Name of meeting: **Overview and Scrutiny Management Committee**
Date: **28th September 2021**
Title of report: **Climate Emergency & Net Zero Roadmap Progress Update and Climate Commission Launch Overview**

Purpose of report:

1. To provide the Overview and Scrutiny Management Committee with an update on the Kirklees Climate Commission and an overview of the development of Kirklees Council Net Zero Roadmap.

2. To provide the Committee with a requested update on the distinction between the Council's annual internal carbon emissions reporting against the '40%' target set in 2010 along with Phase 1 Climate action progress.

Key Decision - Is it likely to result in spending or saving £250k or more, or to have a significant effect on two or more electoral wards?	**N/A**
Key Decision - Is it in the Council's Forward Plan (key decisions and private reports)?	**N/A**
The Decision - Is it eligible for call in by Scrutiny?	**N/A**
Date signed off by Strategic Director & name **Is it also signed off by the Service Director for Finance IT and Transactional Services?** **Is it also signed off by the Service Director for Legal Governance and Commissioning Support?**	**Colin Parr, 20th September 2021** **N/A** **N/A**
Cabinet member portfolio	**Cllr Will Simpson**

Electoral wards affected: **All**

Ward councillors consulted: **None**

Public or private: **Public**

Has GDPR been considered? **Yes**

1. Summary

- The Council passed a motion declaring a 'climate emergency' in January 2019 and subsequently set out its initial response in reports to Cabinet and Council in November 2019. Earlier detailed progress updates were provided to OSMC in March and December 2020.

- This report provides an update on the development and establishment of the Kirklees Climate Commission.

- The report then provides an update on the Council's Phase 1 climate emergency actions and related carbon reduction projects, including the most recent disclosure of district-wide emissions to the CDP and separate process for internal carbon emissions reporting for the 2020–2021-year internal carbon reduction target, set in 2010.

- The report also provides a progress update on the development of the Kirklees Net Zero Roadmap and follow-up climate change programme.

2. Key Information

Background

2.1. Kirklees Council's commitment to addressing climate change is well documented. In January 2019, it declared a climate emergency, which recognised the need for the Council, and the district as a whole, to do more to reduce its carbon emissions and mitigate the negative impacts of climate change.

2.2. Following analysis by the Tyndall Centre for Climate Change Research, the Council then agreed to adopt a science-based target committing the district to becoming carbon neutral by 2038. In doing so, it demonstrated the Council's commitment to be at the forefront of the global response to climate change and to lead by example alongside many other Local Authorities.

2.3. Our previously reported Phase 1 actions were one of the ways which Kirklees identified how it could begin to influence decarbonisation and support the transition to a carbon neutral target. This included the development of the Climate Commission and annual disclosure of its Carbon Emissions.

2.4. As an authority we have recognised the importance of partnerships and have actively focused on delivering key outcomes for Kirklees through the Council's Clean & Green agenda.

2.5. This agenda also includes wider strategic environmental objectives; from tackling contaminated land, improving air quality, reducing pollution, promoting less waste, encouraging sustainable and active travel as well as increasing green spaces and tree planting.

Climate Commission Update

Background

2.6. Since the previous update given to the Overview and Scrutiny Management Committee in December 2020, the Council has now facilitated the set up and launch of the Kirklees Climate Commission.

Advisory Panel

2.7. As reported previously, the Council approached the University of Leeds and Professor Andy Gouldson (Professor of Environmental Policy at the University, and originator of the Climate Commission concept) for assistance in developing the Kirklees Commission.

2.8. Professor Gouldson agreed to chair an independent and interim 'advisory panel' in Kirklees, which acted to support the development of appropriate terms of reference, leading to the implementation of the full Commission.

2.9. The advisory panel consisted of individuals from a variety of backgrounds across Kirklees including representation from Kirklees Active Leisure, the NHS Greater Huddersfield CCG, Kirklees Council, University of Huddersfield, Cummins, Syngenta, and Kirklees Third Sector Leaders.

2.10. The advisory panel met virtually for the first time on 29th January 2021, with an additional 2 meetings in February and April. These were facilitated by the Council, who provided any administrative support as required. The panel focused on agreeing the draft terms of reference to be considered by applicants wishing to join the Commission, as well as determining the process for recruitment and selection of members.

Selection of Commission Members

2.11. The appointed Commissioners are individuals drawn from organisations and groups from the public, private and third sectors across Kirklees. The Commission works through voluntary engagement and none of the Commission members are remunerated.

2.12. Recruitment was via an open process with any interested individuals able to apply. The appointment process was overseen by a selection panel of volunteers from the independent advisory group and was facilitated by the Council. Consideration was given to sectoral representation, as well as the gender and ethnic diversity of the Commission as a whole.

2.13. Advertisement and promotion of the recruitment for the Climate Commissioners and Chair was undertaken through an extensive programme of communication and engagement, utilising the Commission website, the Council's corporate communications, and relevant Council and partner networks. Advisory Panel members agreed to utilise their own networks to promote that the Climate Commission was seeking applications such as through the Mid Yorkshire Chamber of Commerce.

2.14. Advisory Panel members and internal Council colleagues also sought to promote the Kirklees Climate Commission recruitment at networking events and by presenting and promoting at the NHS West Yorkshire Climate Change Organisation Operational Leads Networking group and by running several Communications articles and contacting local organisations from across Kirklees.

2.15. In total, there were 25 applications submitted to become a member of the Commission. This first recruitment exercise resulted in the appointment of 17 Commissioners, alongside the independent Chair role.

2.16. The selection panel appointed Professor Peter Roberts as the Commission's independent Chair. Peter is currently Professor Emeritus of Sustainable Spatial Development at the School of Earth & Environment, University of Leeds and is the Chair of the Northern Ireland Housing Executive. He is a Kirklees resident and is a trustee of the local Kirkwood Hospice. Peter was previously a board member of the Calderdale & Huddersfield NHS Foundation Trust and has a wealth of experience in chairing a range of organisations.

2.17. A full list of the 17 selected Commissioners and their biographies are available on the Kirklees Climate Commission website https://www.kirkleesclimate.org.uk/

2.18. The Council's portfolio holder for Culture and Greener Kirklees is to take the position of Vice-Chair of the Commission. At the launch of the Commission, this position is held by Councillor Will Simpson.

2.19. In addition, a Senior Council Officer, usually the Service Director for Climate Change and Environmental Strategy is expected to attend the Commission meetings and provide representation for the Council's interests.

2.20. The Council has provided a key role in the establishment of the Climate Commission and will continue to provide a leading role in the Commission as it becomes firmly established. However, it is important to reiterate that the Commission will remain independent of the Council.

Commission Role and Purpose:

2.21. The Kirklees Climate Commission and Chair have identified their role as being a body which provides an independent source of information, advice and support for communities, organisations, and other groups across Kirklees on how to best address the challenges associated with climate change.

2.22. In working towards the development of a strategy to combat climate change, the Commission recognises that it is essential that all commissioners work in a way which promotes fairness, inclusion and social justice.

2.23. The commission recognise its need to work with all relevant sectors and actors in all of the communities of Kirklees. Equally, they understand the need to collaborate with adjacent localities, international and national organisations, and a wide range of interest groups.

2.24. The core activities of the Climate Commission will aim to reduce carbon emissions and other causes of climate change and to promote strategies and policies that minimise negative climate effects and enhance resilience.

First Meetings of the Full Commission

2.25. The first meeting of the full Commission was held on Tuesday 20th July 2021, hosted by the Council at Dewsbury Town Hall. This was a 'hybrid' meeting, designed to accommodate those who were able to attend in person (whilst complying with Covid-19 protocols) and also those joining via video call.

2.26. The Commission's second meeting was held on Friday 17th September 2021 at the Textile Centre of Excellence in Huddersfield, again as a 'hybrid' meeting.

2.27. Future Commission meetings are expected to be hosted at accessible locations across the District and it is expected that a 'hybrid' attendance model will continue to be followed for the foreseeable future.

Terms of Reference

2.28. The Commission formally agreed the Terms of Reference at their first meeting in July. A copy of the Terms of Reference document is available to download on the Commission's website, from this webpage: https://www.kirkleesclimate.org.uk/about-kirklees-climate-commission.

2.29. It is intended that the Terms of Reference are to be periodically reviewed by the Commission to ensure they continue to be fit for purpose.

Working Groups

2.30. Following a series of discussions and reflecting member's preferences, the Commission is now in the process of establishing 7 sub-group. These have been identified by the Chair and Commissioners:

- Communications & Engagement
- Young People
- Movement, Innovation & Transport
- Business & Economic Activity
- Buildings & Homes
- Natural Environment & Countryside
- Energy

2.31. It is envisaged that the sub-groups will co-opt other members, who will provide specialist expertise, knowledge, and connections.

Council Support

2.32. The Commission is being supported by a small secretariat, funded by Kirklees Council, using Officer time from within the Energy & Climate Change Team.

2.33. This has been agreed as a provision for the first 3 years of the Commission, with an expectation that the Commission will explore its options for longer term funding, with the ultimate aim of becoming self-sustaining.

Next Steps

2.34. The Council is continuing to work with relevant Commissioners, external stakeholders, and internal teams on the engagement of young people and facilitating opportunities to feed into the wider Commission.

2.35. The Commission are working to address the imbalances in representation of its members, by identifying and engaging with individuals who can fill any recognised gaps.

2.36. The 7 sub-groups are now being convened and are recruiting wider members to join their individual panels.

Kirklees Council's Internal Carbon Reporting and External Disclosure of district emissions to the CDP

Internal Carbon Emissions Reporting

2.37. The Committee has requested an update on the respective processes used in the Council's annual internal carbon emissions reporting process and disclose emissions

2.38. In June 2010, Cabinet approved a target to reduce council emissions by 40% by 2020/21 (based on a 2005/06 baseline), to be consistent with the government's longer-term trajectory for 80% reduction by 2050 (enshrined in law under the Climate Change Act 2008). A carbon budget was implemented in 2008 to help the Council monitor progress and achieve the target. Service carbon budgets were initially expected to decrease annually by around 3%.

2.39. The target covers emissions arising from energy and fuel use in the following areas;

- Council housing
- Street lighting
- Corporate Landlord
- Schools and colleges
- Leisure centres and swimming pools
- Council fleet vehicles

2.40. The internal emissions report produced is focused on the Council's own emissions compiled from energy and carbon data from each of the 6 above stakeholder areas, and considers progress against the 2020/21 target. The internal Carbon emissions report also deals with Scope 1 and 2 emissions (direct emissions and emissions derived from energy generation, respectively).

