

Climate Emergency Annual Report

Date: 15th March 2023

Report of: Director of Resources

Report to: Executive Board

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

Executive Summary

- In 2019 the council declared a climate emergency with a target of achieving net zero emissions for the city by 2030. This report provides the annual update against this target at both a council and city level. It also updates and reflects on wider changes relevant to the city's decarbonisation that have happened both regionally and nationally.
- In 2022 Leeds City Council was recognised as one of 122 city authorities across the world leading the way on climate action as part of a list published by renowned international authority, the Carbon Disclosure Project (CDP). Leeds joins the likes of New York, Paris, Melbourne, Tokyo, Buenos Aires, and Cape Town on the organisation's 2022 A List. Of more than 1,000 global cities that received a rating this year only 12% received an 'A' grade. Leeds was among those cities being celebrated for showing that urgent and impactful climate action—from ambitious emissions reduction targets to building resilience against climate change—is achievable at a global level. However, this action will need to go further and faster in future years for Leeds to retain this 'A' grade.
- The council continues to achieve a high level of success in its grant applications, totalling over £100m since 2019. Around £35 million is being won every year to support areas such as electric charging infrastructure, housing retrofit, public building decarbonisation and the expansion of the district heating PIPES network. Future funding for 2023/24 is expected to continue at this level.
- Despite our successful track record on bidding, we know that to achieve net zero that we need to access significantly more funding. Much of this funding will have to be provided by the private sector, with government grants focused on areas such as technological developments or housing retrofit for those living in fuel poverty. As a result the council has invested significant time in 2022 working with the private sector to identify a model to unlock greater levels of funding, based on self-financing business cases as well as working with the Green Finance Institute to support the work that they are undertaking to develop property linked finance, which is seen as a key way to speed up housing retrofit in the owner occupied market.
- The council's climate emissions have two key sources:
 - The energy that it uses to power and heat its facilities;
 - The fuel that it uses to operate its vehicles fleet.

- The council had previously set itself the target to reduce its own operational emissions by 50% by 2025 and this report demonstrates the actions that it is taking to ensure that it will meet this first target.
- The council will continue to reduce the energy it uses by investing in technologies such as solar PV panels, LED lighting, and alternative heating sources. This work shall build on the success of 2021 which saw £25 million of funding secured to retrofit 40 of our buildings with renewables, energy efficiency improvements and decarbonised heating. A further £4 million of upgrades to 10 more buildings was announced in September 2022. The LED streetlighting programme roll out has also continued at pace, further reducing energy usage.
- Comparing the forecast 2022/23 figures with those for 2018/19, just ahead of the declaration of the climate emergency for Leeds, over 23,000 tonnes per annum, or a 37% reduction, in CO₂e emissions from the council's energy usage has been achieved during this time.
- The council continues to seek to complement the energy reduction and decarbonisation measures outlined above by changing how it procures its energy through direct investment in localised major renewables schemes such as large scale solar, and the use of corporate power purchase agreements enabling investment in large scale renewables potentially outside of Leeds.
- In terms of fleet the council already has what is believed to be the largest electric vehicle fleet of any local authority in the UK, with 384 electric vehicles and its first electric Refuse Collection Vehicles due to arrive on fleet this year.
- Last year was the first year that we started to expand the annual climate emergency report's focus beyond mitigation to adaptation and resilience. In 2022 the first report about the development of the adaptation and resilience plan was taken to executive board and we held our first cross council workshop focused on how we prepare specifically for extreme heatwaves and flooding.
- In 2022 we also focused on food and its emissions, with a draft food strategy published in the autumn, consultation into the new year and the amended food strategy presented for adoption at today's Executive Board.
- The district's emissions continue to show progress towards net zero but, without further action, the pace of change is not currently sufficient to ensure net zero will be achieved by 2030. Where the council has the funding and the powers to enable or deliver change itself it has made good progress, however there are key areas where further support from national government is essential to overcome key barriers, e.g. private housing retrofit and transport. The council is regularly engaging with national policymakers to ensure their awareness of these barriers and challenges.
- There is a particular focus within this report on the challenges that we face to decarbonise the city's housing stock, a sector that contributes 26% to our emissions and in particular the work to accelerate the retrofit of privately owned housing.
- The council has a good track record for securing funding to support cross-tenure housing retrofit works.

- During financial year 2021/2022, the council secured £19.5 million of national government funding for programmes delivering a range of low-carbon heating, energy efficiency, or renewable energy technologies benefiting more than 1,500 domestic properties. During financial year 2022/2023, the council has bid for £19.7 million from national and regional government funding sources to deliver even more low-carbon heating, energy efficiency, or renewable energy technologies benefiting at least 1,100 domestic properties. The council is expecting the outcome of these bids to be publicly confirmed before the end of the financial year. £0.2 million was also secured this year as part of the Government’s “Heats Pump Ready” project to explore the feasibility and viability of networked heat pumps at an inner city location.
- In addition to securing external funding, the council has also previously committed more than £100 million towards the delivery of social housing decarbonisation projects as part of its Capital Housing Investment Programme—incorporating a mix of external and Housing Revenue Account funding—with around 5,000 council properties currently expected to benefit. A more detailed programme update was presented to Executive Board in March 2022. Delivery of this programme is continuous, with several projects delivered or progressed in 2022.
- With regards to the wider built environment, we have seen many other public sector partners connect to our £49 million low carbon district heating network, which continues to expand rapidly. Like the council, many of the city’s other large organisational emitters are also taking significant actions to reduce their own impact on the environment—supporting the city’s journey to become the UK’s first net zero city. The University of Leeds, one of the city’s other largest emitters, has published a detailed Climate Plan and committed to invest more than £150 million to work towards achieving net zero emissions by 2030.
- Planning plays a key role in supporting the standard of new build across the city and ensuring retrofit will not be required. In July 2021 the council carried out initial statutory public consultation on a Local Plan Update, which will update planning policies for carbon reduction, flood risk, green infrastructure (including biodiversity), place making and sustainable infrastructure. More recently, the proposed policies were developed and consulted between October and December 2022.
- Transport contributes around a third of the city’s emissions and needs significant investment to make the changes required. The Connecting Leeds Transport Strategy has decarbonisation as one of its central pillars. The strategy outlines the key steps to deliver the changes needed in Transport to meet the city’s 2030 target of making Leeds Carbon neutral. Its key aims are:
 - Reducing carbon emissions from transport to achieve net zero by 2030, as per the goal of the council’s declaration of a climate emergency is acknowledged to be highly challenging in the transport strategy. A goal for a 43% reduction in CO2 emissions is the level that will be achieved if the modal split targets are achieved by 2030.
 - Reducing the need for travel and the number of car journeys, especially at peak times. The total distances travelled on our roads were still lower in 2021 than pre-pandemic in 2019. With a 13% reduction shown in Indicator 1. LGV (+2%) and HGV (5%) traffic though was higher in 2021 than in 2019. This highlights the importance of the freight strategies.
 - Encouraging and leading the uptake of zero emission vehicles in freight, public and private transport. The uptake of zero emission vehicles showed encouraging signs in the

last year. The number of publicly available EV charging points increase by 129 from October 21 to reach 418 in October 22. First buses now have 21 electric buses operational in Leeds, an increase of 12 on the previous year, First have 32 additional electric vehicles on order with electric charging facilities also planned to be installed at Bramley depot.

- Encouraging people to choose active travel and public transport. Due to the pandemic reliable and meaningful data on mode share is less readily available. However, a comparison is possible of travel into the city centre and changes between 2019 and 2021. From this we see the proportion of trips into the city centre by car in the morning peak increased from a just over half (51.5%) to over two-thirds (69.2%). It has not been possible to obtain rail figures so the full modal split cannot currently be reported. The mode split targets are one of the main metrics to monitor success however there are still challenges accessing some of the required datasets and the ongoing impact of Covid-19 makes it difficult to provide meaningful annual trends. Further review of the current methodology is needed to maintain accuracy. The current data is only available for 2019 and 2021 with 2022 data still to be finalised and published. Further work with internal LCC data count teams is need to develop a more robust dataset and timeline for publishing to ensure this aligns with quarterly and annual reporting by the Transport Strategy service.
- The cost of delivering our long-term ambition in the Connecting Leeds Transport Strategy to become net-zero by 2030 is still significantly beyond the level of funding currently available.
- Leeds City Council approved the city's new Connecting Leeds transport strategy in 2022. In the year since, a record amount of infrastructure and policy work has been completed to improve the city's connectivity and transport networks, some of which is summarised below. A more detailed annual update report was presented to Executive Board in February 2023.
 - Development on Freight Policy – Increased focus on decarbonisation of freight (rail, road, cargo bike, waterborne, last mile, future zero emission technology (robots)
 - Local plans and development of '20 min neighbourhoods' planning, mobility hubs, multi modal interchange.
 - Streetscape road space reallocation policy – This new policy prioritises space on Leeds' streets for sustainable transport. It will be used by all highways scheme designers to ensure the principles of the transport strategy are embedded on Leeds' streets.
 - Future Mass Transit (implications) and planning.
 - WYCA commissioned future Park & Ride studies (road/rail)
 - Parking policy (pay display charging at LCC owned sites)
 - Continued development of LCWIP and ATN (Active Travel fund and Active Travel England support) - CC3/TCF cycle network expansion
 - Travel behaviour campaigns – Walk it / Ride It successfully launched and School initiatives The LCC influencing travel behaviour team each year deliver to more than 10,000 children and young people in Leeds 'Bikeability' training
- The last year has also seen the completion of the Leeds Public Transport Investment Programme (LPTIP): an unprecedented £270 million investment into the Leeds transport network delivered in partnership with the West Yorkshire Combined Authority, bus operators

and other transport stakeholders. The LPTIP programme has delivered significant improvements to the bus network, enhanced facilities for pedestrians and cyclists, and transformed the public realm.

