Appendix: CDP final submission

Below is the final CDP submission made for 2023.

Welcome to CDP-ICLEI Track 2023

Governance

0. Governance

(0.1) Provide details of your jurisdiction in the table below.

Response

Administrative boundary of reporting government^
Metropolitan area

Next highest level of government
County / Province

Next lowest level of government
Town

Land area of the jurisdiction boundary (in square km)^
408.6

Percentage range of land area that is green space
>60%

Current (or most recent) population size^
441,290

2018-based estimate from Office for National Statistics (2020) - Population projections for local authorities: Table 2 - https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2

Population year^
2020

Projected population size
459,204

Projected population year
2038

Select the currency used for all financial information reported throughout your response^

GBP Pound Sterling

(0.2) Provide information on your jurisdiction's oversight of climate-related risks and opportunities and how these issues have impacted your jurisdiction's planning.

kirklees-climate-change-risk-vulnerability-assessment.pdf

Response

Select the processes that reflect your jurisdiction's oversight of climate-related issues

Council (or equivalent) is informed by relevant departments, committees and/or subcommittees about climate-related issues

Climate-related issues are considered by the government when undertaking plans and/or strategies

Climate-related responsibilities are assigned to a committee(s) or a subcommittee(s) in the government

Provide further details on your jurisdiction's oversight of climate-related issues

Kirklees Council has been assessing the impact of its projects, programmes, policies and service changes using Integrated Impact Assessments (IIAs), which includes impacts of climate change, since 2019. All decisions that go through the formal decision-making process (to Cabinet) are required to complete an IIA. These are then published with the other reports related to the decision and are usually available to the public. For larger projects such as road schemes, these typically go through the regional West Yorkshire Combined Authority Assurance Framework, which is now working to implement a requirement for a Carbon Impact Assessment to be completed for proposals.

Decisions around the Councils response to declaring a Climate Emergency in 2019 are delegated to the Climate Change Board. This board is made up of senior officers with a responsibility to make operational decisions on our response to climate change, including the CDP reporting, emissions inventory, climate change action plan and the implementation emission reduction and resilience building projects. This board meets every 8 weeks.

Kirklees Council has also developed a Climate Change Risk and Vulnerability Assessment (CCRVA) to highlight climate-related issues. The CCRVA identifies and reports on 392 risks and associated key opportunities of a changing climate for Kirklees, spread across the following sectors at 2030, 2050 and 2090 timeframes: Culture Leisure and Tourism (3%), Housing and Buildings (15%), Infrastructure inc. highways, IT, transport, Energy (22%), Biodiversity and Environment (20%), Water and Waste (19%), Health and Wellbeing inc. adult care (17%) and Children and Young People (4%). The CCRVA is a key part of the evidence base that has informed the development of the Climate Change Action Plan (CCAP) for Kirklees, which will set out actions that can be

taken by Kirklees Council, Key Partners and members of the wider community to achieve the 2038 target.
The Council's IIA process has been revised during 2023, which has included making the 'Environment' section more robust and fit for purpose. The revised IIA was launched in June 2023.
The Council is also participating in the Yorkshire & the Humber Climate Commission's Adaptation Framework, YHCC Adaptation Programme to:

-Share our learnings of the CCRVA

-Help translate the findings of the CCRVA into a regionally consistent approach to corporate and service area risk management

-Develop the appropriate monitoring and evaluation and governance mechanisms to help track progress against our climate ready goal.

-Share and benefit from best practice with Y&TH CC partners.

Describe how climate-related issues have impacted your jurisdiction's master/development planning

Planning applications in the district are determined in accordance with Kirklees Development Plan (which includes the Kirklees Local Plan and the Holme Valley Neighbourhood Development Plan) unless material considerations indicate otherwise. Additionally, Kirklees had adopted Supplementary Planning Documents for Housebuilders and Highway Design, which include considerations of climate change adaptation and mitigation. These are complemented by Planning Guidance Notes on Climate Change and Biodiversity Net Gain which were adopted in July 2021.

Describe how climate-related issues have impacted your jurisdiction's financial planning

The commitment to reduce carbon emissions and mitigate further climate change has led to increases in capital allocated to projects aimed at reducing the carbon footprint of service areas within the Council. Future budget processes will continue to be designed to allow for the Council provide appropriate match funding for climate initiatives where appropriate and including where funding is funnelled through the West Yorkshire Combined Authority. As a council department we work very closely with key stakeholders within the community, including counsellors, commissioners, and other professionals to maintain oversight to funding opportunities available to tackle climate-related issues. This is regularly reviewed internally to ensure that all appropriate funding opportunities are reviewed, discussed through a decision-making matrix, and applied for to achieve our climate goals. This way of managing our financial planning is intended to give us the opportunity as a council to take climate action when the council is facing significant budgeting pressures.

A key example of working with key stakeholders is how we are working closely with

West Yorkshire Combined Authority to deliver The Better Neighbourhoods programme which forms part of the wider Climate and Environment Plan (CEP) for WYCA. The Better Neighbourhoods programme forms part of the wider Climate and Environment Plan (CEP) Wave 1 portfolio. The programme will work with us to provide grants of £5,000 to £50,000, to local communities, with a particular focus on those communities considered disadvantaged, to fund projects that will support the transition to net zero carbon. The programme will provide community level funding to educate and implement climate improvement projects. These projects will increase climate knowledge, accelerate behaviour changes, and deliver infrastructure to improve wellbeing and building efficiency, with a long-term aim of reducing carbon emissions.

Describe the risks to your jurisdiction related to the transition to a low-carbon economy

Key transitional risks for a transition to a low-carbon economy for Kirklees can be drawn from the "The Global Risks Report 2023" by the World Economic Forum. Examples of transitional risks include the exacerbation of inequalities within Kirklees community, and how the cost of living dominates risk in the next two years globally, job losses from carbon-intense industries (i.e. combustion engine production) and a green skills gap.

There are also some social impacts and risks to the transition to the low-carbon economy for Kirklees which is highlighted in resident engagement. The Residents' Survey was published online between the 16th May and the 17th of June 2022. It was created in conjunction with Research and Intelligence Service and was promoted primarily on the Council's news and social media channels, with some signposting from the Recycling Team using posters and leaflets at two in-person 'roadshow' events. The aim of the survey was to obtain the input and thoughts of Kirklees residents around reducing carbon emissions, helping to inform the development of the Climate Action Plan which will contribute towards achieving the Net Zero aspect of Kirklees' 2038 target. Social risks can be highlighted in the question around the support/opposition to Kirklees' Net Zero Target. Residents who selected 'somewhat/strongly oppose' Net Zero to the question were then asked to explain in a few words their reasons for this - 147 comments were received in total. There were 3 key themes and 3 minor themes to emerge from the comments received Key Themes: • Climate change deniers • Cost, affordability & financial inequality • Net Zero is unachievable Minor themes: • Criticism of the Council • Infringement of personal freedom • 2038 is not soon enough.

(0.3) Report how your jurisdiction assesses the wider environmental, social, and economic opportunities and benefits of climate action.

Response

Does the jurisdiction assess the wider opportunities/benefits of climate action?

Preparing to assess wider opportunities/benefits of all climate actions over the next year

Outline if and how your jurisdiction ensures the equitable distribution of climate action opportunities/benefits

Yes, the jurisdiction is collecting disaggregated or spatial data on the impact of climate actions
Yes, the jurisdiction is engaging with frontline communities most impacted by climate change
Yes, the jurisdiction is designing or implementing climate actions that address the needs of frontline communities most impacted by climate change

Outline how your jurisdiction quantifies the equitable and inclusive distribution of climate action

Kirklees council assess the impacts of its projects, programmes, policies, and service changes using Integrated Impact Assessments to ensure equitable and inclusive action by the council. The council also work directly with key partners including counsellors, charities, and residents to implement place-based action, and to identify and work with individual communities to distribute climate action which affect a community to ensure that any action is meaningful and required for a certain area. Through our Place-based Working Programme, we are changing our relationship with local people, so that we can enable more people to shape their communities as citizens and not just deliver services to customers.

The Communities Partnership Board will oversee and monitor the impact of the Inclusive Communities Framework. Individual organisations and services will, through evaluating work undertaken with communities, determine personalised framework implementation and action plans to improve or enhance practice. The ICF can be scaled up or down and can be applied in a way that is proportionate to the task. System leadership will be key to the framework's success in enabling a positive and consistent approach to our work with communities.
The Communities Partnership Board is Chaired by an Elected Member of the Council and is a partnership of organisations including the Police, Health, Probation, the Voluntary and Community Sector, Elected Members, the Fire Service and many other organisations.

Place-based engagement was used to inform the new developing Environment Strategy, utilising many different stakeholder engagement mechanism to ensure inclusive involvement. For example, there was a Public Survey, feedback via local partner organizations through a scoping exercise, Mini Citizens Assembly, Review of existing data (many the existing plans that the strategy seeks to coordinate with have undertaken public surveys / consultation). The Environment Strategy will be a new top tier strategy that will dictate how the council does its business and provides services and so the place-based method is crucial in its development.

Provide evidence and/or more details on the actions your jurisdiction is taking to ensure equitable and inclusive distribution of climate action

As mentioned previously Kirklees Council assesses the impact of its projects, programmes, policies and service changes using Integrated Impact Assessments (IIAs), which a full Equality Impact Assessment and additional questions around tackling poverty. Any climate action undertaken by the Council has to complete an IIA as part of

the decision making process. Additionally, Kirklees Council is a key partner in the Kirklees Climate Commission, who have a work stream looking at community engagement and involvement with support from key partners.
The Councils Climate Change Action Plan adopts a number of principles, with "Shaped by People" and "Fair" being two of the five. These are defined as:

-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 represented.

- Fair: Achieve a just and equal transition to our Net Zero and Climate Ready future, highlighting co-benefits to be realised.
These principles have been adopted in the development and delivery of our programme for local climate engagement, the aim of which is to help inform and drive district-wide climate action. In order to ensure this action is inclusive and equitable, this engagement focuses on working with different communities demographics and age groups to understand their unique perspectives and key challenges. We have gathered data on indicators such as fuel poverty and deprivation and are using this data to inform action development.

Furthermore, Kirklees will adopt a comprehensive Monitoring and Evaluation process for all actions implemented - utilising both data and stakeholder-led feedback and analysis on the success and failure of these actions. This will ensure that the actions are ever evolving, ensuring they are maximising the benefits and learning from the negative, unintended consequences or 'maladaptation' that may arise.

As a council we monitor the risks that each area face, for example, fuel poverty, digital exclusions, flood risk. We use local information and national data to highlight areas of risk and to ensure equitable and inclusive distribution of climate action. For example, the authority is aware of areas which are at a greater risk of digital exclusion, which may not be able to access online advice surrounding climate change, therefore other place-based approaches may be required.

(0.4) Report on your engagement with other levels of government regarding your jurisdiction's climate action.

Climate component

Climate risk and vulnerability assessment

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government
State/Regional-level government
Lower level of government

Outline the purpose of this engagement

To collect data and/or feedback from other levels of government to inform its development
To facilitate information sharing across different levels of government
To facilitate capacity building across different levels of government
To facilitate the integration of this component into assessments and policy developed across different levels of government

Comment

A series of workshops have been held in the development of the Kirklees Climate Change Risk and Vulnerability Assessment. The first were a set of workshops to understand organisations past experiences of extreme weather events across the county, potential risks from both future extreme weather events as well as those impacts arising from a changing climate in general (e.g. hotter, drier summers and milder, wetter winters) and identify possible risk mitigation measures organisations might already have in place and/ or are aware of to help prepare for such risks. The second iteration was to identify further opportunities for climate adaptation measures, working with key partners from across the region.

Examples of levels engaged with:
National-level government - Environment Agency
Regional-level government - West Yorkshire Combined Authority, Peak District National Park Authority
Lower level of government - Parish Councils

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Climate component

Climate action plan

Level of governments engaged in the development, implementation and/or monitoring of component

National-level government
State/Regional-level government
Lower level of government

Outline the purpose of this engagement

To collect data and/or feedback from other levels of government to inform its development
To facilitate information sharing across different levels of government
To facilitate capacity building across different levels of government
To facilitate the integration of this component into assessments and policy developed across different levels of government

Comment

Initial conversations have been conducted on the climate action plan. We are intending to do another series of workshops related to the development of the Kirklees Climate Action Plan. These will be focused on action identification and development.

Examples of levels engaged with:
National-level government - Environment Agency, Department for Transport, Local Members of Parliament
Regional-level government - West Yorkshire Combined Authority, Peak District National Park Authority
Lower level of government - Parish Councils

1. CCAP_V1.3_ACCESSIBLE.pdf

Climate component

Climate adaptation goal

Level of governments engaged in the development, implementation and/or monitoring of component

State/Regional-level government

Outline the purpose of this engagement

The development of this component is required by a higher-level of government that is not the national government (e.g., by law, regulation and/or agreement)

Comment

Kirklees is committed to being 'climate ready' by 2038, in line with the West Yorkshire Combined Authority's commitment.

Climate component

Climate mitigation target

Level of governments engaged in the development, implementation and/or monitoring of component

State/Regional-level government

Outline the purpose of this engagement

The development of this component is required by a higher-level of government that is not the national government (e.g., by law, regulation and/or agreement)

Comment

Kirklees is committed to becoming net-zero by 2038, in line with the West Yorkshire Combined Authority's commitment.