2.41. The carbon emissions data going into this report is principally based on billing and meter data. Annually data collection starts July/August and goes through a checking and validation process to provide Carbon emissions data for each stakeholder area and the Council as a whole.

2.42. Data collection cannot start much before July/August each year due to some data being produced through quarterly billing cycles. Once accurate Carbon emissions data is completed across all stakeholder areas, draft and final copies of the Council's Carbon Emissions Report are produced. Typically, these are produced around October/November each year, and the final report for 2020-2021 emissions is expected to be complete in November 2021.

2.43. Going forward, a new Energy and Carbon Management database is currently being developed through a new YPO Framework provider, procured in April 2021. It is expected that this will simplify and improve the efficiency, accuracy and adaptability of Carbon Reporting methods over the next 12 months and into the future.

2.44. The Council is also considering options for how the internal reporting process can be made more robust in future, to complement the district CDP process now followed and the enhanced expectations of the Net Zero target. This includes consideration of the Local Government Association's Greenhouse Gas Accounting Tool.

2.45. The most recent 2019/20 emissions reporting summary is included for reference at Appendix 2.

Kirklees District Carbon Reporting through CDP

2.46. In 2019 the government amended the Climate Change Act 2008 to revise the longer-term target to achieve 'net zero' carbon dioxide emissions by 2050. Kirklees Council declared a 'Climate emergency' in January 2019 and set up a Cllr-led Working Party to identify initial priority proposals to address the emergency. The final report of the Working Party was considered by Cabinet and Council in November 2019, which, amongst other measures, adopted a target of 2038 for achieving 'net zero' carbon emissions for the district.

2.47. It is based upon a carbon budget produced for Kirklees by the Tyndall Centre for Climate Change Research. This methodology identified a 'net zero' target year of 2041 for Kirklees. The target was then brought forward to 2038 to align with the regional (West Yorkshire) net zero target.

2.48. As part of its initial response to addressing the climate emergency, the Council has also pledged to disclose the district carbon emissions each year to the independent CDP (formerly known as the Carbon Disclosure Project). The first disclosure took place in 2020 and will continue each year. The Council submitted its 2021 submission to CDP ahead of the July 2021 deadline.

2.49. Participating in the CDP process is both a statement of intent and also allows the Council to learn from and follow best practice from other municipalities across the world. CDP utilises the Global Covenant of Mayors Common Reporting Framework (GCoM CRF) and by submitting to CDP, the Council is also participating in the GCoM framework.

2.50. The Greenhouse Gas (GHG) emissions data is "City Wide" and covers the whole of the Kirklees Council District. The emissions methodology used for the CDP reporting submission is the Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC) and the GHG emissions inventory accounting year is 1st January 2018 to 31st December 2018.

2.51. The emissions data in CDP reporting also deals with Scope 1, Scope 2 & Scope 3 GHG emissions (Scope 3 refers to all other indirect emissions that occur in a company's value chain). The Dataset used in this disclosure is drawn from the UK Department for Business, Energy and Industrial Strategy (BEIS) Local Authority-level emissions dataset. The data from this complex data set, is from 2018 and is the most recent data reported to be available. This timescale is attributed to time taken for in data collection, modelling and then validation by BEIS which are out of the Council's control.

2.52. The Setting City Area Targets and Trajectories for Emissions Reduction (SCATTER) project funded by the UK Department for Business, Energy and Industrial Strategy (BEIS) developed a methodology for Local Authorities to set carbon emissions targets that are consistent with the UN Paris Climate Agreement. The Tyndall Centre for Climate Change Research then used this SCATTER methodology with the latest IPCC Special Report on 1.5 degrees and updated carbon dioxide datasets to downscale the global carbon budget to Kirklees-level. The emissions datasets are complete and based on the latest BEIS local authority level datasets.

2.53. The 'raw' submission to CDP is included as an Appendix to this report. Once processed and ratified by CDP, this data will be available via the CDP portal (at https://www.cdp.net/en). This is dependent on the CDP's own internal processes which are expected to be ready in late 2021.

Other Climate Emergency Phase 1 Initiatives and Current Climate Change Projects

2.54. Updates on the Council's Phase 1 climate emergency projects and key carbon reduction initiatives are included in the table below.

Table 1

Project	Summary Update
Internal Communications and 'culture change' at the Council	• **GEN (Green Employee Network):** this internal employee network has been refreshed and redeveloped and has been meeting since May 21. A new leadership team has been formed, including two co-chairs, and the network will act as a vital forum for discussions and action, and an opportunity for Kirklees services to seek help and guidance in drafting and reviewing policies with climate and the environment in mind. • **Staff Survey**: a staff survey has recently been undertaken. The results from this will be used to guide further communications and actions. Article and analysis have been prepared to feedback to staff. Now planning phase 2 engagement • **Internal communications**: regular articles on climate related issues being featured on Kirklees Council intranet. • **Intranet site**: currently looking at revitalising and updating the Kirklees Council's Climate Emergency intranet webpage • **Staff learning/ training**: Worked with Learning and Organisational Development to make a generic module on climate change available through our internal e-learning platform. We are looking into other

	options of staff learning including carbon literacy and working with other local authorities. • **Climate Champions**: this has recently been promoted as a way of cascading information through a number of 'Climate Champions' to staff across the Council. Currently following up on initial expressions of interest. • **Volunteering**: Kirklees Council allows staff to take up to two days per year to volunteer their time and the recent climate survey has shown there could potentially be a high demand for environmental volunteering opportunities within our workforce. We are working with colleagues in Parks and Greenspaces and Natural Kirklees to ensure that there is an opportunity for staff to engage with environmental themed projects.
Boosting Woodland and green infrastructure creation	The Kirklees White Rose Forest programme aims to • contribute to long-term carbon storage • reverse biodiversity loss • provide opportunities for access to high quality woodlands for our citizens. Programme success to date • 8,366 trees planted over 7ha in 2019/20 season over more than 12 sites across the district. • 27,498 trees planted over 18ha in 2020/21 season over more than 27 sites. • 2019-2021 figures include over 16,000 at Dewsbury Country Park with other sites across N & S Kirklees. The Greenspace team are working with Assets Strategy colleagues to undertake a full review of council landholdings with a view to prioritising sites for woodland creation. For the 21/22 season, 20ha of planting is planned at 11 sites across Kirklees. The 22/23 and 23/24 programmes are in preparation and currently represent a further 59ha of land, around 100,000 trees. The Council is also working via the White Rose Forest partnership to secure external funding to support further planting and expand upon this momentum.
Youth engagement and the 'Our Climate, Our Voice' Climate Festival	1. The two-day 'Our Climate, Our Voice' Young People's Climate Festival took place on the 23rd & 24th March 2021, as an online event delivered by the 'Our Voice' Team here at Kirklees.. Day one was intended for children, day two for older young people. 2. This festival aimed to 'kick start 'our climate conversation with children and young people, so that they could feel safe and heard, and understand they play a big part of our vision. 3. We had commitment to engage from: • 13 primary schools • 3 post 16 provisions • 1 specialised provision • The elected home education team 4. However, anyone with the link could access the site on the days and also watch the festival retrospectively. We estimate over 1000 children engaged based on the IT info. 5. Beyond the festival, the web resource is remaining accessible to a wider audience - www.ourclimateourvoice.co.uk

	6. Our Voice has followed up this festival with a successful programme of engagement called 'Eco Ambassadors' with five schools, and it has been offered to a further three schools. The programme aims to give the participating school children a voice so they can further climate discussions and actions at both school and home. 7. Conversations are happening to look at how to further engage young people, including the schools involved in the Eco Ambassador programme, potentially via a Youth Climate Commission. 8. The Council has listened to feedback raised during the Youth Festival, and in response have employed a Commercial Recycling Officer that has already signed up over 100 schools with an enhanced service ready to start in September this year. This service has also begun expanding to the Council's other trade customers.
District Electric Vehicle Charging Infrastructure (£1m Climate emergency capital)	As part of the Council's Air Quality Action Plan (AQAP) and Phase 1 Climate Emergency response, the Council has committed to significantly increase the charging facilities for electric vehicles across the district, facilitated through a £1 million capital investment. It is widely acknowledged that the lack of access to charging facilities is one of the largest barriers to the uptake of Ultra-Low Emission Vehicles (ULEVs) and pure Electric Vehicles (EVs). It is hoped that the development of a strategic charging infrastructure across the district will support other work to meet the following targets: 1. To increase in percentage of ULEV registered vehicles within the district year on year in line with national average. 2. To meet the projected IMF target of 30% of registered cars within the district to be ULEV by 2027. 3. For 100% of car sales to be ULEVs by 2040, in line with national government targets. Although delayed due to COVID and resource re-deployment to assist with the COVID response. We have sought to backfill and reallocated work to ensure this project was not delayed any longer. As a result, a working group, led by the Air Quality team, has been established to ensure that key stakeholders from across the authority are involved throughout the process. The group has been meeting on a monthly basis since February 2021. Since February, we have completed two market engagement exercises to ensure that the proposed contract is fit for purpose and will deliver the best value for money for the Council. We are currently finalising the tender documents for the procurement of a concessions contract covering the installation and operation of a significant increase in the number of rapid charge points to be located in strategic locations across the district. This will be procured through the Crown Commercial Service (CCS) Dynamic Purchasing System (DPS) for Vehicle Charging Infrastructure Solutions. This procurement exercise also includes charge-points funded through other major council schemes such as the Spen Valley Leisure Centre.
Council Fleet transition to Electric Vehicles	The Council is reducing the carbon footprint of the vehicle fleet and have invested £1m to speed up this change. As a result, an additional 35 electric fleet vehicles, along with associated charging infrastructure

(£1m Climate emergency capital)	required at depots are expected to be brought into service later this year (following beyond our control delays with the supply chain and installation works). The first home chargers are starting to be installed and we have x 5 dual depot chargers due to be installed in Autumn/Winter at our Flint St. depot. These will be capable of charging x 10 electric vehicles simultaneously. (NB. These dates are still subject to external supply chain constraints so further delay is still possible). Three innovative 'vehicle to grid' chargers are now expected to be installed at council depots in Autumn 2021, again following supply chain delays. These can feed excess vehicle charge back to the national grid when electric vehicles are not being used. The Council is also demoing other new innovative technologies as they become available. We received an electric refuse vehicle for demonstration in May, an electric car in June and an EV van tipper and EV road sweeper in Jul. Further electric vehicle demonstrations are planned for later this year, this includes another electric refuse vehicle and also another electric road sweeper.
New Free Parking for Electric Vehicles offer	The council has developed an enhanced free parking for EVs and Low Emissions Vehicle offer when parking in council car parks, building upon the existing 'Green One' Parking permit, which launched on 6th September. The scheme provides free parking for electric vehicles (EVs) and 50% discounted parking for Ultra-low emission vehicles (ULEVs), as well as lower-emission vehicles (LEVs) including low emission hybrid vehicles. The new permit has been extended to all council-run pay and display areas. Maximum stays will still be enforced through the use of a parking clock, similar to that used by disabled badge holders. Along with the planned significant increase in additional EV charging points across the borough, aims to encourage residents to make the switch towards electric vehicles.
Huddersfield Heat Network	The Council is progressing the development of the Huddersfield Heat Network, a key low carbon enabling technology for the town and has identified that an economically viable network opportunity exists. We have successfully received a further £309k of Government grant funding to develop the business case for this opportunity. This feasibility work is now underway, and we are working with a number of external consultants to develop a viable network and produce the business case, expected in early 2022.
Low Carbon Homes	**Low Carbon New-Build Pilot, Liversedge** The Council is progressing a 125-home Low Carbon Homes Pilot Project. This is intended to deliver a minimum of 20 homes constructed to the Certified Passivhaus standard with the remaining homes achieving a 33% improvement on current Part L Building Regulation standards. It is intended that at least one of these properties will be used as a 'zero carbon' home demonstrator project. This scheme is expected to start on site by late 2022.

