisant of increased pressure though reduced availability of water supply.	Action for Kirklees MC and Partners	Investment	A	x	x	x	
WAT.3	Align all plans, strategies and water-related policies with Net Zero and Climate Ready by 2038 goal							
WAT3.1	Consider revisions to Kirklees local planning policy at the next Local Plan update in relation to a potential water efficiency standard in new-build and retrofit developments; domestic industrial commercial and public buildings through the planning applications process.	Action for Kirklees MC	Strategies, plans and programmes	M	x			
WAT3.2	Consider revisions to Kirklees local planning policy at the next Local Plan update to explore the latest approaches to Sustainable Urban Drainage Systems (SuDs) and Water Sensitive Urban Design (WSUD).	Action for Kirklees MC	Policy	M & A	x			

WAT3.3	Ensure Town Centre Action Plans and other flagship Council master planning projects incorporate WSUD and SuDs into their design.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
WAT3.4	Strive to ensure all residential developments on Council-owned land will be designed to the highest water efficiency standards.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x	x		
WAT3.5	Ensure the new Local Flood Risk Management Strategy aligns with the outcomes of this CCAP and associated CCRVA to achieve Climate Ready by 2038.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
WAT.4	Enhancing Kirklees' resilience to water-related climate risks							
WAT4.1	Develop and implement plans to ensure sufficient firefighting water is available particularly during droughts.	Action for Partners	Strategies, plans and programmes	A	x	x		
WAT4.2	Consider installing floodgates where feasible and appropriate to protect key areas of equipment, infrastructure and buildings which may be impacted from flooding:	Action for Partners and Wider Community	Investment	A	x			
WAT4.3	Review emergency planning procedures and to revise measures for reduced water availability and increased demand to reflect the expected increasing in frequency of heatwaves and drought events.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	x	x	x	
WAT4.4	Ensure that Local Resilience Forum Water Supply Disruption Plan considers the increasing occurrence of droughts/ heatwaves.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	x			
WAT4.5	Fire and rescue service may be particularly impacted through demand on services to respond to flooding and heatwave events. Collaboration through the multi-agency flood plan and with neighbouring fire and rescue services should be considered.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x			



CROSS-CUTTING

The actions outlined in this section portray a more holistic approach to achieving a Net Zero and Climate Ready Kirklees by 2038. Climate change, its impacts, and the emissions we produce, are not necessarily restricted by jurisdictional, organisation or sectoral boundaries, and neither are the solutions we can implement to address.

Taking steps to address the climate emergency through cross-cutting sectors will generate numerous co-benefits for the district, including increased engagement with public/private entities outside of district council and an increased representation of specific community groups, including civil society, academia, business, and vulnerable populations.

“Climate change affects us all, through outlier weather events or general damage to future generations” (Political voice).

Climate Emissions:

2,689,294.79 tCO₂e

(SCATTER 2019 – Scope 1, 2 & 3, total GHG emissions for the district of Kirklees - Stationary Energy, Transportation, Waste, IPPU, AFOLU, Generation of Grid Supplied Energy.)

Key Opportunities:

- Increase in outdoor leisure pursuits, resulting in new business opportunities and positive impact on social and health well-being.
- Potential to lesson symptoms of conditions like arthritis and cold weather-related illnesses and (hotter summers, warmer winters)
- Knowledge sharing and collective solutions that can be achieved through collaboration across sectors.

CCRVA Key Climate Change Risks:

- Increased incidences of heat exhaustion, dehydration, and other heat related incidents.
- Increased anxiety in children and young people due to relatives being out in hazardous weather conditions (e.g., flood wardens, firefighters).
- Increase in vector borne diseases.
- Further risks to homeless communities without safe shelter available.
- Unsafe working conditions for site, outdoor workers, and frontline workers.






Key Challenges:







- Ownership over scope 3 emissions.
- The perception that climate change is a hoax, and that climate action is not required.
- To achieve collective, district-wide uptake and ownership of climate actions.
- Obtaining emissions data from private companies across all sectors.
- Identifying and acquiring the necessary funding to implement the projects needed to achieve a Net Zero and Climate Ready Kirklees by 2038.







The actions outlined within the Cross-Cutting sector are those that help address two or more of the objectives laid out across the action response sectors and therefore, no separate objective for cross-cutting actions has been developed.









In total, the CCAP process identified **26** cross-cutting actions, outlined within Table 9. Of which, **3** are mitigation focused, **12** adaptation focused, with **11** covering both adaptation and mitigation. This includes **7** actions for Kirklees MC, **2** for Partners and **17** for collaborative action.



Table 9: Cross-Cutting Actions

I.D	Action Title	Action Owners	Action Type	M or A	Timeframe for Delivery			Co-Benefits
					Short-Term	Medium-Term	Long-Term	
CC.1	Integrate climate action within the Councils operational, governance and decision-making mechanisms							
CC1.1	Develop a top tier 'Environment and Sustainability Strategy' for Kirklees Council.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
CC1.2	Consider undertaking a governance review, building on the Integrated Impact Assessment, to further adapt Kirklees councils' decision-making process so that it is structured around the planetary boundaries and / or doughnut economics model, ensuring key-decisions take into account social, economic and environmental impacts and benefits (including both emission reduction and climate resilience).	Action for Kirklees MC	Strategies, plans and programmes	M & A	x	x		
CC1.3	Develop internal carbon budgets for the Kirklees Council, divided by service area as with financial budgets.	Action for Kirklees MC	Strategies, plans and programmes	M	x			
CC1.4	Consider breaking down the council's annual financial budget to highlight money which has been spent on climate emergency response and associated actions.	Action for Kirklees MC	Strategies, plans and programmes	M & A	x			
CC1.5	Develop, regularly review, update and test business continuity plans and associated actions, to ensure critical activities can continue during severe weather event. Ensure relevant arrangements are communicated to all required parties.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	x			

CC1.6	Encourage greater engagement and empowerment of children and young people in climate adaptation decision making and planning.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x	x		
CC1.7	Ensure that climate change risks and net zero transitional risk are incorporated into organisational management plans and risk registers, assigning appropriate risk owners and coordinators, with each service directorate developing an associated adaptation plan - organisational or service level, to address the key risks.	Action for Kirklees MC and Partners	Strategies, plans and programmes	A	x	x	x	
CC1.8	Ensure that landlords of supported living assets have plans in place to arrange alternative accommodations if needed.	Action for Kirklees MC and Wider Community	Strategies, plans and programmes	A	x			
CC1.9	Have alternative measures in place for those who ordinarily receive home care (e.g., personal alarms and performance monitors). Consider also implementing secondary alternative arrangements should flooding be combined with power supply cuts and electric equipment issued to people.	Action for Kirklees MC, Partners, and Wider Community	Strategies, plans and programmes	A	x	x	x	
CC1.10	Ensure that all outsourced social care providers consider climate change risks in their respective service plans, outlining measures they can take to reduce this risk. .	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x	x	x	
CC.2	Support local businesses, communities, and residents							
CC2.1	Consider establishing a Climate Emergency Community Fund to support community projects that adhere to the Councils Climate Emergency goals.	Action for Kirklees MC and Partners	Investment	M & A	x	x	x	

CC2.2	Look at establishing a Green Entrepreneurs Fund to support the development of green skills and innovative carbon reduction projects in SMEs and micro-businesses across Kirklees	Action for Kirklees MC and Partners	Investment	M & A	x	x	x	
CC2.3	Consider amending business rates to encourage low-carbon and more sustainable practices within Kirklees. I.e., business with a sustainability / carbon strategy and an understanding of their scope 1, 2 and 3 emissions receive relief.	Action for Kirklees MC	Policy	M & A	x			
CC2.4	Look at providing green economy, green skills and 'how to build resilience' into 'Net Zero transition' guidance and support to local SMEs, micro-businesses, and organisations within Kirklees.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M & A	x	x	x	
CC2.5	Consider assessing the adequacy of resources to deal with the increasing trauma and emotional/mental welfare being sought – especially amongst the young – from climate related anxiety, depression, and suicide (associated with experiencing floods, droughts and heatwaves)	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x			
CC2.6	Consider undertaking vulnerability mapping (e.g., with the Climate Just Tool) to highlight particularly vulnerable areas, informing the provision of appropriate support.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x			
CC.3	Taking collaborative action							
CC3.1	Establish a 'Climate Charter' in Kirklees which organisations in Kirklees can become a signatory of, taking ownership over and committing to the goal of becoming Net Zero and Climate Ready by 2038. Utilise this network for collaborative knowledge sharing and working.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x	x	x	

CC3.2	Agree a clear role and set of priorities for the Kirklees Climate Change Commission with the aim to deliver real change and action.	Action for Partners	Strategies, plans and programmes	M & A	x			
CC3.3	Consider options for the Council to work alongside partners and allies to develop a digital platform that integrates multiple sources of data to provide information on the district's performance. Ensure data sharing agreements and data trusts are in place to encourage data to be shared.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x	x	x	
CC3.4	Continue to engage with the diverse range of communities that Kirklees is home to, achieving fair and inclusive climate action that is representative of Kirklees residents.	Action for Kirklees MC, Partners, and Wider Community	Monitoring, data collection, analysis, assessment, research, and collaboration.	M & A	x	x	x	
CC3.5	Enhance the sharing of knowledge and experience in relation to interdependencies across different agencies/ organisations and sectors within Kirklees (e.g., water companies, gas companies).	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	A	x			
CC3.6	Look at developing or if existing, advertise, an app to help individuals understand and monitor their carbon emission reductions from actions they take in their daily lives.	Action for Kirklees MC and Partners	Behavioural, awareness-raising and capacity-building.	M	x			
CC3.7	Complete a more detailed analysis of district wide scope 1, 2 and 3 emissions, building on the SCATTER tool inventory and net zero assessment.	Action for Kirklees MC	Policy	M	x			
CC3.8	Build on Covid19 experience - explore the use of volunteers in times of high demand on services because of climate hazards and associated risks.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment, research, and collaboration.	A	x			
CC3.9	Collaborate with learning outreach/ service providers and build on existing contacts with schools to provide additional support on climate risks.	Action for Kirklees MC and Partners	Monitoring, data collection, analysis, assessment,	A	x			

			research, and collaboration.					
CC.4	Building knowledge and skills to become a more resilient Kirklees							
CC4.1	Provide training/ guidance on climate risk to schools & care contractors.	Action for Kirklees MC	Behavioural, awareness-raising and capacity-building.	A	x			
CC4.2	Provide awareness raising and capacity building training on coping with climate anxiety, understanding climate risk, the vulnerability of the wider community, alongside health-related impacts from climate change and measures that can be adopted, focusing on young people and other vulnerable groups.	Action for Kirklees MC, Partners, and Wider Community	Behavioural, awareness-raising and capacity-building.	A	x			

MONITORING AND EVALUATION STRATEGY

Overview

Monitoring and evaluation (M&E) are important managerial tools necessary to track the progress and facilitate decision making for the climate change actions laid out by this CCAP.