Climate component

Climate adaptation goal

Level of governments engaged in the development, implementation and/or monitoring of component

State/Regional-level government

Outline the purpose of this engagement

The development of this component is required by a higher-level of government that is not the national government (e.g., by law, regulation and/or agreement)

Comment

Kirklees are working with the Yorkshire and Humber Climate Commission adaptation framework and internal colleagues to develop a service improvement adaption plan for the Technology service which will outline the core risks the services faces (drawn from the existing risk register), how they relate to the climate context and data from the Climate Change Risk and Vulnerability assessment, and to develop control measures to reduce that risk. Kirklees are leading this work and are working collaboratively with other local authorities to develop best practise for others who wish to develop service improvement adaptation plans.

(0.5) Report your jurisdiction's most significant examples of collaboration with government, business, and/or civil society on climate-related issues.

Primary entity collaborated with (selection mandatory)

Government/Public body
Regional government

Mechanisms used to collaborate

Knowledge or data sharing
Funding (grants)
Project implementation and management

Areas collaboration focused on

Emissions reduction
Transport (Mobility)

Description of collaboration

ULEV Taxi Scheme

As a result of a successful £2 million bid to the UK Government's Office for Low Emission Vehicles, Kirklees Council, in partnership with West Yorkshire Combined Authority and the other 4 West Yorkshire authorities (Leeds, Bradford, Wakefield and Calderdale) installed over 80 Rapid Electric Vehicle Charging Points across West Yorkshire.

Taxis (hackney carriage and private hire vehicles (PHV)) in West Yorkshire are predominantly diesel cars or vans with an average vehicle age of 6.5 years. The majority of journeys are within town and city centres and therefore contribute to local air pollution issues, as well as the area's carbon footprint. The ULEV Taxi Scheme supports the commitment to make Kirklees a net-zero district by 2038. Each two-bay charge point comprises one bay exclusively for taxi and private hire vehicle to

encourage taxi and private hire drivers to convert from diesel to electric vehicles. All charging points are now installed.

Other entities collaborated with

National government
Neighboring local government

Primary entity collaborated with (selection mandatory)

Government/Public body
Other, please specify
Regional Government and neighbouring local government, alongside civil society.

Mechanisms used to collaborate

Collaborative initiative

Areas collaboration focused on

Ecosystem restoration
Forestry
Natural environment

Description of collaboration

The White Rose Action Plan 2021-25 sets out our targets for tree planting and woodland creation across North and West Yorkshire over the next four years.

Seven million trees, the equivalent of 4900 football pitches or 3500 hectares, could be planted in North and West Yorkshire between 2021 and 2025, with the support of landowners and farmers, with funding from the Government's Nature for Climate fund.

Other entities collaborated with

Residents/community groups
NGO and associations

Primary entity collaborated with (selection mandatory)

Government/Public body
Local government outside of country/area

Mechanisms used to collaborate

Collaborative initiative

Areas collaboration focused on

Adaptation

Description of collaboration

The Council continues to work closely with and provide the secretariat support for the Kirklees Climate Commission and to work alongside the other supporting partner for the KCC, the University of Huddersfield.
The Council is also participating in the Yorkshire & the Humber Climate Commission's

Adaptation Framework, YHCC Adaptation Programme to:
-Share our learnings of the Climate Change Risk and Vulnerability Assessment (CCRVA)
-Help translate the findings of the CCRVA into a regionally consistent approach to corporate and service area risk management
-Develop the appropriate monitoring and evaluation and governance mechanisms to help track progress against our climate ready goal.
-Share and benefit from best practice with Y&TH CC partners.

Other entities collaborated with

Assessment

1. Climate Risk and Vulnerability

(1.1) Has a climate risk and vulnerability assessment been undertaken for your jurisdiction? If not, please indicate why.

Yes, a climate risk and vulnerability assessment has been undertaken

(1.1a) Provide details on your climate risk and vulnerability assessment.

Assessment attachment and/or direct link^

Yes - to be attached as part of final submission

kirklees-climate-change-risk-vulnerability-assessment.pdf

Confirm attachment/link provided to assessment (selection mandatory)

The assessment has been attached

Boundary of assessment relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year of publication or approval^

2022

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment includes a high-emissions scenario (i.e., RCP 8.5)

Primary author(s) of assessment^

Consultant

Please explain

The approach to the CCRVA is in general accordance with the guidance set out in ISO 14091:2021 - Adaptation to climate change – Guidelines on vulnerability, impacts and

risk assessment , where it applies, and IPCC terminology.
Based on this methodology, the following risk components were used to calculate the risk score (i.e. how the risks are prioritised):
- Exposure (likelihood);
- Sensitivity (magnitude of impact); and
- Adaptive capacity.

The overall risk score is in line with Kirklees corporate risk assessment.. In addition to the ISO 14091:2021 approach described above, the definitions of likelihood, magnitude of impact and adaptive capacity are adopted from the CDP and GCoM guidance notes as these align with future climate change. In order to comprehensively assess the above risk components, a stepped approach was taken to the CCRVA.
STEP 1: CLIMATE HAZARDS
STEP 2: IDENTIFICATION OF THREATS AND OPPORTUNITIES AND ASSOCIATED CONSEQUENCES
STEP 3: ASSESSMENT OF EXPOSURE (LIKELIHOOD)
STEP 4: ASSESSMENT OF SENSITIVITY (MAGNITUDE OF IMPACT)
STEP 5: IDENTIFICATION OF CONTROL MEASURES
STEP 6: DETERMINE VULNERABILITY
STEP 7: CALCULATION OF RISK SCORES

(1.2) Provide details on the most significant climate hazards faced by your jurisdiction.

Climate-related hazards^

Drought

Vulnerable population groups most exposed

Elderly
Marginalized/minority communities
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Fishing
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Waste management
Conservation
Construction
Transportation and storage

Information and communication
Real estate activities
Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Vulnerable population: The elderly are more likely to suffer from dehydration due to how their bodies to react less to thirst. Marginalised/minority communities are more likely to live in poverty and therefore may struggle to afford higher food or water prices that could arise from drought - this also applies to low-income households. Vulnerable health groups are likely to have existing health conditions or a lower ability for their bodies to cope without sufficient water, therefore would be more vulnerable to the effects of drought. Outdoor workers may be unable to access water for substantial periods of time. Frontline workers would have to manage an increase in health issues associated with lack of and / or poor-quality water.

Sectors: Agricultural crops may fail due to soil loss and degradation, or if there is a lack of water for crop irrigation, and may also be affected by an increase in pests, pathogens and invasive species – as will forestry and fishing. Forestry may also be impacted by water supply restrictions, deterioration of feeders, and the drying of upland moorland – the latter also impacting fishing. Forestry and conservation could further be affected by degradation and loss of soil, drying out/death of vegetation, and hydrology changes to wetlands. Drought may pose risks to transportation and energy supply, which would also affect information and communication, as the foundation of assets could be affected. Drought will primarily adversely impact water supply, sewerage and waste management, whilst simultaneously coping with pressures from increased daily and peak demand. Some construction activities require water, thus construction activities would be reduced. Real estate activities would be impacted by water supply restrictions, such as hose pipe bans. Additionally, risks to human health would persist due to a lack and / or poor quality water supply.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

High

Current magnitude of impact of hazard^

Medium High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Fire weather (risk of wildfires)

Vulnerable population groups most exposed

Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Conservation
Transportation and storage
Information and communication
Real estate activities
Education
Human health and social work activities
Arts, entertainment and recreation

Describe the impacts on vulnerable populations and sectors^

Vulnerable population: Outdoor workers would be vulnerable to wildfires as they would be significantly exposed to increased air pollution if working nearby a wildfire. Frontline workers would also have to manage an increase in demand for services, whilst putting their own health at risk in wildfire areas.
Sectors: Agricultural crops may fail due to burning, poor air quality or subsequent soil degradation, or if there is a lack of water for crop irrigation which is re-directed to and prioritised for emergency services. Forestry could be damaged through smouldering fires below the land surface, or dieback due to soil damage. Fishing will also be impacted from poor water quality arising from burnt materials entering the water stream. Wildfires may pose risks to transportation due to smoke and poor air quality reducing visibility. Regional electricity transmission may also fail as a result, with key electrical equipment damaged, which would also affect information and communication.
Water supply, sewerage and waste management would also be impacted by wildfires as water sources may be cut off or polluted, and pipes damaged. Real estate activities would be impacted by wildfires as evacuations may occur, or houses burnt down. Additionally, risks to human health would persist due to an increase in air pollution and particulate matter, alongside an increased demand for emergency services. Education may be disrupted by wildfires if communities need to evacuate.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

High

Current magnitude of impact of hazard^

Medium High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Heavy precipitation

Vulnerable population groups most exposed

Children and youth
Elderly
Marginalized/minority communities
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Waste management
Conservation
Construction
Transportation and storage
Accommodation and food service activities
Information and communication
Financial and insurance activities
Real estate activities
Education
Human health and social work activities

Arts, entertainment and recreation

Describe the impacts on vulnerable populations and sectors^

Vulnerable population: The elderly are at risk as they are biophysically more susceptible to flooding - as are children, less likely to be able to access services – which is further reduced with flooding impacting road infrastructure, may live in single level dwellings, or be on a low income – reducing their ability to respond and recover. Children are also at risk of mental health issues after events, and their education can be disrupted due to school closures. Marginalised/minority communities are more likely to live in poverty, hence may struggle to access services or information that could provide assistance, restricting their ability to prepare and recover - this also applies to low-income households. Vulnerable health groups are likely to have existing health conditions or a lower ability for their bodies to cope with diseases, or have mobility issues. Outdoor workers may be unable to undertake their jobs due to accessibility issues. Frontline workers would have to manage an increase in demand, an increase in health issues associated with lack of and / or poor-quality water, and physical injuries from flooding.

Sectors: Agricultural crops and forestry may be damaged if soils become water-logged. These sectors could also be impacted by an increase in pests, pathogens and invasive species. Energy supply and information and communications are at risk from infrastructure damage, flooding and failure. Transportation can be impacted if drains are overwhelmed or if there is damage to retaining walls. Public transport can be disrupted, and road accidents more likely. Flooding can disrupt water supply, overwhelm culverts, and impact water quality. It can also impact sewerage and waste management as sewers are overwhelmed and flooding delays bin collections. Construction is affected as works become dangerous and need to be postponed. Flooding could result in the closure of recreation services and other businesses, which would lead to insurance claims; as would flooding of real estate. Vulnerable assets may also flood, disrupting healthcare and education. Human health and social work could be affected by sewer flooding, damaged council housing, changes in vector ecology, increased service response time, and an increased risk of injury. There is also an increased risk to the homeless community, and a heightened risk to mental health after exposure to the event.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

High

Current magnitude of impact of hazard^

High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Extreme wind

Vulnerable population groups most exposed

Elderly
Marginalized/minority communities
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Waste management
Conservation
Construction
Transportation and storage
Information and communication
Real estate activities
Education
Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Vulnerable populations: The elderly and children are more likely to suffer from injury due to extreme wind. Marginalised/minority communities are more likely to live in poverty and therefore may lack access to safe housing or may struggle to access services or information that could provide assistance, restricting their ability to prepare and recover - this also applies to low income households. Vulnerable health groups are likely to have existing health conditions or have mobility issues, therefore would be more vulnerable to injury from extreme wind, or other physical impacts. Outdoor workers would experience direct exposure to extreme wind, creating a dangerous work environment, where work may need to be postponed. Frontline workers would have to manage an increase in demand for services.

Sectors: Agriculture may be impacted by delivery issues due to road closure from debris. Forestry is negatively affected as extreme winds damage tree stock, and it limits windows for peatland restoration works. Energy supply can be impacted through damage to wind energy assets and other infrastructure, power cuts can arise from damage to powerlines, and energy supply sourcing can be disrupted – this also impacts information and communication systems. Transport may be disrupted due to road closure from debris and an increase in accidents may occur. Water supply may be lost due to extreme winds and raw water quality could be reduced, as a result of debris. Corrosion and decay of plant materials, for water and sewerage systems, is also a risk. Extreme winds increase the risk of injuries and fatalities in construction, so activities may need to be postponed. Service buildings and assets can be damaged, disrupting education. Commercial and private properties could also be damaged. Extreme wind poses a risk to the homeless community, and increases risk of injuries, alongside causing delivery issues, and disrupting health and social care delivery.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Do not know

Current probability of hazard^

High

Current magnitude of impact of hazard^

High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Mass movement

Vulnerable population groups most exposed

Outdoor workers
Frontline workers

Sectors most exposed^

Forestry
Electricity, gas, steam and air conditioning supply
Water supply

Conservation
Transportation and storage
Information and communication
Financial and insurance activities
Real estate activities
Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Vulnerable population: Outdoor workers would experience direct exposure to mass movement events, creating a dangerous work environment, where work may need to be postponed. Frontline workers would have to manage an increase in demand for services, or may be unable to access patients due to road closures.