- Climate Emergency Task group - A project has been launched to develop and shape Highways & Transportation's response to the climate emergency through establishing processes and best practice workstreams which consider whole-life carbon assessments to ensure our infrastructure and communities are resilient and satisfy commitments made as part of our climate emergency declaration to respond to climate change. Focus on Network Management, Maintenance and Street Lighting
- The changes required to transition the city towards a net zero economy will not be possible without widespread public support and behaviour changes from residents and organisations alike. Public communications and engagement has three fundamental roles: enabling the successful delivery of projects, explaining climate policy, and engaging the public on the changes that they can take (whether individual or organisational) to help accelerate climate action. In addition to targeted, project-specific communications support the council continues to work with partners to engage citizens and businesses through a range of approaches. A dedicated monthly e-newsletter highlights regular updates and opportunities for climate action to nearly 7,000 subscribers.

Recommendations

The Executive Board is requested to approve the following recommendations:

- a) Adopt the net zero housing plan for the council (appendix 1)
- b) Note the food strategy consultation responses and approve the adoption of the updated food strategy (appendices 2 and 3)
- c) Approve Leeds City Council becoming a signatory of the Yorkshire and Humber Climate Commission's 'Climate Action Pledge'
- d) Support the submission of the next Annual Report to Executive Board in September 2024 (and every 12 months thereafter) to improve transparency by aligning the Annual Report with the council's Carbon Disclosure Project submission.

Main Report

Why is the proposal being put forward?

- 1 This report is our annual review of the work undertaken in response to the declaration of a Climate Emergency in March 2019.

2 Introduction

- 3 Our climate has changed already and the impacts of this are already being felt locally, nationally, and globally. The climate will continue to change until global net zero is reached—meaning that the greenhouse gas emissions of every territory are either reduced or removed from the atmosphere by natural or man-made means. The planet is already 1.2 degrees Celsius warmer on average than in pre-industrial times as a result of human-caused climate change, according to the EU's Copernicus Climate Change Service.
- 4 2022 was the warmest year on record for the UK according to Met Office figures with the top 10 warmest years on record having each occurred since 2003. All four seasons of 2022 were

within the top ten warmest since the Met Office began recording in 1884. Leeds experienced the hottest day ever recorded in July. 2022 was also among the driest on record requiring many water companies, including Yorkshire Water, to declare a drought and issue a hosepipe ban to help maintain supplies.

- 5 These weather events are becoming more likely as a result of climate change. A recent study conducted by Met Office scientists has concluded that the UK's annual temperature in 2022 would have been considered a 1-in-500-year event in a natural climate where human influences are removed. It is now likely to occur every three to four years.
- 6 Initial analysis by the UK Health Security Agency (UKHSA) shows that across the 5-heat periods in the summer of 2022, the estimated total excess mortality (excluding coronavirus (COVID-19) in England was 2,803 for those aged 65 and over. This is the highest excess mortality figure during heat-periods observed since the introduction of the Heatwave plan for England in 2004. Additionally, the impacts of the heatwaves this summer caused widespread disruption to travel, workplaces, and many council services.
- 7 2022 has been another landmark year for climate diplomacy with COP27 taking place in Sharm El-Sheikh, Egypt. In recognition of the past, current, and future impact of climate change the convention ended with a historic decision to establish and operationalize a new 'loss and damage' fund, particularly for nations most vulnerable to the climate crisis. Additionally, the Prime Minister reiterated the UK's own commitment to reducing emissions by at least 68 per cent by 2030 when speaking at the conference as part of a "global mission for new jobs and clean growth".
- 8 This year also saw an independent review launched by the government into the delivery of net zero climate commitments, with a focus on ensuring that the UK's Net Zero Strategy maximises economic growth while increasing energy security and affordability for consumers and businesses. The outcomes of this Net Zero Review were published in January 2023 with 129 recommendations made to Government on how to take economic advantage of the transition to net-zero. It reaffirmed that the Government's timeline to achieve net-zero was still appropriate, however identified 'net zero is creating a new era of opportunity, but government, industry, and individuals need to act to make the most of the opportunities, reduce costs, and ensure we deliver successfully'
- 9 The council's own climate vision supports the vision set out in the government's Net Zero Strategy but recognises the city's ambition to achieve net zero emissions significantly earlier as far as this is practically possible.
- 10 In 2019, councillors from all parties in Leeds voted to declare a 'climate emergency' and work towards achieving citywide net zero emissions by 2030. Since then, Leeds City Council has delivered climate-related schemes worth hundreds of millions of pounds, published a plan to halve the authority's own carbon footprint by 2025, and begun updating some of the authority's most significant policy documents (such as the Connecting Leeds transport strategy, Housing Strategy, skills strategy, and Local Plan) to ensure they support work to mitigate and adapt to the changing climate.
- 11 Leeds City Council was recognised in 2022 as one of 122 city authorities across the world leading the way on climate action as part of a list published by renowned international authority, the Carbon Disclosure Project (CDP). Leeds joins the likes of New York, Paris, Melbourne, Tokyo, Buenos Aires, and Cape Town on the organisation's 2022 A List. Of more than 1,000 global cities that received a rating this year only 12% received an 'A' grade. Leeds was among those cities being celebrated for showing that urgent and impactful climate action—from ambitious emissions reduction targets to building resilience against climate change—is achievable at a global level. However, this action will need to go further and faster in future

years for Leeds to retain this 'A' grade.

12 The council's most recent submission to the CDP (included as appendix 4 to this report) was prepared in July and has been publicly available online since December 2022. Participation in the CDP requires cities to disclose annually—typically before the end of each July. Given the range and depth of detail that this includes and the submission's complementary nature to this annual report, it is recommended that the council should bring future versions of this report into alignment with the timescales for the CDP submission. Alignment will improve transparency by enabling Executive Board and Leeds citizens to review the city's submission months earlier than it would otherwise be publicly available. The change will also mean that future versions of the Annual Update report will be accompanied by, and will provide a narrative explaining, more detailed data and a fuller picture of the city's climate action progress.

13 National and Regional Context

14 The council can take a wide range of actions to achieve net zero operations as an organisation and as a local authority can contribute significantly to the city's progress towards its net zero target. Nevertheless, neither the council nor the city exists independently of national policy. The transition from natural gas, the shift to a net zero electricity grid, and the removal of fossil fuels from transport are three profound changes to which the council can contribute but where the principal levers lay at a national level.

15 With regards to scope 3 emissions, pertaining to those associated with consumption of goods and services, again the council can make some inroads but issues which determine the degree to which the citizens of Leeds are dependent on imported goods produced and transported with carbon are bound up with national industrial strategy and trade policy.

16 The council can play two roles with regard to impacting on the national agenda. First, the council can and has been acting as a pathfinder for low carbon and zero carbon development. A constructive engagement with government is helping to develop district heating as a viable alternative and pioneering retrofit in multi storey buildings, as two examples. This engagement will help the city achieve reductions in carbon faster but also help prove the case for its implementation at a national level. Secondly, the council can engage national policymakers, communicate the local challenges and opportunities of net zero, and work with them—and with other partners including the LGA, UK100, Core Cities, and other authorities—to address barriers and ultimately improve national policy.

17 Foremost among the immediate financial asks is funding for the delivery of a transformative public transport system. Going beyond the specific asks, however, is a call for greater consistency both of funding and of policy. It is through a long-term commitment to funding that the council can establish comprehensive programmes of work and industry can have the confidence to invest in the long term in technology, training and jobs. The retrofitting of housing has been a particular example of stop start funding but which can turn into a huge opportunity to reduce carbon quickly, reduce bills and create meaningful well paid work. Lastly, there is a need for a comprehensive review of local government powers to ensure they are consistent with the government's own commitment to net zero, ensuring that in key areas such as planning, waste, housing and transport they are properly aligned.

18 Beyond funding and policy, a key issue remains of public awareness, which is both crucial to individual decision making but also to the acceptability of some of the policy changes likely to be required. Local government, central government, industry and the third sector will need to work collectively on this issue in the years to come, often promoting the associated wider

benefits of carbon reduction actions to ensure public buy in. The broad political consensus in the UK regarding the reality of climate change are a crucial advantage and foundation for this.