This allows the action owners to make informed and evidence-based decisions regarding the operations of actions and service delivery, ensuring effective and efficiency use of resources and reporting requirements are met, allowing for public accountability, and enabling the extent to which the project is having a desired impact to be assessed with associated lessons learnt.

*“The Climate Change Action Plan needs to be a live document with ongoing oversight and input to make it flexible and have a wider ownership beyond the Cabinet”
(Political Voice)*

The M&E strategy for Kirklees’ CCAP, will adhere to the following steps in Figure 6 over a 3 yearly cycle of reporting, in line with CDP 2022 Cities Reporting Guidance.

Figure 6: Cycle of Monitoring and Evaluation



Monitoring Progress

The impact that actions have, will be monitored by the annual collection of indicator data, within the Indicator Database, which has been created as part of the evidence base for the Integrated Climate Change Action Plan

The Indicator Database will be the responsibility of appropriate officers within the Energy & Climate Change team, who will draw information on the actions and associated indicators from the relevant Action Owners, officers, and other stakeholders with access to the required databases.

Evaluating results and impacts

The evaluation of actions will be four-fold:

- Through stakeholder engagement: By the most appropriate mechanisms determined at the time of evaluation, a cross-section of Kirklees stakeholders will be engaged to feedback their evaluation of the on-going impact and outcomes of the actions implemented as part of the integrated climate change action plan.
- By evaluating the emission reduction achieved by the actions implemented, against the existing district-wide emissions inventory for Kirklees and the districts steppingstone and absolute science-based targets.
- By evaluating against pre-determined adaptive capacity: The CCRVA has established Kirklees' current 'adaptive capacity' for the hazards and associated risks assessed. Using this pre-determined assessment, elements of adaptive capacity will be evaluated against the relevant indicators within the indicator database, alongside being cross analysed against the findings of the stakeholder engagement.
- By evaluating the social and economic impact of events. Utilising the indicator database as a baseline

Sharing Lessons Learned

Nominated individuals, indicatively the Energy & Climate Change team, will engage with Action Owners, key stakeholders, and residents, to help formulate lessons learned (both positive and negative) in relation to on-going implementation of climate change related actions.

Lessons learned will be collated in-line with the 3-yearly reporting cycle, as outlined below.

Reporting on Action Outcomes

A 3-year reporting cycle will be established, publishing the outcomes of the monitoring and evaluation process, which will remain in-place until the district wide target of Net Zero and Climate Ready by 2038 is achieved.

The 3-yearly "Progress Report" will be shared with Kirklees' Climate Change Board and appropriate stakeholders and will include, as a minimum:

- Action Implementation status and any issues encountered
- Recommendations for revisions to any Climate Change Actions
- Changes to key indicators
- Potential new Climate Change Actions for consideration.

Furthermore, a public fact sheet on implementation progress will be published on Kirklees' Climate Emergency Website, with press releases and case studies considered to highlight specific success stories.

Where required and agreed on by Kirklees' Climate Change Board, a revised version of the Climate Change Action Plan, to reflect Progress Report outcomes, will be published.

NEXT STEPS

As Kirklees embarks on this climate action journey, it is important to recognise and emphasise that a commitment to make a whole district net-zero and climate ready is beyond the authority of Kirklees Council alone.

There is a requirement for strong collaboration and collective action from all allies across the area of Kirklees, individuals, businesses, community organisations, key anchor institution, regional authorities, agencies, and the local authority.

*“Please please please don’t assume that you know all of the answers. There is a wealth of knowledge across Kirklees that can be used to drive action!”
(Kirklees resident)*

Our Net Zero and Climate Ready vision for Kirklees is ambitious and aspirational but is tempered by the funding that is available to work with (capital and operational) and the level of ownership, engagement and uptake that can be achieved.

The public sector faces extremely hard times; with a rapidly growing population, increasing demand for services (i.e., transport, education, social care), on-going reductions in government funding alongside recovery from the COVID-19 pandemic and the cost-of-living crisis. To achieve our climate ambitions, we must seek new ways of doing things and seek new approaches to identifying and accessing necessary investment.

The next steps in our climate action journey, as seen in

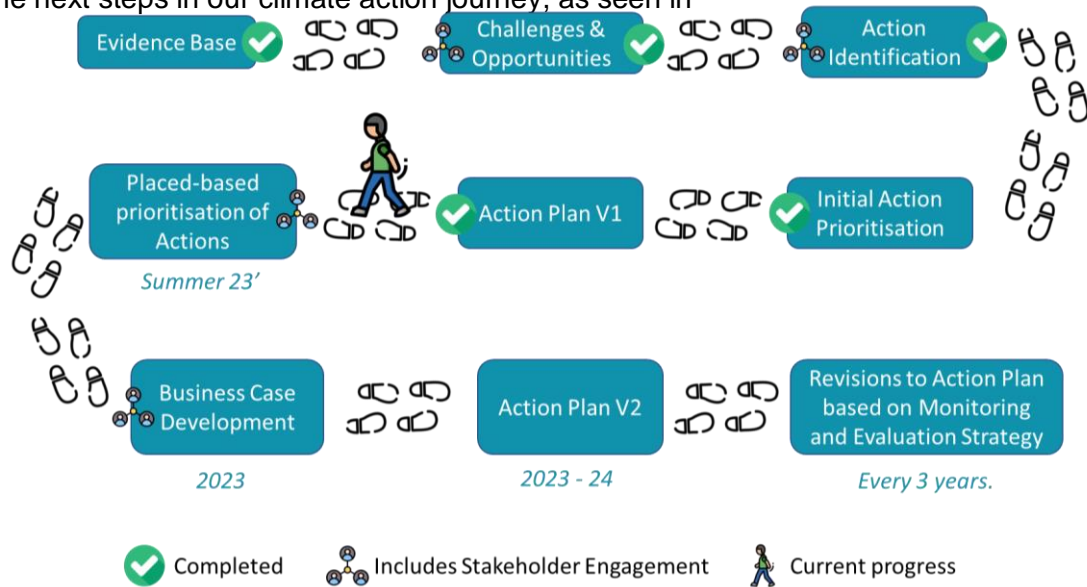


Figure 7, will call upon further engagement and collaboration, to help prioritise appropriate actions by place (i.e., rural vs urban) before developing business cases that will outline the potential financing mechanisms and funding sources alongside a carbon reduction analysis for the high priority actions.

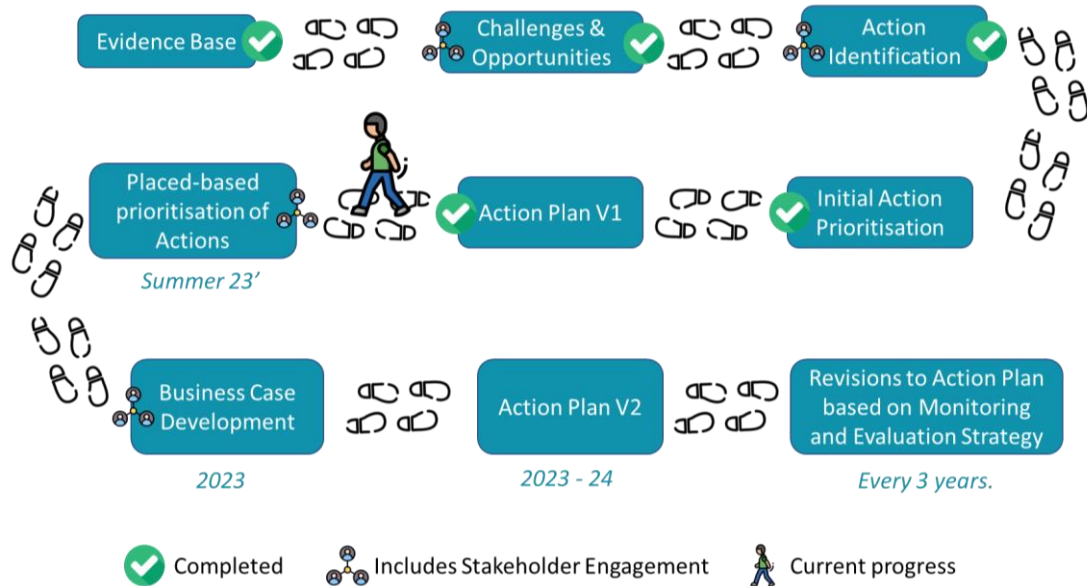


Figure 7: Next steps for the Kirklees CCAP.

This will involve:

- **Placed based prioritisation of Action:** Through stakeholder engagement, appropriate actions will be prioritised by 'place', recognising that the varying social, economic, environmental and build environment characteristics of Kirklees requires actions that are tailored to this uniqueness, rather than a single blanket approach for all areas within Kirklees.
- **Business Case Development:** Once prioritised by place, a business case will be developed for a short-list of high-priority actions. As a minimum, this will include carbon reduction potential and an analysis of funding requirements.
- **Action Plan V2:** Off the back of the previous steps, a second iteration of the action plan will be published, outlining the high priority actions and their associated business cases.
- **Revisions to the Action Plan based on the Monitoring & Evaluation Strategy:** As per the M&E strategy outlined in this report.

