

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

National

Next lowest level of government

Sub-municipal district

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

551.7

Percentage range of land area that is green space

21-30%

Current (or most recent) population size^

798786

Population year^

2020

Projected population size

838027

Projected population year

2030

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.

Green Economy Policy Work Update.pdf

Leeds-Inclusive-Growth-Strategy-FINAL.pdf

LEEDS-TALENT-AND-SKILLS-PLAN-final-consultation-publication.pdf

Capital Programme Cover Report Appendices 310122.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

Relevant departments, committees and/or subcommittees are informed by management about climate-related issues

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

Climate-related issues are considered by government when undertaking budgeting and/or major capital expenditures

Climate-related responsibilities are assigned to management-level positions in government

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

We have a dedicated Executive Member for Infrastructure and Climate who has oversight of all activity relating to climate change, sustainable energy and carbon reduction, sustainable development, sustainable housing growth, highways and transportation, flood and water management, active travel, planning services, and clean air. All key decisions in Leeds which result in the authority spending or saving over £500,000, or is likely to have a significant effect on communities living or working in an area of one or more wards, are considered by Executive Board, community committees, or by officers given delegated responsibility. As set out within the Officer Delegation Scheme as part of the council's constitution, the Director for Resources is authorised by the Executive to discharge the following functions to the Chief Officer for Sustainable Energy and Air Quality:

Climate Change including:-

- a) Establishment, implementation, monitoring and review arrangements to minimise and mitigate the impact of climate change;
- b) Promotion of local co-operation arrangements to reduce the impact of climate change and
- c) Engagement with communities in relation to climate change.

Sustainable Energy and Carbon Reduction including:-

- a) Formulation and implementation of sustainable energy and carbon reduction policies for the city; and
- b) Formulation and implementation of clean air policies for the city

Climate change (including mitigation and adaptation) is one of the main corporate risks on our risk register. It is reviewed quarterly and an update is provided annually to Executive Board.

Executive Board receives an Annual Report on progress following the declaration of a climate emergency in 2019. All formal decisions must evidence impact on our net zero ambitions as one of three key strategic aims through our corporate report template. The council also established a cross political group Climate Emergency Advisory Committee (CEAC) in 2019, which advises the council and Executive Board on climate related matters. The work output of CEAC is then reviewed annually at Full Council. Various aspects of our climate mitigation work are also reviewed by scrutiny committees. The Environment, Housing and Communities Scrutiny Board also has oversight functions relating to executive decisions and other matters of interest in regard to climate change, providing checks and balance to the city's journey to net-zero.

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

The Best City Ambition is our overall vision for the future of Leeds. At its heart is our mission to tackle poverty and inequality and improve quality of life for everyone who calls Leeds home. We will achieve our mission by focusing on improving outcomes across the Three Pillars of the Best City Ambition - Health and Wellbeing, Inclusive Growth and Zero Carbon. The Three Pillars capture the things that will make the biggest difference to improving people's lives in Leeds – and many of the big challenges we face and the best opportunities we have relate to all three - [https://www.leeds.gov.uk/plans-and-strategies/best-city-ambition?](https://www.leeds.gov.uk/plans-and-strategies/best-city-ambition?utm_medium=email&utm_source=govdelivery)

The Leeds Core Strategy sets out the spatial planning framework for the District. Central to its preparation has been the development of an approach which seeks to manage growth in a sustainable way, in balancing the overall, scale, distribution and phasing of development. Population increase, climate change, and the global economy are all huge challenges facing Leeds. Within this context and in planning for growth within the District, there are key links between longer term economic prosperity, environmental quality, local identity and distinctiveness - <https://www.leeds.gov.uk/planning/planning-policy/adopted-local-plan/core-strategy-introduction>

The Local Plan sets out development principles for our area and are used to determine planning applications. Our Leeds Local Plan is being updated to reflect climate mitigation and adaptation, specifically focusing on carbon reduction, flood risk, green infrastructure, placemaking and sustainable infrastructure - <https://www.leeds.gov.uk/planning/planning-policy/local-plan-update>

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

Following the Covid-19 pandemic, and in light of other pressures such as the national cost of living crisis, we are experiencing a significant lack of financial resource, which is the biggest challenge facing local authorities in long term financial planning.

The council's Medium-Term Financial Strategy provides a robust, consistent and sustainable approach to establishing and maintaining a stable and prudent financial basis on which the Council's services are delivered - in line with the council's three pillars as set out in the Best City Ambition, including Zero Carbon. The Capital Programme (attached) clearly sets out financial investment in net-zero and resilience/adaptation measures. This is reported on annually to Executive Board.

Work is being undertaken to review the council's approach to new build. A key principle of this work is to consider whole life costs to ensure that buildings are resilient to the changing climate. The principle of whole life costing when addressing the climate emergency is well established in many schemes. The Leeds Flood Alleviation Scheme will have saved more money than the capital costs of building it if it prevents just a single Storm Eva (2015) level of flooding .

The authority operates both an Invest to Save Fund (used for service improvements or transformational projects where a proof of concept has already been delivered and an initial revenue investment would directly generate cost reductions or income for the Council) and an Innovation Fund (designed to provide pump-priming investment for those more conceptual schemes which need to be developed further). In both cases a Business Case must be completed which specifically includes a section highlighting any implications of the proposal on the climate emergency agenda.

The council have formally asked the West Yorkshire Pension Fund to divest from fossil fuels to minimise climate risk, and actively look to divest into alternative, cleaner investments with comparable returns.

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

With the size of the financial challenge that we are facing to meet net zero, it is well recognised it can only be achieved through greater investment by the financial sector as opposed to total reliance on grant funding, which is often time-limited, low value and inflexible. We are also concerned that the funding outlook at present for building retrofit is very limited, with support focussed on social housing and off-gas grid low-income private sector properties. This leaves a huge amount of unmet need in Leeds, particularly low-income Victorian terraced areas and more affluent areas requiring more expensive improvements. National policy has a key role to play in using financial levers available to encourage swifter action for homeowners and commercial property owners.

Yorkshire and the Humber has long been one of our most important industrial powerhouses. Even since the decline of UK manufacturing, the region has continued to produce materials crucial to our economy: steel, cement, chemicals, glass and more. The Investing in a Just Transition Initiative highlighted that Y&H accounts for 6.4% of UK GDP but 10% of carbon emissions (almost half coming from just 25 industrial sites) and it forecast that 22.2% of jobs across the region could be affected by a transition to a greener economy. 360,000 people in the region — 15% of all jobs - work in industries with high carbon emissions. This presents a high risk to our local economy. The impacts to the local economy sit within the broader context of a just transition to sustainable living for our communities. With living costs rising at their fastest rate for 30 years in the UK, and the average household fuel bill increasing by £693 a year, we must ensure that sustainable changes required to our homes, diets and lifestyles to reach net-zero do not exacerbate the problem, but rather act as tools to improve quality of life.

Our Leeds Inclusive Growth Strategy (attached) sets out how Leeds City Council, the private sector, universities, colleges and schools, the third sector and social enterprises in the city will work together to grow the Leeds economy ensuring that everyone in the city contributes to, and benefits from, growth to their full potential. It sets out how the city intends to promote a positive, outward looking image on the global stage seeking to increase inward investment, exports and tourism. This will be refreshed in 2023 and the Climate Emergency Advisory Committee will be consulted on the draft version in Autumn 2022.

It sets out 12 "big ideas" that act as an action plan to encourage inclusive growth in the city, these are focused on supporting people, places and productivity. One of the big ideas is '21st Century Infrastructure' and sets out the vision to coordinate plans and leveraging investment to improve infrastructure including:

- Transport
- Smart cities
- Low carbon energy - electricity, hydrogen and water networks
- Flood protection
- Green infrastructure

The council's Talent and Skills Plan 2017 (attached) sets out how as a city we can collectively improve the supply of skills that our residents need to play a full and more productive part in the labour market, and that our businesses need to thrive, helping to create a more inclusive economy in a compassionate city. In order to generate action around supporting skills development in emerging areas of the economy such as green, as well targeting employment and skills support towards high carbon transition sectors, a refresh of the 2017 plan, now titled the 'Future Talent Plan' is currently in development, that will be owned and updated by stakeholders in the city, supporting people to develop and maintain the skills that make them and our businesses resilient in the face of change. Please find attached the Green Economy Policy Work Update, which provides detail on recent work with Centre for Progressive Policy to look at the areas of risk within the Leeds economy as a result of the transition to Net Zero.

(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?

Yes, wider opportunities/benefits are assessed for all climate actions

Outline how your jurisdiction quantifies the impact of these wider opportunities/benefits

Wider opportunities/benefits are considered at the action planning stage

Wider opportunities/benefits are considered at post-implementation monitoring and evaluation stage

Wider opportunities/benefits are quantitatively assessed

Wider opportunities/benefits are qualitatively assessed

Describe the wider opportunities/benefits of climate action the jurisdiction has identified

Zero Carbon is one of the three pillars of the Best City Ambition. To realise this ambition, Team Leeds will focus on:

- Delivering a low-carbon and affordable transport network which encourages people to be physically active and reduces reliance on the private car, helping people get around the city easily and safely.
- Promoting a fair and sustainable food system in which more produce is grown locally, and everyone can enjoy a healthy diet.
- Addressing the challenges of housing quality and affordability, tackling fuel poverty and creating vibrant places where residents have close access to services and amenities.
- Joining with local communities, landowners and partners to protect nature and enhance habitats for wildlife.
- Investing in our public spaces, green and blue infrastructure to enable faster transition to a green economy while improving quality of life for residents.

Leeds City Council Equality Improvement Priority for 2021/22 - To ensure that work to deliver the City's climate ambition of net zero provides opportunities for and is inclusive of all communities, including those characteristics protected by law under the Equality Act 2010.