- 19 There have been some positive steps forward at a national level with the recent publication of the Environmental Improvements Plan 2023 which sets out a five-year delivery plan to restore nature and improve the environmental quality of the air, waters, and land. Key highlights of this include:
- a) for the government to publish the third National Adaptation Programme (NAP3) in 2023 that will set out a five year strategy to build the UK's climate resilience
 - b) investment in active travel, with a vision for half of all journeys in towns and cities to be cycled or walked by 2030. £35 million funding has already been committed this financial year
 - c) minimising waste through the introduction of banning the supply of single use plastics from October 2023, working with businesses to implement packaging extended producer responsibility from 2024 and introducing a deposit return scheme for plastic and metal drinks containers from October 2025
 - d) challenging local authorities to improve air quality more quickly by assessing their performance and use of existing powers, while supporting them with clear guidance, funding, and tools. The government have committed to reduce population exposure to PM2.5 by 35% compared to 2018 levels by the end of 2040

The government has also committed to publishing a new Green Finance Strategy, building on the first strategy, published in 2019. It will set out in more detail the steps the government are putting in place to leverage in private finance to deliver government's environmental goals.

- 20 The Yorkshire and Humber Climate Commission (Y&HCC) was also established in 2021 – an independent advisory body set to bring representatives from the public, private and third sector together to support and guide ambitious actions across the region with four inter-related aims:
- a) To foster climate resilience and adaptation to climate risks and impacts
 - b) To support rapid progress towards net zero carbon emissions
 - c) To encourage a just and inclusive transition and climate actions that leave no one and nowhere behind
 - d) To promote sustainability and climate actions that also protect nature and biodiversity
- 21 As part of COP26 the Y&HCC launched their climate action plan, comprising of 50 actions. In early 2022 the council will assess itself against the actions identified and use it to strengthen its own action plan.
- 22 The Yorkshire and Humber Climate Action Pledge was launched on the 15th November 2022, with 24 organisations including local authorities, health and education sectors, third sector and private sector businesses signing up to the pledge after the launch.
- 23 The Pledge has four areas of focus: working towards net zero, adapting to future climate impacts, enhancing nature and biodiversity and working with people, places and partners to create more impact.
- 24 In signing the Climate Action Pledge, we are reaffirming our commitment to these four goals and continuing to show our residents, staff and businesses throughout Leeds that we are a responsible organisation determined to make a positive difference.
- 25 Organisations will be categorised into one of three tiers:

Signatories: those who have signed and pledged to take action

Achievers: Those who already have a plan in place for one or more of our four areas of focus

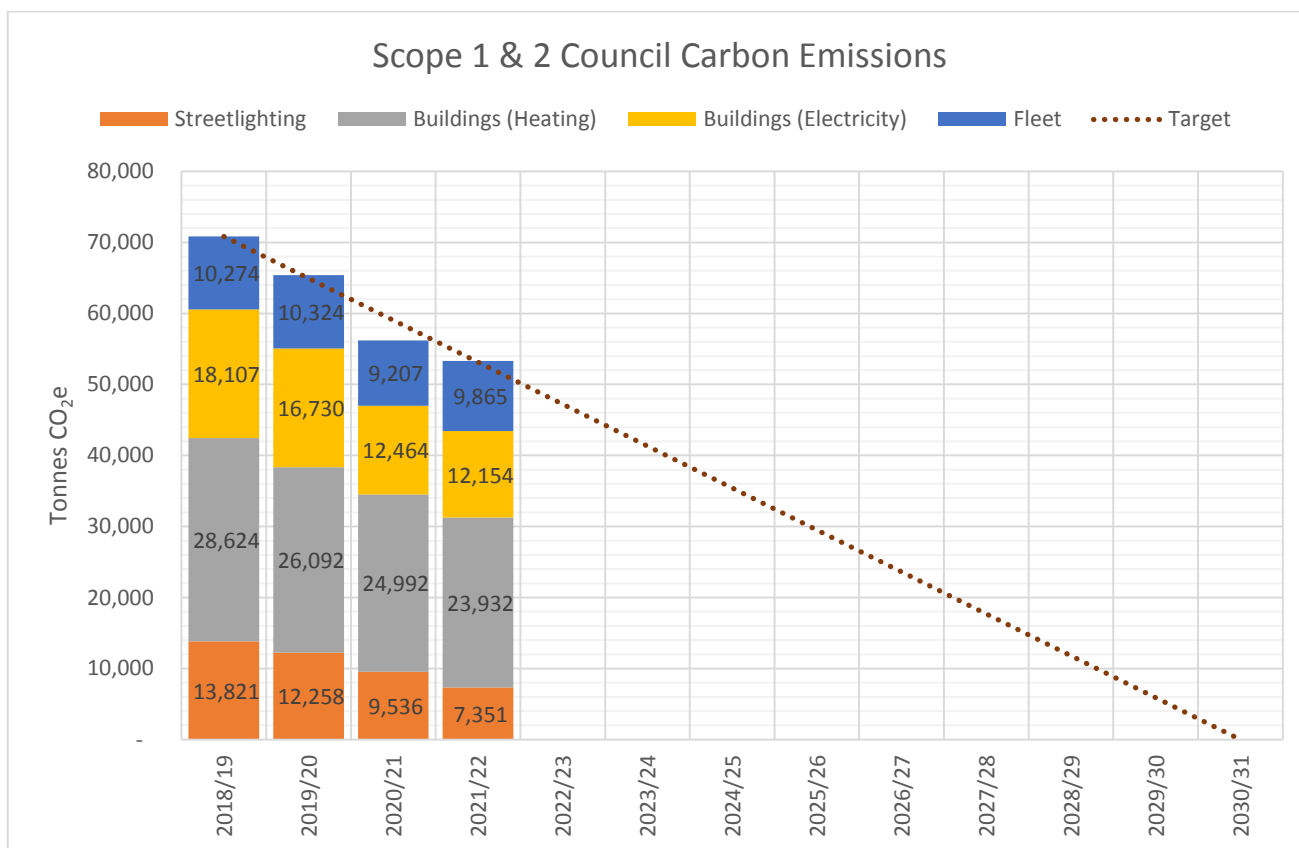
Leaders: During 2023, businesses and organisations that appear to be most advanced will be chosen to develop criteria for Climate Leaders.

26 Businesses and organisations that declare that they have a plan in place for at least one of these areas are categorised as 'Achievers' Within the region, Hull City Council, Kirklees Council and Harrogate Borough Council have already signed the pledge, declaring their position as 'Achievers.'

27 It is recommended that Leeds City Council sign the Yorkshire and Humber Climate Pledge declaring their position as an 'Achiever' and provide an update to the next Climate Emergency Annual Update Report on the progression of their commitments.

Council Emissions - Overview

28 The chart below illustrates how these figures correspond to the trajectory required to achieve the net zero ambition. This shows the council to be on track, noting that the range of measures being implemented by the council as summarised in the sections below will need to be supported by major national policy, infrastructure and funding measures if this rate of progress is to be maintained.



29 The biggest challenges to removing the remaining emissions by 2030 for the council will be the transition of the remainder of our buildings from gas as the current cost of replacing an existing gas heating system with an air source heat pump is multiple times higher than if we were to replace with another gas boiler and will often result in higher running costs. There may also

remain some technological challenges with regards to our fleet replacement, especially in connection with our more specialist fleet where the low volume requirement means that the same level of product development hasn't taken place to find a zero emissions alternative.

30 As well as looking at scope 1 and 2 emissions, the council is committed to looking at how it can reduce its scope 3 emissions¹. With an annual external spend of almost one billion pounds, there is significant potential to use our buying power to reduce wider emissions associated with council services. Measuring scope 3 emissions accurately is very challenging and labour intensive. However, we have started to capture more accurate data for some of our spend categories as shown in the table below and this will enable us to monitor specific areas and develop action plans to reduce scope 3 emissions. Food emissions will be calculated every 3 years rather than annually due to the level of resource required to undertake this exercise.

	Tonnes CO ₂ e 2018/19		Tonnes CO ₂ e 2019/20		Tonnes CO ₂ e 2020/21		Tonnes CO ₂ e 2021/22
Grey Fleet (car mileage claims)	1,232		1,246		587		858
Business Travel (other)	173		199		24		56
Water	n/a		229		158		156
	Tonnes CO ₂ e 2018/19 ²	Food weight (Tonnes)	Tonnes CO ₂ e 2019/20 ⁵	Food weight (Tonnes)	Tonnes CO ₂ e 2020/21 ⁵	Food weight (Tonnes)	Not calculated
Food total	8,671	2,741	7,535	2,494	4,990	2,138	

Energy Strategy

31 With energy usage accounting for over 80% of the council's carbon emissions, and with the council having adopted a new energy strategy in February 2022, work has continued across all key areas to reduce energy related carbon impacts and costs. The ongoing global energy crisis has created major budget pressures, although the council's exposure to these costs has been managed through the implementation of its energy purchasing strategy approved by Executive Board in March 2022.

32 The table below illustrates the progressive year-on-year reductions in gas and electricity consumption since the declaration of the Climate Emergency in March 2019 and the associated carbon emission reductions.