ACKNOWLEDGMENTS

Many people have given their time to develop this document – politicians, businesses, consultants, community groups, residents, and organisations. Thank you.

All icons used within this report have been designed using Flaticon.com.

ACRONYMS LIST

Table 10: Acronyms List for CCAP

Acronym	Definition
A	Adaptation
AFOLU	Agriculture, Forestry and Other Land Use
ASAP	Action Selection and Prioritisation
BEIS	Department for Business, Energy & Industrial Strategy
CBA	Co-benefits Analysis
CCAP	Climate Change Action Plan
CCRA	Climate Change Risk Assessment
CCRVA	Climate Change Risk and Vulnerability Assessment
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
DEC	Display Energy Certificate
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EA	Environment Agency
EPC	Energy Performance Certificate
EV	Electric Vehicle
FA	Feasibility Analysis
GCoM	Global Covenant of Mayors
GHG	Greenhouse gases
HDEN	Huddersfield District Energy Network
HDP	Heat Decarbonisation Plans
H&N	Homes and Neighbourhoods
IPCC	International Panel for Climate Change
IPPU	Industrial Process and Product Use
KCC	Kirklees Climate Commission
LAEPs	Local Area Energy Plans
LLFA	Local Lead Flood Authority
M	Mitigation
M&A	Mitigation and Adaptation

M&E	Monitoring and Evaluation
NBS	Nature Based Solutions
NFU	National Farming Union
NGO	Non-Government Organisation
PCAN	Place-Based Climate Action Network
PV	Photovoltaic
SBT	Science Based Target
UTMC	Urban Traffic Management Control
WRAP	Waste and Resources Action Programme
WRF	White Rose Forest
WYCA	West Yorkshire Combined Authority
WY	West Yorkshire
YPO	Yorkshire Purchasing Organisation

GLOSSARY OF KEY TERMS

A glossary outlining the definitions of key, technical terms used throughout the Kirklees Climate Change Action Plan.

Table 11: Glossary of Terms

Word	Definition
Adaptation	The process of an adjustment to actual or expected climate and its effects to moderate harm or exploit beneficial opportunities.
Anthropogenic	Resulting from or produced by human activities.
Biodiversity Net Gain	Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected in such a way it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored
Carbon Budget	The estimated cumulative amount of global carbon dioxide emissions that that is estimated to limit global surface temperature to a given level above a reference period, considering global surface temperature contributions of other GHGs and climate forcers;
Carbon Dioxide (CO₂)	A naturally occurring gas, CO ₂ is also a by-product of burning fossil fuels, burning biomass, of land use changes and of industrial processes. It is a principle anthropogenic greenhouse gas that is a cause of climate change.
Carbon Dioxide equivalent (CO₂e)	The amount of carbon dioxide (CO ₂) emission that would cause the same integrated radiative forcing or temperature change, over a given time horizon, as an emitted amount of a greenhouse gas (GHG) or a mixture of GHGs.
Climate Change	Refers to a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer.
Climate Ready	This covers two aspect of climate risk, physical and transitional. Physical risks being the impacts we have and will continue to experience from hazards such as flooding, high winds, moorland fires etc and transitional risks being the risks of becoming a net zero society – fluctuation energy prices, cost of living crisis, lack of infrastructure etc.
Decarbonisation	The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence.
Energy Performance Certificates	Energy Performance Certificates (EPCs) are required in the UK to provide a prospective owner or tenant with information on the energy performance of a building and recommendations for improvement. EPCs for homes use an A-G rating scale based on the modelled energy bill costs of running the building.
Greenhouse Gas (GHG)	Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic. The primary GHGs are Carbon Dioxide (CO ₂), Water Vapour (H ₂ O), nitrous oxide (N ₂ O), methane (CH ₃) and Ozone (O ₃).
Hazard	The potential occurrence of a natural or human-induced physical event or trend that may cause loss of life, injury, or other health impacts, as well as damage and loss to

	property, infrastructure, livelihoods, service provision, ecosystems and environmental resources.
Impacts	The consequences of realized risks on natural and human systems, where risks result from the interactions of climate-related hazards (including extreme weather and climate events), exposure, and vulnerability. Impacts generally refer to effects on lives, livelihoods, health and wellbeing, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure.
Maladaptation	Actions that may lead to increased risk of adverse climate-related outcomes, including via increased GHG emissions, increased vulnerability to climate change, or diminished welfare, now or in the future. Maladaptation is usually an unintended consequence.
Mitigation	A human intervention to reduce emissions or enhance the sinks of greenhouse gases.
Net-zero Emissions	Net-zero emissions are achieved when emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals.
Residual carbon	Residual carbon are the emissions remaining after all technically and economically feasible opportunities to reduce emissions in all covered scopes and sectors have been implemented.
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure.
Risk	The potential for adverse consequences where something of value is at stake and where the occurrence and degree of an outcome is uncertain. In the context of the assessment of climate impacts, the term risk is often used to refer to the potential for adverse consequences of a climate-related hazard, or of adaptation or mitigation responses to such a hazard, on lives, livelihoods, health and wellbeing, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure.
Scope 1 Emissions	Scope 1 covers emissions from sources that an organisation owns or controls directly.
Scope 2 Emissions	Scope 2 are emissions that a company causes indirectly when the energy it purchases, and uses is produced
Scope 3 Emissions	Scope 3 encompasses emissions that are not produced by the organisation itself, and not the result of activities from assets owned or controlled by them, but by those that it is indirectly responsible for, up and down its value chain
Stationary Energy	All fossil fuels used in electricity generations and in the direct production of industrial heat. It does not include energy used for transport,
Vulnerability	The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

APPENDIX A: EXISTING ACTIONS FOR KIRKLEES

Appendix A can be found on the Climate Emergency webpage, [here](#)

APPENDIX B: ACTION LIST BY OWNER

The following tables divide the actions outlined in this plan by specific owner, being Kirklees Council, Partners, and Wider Community, alongside those actions that require collaboration, i.e., input from two or more of the owner groups.

WHAT CAN KIRKLEES COUNCIL DO

Table 12: Actions for Kirklees Council only.

I.D	Action Title	I.D	Action Title
Energy			
E1.1	Explore opportunities for renewable generation are identified in future iterations of the Kirklees Local Plan and Our Council Plan.	E2.3	Support the development of solar farms and the installation of PV panels on buildings throughout Kirklees (where appropriate).
E1.2	Consider revisions to Kirklees local planning policy at the next Local Plan update about a potential requirement for new developments within Kirklees to complete an options assessment for renewable energy (heat and power) generation and storage.	E4.1	Explore opportunities in the district to support the expansion of green hydrogen production and/ or use.
E1.3	Consider revisions to Kirklees local planning policies at the next Local Plan update to encourage the development of renewable generation, aligning with the findings of a Local Area Energy Plan.	E4.2	Through the most appropriate mechanisms, i.e., planning provision, publicity, investment or guidance, support community energy projects (e.g., shared heating and group buying schemes for PV))
E1.4	Ensure Kirklees Council are involved in lobbying, review, and development of new national and regional energy-related policies, plans and regulations.	E5.3	Make representations to Ofgem and energy infrastructure providers where appropriate, to ensure Kirklees' energy infrastructure is climate ready.
E2.2	Transition council-owned and operated buildings and schools to use locally generated low and zero carbon sources of energy (e.g. solar PV and, district heat networks such as HDEN), coupled with appropriate storage mechanisms, where feasible, informed by the LAEPs and HDPs.		
Buildings			
B1.1	Complete Heat Decarbonisation Plans (HDPs) for Council corporate estate, leisure centres, business centres and schools, building on the work undertaken for the Huddersfield District Energy Network.	B2.5	All new residential developments on Council-owned land to be designed to the highest possible energy efficiency standard, building on the work seen by the Liversedge Pilot Project (i.e., Passivhaus)

B.1.3	Examine the current building use in the Councils corporate estate to see if they are correct, outlining plans to optimise where possible.	B2.6	Consider revising existing planning guidance and striving to ensure new planning guidance aligns with the ambitions of achieving Net Zero by 2038.
B.1.4	Develop internal Council policy to ensure all maintenance and improvements made to the Council estate need to adhere to best-practice energy efficiency and broader sustainability standards.	B3.1	Explore opportunities to provide more financial support to vulnerable residents living in privately-owned domestic properties for energy-efficiency improvements.
B.1.9	Create a district-wide register for buildings at risk of severe weather events.	B3.5	Launch a programme of retrofit for council-owned domestic properties using programme such as Energiesprong (or equivalent), building on the Abbey Road project.
B.1.11	Ensure planned and preventive maintenance is completed to buildings, trees, other infrastructure, to minimise risk of damaged and windblown debris.	B3.6	Consider options for the council to work alongside the private sector to encourage / enable owners of privately-owned commercial properties to improve the energy efficiency of their assets.
B2.1	Consider revisions to local Kirklees local planning policy at the next Local Plan update to require the highest energy efficiency standards, where proposals are assessed through the planning process. This relates to new-build and retrofit developments; domestic, industrial, commercial, and public buildings.	B3.9	Consider developing outside respite areas (shaded, open to air currents, potentially with moving water) for people who live in premises at risk of overheating.
B2.2	Consider revisions to local planning policy at the next Local Plan update to promote climate change measures and energy efficiency improvements in listed buildings without loss of significance.	B4.2	Identify the funding sources, to assign an officer to work with local developers, construction firms and education centres to develop and launch a local retraining scheme for sustainable construction.
B2.3	Consider revisions to local planning policy at the next Local Plan update to seek to strengthen approaches to encouraging the re-use of buildings and previously developed land.	B5.1	Through the most appropriate mechanisms, i.e., planning provision, publicity or investment, support innovative building schemes and developments within Kirklees.
B2.4	Ensure Town Centre Action Plans for buildings (domestic and non-domestic) and other flagship Council master planning projects, align with the ambitions of achieving Net Zero and Climate Ready by 2038.		
Natural Environment and Biodiversity			
NEB1.1	Consider declaring an ecological emergency for Kirklees and/or equivalent policy measures in order to address the wider environmental challenges faced by the District.	NEB3.2	In appropriate re-wilding locations across the district, install visible information about what visitors can observe and the benefits that re-wilding generates.
NEB1.2	Explore opportunities for small-scale woodland creation across Kirklees	NEB3.4	Develop internal training to educate and inform council colleagues about the value of biodiversity and actions they can take to enhance local biodiversity.