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

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

Please provide evidence and/or more details of how your jurisdiction is ensuring inclusive/equitable climate action

Please see attached internal submission - Equality Improvement Priority Storyboard 2021-22

Equality Improvement Priority Storyboard 202122.docx

(0.4) Report on your engagement with higher and/or lower levels of governments regarding your jurisdiction's climate action.

Climate component

Climate action plan

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

National-level government

Outline the purpose of this engagement

To facilitate information sharing across different levels of government

Comment

We regularly engage with Government departments regarding development of local climate policy and write correspondence on behalf of senior councillors detailing lobbying asks. We have formally responded to a range of national consultations including waste and resource efficiency, air quality management policy and electric vehicle charge points. We have also worked with government, advising and supporting national schemes following successful projects in Leeds, such as advising on spatial work around the government's Electric Vehicle strategy.

As part of our membership of the national Inclusive Growth Network, earlier this year we engaged the Centre for Progressive Policy to undertake some initial work looking at the areas of risk within the Leeds economy as a result of the transition to Net Zero. This has highlighted a number of key takeaways, but we would like to know more – in particular about how to capitalise on existing opportunities and on opportunities that could arise in the future. Therefore, Leeds City Council will be commissioning a partner to help us explore what the transition to Net Zero means for the Leeds economy, including what it means for specific sectors; how we understand the risks and opportunities associated with this; and what can be done practically to support businesses and employers make the transition and become climate resilient.

Climate component

Climate action plan

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

State/Regional-level government

Outline the purpose of this engagement

To facilitate capacity building across different levels of government

Comment

The West Yorkshire Combined Authority (WYCA) brings together the local authorities of Bradford, Calderdale, Kirklees, Leeds and Wakefield, working in partnership with the Local Enterprise Partnership and the City of York. Leeds City Council support the delivery of WYCA's climate action plan, including working with the Mayor of West Yorkshire to improve bus services and deliver mass transit that reflects our Connecting Leeds transport strategy and wider best city ambitions. We also work with WYCA around EV and our Solar Farm feasibility study to deliver key programmes regionally.

In Leeds, we represent the city on seven key work programmes at West Yorkshire level:

- Communications, engagement and marketing campaigns
- Green skills and training
- Better neighbourhoods
- Better Home Yorkshire Hub
- Business sustainability support / energy efficiency and renewables / circular economy, waste and material efficiency
- Solar PV and storage
- Flood risk and drainage

We have representation on the WYCA Green Jobs Taskforce, which brings together experts from across West Yorkshire to review the landscape for green jobs and determine how to deliver the skills needed to address the climate emergency, including the development of the Mayoral Green Jobs Gateway, which is expected to create 1,000 well paid, skilled green jobs for young people and ensure the region has the talent needed to reach its target of becoming a net-zero.

WYCA have also recently commissioned work aiming to gain a clear picture of West Yorkshire's Green economy, including its jobs, skills requirements and relevant supply chains. WYCA would like clear recommendations for Green economy activity to support its plan to deliver on its Net Zero and broad sustainability ambitions and have underlined the importance of aligning this activity with a Just Transition. The work with the Centre for Progressive Policy outlined above will therefore complement the regional work by specifically focusing upon the Leeds economy, as well as providing further insight into the practical actions that can be taken to support Leeds businesses and employers in particular, with less specific focus on the Skills agenda alone.

Climate component

Other, please specify (Heat Network Zoning Pilot)

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

National-level government

Outline the purpose of this engagement

To collect data and/or feedback from other levels of government to inform its development

Comment

The Leeds PIPES District Heating Network (DHN) delivers low carbon, sustainable energy to residents and businesses of Leeds including key Leeds City Council buildings. District heating is likely to continue to grow rapidly, with government announcing their intention to bring in a district heating zoning policy by 2025, which will make it mandatory for certain buildings to connect to district heating. The council is one of a handful of authorities participating in a pilot of the methodology that will be used to identify the zones. The spikes in wholesale gas prices have also made district heating more commercially competitive which is driving interest and many organisations are also attracted by the very low carbon content of the heat that we provide. These factors, should help secure additional customers and growth over the coming decade.

(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

Civil society	Academia
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Mechanisms used to collaborate

Collaborative initiative
 Knowledge or data sharing

Areas collaboration focused on

Emissions reduction
 Adaptation
 Resilience
 Energy
 Transport (Mobility)
 Building and Infrastructure
 Industry

Description of collaboration

The Leeds Climate Commission was established in 2017 and was the very first climate commission, providing a blueprint for the growing number of other climate commissions that have developed since. It is an independent voice in the city, providing authoritative advice on steps towards a low carbon, climate resilient future so as to inform policies and shape the actions of local organisations and stakeholders. It monitors progress towards meeting the city's carbon reduction targets, celebrates success stories and recommends actions to keep the city on track. Leeds City Council is a key partner and our Executive Member for Infrastructure and Climate is the Vice Chair of the Commission.

In 2019, Leeds City Council and the Leeds Climate Commission to undertake a large citywide engagement piece called the 'Big Leeds Climate Conversation'. This involved consulting around 8,000 citizens on a range of proposals related to carbon mitigation, both online and at nearly 80 public meetings or events. As part of the work, a representative Citizens' Jury was convened and jurors were asked to consider the question: "What should Leeds do about the emergency of climate change?" They produced a list of 12 recommendations, covering transport, housing, communications, finance, green spaces, aviation, a proposal for a Leeds Green New Deal, plastics, recycling and political co-operation. A response to each of the recommendations was provided via the Climate Emergency Advisory Committee shortly after.

Other entities collaborated with

Residents
 NGO and associations
 Education sector
 Health care
 Industrials
 Real Estate

Primary entity collaborated with

Civil society	Academia
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Mechanisms used to collaborate

Collaborative initiative
 Knowledge or data sharing
 Capacity development
 Development of local/regional adaptation plans, National Adaptation Plans and/or National Adaptation Programmes of Action (NAPAs)

Areas collaboration focused on

Emissions reduction
 Adaptation
 Resilience
 Energy
 Transport (Mobility)
 Waste
 Building and Infrastructure
 Industry
 Agriculture
 Forestry
 Landscape and jurisdictional approaches
 Ecosystem restoration
 Food
 Water
 Public health

Description of collaboration

Leeds City Council is part of the Yorkshire and Humber Climate Commission (the first regional group of its kind), which brings together key public, private and third sector partners to plan and accelerate climate mitigation and adaptation. The partnership evolved from the work of the Leeds Climate Commission, of which the council is a lead partner. The commission also hosts a regional policy forum and several different working groups - all of which Leeds representatives attend. The Chief Officer for Sustainable Energy and Air Quality is a commissioner, representing West Yorkshire. The Commission published its Climate Action Plan for the region in November 2021, which can be found here - <https://yorksandhumberclimate.org.uk/climate-action-plan>

The Yorkshire and Humber Climate Commission have also set up a task and finish group, led by Environment Agency and Leeds City Council representatives, to develop a programme for local authorities to support adaptation and resilience planning. This will ensure joined up thinking across the region and allow the council to play a leading role in piloting and developing the knowledge, skills and tools all local authorities will need to develop their own adaptation plans.

Other entities collaborated with

Neighboring local government
 Academia
 Residents
 NGO and associations
 Education sector
 Energy
 Financials

Health care
Industrials
Real Estate
Utilities

Primary entity collaborated with

Government	Local government within country
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Mechanisms used to collaborate

Collaborative initiative
Knowledge or data sharing

Areas collaboration focused on

Emissions reduction
Adaptation
Resilience
Energy
Transport (Mobility)
Waste
Building and Infrastructure
Industry
Agriculture
Forestry
Food
Water

Description of collaboration

We are a member of the UK100 (network for UK local leaders focused solely on climate) and Core Cities UK (association of 11 largest UK cities) - we regularly share advice and insight with other local authorities based on our experience of delivering climate action. Sit on policy forum for UK100 - policy working group.

Other entities collaborated with

Local government within country

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[^]

Strategic Flood Risk Assessment
Strategic Flood Risk Assessment Oct 2007.pdf

Confirm attachment/link provided to assessment

The assessment has been attached

Boundary of assessment relative to jurisdiction boundary[^]

Same - covers entire jurisdiction and nothing else

Year of publication or approval[^]

2007

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment considers transition risks
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework
A process has been established for prioritizing identified hazards

Primary author(s) of assessment[^]

Dedicated team within jurisdiction

Please explain

In May 2021 Leeds City Council appointed AECOM to update the Leeds Strategic Flood Risk Assessment (SFRA). The updated SFRA will be a Level 1 document only but will include additional modelling work around the Leeds FAS and limited breach analysis. This additional modelling and breach analysis work is intended for internal use only, is provided in response to the declaration of the climate change emergency, and is to revise and inform both flood risk and general policy updates. However, an important distinction is that the update is not to inform the current Local Plan and the list of allocated sites. This will take place at the next Local Plan review when a Level 2 SFRA will have to be commissioned. This is likely to be within the next 18-24 months.

The SFRA update is now at a very advanced stage with a meeting on 28 July for the final document review. After this there will be consultation with professional partners, Local Plan update, internal governance and sign-off, and Member consultation including Development Plan Panel and Scrutiny Board.

Assessment attachment and/or direct link[^]

Corporate Risk Assurance - Climate Change 2022
Climate Change Corporate Risk Assurance 2022.docx

Confirm attachment/link provided to assessment

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 considers transition risks
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework
A process has been established for prioritizing identified hazards
A process has been established to update the assessment at least every five years

Primary author(s) of assessment[^]

Relevant department within jurisdiction

Please explain

We have risk management arrangements in place which feed into a corporate risk register. The register houses the most significant, cross-cutting risks that could impact on the outcomes we aim to deliver as set out in the Best Council Plan. These risks can be internal or external facing.

Internal risks relate to the organisation itself and cover areas such as finance, staff and business continuity.

External risks are those that could affect the city – its people, communities, businesses and infrastructure – where we have a role, often in partnership, to mitigate them.