Sectors: Forestry can be negatively affected as mass movement would damage tree and plant stock. Conservation may be impacted if peatlands or protected areas are damaged from mass movement. Energy supply can be impacted through damage to energy assets and other infrastructure and power cuts can arise from damage to powerlines – this also impacts information and communication systems. Transport may be disrupted due to road closure from debris and an increase in accidents may occur. Mass movement damaging businesses, real estate, infrastructure and such would lead to insurance claims and negatively impact financial activities. Mass movement poses a risk to the homeless community, could damage council housing, and increases risk of injuries, alongside causing delivery issues, and disrupting health and social care delivery.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Current probability of hazard^

Medium

Current magnitude of impact of hazard^

Medium

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Other, please specify

Humidity

Vulnerable population groups most exposed

Children and youth

Elderly

Marginalized/minority communities

Vulnerable health groups

Low-income households

Outdoor workers

Frontline workers

Sectors most exposed^

Electricity, gas, steam and air conditioning supply

Conservation

Construction

Transportation and storage

Information and communication

Real estate activities

Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Vulnerable populations: The elderly and children are more likely to suffer from humidity related illness due their heightened susceptibility to overheating and heat stress – this also applies to outdoor workers, alongside general discomfort. Marginalised/minority communities are more likely to live in poverty and therefore may live in poor condition housing that is more susceptible to mould and mildew growth - this also applies to low income households. Vulnerable health groups are likely to have existing health conditions, such as asthma, which are exacerbated by high humidity. Frontline workers would have to manage an increase in demand for services.

Sectors: High humidity can impact electricity supply as the water vapour can interrupt electricity currents when it settles – this subsequently impacts information and communication services. Construction, real estate and human health are all affected by increased mould and mildew growth in homes and buildings, which triggers asthma and allergies, but in severe cases also weakens ceilings or walls, undermining the structural integrity of buildings. Conservation is impacted as high humidity can rot plants, and poses a risk to Sphagnum moss.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

No

Current probability of hazard^

High

Current magnitude of impact of hazard^
High

Expected future change in hazard intensity^
Increasing

Expected future change in hazard frequency^
Increasing

Timeframe of expected future changes^
Medium-term (2026-2050)

Climate-related hazards^

Vulnerable population groups most exposed

Sectors most exposed^

Describe the impacts on vulnerable populations and sectors^

Proportion of the population exposed to the hazard

Did this hazard significantly impact your jurisdiction before this reporting year?

Current probability of hazard^
Medium High

Current magnitude of impact of hazard^
Medium

Expected future change in hazard intensity^
Increasing

Expected future change in hazard frequency^
Increasing

Timeframe of expected future changes^
Medium-term (2026-2050)

Climate-related hazards^
Infectious disease

Vulnerable population groups most exposed

Children and youth
Elderly
Vulnerable health groups
Outdoor workers
Frontline workers

Sectors most exposed^

Water supply
Waste management
Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Changes in the climatic trends and extreme events can lead to changes in vector ecology. Wetter and hotter conditions can create conditions which are more viable habitats for species which spread disease (e.g., Ticks leading to Lyme disease). Additionally, these conditions could also see non-native species becoming much more prevalent bringing with them diseases which can be transmitted to humans (e.g., mosquitos). Depending on the type of disease different groups of society will be impacted. However, those most vulnerable include children and youth, the elderly and vulnerable health groups this is due to them being more biophysically susceptible to diseases. Those working outdoors are at more increased risk of being exposed/bitten by insects, and frontline workers will be more exposed to those already exposed to the disease. Therefore, the sectors exposed would be those that provide care to those impacted such as human health and social work activities. Additionally flooding can result in the increased risk of parasites (e.g., cryptosporidium) which can contaminate water supplies and result in negative impact on human health. Extreme temperatures can result in increase in odour and vermin at treatment facilities resulting in increased spread of diseases.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Current probability of hazard^

Medium

Current magnitude of impact of hazard^

High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Extreme heat

Vulnerable population groups most exposed

Women and girls
Children and youth
Elderly
Marginalized/minority communities
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Fishing
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Waste management
Conservation
Transportation and storage
Accommodation and food service activities
Information and communication
Real estate activities
Education
Human health and social work activities
Arts, entertainment and recreation

Describe the impacts on vulnerable populations and sectors^

Vulnerable populations: Women and girls would experience a heightened sensitivity to heat during pregnancy and hormonal changes. The elderly and children are more likely to suffer from heat related illness due to ability for their bodies to react in extreme heat. Marginalised/minority communities are more likely to live in poverty and therefore lack access to cooling provisions, well ventilated properties and services during extreme heat - this also applies to low income households. Vulnerable health groups are likely to have existing health conditions or a lower ability for their bodies to react to extreme heat, therefore would be more vulnerable to the effects of extreme heat. Outdoor workers would experience direct exposure to heat and may be unable to seek shade or cooling facilities. Frontline workers would have to work through extreme heat and may also be unable to seek shade or cooling facilities.

Sectors: Extreme heat may cause agricultural crops to fail, and forestry and

conservation may be threatened through an increase in pests, pathogens and invasive non-native species. For fishing, phenology changes may be experienced. Heat stress may pose risks to energy supply, which would also affect information and communication. Extreme heat may also increase daily and peak demand for water, increasing pressure on water supply and waste management.
Construction workers would be at risk from exposure to heat and construction processes may halt due to extreme temperatures. Transportation may be affected by an increase in road users (due to tourism and changes in active travel useage) and the potential for road surface melting. For accommodation and education facilties, there would be a reduction in thermal comfort, disrupting education and wellbeing. Risks to human health and an increased demand for social work activities. Playgrounds may experience overheating and there would be an increase in public safety concerns.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

High

Current magnitude of impact of hazard^

High

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

Climate-related hazards^

Extreme cold

Vulnerable population groups most exposed

Children and youth
Elderly
Marginalized/minority communities
Vulnerable health groups
Low-income households
Outdoor workers
Frontline workers

Sectors most exposed^

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, waste management and remediation activities
Waste management
Transportation and storage
Accommodation and food service activities
Information and communication
Real estate activities
Education
Human health and social work activities
Arts, entertainment and recreation

Describe the impacts on vulnerable populations and sectors^

Vulnerable populations: The elderly and children are more likely to suffer from cold related illness due to their heightened sensitivity to the cold. Marginalised/minority communities are more likely to live in poverty and therefore lack access to heating provisions and suitable clothing - this also applies to low-income households. Vulnerable health groups are likely to have existing health conditions or a lower ability for their bodies to react to extreme cold, therefore would be more vulnerable to the effects of extreme cold. Outdoor workers would experience direct exposure to cold weather and may be unable to wear appropriate clothing or access heating facilities. Frontline workers would have to work through extreme cold and may also be unable to wear appropriate clothing or access heating facilities.
Sectors: Extreme cold may cause agricultural crops to fail, and forestry may be threatened through root damage or nutrient and water uptake disruption. Extreme cold may pose risks to energy supply, which would also affect information and communication. Risk to energy supply is further heightened by increased demand for gas for heating. Extreme cold also increases the risk of freeze thaw, resulting in ground movements that can impact water supply, sewerage, and waste management activities. Pipes in homes also may burst or freeze, cutting off water supply – this also relates to real estate activities. Transportation may be affected by icy/snow covered roads, being potentially dangerous for road users. For education facilities, there would be a reduction in thermal comfort, disrupting education and wellbeing. Accommodation and food service activities may see a reduction in income due to less visitors leaving their homes. Extreme cold poses a risk to human health and can increase demand for social work activities.

Proportion of the population exposed to the hazard

90-100%

Did this hazard significantly impact your jurisdiction before this reporting year?

Yes

Current probability of hazard^

High

Current magnitude of impact of hazard^
High

Expected future change in hazard intensity^
Increasing

Expected future change in hazard frequency^
Decreasing

Timeframe of expected future changes^
Medium-term (2026-2050)

GCoM Common Reporting Framework Reporting Requirements for European Cities

(1.3) Identify and describe the most significant factors impacting on your jurisdiction's ability to adapt to climate change and indicate how those factors either support or challenge this ability.

Factors that affect ability to adapt^	Degree to which this factor challenges/supports the adaptive capacity of your jurisdiction (selections mandatory) ^	Describe how the factor supports or challenges the adaptive capacity of your jurisdiction^
Access to basic services	Challenges Moderately challenges	In an extreme weather event, energy and water supplies, sanitation, access to food, information and emergency services may be restricted for all residents, with a lack of shelter further impacting homeless residents.
Access to healthcare	Supports Moderately supports	NHS services are provided across the county and all residents have access to these services
Access to healthcare	Challenges Moderately challenges	Access to services can be restricted in an extreme weather event, alongside additional strain on services
Access to education	Challenges Moderately challenges	A lack of an understanding of climate risks and how to adapt creates a barrier to adaptive capacity within the adult population. Additionally, children missing out on and moving schools due to extreme events disrupts their education.
Access to education	Supports Somewhat supports	The adult population being able to gain an understanding of climate risks and how to adapt permits a growth in adaptive capacity.

Public health	Supports Somewhat supports	Physical health is improved when people are more likely to enjoy outdoor recreation during events such as heatwaves
Public health	Challenges Moderately challenges	Mental health is negatively affected if impacted by an extreme weather event. Additionally, Physical health is impacted when people are less likely to enjoy outdoor recreation during events, such as flooding.
Cost of living	Challenges Moderately challenges	The current increasing cost of living across the UK negatively affects household's ability to save money and prepare for impacts of extreme events
Housing	Challenges Moderately challenges	Existing and newly built homes are not always built to adapt to climate hazards.
Poverty	Challenges Moderately challenges	40% of the Kirklees population are within the bottom 30% of income deprivation. This makes it harder for them to adapt to changing weather and climate.
Inequality	Challenges Somewhat challenges	Women and girls are more vulnerable to climate change based on cultural norms and their lower socioeconomic status in society
Unemployment	Challenges Somewhat challenges	The unemployment rate among male and female residents in Kirklees is 4.5% - 0.7% higher than UK average. Those who are unemployed have a lower adaptive capacity due to restricted income and living situation.
Migration	Challenges Somewhat challenges	Migrants living in the area with a restricted understanding of English may struggle to access basic needs and communication services which allow them to prepare for extreme events - 8.6% of Kirklees population's main language is not English. Additionally, residents may migrate out of Kirklees to 'safer' areas as a result of being impacted by hazards, which would impact the community and economy.
Migration	Supports Somewhat supports	Immigration into the area from less safe areas or countries as a result of being impacted by hazards, can positively contribute to the community and economy, which can have a knock on beneficial impact on adaptive capacity.

Economic health	Challenges Somewhat challenges	Gross Value Added (GVA) is a measure of the increase in the value of the economy due to the production of goods and services. Kirklees GVA per head is £17,084 (UK £28,729). Thus, Kirklees has a lower than average economic health in the UK which could negatively impact the area's ability to adapt.
Economic diversity	Supports Somewhat supports	Kirklees has a relatively diverse economy, with the largest employers being the following industries: manufacturing, health, retail, education. However, health and education do not necessarily add economic value to the district.
Political stability	Challenges Moderately challenges	Kirklees Council has had a relatively unstable political history with no single party majority between 1999 and 2018. Labour gained overall control of the council in 2018 but lost its majority again in late 2020 when three councillors resigned from the party. In the local elections of 2022, the Labour Party regained control of the Council. This undermines long term plans.
Legal/Institutional constraints	Supports Moderately supports	Local authorities' aspirations are often limited by budgetary constraints and Local Authorities across the UK have seen severe spending cuts over the past decade leading to many services having to be streamlined.
Budgetary capacity	Challenges Moderately challenges	Local authorities' aspirations are often limited by budgetary constraints and Local Authorities across the UK have seen severe spending cuts over the past decade leading to many services having to be streamlined.
Safety and security	Challenges Moderately challenges	Local authorities' aspirations are often limited by budgetary constraints and Local Authorities across the UK have seen severe spending cuts over the past decade leading to many services having to be streamlined.
Land use planning	Supports Somewhat supports	Designating development in areas at lowest risk of flooding and / or requiring the inclusion of adaptation measures in builds / on sites can improve adaptive capacity. The former is acknowledged through the Kirklees Local Plan and Climate Change Design Guidance.

Access to quality / relevant data	Supports Somewhat supports	A national weather warning system in place through the Met Office
Community engagement	Challenges Moderately challenges	More often than not, community interaction with the Council can be negative, such as through complaints of services, with relatively low attendance to informative and educational events. It can also be hard to engage the community on proactive, rather than reactive, climate adaptation measures.
Resource availability	Supports Moderately supports	Yorkshire Water have prepared an adaptation report, drought plan, 25 year water resources plan, and a 25 year drainage and wastewater plan.
Resource availability	Challenges Moderately challenges	Flooding and Heatwaves have impacted crop yields in the Kirklees area
Environmental conditions	Challenges Moderately challenges	Extreme heat and subsequent heightened pollution negatively affect the health of residents
Infrastructure conditions / maintenance	Challenges Moderately challenges	Infrastructure in the UK is ageing and was therefore not originally designed and built for the projected future climate and the ability to adapt to climate hazards
Access to basic services	Challenges Moderately challenges	Generally, the access to basic services is well maintained and the provisions for this is somewhat covered through the council's emergency planning.
Infrastructure capacity	Challenges Moderately challenges	Transport and energy infrastructure are at risk of failure from climate hazards

2. Emissions Inventory

Emissions Inventory Methodology

(2.1) Does your jurisdiction have a community-wide emissions inventory to report?

Yes

4.0

(2.1a) Provide information on and an attachment (in spreadsheet format)/ direct link to your main community-wide GHG emissions inventory.

Response

Main community-wide emissions inventory: attachment (spreadsheet) and/or URL link (with unrestricted access)^

We have attached our inventory in the SCATTER Tool output format and will report our emissions in the CRF format (SCATTER_kirklees_CDP-report-inventory_2019.xlsx attached).