	Low Carbon Retrofit Pilot, Abbey Road, Fartown The Council aims to complete a pilot 'next generation' retrofit scheme which involves thermal/energy improvements to 8 existing council properties. This will demonstrate that retrofitting existing stock to achieve SAP band B is feasible and cost-effective. The aim is to develop an agreed long-term programme and specification that gives the Council confidence that we are achieving the best thermal performance and reducing carbon emissions in existing council housing stock.

Partnership Working with the Combined Authority and Region

2.55. The Council has a well-established working relationship with the WY Combined Authority both at elected member level and officers. This has traditionally been via the Green Economy Panel for elected representatives, the Directors of Development meetings, and at a more junior officer level the Green Economy Officers Group (GEOG).

2.56. Following the recent devolution settlement and election of the WY Combined Authority Mayor there has been some changes to this relationship in that the Green Economy Panel has been replaced with the Climate, Energy and Environment Committee.

2.57. Key projects underway at the WYCA relating to this agenda include:

- The Tackling the Climate and Environment Emergency Roadmap (expected to be published this Autumn), which has developed from the WY Emissions Reductions Pathways project, which set out how the region could reach its 2038 net zero target.
- Development of the WY Carbon Impact Assessment toolkit, which will be used to assess the carbon impacts associated with schemes passing through the WYCA assurance process. The scheme is currently in development.
- Both of the above schemes have been represented by Kirklees Officers on the project steering groups.

2.58. Council officers also attend the regular GEOG meetings, which also present an opportunity for networking and sharing of best practice with the other WY local authorities.

2.59. Engagement via the GEOG and other officer groups at the WYCA including Transport Task Group and the West Yorkshire Low Emission Strategy Working Group (WYLES) can often lead to potential partnership funding opportunities.

2.60. A current example of this is the City Region Sustainable Transport Settlement (CRSTS), where the council is currently exploring enhanced funding for innovative electrical vehicle charging infrastructure and an Electric Vehicle Try before you buy support package, in conjunction with the CA and the other WY authorities. It is intended that these projects will seek to address inequalities in EV uptake and offer an education and awareness package to help residents, businesses and private fleet operators (taxis) to make an informed switch.

2.61. Beyond the WYCA, Officers also participate in the following regular partnership working forums with other regional and national organisations:

- Yorkshire and the Humber Climate Commission Net Zero Working Group
- NHS WY&H Climate Change Organisational Operational Leads Network (convened by the WY & Harrogate Health and Care Partnership)
- Place-Based Carbon Action Network (PCAN – network of other Climate Commissions)
- Association of Directors of Environment, Economy, Planning & Transport (ADEPT)

- Association of Public Sector Excellence (APSE), APSE Energy sub-network and the APSE Climate Change and Renewable Energy Network

2.62. The Council is currently working with regional partners (WYCA and the other WY Local Authorities) to develop a bid for a COP26 Regional Green Zone, to align with activity underway at the main COP26 event in November. The Council intends to use this event to showcase the Kirklees Climate Commission in conjunction with Commission members.

The Kirklees Net Zero Roadmap and Development of the Climate Emergency Programme

2.63. In early 2021 the Council commissioned the University of Leeds to produce a 'Net Zero Roadmap' for Kirklees (aka a 'Mini-Stern report) to inform and help prioritise how the district's net-zero target of 2038 and contribution to the UK target of 2050 can be achieved. The roadmap will also help Kirklees Climate Commission (KCC) identify and plan its work priorities and inform the development of the climate change programme.

2.64. The delivery of the first draft of this report has unfortunately been delayed by competing priorities within the University of Leeds team undertaking this work. This first draft was received by the Council in mid-August 2021 and has given us little time to review and digest the contents of the report.

2.65. Once appropriately checked and agreed internally, this report will be circulated to stakeholders (including the KCC) and will be formally published. We propose also sharing this final draft with members of the Committee. The final version of the Roadmap will include summary infographics to aid interpretation.

2.66. The Roadmap will serve a two-fold purpose:

- To inform the work of the Kirklees Climate Commission and help prioritise its' initial areas of focus.
- To inform and aid the development of the Council's Climate Change Programme and help prioritise measures for consideration beyond the initial Phase 1 priorities.

Summary of Key initial findings from the draft Kirklees Net Zero Roadmap

2.67. The Roadmap will help the Council understand its baselines and makes clear that the majority of all emissions reductions across the district need to be delivered within the next ten years.

2.68. Across the district, scope 1 and 2 carbon emissions from Kirklees have fallen by 39% since 2000. With on-going decarbonisation of grid electricity and taking into account population and economic growth within Kirklees, the roadmap projects that that Kirklees' 2000 level of annual emissions output will have fallen by a total of 49% in 2050 under a 'business as usual' scenario. Clearly, this is some way off achieving 'net zero'.

2.69. The Roadmap proposes two successive routes to prioritise district decarbonisation:

a) Cost Effective options

Closing the gap between projected emissions and net zero emissions can be partly realised through cost-effective options that are likely to more than pay for themselves through the energy cost reductions they will generate.

It is anticipated that the gap between 'business as usual' emissions and achieving net zero could be closed by 47%, through the adoption of cost-effective options in domestic houses, public and commercial buildings as well as transport and industry.

b) More Ambitious Innovative options

The gap between BAU and net zero could be further closed by 70% through the adoption of options that are readily available, but that may not pay for themselves directly. The remaining 30% will need to be addressed through more innovative (and potentially costly) solutions.

2.70. The roadmap report is clear in its recommendation that Kirklees needs to adopt a clear and ambitious climate action plan, and that much of the actions proposed will be 'win-win' carbon reduction options that will improve economic, social and health outcomes as well as reducing carbon emissions. The following key recommendations are given:

a)	The report should focus first on the District's direct (Scope 1 - direct and Scope 2 – indirect emissions from energy- generation). Over time this should then be broadened to include Scope 3 (all other indirect emissions).
b)	The roadmap proposes recommended KPIs to work towards net zero targets
c)	Stresses that action is required across the district and that the establishment of the Kirklees Climate Commission is already helping to draw these actors together and build capacity.
d)	The Commission has a role to play is establishing leadership groups for key sectors, a process already underway with the creation of focused Sub-groups.

3. Implications for the Council

Working with People

4.1. Addressing climate change and air pollution are both areas that need to be addressed by working with members of the public, for example in influencing vehicle, travel and lifestyle choices. Whilst many actions will be taken at national and local authority level, partners and citizens also need to be assisted in making the right decisions. Both the proposed Commission and the Council are considered to have a key role in influencing and changing the behaviour of residents.

Working with Partners

Place Based Working

4.2. A key theme of tackling the Climate Emergency is collaborating with other partners, regionally and on the national stage. Addressing climate change is not something that the Council can achieve alone for the borough of Kirklees. Instead, a strong working relationship with partners is essential in order to develop real action in Kirklees. This is fundamental to the establishment of the Kirklees Climate Commission.

Climate Change and Air Quality

4.3. The recording and monitoring of carbon emissions and also the establishment of the Climate Commission are both important steps in the Council's long-term priority of tackling the climate emergency in Kirklees.

Improving outcomes for children

4.4. As above, ongoing monitoring of climate emissions along with the establishment of the Kirklees Climate Commission are both considered important elements of a long-term plan to address the climate emergency. This will help mitigate any potential negative impacts for children caused by future climate impacts.

Other (e.g. Legal/Financial or Human Resources)

4.5. The Council has committed to support the implementation of the Climate Commission and will continue to do so. However, this will also be balanced with a need to retain the independence of the Commission. The Council will continue to work with local partners as well as the University of Leeds to ensure that the Commission is appropriately supported and resourced.

5. Consultees and their opinions

No opinions have been sought at this stage.

6. Next steps and timelines

- The second meeting of the Kirklees Climate Commission took place on 17th September. Following this, meetings will continue to take place at regular intervals and the Commission will continue to develop the structure and members of the sub-groups sitting beneath the main Commission.
- The next and final round of reporting against the internal 40% carbon reduction target is expected by the end of Q3 2021-22.
- The Council's CDP submission is expected to be available via the CDP website by the end of the year (NB. this timeline is not within the Council's control).
- The Kirklees Net Zero Roadmap is in the process of being finalised and is expected to be published in Q3-Q4 2021/22.
- The full roadmap and the Council's detailed climate change plan is anticipated to be ready in Q1-Q2 2022/23.

7. **Officer recommendations and reasons**

Officers recommend that the Committee notes the updates provided in the report.

8. Cabinet Portfolio Holder's recommendations

Not applicable.

9. Contact officers

Shaun Berry, Operational Manager, Public Protection

John Atkinson, Project Manager (Energy & Climate Change), Public Protection

10. Background Papers and History of Decisions

16th January 2019 – Full Council declaration of a Climate Emergency
https://democracy.kirklees.gov.uk/ieListDocuments.aspx?CId=138&MId=5651

12th November 2019 – Cabinet Decision relating to Climate Change and Air Quality
https://democracy.kirklees.gov.uk/documents/s32319/Item%207%20Kirklees%20Climate%20Emergency%20Report%20002.pdf

(N.B. this includes the following documents as appendices:

1. Final Report of the Climate Emergency Working Party as an Appendix
2. Tyndall Centre for Climate Change Research Carbon Budget and methodology for Kirklees)

13th November 2019 Full Council Paper relating to Climate Change and Air Quality
https://democracy.kirklees.gov.uk/documents/s32341/Climate%20Emergency%20report%20for%20Council%20on%2013%20November%202019.pdf

11. **Service Director responsible**

Katherine Armitage, Service Director Environmental Strategy & Climate Change

12. Appendices

1. Kirklees Climate Commission Terms of Reference
2. 2019/20 Internal Carbon Emissions reporting summary
3. 2021 CDP disclosure of carbon emissions and climate reporting

Appendices

Appendix 1: Kirklees Climate Commission Terms of Reference
(Also available at https://www.kirkleesclimate.org.uk/)

Terms of Reference

1. Background and Context

1.1. Working towards net zero carbon emissions and promoting climate resilience can help Kirklees to be happier, healthier, more prosperous and more inclusive.