We update the corporate risk register each quarter and then publish the Corporate Risk Map – a diagram that shows the various risks and their ratings based on a combined assessment of their probability (how likely the risk is to occur) and potential impact.

We also produce a more detailed annual corporate risk report that provides assurance on how we and our partners are managing the key corporate risks (to be updated by July 27th) - <https://www.leeds.gov.uk/performance-and-spending/performance/annual-corporate-risk-report>

Assessment attachment and/or direct link[^]

Climate Adaptation and Resilience Plan
Climate Adaptation Resilience Plan Report Appendix A 080722.pdf
Climate Adaptation and Resilience Plan.pdf
Climate Adaptation Resilience Plan Report Appendix C 080722.pdf
Climate Adaptation Resilience Plan Report Appendix B 080722.pdf

Confirm attachment/link provided to assessment

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 considers transition risks
Assessment includes a high-emissions scenario
Identified hazards have been incorporated into the jurisdictions overall risk management framework
A process has been established for prioritizing identified hazards
A process has been established to update the assessment at least every five years

Primary author(s) of assessment[^]

Dedicated team within jurisdiction
Relevant department within jurisdiction

Please explain

This report sets out a range of activity that has taken place to date across the council, and with our partners, to better understand and begin to deliver on the city's ambition to strengthen our resilience to the impacts of climate change locally, in line with the government's National Adaptation Programme (NAP) and the latest UK Climate Change Risk Assessment (CCRA). This report also details future work to undertake a deeper council-wide climate risk assessment to further prevent and protect against climate impacts.

Assessment attachment and/or direct link[^]

<https://www.paolasakai.uk/projects/tool-to-assess-climate-opportunities>

Confirm attachment/link provided to assessment

The assessment can be accessed (unrestricted) on the link provided

Boundary of assessment relative to jurisdiction boundary[^]

Same - covers entire jurisdiction and nothing else

Year of publication or approval^A

2021

Factors considered in assessment

Assessment considers vulnerable populations
Assessment considers water security
Assessment considers nature
Assessment considers transition risks
Assessment includes a high-emissions scenario

Primary author(s) of assessment^A

Other, please specify (Dr Paola Sakai, University of Leeds)

Please explain

A climate vulnerability index formulated for the city by a university colleague

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

Climate-related hazards^A

River flooding

Vulnerable population groups most exposed

Women and girls
Children and youth
Elderly
Indigenous population
Marginalized/minority communities
Vulnerable health groups
Low-income households

Sectors most exposed^A

Agriculture
Sewerage, waste management and remediation activities
Conservation
Construction
Accommodation and food service activities
Real estate activities
Education
Human health and social work activities

Describe the impacts on vulnerable populations and sectors^A

Six years ago, Storm Eva devastated homes and businesses in Leeds costing the city an estimated £36.8 million. The risk will continue to increase as the climate changes —however we are taking significant action to alleviate flood risk.

Proportion of the population exposed to the hazard

Please select

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

Yes

Current probability of hazard^A

Medium

Current magnitude of impact of hazard^A

High

Expected future change in hazard intensity^A

Increasing

Expected future change in hazard frequency^A

Increasing

Timeframe of expected future changes^A

Medium-term (2026-2050)

Climate-related hazards^A

Urban flooding

Vulnerable population groups most exposed

Women and girls
Children and youth
Elderly
Indigenous population
Marginalized/minority communities
Low-income households

Sectors most exposed^A

Agriculture
Forestry
Sewerage, waste management and remediation activities
Waste management
Construction
Accommodation and food service activities
Financial and insurance activities
Real estate activities

Education

Describe the impacts on vulnerable populations and sectors^

The frequency of flooding events in Leeds has increased in recent years. Winter months have seen excessive rainfall over an extended period of time causing the rivers to exceed their capacity. Summer months have seen an increase in prolonged dry periods where the ground becomes baked and impenetrable followed by short intense downpours which run off quickly leading to surface water flooding. Local rainfall data shows that since July 2019 Leeds has generally been experiencing higher rainfall than the East and North East England average. There has been a rise in purpose built accommodation for people who are especially vulnerable, such as elderly and disabled. These people may be less able to cope with the impacts of flooding and the effects can be devastating for them.

Proportion of the population exposed to the hazard

<10%

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

Yes

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

Children and youth
Elderly
Vulnerable health groups
Low-income households
Outdoor workers

Sectors most exposed^

Agriculture
Forestry
Fishing
Electricity, gas, steam and air conditioning supply
Water supply
Waste management
Administrative and support service activities
Conservation
Construction
Transportation and storage
Accommodation and food service activities
Education

Describe the impacts on vulnerable populations and sectors^

Leeds is increasing experiencing multiday periods of excessively hot weather (often combined with high humidity) which can be harmful to health resulting in increased hospital admissions for heat- related illness, as well as cardiovascular and respiratory disorders. Some populations are more vulnerable and at higher risk such as low-income urban residents, those with underlying health conditions, people living alone, young children and older people. This is resulting in more proactive action to issue alerts and advice to the public on how to stay safe in hot weather.

Proportion of the population exposed to the hazard

Data is not available

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

Yes

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^

Drought

Vulnerable population groups most exposed

Marginalized/minority communities
Outdoor workers

Sectors most exposed^

- Agriculture
- Forestry
- Fishing
- Manufacturing
- Water supply
- Sewerage, waste management and remediation activities
- Waste management
- Construction
- Accommodation and food service activities
- Human health and social work activities

Describe the impacts on vulnerable populations and sectors^

Drought is a naturally occurring phenomenon when rainfall levels are lower than normal, resulting in low river, reservoir and groundwater levels. This can lead to water supply problems for domestic and commercial use and potentially harm the environment. Droughts have occurred in the past and are likely to be experienced in the future. In Yorkshire, we experienced drought conditions in 1929, 1959, 1976, 1995 and 2018. We are still preparing for worse events than those in the historic record, as climate change may lead to a reduction in flows. Agriculture can be particularly vulnerable as their farming practices require increased water use during times of drought when their own private supplies may also be depleted. Agriculture can be particularly vulnerable as their farming practices require increased water use during times of drought when their own private supplies may also be depleted.

Proportion of the population exposed to the hazard

Data is not available

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

Yes

Current probability of hazard^

Low

Current magnitude of impact of hazard^

Low

Expected future change in hazard intensity^

Increasing

Expected future change in hazard frequency^

Increasing

Timeframe of expected future changes^

Medium-term (2026-2050)

(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^		Describe how the factor supports or challenges the adaptive capacity of your jurisdiction^
Budgetary capacity	Challenges	Significantly challenges	There are significant costs associated with investing in adaptations to mitigate the risk of flooding and extreme heat that cannot be covered by council budgets without additional support.
Housing	Challenges	Significantly challenges	Many of the changes required to adapt to rising temperatures involve installation of efficiency or other technological measures in existing housing, especially with regards to the private rental sector. National support and policy is needed.
Government capacity	Challenges	Significantly challenges	Challenge associated with elements of adaptation that fall outside of our jurisdiction
Community engagement	Challenges	Moderately challenges	Buy-in from communities, helping communities to make sustainable changes to their behaviour and lifestyles
Inequality	Challenges	Moderately challenges	Climate vulnerability is higher in most deprived areas of the city, due to lack of resources to protect homes and health inequalities

2. Emissions Inventory

Emissions Inventory Methodology

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

Yes

(2.1a) Provide an attachment (in spreadsheet format) or a direct link to your community-wide emissions inventory. In addition, select the inventory year and report the jurisdiction's population for that year.

	Community-wide inventory attachment (spreadsheet) and/or link (with unrestricted access)^	Status of community-wide inventory attachment and/or direct link	Inventory year^	Population in inventory year^	Comment
Response	See attached "SCATTER_leeds_Inventory_2019.xlsx" file SCATTER_leeds_Inventory_2019.xlsx	The emissions inventory has been attached	2019	793139	Population estimates (2019) taken from https://www.nomisweb.co.uk/

(2.1b) Provide the following information regarding your latest community-wide GHG emissions inventory.

Boundary of inventory relative to jurisdiction boundary^

Same - covers entire jurisdiction and nothing else

Primary methodology/framework to compile inventory

Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC) reported in the format of GCoM Common Reporting Framework (CRF)

Tool used to compile inventory

SCATTER

Gases included in inventory^

CO2
CH4
N2O

Source of Global Warming Potential values

IPCC Fourth Assessment Report (2007)

Has the inventory been audited/verified?

<Not Applicable>

Overall level of data quality

<Not Applicable>

Has the methodology and/or boundary used for this inventory changed when compared to the previously reported inventory?