SCATTER_kirklees_CDP-report-inventory_2019.xlsx

Status of main community-wide inventory attachment and/or direct link (selection mandatory)

The emissions inventory has been attached

Year covered by main inventory^

2019

Boundary of main inventory relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Population in year covered by main inventory^

439,787

Primary protocol/framework used to compile main inventory (selection mandatory)

Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC)

Tool used to compile main inventory

SCATTER

Gases included in main inventory^

CO2
CH4
N2O

Primary source of emission factors

IPCC Fourth Assessment Report (2007)

Additional/historical inventories: attachment (spreadsheet) and/or URL link (with unrestricted access)

Emissions Inventory Data

GCoM Common Reporting Framework Reporting Requirements for European Cities

(2.1c) Provide a breakdown of your community-wide emissions in the format of the Common Reporting Framework.

	Direct emissions (metric	If you have no direct emission	Indirect emissions from the use	If you have no indirect emission	Emissions occurring outside	If you have no emissions to report	Please explain any excluded sources,

	tonnes CO2e)^	s to report, please select a notation key to explain why^	of grid-supplied electricity, heat, steam and/or cooling (metric tonnes CO2e)^	s to report, please select a notation key to explain why^	the jurisdiction boundary as a result of in-jurisdiction activities (metric tonnes CO2e)	that are occurring outside the jurisdiction boundary as a result of in-jurisdiction activities, please select a notation key to explain why	identify any emissions covered under an ETS and provide any other comments^
Stationary energy > Residential buildings^	497,830.85		156,916.95		92,188.61		
Stationary energy > Commercial buildings & facilities^	74,106.99		85,639.29		22,641.99		
Stationary energy > Institutional buildings & facilities^	60,779.87		18,594.57		10,724.91		
Stationary energy > Industrial buildings & facilities^	205,728.64		104,324.44		51,937.85		
Stationary energy > Agriculture^	5,630.42		1.06		1,340.23		
Stationary energy > Fugitive emissions^	62,281.78		0	NE	0	NE	Category 1B from the UK Devolved Administration GHG

							Inventory 1990-2016, representing fugitive fuel emissions from energy supply is applied to Local Authorities according to their population.
Total Stationary Energy	906,358.56		365,476.32		178,833.59		
Transportation > On-road^	601,995.56		0	IE	208,024.14		Electricity consumption from on-road transport included in Stationary Energy figures
Transportation > Rail^	9,732.18		0	IE	2,312.42		Electricity consumption from rail transport included in Stationary Energy figures
Transportation > Waterborne navigation^	3,581.19		0	IE	0	IE	All UK waterborne transport assumed to be diesel.
Transportation > Aviation^	0	NO	0	IE	243,433.3		Electricity consumption from aviation not possible

							to separate from stationary energy data.
Transportation > Off-road^	6,009.5		0	IE	0	IE	All UK waterborne transport assumed to be diesel. Electricity consumption from off-road transport included in Stationary Energy figures
Total Transport	621,318.44		0	IE	453,769.85		Electricity consumption from off-road, on-road, and rail transport included in Stationary Energy figures. All UK waterborne transport assumed to be diesel. Electricity consumption from aviation not possible to separate from stationary energy data.
Waste > Solid waste disposal^	5,922.62		0	NO	0	IE	Waste arisings data for England, Northern

							Ireland, Scotland and Wales has been allocated to different streams (open-loop, closed-loop, landfill, composting, incineration).
Waste > Biological treatment^	0	NO	0	NO	0	IE	Waste data is allocated at the point of generation, regardless of treatment location, so all emissions including scope 3 attributable to that waste are included in the scope 1 figure.
Waste > Incineration and open burning^	2,884.26	NO	0	NO	0	IE	Waste data is allocated at the point of generation, regardless of treatment location, so all emissions including scope 3 attributable to that waste are included in the scope 1 figure.

Waste > Wastewater^	8,001.99		0	NO	0	NO	M3 wastewater treated has been calculated for the national total wastewater based on emissions of industrial and domestic wastewater treatment for the UK Devolved Administration GHG Inventory 1990-2016. This has been applied to local authorities based on population.
Total Waste	16,808.87		0	NO	0	IE	Waste data is allocated at the point of generation, regardless of treatment location, so all emissions including scope 3 attributable to that waste are included in the scope 1 figure.
IPPU > Industrial process	101,554.17		0	NO	0	NE	Beyond the scope of the

							current analysis; we plan to include in future.
IPPU > Product use	0		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
Total IPPU	101,554.17		0	NO	0	NE	
AFOLU > Livestock	56,812.04		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Land use	-12,683.69		0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Other AFOLU	0	NE	0	NO	0	NE	Beyond the scope of the current analysis; we plan to include in future.
Total AFOLU	44,128.35		0	NO	0	NE	
Generation of grid-supplied energy > Electricity-	15,300		0	NO	1,989.79		

only generation^							
Generation of grid-supplied energy > CHP generation^	0	NO	0	NO	0	NO	CHP generation not reported in this LA in DUKES
Generation of grid-supplied energy > Heat/cold generation^	0	NO	0	NO	0	NO	
Generation of grid-supplied energy > Local renewable generation	2.67		0	NO	0		We have not extracted electricity-specific emissions from factors used for renewable electricity. All emissios are included in Scope 1.
Total generation of grid-supplied energy	15,302.66		0	NO	1,989.79		-
Total Emissions (excluding generation of grid-supplied energy)	1,705,471.04		365,476.32		634,593.24		

3. Sector Assessment Data

Energy Data

GCoM Common Reporting Framework Reporting Requirements

(3.1) Report the following information regarding your jurisdiction-wide energy consumption.

Response

Total energy consumption (MWh)^
8,277,071

Total energy consumption from renewable energy sources (MWh)^
31,528

Indicate the energy data for which you can report a fuel/technology mix^
Energy generation mix data

Indicate the energy-related assessments that have been undertaken for your jurisdiction^

Please explain^

(3.1c) For each type of renewable energy within the jurisdiction boundary, report the installed capacity (MW) and annual generation (MWh).

Solar PV

Installed capacity (MW)^
25.2

If you have no installed capacity data to report, please select a notation key to explain why^

Annual generation (MWh)^
22,732.47

If you have no generation data to report, please select a notation key to explain why^

Year data applies to
2020

Comment
(from BEIS renewable energy by local authority dataset to 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1115981/Renewable_electricity_by_local_authority_2014-2021_Nov22update.xlsx)

Solar thermal

Installed capacity (MW)^

If you have no installed capacity data to report, please select a notation key to explain why^
Not Estimated (NE)

Annual generation (MWh)^

If you have no generation data to report, please select a notation key to explain why^
Not Estimated (NE)

Year data applies to
2020

Comment
Solar Thermal data not available

Hydropower

Installed capacity (MW)^
0

If you have no installed capacity data to report, please select a notation key to explain why^

Annual generation (MWh)^

If you have no generation data to report, please select a notation key to explain why^
Confidential (C)

Year data applies to
2020

Comment

(from BEIS renewable energy by local authority dataset to 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1115981/Renewable_electricity_by_local_authority_2014-2021_Nov22update.xlsx)
There was some Hydropower generation in this local authority but it has been suppressed to prevent the output of individual plants being revealed.

Wind

Installed capacity (MW)^

2.9

If you have no installed capacity data to report, please select a notation key to explain why^

Annual generation (MWh)^

8,795.92

If you have no generation data to report, please select a notation key to explain why^

Year data applies to

2020

Comment

(from BEIS renewable energy by local authority dataset to 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1115981/Renewable_electricity_by_local_authority_2014-2021_Nov22update.xlsx)

Bioenergy (Biomass and Biofuels)

Installed capacity (MW)^

0.03

If you have no installed capacity data to report, please select a notation key to explain why^

Annual generation (MWh)^

If you have no generation data to report, please select a notation key to explain why^

Confidential (C)

Year data applies to

2020

Comment

(from BEIS renewable energy by local authority dataset to 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1115981/Renewable_electricity_by_local_authority_2014-2021_Nov22update.xlsx)
There was some Bioenergy generation in this local authority but it has been suppressed to prevent the output of individual plants being revealed.

Geothermal

Installed capacity (MW)^

If you have no installed capacity data to report, please select a notation key to explain why^

Not Occurring (NO)

Annual generation (MWh)^

If you have no generation data to report, please select a notation key to explain why^

Not Occurring (NO)

Year data applies to

2020

Comment

Other

Installed capacity (MW)^

12

If you have no installed capacity data to report, please select a notation key to explain why^

Annual generation (MWh)^

If you have no generation data to report, please select a notation key to explain why^

Confidential (C)

Year data applies to

2020

Comment

Of which 1.0 MW is Anaerobic Digestion and 11.0 MW is from Municipal Solid Waste for Installed capacity (MW).
There was some generation from Anaerobic Digestion and Municipal Solid Waste in this local authority but it has been suppressed to prevent the output of individual plants being revealed.
(from BEIS renewable energy by local authority dataset to 2021 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1115981/Renewable_electricity_by_local_authority_2014-2021_Nov22update.xlsx)

(3.2) Report the percentage of households within the jurisdiction with access to clean cooking fuels and technologies.

	Percentage of households within the jurisdiction with access to clean cooking fuels and technologies ^	Data source	Year data applies to	Comment
Response	>75%	National-level data	2021	United Kingdom (100%), https://data.worldbank.org/indicator/EG.CFT.ACCS.ZS

(3.3) How many households within the jurisdiction boundary face energy poverty? Select the threshold used for energy poverty in your jurisdiction.

	Indicator used to estimate energy poverty^	Percentage of households or total population within the jurisdiction boundary that face energy poverty^	Threshold used for energy poverty^	Comment
Response	Percentage of households within the jurisdiction boundary that face	17.4	Other, please specify LILEE indicator - If they are living in a property	Energy poverty measured using UK Government Sub-regional Fuel Poverty in England, 2022 (2020 data) - Fuel poverty in England is now measured using the Low Income Low Energy Efficiency (LILEE) indicator rather than the old Low Income High Costs (LIHC) indicator. Under the LILEE

	energy poverty		with a fuel poverty energy efficiency rating of band D or below and when they spend the required amount to heat their home, they are left with a residual income below the official poverty line.	indicator, a household is considered to be fuel poor if: - they are living in a property with a fuel poverty energy efficiency rating (FPEER) of band D or below and - their disposable income (income after housing costs (AHC) and energy needs) would be below the poverty line (The poverty line being defined as an equivalised disposable income of less than 60% of the national median). There are 3 important elements in determining whether a household is fuel poor: - household income - household energy requirements - fuel prices. For the city/municipal boundary the 32,492 households facing fuel poverty represents 17.4% of the total households, which is just over average for the UK. Data: https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2022

(3.4) Report the following information on access to secure energy for your jurisdiction.

Percentage of population or households with access to electricity

Data availability

Data available to report

Indicator^

Percentage of households with access to electricity (%)

Response value^

100

Year data applies to

2021

Comment

United Kingdom (100%), https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS

Average duration of available electricity

Data availability

Data available to report

Indicator^

Number of hours electricity is available per year (hours/year)

Response value^

8,759.47

Year data applies to

2021

Comment

An average of 31.57 minutes were lost per customer (8,759.47 hours electricity available out of total 8,760 hours/year, https://www.statista.com/statistics/817270/average-minutes-lost-per-electricity-consumer-united-kingdom-uk/.

Average yearly final energy consumption per capita

Data availability

Data available to report

Indicator^

kWh/year/person

Response value^

29,403

Year data applies to

2021

Comment

https://ourworldindata.org/grapher/per-capita-energy-stacked

Transport Data

(3.5) Report your jurisdiction's passenger and/or freight mode share data.

Mode share data

Passenger mode share data to report

Passenger mode share as share of vehicle distance travelled

Passenger mode share: Walking

0

Passenger mode share: Cycling

1

Passenger mode share: Micromobility (including e-scooters)

0

Passenger mode share: Buses (including Bus Rapid Transit)

3

Passenger mode share: Rail/Metro/Tram

7

Passenger mode share: Ferries/ River boats

0

Passenger mode share: Taxis or shared vehicles (e.g. hire vehicles)

0

Passenger mode share: Private motorized transport

88

Passenger mode share: Other

1

Year passenger mode share data applies to

2021

Total passenger mode share reported

100

Freight mode share data to report

Freight mode share as share of vehicle distance travelled

Freight mode share: Motorcycle / Two wheeler

0

Freight mode share: Light Goods Vehicles (LGV)

0

Freight mode share: Medium Goods vehicles (MGV)

0

Freight mode share: Heavy Goods vehicles (HGV)

85

Freight mode share: Rail

0

Freight mode share: Inland water transport

15

Freight mode share: Other

0

Year freight mode share data applies to

2020

Total freight mode share reported

100

Comment

Passenger Transport: Data taken from Department for Transport Statistics, Table TSGB0101 for 2021. This excludes travel by water and walking. "Other" covers Air. Freight transport: Data taken from Department for Transport Statistics, Table TSGB0403 for 2020. This is "goods moved" data only for All Traffic which covers coke and refined petroleum, coal and lignite and other freight".

Waste Data

(3.7) Report the following waste-related data for your jurisdiction.