NEB1.3	Establish a rewilding programme for appropriate areas of Kirklees Council controlled and managed land.	NEB4.1	Consider revisions to Kirklees local planning policy at the next Local Plan update to seek to ensure that new developments in Kirklees, including any public realm and supporting infrastructure, shall achieve the highest standards of design for the natural environment and local biodiversity, seeking to ensure that the development enhances Kirklees natural capital and provides ecosystem services through green infrastructure and nature-based solutions.
NEB1.5	Consider transforming urban parks and play areas to provide resilient Nature Based Solutions and re-wilding, planting more drought resistant vegetation, creating more shaded space, and undertaking habitat improvements e.g. SuDs, bio-Swales, and wildflowers.	NEB4.2	Commit to a programme of tree protection and planting; requiring developers to appropriately establish trees and wildlife areas within new developments, alongside protecting or replanting mature trees, as opposed to felling. Where tree loss is deemed to be acceptable, developers will be required to submit a detailed mitigation scheme.
NEB2.1	Create a mandate within the council to dedicate appropriate officers to focus on work required around protecting and enhancing the natural environment.	NEB4.3	Continue to develop and map out a strategic green infrastructure network for Kirklees, considering options how the protection of its function could be strengthened within the network in a future Local Plan update, including considering how new developments and land-use change respect, coordinate with, and enhance the network.
NEB2.2	Evolve how council-owned and managed land e.g., parks and open spaces, is managed, with a focus to increase biodiversity and restore habits, including through reduced pesticide use and increased re-wilding programmes.	NEB4.4	Develop internal Council policy to ensure all works undertaken on Council-owned and managed land, assets, and infrastructure, that are not bound by planning policy, adhere to the highest standards of design for the natural environment and local biodiversity.
NEB2.4	Review all Green Infrastructure and publicly owned land in terms of climate resilience	NEB5.2	Consider how existing work on the Kirklees biodiversity net-gain land-bank, be evolved to incorporate potential future carbon offsetting requirements.
NEB3.1	Create and share information about the environmental benefits of woodlands through the White Rose Forest partnership and small-scale woodland creation.		
Sustainable Food and Agriculture			
SA1.1	Use the planning process to promote land for food production including as part of new developments where justified.	SA3.1	Continue to develop the Sustainable Food Cities Programme for Kirklees, building community food knowledge resource projects and alter catering and food procurement towards more sustainable and healthy habits.
SA1.2	Providing guidance/signposting to community organisations regarding legal issues of establishing community gardens / allotments / orchards.	SA3.3	Consider planning for the revision of back-up and alternative food supplies in cases where supply chain of foodstuffs is hindered, disrupted, or even halted.

SA1.3	Develop a support system to help community food-based projects.	SA5.2	Strive to ensure the local planning policy, at the next Local Plan Update, allow/facilitate farmers to be able to adapt to future challenges through diversification in land-use and practices.
SA2.1	Look at how the planning provision can be used to encourage the development and growth of innovative, modern farming practices, particularly in the urban environment, within Kirklees.	SA5.3	Ensure Kirklees are involved in lobbying, review, and development of new national and regional level farming incentives.
Transport			
T.1	Align all plans, strategies, and transport related policies with Net Zero and Climate Ready by 2038 goal	T4.1	Develop a strategy for behaviour change in relation to transport for the district of Kirklees. Potential to integrate with the transport strategy.
T1.1	Develop a Kirklees Transport Strategy that is consistent with the outcomes of this CCAP and the Net Zero and Climate ready by 2038 goal.	T4.2	Assign an officer to work with residents and local organisations to help facilitate and implement behaviour change initiatives in transport for Kirklees.
T1.3	Consider revisions to Kirklees local planning policy at the next Local Plan update to aim to ensure sites for new housing and commercial developments that can be served by quality public transport links and active travel (walking and cycling). Explore the concept of low traffic or car-free development.	T4.3	Continue to implement anti-idling policies across the district, focusing on schools, train stations etc.
T1.4	Review the Kirklees local planning policy to ensure new transport infrastructure is designed to align with the Net Zero and Climate ready by 2038 goal.	T4.4	Assist residents with upskilling to take advantage of sustainable transport employment opportunities.
T1.6	Review taxi vehicle license policy to encourage and incentivise the use of 'cleaner' ULEV vehicles.	T5.2	Consider collaborating with neighbouring districts, such as Calderdale, on the potential for park and ride schemes to large urban centres such as Huddersfield and Dewsbury.
T2.1	Building on Kirklees' Air Quality Action Plan, consider smart UTMC (Urban Traffic Management Control) system which allocates 'green lights' according to emissions produced by vehicles, giving consideration for modal shift towards active travel.	T5.3	Continue to develop the EV charging infrastructure across Kirklees, giving core consideration for on-street charging and access to charge points for private-hire companies, whilst not negatively impacting on the cycling and pedestrian user experience.
T3.4	Increase the amount of secure bicycle parking throughout Kirklees that is appropriate for different uses and locations.	T5.9	Develop a district approach to providing shaded walking / cycling routes for hotter weather, particularly in urban areas.
T3.6	If legalised, incentivise the safe uptake of E-scooter hire companies in urban centres within Kirklees, alongside encouraging private E-scooter use for short journeys.	T6.2	Consider developing a sustainability strategy for maintaining transport assets, ensuring it aligns with ambitions of this CCAP, outlining the use of more innovative, sustainable methods and materials.

T3.12	Assess the feasibility of implementing low/zero emissions zone across Kirklees, linking with clean air zones.		
Waste			
WAS1.1	Be ready to update the current Resource & Waste Strategy 2021 - 2030, associated activities and assets, to align with emerging Government policy and the Kirklees climate ambition of being Net Zero and Climate Ready by 2038.	WAS2.1	Develop capacity building training and guidance to upskill Council staff on circular economy principles and measures, and how these can be applied in the councils' operations across appropriate service directorates.
WAS1.2	Consider revisions to Kirklees local planning policy at the next Local Plan update to potentially require new development, including any public realm and supporting infrastructure, to incorporate circular economy measures into all aspects of the design, construction, and operation process. These could be reported via a Circular Economy Statement.	WAS2.7	Investigate and refine the waste/resources associated with procurement
WAS1.3	Develop guidance outlining how to prepare a Circular Economy statement to accompany planning applications.	WAS2.8	Continue to integrate formal re-use systems into all of Kirklees' HWRCs.
WAS1.4	Ensure Town Centre Action Plans and other flagship Council master planning projects adopt circular economy measures in all aspects of the design, construction, and operation.	WAS3.4	Consider piloting 'zero-waste zones' within Kirklees to test and implement practices and policies that support Kirklees' ambition to be net zero by 2038.
Water			
WAT1.2	Work with partners to divert grey wastewater from waterbodies (i.e., rivers and reservoirs)	WAT3.3	Ensure Town Centre Action Plans and other flagship Council master planning projects incorporate WSUD and SuDs into their design.
WAT2.4	Develop a plan to improve the water use and efficiency in the Council's operational estate i.e., rainwater harvesting and grey water recycling.	WAT3.4	Strive to ensure all residential developments on Council-owned land will be designed to the highest water efficiency standards.
WAT3.1	Consider revisions to Kirklees local planning policy at the next Local Plan update in relation to a potential water efficiency standards in new-build and retrofit developments, domestic industrial commercial and public buildings through the planning applications process.	WAT3.5	Ensure the new Local Flood Risk Management Strategy aligns with the outcomes of this CCAP and associated CCRVA to achieve Climate Ready by 2038.

WAT3.2	Consider revisions to Kirklees local planning policy at the next Local Plan update to explore the latest approaches to Sustainable Urban Drainage Systems (SuDs) and Water Sensitive Urban Design (WSUD).		
Cross-cutting			
CC1.1	Develop a top-tier Environment and Sustainability strategy for Kirklees Council.	CC2.3	Consider amending business rates to encourage low-carbon and more sustainable practices within Kirklees. I.e., business with a sustainability / carbon strategy and an understanding of their scope 1, 2 and 3 emissions receive relief.
CC1.2	Consider undertaking a governance review, building on the Integrated Impact Assessment, to further adapt Kirklees councils' decision-making process so that it is structured around the planetary boundaries and / or doughnut economics model, ensuring key-decisions take into account social, economic and environmental impacts and benefits (including both emission reduction and climate resilience).	CC2.6	Consider undertaking vulnerability mapping (e.g., with the Climate Just Tool) to highlight particularly vulnerable areas, informing the provision of appropriate support.
CC1.3	Develop internal carbon budgets for the Kirklees Council, divided by service area as with financial budgets.	CC4.1	Provide training/ guidance on climate risk to schools & care contractors.
CC1.7	Breakdown the council's financial budget to highlight money which has been spent on climate emergency response and associated actions.		