<Not Applicable>

Additional documentation and comments

<Not Applicable>

Emissions Inventory Data

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

	Direct emissions (metric tonnes CO2e)^	If you have no direct emissions to report, please select a notation key to explain why^	Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling (metric tonnes CO2e)^	If you have no indirect emissions to report, please select a notation key to explain why^	Emissions occurring outside the jurisdiction boundary as a result of in-jurisdiction activities (metric tonnes CO2e)	If you have no emissions to report that are occurring outside the jurisdiction boundary as a result of in-jurisdiction activities, please select a notation key to explain why	Please explain any excluded sources, identify any emissions covered under an ETS and provide any other comments^
Stationary energy > Residential buildings^	826902	Please select	302767	Please select	159107	Please select	
Stationary energy > Commercial buildings & facilities^	113564	Please select	211572	Please select	46937	Please select	
Stationary energy > Institutional buildings & facilities^	92701	Please select	45938	Please select	19029	Please select	
Stationary energy > Industrial buildings & facilities^	294736	Please select	257734	Please select	88828	Please select	
Stationary energy > Agriculture^	6368	Please select	1	Please select	1516	Please select	
Stationary energy > Fugitive emissions^	112034	Please select	0	NE	0	NE	
Total Stationary Energy	1446304	Please select	818012	Please select	315417	Please select	
Transportation > On-road^	1515226	Please select	0	IE	589343	Please select	Electricity
Transportation > Rail^	13943	Please select	0	IE	3318	Please select	Electricity

	Direct emissions (metric tonnes CO2e)^	If you have no direct emissions to report, please select a notation key to explain why^	Indirect emissions from the use of grid-supplied electricity, heat, steam and/or cooling (metric tonnes CO2e)^	If you have no indirect emissions to report, please select a notation key to explain why^	Emissions occurring outside the jurisdiction boundary as a result of in-jurisdiction activities (metric tonnes CO2e)	If you have no emissions to report that are occurring outside the jurisdiction boundary as a result of in-jurisdiction activities, please select a notation key to explain why	Please explain any excluded sources, identify any emissions covered under an ETS and provide any other comments^
Transportation > Waterborne navigation^	3422	Please select	0	IE	0	IE	All UK waterborne
Transportation > Aviation^	42346	Please select	0	IE	437894	Please select	Electricity
Transportation > Off-road^	15126	Please select	0	IE	0	NE	Electricity
Total Transport	1590063	Please select	0	Please select	1030556	Please select	
Waste > Solid waste disposal^	125695	Please select	0	IE	0	IE	
Waste > Biological treatment^	0	NO	0	NO	0	IE	
Waste > Incineration and open burning^	3869	Please select	0	IE	0	IE	
Waste > Wastewater^	14394	Please select	0	NO	0	NO	
Total Waste	143958	Please select	0	Please select	0	Please select	
IPPU > Industrial process	250733	Please select	0	Please select	0	NE	
IPPU > Product use	0	NE	0	NE	0	NE	
Total IPPU	250733	Please select	0	NE	0	NE	
AFOLU > Livestock	31203	Please select	0	NE	0	NE	
AFOLU > Land use	-19669	Please select	0	Please select	0	NE	
AFOLU > Other AFOLU	0	NE	0	Please select	0	NE	
Total AFOLU	11535	C	0	C	0	NE	
Generation of grid-supplied energy > Electricity-only generation^	0	NO	0	NO	0	NO	
Generation of grid-supplied energy > CHP generation^	596	Please select	0	NE	95	Please select	
Generation of grid-supplied energy > Heat/cold generation^	0	NO	0	NO	0	NO	
Generation of grid-supplied energy > Local renewable generation	96	Please select	0	NO	0	NO	
Total generation of grid-supplied energy	693	Please select	0	Please select	95	Please select	
Total Emissions (excluding generation of grid-supplied energy)	3443286	Please select	818012	Please select	1346068	Please select	SCATTER inventory spreadsheet has a breakdown of kWh for Space heating & hot water... so I've combined that with the Electric Grid Mix of fuels from 2019 to fill in the % of heating/cooling question.

3. Sector Assessment Data

Energy Data

(3.1) Report the total annual electricity and heating and cooling consumption data (in MWh) and the percentage breakdown of this consumption by energy type for your jurisdiction.

Electricity consumption

Total annual jurisdiction-wide consumption in MWh

3033637

Data source used to provide percentage breakdown of consumption by energy type

National-level data

Percentage of total consumption from coal

1.7

Percentage of total consumption from gas

37.7

Percentage of total consumption from oil

0

Percentage of total consumption from nuclear

15.3

Percentage of total consumption from hydropower

1.1

Percentage of total consumption from bioenergy (biomass and biofuels)

6.7

Percentage of total consumption from wind

21.9

Percentage of total consumption from geothermal

0

Percentage of total consumption from solar (PV and thermal)

3.9

Percentage of total consumption from waste to energy (excluding biomass component)

Percentage of total consumption from other renewable sources

Percentage of total consumption from other non-renewable sources

11.5

Year data applies to

2021

Comment

2021 Generation Mix from National Grid, 'Other' sources consist of Imports (10.3%), Storage (0.6%) and Other (unspecified) (0.6%):
<https://data.nationalgrideso.com/carbon-intensity1/historic-generation-mix#>

2020 Total Consumption from BEIS: <https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics>

Heating and cooling consumption

Total annual jurisdiction-wide consumption in MWh

122412141

Data source used to provide percentage breakdown of consumption by energy type

Other data source, please specify (SCATTER inventory Space & Hot Water data, combined with 2019 Electric Generation mix from <https://data.nationalgrideso.com/carbon-intensity/1/historic-generation-mix#>)

Percentage of total consumption from coal

0.6

Percentage of total consumption from gas

88.9

Percentage of total consumption from oil

0.5

Percentage of total consumption from nuclear

<Not Applicable>

Percentage of total consumption from hydropower

<Not Applicable>

Percentage of total consumption from bioenergy (biomass and biofuels)

5.6

Percentage of total consumption from wind

<Not Applicable>

Percentage of total consumption from geothermal

Percentage of total consumption from solar (PV and thermal)

0.3

Percentage of total consumption from waste to energy (excluding biomass component)

Percentage of total consumption from other renewable sources

1.8

Percentage of total consumption from other non-renewable sources

2.3

Year data applies to

2019

Comment

SCATTER inventory includes kWh for Space heating, cooling & Hot water for Domestic, Commercial & Institutions. This can be combined with the Electric Grid Mix to calculate the % values.

As Nuclear (1.5%), Hydropower (0.1%) & Wind (1.7% are greyed out these have been included in the 'Other' sections, along with the total of Electric Imports & Storage (0.8%).

Note that the SCATTER total MWh is much higher than the area's Heat demand taken from the UK CHP Heat map (4,617,966 MWh):

<https://chptools.decc.gov.uk/developmentmap>

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

	Installed capacity (MW)	Annual generation (MWh)	Year data applies to	Comment
Solar PV	38.11	38321.198	2020	https://www.gov.uk/government/statistics/regional-renewable-statistics
Solar thermal			Please select	
Hydropower	0.56	2064.772	2020	https://www.gov.uk/government/statistics/regional-renewable-statistics
Wind	12.37	35657.025	2020	https://www.gov.uk/government/statistics/regional-renewable-statistics
Bioenergy (Biomass and Biofuels)	2.34	5222.4	2020	https://www.gov.uk/government/statistics/regional-renewable-statistics
Geothermal			Please select	
Other	30.6	60910.509	2020	https://www.gov.uk/government/statistics/regional-renewable-statistics Anaerobic Digestion (1.603 MW - 8,846.636 MWh) Landfill Gas (13.829 MW - 52,063.873 MWh) Municipal Solid Waste (15.165 MW - unknown MWh)

(3.3) Report the following energy access related information for your jurisdiction.

Indicator and metric used	Indicator value	Year data applies to	Comment
Average unit price of electricity (Currency unit as specified in 0.1) Residential unit price per kWh	0.1830572554	2021	£/kWh average price for Yorkshire. https://www.gov.uk/government/statistical-data-sets/annual-domestic-energy-price-statistics In addition there is an average annual standing charge of £92.28
Access to electricity Percentage of households with access to electricity	100	2022	
Access to clean cooking fuels and technologies Percentage of households within the jurisdiction with access to clean cooking fuels and technologies (%)	100	Please select	

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

	Indicator used to quantify 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 energy poverty	17.6	Other, please specify (LILEE (Low Income Low Energy Efficiency) See: https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics)	Government publish Fuel Poverty at LSOA (lower layer super output area) geographies:- https://www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics Data is published two years in arrears. Under the LILEE (Low Income Low Energy Efficiency) methodology a household is considered to be fuel poor if it has a fuel poverty energy efficiency rating (FPEER) of band D or below AND if they were to spend their modelled energy costs, they would be left with a residual income below the official poverty line.

Transport Data

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

Please complete

Passenger mode share data to report

Jurisdiction does not have passenger mode share data

Passenger mode share: Walking

<Not Applicable>

Passenger mode share: Cycling

<Not Applicable>

Passenger mode share: Micromobility (including e-scooters)

<Not Applicable>

Passenger mode share: Buses (including Bus Rapid Transit)

<Not Applicable>

Passenger mode share: Rail/Metro/Tram

<Not Applicable>

Passenger mode share: Ferries/ River boats

<Not Applicable>

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

<Not Applicable>

Passenger mode share: Private motorized transport

<Not Applicable>

Passenger mode share: Other

<Not Applicable>

Total passenger mode share reported

<Not Applicable>

Freight mode share data to report

Jurisdiction does not have mode share data for freight transport

Freight mode share: Motorcycle / Two wheeler

<Not Applicable>

Freight mode share: Light Goods Vehicles (LGV)

<Not Applicable>

Freight mode share: Medium Goods vehicles (MGV)

<Not Applicable>

Freight mode share: Heavy Goods vehicles (HGV)

<Not Applicable>

Freight mode share: Rail

<Not Applicable>

Freight mode share: Inland water transport

<Not Applicable>

Freight mode share: Other

<Not Applicable>

Total freight mode share reported

<Not Applicable>

Comment

Yorkshire & Humber region data from Department for Transport statistics (2020) - National Travel Survey: <https://www.gov.uk/government/collections/national-travel-survey-statistics>