	Data availability	Response (in unit specified)	Year data applies to	Comment
Total amount of solid waste generated (tonnes/year)	Reporting jurisdiction-level data	193,511		Kirklees Council provide the solid waste collection service for households within its own jurisdiction. The Council also collects some commercial waste through its 'Trade Waste' service. This figure is the 2020/21 Financial Year total residual waste collected (both household and other).
Percentage of the total solid waste generated that is utilized for waste to energy (%)	Reporting jurisdiction-level data	62.33		Household waste sent for energy recovery (BVPI82c)
Percentage of the total solid waste generated that is diverted away from landfill and incineration (%)	Reporting jurisdiction-level data	25		This is household waste sent for reuse, recycling or composting, as opposed to landfill or incineration. This figure is the 2020/21 Financial Year.
Percentage of the diverted solid waste generated that is recycled (%)	This data is not available to report			
Percentage of the diverted solid waste generated that is reused (%)	This data is not available to report			
Percentage of waste collected where	This data is not available to report			

separation at source is taking place (%)				
Total annual amount of food waste produced in the jurisdiction (tonnes/year)	This data is not available to report			
Volume of wastewater produced within the jurisdiction boundary (megalitres/year)	This data is not available to report			
Percentage of wastewater safely treated to at least secondary level (%)	This data is not available to report			

Public Health Data

(3.8) Report on how climate change impacts health outcomes and health services in your jurisdiction.

Health area affected by climate change

Health outcomes

Identify the climate hazard(s) that most significantly impact the selected health area

Extreme heat
Extreme cold
Urban flooding
River flooding

Identify the health issues driven by the selected climate hazard(s)

Heat-related illnesses
Cold-related illnesses
Exacerbation of non-communicable disease symptoms - respiratory disease
Mental health impacts
Disruption to health service provision

Timeframe of impact

Medium-term (2026-2050)

Identify which vulnerable populations are affected by the selected health issue(s)

Children and youth
Elderly
Vulnerable health groups

Low-income households
Outdoor workers

What factors affect your jurisdiction's ability to address the selected health issues

Lack of financial capacity

Comment

Extremes of temperature can lead directly to deaths, and the UK climate change risk assessment (CCRA) raises high summer temperatures in buildings as a particular health concern . This is especially problematic for vulnerable groups such as the elderly, children and young people, those with co-existing physical illness, and those without suitable housing. Energy is needed to heat and cool homes, especially if temperatures are more extreme. However as both demand increases, and (unless sustainable and low carbon energy is used) supply decreases, it is likely the prices of energy will increase. Fuel poverty levels are already higher than the national average in Kirklees (13.1% compared to 11.1%), and cold damp houses are known to cause poor health . This would increase the risk of illness to those living with economic deprivation, many of whom are already disproportionally affected by also having vulnerabilities such as pre-existing physical illness. Other temperature effects may be more subtle, for example, those working outdoors are likely to be exposed to increased heat and UV, causing short and long term health risks.

Another key risk from climate change highlighted in the UK CCRA is flooding. In Kirklees this predominantly affects people living and working in areas of high flooding risk, mostly along the Holme, Colne, and Calder Valleys. House prices in rural areas such as the Colne and Holme Valleys are correlated to flood risk; those who cannot afford more expensive property are most likely to suffer the consequences of flooding . This is especially problematic in Kirklees where there is a net imbalance of affordable housing. Looking at the consequences of flood damage, both personal and commercial property loss is associated with stress, anxiety, and depression. Severe weather has already impacted on transport infrastructure, with roads, railways, and airports struggling to stay open in adverse conditions. Not only does this limit access to community resources and increase isolation, but it can mean that mobile care services are unable to reach those that need them. Again this affects all groups unable to fully care for themselves disproportionately.

(3.10) Provide details of the household access to water, sanitation services and water consumption in your jurisdiction.

Response

Data availability

Data is available for the percentage of households with access to safely managed drinking water services
Data is available for the percentage of households with access to safely managed sanitation services

Data is available for the average household water consumption in litres per capita per day

Percentage of households with access to safely managed drinking water services

100

Percentage of households with access to safely managed sanitation services

100

Household water consumption (litres/capita/day)

141.2

Comment

The majority of households in the district (over 99%) are provided with drinking water and sanitation services by Yorkshire Water. Kirklees Council provide water sampling for private water supplies in the area, with 238 registered properties. According to the reporting to the Drinking Water Inspectorate for all properties sampled in the last 2 years within Kirklees which had issues with water quality, issues have been corrected through treatment or moved to mains water supply.

Household water consumption - This is the average for 2020/2021 - figure provided for Yorkshire Water customers, which covers Kirklees, but also the wider Yorkshire area. As reported in the Yorkshire Water Annual Performance Report - https://www.yorkshirewater.com/media/yosbv52w/our-annual-performance-report-2020-2021.pdf

Food Data

(3.11) What percentage of your population is food insecure and/or lives in a food desert?

	Data availability	Percentage of population that is food insecure	Comment
Response	Data available for the percentage of population that is food insecure	7	Reporting the percentage of households in Yorkshire and the Humber that are food insecure. Taken from: Department for Work & Pensions 2020/21 Household Food Security in the United Kingdom Dataset (Results from the Family Resources Survey, 2020/21)- Table 9.1: Households by region/country and household food security status, 2020/21, United Kingdom. More information on the methodology can be found under 'Household Food Security' in the glossary on this page: https://www.gov.uk/government/statistics/family-resources-

			survey-financial-year-2020-to-2021/family-resources-survey-background-information-and-methodology#glossary

Targets

4. Adaptation Goals

(4.1) Does your jurisdiction have an adaptation goal(s) in place? If no adaptation goal is in place, please indicate the primary reason why.

Yes, our jurisdiction has an adaptation goal(s)

(4.1a) Report your jurisdiction's main adaptation goals.

Select a reference ID for the goal

Adaptation goal 1

Adaptation goal^

Climate Ready by 2038

Climate hazards that goal addresses^

Heat stress
Extreme heat
Extreme cold
Snow and ice
Drought
Water stress
Increased water demand
Fire weather (risk of wildfires)
Urban flooding
River flooding
Extreme wind
Storm
Heavy precipitation
Mass movement
Biodiversity loss
Loss of green space/green cover
Soil degradation/erosion
Infectious disease

Base year of goal (or year goal was established if no base year)^

2022

Target year of goal^

2038

Description of metric / indicator used to track goal^

The adaptation goal will be tracked using a number of indicators outlined within the Climate Change Risk and Vulnerability Assessment for the district of Kirklees and Indicator Database. As part of the Kirklees' Climate Action Plans Monitoring & Evaluation strategy, annual data collection, analysis, evaluation and reporting will be undertaken to track progress, both positive and negative, against the adaptation goal. This M&E process will help inform the on-going development of our on-going and planned actions, implementing lessons learned to avoid maladaptation.

Comment

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 understand 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

None of the coastal climate hazards are applicable to Kirklees as it is a land-locked district.

Kirklees' Adaptation Goal can be found on our website, here:
https://www.kirklees.gov.uk/beta/climate-emergency/index.aspx

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Select a reference ID for the goal

Adaptation goal 2

Adaptation goal^

To positively deliver climate ready developments in Kirklees.

Climate hazards that goal addresses^

Urban flooding
River flooding

Base year of goal (or year goal was established if no base year)^

2019

Target year of goal^

2038

Description of metric / indicator used to track goal^

This adaptation goal is being tracked using a number of planning related indicators i.e. properties built within appropriate EA flood zones, alongside impact related indicators - monitoring and assessing the impact of flood events on new built properties across the district.

All monitoring reports for planning and development are publicised here:
https://www.kirklees.gov.uk/beta/planning-policy/information-monitoring.aspx

Comment

This goal is outlined within to Kirklees Local Plan, 2019, alongside our responsibility as the Lead Local Flood Authority.

Select a reference ID for the goal

Adaptation goal 3

Adaptation goal^

To improve air quality in Kirklees Council

Climate hazards that goal addresses^

Biodiversity loss
Loss of green space/green cover
Infectious disease

Base year of goal (or year goal was established if no base year)^

2019

Target year of goal^

2024

Description of metric / indicator used to track goal^

This goal is tracked by regularly reviewing and assessing levels of pollutants across the district, being: Nitrogen Dioxide, Sulphur Dioxide, fine particles (PM10), Carbon Monoxide, Lead, Benzene and 1-3 Butadiene. Smoke control areas, Air Quality management areas and annual reports can be found here: https://www.kirklees.gov.uk/beta/crime-and-safety/air-pollution.aspx

Comment

This plan has been developed in fulfilment of Part IV of the Environment Action 1995, Local Air Quality Management. This goal builds on previous action taken to improve air quality from May 2007 to August 2019, driving actions across 11 broad topics:
- Alternatives to private vehicle use
- Environmental permits
- Freight and delivery management
- Policy guidance and development control
- Promoting low emission plants
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management
- Vehicle fleet efficiency.

Kirklees Air Quality Action Plan can be found here: https://www.kirklees.gov.uk/beta/crime-and-safety/pdf/air-quality-action-plan.pdf

5. Mitigation Targets

GCoM Common Reporting Framework Reporting Requirements for European Cities

(5.1) Does your jurisdiction have an active greenhouse gas emissions reduction target(s) in place? Please include long-term and/or mid-term targets. If no active GHG emissions reduction target is in place, please indicate the primary reason why.

Yes, our jurisdiction has an active greenhouse gas emissions reduction target(s)

(5.1a) Provide details of your emissions reduction target(s). Please report both long-term and mid-term targets, if applicable.

Select a reference ID for the target

Target 1

Target type (selection mandatory)^

Fixed-level target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

Yes, this target will be achieved using carbon credits but the number of credits required has not been quantified

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2019

Covered emissions in year target was established (metric tonnes CO2e)

2,763,665.46

Base year^

Covered emissions in base year (metric tonnes CO2e)^

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2038

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

0

Projected population in target year

459,204

Please ensure you make two selections in this column.

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to.

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)
Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

2,763,665.46

Is this target the jurisdiction's most ambitious target?

Yes

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government
Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government
Target is conditional on additional state or regional/national legislation, regulation and/or policy
Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)
Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration
Target is conditional on the development or scaling up of other innovative technologies

Please explain^

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.

Select a reference ID for the target

Target 2

Target type (selection mandatory)^

Fixed-level target

Boundary of target relative to jurisdiction boundary^

Government operations – covers only emission sources owned and operated by jurisdictions government

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

We do not know if this target will be achieved using carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2022

Covered emissions in year target was established (metric tonnes CO2e)

80,167

Base year^

Covered emissions in base year (metric tonnes CO2e)^

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2038

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

0

Projected population in target year

459,204

Please ensure you make two selections in this column.

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to.

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)
Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

80,167

Is this target the jurisdiction's most ambitious target?

Yes

Alignment with Nationally Determined Contribution

This target is more ambitious than the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration

Target is conditional on the development or scaling up of other innovative technologies

Please explain^

This is a target for the Councils own operational scope 1 to 3 emissions, in-line with the district-wide 2038 target.

Select a reference ID for the target

Target 3

Target type (selection mandatory)^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

No, this target will not use carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2022

Covered emissions in year target was established (metric tonnes CO2e)

1,665,000

Base year^

2000

Covered emissions in base year (metric tonnes CO2e)^

2,767,000

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2025

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

63

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

1,023,790

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

447,671

Please ensure you make two selections in this column.

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to.

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)
Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

2,763,665.46

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is as ambitious as the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government
Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration
Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government
Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)
Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration
Target is conditional on the development or scaling up of other innovative technologies

Please explain^

Developed as part of Kirklees Net Zero Assessment to achieve the districts 2038 Net Zero and National net zero by 2050 targets. Found here: https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

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Select a reference ID for the target

Target 4

Target type (selection mandatory)^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

No, this target will not use carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2022

Covered emissions in year target was established (metric tonnes CO2e)

1,665,000

Base year^

2000

Covered emissions in base year (metric tonnes CO2e)^

2,767,000

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2030

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

78

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

608,740

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

452,340

Please ensure you make two selections in this column.

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to.

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)
Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

452,340

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is as ambitious as the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government
Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration
Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government
Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)
Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration
Target is conditional on the development or scaling up of other innovative technologies

Please explain^

Developed as part of Kirklees Net Zero Assessment to achieve the districts 2038 Net Zero and National net zero by 2050 targets. Found here: https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

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Select a reference ID for the target

Target 5

Target type (selection mandatory)^

Base year emissions (absolute) target

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target^

Target covers all the emissions sources which are included in the jurisdiction inventory

Are carbon credits currently used or planned to be used to achieve this target?^

No, this target will not use carbon credits

Percentage of target to be met using carbon credits generated from outside jurisdiction or target boundary^

Year target was established

2022

Covered emissions in year target was established (metric tonnes CO2e)

1,665,000

Base year^

2000

Covered emissions in base year (metric tonnes CO2e)^

2,767,000

Emissions intensity figure in base year (metric tonnes CO2e per capita or GDP)^

Target year^

2040

Estimated business as usual emissions in target year (metric tonnes CO2e)^

Percentage of emissions reduction (including offsets and carbon dioxide removal)^

92

Net emissions in target year (after offsets and carbon dioxide removal) [auto-calculated]

221,360

Net emissions in target year (after offsets and carbon dioxide removal) (metric tonnes CO2e)^

Projected population in target year

461,132

Please ensure you make two selections in this column.

Specify if target is considered a science-based target (SBT) and the SBT methodology it aligns to.

Yes, our jurisdiction considers the target to be science-based (select applicable methodology)
Tyndall Centre

Covered emissions in most recent inventory (metric tonnes CO2e)

452,340

Is this target the jurisdiction's most ambitious target?