LCC energy consumption				
	Gas (kWh)	Elec (kWh)	Total kg CO ₂ e	% CO ₂ e reduction (compared to 18/19)
2018/19	155,185,026	123,951,177	62,626,120	
2019/20	150,975,376	128,138,426	59,688,728	
2020/21	147,653,416	106,961,797	51,431,690	
2021/22	140,519,929	104,264,513	47,309,569	25%

¹ Scope 3 emissions are those emissions that the organisation is indirectly responsible for from buying products or services from its supplier or mileage completed by employees in their own vehicles.

² The CO₂e emission factors for Food items vary between sources, so the figures presented above are best estimates using the averages of min/max values. For some products, emission factors have had to be defaulted to the BEIS generic food/drink emission factor and for other products the most likely food equivalent has been used.

- 33 Action and progress since the last annual update can be summarised under the following key areas:
- 34 **Reducing energy consumption** – the council has continued its work to ‘right size’ the corporate estate in response to new ways of working and changes to models of service delivery, as well as ongoing work to raise awareness amongst building managers, staff and service users of the impacts of energy usage, and the improved use of data to understand where further energy savings can be achieved through better energy management. In addition to the programme led by Strategic Asset Management, a dedicated Energy Reduction Team has been established to ensure focused action to reduce energy consumption. Measures have included a range of asset disposals, permanent and temporary closures of buildings, concentration of staff into specific areas of buildings to enable partial shutdowns, adjustments to building and facility heating settings, development of site-specific action plans at high-consuming sites and enhanced staff engagement and awareness raising on energy usage issues.
- 35 **Improving energy efficiency** – the programme of work to secure grant funding and deliver energy efficiency, low carbon heating and renewables generation measures across the corporate estate and schools has continued, with a further 10 schemes delivered in 2022, totalling 47 since the Public Sector Decarbonisation Scheme (PSDS) opened in September 2020. A bid has been submitted for further funding of £10.3m, which would enable a further 21 sites which are planned to be delivered by March 2024. Schemes include the installation of heat pumps, building energy management systems, insulation, LED lighting, solar PV and a range of other energy efficiency measures. Work has also been undertaken to review how the crematoria can be made more energy efficient and reduce gas use by adopting common operational practise used by other local authorities whilst ensuring that the Council continues to respect the guidelines set out by the Institute of Cemetery and Crematorium Management. In addition to this, the wholesale conversion of the city’s street lighting to LED has progressed rapidly, providing substantial reductions in electricity consumption.
- 36 **Increasing renewables** – In terms of the council’s target to move to 100% electricity provided by green sources, although corporate power purchase agreements (PPA’s) with major renewables generators continue to be explored and remain a key part of the strategy, market energy price increases have meant that these are currently less favourable and the council has therefore prioritised feasibility work to itself bring forward local large-scale solar renewables generation sites within Leeds—building on the 8.3 MW of solar generation capacity that council schemes have already delivered in recent years. Alongside work on the Local Plan Update to identify potential ‘opportunity areas’ for renewables across the district, work has also been progressed to assess technical feasibility and the financial business case of large-scale solar, and ongoing site selection work to evaluate needs and constraints, assessing potential brownfield prior to consideration of greenfield sites, and non-Green Belt before Green Belt. In support of the delivery of future schemes a report was presented to the Executive Board in December 2022 to agree the required capital funding injection and the proposed procurement and commercial arrangements for solar schemes. An increased target to deliver 30% of the Council’s electricity demand through locally based renewables generation by 2025/26 was also agreed, representing a substantially increased commitment over the previous 10% target.

37 **Streetlighting**

- 38 One of the council’s main users of energy is streetlighting, accounting for around 30% of electricity consumption. As noted above, a four-year programme to transfer the city’s streetlighting to run on LEDs by October 2023 was commenced in 2019 at a rate of around 1,900 new lanterns installed per month. Once complete it is expected that this scheme will

reduce CO₂ annual emissions from streetlighting by over 4,573 tonnes CO₂e and reduce the council's electricity consumption by around 24,400 MWh per year. Further measures to provide the ability to dim street lighting where this can be safely delivered have been assessed and are currently expected to be implemented progressively from March 2023.

39 Existing Buildings

40 In March 2021, the council was successful in securing over £25m grant funding to invest in decarbonising its estate through the first round of the Public Sector Decarbonisation Scheme. This funding was used to install a range of low carbon technologies at 40 sites representing a variety of different building types (such as homes for older people, leisure centres, offices, schools, heritage sites, etc):

41 Technologies include:

- District Heating connections
- Air Source Heat Pumps
- Solar Panels
- LED lighting
- Insulation / Glazing

42 All works were completed by 30 June 2022, with a total carbon saving of 3,857 tCO₂pa.

43 During the delivery of the above, the council then successfully applied for a further £4.3m funding to install similar works at ten additional buildings, with a further carbon saving of 684 tCO₂pa. These schemes are currently being delivered.

44 The council has since submitted two further bids totalling £10.3m to decarbonise a further 21 buildings comprising schools, corporate and heritage buildings, to be delivered by March 2024. Beyond this it is anticipated that Central Government will put out further calls for funding applications throughout the coming years. The council continues to undertake assessments of buildings in partnership with its appointed contractor so we can be ready to submit further decarbonisation funding applications as and when funding is made available.

45 The use of buildings will change over time as service requirements develop and evolve. This may open up opportunities for buildings to be used for different purposes which may necessitate more comprehensive refurbishment schemes being brought forward to remodel the building and address backlog maintenance requirements. In these situations, the council will take the opportunity to explore the potential to further improve the energy efficiency and performance of the building through implementation of a range of retrofit measures.

46 Fleet

47 The council's fleet of electric vehicles is currently 380, believed to be the largest zero emission fleet of any local authority in the country. There are currently 121 depot charging points and 117 charge points at employee homes and work has been completed to future proof both the new Waste and Seacroft Ring Road depots to enable additional charge points to be installed when required. Work to develop the fleet replacement programme continues to seek to identify opportunities to transition heavier, more specific purpose vehicles to EV or alternative fuel options. This remains challenging, we worked with the Energy Savings Trust in 2022 to look at the fleet and continue to engage with EST as well as other key stakeholders to identify opportunities for replacement of vehicles with zero emission alternatives. The key barriers to delivery of this change remain lack of availability of suitable zero emission vehicles, as well as the cost of the vehicles when they are available with the additional need to develop the required fuelling infrastructure to support them. The government, whilst planning to end the sale of conventional engine cars and vans in 2030, has set a later date of 2035 and 2040 for HGV's (depending on size) which means that the market in heavier vehicles is some way behind and the horizon for price parity will also be later for HGVs than for cars and vans.

48 Following an exercise to establish total cost of ownership models, the council is now in the process of purchasing 3 electric refuse collection vehicles, with the capital now approved for this. These will replace outgoing diesel vehicles in the refuse fleet. The council continues to develop a fleet replacement strategy that best aligns the decarbonisation and air quality priorities with service need. The long-term aim is to identify dates for when vehicles will be available in alternative fuel models but also when there will be better price parity (taking into account the potential revenue savings associated with alternative fuel vehicles) as for vehicle types that are new to market, the alternative fuel option is proving unaffordable.

49 **Scope 3**

50 Over the last year the council has continued to focus on emissions relating to food. The Leeds Food Strategy was launched, in draft format, in October 2022 and approved for consultation at Executive Board. The strategy was open to public consultation until December 2022 and a summary of the consultation and an updated version of the strategy can be found at appendix (2 and 3) for adoption by Executive Board.

51 The consultation on the Leeds Food Strategy lasted for 8 weeks and comprised of an online survey as well face to face/virtual meetings and sessions. Food Wise Leeds, the city's food partnership delivered the consultation alongside LCC. A total of 307 individuals and 28 businesses/organisations completed the online survey and a further c.700 people were verbally updated about the consultation at face-to-face/virtual meetings.

52 The overarching vision for the strategy is that "Leeds has a vibrant food economy where everyone is able to access local, healthy and affordable food, produced in a way which improves our natural environment and embraces innovation". This was written and agreed by a group of almost 100 stakeholders at an event that launched the strategy work in January 2022. In the recent consultation, 90.7% of those that completed the survey agreed with the vision statement.

53 The Leeds Food Strategy follows three themes, which align with the three pillars of Leeds City Council's Best City Ambition: health and wellbeing, food security and economy, and sustainability and resilience. The final theme sets out 5 objectives which will contribute to work relating to reduction of food related emissions in Leeds until 2030. In the recent consultation, 89.2% of those that completed the survey agreed on focusing on these three themes.

54 The 5 objectives within the sustainability chapter are (ranked in order from most important to least important according to consultation):

- a) Tackle waste by reducing, redistributing, and utilising surplus food.
- b) Empower residents to choose healthy diets by raising awareness of choices that are good for the planet.
- c) Encourage and enable innovative and community-led food production.
- d) Support local farmers to transition to resilient and profitable agriculture which improves the environment.
- e) Champion environmentally sustainable and resilient procurement.

55 Agreement with the above objectives ranged from 85-95% with objective 'a' above being the most agreed to and objective 'b' above being the least. Overall this is high level of agreement and the focus of work will move to delivery from now until 2030.