1.2. In January 2019, Kirklees Council approved a Kirklees Climate Emergency Motion which committed Kirklees to work towards net zero greenhouse gas (GHG) emissions (including CO2 and other GHGs) by 2038 and to establish a multi-stakeholder Kirklees Climate Commission (KCC).

2. Vision

2.1. Covering the entire geographic area of Kirklees, KCC will bring together key communities, organisations and groups from across Kirklees to support, guide and track climate action within the area.

2.2. KCC will strive to promote inclusion and diversity and to include balanced representation from across the different communities and sectors in the area.

2.3. KCC will focus primarily on the transition to net zero carbon emissions, with a particular focus on energy, houses, commercial buildings, transport, energy, land-use (including agriculture) and nature but it will also consider climate risks from within and beyond Kirklees such as those related to flooding.

2.4. The focus on net zero carbon emissions will consider not only direct emissions from fuel and electricity use within the area (i.e. scope 1 and 2 emissions), but also the significance of goods and services imported into or exported from the area (i.e. scope 3 emissions).

2.5. KCC will promote fairness, inclusion and a just transition (including for communities and sectors that face challenges in the transition towards net zero and climate resilience), and actions that are more broadly sustainable, particularly as they relate to nature and biodiversity.

2.6. KCC will work with other Commissions, especially the Yorkshire and Humber Climate Commission and others included in the Place-based Climate Action Network (PCAN).

3. Scope

3.1. KCC will:

- Promote leadership in the district on climate change, encouraging stakeholders to take effective action now, while maintaining a long-term perspective;
- Provide authoritative independent advice on the most effective ways of reducing carbon emissions and meeting the district's emissions reduction targets;
- Promote best practice in public engagement on climate change and its impacts in order to support robust decision-making;
- Review collective area-wide progress towards meeting the district's emissions targets, celebrating good practice and recommending actions to keep the district on track;
- Advise on the assessment of climate-related risks and adaptation opportunities in the district and on progress towards climate resilience;
- Bring together major organisations and key groups in Kirklees to collaborate on projects and promote innovations that result in measurable contributions towards meeting the district's climate reduction target;
- Make the economic case for new initiatives and investment in low emissions and climate resilient projects in the district;
- Act as a forum where organisations can exchange ideas, research findings, information and best practice on emissions reduction and climate resilience.
- Support and develops appropriate activity-based funding bids, which demonstrate measurable green recovery and low emissions district;

3.2 Although KCC will advocate climate action, it is not intended to be a platform for lobbying, campaigning, marketing or PR. It will work through constructive, collaborative engagement and debate and wherever possible through consensus-based decision making.

3.3 KCC will collaborate with the Yorkshire and Humber Climate Commission and be part of a wider network of local climate commissions through the Place-based Climate Action Network (PCAN).

4. Deliverables

4.1 KCC will generate the following deliverables:

- The preparation of a net zero plan to inform target setting, help to establish priorities for action, guide delivery activities and help monitor progress across Kirklees.
- The provision of a forum for engagement, awareness raising, constructive debate, the building of capacities and the sharing of best practice on climate action across Kirklees.
- The provision of a forum that promotes innovation and helps actors in the region to develop new initiatives and seek new funding for climate-related projects and programmes across Kirklees;
- The preparation and publication of an annual report that monitors activities, evaluates progress and advises on future opportunities and priorities. This report will be publicly available, but it will also be submitted to the leaders and relevant portfolio holders in Kirklees Council who will consider each annual report and issue a formal response.
- A set of indicators to track the impact of the KCC itself, with the aim of ensuring that the Commission makes a tangible difference to the delivery of climate actions within the area.

5. Structures and Governance

5.1. KCC is an independent body comprised of a broadly inclusive and representative set of individuals drawn from organisations and groups from the public, private and civic sectors across Kirklees.

5.2. KCC will have an independent Chair (to be appointed) and a Vice Chair who will normally be the portfolio holder for environment, sustainability and climate change from Kirklees Council.

5.3. KCC will then appoint a range (c.20) of Commissioners drawn from key organisations and groups including a) the Council and other public sector bodies such as the NHS and the university, b) key businesses/employers and other private sector organisations and c) communities and other civic or non-governmental organisations in the area. It will include a youth representative.

5.4. The Chair, the Vice Chair and the Commissioners will oversee KCC's strategy and activities, with the Commission also supporting and being informed by a number of Panels focusing on priority areas such as housing, transport, energy, community engagement etc.

5.5. Where possible, the Panels will be convened by Commissioners but also include other members drawn from across the area.

5.6. The Commission and the panels will be supported by a small secretariat, funded initially by Kirklees Council but exploring options for longer term funding and sustainability.

5.7. The Commission will meet a minimum of four times a year at locations around the area, with Panels meeting as required.

5.8. The Commission will also hold at least one significant public engagement event each year.

5.9. These structures will be kept under review and may evolve where necessary/appropriate with the aim of ensuring that the Commission functions in the most effective, efficient and inclusive ways as it moves forward.

6. Communications

6.1 The Commission will maintain a web-site and will publish position papers, action plans, an annual report and other outputs as appropriate.

6.2 Any sensitive or contentious issues will be reviewed by the Chair and/or discussed by the Commission prior to publication, with a two-thirds majority of a quorate meeting being required for outputs/communications to be approved.

6.3 Where there are significant disagreements, these will be acknowledged and the different positions set out in any Commission statements and publications.

6.4 All Commission statements and publications will be made with a supporting statement making it clear that although they represent the majority view of the Commission, the statement may not represent the view or position of any member of the Commission or of the organization/group etc. that they represent.

6.5 Where members represent the Commission (i.e. in presentations or engagements in the media), they will present the wider view of the Commission in good faith.

7. Membership

7.1 Membership of the Commission and the Panels is open to individuals representing key organisations from the public, private, voluntary and community sectors across the district who can contribute to the development and delivery of a low carbon and/or climate resilient economy/society in Kirklees.

7.2 The independent Chair and Commissioners will be appointed through an open process on the basis for a fixed period of 3 years.

7.3 The appointments process will be overseen by a panel to be drawn initially from the independent advisory group set up to oversee creation of the Commission and subsequently from the Commission itself.

7.4 The independent Chair should be a resident of Kirklees, have expertise in the climate field and experience in chairing similar initiatives and convening community-wide initiatives.

7.5 Commissioners should be representatives of an organisation, sector, group or community in Kirklees, and be able to feed in views to the Commission and promote the work of the Commission more widely. They should also have knowledge/understanding relevant to the Commission and an ability to contribute to its work.

7.6 The Chair, Vice Chair and Commissioners should all be willing to support the goals and working principles of the Commission, whilst committing to attend quarterly meetings and the annual engagement event and ideally also engage in the work of one of the panels of the Commission.

7.7 The Commission works through voluntary engagement and none of the roles on the Commission are remunerated.

7.8 Alternate representatives would not usually be allowed to attend. If a member is absent for three meetings in succession, membership will be reviewed and may be revoked.

7. Working Principles

7.1. The Commission be guided by the following principles in all of its activities:

- Working relationships are friendly and constructive;
- No party has a monopoly on knowledge/understanding or best practice;
- All information is shared openly wherever possible;
- Problems are solved jointly and wherever possible through consensus;
- Innovative proposals are positively received and reviewed;
- Work is delivered to the highest standards of good practice and quality;
- Beyond the fact that the Commission is set up to advocate ambitious climate action across Kirklees, the Commission is not to be used as a platform for lobbying, campaigning, marketing or PR.

Appendix 2 – 2019/20 Internal Carbon Emissions Summary

For reference, a summary of the reporting from the last compete reporting (2019/20 year) is included below. This is taken from the update provided to OSMC in December 2020.

2019/20 Internal Carbon Emissions Summary

Area	% Carbon Emissions	2019/20 Carbon Emissions (tCO2)	% Carbon Reduction Since 2005/06	2019/20 Energy Spend (£, 000s)	% Energy Spend Increase Since 2005/06
Council Housing	*60*	52,374	*-57.3*	£29,403	11.6
Street Lighting	*4*	3,892	-68.8	£1,712	54.0
Corporate Landlord	*8*	7,170	-55.9	£2,371	5.7
Schools & Colleges	*18*	*15,302*	-38.2	£4,964	59.5
Leisure Centres	*4*	3,793	-28.1	£804	20.6
Fleet	*5*	4,777	-21.8	£1,893	8.6
TOTALS		**87,307**	**-53.5**	**£41,150**	**16.8**

Appendix 3: CDP emissions and climate disclosure for 2021

Welcome to the CDP-ICLEI Unified Reporting System 2021

0. Introduction

(0.1) Please give a general description and introduction to your city including your city's reporting boundary in the table below.

	Administrative boundary	Description of city
Please complete	Metropolitan area	Kirklees is a Metropolitan Borough Council in West Yorkshire and includes the principal towns of Huddersfield and Dewsbury. It is part of the West Yorkshire Combined Authority (WYCA) and a partner authority of the Leeds City Region Local Enterprise Partnership (LCR LEP). The District covers an area of 409km2 with a population of 438,000. Part of the District is within the Peak District National Park.

(0.2) If you have not previously submitted your Letter of Commitment to the Global Covenant of Mayors, either through the relevant regional covenant or through the Global Covenant secretariat, please attach the letter signed by an appropriately mandated official (e.g. Mayor, City Council) to this question.

City Details

(0.3) Please provide information about your city's Mayor or equivalent legal representative authority in the table below.

	Leader title	Leader name	Current term end year
Please complete	Leader of the Council	Cllr Shabir Pandor	2024

(0.4) Please select the currency used for all financial information disclosed throughout your response.

GBP Pound Sterling

(0.5) Please provide details of your city's current population. Report the population in the year of your reported inventory, if possible.

	Current population	Current population year	Projected population	Projected population year
Please complete	438,727	2018	452,300	2030

(0.6) Please provide further details about the geography of your city.

	Land area of the city boundary as defined in question 0.1 (in square km)
Please complete	408.6

1. Governance and Data Management

Governance

(1.0) Please detail sustainability goals and targets (e.g. GHG reductions) that are incorporated into your city's master plan and describe how these are addressed in the table below.