Waste Data

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

	Data availability	Response (in unit specified)	Comment
Amount of solid waste generated (tonnes/year)	Reporting jurisdiction-level data	340278	The waste data provided in this section is for financial year 21/22. It includes all Household Waste and any trade waste within the Council's control. Trade waste includes fly tipping and waste brought to the HWRCs by traders which is weighed over the weighbridge. Essentially it is Municipal Solid Waste within the Council's control.
Percentage of the solid waste generated that is diverted away from landfill or incineration (%)	Reporting jurisdiction-level data	37.4	
Percentage of the diverted solid waste generated that is recycled (%)	Reporting jurisdiction-level data	36	(this includes composting of garden waste). This difference to the % above is reuse (0.8%) and because certain waste is essentially 'recycled' but does not legally classify as government defined recycling. If the question is purely about 'recycling' rather than officially defined recycling, then the answer should be 36.6%.
Percentage of the diverted solid waste generated that is utilized for waste to energy (%)	Reporting jurisdiction-level data	61.7	
Percentage of the diverted solid waste generated that is reused (%)	Reporting jurisdiction-level data	0.8	Via our reuse shops and various streams of waste at Household Waste Sites
Percentage of waste collected where separation at source is taking place (%)	Reporting jurisdiction-level data	37.5	This percentage shows all waste that is not classed as residual waste, however, 100% of our residual waste goes for further sorting, albeit not at source, prior to energy from waste or landfill
Total annual amount of food waste produced in the jurisdiction (tonnes/year)	Reporting jurisdiction-level data	67196	This is based on a recent compositional analysis showing the amount of food in the kerbside bin service, both residual and recycling bins, as a percentage of overall kerbside tonnages for these bins. We do not hold any reliable data showing what food might be disposed of as residual waste at Household Waste Sites
Volume of wastewater produced within the jurisdiction boundary (megalitres/year)	This data is not available to report	<Not Applicable>	
Percentage of wastewater safely treated to at least secondary level (%)	This data is not available to report	<Not Applicable>	

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 systems

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

Extreme heat

Drought

Urban flooding

River flooding

Infectious disease

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

Heat-related illnesses

Vector-borne infections and illnesses

Water-borne infections and illnesses

Exacerbation of non-communicable disease symptoms - respiratory disease

Mental health impacts

Direct physical injuries and deaths due to extreme weather events

Food and nutrition security

Disruption to water, sanitation and wastewater services

Disruption to health service provision

Overwhelming of health service provision due to increased demand

Lack of climate-informed surveillance, preparedness, early warning and response

Damage/destruction to health infrastructure and technology

Disruption of health-related services

Timeframe of impact

Long-term (after 2050)

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

Women and girls

Children and youth

Elderly

Marginalized / minority communities

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

Leeds is increasing experiencing multiday periods of excessively hot weather (often combined with high humidity) which can be harmful to health resulting in increased hospital admissions for heat-related illness, as well as cardiovascular and respiratory disorders. Some populations are more vulnerable and at higher risk such as low-income urban residents, those with underlying health conditions, people living alone, young children and older people. This is resulting in more proactive action to issue alerts and advice to the public on how to stay safe in hot weather.

There is an appreciation that the infectious diseases challenges of today will be amplified by the extensive movement of people caused by climate change, making pandemics more likely and which will require an increased state of preparedness.

The Leeds health protection system have robust arrangements in place to prevent and manage all infectious disease outbreaks of concern including those that are new and emerging. Health risks linked to climate change are identified on the council's risk register and embedded throughout multiple existing strategies and governance arrangements, rather than as a standalone document or committee.

Leeds City Council is investing in flood alleviation measures to mitigate the long-term public health risk from flooding as part of our Flood Risk Management strategy. Short-term extreme weather events are monitored and mitigated proactively by the council's resilience and emergency management teams.

The council has recently consulted on its Local Plan to strengthen planning policies to help manage the risk of climate change in the long-term. The proposed local plan update includes policies to reduce flood risk, and encourage green and sustainable infrastructure among other themes.

The council's air quality strategy has protecting the health of citizens in Leeds from pollution at its heart, with a clear action plan demonstrating how we aim to improve air quality to meet WHO targets for ambient air quality.

The council has also made commitments to procure more food served and sold by the local authority from Yorkshire and its surrounding regions. As well as reducing the carbon emissions from food transportation, this commitment will also support regional food producers—helping to improve the resilience of our food system from climate-related shocks, e.g. shortages and increased prices relating to global supply chain disruption.

(3.9) Provide information on the current impact of the COVID-19 pandemic on climate action in the jurisdiction.

Response

Impact of COVID-19 on the implementation of climate action policies in your jurisdiction

No change on emphasis on climate action

Impact of COVID-19 economic response on jurisdiction's budget for financing climate action in your jurisdiction

Reduced finance available for climate action

Climate-related impact of COVID-19 recovery interventions

Recovery interventions that focus on employment opportunities in green sectors

Comment

Despite the significant impacts of covid-19 on the council's financial position, the council has continued to prioritise the climate emergency. The council has dedicated resource to maximise the money secured through different recovery schemes made available by national government.

We have secured approximately £25 million of funding through the government's green recovery schemes for completing energy efficiency works in both the domestic sector and public sector estate as well through the Heat Network Investment Programme. This will complement the £24 million that had already been secured from European funding and will improve over 5,000 domestic properties as well as all of our city centre estate and will support the extension of our district heating network.

The council is also conducting a broader review of the city's economic and skills strategies in light of the need for post-pandemic recovery and the changed economic landscape. Ensuring a 'just transition' will be a key focus of this work.

(3.10) Report the following air pollution data for the jurisdiction.

Air pollution metric	Value	Weblink to air pollution data from monitoring site(s)	Comment
Particulate Matter PM2.5 concentration (annual average) level (ug/m3)	12	https://www.leeds.gov.uk/clean-air/air-quality-annual-report	https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=143
NO2 concentration (annual average) level (ug/m3)	35.2	https://www.leeds.gov.uk/clean-air/air-quality-annual-report	https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=143
Number of days exceeding air quality guidelines/standards (times/year)	0	https://www.leeds.gov.uk/clean-air/air-quality-annual-report	https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=143
Other air pollution metric, please specify (Particulate Matter PM10 concentration (annual average) level (ug/m3))	16	https://www.leeds.gov.uk/clean-air/air-quality-annual-report	https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=143

(3.11) 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

Percentage of households with access to safely managed drinking water services

100

Percentage of households with access to safely managed sanitation services

<Not Applicable>

Household water consumption (litres/capita/day)

<Not Applicable>

Comment

Food data

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

	Data availability	Percentage of population that is food insecure	Percentage of population that lives in a food desert	Comment
Response	Data available for the percentage of population that is food insecure	9	<Not Applicable>	The Food Foundation estimate that nationally 9% of the population live in food insecurity, for Leeds this would equate to approximately 72,000 people

(3.13) Report the total quantity of food that is procured (in tonnes) for government-owned and/or operated facilities (including municipal facilities, schools, hospitals, youth centers, shelters, public canteens, prisons etc.). If available, please provide a breakdown per food group.

	Total quantity of food procured (tonnes)	Breakdown of procured food by food group	Year data applies to	Comment
Response	2138	Please see attached Food data breakdown.png		2020/21

Water Data

(3.14) Report the sources of your jurisdiction's water supply, volumes withdrawn per source, and the projected change.

Source of jurisdiction's water supply	Are you able to report volumetric data for this source?	Annual volume of water withdrawn per source (in megalitres)	Projected level of change over next 5-10 years	Comment
Jurisdiction does not have this data	<Not Applicable>	<Not Applicable>	<Not Applicable>	Yorkshire Water are responsible for the water supply to the region

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^

Increased flood alleviation and urban cooling by increasing tree cover in the district from 17% to 33%.

Climate hazards that goal addresses^

Extreme heat
Urban flooding
River flooding

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

2020

Target year of goal^

2050

Description of metric / indicator used to track goal^

The White Rose Forest Strategy for Leeds aims to significantly increase the existing 17% tree canopy cover across the District to 33% by 2050 in partnership with business, residents, institutions, communities, landowners and farmers. It will build on the substantial work that the Council already carries out around the planting and management of trees as well as encouraging planting and protection of trees through the planning process.

Scientists from the University of Leeds have used the Committee on Climate Change's methodology to calculate the increase in Leeds' tree canopy cover that is required for Leeds to make a contribution to the national tree planting effort in proportion to its greenhouse gas emissions.

When looking at potential planting areas the Systematic Conservation Planning Tool which is currently under development by Leeds University will be used to give an overall planting approach to an area. It combines different data stored on map layers such as land ownership, biodiversity and open space, areas of multiple deprivation and uses an algorithm to provide a map of potential optimal planting sites.

<https://democracy.leeds.gov.uk/ieDecisionDetails.aspx?AllId=80827>

Comment

Select a reference ID for the goal

Adaptation goal 2

Adaptation goal^

Reduced flood risk using a mix of traditional engineering and natural flood management.

Climate hazards that goal addresses^

River flooding

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

2022

Target year of goal^

2024

Description of metric / indicator used to track goal^

In March 2022, work began on the Flood Alleviation Scheme Phase 2 (FAS2). Leeds FAS2 combines catchment-wide natural flood management and traditional engineering that stretches for 14km along the River Aire between Leeds Train Station and Apperley Bridge. When it is complete in Autumn 2023, Leeds FAS2 will reduce flood risk to a 0.5% probability of occurring in any given year (a 1-in-200-year level of flood protection) for 1,048 homes and 474 businesses as well as the area protected by FAS1. Like FAS1, FAS2 also includes an allowance for climate change up to 2069. Once completed, FAS2 will protect against flood events similar to the Boxing Day floods in 2015. The climate change allowance is achieved through nature-based measures across the whole catchment that will mature and offer increased protection over time by reduce peak flows in the catchment by 5-10%.

Comment

Select a reference ID for the goal

Adaptation goal 3

Adaptation goal^

To ensure that all service level business continuity plans consider the current, expected and future impacts of climate change

Climate hazards that goal addresses^

Heat stress
Extreme heat
Extreme cold
Snow and ice
Drought

Water stress
Increased water demand

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

2022

Target year of goal^

2023

Description of metric / indicator used to track goal^

The council has an overarching business continuity management arrangement as well as individual business continuity plans (BCP) for services identified as being 'critical'. The BCPs outline the steps required to recover service delivery to an agreed level following a disruptive incident. The council's BCPs already include some arrangements for workforce planning and service delivery following a severe weather event, however as part of our adaptation plan, we will work with services across the council to review service level BCPs to ensure that they consider the potential impacts of future climate change, such as the potential for an increased frequency and extent of impacts. This review will take place over the coming year.

Comment

5. Mitigation Targets

(5.1) Does your jurisdiction have an active greenhouse gas emission reduction target(s) in place? 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).