No, but it is a mid-term target for the most ambitious target

Alignment with Nationally Determined Contribution

This target is as ambitious as the Nationally Determined Contribution

Select the conditional components of your emissions reduction target

Target is conditional on mitigation in emissions sources that are controlled by a higher level of government
Target is conditional on mitigation in emissions sources that are controlled by private entity outside of direct control of jurisdiction administration
Target is conditional on complete implementation of legislation, regulation and/or policy set by a higher level of government
Target is conditional on additional state or regional/national legislation, regulation and/or policy

Conditional on the provision of national funding for infrastructure (e.g., renewable energy generation, energy efficiency measures etc.)
Target is conditional on the decarbonization of the electricity grid that is outside the direct control of jurisdiction administration
Target is conditional on the development or scaling up of other innovative technologies

Please explain^

Developed as part of Kirklees Net Zero Assessment to achieve the districts 2038 Net Zero and National net zero by 2050 targets. Found here: https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

6. Sector Targets

GCoM Common Reporting Framework Reporting Requirements

(6.1) Provide details of your jurisdiction's energy-related targets active in the reporting year. In addition, you can report other climate-related targets active in the reporting year.

Target type (selection mandatory)^

Waste target
Target to increase the diversion rate away from landfill and incineration

Target description

Overarching vision: "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."

Specific waste target: 90% diversion of municipal waste from landfill

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2021

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Metric used to measure target^

Percentage of municipal waste sent to landfill

Metric value in base year^

11.5

Target year^

2026

Metric value in target year^

10

Metric value in most recent year data is available

11.5

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

Within the "Resources and Waste Strategy 2021 - 2030" document:
https://www.kirklees.gov.uk/beta/delivering-services/waste-strategy.aspx

Progress made towards target

Target type (selection mandatory)^

Renewable energy installed capacity target

Increase installed capacity of renewable electricity

Target description

To install Solar PV on domestic properties within Kirklees

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Other, please specify

Total Homes Applied

Metric used to measure target^

Mean Annual Rate of Installation

Metric value in base year^

0

Target year^

2050

Metric value in target year^

69,485

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

28

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

Target type (selection mandatory)^

Renewable energy installed capacity target

Increase installed capacity of renewable heating and/or cooling

Target description

To install heat pumps within domestic properties in Kirklees

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Other, please specify

Total Homes Applied

Metric used to measure target^

Mean Annual rate of installation

Metric value in base year^

0

Target year^

2050

Metric value in target year^

7,219

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

28

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

Target type (selection mandatory)^

Energy efficiency targets

Increase energy efficiency of buildings (residential buildings)

Target description

To increase the number of properties within the district with energy efficiency measures.

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Other, please specify

Total Homes Applied

Metric used to measure target^

Mean Annual Rate of Installation

Metric value in base year^

0

Target year^

2050

Metric value in target year^

88,349

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

The metric value is for glazing upgrades. Other metrics also include:
- Loft insulation: 62, 551
- Wall insultation: 44,708
- Drought proofing: 35, 522
- Cavity Wall insulation: 29,706

Target type (selection mandatory)^

Renewable energy installed capacity target

Increase installed capacity of renewable electricity

Target description

Increase the amount of floor space in public & commercial buildings services by renewable electricity - solar and wind

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Other, please specify

Floor Space Applied (m2)

Metric used to measure target^

Mean Annual Rate of Installation (m2)

Metric value in base year^

0

Target year^

2050

Metric value in target year^

1,649,039

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

7

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

The metric value provided is for wind turbines. For office solar PV it is: 251, 007

Target type (selection mandatory)^

Energy efficiency targets

Increase energy efficiency of buildings, specify building types covered

Public & Commercial

Target description

Increase the amount of floorspace (m2) serviced by heat pumps.

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Other, please specify

Floor Space Applied (m2)

Metric used to measure target^

Mean annual rate of installation (m2)

Metric value in base year^

0

Target year^

2050

Metric value in target year^

251,007

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

Target type (selection mandatory)^

Transport target

Other transport target type, please specify

Increase ULEV replacement of combustion private cars

Target description

To increase the number of EVs replacing conventional private cars

Boundary of target relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Year target was established

2022

Base year^

2022

Metric used to measure target (renewable energy or energy efficiency target)^

Metric used to measure target^

Number of private EV vehicles deployed on Kirklees roads

Metric value in base year^

0

Target year^

2035

Metric value in target year^

137,017

Metric value in most recent year data is available

0

Percentage of total energy that is renewable in target year

Is this target publicly available?

Yes, provide link/attachment

https://www.kirklees.gov.uk/beta/climate-emergency/pdf/net-zero-carbon-assessment.pdf

Progress made towards target

Planning

7. Planning

Climate Action Planning

(7.1) Does your jurisdiction have a climate action plan or strategy that addresses mitigation, adaptation (resilience), and/or energy?

Yes, our jurisdiction has a climate action plan or strategy

(7.1a) Report details on the climate action plan or strategy that addresses mitigation, adaptation (resilience), and/or energy-related issues in your jurisdiction.

Climate action plan type^

Integrated climate plan (addressing mitigation, adaptation and energy-related issues)

Attachment/link and name of plan^

Kirklees Climate Change Action Plan (CCAP)

1. CCAP_V1.3_ACCESSIBLE.pdf

Confirm attachment/link provided to plan (selection mandatory)

The plan has been attached and can be accessed (unrestricted) on the link provided

Boundary of plan relative to jurisdiction boundary^

Same (jurisdiction-wide) covers entire jurisdiction and nothing else

Processes for monitoring evaluation and updates of plan^

Monitoring: Information on progress of plan is monitored and publicly reported annually
Evaluation: Evaluation of plan takes place at least every 3 years
Update: Updates to the plan are published at least every 3 years

Funding sources and financial instruments to finance plan

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes
Public-private partnerships
Private partnerships (e.g., a combination of private investments)

Communities and organizations engaged^

National government and/or agencies
State/regional government(s) and/or agencies
Local government (s) and/or agencies
Citizens

Vulnerable population groups
Academia
Business and private sector
Trade unions
Non-governmental organisations

Describe if and how climate-related scenarios have informed the plan

The Climate Change Action Plan (CCAP) has been informed by the Climate Change Risk and Vulnerability Assessment, which utilised UKCP18 data for Kirklees, using RCP8.5 scenario at current, 2030, 2050 and 2080 timeframes. The (CCAP) outlines our approach of how the district of Kirklees can achieve its ambition to be 'Net Zero and Climate Ready by 2038'.

Primary author(s) of plan^

Dedicated team within jurisdiction

Assessment of co-benefits, trade-offs, and synergies of actions included in plan^

Plan assesses co-benefits of actions

Year of formal approval of plan^

2022

End year of plan

2038

Total cost of implementation of plan (in currency specified in 0.1)

Sectors covered by action plan

Agriculture
Forestry
Electricity, gas, steam and air conditioning supply
Water supply
Sewerage, wastewater management and remediation activities
Waste management
Conservation
Construction
Transportation and storage
Accommodation and food service activities
Real estate activities
Professional, scientific and technical activities
Education
Human health and social work activities
Other, please specify

The plan covers: Buildings, Energy, Sustainable Food & Agriculture, Natural Environment & Biodiversity, Waste, Water, Transport and Cross=Cutting

Please explain

The CCAP Can be found at https://www.kirklees.gov.uk/beta/climate-emergency/pdf/kirklees-climate-change-action-plan.pdf

1. CCAP_V1.3_ACCESSIBLE.pdf

Sector Action Planning

(7.2) Report details on the other climate-related plans, policies and/or strategies in your jurisdiction.

Area of plan, policy and/or strategy

Other, please specify

Resources and Waste Strategy

Attachment/ link and name of plan

https://www.kirklees.gov.uk/beta/delivering-services/waste-strategy.aspx

Resources and Waste Strategy 2021 - 2030

waste-strategy.pdf

Current status of plan

Implementation complete

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2021

End of year plan

2030

Comment

Area of plan, policy and/or strategy

Air quality

Attachment/ link and name of plan

https://www.kirklees.gov.uk/beta/crime-and-safety/pdf/air-quality-action-plan.pdf Air Quality Action Plan for Kirklees Council

air-quality-action-plan.pdf

Current status of plan

Implementation complete

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2019

End of year plan

2024

Comment

This Air Quality Action Plan (AQAP) has been produced as part of our duty to Local Air Quality Management (LAQM). It outlines the action we will take to improve air quality in Kirklees Council between April 2019 and March 2024.

Area of plan, policy and/or strategy

Health and wellbeing

Attachment/ link and name of plan

Kirklees Health & wellbeing Plan: https://www.kirklees.gov.uk/beta/delivering-services/pdf/kirklees-health-and-wellbeing-plan.pdf

kirklees-health-and-wellbeing-plan.pdf

Current status of plan

Implementation complete

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2018

End of year plan

2023

Comment

Our Ambition for population health and wellbeing is that based on our priorities, we'll be focused on making impact in the following areas and use this as a barometer for improvement in population health and wellbeing. To make the biggest impact for our population and to deliver a system impact we will focus on prevention and early intervention with each of our population cohorts to make healthy weight the norm, increase proportion of people who feel connected to their communities, increase the proportion of people who fell in control of their onw health and wellbeing and increase life expectancy.

Area of plan, policy and/or strategy

Spatial development

Attachment/ link and name of plan

Kirklees Development Plan https://www.kirklees.gov.uk/beta/planning-policy/local-plan.aspx

local-plan-strategy-and-policies (1).pdf

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2019

End of year plan

2024

Comment

The Kirklees Development Plan consists of the Kirklees Local Plan and, in applicable areas, the Holme Valley Neighbourhood Development Plan.

The Kirklees Local Plan was adopted on 27 February 2019. It comprises the strategy and policies document, allocations and designations document and associated policies map. The Holme Valley Neighbourhood Development Plan (HVNDP) covers the Holme Valley Parish Council area including the area within the Peak District National Park and was successful at referendum on 4 November 2021. The Neighbourhood Plan was subsequently made (brought into force) by Kirklees Council on 8th December 2021 and by the Peak District National Park Authority on 10th December 2021.

Area of plan, policy and/or strategy

Other, please specify

Broader Sustainability

Attachment/ link and name of plan

Our Council Plan 2021 / 23 - Clean and green.
https://www.kirklees.gov.uk/beta/delivering-services/council-plan-clean.aspx

Current status of plan

Implementation complete

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2021

End of year plan

2023

Comment

Our built and natural environment contributes to people's quality of life and makes the district a more attractive place in which to live and invest. We want to connect people and places, improve air quality and green infrastructure and be resilient in the face of extreme weather events and climate change, as well as helping people reduce waste and recycle more.

Area of plan, policy and/or strategy

Other, please specify

Environment Strategy

Attachment/ link and name of plan

Current status of plan

In implementation

Boundary of plan relative to jurisdiction boundary

Same – covers entire jurisdiction and nothing else

Year of formal approval of plan

2023

End of year plan

2040

Comment

The Environmental Strategy: Everyday, Life' 2023 aims to make Kirklees a national leader in environmental sustainability. This strategy sets out how we, in Kirklees, can ensure a healthy planet for all, where people and nature can thrive together.

The Strategy outlines the vision and ambitions, with specific targets and aims to be developed underneath it. The strategy is structured around four core themes:

• Closing the Loop: Taking radical action on circularity and resources

• Nurturing Nature: Green spaces, nature recovery and biodiversity

• Bringing it Home: Good homes and more sustainable neighbourhoods

• Kirklees on the Move: Better greener transport options for all

Each theme will be underpinned by our ‘Always on’ priorities, which are the three principles by which we have developed and will deliver the strategy and consist of: Sustainable Economic Development, Resilient Futures, and Environment for All. Each of which will seek to ensure sustainable growth, resilience, and inclusivity across all areas of activity.

There are 12 key headline targets across the four themes:

- Zero avoidable waste by 2038

- Growing the sharing economy in Kirklees to be a national leader

- Nature in recovery by 2030

- All degraded peatland to be in restoration by 2038

- Increase Kirklees tree canopy cover to 18% by 2050

- All residents in Kirklees to live within 500m / 5minutes' walk away from accessible green or blue space by 2038

- Good homes – all homes in Kirklees to be at least EPC C by 2030

- Net zero energy supply by 2038

- Sustainable neighbourhoods programme launched by 2025

- 60% of journeys within Kirklees to be Sustainable Journeys by 2030

- 100% fleet vehicles to be zero carbon by 2038

- All of Kirklees homes to be within 1km of a public transport node via a safe pedestrian route by 2038.

The Strategy is one of the council's four top-tier strategies, alongside the Kirklees Health and Wellbeing Strategy, the Inclusive Communities Framework, and the Inclusive Economies Strategy. Each of these strategies plays a crucial role in shaping Kirklees' future by addressing key areas such as environmental sustainability, health and wellbeing, inclusivity, and economic growth.

Area of plan, policy and/or strategy

Attachment/ link and name of plan

Current status of plan

Boundary of plan relative to jurisdiction boundary

Year of formal approval of plan

End of year plan

Comment

Finance

(7.5) Describe any planned climate-related projects within your jurisdiction for which you hope to attract financing.

Project area

Buildings

Project title

Huddersfield District Energy Network

Stage of project development

Project structuring

Status of financing

Project partially funded and seeking additional funding

Identified financing model

Grants

Public finance - national government

Project description and attach project proposal

Huddersfield District Energy Network (HDEN)- Development of a municipal heat network opportunity providing heat and power from the town's Energy from Waste (EfW) facility to premises in Huddersfield town centre. The Heat Network will play an important part in reducing the carbon emissions from the district's main town. Crucially, this will be primarily through the decarbonisation of heat, which is a much more challenging area of the energy industry to decarbonise relative to electricity. As the infrastructure of the network itself is likely to outlast several sources of heat, it is also considered a key enabling technology for future low carbon heat sources. The Council approved the Outline Business Case for the HDEN in September 2022. The scheme was successful in accessing £8.2m funding (£1m for commercialisation development and £7.2m towards construction) from the Uk Government's Green Heat Networks Fund.