WHAT CAN PARTNERS DO

Table 13: Actions for Partners within Kirklees

I.D	Action Title	I.D	Action Title
Energy			
E3.5	Invest in the upskilling of employees, developing the necessary skills required for renewable energy technologies.	E5.1	Implement Northern PowerGrid's wide scale grid improvement plan.
E4.3	Invest in programmes of research into enhanced renewable energy (heat and power) generation and storage.	E5.2	Assess current and future grid capacity, designing-in the need to cope with extra load and fluctuation that renewable energy

			technologies and enhanced electricity demand will create, especially for larger scale schemes. Links to the future Local Area Energy Plan.
E4.4	Explore opportunities for alternative energy commissioning at a reduced cost or with subsidies to replace the existing dependency on gas.	E5.4	Review and refine grid capacity management, ensuring that demand reflects actual use.
Buildings		Transport	
B1.5	Complete condition surveys on all commercial buildings, sharing the data on a centralized platform to inform future action by others	T3.8	Support and encourage employees to cycle, walk or run to work by providing secure cycle storage, changing rooms and lockers.
B1.6	Commit to evaluating and refining current building use and management to reduce operational energy demand.	T3.9	Implement sustainable travel initiatives for employees and consider reducing the availability of onsite parking to service only those with accessibility needs.
B3.7	Commit to energy reduction and climate resilience measures in organisational assets, including demand reduction, upgrade the building insulation, decarbonising the heating and incorporating passive or active cooling mechanisms.	T3.13	Extend WYCA Car Club to cover E-Bikes.
B4.3	Invest in the upskilling of employees, developing the necessary skills required for more sustainable construction practices.	T5.4	Organisations and businesses with fleets (HGVs, buses coaches, waste collection vehicles, vans or taxis), to develop renewal strategies that align to Net Zero by 2038, being more fuel efficient and becoming ECO Stars members.
B5.2	Strive for new developments to achieve the highest possible energy efficiency standards.	T5.6	Bring transport stakeholders together on a semi-regular basis, to ensure all are aware of the work others are doing,
Natural Environment and Biodiversity		Waste	
NEB1.7	Consider implementing rewetting initiatives - Infrastructure and techniques already exist but funding is needed for initial capital works e.g., gully blocking, sphagnum planting, bunding.	WAS1.5	Ensure new developments adopt circular economy measures in all aspects of the design, construction, and operation.
NEB3.6	Providing residents with information on individual gardening practices and behaviours that they can adopt. Link to the ecological emergency, cost of living and climate crisis e.g. micro allotments, rewilding, tree planting.	WAS1.6	Adopt organisational targets for waste reduction and recycling rates, integrating circular economy principles and measures into day-to-day practices.
NEB4.5	Seek to ensure that new commercial and residential developments achieve the highest standards of design for our natural environment and biodiversity.	WAS2.5	Consider expanding trade and commercial waste collection and disposal to incorporate glass and food waste.
		WAS3.2	Mattress innovation hub - supporting mattress manufacturers to be more sustainable in design, production, and end-of-life considerations.

Sustainable Food and Agriculture		Water	
SA4.2	Work with food suppliers / producers and private-sector investors to develop proposals for produce distribution hub(s). Support with planning provision.	WAT4.1	Develop and implement plans to ensure sufficient firefighting water is available particularly during droughts.
Cross-cutting			
CC3.2	Agree a clear role and set of priorities for the Kirklees Climate Change Commission with the aim to deliver real change and action.		

WHAT CAN THE WIDER COMMUNITY DO

Table 14: Actions for the Wider Community within Kirklees

I.D	Action Title	I.D	Action Title
Buildings		Natural Environment and Biodiversity	
B3.4	Explore opportunities to improve the energy efficiency of your home i.e., insulation	NEB1.4	Rewild your gardens; plant trees and wildflowers to encourage and support local wildlife.
Sustainable Food and Agriculture		Transport	
SA3.2	Adopt more sustainable and healthy food habits, achieving a balanced diet, eating more seasonal, locally sourced foods,	T3.7	Choose walking, cycling or public transport for short journeys instead of a car
SA4.3	Buy sustainably and locally produced food where possible		
Waste		Water	
WAS2.9	Look at establishing a home composting system for food waste.	WAT1.1	Promote, develop opportunities, and consider volunteering to help clean up local waterways across Kirklees.
WAS2.10	Reduce household waste, including food waste and single-use plastics.		
WAS2.11	Consider adapting your consumer behaviour and the impact it can have on waste; making conscious decisions to avoid fast fashion, avoid single-plastics and to purchase the best-quality product you can afford.		

WHAT CAN BE DONE IN COLLABORATION?

Table 15: Actions for collaboration within Kirklees.

I.D	Action Title
Energy	
E.2.1	Complete a Local Area Energy Plan for Kirklees, working in collaboration with neighbouring authorities where appropriate.
E.2.4	Switch to renewable energy tariffs and investigate options for on-site renewable energy (heat and power) generation and storage
E3.1	Working in collaboration with local educational institutions, launch a local re-training scheme for renewable energy technologies in Kirklees, enabling workers to adapt to the demand for skills.
E3.2	Compile a library of appropriate "Toolbox talks" that can be utilised by contractors to upskill employees.
E3.3	Host drop-in Energy Advice Centres for residents within Kirklees
E3.4	Encourage and support supply chain upskilling in the Local Government Authority.
Buildings	
B.1.2	Evaluate building management practices and systems to prioritise operational energy saving.
B.1.7	Carry out regular inspections of assets and ensure planned and preventative maintenance takes place, specifically to gutters, drains, gullies etc. Ensure specific attention is paid to any materials susceptible to temperature extremes.
B.1.8	Consider insurance against subsidence (and other geological risks identified in site/asset facilities information, ongoing monitoring, audits etc.).

I.D	Action Title
Transport	
T1.2	Work with WYCA to deliver the Bus Service Improvement Plan vision in Kirklees, aligning with Net Zero by 2038, including an enhanced network, clearer fares, improved customer support, bus priority and greener bus fleet.
T1.5	Review event management policies in Kirklees to require event management plans to outline active and public modes of transportation that can be taken to the event location.
T3.1	Develop a Local Cycling and Walking Infrastructure Plan for Kirklees that identifies high priority routes and informs future investment decisions, whilst continuing to improve and expand both traffic-free and on-highway cycling infrastructure.
T3.2	Review data on how people move around Kirklees and take steps to optimise the transport network, giving priority for sustainable, shared, and active models of travel.
T3.3	Investigate the development of active/liveable neighbourhoods in Kirklees.
T3.5	Develop and deliver communications and engagement programmes to encourage sustainable and active travel in Kirklees.
T3.11	Investigate how the Council and other organisations procurement policies could encourage the use of ULEV vehicles and bicycles (E-bikes and cargo bikes) including demand for freight consolidation centres.
T4.6	Continue to invest in travel training for all school children across Kirklees to promote the use of active and shared transport
T5.1	Continue to work with WYCA to develop a Mass Transit system in West Yorkshire
T5.5	Identify and bid for funding opportunities to implement a programme of improvements to the Penistone railway line to improve journey times, frequency and improve active travel connections to the train stations.

B.1.10	Ensure that more severe drought events are included as a specific risk in the Asset Management Plans.
B.1.12	Identify organisational assets which are anticipated to be most vulnerable to severe weather (storms, flooding, overheating) and ensure that more severe weather is included as a specific risk criterion in the relevant Business Continuity Plans and in the Asset Management review process.
B2.7	Support and guide Parish Councils to strive to ensure that Neighbourhood Development Plans reflect the ambition and actions in this Action Plan in achieving a Net Zero and Climate Ready Kirklees by 2038.
B3.2	Enforce minimum energy-efficiency standards in the private rented sector, working in collaboration with relevant housing associations.
B3.3	Explore opportunities to invest in energy efficiency improvements for community buildings and schools.
B3.8	Upgrade all appliances to highest possible energy efficiency when at end-of-life.
B3.12	Ensure specifications for new care homes and site selection considers temperature projections, with adequate cooling, ventilation, natural internal and external shading.
B4.1	Working in collaboration with local educational institutions, launch a local re-training scheme for sustainable construction in Kirklees, enabling workers to adapt to the demand for skills such as energy efficiency retrofitting.
B4.4	Develop a database of local tradespeople and resources that Kirklees residents and organisations can utilise to make homes/businesses more energy efficient.
B4.5	Include greater climate change assumptions into EA information sources that are used in the planning process. Expand on existing liaison with EA.
B5.3	Publicly share and advertise case studies of energy efficiency and best-in-class developments.

T5.8	Consider undertaking a cross-organisational joint mapping exercise to determine roads particularly vulnerable to flooding and plot alternative routes. Ensure route plans are distributed to ensure services can still efficiently reach those in need of care.
T6.1	Explore opportunities in the district for supporting the expansion of low carbon and zero carbon fuel alternatives for private, public and freight vehicles, such as green hydrogen and synthetic fuels.
T6.3	Further build on current academic partnerships to develop and test innovative transport solutions.
Waste	
WAS2.2	Publicly share and advertise case studies of best-in-class waste management, waste behaviours and application of circular economy principles and measures within Kirklees, the West Yorkshire region and nationally.
WAS2.3	Better communicate the on-going education campaigns in Kirklees schools, colleges and universities in relation to waste management and circular economy principles, making it available for a broader audience of Kirklees residents.
WAS2.4	Develop and publicise an inventory of businesses and shops within Kirklees that implement best-practice circular economy or waste hierarchy principles, i.e. charity shops, vintage shops, refill shops, repair providers.
WAS2.6	Investment into staffing/grant funds to assist local businesses on waste reduction and reuse
WAS2.12	Where waste management assets are closed, ensure communication procedures are in place to alert potential users and visitors.
WAS3.1	Research the feasibility of implementing a network of industry symbiosis within Kirklees and the broader WY region (i.e. waste from one industry becomes a resource for another)
WAS3.3	Introduce 'Green Fashion hubs' within Kirklees, involving established and aspiring stakeholders in the fashion industry, including schools and young people.