56 The Leeds Food Strategy went out to consultation in October 2022 for an eight-week period. The strategy follows three themes (each with five objectives), aligning it with the three pillars of Leeds City Council's Best City Ambition

- Health and Wellbeing
- Food Security and Economy
- Sustainability and Resilience

Comments from respondents were largely positive with high levels of agreement in the vision, themes and objectives of the strategy. Current affairs such as the cost of living crisis, featured heavily within responses.

It was highlighted that some of the language used was not fully inclusive and made it difficult to understand. Additionally, it was felt that allotments, waste food packaging and cultural food were not mentioned enough throughout the strategy.

As a result the following changes have been made to the Leeds Food Strategy:

- Amendments to the language used within the document to ensure it is accessible by all
- Re-ordering of the objectives to reflect what the residents, businesses and organisations feel is the most important priorities for Leeds
- The topics that were felt to be undermentioned have been acknowledged and highlighted in the updated strategy

57 Leeds currently holds the 'Sustainable Food Places' Bronze award and next year will, alongside Food Wise Leeds, apply for the Silver award.

58 Over the last year the council has worked with the University of Leeds to develop a new carbon footprint calculator that can be used to calculate the carbon impact of school meals provided by Catering Leeds and shows the breakdown of contributing carbon per ingredient. Catering Leeds are in the early days of implementing the tool, using it to inform them at the menu design stage and intend to use the outputs of the calculator to advertise the carbon impact of different menu options. The calculator will also hopefully be tested across LCC cafes next year, giving consumers more information about the carbon impact of a meal which will help them make more conscious decisions. In the strategy consultation when asked 'Would knowing that a food or menu item has a high carbon footprint influence your food choice?', 26.2% of people answered 'definitely' and 40.7% of people answered 'probably'. Including carbon labelling on school menus and LCC café outlet menus could see more consumers make a lower carbon meal choice—contributing to the council's target to halve the carbon footprint of the average meal served by 2030.

59 In October 2022, Executive board noted the introduction of the Leeds City Council's Food Procurement Guidelines. A cross-council group worked together to create a set of guidelines that should be referenced whenever council officers procure food or whenever a new food supplier is being chosen. This includes ensuring that the ban on air-freighted food and importance of buying locally is reflected in all new council contracts, as well as placing more emphasis on contractors to provide data that allows more accurate carbon assessments to be undertaken.

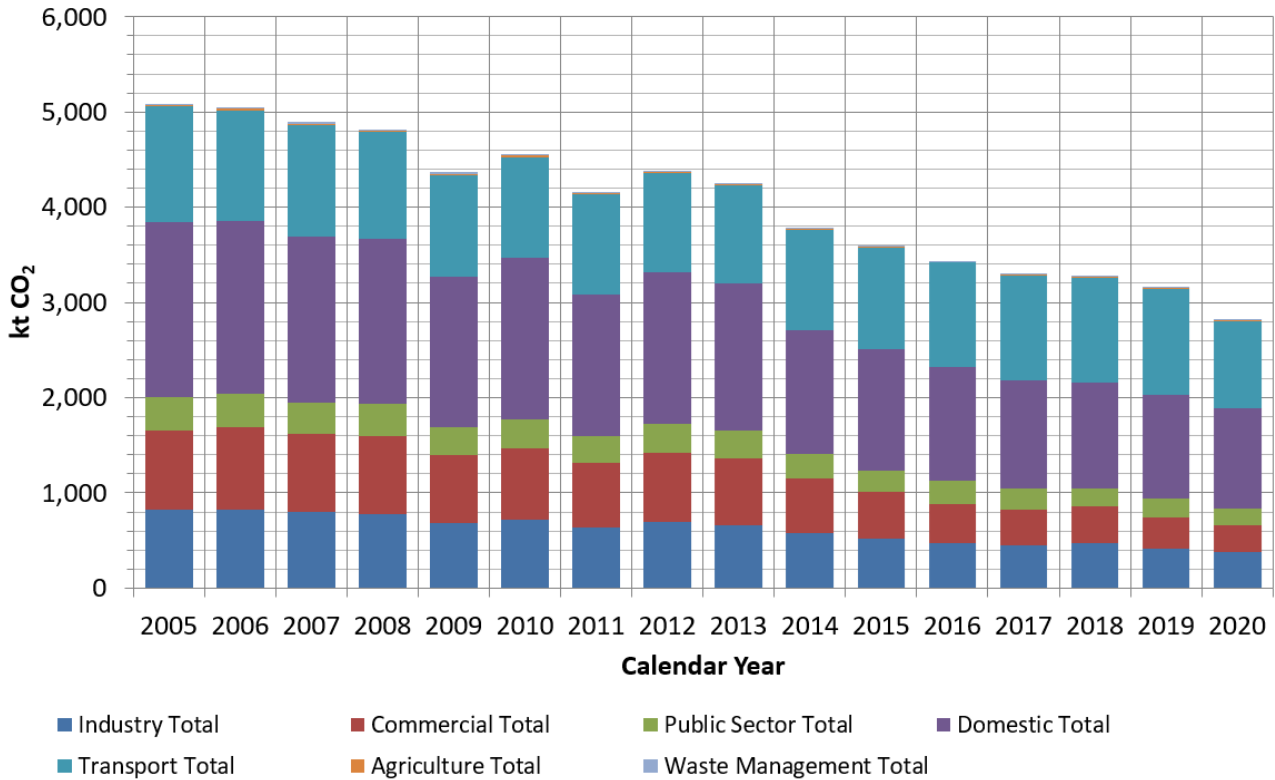
60 In 2020/21, Leeds City Council spent an estimated £4,718,809 on food. The 2,133 tonnes of food purchased amounted to a carbon footprint of 4,990 tonnes of CO₂, hence the importance

of the implementation of these procurement guidelines. The Leeds Food Strategy consultation suggests that residents are supportive of action to reduce the council's scope 3 emissions from food: 91.7% of respondents to the online consultation stated that it is important that Leeds City Council considers the impact of the food it purchases on the environment.

- 61 As well as the very targeted work that is being undertaken on food, there are key steps that can be taken to consider the Climate Emergency in procurement and delivery of commissioning of works and services. The team are working across directorates to support this work, with some notable examples of key services taking a strong lead on this.
- 62 The Leeds Flood Alleviation Scheme (LFAS2) is taking a proactive approach to tackling the embedded carbon (the emissions from extracting raw materials through to construction) that is part of this type of project delivery. LFAS2 aims to reduce flood risk to communities and businesses along the River Aire corridor between Leeds Rail Station and Apperley Bridge. The scheme will provide a 1-in-200-year level of protection against flooding in the LFAS2 area. Once delivered, the scheme will reduce flood risk and provide better protection for 1,048 homes and 474 businesses. LFAS2 will also raise the level of protection across the LFAS1 area in the city centre from 100yr to 200yr which covers another 3000 homes and 500 businesses.
- 63 The construction, operation and decommissioning of assets is a major source of greenhouse gases (GHGs). To address the carbon impact of the scheme, LFAS established a carbon baseline – the quantity of carbon that would be emitted because of the scheme without additional mitigation. The baseline emissions associated with the construction of LFAS2 are estimated to be approximately 23,600 tonnes of CO₂ equivalent (tCO₂e). In the commissioning of the work they are now working closely with engineers and contractors on the project to reach the targets set out below identifying alternative, lower-carbon approaches and materials.
- 64 Most of the baseline emissions are expected to arise from the use of materials. LCC has set a **20%** carbon reduction target from the use of materials. If this target is reached, this would reduce scheme emissions by approximately 3,200 tonnes. Just under 25% of the carbon baseline is associated with fuel and electricity use during construction. LCC has set a reduction target of **10%** for the carbon from construction energy use. If this target is reached, this would reduce scheme emissions by over 500 tonnes. This process of identifying the carbon baselining of such schemes therefore demonstrates the ability to target reductions through careful selection of processes and materials used in delivery of schemes, an approach that Highways are seeking to utilise across all their construction schemes. Some of those measures include use of HVO in plant machinery use, utilisation of Eco Sheet piles (a material used as part of flood defence) that are manufactured from scrap material and are re-usable and recyclable and use of electric vehicles by teams and contractors working on the project.

65 City Emissions - Overview

Leeds - Subset CO₂ emissions within scope of Local Authorities



66 The breakdown of this data against sub-categories is detailed below:

	Mega (i.e. million) tonnes CO ₂
Industry, Commercial, Public Sector, Agriculture & Waste Management	0.8558
Domestic	1.503
Transport	0.9160
Total	2.8221

67 Housing

68 The council has made good progress this year on improving home energy efficiency, despite a lack of long-term support from government. The focus has been on delivering grants already secured, attracting new income, strategic development and lobbying for additional support.