Sustainability goals and targets	Description
Emissions reduction targets	In response to the Council's Climate Emergency declaration in 2019, a target of net zero carbon emissions by 2038 was set for the district. This target also aligns with the regional (West Yorkshire) net zero by 2038 target. Planning Application Guidance and Advice document recently been approved by Cabinet - 'Climate Change Guidance for Planning Applications' https://www.kirklees.gov.uk/beta/planning-applications/guidance-and-advice-notes.aspx The Council also has an adopted district Air Quality Action Plan, which sets out ten Air Quality Management Areas across the district. in order to address polluting emissions. https://www.kirklees.gov.uk/beta/crime-and-safety/pdf/air-quality-action-plan.pdf
Biodiversity targets	Planning Application Guidance and Advice document recently been approved by Cabinet - 'Biodiversity Net Gain Technical Advice Note' https://www.kirklees.gov.uk/beta/planning-applications/guidance-and-advice-notes.aspx

(1.6) Please provide information on the overall impact of COVID-19 on climate action in your city.

	Impact of COVID-19 on climate action in your city	Comment
Response	No change on emphasis on climate action	An initial analysis of the Air Quality (NO2) concentrations have shown district wide reductions of between17% to 20%. During 2020 it was anticipated to get 5% to 7% reductions if COVID-19 had not occurred, in line with previous non-COVID years trends. This means that it is estimated that COVID-19 accounted for around 10% of the reduction in NO2 concentrations. Further research is required to more fully understand changes in Air Quality in 2020/2021 and to inform further roadmaps to recovery. Other Key Impacts of COVID-19 are: - Significant switch to Working from Home and Hybrid working for Council services - Repurposing of office buildings for 'Safe Working' - Some building closures and other buildings changed to 24hr operation as COVID-19 Test Centres - Home deliveries have evolved into a new industry with an increase in delivery vehicles on the road - Raised awareness of 'Active Travel'

(1.7) Please provide information specifically on the impact of the COVID-19 economic response on climate action in your city and synergies between COVID-19 recovery interventions and climate action.

	Impact of COVID-19 economic response on city's	COVID-19 recovery interventions and climate action synergies	Explanation

	budget for financing climate action in your city		
Response	No change on finance available for climate action	Recovery interventions that scale up investments in and access to digital technologies, funding mechanisms, and capacity-building solutions to enhance resilience to shocks, including climate change	

2. Climate Hazards and Vulnerability

Climate Risk and Vulnerability Assessment

(2.0) Has a climate change risk and vulnerability assessment been undertaken for your city?

Intending to undertake in the next 2 years

Climate Hazards

(2.1) Please list the most significant climate hazards faced by your city and indicate the probability and consequence of these hazards, as well as the expected future change in frequency and intensity. Please also select the most relevant assets or services that are affected by the climate hazard and provide a description of the impact.

Climate Hazards

Extreme Precipitation > Rain storm

Did this hazard significantly impact your city before 2021?

Yes

Current probability of hazard

Medium

Current magnitude of hazard

Medium

Social impact of hazard overall

Increased demand for public services
Increased demand for healthcare services

Most relevant assets / services affected overall

Transport
Society / community & culture
Emergency services
Other, please specify
Street cleansing; Flood risk management

Please identify which vulnerable populations are affected

Children & youth
Elderly
Low-income households
Persons living in sub-standard housing

Future change in frequency

Increasing

Future change in intensity

Increasing

Future expected magnitude of hazard

Medium High

When do you first expect to experience those changes in frequency and intensity?

Medium-term (2026-2050)

Please describe the impacts experienced so far, and how you expect the hazard to impact in the future

Severity and impacts expected to increase in line with UK projections. Climate change will increase flood risk in Kirklees, through its impacts on river flow and rainfall intensity. The Calder, its tributaries the Colne and Holme, and approximately 5000 other smaller watercourses flow through Kirklees. Around these watercourses there has been significant recent flooding in 2002, 2004, 2007, 2008, 2012, 2014, 2015, 2017 and 2019. The wards along these main rivers contain housing, transport and public service infrastructure, commercial and industrial enterprises, agricultural land and environmental and cultural heritage that is at significant risk of future flooding. There is further flooding risk from sewer overflow and ground water flooding (especially around Mirfield, Dewsbury, Huddersfield and Meltham), and lesser risk from the region's canals and reservoirs (20). Details on flood risk, and advice on development can be found in the Calderdale Catchment Strategic Flood Risk Assessment (20).

The White Rose Forests Landscapes for Water programme is looking at tree planting on approximately 600 hectares over four years in the Upper Calder catchment in partnership with Kirklees Council, United Utilities and the National Trust.

Kirklees Councils landscape and woodland designs also recognize the impact of climate change, including corridors to allow species migration.

Climate Hazards

Flood and sea level rise > Flash / surface flood

Did this hazard significantly impact your city before 2021?

Yes

Current probability of hazard

Medium

Current magnitude of hazard

Medium

Social impact of hazard overall

Increased demand for public services

Increased risk to already vulnerable populations

Most relevant assets / services affected overall

Water supply & sanitation

Transport

Emergency services

Other, please specify

Street cleansing; Flood risk management

Please identify which vulnerable populations are affected

Elderly

Low-income households

Persons living in sub-standard housing

Future change in frequency

Increasing

Future change in intensity

Increasing

Future expected magnitude of hazard

Medium

When do you first expect to experience those changes in frequency and intensity?

Medium-term (2026-2050)

Please describe the impacts experienced so far, and how you expect the hazard to impact in

the future

Climate change will increase flood risk in Kirklees, through its impacts on river flow and rainfall intensity. The Calder, its tributaries the Colne and Holme, and approximately 5000 other smaller watercourses flow through Kirklees. Around these watercourses there has been significant recent flooding in 2002, 2004, 2007, 2008, 2012, 2014, 2015, 2017 and 2019. The wards along these main rivers contain housing, transport and public service infrastructure, commercial and industrial enterprises, agricultural land and environmental and cultural heritage that is at significant risk of future flooding. There is further flooding risk from sewer overflow and ground water flooding (especially around Mirfield, Dewsbury, Huddersfield and Meltham), and lesser risk from the region's canals and reservoirs (20). Details on flood risk, and advice on development can be found in the Calderdale Catchment Strategic Flood Risk Assessment (20).

The White Rose Forests Landscapes for Water programme is looking at tree planting on approximately 600 hectares over four years in the Upper Calder catchment in partnership with Kirklees Council, United Utilities and the National Trust.

Kirklees Councils landscape and woodland designs also recognize the impact of climate change, including corridors to allow species migration.

Climate Hazards

Extreme hot temperature > Extreme hot days

Did this hazard significantly impact your city before 2021?

Yes

Current probability of hazard

Medium Low

Current magnitude of hazard

Medium

Social impact of hazard overall

Increased demand for healthcare services
Increased risk to already vulnerable populations

Most relevant assets / services affected overall

Public health
Emergency services

Please identify which vulnerable populations are affected

Elderly
Persons with chronic diseases

Future change in frequency

Increasing

Future change in intensity

Increasing

Future expected magnitude of hazard

Medium High

When do you first expect to experience those changes in frequency and intensity?

Medium-term (2026-2050)

Please describe the impacts experienced so far, and how you expect the hazard to impact in the future

There will be challenges in places where health services are delivered. Be this at hospitals, GP practices, pharmacies, resource centres, community hubs etc., or at people's homes, where mobile care is provided. The same problems face domestic, commercial and industrial buildings, which may not have been designed to accommodate people in an increasingly dynamic environment. Outdoor spaces, transport infrastructure, and green spaces will be similarly affected.

GCoM Common Reporting Framework Reporting Requirements for European Cities

(2.2) Please identify and describe the factors that most greatly affect your city's ability to adapt to climate change and indicate how those factors either support or challenge this ability.

Factors that affect ability to adapt	Indicate if this factor either supports or challenges the ability to adapt	Level of degree to which factor challenges/supports the adaptive capacity of your city	Please describe how the factor supports or challenges the adaptive capacity of your city
Government capacity	Challenges	Significantly challenges	Currently statutory obligations relating to climate mitigation are not required of local authorities, which helps limit the recourses available to tackle climate change. Certainty over how/if this will change in future will assist local authorities in planning for addressing climate change.

(2.3) Is your city facing risks to public health or health systems associated with climate change?

Yes

(2.3a) Please report on how climate change impacts health outcomes and health services in your city.

Area affected by climate change

Health outcomes
Health systems (service provision, infrastructure and technologies)

Health-related risk and vulnerability assessment undertaken

Yes

Identify the climate hazards most significantly impacting the selected areas

Extreme hot temperature > Extreme hot days
Flood and sea level rise > Flash / surface flood

Identify the climate-related health issues faced by your city

Heat-related illnesses
Air-pollution related illnesses
Disruption to water, sanitation and wastewater services

Timescale of climate-related issues for the selected health area

Medium-term (2026-2050)

Please identify which vulnerable populations are affected by these climate-related impacts

Children and youth
Elderly
Persons with pre-existing medical conditions
Persons living in sub-standard housing

Please explain

These factors are identified in the Kirklees Joint Strategic Assessment (http://observatory.kirklees.gov.uk/jsna/physicalenvironment)

3. Adaptation

Adaptation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(3.0) Please describe the main actions you are taking to reduce the risk to, and vulnerability of, your city's infrastructure, services, citizens, and businesses from climate change as identified in the Climate Hazards section.

Climate hazards

Flood and sea level rise > Flash / surface flood

Action

Flood mapping

Action title

Reviewing existing Kirklees Local Flood Risk Management Strategy (2019)

Status of action

Implementation

Means of implementation

Development and implementation of action plan

Co-benefit area

Enhanced resilience

Enhanced climate change adaptation

Sectors/areas adaptation action applies to

Water

Action description and implementation progress

The annual reporting mechanism is now through this ‘Annual Progress and Implementation Plan’. The plan provides more specific details on

• The current understanding of the location and extent of local flood risk

• progress against the Local Strategy objectives

• a record of works and studies carried out in the previous year, which are relevant to the Local Strategy objectives

• Working with Planning colleagues to influence planning decisions to take account of flood risk

• priorities for the forthcoming year

The Plan gives a clearer appreciation of what the council needs to do, how it intends to do it and what it has actually done. This is yet to be put in place.