Natural Environment and Biodiversity	
NEB1.6	Working with the White Rose Forest, assess and research innovative ways to meet sapling and bulb demand more locally, i.e. sustainably harvesting saplings from existing mature forests and re-planting in a nursery.
NEB2.3	Through Moors for the Future Partnership and other regional partners and statutory agencies, begin to jointly develop detailed peatland management/restoration plans for Kirklees in co-ordination with ongoing restoration efforts.
NEB3.3	Run an district-wide educational campaign on responsible upland behaviour, focusing on dry conditions and wildfire risk.
NEB3.5	Work with schools within Kirklees to educate children around the current biodiversity crisis and it's links with the climate emergency.
NEB5.1	Working with appropriate partners and landowners, undertake an assessment to accurately understand the amount of carbon that is both sequestered and emitted by the natural vegetation and landscapes within Kirklees. Repeat in-line with the Monitoring and Evaluation process of this CCAP.
Sustainable Food and Agriculture	
SA1.4	Take ownership over local allotments and district farms, establishing an open and accessible membership / volunteer system to manage the land effectively and sustainably.
SA2.2	Develop and support a demonstrator / pilot project for Agri-tech, such as urban/vertical farming within the district.
SA3.4	Support and supplement vulnerable people and families, e.g. free school meals, family food funds for healthy eating.
SA4.1	Establish initiatives to connect local growers and suppliers.
SA5.1	Engage and encourage the participation of farming stakeholder groups within Kirklees in the Climate Conversations.

WAS3.5	Consider implementing a 'just-in-time' ordering system at high-schools across Kirklees, in-line with that used in primary schools in order to avoid food waste.
Water	
WAT1.4	Consider the feasibility of implementing appropriate land-management techniques in high risk areas of Kirklees to divert surface water run-off away from stormwater infrastructure and overburdened surface water drains.
WAT2.1	Design and deliver district-wide guidance and educational campaigns on water saving techniques.
WAT2.2	Install water butts on domestic properties where feasible.
WAT2.3	Consider the potential for communal water harvesting/ reuse schemes.
WAT2.5	Consider retrofit measures such as rainwater harvesting, grey water recycling and measures on commercial and residential buildings to reduce water demand and use.
WAT2.6	Upgrade all appliances to the highest possible water efficiency when at end of life
WAT2.7	Develop and implement a watering regime cognisant of increased pressure though reduced availability of water supply.
WAT4.2	Consider installing floodgates where feasible and appropriate to protect key areas of equipment, infrastructure and buildings which may be impacted from flooding:
WAT4.3	Review emergency planning procedures and to revise measures for reduced water availability and increased demand to reflect the expected increasing in frequency of heatwaves and drought events.
WAT4.4	Ensure that Local Resilience Forum Water Supply Disruption Plan considers the increasing occurrence of droughts/ heatwaves.

SA5.4.	Explore opportunities, in collaboration with regional and national government and the private sector, to financially support more sustainable agricultural practices in the Kirklees farming community.
SA5.5	Support a shift in how farmland is managed to make it more resilient. Consider how incentives/subsidies can be used and how councils can influence these mechanisms.

WAT4.5	Fire and rescue service may be particularly impacted through demand on services to respond to flooding and heatwave events. Collaboration through the multi-agency flood plan and with neighbouring fire and rescue services should be considered.
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I.D	Action Title	I.D	Action Title
Cross-cutting			
CC1.6	Encourage greater engagement and empowerment of children and young people in climate adaptation decision making and planning.	CC2.6	Consider undertaking vulnerability mapping (e.g., with the Climate Just Tool) to highlight particularly vulnerable areas, informing the provision of appropriate support.
CC1.7	Ensure that climate change risks and net zero transitional risk are incorporated into organisational management plans and risk registers, assigning appropriate risk owners and coordinators, with each service directorate developing an associated adaptation plan - organisational or service level, to address the key risks.	CC3.1	Establish a 'Climate Charter' in Kirklees which organisations in Kirklees can become a signatory of, taking ownership over and committing to the goal of becoming Net Zero and Climate Ready by 2038. Utilise this network for collaborative knowledge sharing and working.
CC1.8	Ensure that landlords of supported living assets have plans in place to arrange alternative accommodations if needed.	CC3.3	Consider options for the Council to work alongside partners and allies to develop a digital platform that integrates multiple sources of data to provide information on the district's performance. Ensure data sharing agreements and data trusts are in place to encourage data to be shared.
CC1.9	Have alternative measures in place for those who ordinarily receive home care (e.g., personal alarms and performance monitors). Consider also implementing secondary alternative arrangements should flooding be combined with power supply cuts and electric equipment issued to people.	CC3.4	Continue to engage with the diverse range of communities that Kirklees is home to, achieving fair and inclusive climate action that is representative of Kirklees residents.
CC1.10	Ensure that all outsourced social care providers consider climate change risks in their respective service plans, outlining measures they can take to reduce this risk.	CC3.5	Enhance the sharing of knowledge and experience in relation to interdependencies across different agencies/ organisations and sectors within Kirklees (e.g., water companies, gas companies).
CC2.1	Consider establishing a Climate Emergency Community Fund to support community projects that adhere to the Councils Climate Emergency goals.	CC3.6	Develop or if existing, advertise, an app to help individuals understand and monitor their carbon emission reductions from actions they take in their daily lives.
CC2.2	Consider establishing a Green Entrepreneurs Fund to support the development of green skills and innovative carbon reduction projects in SMEs and micro-businesses across Kirklees	CC3.8	Build on Covid19 experience - explore the use of volunteers in times of high demand on services because of climate hazards and associated risks.
CC2.4	Provide green economy, green skills and 'how to build resilience' into 'Net Zero transition' guidance and support to local SMEs, micro-businesses, and organisations within Kirklees.	CC3.9	Collaborate with Learning Outreach/ Service providers and build on existing contacts with schools to provide additional support on climate risks.

CC2.5	Consider assessing the adequacy of resources to deal with the increasing trauma and emotional/mental welfare being sought – especially amongst the young – from climate related anxiety, depression, and suicide (associated with experiencing floods, droughts, and heatwaves)	CC4.2	Provide awareness raising and capacity building training on coping with climate anxiety, understanding climate risk, the vulnerability of the wider community, alongside health-related impacts from climate change and measures that can be adopted, focusing on young people and other vulnerable groups.
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APPENDIX C: FEASIBILITY AND CO-BENEFITS ANALYSIS




This appendix portrays the details of the feasibility and co-benefits assessment utilised to prioritise the climate change actions that are seen within this action plan.

This assessment was adapted from the UK100 ASAP Tool¹².


FEASIBILITY ANALYSIS:

The below table outlines the feasibility criteria that was used to prioritise climate change actions outlined in this plan. Each of the criteria had an equal score of 1, resulting in a maximum score of 13.

Table 16: Feasibility Criteria used for the prioritisation of actions, with associated symbols for the headline categories.

Feasibility Category	Criteria	Definition
Authority / Ownership 	Owner Authority	Does the action owner have the legal authority to implement this action, or would it need to be implemented by another entity, such as the national government, a utility or agency outside of the district, or private sector organisations?
	Alignment with District Policy	Is the action aligned with existing Council policy? For example, does it further the stated goals of the Councils Strategic Plan, Transport Strategy, Health and Wellbeing Plan, Environment and Sustainability Plan etc.
	Ownership / Access	Does the "action owner" currently own, lease, or have access to the land or assets required to implement this action?
Support 	Political Acceptability	Is this action politically popular or would it be politically challenging to implement?
	Alignment with Cultural / Social Norms	Is the behaviour or technology change encouraged by this action favoured or disfavoured based on local cultural/social norms?
	Alignment with other commitments	Will the action also contribute to the district meeting an additional declaration or commitment?
	Alignment with Regional / National / State Policy	Does the action align with or promote regional or national policies and priorities?
Financing and Funding 	Funding Source Secured / Identified	Has full or partial funding for this action been secured, or has a potential funding source been identified?
	Additional Capital Required to Implement	Beyond any funding that is currently secured or identified, how much additional capital would be required to implement the action (capital expenditure)?
	Additional Capital Requires to Operate	Beyond any funding that is currently secured or identified, how much additional capital would be required to sustain the action after implementation (operational expenditure)?
	Meets Relevant Environmental and Social Standards and Regulations	Would the action comply with relevant environmental and social standards or regulations (e.g., Environment Act) necessary to be eligible for funding?




¹² C40 Cities. 2022. *Action Selection and Prioritisation*. [Online]. [Accessed 27th July 2022] Available from: <https://resourcecentre.c40.org/resources/action-selection-and-prioritisation>



Technology 	Technology / Market Readiness	Is the technology required to implement the action ready for the market, will it require subsidies or other policy support to encourage adoption, or does it face significant technological or market hurdles before adoption can begin?
	Spatial Suitability	Is the action spatially or physically suitable for the location where it has been proposed?

CO-BENEFITS ANALYSIS

The below table outlines the co-benefits criteria, other than carbon reduction potential and resilience, that was used to prioritise climate change actions outlined in this plan. Each of the criteria had a score of 1, resulting in a maximum score of 22.

Table 17: Benefits criteria used for the prioritisation of actions with associated symbols for the headline categories.