69 The council has delivered home improvements with support from:

- a) The Green Homes Grant Local Authority Delivery funding (LAD) from BEIS which supports primarily private sector homes, with strict requirements to only support low-income households in the oldest and coldest homes, all within a funding cap. This was funded by government in 3 phases, each with different requirements, with delivery between late 2020 and summer 2022. More than 900 homes benefited from these schemes in total. 558 homes were fitted with 1.7 megawatts of rooftop solar panels which produce free electricity during daylight hours, helping to reduce electricity bills. External wall insulation was the second most popular upgrade with 238 households now benefitting from the technology. Once fitted to the outside of a building, the insulation helps lock in heat without sacrificing indoor space. The project also installed loft and roof insulation, heat pumps, new windows and doors and even connected some homes to district heating.

- b) The Getting Building Fund from the Ministry of Communities, Housing and Local Government's to deal with disrepair and provide external wall insulation, room in roof insulation, new windows, doors, heating systems and repair work for private homes in Holbeck.
- c) The Social Housing Decarbonisation Fund (SHDF) from BEIS, which funds innovative whole house improvements to council homes.
 - i. SHDF Demonstrator is improving council homes in Holt Park, installing super insulation to walls and roofs, high performance windows and doors and air source heat pumps and solar panels. The contractor is focussing on high quality detailing to minimise cold bridging and heat loss.
 - ii. SHDF wave 1 funding for external wall insulation and other energy efficiency improvements within the Lovells, Naseby Grange and Parkways multistorey flats.
- d) The European Regional Development Fund (ERDF) funding from the EU which supports a variety of low carbon projects.
 - i. The initial Lincoln Green work was completed in 2021, with c1700 flats connected to district heating and external wall insulation on 3 blocks. The project was extended in 2022 and now includes leasehold flats using LAD funding and an additional 170 council flats using TIBB underspend. It will also provide insulation to another block.
 - ii. The Transformational Insulation in Back to Backs (TIBB) project was designed to install innovative external wall insulation on 750 council owned back-to-back homes but has stalled due to supply chain issues. It will now complete 150 homes with underspend moved to other projects.
 - iii. The Fitting the Future (FtF) project has been reshaped in agreement with ERDF using TIBB underspend and now focusses on whole house insulation for 300 homes, with an offer of electric vehicle charging points for 50 homes.
 - iv. The Clustering for Warmth (CfW) project is delivering innovative Ground Source Heat Pumps to 845 council flats in 18 blocks. We are now working with the contractor to extend the offer to leasehold flats.

70 Key metrics from these existing grants are provided in the table below:

Name	Grant income	Total value	Homes complete	Homes yet to be completed	Status
LAD 1a, 1b & 2	£9.3m	£9.5m	930	0	Complete
GBF	£3m	£4.52m	146	0	Complete
SHDF Demonstrator	£4.1m	£9.8m	190	0	Complete
SHDF wave 1	£9.59m	£24.9m	0	630	August 2023
ERDF Lincoln Green	£9.1m	£20.2m	1180	170	June 2023
ERDF TIBB	£1.07m	£2.15m	22	128	March 2023
ERDF FtF	£3.6m	£7.2m	0	300	June 2023

71 Additional funding

72 In addition to the capital programmes outlined above, the council has also bid for £3.07m of SHDF wave 2 funding. If secured, this will be used to connect the 3 Lovells blocks to district heating and install ground source heat pumps in the 2 Claytons blocks, with a total project value of £8.4m.

- 73 As part of the Levelling Up bids for the city, the council has asked for further funding which, if successful, would allow us to undertake Holbeck phase 3 to provide whole house insulation to around 240 back-to-back homes.
- 74 We continue to be concerned that the funding outlook is very limited, with current support focussed on social housing and off-gas grid low-income private sector properties, despite the cost-of-living crisis now affecting many households. This leaves a huge amount of unmet need in Leeds, particularly low-income Victorian terraced areas and more affluent areas requiring more expensive improvements.
- 75 Government is currently consulting on ECO+ which is designed to extend eligibility to the least efficient properties in council tax bands A-D. While this is welcome, we are concerned that it only allows a single measure to be installed in each home, rather than taking a whole house approach, which is widely recognised as the best and most efficient approach.
- 76 Strategic**
- 77 The council has prepared a Net Zero Housing Plan which is published alongside this report. This is designed to outline the size of the problem in Leeds and summarise the key actions that need to be taken to accelerate housing decarbonisation within both new and existing homes.
- 78 During 2022, the council has been very active at regional and national levels, developing plans to accelerate housing decarbonisation, particularly amongst non-fuel poor homes, which have been overlooked for many years.
- 79 The council has worked closely with the West Yorkshire Combined Authority on plans for a Better Homes Hub. The Better Homes Hub is designed to provide a regional structure that will support the home retrofit industry to grow rapidly to meet future demand. This will initially use gainshare and other grant funding to create projects that stimulate demand, whilst building the retrofit infrastructure needed over the long term. Key elements approved at the Strategic Outline Business Case stage include:
- a) Funding for demonstrator projects within each local authority;
 - b) Creation of a one-stop-shop that hand-holds customers through the retrofit journey;
 - c) Creation of a financial product that is available to all so that retrofit is within everyone's reach;
 - d) Coordinated regional branding, marketing and advice services;
 - e) A training and skills package to support the industry to grow.
- 80 The council has also been working with the Prime Minister's Business Council since summer 2022 to jointly find solutions to accelerate retrofit under the banner of the Local Retrofit Accelerator (LRA). We deliberately chose to address able-to-pay private households for two reasons:
- a) The able-to-pay market has been overlooked since the end of the Green Deal, despite representing 60%+ of the retrofit market and having the lowest EPC rating of all sectors;
 - b) Fuel poor homes and social housing require grant funding but where this is provided (i.e. SHDF, GBF, Levelling Up Fund) it is relatively easy to achieve near 100% take up rates.
- 81 The LRA therefore aims to address three challenges which are slowing down energy efficiency retrofit amongst non-fuel poor private householders. These challenges are a complex customer journey, a fractured supply chain and an unattractive financial proposition.
- 82 Work continues in 2023 to take the learning from this work and establish a one stop shop to take this work forward.

83 The council has also been very active in bidding for smaller amounts of funding to help put in place some of the support needed to accelerate retrofit. This includes:

- a) £50k from the MCS Charitable Foundation to build capacity within the team;
- b) £200k from the Green Homes Finance Accelerator project in partnership with Lloyds and Arup (which could lead to a c£2m demonstrator phase) to create new financial products;
- c) £75k from the UKRI Pioneer Places research project in partnership with UKGBC and MCS Charitable Foundation (which could lead to an £8m implementation phase) to focus on whole place decarbonisation.

84 Business/ Commerce

85 2022 was another successful year of growth for the Leeds PIPES district heating network, with works ongoing across the city to connect new customers and extend the main spine network. Six customers have been connected to the network in 2022, bringing the total number of customers connected to ten, with two further customers due to start taking heat by April 2023, and a significant number of potential customers in the pipeline currently. The table below shows key metrics for the network since it commenced operations, with projections up to 24/25.

	2020/21	2021/22	2022/23 (forecast)	2023-4 (forecast)	2024-5 (forecast)
Heat supplied to customers (MWh)	11,757	15,454	24,000	32,000	38,000
Number of non-domestic customers	1	4	12	13	18
Number of domestic customers	c1600	c1700	c1800	c1900	c2100

86 Six customers have been connected to the network in 2022, bringing the total number of customers connected to ten, with two further customers due to start taking heat by April 2023, and a significant number of potential customers in the pipeline currently. Volatility in the gas and electricity markets has improved the already strong Leeds PIPES commercial offer when compared to counterfactuals of gas and heat pumps, and the network continues to prove its reliability to customers. The Phase 3 extension to the spine network started on site in September 2022 and will continue into summer 2023, whilst the project team will continue to develop business cases for additional extensions to feed into funding applications later in the year.

87 The majority of connections to the network so far have been public sector customers, but we anticipate that the next phase will primarily connect commercial non-domestic customers. This will raise the profile of the network, and prove the viability and benefits of DHN connections for commercial customers.

88 This is particularly important given the government's plans to introduce a District Heating Zoning Policy by 2025. This will make it mandatory for certain buildings, including new developments, in specific zones to connect to district heating. The council anticipates that this policy will accelerate growth in the coming years and we continue to work closely with government on the details of the policy, including participating in several pilot projects which may see Leeds become the test-bed ahead of a national policy roll-out.