Finance status

Seeking funding

Majority funding source

(Sub)national

Total cost of the project (currency)

Total cost provided by the local government (currency)

Total cost provided by the majority funding source (currency)

Web link

(not yet published online)

Climate hazards

Extreme Precipitation > Rain storm

Action

Flood mapping

Action title

Development and implementation of the Kirklees Local Flood Risk Management Strategy (2019)

Status of action

Implementation

Means of implementation

Monitor activities

Development and implementation of action plan

Co-benefit area

Enhanced resilience

Enhanced climate change adaptation

Sectors/areas adaptation action applies to

Water

Action description and implementation progress

Please see attached plan - under 3.2a.

Finance status

Seeking funding

Majority funding source

(Sub)national

Total cost of the project (currency)

Total cost provided by the local government (currency)

Total cost provided by the majority funding source (currency)

Web link

(not yet published online)

Climate hazards

Extreme hot temperature > Extreme hot days

Action

Incorporating climate change into long-term planning documents

Action title

Risk identified in the Kirklees Joint Strategic Assessment

Status of action

Scoping

Means of implementation

Capacity building and training activities

Policy and regulation

Co-benefit area

Enhanced resilience
Enhanced climate change adaptation

Sectors/areas adaptation action applies to

Public Health and Safety

Action description and implementation progress

Issues highlighted in the Kirklees Joint Strategic Assessment (http://observatory.kirklees.gov.uk/jsna) and to be addressed though relevant strategies and action plans.

Local authorities and clinical commissioning groups (CCGs) have to develop Joint Strategic Needs Assessments (JSNAs) and Joint Health and Wellbeing Strategies (JHWSs), on behalf of the Health and Wellbeing Board.

Our new KJSA provides a picture of the health and wellbeing of Kirklees people and is used to inform the commissioning strategies and plans of the council, Greater Huddersfield CCG, North Kirklees CCG and the local voluntary and community sector.

It includes information about health needs and assets. Health assets help people and communities to maintain and sustain their health and well-being, such as skills, knowledge, their networks and connections and community spaces, for example parks.

Finance status

Seeking funding

Majority funding source

(Sub)national

Total cost of the project (currency)

Total cost provided by the local government (currency)

Total cost provided by the majority funding source (currency)

Web link

http://observatory.kirklees.gov.uk/jsna/physicalenvironment

Adaptation Planning

GCoM Common Reporting Framework Reporting Requirements for European Cities

(3.2) Does your city council, or similar authority, have a published plan that addresses climate change adaptation and/or resilience?

Yes

GCoM Additional Information

(3.2a) Please provide more information on your plan that addresses climate change adaptation and/or resilience and attach the document. Please provide details on the boundary of your plan, and where this differs from your city's boundary, please provide an explanation.

Publication title and attach the document

Flood risk management plan: Appendix A - Progress and Implementation Plan

Appendix A - Progress and Implementation Plan 2020_21 to 21_22.docx

Web link

Sectors/areas covered by plan that addresses climate change adaptation

Water

Public Health and Safety

Climate hazards factored into plan that addresses climate change adaptation

Extreme Precipitation > Rain storm

Flood and sea level rise > Flash / surface flood

Flood and sea level rise > River flood

Flood and sea level rise > Groundwater flood

Year of adoption of adaptation plan by local government

2020

Boundary of plan relative to city boundary (reported in 0.1)

Same - covers entire city and nothing else

If the city boundary is different from the plan boundary, please explain why

Stage of implementation

Plan developed but not implemented

Type of plan

Standalone

Has your local government assessed the synergies, trade-offs, and co-benefits, if any, of the main mitigation and adaptation actions you identified?

Yes

Describe the synergies, trade-offs, and co-benefits of this interaction

There is a strong synergy in this plan with the Council's Local Plan and SFRA, Climate Emergency. One of the great Climate Change hazards is flood risk. The work that is done supports this policies and plans.

Primary author of plan

Dedicated city team

Description of the stakeholder engagement processes

Members, Public, Environment Agency, Yorkshire Water and also Kirklees (internal departments).

Adaptation Goals

(3.3) Please describe the main goals of your city's adaptation efforts and the metrics / KPIs for each goal.

Adaptation goal

Increase of 2500ha canopy cover by 2050

Climate hazards that adaptation goal addresses

Flood and sea level rise > Flash / surface flood
Flood and sea level rise > Groundwater flood

Target year of goal

2050

Description of metric / indicator used to track goal

Not known.

Does this goal align with a requirement from a higher level of government?

Do not know

Select the initiatives related to this adaptation goal that your city has committed to

Declaring Climate Emergency

Comment

4. City-wide Emissions

City-wide GHG Emissions Data

(4.0) Does your city have a city-wide emissions inventory to report?

Yes

💬4.0

(4.1) Please state the dates of the accounting year or 12-month period for which you are reporting your latest city-wide GHG emissions inventory.

	From	To
Accounting year dates	January 1, 2018	December 31, 2018

(4.2) Please indicate the category that best describes the boundary of your city-wide GHG emissions inventory.

	Boundary of inventory relative to city boundary (reported in 0.1)	Excluded sources / areas	Explanation of boundary choice where the inventory boundary differs from the city boundary (include inventory boundary, GDP and population)
Please explain	Same – covers entire city and nothing else		

(4.3) Please give the name of the primary protocol, standard, or methodology you have used to calculate your city's city-wide GHG emissions.

	Primary protocol	Comment
Emissions methodology	Global Protocol for Community Greenhouse Gas Emissions Inventories (GPC)	

(4.4) Which gases are included in your city-wide emissions inventory?

CO2
CH4
N20

GCoM Additional Information

(4.5) Please attach your city-wide inventory in Excel or other spreadsheet format and provide additional details on the inventory calculation methods in the table below.

Document title and attachment

SCATTER_kirklees_CDP-report-inventory.xlsx

SCATTER_kirklees_CDP-report-inventory.xlsx

Emissions inventory format

I have attached my inventory in the SCATTER output format and will report my emissions in the CRF format (4.6a)

Web link

Emissions factors used

IPCC

Global Warming Potential
(select relevant IPCC Assessment Report)

IPCC 4th AR (2007)

Please select which additional sectors are included in the inventory

Industrial process and/or product use
Agriculture, forestry or other land use sectors

Population in inventory year

438,727

Overall level of confidence

High

Comment on level of confidence

Emissions data comes from UK Govt datasets (BEIS) via SCATTER tool

GCoM Common Reporting Framework Reporting Requirements for European Cities

(4.6a) The Global Covenant of Mayors requires committed cities to report their inventories in the format of the new Common Reporting Framework, to encourage standard reporting of emissions data. Please provide a breakdown of your city-wide emissions by sector and sub-sector in the table below. Where emissions data is not available, please use the relevant notation keys to explain the reason why.

	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 city boundary as a result of in-city activities (metric tonnes CO2e)	If you have no emissions occurring outside the city boundary to report as a result of in-city 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	487,382.32		172,347.79		98,878.99		
Stationary energy > Commercial buildings & facilities	79,514.98		99,494.85		27,111.8		
Stationary energy > Institutional buildings & facilities	65,171.98		21,602.99		12,535.71		
Stationary energy > Industrial buildings & facilities	211,347.32		121,347.32		57,063.78		
Stationary energy > Agriculture	5,807.98		1.49		1,370.47		

Stationary energy > Fugitive emissions	61,998.97		0		0		
Total Stationary Energy	911,223.36		414,897.89		196,960.75		
Transportation > On-road	571,017.54		0	IE	215,238.56		Electricity consumption from on-road transport included in Stationary Energy figures
Transportation > Rail	9,923.03		0	IE	2,333.52		Electricity consumption from rail transport included in Stationary Energy figures
Transportation > Waterborne navigation	1,943.07		0	IE	0	IE	All UK waterborne transport assumed to be diesel.
Transportation > Aviation	0	NO	0	IE	225,977.82		Electricity consumption from aviation not possible to separate from stationary energy data.
Transportation > Off-road	5,710.18		0		0	NE	Electricity consumption from off-road transport included in Stationary Energy figures
Total Transport	588,593.82		0	IE	443,549.89		
Waste > Solid waste disposal	11,198.39		0		0	IE	

Waste > Biological treatment	0	NO	0		0	IE	
Waste > Incineration and open burning	0	NO	0		0	IE	
Waste > Wastewater	25,825.84		0		0	IE	
Total Waste	37,024.23		0		0		
IPPU > Industrial process	104,376.17		0		0		Beyond the scope of the current analysis; we plan to include in future.
IPPU > Product use	0		0		0	NE	Beyond the scope of the current analysis; we plan to include in future.
Total IPPU	104,376.17		0		0		
AFOLU > Livestock	56,788.49		0		0		Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Land use	-9,722.15		0		0		Beyond the scope of the current analysis; we plan to include in future.
AFOLU > Other AFOLU	0	NE	0		0		Beyond the scope of the current analysis; we plan to include in future.
Total AFOLU	47,066.34		0		0		

Generation of grid-supplied energy > Electricity-only generation	17,533.01		0		2,437.05		
Generation of grid-supplied energy > CHP generation	0	NO	0		0	NO	
Generation of grid-supplied energy > Heat/cold generation	0	NO	0		0	NO	
Generation of grid-supplied energy > Local renewable generation	2.95		0		0		We have not extracted electricity-specific emissions from factors used for renewable electricity. All emissions are included in Scope 1.
Total Generation of grid-supplied energy	17,535.96		0		2,437.05		
Total Emissions (excluding generation of grid-supplied energy)	1,688,283.92		414,897.89		640,510.64		

(4.8) Please indicate if your city-wide emissions have increased, decreased, or stayed the same since your last emissions inventory, and describe why.

	Change in emissions	Primary reason for change	Please explain and quantify changes in emissions
Please explain	Increased	Increased energy/electricity consumption	Net Increase by 6,193 tonnes CO2e - Significant increase in emissions for IPPU (Industrial Process), by 58,268 tonnes C02e

(4.9) Does your city have a consumption-based inventory to measure emissions from consumption of goods and services by your residents?

	Response	Provide an overview and attach your consumption-based inventory if relevant
Please complete	Not intending to undertake	

City-wide external verification

(4.12) Has the city-wide GHG emissions data you are currently reporting been externally verified or audited in part or in whole?

Not intending to undertake, please specify why

Emissions data comes from UK Government datasets (BEIS) via SCATTER tool

Historical emissions inventories

(4.13) Please provide details on any historical, base year or recalculated city-wide emissions inventories your city has, in order to allow assessment of targets in the table below.

GCoM Emission Factor and Activity Data

(4.14) State if the emissions factors and activity data used to calculate your cities emissions are accessible within the attached emissions inventory in question 4.5. If so, please describe where these are located within the attached inventory.