Select a reference ID for the target

Target 1

Target type[^]

Fixed-level target

Boundary of target relative to jurisdiction boundary[^]

Same - covers entire jurisdiction and nothing else

Emissions sources covered by target[^]

Target covers direct emissions (Scope 1) and indirect emissions from grid-supplied energy (Scope 2) included in 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[^]

<Not Applicable>

Year target was established

2019

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

4261298

Base year[^]

<Not Applicable>

Covered emissions in base year (metric tonnes CO2e)[^]

<Not Applicable>

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

<Not Applicable>

Target year[^]

2030

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

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

0

Projected population in target year

838027

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)	Other, please specify (Place-Based Climate Action Network (PCAN))
--	---

Covered emissions in most recent inventory (metric tonnes CO2e)

4261298

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 implementation of carbon capture and storage (CCS) technology

Target is conditional on a reduction in emissions from air travel that is outside the direct control of jurisdiction administration

Please explain[^]

The PCAN team, working with other researchers from Queen's University Belfast, the University of Edinburgh and the University of Leeds, have developed the Leeds Net-Zero Carbon Roadmap - https://www.leedsclimate.org.uk/sites/default/files/Net-Zero%20Carbon%20Roadmap%20for%20Leeds_0.pdf

Scope 1 and Scope 2 figures are taken from the SCATTER.

Many of the actions that need to be taken to meet net zero are not within the direct control of the council. Our new climate action plan will set out what we need from central government, businesses and communities to help us reach this goal.

6. Sector Targets

(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

Transport target	Modal share targets
------------------	---------------------

Target description

The Connecting Leeds Transport Strategy sets out our vision for Leeds to be a city where you don't need a car, where everyone has an affordable, low carbon, healthy and accessible choice in how they travel.

The targets for the Transport Strategy are set out as follows:

- o Net-zero Carbon emissions by 2030
- o Vision Zero (target of zero people seriously killed or injured)
- o Modal shift (increase rail travel by 100%, walking by 33%, cycling by 400%, bus travel by 130%, and decrease car use by 30%)

£270m investment in public transport and active travel infrastructure. The predicted reduction in greenhouse gas emissions from modal shift resulting from the scheme equates to 15,947 tonnes of CO₂e (43%). Additional benefits include more reliable and attractive bus services, improved health from cleaner air and physical activity, reduced congestion and a better connected city. Carbon reduction figure includes carbon saved as a result of expected modal shift only.

Boundary of target relative to jurisdiction boundary

Same - covers entire jurisdiction and nothing else

Year target was established

2021

Base year

2021

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

<Not Applicable>

Metric used to measure target

Tonnes of CO₂e

Metric value in base year

15947

Target year

2030

Metric value in target year

Metric value in most recent year data is available

Percentage of total energy that is renewable in target year

<Not Applicable>

Is this target publicly available?

Yes, provide link/attachment (<https://democracy.leeds.gov.uk/ielssueDetails.aspx?IId=118903&PlanId=0&Opt=3#AI86757>)

Comment

Target type

Air Quality	Target to reduce PM2.5 concentrations (annual/24 hour)
-------------	--

Target description

Through implementation of the Air Quality strategy we aim to continue reducing pollution levels in the city. Reducing levels of pollution will enable us to achieve the following objectives:

- To remain legally compliant with emissions of NO₂ and through further actions that we take we will reduce emissions further as far as possible.
- To eliminate Air Quality Management Areas (AQMAs) in the city.
- To achieve and continue to meet compliance with the WHO targets for PM_{2.5} and maintain compliance with the WHO targets for PM₁₀.
- To take pro-active action to address other harmful emissions.
- To work citywide, helping to reduce health inequalities.
- To ensure that citizens and other stakeholders are well informed about indoor and outdoor pollutants and how to mitigate exposure and reduce their own contribution.
- To use data to select the right interventions.

Boundary of target relative to jurisdiction boundary

Same - covers entire jurisdiction and nothing else

Year target was established

2021

Base year

2021

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

<Not Applicable>

Metric used to measure target**Metric value in base year****Target year**

2030

Metric value in target year**Metric value in most recent year data is available****Percentage of total energy that is renewable in target year**

<Not Applicable>

Is this target publicly available?Yes, provide link/attachment (<https://democracy.leeds.gov.uk/documents/s223876/Leeds%20Air%20Quality%20Strategy%20Cover%20Report%20120721.pdf>)**Comment**

Planning

7. Planning

Climate Action Planning

(7.1) Does your jurisdiction have a climate action plan or strategy?

Yes, our jurisdiction has a climate action plan or strategy

(7.1a) Report details on the climate action plan or strategy that addresses climate mitigation and/or climate adaptation (resilience) in your jurisdiction.**Climate action plan type[^]**

Standalone climate mitigation plan

Attachment/link and name of plan[^]Climate Emergency Annual Report
Climate Emergency Annual Report.pdf**Confirm attachment/link provided to plan**

The plan has been attached

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 annually

Update: Updates to the plan are published annually

Funding sources and financial instruments to finance plan

Jurisdiction's own resources

Regional funds and programmes

National funds and programmes

Stakeholders engaged[^]

State/regional government(s) and/or agencies

Local government (s) and/or agencies

Citizens

Vulnerable population groups

Academia

Business and private sector

Describe if and how climate-related scenarios have informed the planThe attached report is based on the Government's Net-Zero Strategy, the Net-Zero Carbon Roadmap for Leeds (<https://www.leedsclimate.org.uk/leeds-carbon-roadmap>) and the Yorkshire and Humber Action Plan. It brings together a range of work taking place across the council, as well as sector specific strategies set out at 7.3**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

Plan assesses trade-offs of actions

Plan assesses synergies of actions

Year of formal approval of plan[^]

2019

End year of plan

2030

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

13644975134

Sectors covered by action plan

Agriculture
 Forestry
 Electricity, gas, steam and air conditioning supply
 Waste management
 Transportation and storage

Comment

Leeds City Council is developing a more detailed formal climate action plan based on the above document and Leeds Climate Commission roadmap.

Climate action plan type^

Standalone adaptation plan

Attachment/link and name of plan^

Leeds Climate Adaptation and Resilience Plan (plus 3 appendices)
 Appendix C - Cascading impacts of climate change.docx
 Exec Board Adaptation and Resilience Plan report v3.0.docx
 Copy of Appendix A Mapped CCRA3 Risks.xlsx
 Appendix B - Climate change by warming scenario.docx

Confirm attachment/link provided to plan

The plan has been attached

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 annually
 Update: Updates to the plan are published annually

Funding sources and financial instruments to finance plan

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

Stakeholders engaged^

Local government (s) and/or agencies
 Academia

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

This approach has been informed by the Local Partnerships Climate Adaptation Toolkit, a resource specifically designed for local authorities to use to develop a climate adaptation and resilience plan. which includes a risk generator. Next steps include working with academic partners to quantify the risks to Leeds.

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
 Plan assesses trade-offs of actions
 Plan assesses synergies of actions

Year of formal approval of plan^

2022

End year of plan**Total cost of implementation of plan (in currency specified in 0.1)****Sectors covered by action plan**

Agriculture
 Forestry
 Manufacturing
 Electricity, gas, steam and air conditioning supply
 Water supply
 Sewerage, wastewater management and remediation activities
 Waste management
 Administrative and support service activities
 Public administration and defence; compulsory social security
 Conservation
 Transportation and storage
 Information and communication

Comment

This document sets out plans to build the city's resilience and adapt to the impacts of climate change, in line with the government's National Adaptation Programme and latest UK Climate Change Risk Assessment (CCRA). This report summarises some of the activity that has taken place to date, along with plans to undertake a council-wide climate risk assessment and further develop the city's resilience to climate change over the year ahead and beyond.

Whilst there is significant work taking place across the council to address the impacts of climate change and robust arrangements in place for dealing with severe weather and planning for potential economic shocks, there is a need to undertake a comprehensive climate risk assessment of all council services to identify any gaps and opportunities to 'future proof' and enhance existing policy. Following an initial audit of service plans, the Sustainable Energy and Air Quality team will deliver a series of

workshops with council teams, with support from academic partners, to identify climate related risks to individual services, what activity is already taking place to address such risks, and how teams can build further resilience within their own policies and frameworks. This will include a full review of service level business continuity plans.

An update will be provided in 12 months time.

Sector Action Planning

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

Consumption Emissions Planning

(7.3) Does your jurisdiction have a strategy for addressing emissions from consumption of the most relevant goods and services?