- 89 One of these pilots is seeking to develop practical zoning delivery plans for several of the most promising zones in the city. We anticipate that these will focus on the existing Leeds PIPES area in the city centre, the planned SSE network around Skelton Grange and some demand or supply-led zones. In parallel, the council is continuing to develop plans for a network in the South Bank, given its position as one of Europe's largest city centre regeneration schemes. Two phases of feasibility have completed to date, with positive engagement with potential customers. The council has submitted a funding application to BEIS to undertake Detailed Project Development prior to submitting a capital funding application to the Green Heat Network Fund later this year.
- 90 In December, the Mayor of West Yorkshire launched a new £1 million fund to help businesses struggling with energy bills which offers up to £5,000 to help individual businesses with practical solutions to reduce costs, including help to buy a more efficient boiler or install low-energy lighting. The scheme is part of a multimillion-pound package of measures from the West Yorkshire Mayor to help people and businesses with the escalating cost of living crisis whilst accelerating climate action. A new £10.6 million West Yorkshire Business Sustainability Programme, led by the LEP, will launch in April to help small and medium sized firms to reduce their bills by being more energy efficient and sustainable. It builds on the LEP's current ReBIZ programme which has helped more than 600 SMEs to date. It will provide a one-stop-shop for businesses and non-profits wishing to better understand and reduce their impact on the environment, offering support with resource efficiency, carbon footprinting, a peer network, and grants. The council will support the West Yorkshire Combined Authority to promote the scheme in Leeds.
- 91 Like the council, many of the city's other large organisational emitters are also taking significant actions to reduce their own impact on the environment—supporting the city's journey to become the UK's first net zero city. Leeds Teaching Hospital Trust has committed to becoming carbon neutral by 2040. The trust has so far invested more than £13.7 million on projects related to energy efficiency, low carbon heating, low energy lighting or renewable energy and has become the first 'Carbon Literacy' accredited NHS trust in the UK. Arla, one of the world's largest dairy producers, is also one of the largest emitters in Leeds. It aims to have reduced its carbon footprint from production, logistics and energy usage by 63% before the end of 2030. To achieve this, the company has pledged to convert to 100% green electricity across all its production sites and is transitioning its fleet of vehicles to use greener fuels such as biodiesel, biogas and electricity.
- 92 The council also regularly supports and showcases examples of business and other organisational sustainability initiatives to encourage best practice. This includes a regular spotlight featuring different case studies in its popular #LeedsClimate e-newsletter which has grown to 6,892 subscribers. Recent examples of business action celebrated this year include Sulzer, a global pump manufacturing company based in Leeds which has taken steps to support plant and animal life at its Leeds site by developing a wildlife garden complete with butterflies, bees, trees, shrubs and a pond. Similarly, HEART Headingley was featured earlier in the year after it installed a range of carbon-saving measures including solar panels, a cleaner cooker, a greywater recycling system, light sensors, and a building management system which controls heating throughout the building.

Transport

- 93 The Connecting Leeds Transport Strategy has decarbonisation as one of its central pillars, in line with the council's own priorities. The Strategy states: "Our vision for Leeds is to be a city where you don't need a car. Where everyone has an affordable and accessible zero carbon choice in how they travel. We want to Connect Leeds, Connect Communities, and Connect Businesses together in the most sustainable ways."
- 94 Transport is also the main contributor to carbon emissions in Leeds with the Council making a commitment to a long-term air quality strategy in order to help ensure compliance with legal limits of

emissions to bring about further air quality improvements and associated health benefits. Everybody needs to work together in order to drive change if we are to achieve our ambitious targets by 2030.

- Reducing the need for travel and the number of car journeys, especially at peak times
- Encouraging people to choose active travel and public transport
- Improving the efficiency of the transport network and making better use of our road space
- Encouraging and leading the uptake of zero emission vehicles in freight, public and private transport.

- 95 A Streetscape Reallocation Policy has been adopted in 2022, which prioritises space on our streets for sustainable transport. It will be used by all scheme designers, with training and best practice shared, to ensure the principles of the Connecting Leeds Transport Strategy materialise on our streets.
- 96 Since September 2022 bus passengers in Leeds have benefited from lower and more consistently priced fares. Thanks to two new Mayor's Fares, single journeys capped at £2 and the MCard DaySaver at £4.50, reduced from £5.50 – an almost 20% saving on the current price.
- 97 Early data analysis at a West Yorkshire level would suggest that bus patronage in September increased by 5% compared with June 22. Bus travel by adult paying passengers in September 22 was around 10% higher than average monthly patronage in 2022.
- 98 The implementation of schemes on Park Row, The Headrow, Corn Exchange and Meadow Lane have transformed these areas, provided improved bus reliability, safe and more accessible cycle facilities and enhanced public spaces including Cookridge Street and the first phase of Aire Park.
- 99 Building on these successful schemes, significant works are ongoing in the city centre at City Square, Leeds Station, and Crown Point Road to create a world class city centre where people want to live, work and visit.
- 100 Armley Gyratory improvements are on site, which complements the work being undertaken by National Highways on the M621 and follows the successful completion of Regent Street Bridge to provide appropriate routes for strategic traffic around the city centre.
- 101 The city centre cycle network continues to expand with the Western Gateway scheme on site and followed shortly by improvements on Crown Point Bridge and key links in the south of the city centre from Dewsbury Road to Neville Street. Funding from CRSTS has been secured to continue this network expansion with feasibility work underway ahead of public consultation next year
- 102 The LPTIP programme successfully finished delivery in 2022. A highlight was the world class gateways to the city centre as described above.
- 103 Three new segregated cycle routes completed as part of City Connect 3; Dewsbury Road, Elland Road, and Clay Pit Lane.
- 104 Active travel encouraged through the creation of safer cycle lanes. Pedestrians will benefit from new walking routes and safer crossings. All of which is a bid to make sustainable travel more appealing by improving walking, and cycling connections
- 105 The package of public transport improvements was informed by the Transport Conversation and schemes delivered aspirations in line with the Leeds Transport Strategy. Key was increased use of public transport in a manner which contributes to carbon reduction by encouraging modal shift away from the private car and supporting inclusive growth by making it easier to access education, employment, and public services.
- 106 Extensions of the 2 Park & Ride (P&R) sites at Temple Green (388 space expansion taking capacity to 1388 spaces) & Elland Road (570 space expansion taking capacity to 1358 spaces) in addition to the new award winning Stourton site (1200 spaces), with solar power generation and electric buses, has increased the capacity to nearly 4000 spaces.

- 107 Patronage levels continue to grow post pandemic, and the service continues to get excellent customer feedback. P&R provision has supported the city centre commuter parking planning policy to reduce the number of temporary city centre car parks and encourage development of these sites.
- 108 Full details of achievements of the LPTIP schemes and P&R are contained in the LPTIP programme report for Executive board of the 8th February 2023.
- 109 To encourage rail travel, a new White Rose Station is on site and development work continues to be progressed by the Combined Authority and Network Rail for new stations at Thorpe Park and LBA Parkway
- 110 As part of last mile delivery decarbonisation, a trial agreement has been approved with Starship Technologies to provide a new and innovative last mile delivery service using zero emission autonomous personal delivery droids (PDDs). The trial was launched on 30th November 2022 and will run for 3 months with the option to continue if successful. During the trial period residents in the participating area will be able to use the Starship delivery service to order groceries via an online app from two CO-OP stores located within the trial area. The service operates with 20 delivery droids (10 at each location).
- 111 The Council continue to support the development of Mass Transit with the Combined Authority. A well connected, low-carbon transport alternative is only possible with a modern, integrated transport system, of which Mass Transit is an integral part. An updated Mass Transit Vision document has been published for consultation and significant development funding has been secured through the City Region Sustainable Transport Settlement (CRSTS). The West Yorkshire Mass Transit 2040 plan has recently been out for public consultation which ran until January 2023.
- 112 Decarbonisation of the freight sector is an essential part of the Leeds Transport Strategy which currently has not been measured in full. Leeds City Council have played a key role in the development of the Combined Authority rail freight study which is part of the wider Rail Strategy. A draft has been produced and will be published shortly. LCC have also fed into work on identifying potential new rail freight interchange sites across Leeds and West Yorkshire.
- 113 **Development of public electric vehicle charge infrastructure.**
- 114 The electric charge infrastructure in the city has continue to grow in line with the increased prevalence of plug-in vehicles in the city. From 129 public charge points in the city in October 2021, there are now 418 as at October 2022, with the number increasing constantly.
- 115 This provision includes further charging installed using Residential Charge Scheme grant funding that has delivered 30 fast charge points across 6 locations in Leeds, with further funding secured that is enabling 54 fast charge connections across 9 locations in Leeds to be completed in early 2023. These installations are designed to support residential areas where housing typically lacks off street parking and therefore households whose residents have been unable to utilise the home charge grant, that has now been ceased.
- 116 City scale infrastructure will need to be delivered collaboratively and utilising the various levers the council, and central government has, recognising that commercially viable and sustainable, well maintained and reliable networks are likely to be best managed by the private sector who operate at regional, national and international levels with the back office, maintenance, customer service operations and purchasing power to be able to deliver best value to customers in a competitive charge point environment. A regional strategy to deliver infrastructure is being developed between WYCA and the five local authorities.
- 117 As well as working on development of this strategy, a regional framework is also being developed for use by the five West Yorkshire districts. This framework will allow the councils to call off suppliers from the framework to deliver either grant funded projects, or work with the

operators to deliver projects that are either fully or part funded through their own investment. Significant work with the sector over the last year has found that there is a clear appetite for commercial investment in delivery of charge infrastructure in the city and wider region, so that in line with the electric vehicle charge point infrastructure strategy agreed in 2022 we can act as a facilitator and active partner in ensuring that the growth of zero emission driving can continue. The West Yorkshire EV Strategy is expected to be agreed in spring 2023, with the framework established in time to be utilised to support a regional bid for funding from the governments Local Electric vehicle Infrastructure (LEVI) grants that are expected to be announced in mid 2023.