Total cost of project (in currency specified in 0.1)

1,000,000

Total investment cost needed if relevant (in currency specified in 0.1)

1,000,000

Project area
Renewable energy

Project title
Heat Decarbonisation Plans

Stage of project development
Scoping

Status of financing
Project not funded and seeking full funding

Identified financing model
Public finance - national government

Project description and attach project proposal
Creating Heat Decarbonisation Plans (HDP's) for buildings would be an essential part of the drive to meet the Council's own district-wide Net Zero target of 2038 plus the wider Leeds City Region West Yorkshire Combined Authority's Net Zero target, with an associated carbon budget, of which the Council is a signatory. This is complemented by the region's 'Energy Strategy and Delivery Plan', which will help the Council prioritise interventions and projects to deliver carbon and energy savings. In particular, the PSDS/LCSF funding streams would help resource the delivery of projects and provide the skills and knowledge for future projects to reduce the Council's own emissions, to reach our Net Zero targets and align with our Action Plan, arising from the Council's Climate Emergency Declaration back in 2019.
The Council is currently in the early stages of engagement with a number of organisations that are currently offering potential assistance with developing HDP's. This includes obtaining proposals for consultancy support and site feasibility studies. We are currently going through a process of data sourcing/acquisition and energy audit/assessment to provide a foundation for this work and have applied for government funding (LCSF Phase 3 and 4). HDP's were completed for 14 Council sites on 31/03/23 through LCSF Phase 3. The Council is awaiting the final outcome of the application process for LCSF Phase 4.

Total cost of project (in currency specified in 0.1)
97,955

Total investment cost needed if relevant (in currency specified in 0.1)
97,955

Project area
Transport

Project title
Local Electric Vehicle Infrastructure Pilot

Stage of project development
Project feasibility

Status of financing
Project partially funded and seeking additional funding

Identified financing model
Public finance - own budget
Public finance - national government

Project description and attach project proposal
Kirklees Council is working with the West Yorkshire Combined Authority, Calderdale Council, Wakefield Council, Leeds City Council and City of Bradford Council on a proposal for the delivery of local electric vehicle infrastructure across the West Yorkshire region, including Kirklees. This pilot project will deliver fast chargers for the public to use and will use innovative procurement methods. As a partnership, the proposal is looking to attract £1.5 million of funding, which the partner authorities will match fund (for a total investment of £3 million). The project supports the transition to EV use in the region, with a particular focus on provision for those without off-street parking. It will provide an improvement in accessible EV charging provision that would not otherwise be met by current or planned EV chargepoint infrastructure. It is hoped that the project will increase consumer confidence in transitioning to EVs across the region, ensuring increased uptake.

Total cost of project (in currency specified in 0.1)
3,000,000

Total investment cost needed if relevant (in currency specified in 0.1)
1,500,000

Project area
Renewable energy

Project title
Heat Decarbonisation Schemes

Stage of project development
Scoping

Status of financing
Project partially funded and seeking additional funding

Identified financing model
Public finance - national government

Project description and attach project proposal
The Council is in the process of developing a pipeline of preparatory work in anticipation of further PSDS schemes which we expect to be forthcoming and to be ready for anticipated challenging timescales. We plan to use developed decarbonisation plans as

prototypes so that plans for all buildings in those building types covered can be developed in anticipation of future PSDS funding where the lessons learnt can be applied. In addition, the benefits will be maximised by the sharing of knowledge, for our own team and further teams from across the council, allowing them to be 'upskilled' in the realm of heat decarbonisation.
It is intended that the schemes applied for will deliver excellent value for money by being a 'success story' that would bring multiple teams together by fostering collaboration and cooperation over potential new projects arising from the grant funding. Using the experience and skills gained, there would be an increased likelihood of further decarbonisation projects across the council's building portfolio, leading an expected improvement in the success rate and outcomes of funding bids.
The buildings identified cover a representative range of public sector building types which are relatively poor-or-average-performing relative to their typical archetype. The buildings identified also represent the geography of the district to ensure as diverse a range of areas as possible; the sites chosen include council sites from across the wider towns and villages of the district. The potential for flagship decarbonisation schemes across the district allows us to take all our communities with us on this journey to decarbonisation, thereby maximising socioeconomic benefits too, as an opportunity for education and development, and as a form of infrastructure investment by breathing new life into old buildings, to ensure no community is left behind.
The project cost (£2.5 million) is purely an estimate at this stage, subject to the next PSDS scheme's application conditions and funding requirements. The authority has been successful in accessing c.£90k of HDP funding to continue the programme to develop council site HDP's for all the key council sites which will allow us to apply for further funding in the future to continue this work.

Total cost of project (in currency specified in 0.1)

2,500,000

Total investment cost needed if relevant (in currency specified in 0.1)

2,500,000

Actions

8. Adaptation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(8.1) Describe the outcomes of the most significant adaptation actions your jurisdiction is currently undertaking. Note that this can include those in the planning and/or implementation phase.

Action (selections mandatory)^

Educational/Informational actions
Other, please specify
Multiple aspects: flood mapping, early warning systems, measuring flood risk and integrating climate projection into planning policies.

Climate hazard(s) that action addresses^

Heavy precipitation

Action description and web link to further information^

The annual reporting mechanism is now through this 'Annual Progress and Implementation Plan'. The plan provides more specific details on
• The current understanding of the location and extent of local flood risk
• progress against the Local Strategy objectives
• a record of works and studies carried out in the previous year, which are relevant to the Local Strategy objectives
• Working with Planning colleagues to influence planning decisions to take account of flood risk
• priorities for the forthcoming year

The Plan gives a clearer appreciation of what the council needs to do, how it intends to do it and what it has actually done.
• We have installed new software to help forecast flooding in Kirklees to enhance our severe weather incident management function in response to Climate impacts. We are able to now monitor the monthly rainfalls received in various parts of the district and look at trends to direct future actions.
• We have a trial ongoing for a local flood warning system on ordinary watercourses. This is to provide alerts to improve the Council's preparedness.
• We are reviewing an updating our planning advise taking into UK2018 climate projects and promoting developments that can be easily adapted to future flood risks.
• The existing Local Flood Risk Management Strategy is being revised to reflect new research and science on climate impacts and how we address them.

The Environment Agency's Medium Term Plans has around £30 million in the pipeline for flood risk mitigation works in Kirklees. Schemes that will help to protect properties from flooding and quality assurance process promote biodiversity net gain and carbon sequestration. At this stage these benefits are not quantifiable and must undergo a development case. This is overseen by the Yorkshire Flood Risk and Coastal Committee where Kirklees is a member in attendance.

Sectors adaptation action applies to^

Sewerage, wastewater management and remediation activities
Public administration and defence; compulsory social security
Information and communication
Other, please specify
Buildings; Residential, Commercial, Public.

Co-benefits realized^

Fewer or no households and businesses forced from homes/places of work

Improved mental wellbeing/quality of life

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

31,000,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Ecosystem-based actions
Ecological restoration (including wetland and floodplain conservation and restoration)

Climate hazard(s) that action addresses^

Extreme heat
Fire weather (risk of wildfires)
Heavy precipitation

Action description and web link to further information^

Development of a comprehensive peatland inventory, understanding the current state of peatland and outlining actions that are and can continue be taken to restore areas in a poor state. https://www.moorsforthefuture.org.uk/

Sectors adaptation action applies to^

Conservation

Co-benefits realized^

Reduced natural resource depletion
Improved education and public awareness on climate issues
Improved water/soil quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Engineered and built environment actions
Resilience and resistance measures for buildings

Climate hazard(s) that action addresses^

Heavy precipitation

Action description and web link to further information^

Offer grant funding through the property Flood Resilience Grant (PFR) for residential homes and businesses to make homes more resilient to future flooding. Up to £5,000 per property.

Sectors adaptation action applies to^

Real estate activities

Co-benefits realized^

Increased security/protection for poor/vulnerable populations
Fewer or no households and businesses forced from homes/places of work
Improved mental wellbeing/quality of life
Reduced disaster/disease/contamination-related health impacts

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

National funds and programmes
Other, please specify source(s)
Property Flood Resilience (PFR) Grant

Status of action in the reporting year^

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

5,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Ecosystem-based actions
Afforestation and reforestation

Climate hazard(s) that action addresses^

Extreme heat
Drought
Heavy precipitation
Other, please specify
Humidity

Action description and web link to further information^

Development of Kirklees Land-Bank, for biodiversity credits to be spent as part of the biodiversity net gain policy.

Sectors adaptation action applies to^

Forestry
Conservation

Co-benefits realized^

Reduced GHG emissions
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
Public-private partnerships

Status of action in the reporting year^

Feasibility finalized, and finance partially secured

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Ecosystem-based actions

Ecological restoration (including wetland and floodplain conservation and restoration)

Climate hazard(s) that action addresses^

Extreme heat

Drought

Heavy precipitation

Other, please specify

Humidity

Action description and web link to further information^

Nature Flows Landscape Recovery project in-partnership with River Trusts, new community management groups, local authorities, private landowners, yorkshire wildlife trust, yorkshire water and national trust to enhance the management of their land by improving, restoring, creating and connecting wetlands and ponds, wider habitat improvements on riparian urban-land alongside river restoration.

Sectors adaptation action applies to^

Agriculture

Forestry

Conservation

Human health and social work activities

Co-benefits realized^

Reduced natural resource depletion

Increased water security

Increased security/protection for poor/vulnerable populations

Improved education and public awareness on climate issues

Fewer or no households and businesses forced from homes/places of work

Improved mental wellbeing/quality of life

Reduced health impacts from extreme heat or cold weather

Reduced disaster/disease/contamination-related health impacts
Improved water/soil quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
National funds and programmes
Public-private partnerships

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

541,609

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Ecosystem-based actions
Afforestation and reforestation

Climate hazard(s) that action addresses^

Extreme heat
Heavy precipitation
Other, please specify

Action description and web link to further information^

The White Rose Action Plan 2021-25 sets out our targets for tree planting and woodland creation across North and West Yorkshire over the next four years.

Seven million trees, the equivalent of 4900 football pitches or 3500 hectares, could be planted in North and West Yorkshire between 2021 and 2025, with the support of landowners and farmers, with funding from the Government's Nature for Climate fund.

https://whiteroseforest.org/about/actionplan/

Sectors adaptation action applies to^

Forestry

Co-benefits realized^

Job creation
Improved mental wellbeing/quality of life
Improved air quality
Increased/improved green space
Protected/improved biodiversity and ecosystem services

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

90-100%

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

National funds and programmes

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Educational/Informational actions
Community engagement/education

Climate hazard(s) that action addresses^

Extreme heat
Extreme cold
Drought
Fire weather (risk of wildfires)
Extreme wind
Heavy precipitation
Mass movement
Infectious disease

Action description and web link to further information^

Delivery of a Kirklees Climate Change Youth Summit, raising awareness and knowledge around all aspects of climate change adaptation and mitigation.

Adult community learning - The main purpose of the Community Learning (CL) fund is to reach disadvantaged communities and individuals, to enable them to develop new skills, participate in learning and to progress towards further learning and/or sustainable employment. Community Learning supports wider government policies on localism, social justice, stronger families, digital inclusion and social mobility.

What's recycling all about – This course is designed for learners with a little English, but who do not understand what recycling is or what it's all about. It would incorporate the concept of recycling what goes where , green recycle bins, tips and also charity shops if possible it would also incorporate a visit to the local recycling plant of the project including project scope and outcomes to be achieved.
In the Herb Garden – Learning to create a windowsill herb garden / raised bed veg patch, growing their chosen plants from a variety of plants and seeds. Showing their families or friends how to do the same. Enabling learners to grow
organic, good quality food which will help their health and wellbeing.

Sectors adaptation action applies to^

Other, please specify
Young people and community

Co-benefits realized^

Improved education and public awareness on climate issues

Timeframe for which increased resilience is expected to last

Long-term (after 2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

30-40%

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Government policies and programs actions

Other, please specify

Integrate climate risk assessment outcomes into Councils Corporate Risk Management approach

Climate hazard(s) that action addresses^

Extreme heat

Extreme cold

Drought

Fire weather (risk of wildfires)

Extreme wind

Heavy precipitation

Mass movement

Infectious disease

Other, please specify

Humidity

Action description and web link to further information^

Integrate the findings of the CCRVA assessment within the Corporate Risk Matrix, both the operational response and reputational / strategic risks associated.

Sectors adaptation action applies to^

Other, please specify

Council risk management services

Co-benefits realized^

Increased security/protection for poor/vulnerable populations
Increased transparency and accountability
Improved mental wellbeing/quality of life
Improved preparedness for health service delivery

Timeframe for which increased resilience is expected to last

Short-term (by 2025)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Engineered and built environment actions

Other, please specify

Retrofit of social housing

Climate hazard(s) that action addresses^

Extreme heat

Extreme cold

Action description and web link to further information^

All our new development sites in the council housing team Homes and Neighbourhoods are considering development proposals through the lens of carbon reduction, cost of living crisis and housing affordability. Key to our approach is placeshaping and building successful communities. Strategy for housing that will deliver measures to support the 2038 target. Bidding for funding wherever possible to retrofit properties installing renewables wherever possible. Including district heating alongside residential properties. Data mapping as to biggest carbon emitters and prioritising inline with fuel poverty. Smaller pilot projects have started however the programme of work is currently being planned alongside targeting spend.
This includes air source heating, insulation and solar panels.