	Response	Provide a link and/or attachment to the strategy addressing emissions from consumption of the most relevant goods and services	Highlight any specific action the jurisdiction is implementing to address emissions from the consumption of goods and services in this category
Food	Yes	Developing a Food Strategy for the city, to be published Autumn 2022	<p>In January 2022, the Leeds Food Strategy began with an online event that was attended by about 100 people, where we came up with the strategy's working vision:</p> <p>"Leeds has a vibrant food economy where everyone is able to access local healthy and affordable food, produced in a way which improves our natural environment and embraces innovation."</p> <p>Since then work has been progressing under 3 working groups that follow the 3 areas the strategy will cover:</p> <ol style="list-style-type: none"> 1. Sustainability 2. Health & Wellbeing 3. Food Security & Inclusive Growth
Construction and demolition	Yes	https://www.leeds.gov.uk/planning/planning-policy/local-plan-update	In July 2021, the council carried out initial statutory public consultation on a Local Plan Update, which will update planning policies for carbon reduction, flood risk, green infrastructure (including biodiversity), place making and sustainable infrastructure.
Transportation	Yes	Connecting Leeds Strategy and Action Plan published in 2021 6 Connecting Leeds Transport Strategy Action Plan.pdf 5 Connecting Leeds Transport Strategy.pdf	<p>The Connecting Leeds Transport Strategy has decarbonisation as one of its central pillars, in line with the council's own priorities. The Strategy states: Our vision for Leeds is to be a city where you don't need a car. Where everyone has an affordable and accessible zero carbon choice in how they travel. We want to Connect Leeds, Connect Communities, and Connect Businesses together in the most sustainable ways.</p> <p>Across Connecting Leeds projects, all future contracts and frameworks that are procured will have a requirement for Contractors and Suppliers to deliver schemes and services with reduced climatic impact, these will include:</p> <ul style="list-style-type: none"> - Carbon targets to be imposed and monitored - Use of local labour - Use of local supply chain - Use of local SME's - Use of lower carbon materials - Use of sustainable drainage with climate change uplifts - Recycling material and minimising site trips
Clothing and textiles	No	<Not Applicable>	
Household appliances and electronics	No	<Not Applicable>	
Aviation	No	<Not Applicable>	
Waste management	Yes	https://www.leeds.gov.uk/residents/bins-and-recycling/waste-strategy	Refreshed strategy, with climate change as a central theme, to be published in Autumn 2022.
Other	Yes	Energy Strategy and Action Plan 2022 Energy Strategy and Action Plan.pdf	<p>Energy Strategy and Action Plan, published 2022.</p> <p>Energy use contributes around 83% of the council's carbon emissions and it is therefore recognised that measures are needed to reduce consumption across its services, increase the volume of energy from low carbon sources and to act as an exemplar in promoting a reduction in the impacts of energy consumption across the city.</p> <p>The scope of this strategy is primarily focused on the council's own energy usage. A separate 'Better Homes' strategy, linked to the council's Housing Strategy, is currently being developed to address the decarbonisation of housing within Leeds.</p>

Finance

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

Project area

Renewable energy

Project title

Solar farm development

Stage of project development

Scoping

Status of financing

Project not funded and seeking full funding

Identified financing model

Grants

Loans from commercial banks

Loans from International Financial Institutions

Public finance - own budget

Project description and attach project proposal

Initial feasibility study has been undertaken which has indicated that a solar farm could generate 35% of the council's energy provision and site selection has commenced in July 2022, with procurement to take place between November 2022 and May 2023. Design, planning and ground conditions to be established by January 2024 when construction will begin.

Total cost of project (in currency specified in 0.1)

44000000

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

44000000

(7.5) Report the factors that support climate-related investment and financial planning in your jurisdiction.

Response

Mechanisms used by jurisdiction to access finance for climate-related projects

Jurisdiction's own funds and budgetary means

Jurisdiction accesses finance from national government funds, grants etc.

Jurisdiction accesses finance from public-private partnerships

Comment

Where the council has the funding and the powers to enable or deliver change it has made progress but there are key areas such as private housing retrofit for higher income home-owners or transport where the support of national government is essential to overcome some of the key barriers.

The council has a good track record for securing funding to support cross housing tenure retrofit works. In 2021/22 the council has been working with a number of different funding streams, including Green Homes Grant, Getting Building Fund, European Funding and Social Housing Decarbonisation Fund to deliver measures such as external wall insulation, solar panels, room in roof insulation to both social and private housing. The funding comes with many stipulations that are challenging to meet such as the SAP rating of the house, the income of the house owner or the caps on the cost of measures. Despite this, measures will be delivered in circa 1,200 private homes. Investment in our own social housing continues at pace with projects such as the installation of ground source heat pumps in our multi storey flats or the work in Holbeck to make 190 council homes net zero being two very noteworthy examples. The Holbeck scheme was also supported financially via contributions from private landlords.

Credit rating of jurisdiction

Comment

Decarbonising jurisdiction's investments

Jurisdiction has taken steps to decarbonise the investments held by the jurisdiction retirement funds by divesting from fossil fuels

Comment

The council have formally asked the West Yorkshire Pension Fund to divest from fossil fuels to minimise climate risk, and actively look to divest into alternative, cleaner investments with comparable returns.

Actions

8. Adaptation Actions

(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^

Engineered and built environment actions	Flood defence, such as flood levees and culverts
--	--

Climate hazard(s) that action addresses^

Urban flooding
River flooding

Action description and web link to further information^

The Councils Strategic Flood Risk Assessment has been updated to reflect the latest government climate change allowances and impacts. This will inform future development (planning application and site allocations) ensuring that all new developments are safe and resilient against flooding in line with the current national planning policies. The SFRA update will also promote the increased use of SuDS, thus increasing the bio diversity and ecological benefits alongside reducing flood risk within the City.

A combination of traditional engineering methods and Natural Flood Management (NFM) will be used to reduce flood risk in Leeds, in partnership primarily between Leeds City Council and the Environment Agency but many other partners are also involved.

Completed work replace with FAS1 and NFM scheme completed

Work to help protect Leeds city centre from the risk of flooding has been completed. Improvements included:

- Work was done to create moveable weirs at crown point and Knostrop. These will help to reduce flooding by up to one metre.
- The canal and river have been merged by removing the land known locally as Knostrop Cut island. This means the river can now hold more water and will help to lower water levels during a flood.
- Flood defence walls have been constructed along Hol beck. Low level embankments have increased the level of protection in Woodlesford.

Current work

We're working with the Environment Agency on our Flood Alleviation Scheme Phase 2 (FAS2) to help protect 1,048 homes and 474 businesses. We're focusing mainly on the developed areas along the River Aire, upstream of Leeds Train Station and Apperley Bridge.

FAS2 provides a one in a 200 year level of protection against flooding. This means flooding will be reduced to a 0.5 per cent chance of occurring in any given year, including an allowance for climate change. Once the scheme is completed, it will help protect against similar flooding to Storm Eva.

Natural flood management and traditional engineering will be used to help reduce flood risk. This will also create new habitats for wildlife and reduce the impact of climate change. The amount of rainwater going into the river will be reduced. The ground will also be able hold more water during floods. Different interventions we are looking at include:

- creating new woodland
- reducing the flow of the water during heavy rain in different ways
- having new storage ponds
- rechanneling the river to slow down the flow

Traditional engineering methods include building flood defence walls, creating new flood storage areas and making improvements to existing structures.

Sectors adaptation action applies to^

Forestry
Water supply
Sewerage, wastewater management and remediation activities
Conservation
Construction

Co-benefits realised^

Job creation
Reduced natural resource depletion
Reduced disruption of energy, transport, water or communications networks
Fewer or no households and businesses forced from homes/places of work
Reduced disaster/disease/contamination-related health impacts
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

<10%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Please select

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)

170000000

Action^

Engineered and built environment actions	Municipal water efficiency retrofits
--	--------------------------------------

Climate hazard(s) that action addresses^

Extreme heat
Drought

Action description and web link to further information^

We have set a standard for water efficiency in new residential development in the Core Strategy as follows:

POLICY EN2: SUSTAINABLE DESIGN AND CONSTRUCTION

Non-residential developments of 1,000 or more square metres (including conversion) where feasible are required to meet the BREEAM standard of 'excellent'.
Residential developments of 10 or more dwellings (including conversion) where feasible are required to meet a water standard of 110 litres per person per day.

Also in the Natural Resources and Waste Local Plan:

WATER 1: WATER EFFICIENCY

All new developments should include measures to improve their overall water efficiency where appropriate. This will be achieved through a mixture of measures to use less treated water and reduce wastewater such as:

- Sustainable urban drainage systems,
- Rainwater collection and storage,
- Grey water recycling and storage systems, and
- More absorbent surfaces for water drainage.

For SuDS this is included in the surface water run off policy which states:

WATER 7: SURFACE WATER RUN-OFF

All developments are required to ensure no increase in the rate of surface water run-off to the existing formal drainage system. Development will be expected to incorporate sustainable drainage techniques wherever possible.

- On previously developed sites peak flow rates must be reduced by at least 30%
- On sites which have not previously been connected to the drainage infrastructure, or watercourse, surface water run off rates will not exceed the 'greenfield' run-off rate (i.e. the rate at which water flows over land which has not previously been developed).

Separately, we use rain gardens for surface water capture and storage to manage flood events. These are built in underground as part of any tree pits/planting schemes for public realm works.

Sectors adaptation action applies to^

Water supply
Sewerage, wastewater management and remediation activities
Construction

Co-benefits realised^

Reduced costs
Reduced natural resource depletion
Reduced disruption of energy, transport, water or communications networks
Increased water security
Reduced disaster/disease/contamination-related health impacts

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

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Other, please specify source(s) (No funding requirement)

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

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)

0

Action^

Engineered and built environment actions	Resilience and resistance measures for buildings
--	--

Climate hazard(s) that action addresses^

Extreme heat
Urban flooding
River flooding

Action description and web link to further information^

Leeds will ensure that new developments are located and designed to avoid, reduce and mitigate flood risk, increase biodiversity and reduce the carbon footprint of risk reduction schemes through natural flood solutions.

Our current Local Plan has many effective policies for flood risk and through flood alleviation schemes the council is working with partners and investing in infrastructure to help protect communities. But with the impacts of climate change worsening, it's important that we consider options for improving policies on flood risk.

We want to:

- ensure that all new developments are located and designated to avoid, reduce and mitigate flood risk
- reduce the speed of surface water run-off through increased use of sustainable and natural drainage systems
- ensure our policies reflect up to date evidence, guidance and best practice to help manage flood risk

The areas of policy affected include:

- sustainable drainage systems
- enhanced resilience
- porous materials
- functional floodplain

Sectors adaptation action applies to^

Construction

Co-benefits realised^

Reduced disaster/disease/contamination-related health impacts

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

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources
National funds and programmes

Status of action in the reporting year^

Please select

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)

Action^

Engineered and built environment actions	Resilience and resistance measures for buildings
--	--

Climate hazard(s) that action addresses^

Extreme heat

Action description and web link to further information^

100m investment in housing retrofit

Sectors adaptation action applies to^

Electricity, gas, steam and air conditioning supply
Construction

Co-benefits realised^

Job creation
Reduced costs
Increased energy security
Reduced fuel poverty
Increased security/protection for poor/vulnerable populations
Increased social inclusion, equality and justice
Improved mental wellbeing/quality of life
Improved air quality
Reduced health impacts from extreme heat or cold weather
Reduced health costs
Reduced GHG emissions

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

<10%

Hectares (ha) of natural systems with increased resilience due to adaptation action

Funding source(s)

Jurisdiction's own resources
Regional funds and programmes
National funds and programmes
International (including ODA)

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)

(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^

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

Action description and web link to further information^

38 civic buildings, leisure centres, primary schools, children’s centres, homes for older people and offices across the city will benefit from a range of low carbon heat and energy upgrades carried out by the council and partners. Air source heat pumps, new connections to the district heating network, solar photovoltaic panels, LED lighting, and double glazing will all be installed. Installation of green measures is well underway and has completed on most buildings. The project is due for completion in the next few months.