Co-benefit Category	Criteria	Definition
Health and Wellbeing 	Air Quality	Reduced exposure to particulate matter (PM2.5 and PM10), NO ₂ , O ₃ , SO ₂ or airborne toxins.
	Physical Health	Increased life expectancy, or reduced incidents of diseases or deaths attributed to pollution, poor sanitation, or lack of access to nutrients or a lack of physical exercise.
	Wellbeing	Reduced levels of stress/anxiety, time spent working/commuting, and increased gender equality in housework/childcare.
Environment 	Water Quality and Management	Reduced levels of dissolved oxygen, phosphorous, nitrates, nitrites, fecal matter; sedimentation, chemicals, and/or heavy metals in freshwater and marine water bodies, alongside better management of water resources.
	Habitat	Increased creation, preservation, or restoration of natural environments.
	Biodiversity	Enhances local biodiversity.
	Green Space	Increased percentage of urban area that is greenspace, urban tree canopy, and/or access to parks, alongside increased rural space that is protected or more sustainably managed.
Economic Prosperity 	Employment	Increased employment rate, access to quality jobs (full-time versus temporary; high-paying versus low-paying), and total number of jobs.
	Income and Poverty	Increased income and social mobility - especially for vulnerable populations, reduced poverty rate.
	Cost of Living	Reduced cost of living or utility cost savings.
	Skills and Training	Increased access to green skills training and programs.
Essential Public Services	Housing	Increased availability of affordable housing, reduced proportion of residents living in poor quality housing with poor energy efficiency, reduced proportion of income spent on rent or mortgage.
	Mobility	Increased proportion of population within walking distance of transit (e.g., 500 m),

		share of trips by sustainable, active modes, reduced transportation costs.
	Energy	Increased proportion of population with access to clean, 'green' electricity, reduced energy bills and poverty.
	Waste Management	Increased proportion of households with access comprehensive recycling collections (inc food waste and glass), reduced waste generation and littering.
	Water	Reduced risk of surface or riverine flooding.
Inclusivity and Civil Society 	Stakeholder Engagement	Increased engagement with public/private entities outside of district council.
	Social Justice	Reduced socioeconomic or health disparities between groups based on race, ethnicity, religion, gender, or other identity.
	Community Representation	Increased representation of specific community groups, including civil society, academia, business, and vulnerable populations.

APPENDIX D: STAKEHOLDER SURVEY RESULTS

Appendix E can be found on the Climate Emergency webpage, [here](#).

APPENDIX E: ORGANISATIONAL AND JURISDICTIONAL POWER AND RESPONSIBILITIES FOR KIRKLEES

The following appendix outlines a non-exhaustive list of appropriate national, regional, and local level organisations and their associated power and responsibilities in relation to the governance of each of the 7 sectors covered by the Kirklees Climate Change Action Plan. Cross-cutting not included.

In the context of this appendix, ‘Governance’ can be defined as: the organisation, whether public or private, that has jurisdictional decision-making powers over the action areas. This could be Local Government, Utility Company, National Agency, National Trust etc.

It is recognised that other organisations, not covered by this table, may hold power and responsibilities in the sectors and that those included in this table, may have powers or responsibilities not referenced or included.

Table 18: A non-exhaustive overview of Kirklees Governance for Buildings at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
Buildings	<p><u>Department for Levelling Up, Housing and Communities (DLUHC)</u> Setting national housing and planning policy</p> <ul style="list-style-type: none"> Including local government, planning, targets, social and affordable homes, energy performance, building safety <p><u>Department for Business, Energy & Industrial Strategy (BEIS)</u></p> <ul style="list-style-type: none"> Policy and guidance on energy & buildings such as the Heat and Buildings Strategy Providing grants and funding for making homes and buildings more energy-efficient Research and Innovation into Net Zero including buildings and decarbonisation <p><u>Housing Developers</u></p> <ul style="list-style-type: none"> Responsible for ensuring new homes are built up to the standard set by regulators. 	<p><u>WYCA</u> Has policies and strategies covering:</p> <ul style="list-style-type: none"> Housing, Heritage, and Regeneration Spatial Planning <p><u>Regional Social Housing Providers</u></p> <ul style="list-style-type: none"> Manage social and affordable homes across Yorkshire <p><u>Regional Housing Developers</u></p> <ul style="list-style-type: none"> Responsible for ensuring new homes are up to the standard 	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> Planning: <ul style="list-style-type: none"> Local Plan Development Management Planning Enforcement Building Control Social Housing - Homes & Neighbourhoods (H&N) which has now been brought under Council ownership, was previously Arms-length (Kirklees Neighbourhood Housing) Asset Management and Strategy – responsible for council buildings, acquiring, maintaining, disposal <p><u>Parish Councils</u></p> <ul style="list-style-type: none"> Holme Valley has its own Neighbourhood Development Plan formed by a referendum and sits alongside Kirklees Local Plan so must also be considered in planning decisions

Table 19: A non-exhaustive overview of Kirklees Governance for Energy at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
Energy	<p><u>BEIS</u> The main national governance level responsible for energy, including:</p> <ul style="list-style-type: none"> • Net Zero by 2050 target • Carbon budgets • Providing funding towards decarbonisation, district heating networks, and renewables, green finance • Science, Research and Innovation into Energy, renewables, decarbonisation • Energy Security and Clean Growth both across the private and public sector • Resilience and emergency planning – the response to fuel supply disruptions • Tackling fuel poverty through the competitive Sustainable Warmth fund which LAs must apply for. 	<p><u>WYCA</u></p> <ul style="list-style-type: none"> • A facilitator, with investment and funding, but not a policymaking body for energy • Energy strategy, and a net-zero by 2038 target, with significant progress to be made by 2030 	<p><u>Yorkshire Purchasing Organisation</u></p> <ul style="list-style-type: none"> • The Council has a contract for its Energy supply via YPO • At the time of writing, the electricity supplier is NPower (100% Renewable) and gas is supplied by Corona • All energy data is stored on an 'Energy Hub' database provided by Utilidex via YPO. This is used by both the finance team for managing payments and by the Energy & Climate Change team for annual Carbon Reporting/CDP purposes.
	<p><u>Salix Finance</u></p> <ul style="list-style-type: none"> • The non-departmental BEIS-funded body which administers and awards the grant funding and loans for public sector decarbonisation projects. 	<p><u>WYCA and 'Leeds City Region' Local Enterprise Partnership:</u></p> <ul style="list-style-type: none"> • Energy Accelerator – offering support and funding for low-carbon projects 	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> • The Energy & Climate Change team is responsible for overseeing this energy contract with regards to Corporate Portfolio and Schools • Decarbonisation and energy efficiency advice and initiatives • Separate teams within Homes & Neighbourhoods and Kirklees Active Leisure are responsible for their energy usage and sustainability policies
	<p><u>National Grid</u> Responsible for the national energy (gas and electric) distribution network and infrastructure. Research, development and investment in smart solutions for the future i.e., more renewable generation, electric cars, etc</p>	<p><u>North East & Yorkshire Energy Hub</u> A collaboration of the 6 LEPs across the region accelerating the transition to NZ</p> <ul style="list-style-type: none"> • Increase the number, quality and scale of local energy project delivery • Raise local awareness and opportunities for local energy investment, attracting private/public finance for projects 	<p><u>Parish Councils</u></p> <ul style="list-style-type: none"> • Can undertake small-scale localised projects in their remit. Examples include Holme Valley Parish Council who have installed solar PV.
		<p><u>Northern PowerGrid</u> The distribution network operator for Yorkshire, Humber and the North East. Responsible for the network, maintenance and responding to emergencies and power cuts. Innovation and investment in the network to support the transition to more renewable energy.</p>	

Table 20: A non-exhaustive overview of Kirklees Governance for Natural Environment & Biodiversity at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
<p>Natural Environment & Biodiversity</p>	<p><u>Defra</u> Policy, guidance on national natural environment and biodiversity policy, such as</p> <ul style="list-style-type: none"> • Green infrastructure policy, working with planning and the part nature plays in net zero goals (carbon sequestration, etc) • Conservation and facilitating biodiversity net gain and nature recovery <p><u>Natural England</u> The government’s adviser for the natural environment, supporting Defra with delivering the ambitions set out in the 25-year plan and other policies</p> <ul style="list-style-type: none"> • Nature Recovery Networks, nature-based solutions to tackle climate change, improving natural capital, evidence, expertise, and partnerships. <p><u>National Trust</u> Membership-based organisation for heritage conservation. In addition to responsibility in maintaining historic stately homes and their surrounding green space, but also for significant areas of wild countryside, such as Marsden Moor, a large area of western Kirklees.</p> <p><u>Forestry Commission</u> Non-ministerial government department responsible for publicly owned forests and both public and private forestry in England.</p> <ul style="list-style-type: none"> • Woodland Management Plans 	<p><u>WYCA</u></p> <ul style="list-style-type: none"> • Has a “Green and Blue Infrastructure” Strategy and a Local Nature Recovery Strategy, working with partners • Green social prescribing, working with WY Health & Social Care Partnership to provide nature-based activities • Supporting nature recovery schemes for net zero, considering a grant programme for land-use and peatland restoration <p><u>White Rose Forest</u> The large-scale tree planting project across Northwest Yorkshire, forming part of the wider Northern Forest stretching from Merseyside to East Yorkshire.</p> <ul style="list-style-type: none"> • Has its own Action Plan and works in partnership with the Council, and bodies such as the Woodland Trust and Yorkshire Wildlife Trust <p><u>Peak District Authority</u> Part of the far south-western area of Kirklees (around Holme and Colne Valley) is within the jurisdiction of the Peak District Authority</p> <ul style="list-style-type: none"> • They are the statutory planning authority for the area in the National Park, rather than the Council 	<p><u>Kirklees Council</u> Parks and Greenspaces:</p> <ul style="list-style-type: none"> • Maintenance of municipal parks, public rights of way, public greenspaces, and vegetation, Fly tipping clearance • Volunteering Coordinator works with community groups and ‘Friends of...’ groups who maintain and have some autonomy over their parks • Runs community engagement events promoting green spaces and maintaining them, e.g., litter picking days <p>Planning:</p> <ul style="list-style-type: none"> • Will make decisions on whether to allow development on greenfield (not Green Belt) or brownfield sites • A dedicated Biodiversity Officer, ensuring species are not harmed in the process of any developments • Has the register of common land and village greens. <p><u>Parish Councils:</u></p> <ul style="list-style-type: none"> • May have some powers over communal greenspaces such as village greens, footpaths and maintenance of right of ways / bridleways. <p>Any natural environment/biodiversity initiatives as part of their Climate Emergency documents if applicable</p>