Working with Better Homes Yorkshire, looking at coming up with an offer for low carbon measures for those in private homes.

https://kirkleestogether.co.uk/2022/04/06/low-carbon-housing-to-be-built-on-former-middle-school-site/

https://www.kirklees.gov.uk/beta/council-housing/your-community/retrofit-abbey-road.aspx

Sectors adaptation action applies to^

Accommodation and food service activities

Co-benefits realized^

Increased energy security
Reduced fuel/energy poverty
Increased security/protection for poor/vulnerable populations
Improved physical health
Improved mental wellbeing/quality of life

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

10-20%

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Regional funds and programmes
National funds and programmes

Status of action in the reporting year^

Action in operation (targeted to sector/location)

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

1,000,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

Yes

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Percentage of households or population within the city boundary that spending up to X% of income on energy service (decrease)

Action (selections mandatory)^

Educational/Informational actions
Other, please specify
Skills development

Climate hazard(s) that action addresses^

Other, please specify
Green skills gap

Action description and web link to further information^

The project is a flexible Construction Skills Hub – Kirklees Build which will ensure the council is able to benefit from major capital projects being delivered across Kirklees over the next decade. The Council's ambition is to maximise the social value benefits from these investments. Kirklees Build is one of the nine projects, backed by government as part of the Dewsbury Town Investment Plan.

Aimed at young people, and adults to skill/reskill in standard construction skills, and new MMC or low carbon based technologies. E.g. ground source heat pumps, green retrofitting. Meeting employer needs for skilled labour now and in the short / medium term future.

https://democracy.kirklees.gov.uk/documents/s45597/Construction%20Skills%20Village%20plan%20on%20page.pdf

Sectors adaptation action applies to^

Construction

Professional, scientific and technical activities

Co-benefits realized^

Job creation

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Scoping

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

2,000,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Behavioural actions

Other, please specify

Food waste

Climate hazard(s) that action addresses^

Other, please specify

Food waste / Food poverty

Action description and web link to further information^

Food re-distribution network in partnership with the Bread and Butter Thing, community orgs and TSL. Members sign up to access food that would otherwise go to waste. Currently 3 hubs with 2 more to open by end of September. Approx. 1000kg of food saved per hub per week (13kg/member x 80 members).

https://kirkleestogether.co.uk/2022/02/28/award-winning-affordable-food-scheme-launches-first-yorkshire-hub-in-kirklees/

Sectors adaptation action applies to^

Public administration and defence; compulsory social security

Co-benefits realized^

Reduced costs
Increased food security
Increased security/protection for poor/vulnerable populations
Increased social inclusion, equality and justice
Increased transparency and accountability

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes

Status of action in the reporting year^

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is not included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

Yes

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Behavioural actions

Other, please specify

Recycling and waste strategy

Climate hazard(s) that action addresses^

Action does not address hazard

Action description and web link to further information^

Kirklees council is committed to deliver as park of the Kirklees Resources & Waste Strategy centred around recycling and waste minimalization. Measured through tonnage saved.

Reuse shop trial through 'Revive', to see if its viable for Kirklees. Two x containers at waste sites for people to drop of waste that could be reused instead of landfill .In the process of setting up a shop to sell items that are collected in Huddersfield. Lease and unit currently being secured for the shop. Future plans for bulky items such as furniture and white goods to be collected and sold in a similar shop format .

https://www.kirklees.gov.uk/beta/delivering-services/waste-strategy.aspx
Green digital hubs have been developed to repurpose unwanted laptops, desktops, tablets and smartphones passing them on to Kirklees resident who are digitally excluded. By donating equipment residents and businesses are giving back to the community, recycling and keeping useable equipment out of landfill.

Sectors adaptation action applies to^

Waste management

Co-benefits realized^

Reduced costs

Increased security/protection for poor/vulnerable populations

Increased social inclusion, equality and justice

Timeframe for which increased resilience is expected to last

Short-term (by 2025)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources

Status of action in the reporting year^

Implementation complete in the reporting year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Action (selections mandatory)^

Engineered and built environment actions

Hazard resistant infrastructure design and construction

Climate hazard(s) that action addresses^

Heavy precipitation

Mass movement

Action description and web link to further information^

The highways team at Kirklees council has undertaken a local climate impact profile, so we can understand what impact climate is going to have on our assets. Assessing our carbon baseline footprint, specifically around highways maintenance activity. Working with partners to develop an action plan, increase understanding of carbon impact adaption and mitigation moving forward. One key area they are developing is carbon literacy understanding and training for the service area.

Project to replace ageing digital architecture in Highways and Operational Services with a modern asset and data management system(s) . This will have multiple benefits, one of these being improved performance management around carbon reporting, allowing holistic decision making and planning to take place.

In the next twelve months a a sustainability strategy for the service will be developed this will highlight how we reuse, recycle and innovate sustainable solutions moving forward.

https://kirkleestogether.co.uk/2023/03/14/highways-capital-plan-gets-cabinet-approval/#:~:text=Funding%20attributed%20to%20public%20rights%20of%20way%20

%28PROW%29,to%20clear%20routes%20currently%20impassable%20by%20heavy%20vegetation.

Sectors adaptation action applies to^

Transportation and storage

Co-benefits realized^

Business/technological innovation
Improved road safety

Timeframe for which increased resilience is expected to last

Medium-term (2026-2050)

Proportion of the total jurisdiction population with increased resilience due to adaptation action

I do not have this data

Proportion of natural systems with increased resilience due to adaptation action

I do not have this data

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes

Status of action in the reporting year^

Implementation complete in the reporting year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

24,408,044

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

9. Mitigation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(9.1) Describe the outcomes of the most significant mitigation actions your jurisdiction is currently undertaking. Note that this can include those in the planning and/or implementation phases.

Primary emissions sector addressed and action type (selections mandatory)^

Stationary energy

Domestic and/or commercial heat network

Action description and web link to further information^

Development of the Huddersfield Heat Network, utilising heat and power from the district's Energy from Waste (EfW) facility, located at the edge of Huddersfield. It is anticipated that the heat network will deliver 27,613 MWh/yr heat load and 43,962 MWh/yr electricity to premises in the town centre. The pre-implementation phase is at the Detailed Project Development (DPD) stage. The key output from the DPD stage will be an Outline Business Case, in line with the HM Treasury 'five case' model (i.e. Strategic, Economic, Commercial, Financial and Management cases), which will allow the Council to decide whether it wishes to progress to implementation and delivery of the HHN and consider potential sources of capital investment. 2025 is the estimated start date of operation.

Start year of action

2025

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated emissions reductions due to action

Estimated emissions reductions (metric tons CO2e)^

2,872

Estimated annual energy savings (MWh)^

Estimated annual renewable energy generation (MWh)^

Co-benefits realized^

Increased energy security

Reduced fuel/ energy poverty

Enhanced resilience to shocks and disasters

Funding source(s)

Jurisdiction's own resources
National funds and programmes

Status of action in the reporting year^

Feasibility finalized, and finance partially secured

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

16,450,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

Yes

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Source mix of thermal energy (heating and cooling) consumed within local boundary (decrease)

Heat decarbonisation - Replacement of Fossil Fuel Heating & Cooling with Heat Network Thermal Energy from EFW plant.

Primary emissions sector addressed and action type (selections mandatory)^

Stationary energy
LED / CFL / other luminaire technologies

Action description and web link to further information^

Conversion of street lighting in the district to LED units. Infrastructure development and part of scheduled lighting unit replacement to give reduction in electricity consumption, reduction in carbon emissions, reduction of future maintenance costs, and mitigation of increasing electricity charges. Successful in obtaining Salix funding for first 3 years (2018/19 to 2020/21). External source of capital investment will be prioritised to maintain the improvement in energy efficiency and downward trajectory of carbon emissions.

Start year of action

2018

Year for which mitigation is expected to last

2023

Impact indicators measured^

Estimated emissions reductions due to action
Estimated annual energy savings due to action

Estimated emissions reductions (metric tons CO2e)^

850

Estimated annual energy savings (MWh)^

3,025.37

Estimated annual renewable energy generation (MWh)^

Co-benefits realized^

Reduced costs
Business/technological innovation
Other impacts from climate actions
Enhanced climate change mitigation

Funding source(s)

Jurisdiction's own resources
National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in less than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

10,000,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Primary emissions sector addressed and action type (selections mandatory)^

Stationary energy
Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings

Action description and web link to further information^

Energy efficiency upgrades in council homes - New Gas Boilers, Solid Wall Insulation, other Cavity Wall Insulation, Solar PV,
Gas Mains to electric homes, and improvements in Loft Insulation. Government funding through LAD 1 has successfully been bid for. This will provide 66% funding towards the installation of a number of measures, including heat pumps, solar PV, loft insulation, cavity and solid wall insulation to the remaining properties that are below a SAP band D.

Following on from this investment will need to be focused on bringing the housing stock up to a minimum SAP band C.

Start year of action

2005

Year for which mitigation is expected to last

2028

Impact indicators measured^

Estimated emissions reductions due to action
Estimated annual energy savings due to action
Estimated annual renewable energy generated due to action

Estimated emissions reductions (metric tons CO2e)^

4,098

Estimated annual energy savings (MWh)^

21,155

Estimated annual renewable energy generation (MWh)^

122

Co-benefits realized^

Reduced costs
Increased security/protection for poor/vulnerable populations

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

905,010

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

Yes

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Energy consumption from renewable energy sources (increase)
Installed capacity of renewable energy sources within local boundary (increase)
Total energy generated from renewable energy sources within local boundary (increase)

Primary emissions sector addressed and action type (selections mandatory)^

Transportation

Improve fuel economy and reduce CO2 emissions from motorized vehicles

Action description and web link to further information^

Innovative approach to increasing the uptake of electric vehicles within Kirklees, through 2 work streams: 1) Installation of on-street charge points for public use and 2) Try-before-you-buy scheme for commercial electric vehicles. Funding obtained through West Yorkshire's allocation from the City Region Sustainable Transport Settlements (CRSTS).

Start year of action

2022

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated emissions reductions due to action

Estimated emissions reductions (metric tons CO2e)^

Estimated annual energy savings (MWh)^

Estimated annual renewable energy generation (MWh)^

Co-benefits realized^

Revenue generation

Improved air quality

Funding source(s)

Regional funds and programmes

National funds and programmes

Status of action in the reporting year^

Implementation underway with completion expected in more than one year

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

4,600,000

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Primary emissions sector addressed and action type (selections mandatory)^

Transportation

Improve walking, cycling and integrated transit access

Action description and web link to further information^

Kirklees has received 1.9 million for the active travel improvements, and this money will see improvements to cycling and walking in towns across Kirklees and will contribute to the council's emerging district-wide Active Travel agenda.

Areas earmarked for improvements include the A62 Leeds Road in Huddersfield, improvements to walking and cycling access to the Spen Valley Greenway in and around Cleckheaton, and improved connections to Dewsbury Railway Station.

In addition, the council is looking into the possibility of creating an active travel neighbourhood in an area of Huddersfield to help improve links to the wider walking and cycling network in the town.

https://kirkleestogether.co.uk/2020/11/16/kirklees-is-set-to-benefit-from-2m-of-government-funding-into-active-travel/

Cabinet report can be found here:
https://democracy.kirklees.gov.uk/documents/s41801/Kirklees%20Active%20Travel%20Fund%20Cabient%20Report%2022%20June%202021%20-%20Final%20version%2010062021.pdf

Start year of action

2021

Year for which mitigation is expected to last

2050

Impact indicators measured^

Estimated emissions reductions due to action

Estimated emissions reductions (metric tons CO2e)^

Estimated annual energy savings (MWh)^

Estimated annual renewable energy generation (MWh)^

Co-benefits realized^

Reduced congestion
Reduced disruption of energy, transport, water and communications networks
Improved road safety
Improved physical health
Improved mental wellbeing/quality of life
Improved air quality

Funding source(s)

Regional funds and programmes
National funds and programmes

Status of action in the reporting year^

Feasibility finalized, and finance fully secured

Inclusion in climate action plan and/or jurisdiction development/master plan^

Action is included in climate action plan and/or development/master plan

Total cost of action (in currency specified in 0.1)

1,983,983

Does this action contribute to your jurisdiction's energy access and/or poverty objectives?^

No

Select the related energy access and/or poverty indicator(s) for this action, and indicate how they are impacted by the action (i.e. value increased or decreased)^

Action not related to energy access and/or poverty indicator(s)

Further Information

(10.1) Use this field to provide any additional information or context that you feel is relevant to your jurisdiction's response. Please note that this field is optional and is not scored/assessed.

We have been proactive and completed the emissions data for 2019 with the CIRIS tool which is populated with the SCATTER 2019 data in preparation for next year which we have sent over to the CDP technical team for in depth analysis. We are also working closely with C40 to ensure best practise when completing the CIRIS tool and we will be improving on this in time for the CDP submission in 2024. We have attached a copy of the inventory for 2019 in the CIRIS tool format that has been developed (CIRIS_Standard_v2.5_EN_Kirklees_2019 v.1.xlsx attached).

CIRIS_Standard_v2.5_EN_Kirklees_2019 v.1.xlsx

Submit your response

What language are you submitting your response in?

English

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I have read and accept the Terms and Conditions

Please confirm how your response should be handled by CDP.

	Public or non-public submission
I am submitting my response	Publicly (recommended)