Start year of action

2021

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

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

Estimated annual emissions reductions (metric tons CO2e/year)^

3951

Estimated annual energy savings (MWh/year)^

20538

Estimated annual renewable energy generation (MWh/year)^

2168

Co-benefits realised^

- Job creation
- Reduced costs
- Increased energy security
- Improved air quality

Funding source(s)

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)

25300000

Primary emissions sector addressed and action type^

Stationary energy	LED / CFL / other luminaire technologies
-------------------	--

Action description and web link to further information^

The council approved plans to replace the city’s street lamps with LEDs in December 2018. Since then more than 25,000 lights have been converted to LED, resulting in a 3.9 million kWh electricity consumption reduction and a saving of 909 tonnes of CO2. Moving forward a further 1900 lanterns will be replaced every month until completion.

Start year of action

2019

Year for which mitigation is expected to last

Please select

Impact indicators measured^

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

Estimated annual emissions reductions (metric tons CO2e/year)^

7050

Estimated annual energy savings (MWh/year)^

31000

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

- Reduced costs
- Reduced noise/light pollution

Funding source(s)

Please select

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)

25400000

Primary emissions sector addressed and action type^

Stationary energy	LED / CFL / other luminaire technologies
-------------------	--

Action description and web link to further information^

Woodhouse car park lighting replacement. An interest free loan was secured to deliver the work in 2020. Work was completed in December 2020.

Start year of action

2020

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual energy savings due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

65

Estimated annual energy savings (MWh/year)^

3900

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Reduced costs

Reduced noise/light pollution

Funding source(s)

Please select

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)

241000

Primary emissions sector addressed and action type^

Transportation	Improve fuel economy and reduce CO2 emissions from motorized vehicles
----------------	---

Action description and web link to further information^

'Try before you buy' electric van and private hire vehicle scheme for local businesses, public sector organisations, charities and private hire drivers. The scheme helps organisations understand the detailed business case for switching to zero emission vehicles. It is expected that many participants will switch to zero emission vehicles after participating in the scheme. More than half of participants have said that they would consider switching to electric vehicles after taking part in the scheme.

Carbon saving figure based on replacing emissions per mile from an 'average' EU van with an electric vehicle multiplied by the number of miles trial vehicles are expected to have been driven when scheme concludes in March. Figure doesn't include carbon savings from participants who switch to an EV after taking part in the scheme.

Start year of action

2021

Year for which mitigation is expected to last

2022

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

19

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Reduced costs

Improved mobility and access

Improved education and public awareness

Improved air quality

Funding source(s)

Please select

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)

2300000

Primary emissions sector addressed and action type^

Transportation	Other, please specify (Multiple actions - set out below)
----------------	--

Action description and web link to further information^

We have an ambitious vision for Leeds: to create a world-class city that allows for seamless travel not just within the city, but regionally, nationally and internationally. We want to build a smart city that embraces innovative technology to help us use space efficiently, and manage and maintain our public transport network.

We want Leeds to be a great place for everyone who lives in, works in or visits the city, with well-connected neighbourhoods and an accessible, attractive city centre.

We also want to reduce traffic congestion and air pollution, which will encourage people to walk, cycle and be more active.

The Leeds Public Transport Investment Programme (LPTIP) comprises of 8 packages which cover:

- 1) Programme management: resources for a dedicated team for the overall management and delivery of the programme
- 2) Bus Priority Corridors: investment in a number of key corridors to improve bus service reliability and reduce bus journey times
- 3) Bus Park and Ride: new park and ride facilities to be developed to the north and south of the City with further expansions at Elland Road
- 4) City Centre: redesigning road layouts to reduce congestion and improve the pedestrian environment
- 5) Rail: develop three new rail stations across the city at proposed sites of Leeds Bradford airport, Thorpe Park and White Rose, with accessibility improvements at Cross gates, Morley and Horsforth.
- 6) Bus Delivery: support real-time improvements and review connectivity throughout the Leeds district
- 7) Mass Transit: develop a long term mass transit approach
- 8) Bus Delivery Board: a series of measures to improve the bus service offer

The predicted reduction in greenhouse gas emissions from modal shift resulting from the scheme equates to 15,947 tonnes of CO2e. Additional benefits include more reliable and attractive bus services, improved health from cleaner air and physical activity, reduced congestion and a better connected city.

Carbon reduction figure includes carbon saved as a result of expected modal shift only.

Start year of action

2017

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

15947

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Increased labour productivity

Increased economic production

Reduced disruption of energy, transport, water and communications networks

Improved mobility and access

Improved road safety

Improved air quality

Improved preparedness for health service delivery

Funding source(s)

Please select

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)

270000000

Primary emissions sector addressed and action type^

Stationary energy	Energy efficiency/ retrofit measures addressing existing commercial, residential and/or municipal buildings
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Action description and web link to further information^

The Leeds PIPES District Heating Network (DHN) delivers low carbon, sustainable energy to residents and businesses of Leeds including key Leeds City Council buildings. Almost 2,000 properties have now been connected, along with Leeds Civic Hall, Leeds Town Hall, Leeds Museum and Leeds Art Gallery/Central Library along with council-owned St George House.

Currently saving an estimated 4,379 tonnes of CO2 per annum, however can save a potential 11,700-20,600 tonnes CO2 per annum depending on the heating systems being replaced.

Start year of action

2017

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

11700

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Job creation
 Revenue generation
 Reduced costs
 Increased energy security
 Reduced disruption of energy, transport, water and communications networks
 Reduced fuel poverty
 Improved air quality

Funding source(s)

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

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)

47000000

Primary emissions sector addressed and action type^

Agriculture, Forestry and Land Use	Other, please specify (Multiple actions - Set out below)
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Action description and web link to further information^

Launched last year, the Woodland Creation Initiative will see 5.8 million trees planted on council land over the next 25 years.

Tree planting is proven to benefit the wellbeing of communities, support wildlife, and help tackle the climate emergency. The project will support the White Rose Forest in Leeds strategy, the council's plan to increase tree canopy cover from 17% to 33% by 2050.

In the first year since the schemes launch, approximately 200,000 trees were planted on council land and planning is well underway to plant another 25 hectares for the 2021 planting season.

The Initiative will cost £350,000 inclusive of £50,000 external funding in its first year. The cost of delivering the scheme will remain similar in future years but a greater share of funding is expected to come from external sources after the initial year.

Emissions reduction figure based on carbon savings of planting trees and 50 years of growth.

Start year of action

2020

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

250000

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Enhanced climate change adaptation
Improved preparedness for health service delivery
Protected/improved biodiversity and ecosystem services

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 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)

8500000

Primary emissions sector addressed and action type^

Waste	Other, please specify (Multiple actions - set out below)
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Action description and web link to further information^

RERF is fully operational and receiving the city's entire waste.

Includes emissions avoided as a result of recycling captured through mechanical pre-treatment, avoided emissions from fossil-fuel based grid power generation through export of electricity from RERF on to grid, through capture of ferrous metals for recycling from ash, through capture and recycling of ash for construction applications.

Start year of action

2016

Year for which mitigation is expected to last

2051 or later

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

39688

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Increased energy security
Reduced fuel poverty

Funding source(s)

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

Status of action in the reporting year^

Action in operation (jurisdiction-wide)

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)

139270000

Primary emissions sector addressed and action type^

Transportation	Improve fuel economy and reduce CO2 emissions from motorized vehicles
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Action description and web link to further information^

Installation of at least 30 dual rapid charge points at public locations across Leeds. Most are operational already and all will be by October 2021.

Funding was secured through a joint application between the 5 West Yorkshire Councils and the WYCA that ensured the Office for Low Emission Vehicle's (now OZEV's) Ultra-Low Emission Vehicle (ULEV) Taxi Scheme provided £1.9m of funding towards delivery of a rapid charge network across the region to support the uptake of EV in the taxi & private hire sector. The project secured additional local transport plan funding as well as securing significant additional funding from ENGIE who won the open competitive tender process to act as supplier, installer and operator for the network. This also included the provision of renewable energy to the network free of charge to users until the end of October 2021.

Carbon saving figure based on current monthly usage and is likely to be somewhat conservative of true emission saving.

Start year of action

2019

Year for which mitigation is expected to last

End year not known/not applicable

Impact indicators measured^

Estimated annual emissions reductions due to action

Estimated annual emissions reductions (metric tons CO2e/year)^

366

Estimated annual energy savings (MWh/year)^

<Not Applicable>

Estimated annual renewable energy generation (MWh/year)^

<Not Applicable>

Co-benefits realised^

Improved air quality

Reduced disaster/disease/contamination-related health impacts

Reduced noise/light pollution

Funding source(s)

Please select

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)

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.

N/A

Submit your response

Please provide the following details about the amendments you have made to your response.

Question number

2.1

Reason for change

Updated information has become available, which was not available when submitting

Updated response

- IPPU > Product use
- Total IPPU
- Total AFOLU

Question number

9.1

Reason for change

Updated information has become available, which was not available when submitting

Updated response

Added 'Estimated annual energy savings (MWh/year)'^ –

What language are you submitting your response in?

English

Please read and accept our Terms and Conditions

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)