<ul style="list-style-type: none"> • Licenses for tree felling and reporting illegal felling • Countryside Stewardship • Importing/exporting wood/timber <p><u>Woodland Trust</u> A national woodland conservation charity</p> <ul style="list-style-type: none"> • Supporting tree-planting, conservation, restoration, and protection of woods <p><u>DLUHC</u></p> <ul style="list-style-type: none"> • Allocates Green Belt land, which is protected from development and can only be released by the Secretary of State <p><u>Land Registry</u> A non-ministerial department holding all the records of land ownership in England & Wales. This includes title deeds, boundaries, and relevant planning issues such as tree preservation, conservation, listed buildings and environmental health notices.</p>	<ul style="list-style-type: none"> • Also responsible for biodiversity and management of the area <p><u>Moors for the Future</u> A Lottery-funded project delivering landscape scale blanket bog restoration across the Peak District and South Pennines, some of the most degraded peatlands in Europe. Their work includes research and monitoring as well as practical conservation and awareness-raising.</p> <p><u>Yorkshire Wildlife Trust</u> A charitable NGO protecting wildlife in Yorkshire; owns and runs several nature reserves, two of which are in Kirklees:</p> <ul style="list-style-type: none"> • Stirley Farm, Huddersfield • Upper Park Wood, Holmfirth
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Table 21: A non-exhaustive overview of Kirklees Governance for Sustainable Food and Agriculture at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
<p>Sustainable Food and Sustainable Food</p>	<p><u>Defra</u> Setting national farming and food policy</p> <ul style="list-style-type: none"> • Countryside Stewardship, rural payments scheme, and post-Brexit Common Agricultural Policy (CAP) reform • Funding for farmers to support transition to net-zero through the Farming Innovation Programme • Imports and exports • Animal welfare policy • Guidance and legislation on fertiliser use to prevent pollution and excess runoff 	<p><u>WYCA</u> <i>Agricultural emissions are part of the West Yorkshire Emissions Reduction Pathways but WYCA's actual Governance over Agriculture and Sustainable Food appears limited. There is evidence that there was once a "West Yorkshire Rural Partnership" which has since been disbanded.</i></p> <p><u>NFU – Northeast Region</u></p>	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> • Planning: development of agricultural land, monitoring contaminated land • Environmental Health: food hygiene inspections • Animal licenses and animal health <p><u>Parish Councils:</u> Management of local allotments where present.</p>

<p><u>Defra/Environment Agency</u></p> <ul style="list-style-type: none"> • Enforcement action in the case of agricultural pollution incidents <p><u>National Farming Union (NFU)</u></p> <p>The primary union representing 46,000 farmers and growing businesses, covering two-thirds of agricultural land across England and Wales.</p> <p><u>Soil Association</u></p> <p>A national charity campaigning in favour of sustainable food, against intensive farming and is also the body that certifies organic foods in the UK.</p>	<p>Any farmers/agricultural businesses in Kirklees that are NFU members are members of the 'Northeast' branch, which covers Yorkshire, and is based in York.</p>
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Table 22: A non-exhaustive overview of Kirklees Governance for Transport at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
Transport	<p><u>Department for Transport (DfT)</u></p> <p>Policy, guidance & funding to local/regional government on:</p> <ul style="list-style-type: none"> • Improving and maintaining road networks. • Improving passenger and freight travel. • Developing of new major transport schemes. <p>Road maintenance (trunk roads, motorways, major roads) via Highways England.</p> <p>Strategic direction for the rail industry in England and Wales, including:</p> <ul style="list-style-type: none"> • Funding investment in infrastructure (via Network Rail). • Awarding and managing rail franchises. • Regulation of rail fares. <p>Promotion of lower carbon transport & active travel. Activities include:</p>	<p><u>WYCA (inc. WY Metro)</u></p> <p>Public transport provision, including:</p> <ul style="list-style-type: none"> • Funding for private operators delivering 'non-profitable' bus routes. • Management of bus stations/bus stops/timetable displays. • Train ticket subsidies. • MCard Scheme – travel smartcard. <p>Develops & secures funding for major transport schemes (typically DfT funding).</p> <p>Has an 'Economic and Transport Recovery' Policy as well as Bus and Connectivity strategies.</p>	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> • Taxi licensing. • Parking, inc. public EV charging infrastructure. • Road maintenance (borough's adopted roads). • Traffic regulation & road safety. • Delivery of major transport infrastructure schemes (DfT funding via WYCA). • Local planning policy, inc. Kirklees Local Plan. • Active travel promotion (Public Health team). <p><u>Parish Councils</u></p> <ul style="list-style-type: none"> • Promoting sustainable transport within their local area and as part of their Neighbourhood Development

<ul style="list-style-type: none"> Grant schemes for EV charging infrastructure (via OZEV, with BEIS) Active Travel England (announced Jan 2022) is managing the national active travel budget, awarding funding for projects that meet the set standards. <p>Funding and regulation of bus services.</p> <p><u>Ministry for Housing, Communities & Local Government</u> National Planning Policy Framework – Sustainable Transport</p> <p><u>Network Rail</u> Strategic rail projects.</p> <p><u>First Group & Arriva:</u> British multi-national transport groups, operating public bus and rail transport.</p>	<p><u>Transport for the North</u> Strategic rail projects (in partnership with Network Rail).</p> <p>Major transport projects (in partnership with Kirklees MC and Highways England).</p> <p><u>Transdev:</u> Regional bus operators across Lancashire and Yorkshire</p>	<p>Plan where applicable (e.g. Holme Valley)</p>
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Table 23: A non-exhaustive overview of Kirklees Governance for Waste at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
Waste	<p><u>Defra</u> Responsible for waste policy on a national level</p> <ul style="list-style-type: none"> Waste Strategy and Environment Bill which legislates for what waste local authorities must collect from the kerbside National reporting and statistics via Waste Dataflow Waste reduction policies such as the Carrier Bag charge, tackling single-use plastic, and now consulting on a Deposit Return Scheme <p><u>BEIS:</u></p> <ul style="list-style-type: none"> Supporting research & innovation in waste reduction and increasing recycling 	<p><i>Unlike other Metropolitan Areas, there is no 'West Yorkshire Waste Disposal Authority' for the region, and it does not come under WYCA's remit; there is no apparent regional governance level.</i></p> <p><i>Therefore, each of the 5 boroughs are responsible for waste</i></p>	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> Responsible for waste and recycling <i>collection</i> Policy and provision of a kerbside residual waste and recycling service on alternate weeks and a subscription-based garden waste service A new trade and schools recycling service Dealing with enquiries from residents: missed collections, bin deliveries, approval of assisted collections and additional bins Educating residents on correct recycling through a team of Advisors, Communications campaigns Maintenance of former landfill sites

<ul style="list-style-type: none"> Responsible for funding of heat networks, some of which (e.g., Kirklees) may use Energy from Waste (EfW) as a source of heat/power <p><u>Environment Agency + Defra</u></p> <ul style="list-style-type: none"> Waste permits Investigating Waste Crime Pollution from EA-regulated waste sites <p><u>Private Waste Contractors (e.g., Biffa, Forge, Veolia, Viridor, etc)</u></p> <ul style="list-style-type: none"> Some businesses may use national private waste companies instead of the local authority to collect their waste and recycling in line with the law. Businesses are not permitted to use the local authority's residential waste/recycling service. <p><u>Waste and Resources Action Programme (WRAP)</u></p> <p>A Defra-funded charity which mainly delivers national campaigns which local authorities can utilise, and has case studies advising best practise across local authorities</p>	<p><i>disposal independently.</i></p>	<p><u>Suez</u></p> <ul style="list-style-type: none"> Since 1998 is the Contractor responsible for waste <i>disposal</i>. This involves the running of the Energy from Waste (EfW) plant and Materials Recovery Facility (MRF) in Huddersfield, the Transfer Loading Station (TLS) in Dewsbury, and Household Waste Recycling Centres (HWRCs) across the district. They are responsible for waste once it has been dropped off by the council collection service in accordance with the contract. Therefore, they dictate the materials accepted for recycling, acceptable contamination levels, rejection of contaminated recycling, and the running of HWRCs. Some waste is sent to landfill elsewhere; there are no Suez-run active landfills in the borough. The contract has been extended on an interim basis for 2 more years while a new contract goes out to tender. Plastic pots, tubs and trays have been accepted for recycling from April 2022. <p><u>Glass Recycling UK</u></p> <p>The Contractor responsible for the emptying of over 100 glass bottle banks across the district (there is no kerbside service)</p>
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Table 24: A non-exhaustive overview of Kirklees Governance for Water at a National, Regional and Local.

Action Areas	National Governance	Regional Governance	Local Governance
Water	<p><u>Defra/Environment Agency: Fluvial flooding</u></p> <ul style="list-style-type: none"> Managing flood risk around 100km of main rivers, flood risk mapping, warnings and alerts Maintaining river and coastal flood defences 	<p><u>Yorkshire Water</u></p> <ul style="list-style-type: none"> The water supplier for Yorkshire, responsible for potable water supply right up to the 	<p><u>Kirklees Council</u></p> <ul style="list-style-type: none"> Undertakes Strategic Flood Risk Assessments around fluvial flooding e.g. Calder Catchment

Natural England

The Government's advisor on the natural environment, which also includes freshwater and wetland habitats

Canal and River Trust

A charity responsible for maintaining 2,000 miles of waterways across England and Wales

- The Trust is responsible for the maintenance and running of 35km of Canals.
- They also maintain 6 reservoirs.

- boundary of a home or business
- Responsible for public sewers and shared drains
- Maintains 21 reservoirs within Kirklees.

WYCA

- Flood Risk Management Policy
- "Green and Blue Infrastructure" Strategy

- As a Lead Local Flood Authority (LLFA), has a duty to manage local flood risk from surface water (pluvial)
- Develops Flood Risk strategy and Strategic Environmental Assessment reports to inform the management of flood risk.
- The planning department also plays a part in managing flood risk, informing planning decisions, working with EA and neighbouring councils where necessary

Other duties:

- Maintaining public highway drains and clearing gullies which are not owned by Yorkshire Water
- Granting environmental permits to any works on watercourses
- Testing private water supplies and bottled water companies in the district to ensure safe drinking water