Emissions factors and Activity Data Reported

Emissions factors and activity data accessibility

Emissions factors and activity data are accessible within the attached inventory in question 4.5

State the location of emissions factors and activity data within the attached inventory in question 4.5

Provided in attachment 'SCATTER_kirklees_CDP-report-inventory.xlsx'

5. Emissions Reduction

Mitigation Target setting

GCoM Common Reporting Framework Reporting Requirements for European Cities

(5.0) Do you have a GHG emissions reduction target(s) in place at the city-wide level?

Base year emissions (absolute) target

Fixed level target

(5.0a) Please provide details of your total city-wide base year emissions reduction (absolute) target(s). In addition, you may add rows to provide details of your sector-specific targets, by providing the base year emissions specific to that target.

Sector

All emissions sources included in city inventory

Where sources differ from the inventory, identify and explain these additions / exclusions

Boundary of target relative to city boundary (reported in 0.1)

Same (city-wide) – covers entire city and nothing else

Explanation of boundary choice where the inventory boundary differs from the city boundary (include inventory boundary, GDP and population)

Base year

2005

Year target was set

2010

Base year emissions (metric tonnes CO2e)

2,848,300

Percentage reduction target

40

Target year

2020

Target year absolute emissions (metric tonnes CO2e) [Auto-calculated]

1,708,980

Percentage of target achieved so far

96

Is this target considered to be your cities most ambitious target?

Yes

Does this target align with the global 1.5 - 2 °C pathway set out in the Paris Agreement?

No

Select the initiatives that this target contributes towards

Individual City Commitment

Does this target align to a requirement from a higher level of government?

No

Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.

This is the district's previous base year emissions target from 2010. Data is from 2018 (same as the emissions inventory year).

(5.0b) Please provide details of your total fixed level target(s).

Sector

All emissions sources included in city inventory

Where sources differ from the inventory, identify and explain these additions / exclusions

Boundary of target relative to city boundary (reported in 0.1)

Same (city-wide) – covers entire city and nothing else

Explanation of boundary choice where the assessment boundary differs from the city boundary

Year target was set

2020

Absolute emissions in year target was set

Target year

2038

Projected population in target year

459,204

Target year absolute emissions (metric tonnes CO2e)

11,305,000

Percentage of target achieved so far

0

Is this target considered to be your cities most ambitious target?

Yes

Does this target align with the global 1.5 -2 °C pathway set out in the Paris agreement?

Yes - 2 °C

Select the initiatives that this target contributes towards

Global Covenant of Mayors for Climate & Energy
Declaring Climate Emergency

Does this target align to a requirement from a higher level of government?

Yes

Please describe your target. If your country has an NDC and your city's target is less ambitious than the NDC, please explain why.

This target has been set in response to the Council's Climate Emergency declaration in 2019. It is based upon a carbon budget produced for Kirklees by the Tyndall Centre for Climate Change Research. This methodology identified a 'net zero' target year of 2041 for Kirklees. The target was then brought forward to 2038 to align with the regional (West Yorkshire) net zero target.

(5.1) Please describe how the target(s) reported above align with the global 1.5 - 2 °C pathway set out in the Paris agreement.

The Setting City Area Targets and Trajectories for Emissions Reduction (SCATTER) project funded by the UK Department for Business, Energy and Industrial Strategy (BEIS) developed a methodology for Local Authorities to set carbon emissions targets that are consistent with the UN Paris Climate Agreement. The Tyndall Centre for

Climate Change Research then used this SCATTER methodology with the latest IPCC Special Report on 1.5 degrees and updated carbon dioxide datasets to downscale the global carbon budget to Kirklees-level. This aligns with the "well below 2 degrees" aspiration of the Paris agreement.

(5.2) Is your city-wide emissions reduction target(s) conditional on the success of an externality or component of policy outside of your control?

No

(5.3) Does your city-wide emissions reduction target(s) account for the use of transferable emissions units?

No

Mitigation Actions

GCoM Common Reporting Framework Reporting Requirements for European Cities

(5.4) Describe the anticipated outcomes of the most impactful mitigation actions your city is currently undertaking; the total cost of the action and how much is being funded by the local government.

Mitigation action

Energy Supply > Low or zero carbon energy supply generation

Action title

Development and implementation of the Huddersfield Heat Network

Means of implementation

Stakeholder engagement
Infrastructure development
Assessment and evaluation activities

Implementation status

Pre-implementation

Start year of action

2025

End year of action

Estimated emissions reduction (metric tonnes CO2e)

2,872

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Per year

Co-benefit area

Enhanced resilience
Improved resource efficiency (e.g. food, water, energy)
Greening the economy

Action description and implementation progress

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

Finance status

Feasibility undertaken

Total cost of the project

16,450,000

Total cost provided by the local government

Majority funding source

Other, please specify

Offer of grant funding from BEIS HNDU, corresponding capital match funding for project development stage to be agreed. DPD Outline Business Case to allow Council to progress to implementation of HHN/ consider potential sources of capital investment.

Total cost provided by the majority funding source (currency)

Web link to action website

(Page 53) -
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002390/Heat_Networks_Project_Pipeline_January_to_March_2021__1_.pdf

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Mitigation action

Buildings > Switching to low-carbon fuels

Action title

All corporate electricity to be 100% renewably generated (Active from April 2021)

Means of implementation

Sustainable public procurement

Implementation status

Implementation complete

Start year of action

2021

End year of action

Estimated emissions reduction (metric tonnes CO2e)

8,370

Energy savings (MWh)

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Per year

Co-benefit area

Enhanced resilience
Reduced GHG emissions

Action description and implementation progress

Sourcing of electricity to be from 100% renewable sources (via the national grid) from April 2021 onwards.

Finance status

Finance secured

Total cost of the project

33,000

Total cost provided by the local government

33,000

Majority funding source

Local

Total cost provided by the majority funding source (currency)

33,000

Web link to action website

Mitigation action

Outdoor Lighting > LED / CFL / other luminaire technologies

Action title

Conversion of street lighting in the district to LEDs lanterns

Means of implementation

Infrastructure development
Development and implementation of action plan

Implementation status

Implementation

Start year of action

2018

End year of action

Estimated emissions reduction (metric tonnes CO2e)

850

Energy savings (MWh)

3,025.37

Renewable energy production (MWh)

Timescale of reduction / savings / energy production

Per year

Co-benefit area

Improved resource efficiency (e.g. food, water, energy)

Action description and implementation progress

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

Finance status

Finance secured

Total cost of the project

10,000,000

Total cost provided by the local government

5,300,000

Majority funding source

(Sub)national

Total cost provided by the majority funding source (currency)

4,700,000

Web link to action website

Mitigation action

Buildings > Energy efficiency/ retrofit measures

Action title

Council housing energy efficiency measures

Means of implementation

Infrastructure development

Development and implementation of action plan

Implementation status

Implementation complete

Start year of action

2005

End year of action

Estimated emissions reduction (metric tonnes CO2e)

53,269

Energy savings (MWh)

275,000

Renewable energy production (MWh)

608

Timescale of reduction / savings / energy production

Other, please specify

From 2005/06 to 2018/19

Co-benefit area

Reduced GHG emissions

Improved resource efficiency (e.g. food, water, energy)

Poverty reduction / eradication

Action description and implementation progress

Energy efficiency upgrades in council homes - New Gas Boilers, Solid Wall Insulation, other Cavity Wall Insulation, Solar PV,

Gas Mains to electric homes, and improvements in Loft Insulation. Government funding through LAD 1 has successfully been bid for. This will provide 66% funding towards the installation of a number of measures, including heat pumps, solar PV, loft insulation, cavity and solid wall insulation to the remaining properties that are below a SAP band D. Following on from this investment will need to be focused on bringing the housing stock up to a minimum SAP band C.

Finance status

Finance secured

Total cost of the project

905,010

Total cost provided by the local government

Majority funding source

Local

Total cost provided by the majority funding source (currency)

905,010

Web link to action website

Mitigation Planning

GCoM Common Reporting Framework Reporting Requirements for European Cities

(5.5) Does your city have a climate change mitigation or energy access plan for reducing city-wide GHG emissions?

In progress

GCoM Additional Information

(5.5a) Please attach your city's climate change mitigation plan below. If your city has both mitigation and energy access plans, please make sure to attach all relevant documents below.

6. Opportunities

Opportunities

(6.0) Please indicate the opportunities your city has identified as a result of addressing climate change and describe how the city is positioning itself to take advantage of these opportunities.

Opportunity	Describe how the city is maximizing this opportunity
Improved efficiency of municipal operations	Through annual internal carbon emissions reporting (based upon a 2005/06 baseline) and through annual external district greenhouse gas (GHG) emissions reporting through CDP submissions.
Development of climate change resiliency projects	To be identified through ongoing mitigation planning for the district. We anticipate that this will inform the identification of other priority areas. Progress in the roll out of Fleet Electric Vehicles (EV) and development of EV Charging infrastructure, and the development of the Huddersfield Heat Network project. The heat network will utilise local energy generation delivered to Town Centre sites. This will be backed up with full gas boiler back up for heat, and connection to the national electricity grid as a back-up for the provision of electricity.
Development of energy efficiency measures and technologies	The development of the Huddersfield Heat Network project and the development of a Building Energy Management Systems (BEMS) improvements project.
Increase opportunities for partnerships	Development of a Kirklees Climate Commission and subsequent Green Charter. Has progressed to a 'Shadow Board' being set up and currently meeting. Handover to Full Climate Commission Board expected later in the 2021.
Increased opportunities for investment in infrastructure projects	To be identified through ongoing mitigation planning for the district. Progress in the development of the Huddersfield Heat Network project. This will be a significant infrastructure project local to the Huddersfield town area. Progress in the roll out of Fleet Electric Vehicles (EV) and development of EV Charging infrastructure in both corporate and public locations.

Collaboration

(6.2) Does your city collaborate in partnership with businesses and/or industries in your city on sustainability projects?

Yes

(6.2a) Please provide some key examples of how your city collaborates with business and/or industries in the table below.

Collaboration area	Type of collaboration	Description of collaboration
Building and Infrastructure	Technical assistance	The Council has set up a Kirklees Climate Commission which met for the first time in July 2021. The Commission provides a positive and supportive forum for sharing best practice in relation to addressing climate change. Members include representatives from the public sector, businesses and community and faith representation. For more information see: https://www.kirkleesclimate.org.uk/
Transport (Mobility)	Project implementation and management	The Council is collaborating with partners across the district in the roll-out of strategic EV charging infrastructure. To date, this engagement has involved initial discussions with the Calderdale and Huddersfield NHS Trust, Huddersfield University and Locala (Community health care)
Energy	Project implementation and management	The Council is developing a low-carbon municipal heat network for Huddersfield (see earlier section) and is engaging with potential private heat-off takers and heat suppliers from both the private and public sectors .

Finance and Economic Opportunities

(6.5) List any mitigation, adaptation, water related or resilience projects you have planned within your city for which you hope to attract financing and provide details on the estimated costs and status of the project. If your city does not have any relevant projects, please select 'No relevant projects' under 'Project Area'.

Project area

Buildings

Project title

Huddersfield Heat Network

Stage of project development

Project structuring

Status of financing

Project partially funded and seeking additional funding

Financing model identified

Yes

Identified financing model description

'Five case' model (i.e. Strategic, Economic, Commercial, Financial and Management business cases).
Council Cabinet to accept the offer of grant funding from the BEIS Heat Networks Delivery Unit (HNDU) and agree corresponding capital match funding for the project development stage.
The DPD Outline Business Case (in line with the HM Treasury 'five case' model) will allow the council to decide whether it wishes to progress to implementation and delivery of the HHN and consider potential sources of capital investment.

Project description and attach project proposal

Development of a heat network opportunity providing heat and power from the town's Energy from Waste (EfW) facility to premises in Huddersfield town centre. The Heat Network will play an important part in reducing the carbon emissions from the district's main town. Crucially, this will be primarily through the decarbonisation of heat, which is a much more challenging area of the energy industry to decarbonise relative to electricity. As the infrastructure of the network itself is likely to outlast several sources of heat, it is also considered a key enabling technology for future low carbon heat sources.

Total cost of project

16,911,590

Total investment cost needed

16,450,000

8. Energy

(8.0) Does your city have a renewable energy target?

Not intending to undertake, please specify

Energy/electricity is privatised and purchased from outside the council's jurisdiction. As of April 2021, the council is sourcing 100% renewable electricity for corporate electricity contracts.

(8.1) Please indicate the source mix of electricity consumed in your city.

Electricity supply is privatised in the UK and delivered through the National Grid. Depending on the utility provider, they will have different mixes of electricity supply. Public sector entities, private organisations and householders can choose different providers for their energy supply.

The breakdown given here is from the council's electricity supplier for municipal operations. Of this, 12.6% (included in 'other') is from renewable sources. This is not split down further by the supplier.

The council intends to source 100% renewable electricity for municipal operations from its supplier by April 2021.

Electricity source

Coal

1.9

Gas

29.1

Oil

0

Nuclear

17.3

Hydro

0.8

Bioenergy (Biomass and Biofuels)

9

Wind

10.7

Geothermal

0

Solar (Photovoltaic and Thermal)

4.5

Waste to energy (excluding biomass component)

0

Other sources

26.7

Total - please ensure this equals 100%

100

Total electricity consumption (MWh)

Year data applies to

2018

What scale is the electricity mix data

Local government operations mix reported

Comment

Electricity supply is privatised in the UK and delivered through the National Grid. Depending on the utility provider, they will have different mixes of electricity supply. Public sector entities, private organisations and householders can choose different providers for their energy supply.

The breakdown given here is from the council's electricity supplier for municipal operations. The council intends to source 100% renewable electricity for municipal operations from its supplier by April 2021.

(8.1a) Please indicate the source mix of thermal energy (heating and cooling) consumed in your city.

Thermal energy consumption

Coal

1.7

Gas

72.6

Oil

23.5

Bioenergy (Biomass and Biofuel)

2.2

Geothermal

0

Solar (Thermal)

0

Waste to energy (excluding biomass component)

0

Other sources

0

Total (auto-calculated)

100

Total consumption (MWh)

72,073,000

Year data applies to

2018

What scale is the thermal energy mix data

Regional/State mix reported

Comment

(from BEIS Sub-national total final energy consumption statistics: 2005 to 2018. https://https://www.gov.uk/government/statistics/total-final-energy-consumption-at-regional-and-local-authority-level-2005-to-2018))

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

	Installed capacity (MW)	Annual generation (MWh)	Year data applies to	Comment
Solar PV	23.1			(from BEIS renewable energy by local authority dataset to 2018 https://www.gov.uk/government/statistics/regional-renewable-statistics)
Solar thermal				
Hydro power				
Wind	2.9			(from BEIS renewable energy by local authority dataset to 2018 https://www.gov.uk/government/statistics/regional-renewable-statistics)
Bioenergy (Biomass and Biofuels)				
Geothermal				
Other, please specify	10.5			Of which 1MW is Anaerobic Digestion and 9.5 is from Municipal Solid Waste. (from BEIS renewable energy by local authority dataset to 2018 https://www.gov.uk/government/statistics/regional-renewable-statistics)

(8.3) Does your city have a target to increase energy efficiency?

Intending to undertake in the next 2 years

(8.4) Please report the following energy access related information for your city.

Energy access

Electrification ratio of the city

100

Average electricity consumption per commercial establishment (MWh/annum)

Average electricity consumption per residential household (MWh/annum)

3.405

Average unit price of electricity (Currency unit as specified in 0.4/MWh)

Percentage of electricity distributed, but not billed

Percentage of city population with access to clean cooking

100

Comment

Do not have full figures for the above, Ave Electrical consumption per residential household is for 2019 (most recent) and taken from the following source https://lginform.local.gov.uk/reports/lgastandard?mod-metric=3801&mod-period=1&mod-area=E08000034&mod-group=AllMetropolitanBoroughLaInCountry_England&mod-type=namedComparisonGroup

(8.5) How many households within the municipal boundary face energy poverty? Please select the threshold used for energy poverty in your city.

Energy Poverty

Number of households within the city boundary that face energy poverty

19,294

Threshold used for energy poverty

Other, please specify

LILEE indicator - If they are living in a property with a fuel poverty energy efficiency rating of band D or below and when they spend the required amount to heat their home, they are left with a residual income below the official poverty line.

Comment

Energy poverty measured using UK Government Sub-regional Fuel Poverty in England, 2020 (2018 data) - Fuel poverty in England is now measured using the Low Income Low Energy Efficiency (LILEE) indicator rather than the old Low Income High Costs (LIHC) indicator. Under the LILEE indicator, a household is considered to be fuel poor if:
- they are living in a property with a fuel poverty energy efficiency rating of band D or below
and
- when they spend the required amount to heat their home, they are left with a residual income below the official poverty line

There are 3 important elements in determining whether a household is fuel poor:
- household income
- household energy requirements
- fuel prices.

For the city/municipal boundary the 19,294 households facing fuel poverty represents 10.6% of the total households, which is just over average for the UK.

10. Transport

(10.0) Do you have mode share information available to report for the following transport types?

(10.3) Please provide the total fleet size and number of vehicle types for the following modes of transport.

	Number of private cars	Number of buses	Number of municipal fleet (excluding buses)	Number of freight vehicles	Number of taxis	Transport Network Companies (e.g. Uber, Lyft) fleet size	Customer-drive carshares (e.g. Car2Go, Drivenow) fleet size	Comment
Total fleet size	193,700	700	64	27,200	2,274			Data based on 2019 DfT figures for vehicles licensed in the district (may be different to actual vehicles in use in the district)
Electric	383		0					Data based on 2019 DfT figures for vehicles licensed in the district (may be different to actual vehicles in use in the district)
Hybrid			0					No figure split out for hybrids in DfT licensing statistics.
Plug in hybrid	483		0					Data based on 2019 DfT figures for vehicles

								licensed in the district (may be different to actual vehicles in use in the district)
Hydrogen			0					No figure split out for hydrogen in DfT licensing statistics.

(10.5) Does your city have a low or zero-emission zone or restrictions on high polluting vehicles that cover a significant part of the city? (i.e. that disincentivises fossil fuel vehicles through a charge, a ban or access restriction)

No

12. Food

Food Consumption

(12.0) Report the total number of meals that are annually served and/or sold through programs managed by your city (this includes schools, hospitals, shelters, public canteens, etc.).

Total meals served or sold through programs managed by your city

Number of meals

2,615,913

Cities facilities

Schools
Public Canteens (City Hall, Parks, etc.)

Comment

Figure is per annum for last year. It is substantially lower than a 'normal' year due to Covid.

(12.1) What is the per capita meat and dairy consumption (kg/yr) in your city?

Meat consumption per capita (kg/year)

Kg/Year/Capita

Year data applies to

Is your city calculating emissions associated with this consumption?

Comment

Not known.

Dairy consumption per capita (kg/year)

Kg/Year/Capita

Year data applies to

Is your city calculating emissions associated with this consumption?

Comment

Not known.

Sustainable Food Policies and Actions

(12.3) Does your city have any policies relating to food consumption within your city? If so, please describe the expected outcome of the policy.

	Response	Please describe the expected outcome of the policy
Please complete	No	

(12.4) How does your city increase access to sustainable foods?

Do you subsidise fresh fruits and vegetables?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

Do you tax/ban higher carbon foods (meat, dairy, ultra-processed)?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

Do you use regulatory mechanisms that limit advertising of higher carbon foods (meat, dairy, ultra-processed)?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

Do you use regulatory mechanisms that limit the sale of higher carbon foods (meat, dairy, ultra-processed)?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

Do you incentivise fresh fruit/vegetables vendor locations?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

Do you have programs/policies/regulations on food surplus - either food surplus recovery and redistribution, or food waste avoidance programs (i.e. Love Food/Hate Waste)?

Action implemented

No

Please provide details and/or links to more information about the actions your city is taking to increase access to sustainable foods

13. Waste

(13.0) What is the annual solid waste generation in your city?

	Amount of solid waste generated (tonnes/year)	Year data applies to	Please describe the methodology used to calculate the annual solid waste generation in your city
Please complete	189,112	2019	It is for 2019-20. Data is from Uk Govt Local Authority collected waste statistics https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables. Please note that this relates only to data collected by the local authority and not private providers.

14. Water Security

Water Supply

(14.0) What are the sources of your city's water supply?

Surface water, from sources located fully or partially within city boundary

Surface water, from sources outside the city boundary (by water transfer schemes)

(14.1) What percentage of your city's population has access to potable water supply service?

100

(14.2) Are you aware of any substantive current or future risks to your city’s water security?

No, please specify why

No risk. All water companies-statutory duty-produce water resource management plans-forecast supply & demand-min. 25 years. Climate change impact is accounted for along with add. factors https://www.yorkshirewater.com/about-us/resources/drought-plan/

Water Supply Management

(14.4) Does your city have a publicly available Water Resource Management strategy?

Yes

(14.4a) Please provide more information on your city's public Water Resource Management strategy.

Publication title and attach document

Yorkshire Water - Water Resource Management Plan

Yorkshire Water - water-resources-management-plan-2019.pdf

Year of adoption from local government

2019

Web link

https://www.yorkshirewater.com/about-us/resources/water-resources-management-plan/

Does this strategy include sanitation services?

Do not know

Stage of implementation