118 **EV Trials**

119 The EV Trials Scheme completed in Spring 2022. Leeds launched the first local authority electric vehicle trial scheme in 2020, providing vans to businesses, public sector and third sector organisations for 2 months, or cars licensed for private hire use for up to one month. The scheme allows participants to gain valuable experience of driving electric vehicles as well as getting insight into their economic benefits. By the close of the scheme over 230 trials were completed, with almost 400,000 zero emission miles travelled, savings approximately 35 tonnes of CO2 emissions. 52% of van trial participants plan to purchase an EV following the trial, with 39% of private hire drivers planning to purchase an EV. By the time of writing the project evaluation report in mid 2022/3 42 EV's had been purchased by participants of the trial scheme with many projecting purchases of EV as their next vehicles when due to replace fleet

120 Leeds City Council successfully secured £100,000 of funding for E-Cargo bikes to support transition of last mile delivery to zero emission mode. These E-Cargo bikes were purchased in 2022, with the vehicles being made available to business to trial through the Influencing Travel Behaviour team. The funding has enabled the purchase of 27 E-Cargo bikes in a range of different styles and sizes to enable best fit for different operational uses. As well as making these available to business, public and third sector trialists internal services to LCC will also trial these bikes. Evaluation of the E-Cargo trials will be undertaken with GPS tracking systems being procured to enable effective data analysis of miles, usage and range, so that their use can be best evaluated and promoted. We are also working with the Energy Savings Trust and Leeds University's Institute for Transport Studies on a project to establish whether E-Cargo provides opportunity for modal shift for commuters, or as part of household use.

121 **White Rose Forest**

122 The council's Woodland Creation Scheme is continuing to work towards its target of planting 50 hectares of trees per year on council land. The planting objective is to capture and store carbon to contribute to the net zero ambitions. The White Rose Forest have helped the council secure funding to support the annual target of 50 hectares of planting and are continuing to support with securing the funding for delivery of this in subsequent years.

123 As well as planting, the Woodland Creation Scheme continues to include a successful tree seed collection campaign run in schools and other council facilities and an educational pack for schools.

124 The council is currently strengthening its policies in relation to planning policy through the Local Plan Update in terms of planting more trees in association with new development. Planners continue to advocate for trees as part of the planning process, however currently legislation does not allow for protection of trees on the basis of carbon capture, only on the basis of amenity.

125 The council is also promoting tree planting to businesses, farmers, landowners, institutions and residents. The White Rose Forest team have worked with the council on development of

processes and communication materials to support engagement with those stakeholders. A web page and leaflet have been launched and distributed to stakeholders as well as land agents and auction marts in the sector. Those interested in planting trees are referred to the WRF Joint Venture team who engage partners such as Groundwork and the Woodland Trust who help with the planning, funding and planting as well as maintenance of the new woodland.

126 The council is also liaising with faith organisations to look at the potential for planting on areas around places of worship and other land held by these institutions. Work is on-going with Leeds Community Health Trust to look at planting on clinical sites and the team is also working with Northern Power Grid to consider planting at substation sites. Funding and planning support will again be provided through White Rose Forest and Joint Venture.

127 In 2022 the council successfully applied for Tree City Of The World status, this is an award run by the Arbor Foundation in the US and the Food and Agriculture Organisation of the United Nations. The award recognises the council's commitment to the planting, maintenance and planning for trees.

128 The council will launch the partnership with Trees for Streets in 2023, this is a web-based scheme to secure sponsorship for trees located in streets and parks, providing residents and businesses with the ability to contribute to planting specific trees in their neighbourhood or beyond. Development of this scheme for Leeds is at an advanced stage, with match-funding secured from the White Rose Forest and process for delivery agree with the Highways service.

129 **Green Jobs and Skills**

130 Adapting and mitigating climate change also brings with it the opportunity to create new, green jobs, as well as developing existing roles to ensure people have the relevant skills needed to complete their job in the future. Examples of this include gas engineers moving from the installation of gas networks to ground source heat pumps.

131 To address this need in the city, the Council has appointed a dedicated Green Skills lead to work across the sector to drive the work forward, mapping existing, and future needs of the sector, based upon current provision, to identify gaps in the agenda and and to identify the priority areas of focus.

132 Collaborative working with Leeds City College, Leeds College of Building and various government departments has provided opportunity to develop skills provision in the city for current and future generations. Other partnerships include working with WYCA and other Local Authorities to develop programmes to support unemployed individuals into Green Jobs and with Ahead Partnership to promote careers in the Green Energy and Low Carbon sectors.

133 In September 2022 the Future Talent Leeds Plan was launched having been developed with stakeholders in the city. The plan provides a set of ambitions to improve Talent and Skills across Leeds and supports people to develop and maintain the skills that make them, alongside businesses, resilient to change. A spotlight focus on Green, Digital, Manufacturing and Creative/Cultural sectors were identified as where key growth opportunities exist in the labour market.

134 Moving forward the focus of Green Jobs and Skills will be on developing the Employment and Skills 'Green Skills Plan' to support the transition to net-zero by 2030 and adapting to climate change. The plan will look to:

- **Inspire, Inform and Develop** the talent of the next generation. Facilitate green skills activities, inspiration opportunities, events, CPD and resources to support school engagement
- **Facilitate** easy access to green skills, job information/opportunities, career pathways and to enable young people and adults to make informed choices. Develop targeted green

skills/employability/innovation initiatives to support those furthest from the labour market, economically inactive, in low-paid/insecure work to develop skills required to access further learning/employment within low carbon growth sectors. Help to support the delivery of transition for those currently in jobs at high risk of not upskilling

- **Collaborate** with businesses and partners to understand and bridge skill gaps. Develop collaboration opportunities between key growth/transition sectors, businesses and partners with a focus on current/pipeline skills demands. Map the skills needed in key growth/transition sectors to identify opportunities and gaps
- **Support** businesses to develop green jobs, attracting, developing and retaining staff. Facilitate access to skills support for Leeds businesses and raise aspirations for a more inclusive workforce by targeting under-represented groups to gain employment/upskilling opportunities. Support the delivery of a just transition – supporting those currently in jobs at high risk to prosper through the transition
- **Communicate** Green skills campaign. Develop communication/promotional campaign/s to promote and accelerate the take up of skills provision for Leeds residents and businesses. Communicate ongoing partner local, regional, national green skills an developments/opportunities.

135 **Climate Resilience and Adaptation**

136 Climate adaptation is broadly defined as referring to any activity that minimises the impact of current, expected, and potential climate change and its effects. Climate change poses a threat to lives, livelihoods and the local environment. Climate related risks will continue to increase—even if the global commitments of the Paris Agreement succeed in limiting warming to well below 2°C—until global net zero carbon emissions are achieved. The UK is already experiencing changes to its weather with a climate already 1.1°C warmer than pre-industrial levels.

137 In July 2022, the council’s Executive Board approved the development of a Climate Adaptation and Resilience Plan based upon the approach outlined within a report to the Board that month. The council will build on and strengthen existing risk management, business continuity, and severe weather planning arrangements as part of this work. The Climate Emergency Action Committee (CEAC) will provide oversight of this work.

138 It will be important that the city’s services, infrastructure, and systems that residents and businesses rely on are robust and resilient so they can continue to operate and provide effective outputs long into the future. The Committee on Climate Change has identified a number of specific risks that residents and businesses will face as a result of climate change that the council’s adaptation and resilience plan will need to consider.

139 The Emergency Planning and Resilience Team have robust arrangements in place for responding to severe weather events and to understand, as well as manage, the short and long-term risks. These risks will be monitored and developed with services to ensure they are ready for the increased likelihood and impact of those risks relating to climate change.

140 Climate-related hazards that Leeds is increasingly likely to experience can be grouped into four themes: extreme and prolonged **heat, flooding, drought,** and **cascading impacts** resulting from climate impacts elsewhere. In 2022, Leeds experienced the effects of several of these hazards first-hand. In July, heatwaves through the UK saw Leeds’ highest recorded temperature. This was a weather event which directly impacted the way many council services had to operate.

141 While a whole council response will be required as part of the climate adaptation and resilience plan, some teams with relevant experience or expertise will work together to facilitate workshops and support services in other ways. Officers from teams including: Resilience & Emergencies, Sustainable Energy & Air Quality, and Flood Risk Management have been

meeting regularly to progress this work.

142 In December 2022 the first internal Climate Adaptation and Resilience Workshop was held. More than seventy council officers from every directorate met to learn more about—and consider how to mitigate—the future impacts of local climate change on services and service users. Over the course of the morning, officers heard presentations from several speakers about how much more likely severe weather events like flooding and heatwaves are expected to become in Leeds by 2050 and what this means for the council’s risk management, business continuity, and emergency responder responsibilities. Attendees participated in various activities and discussed the short, medium, and long-term actions that individuals, services, and teams should be considering going forward. Engaging more services will provide opportunities to build an action plan highlighting actions that services have identified based on their expertise and increased awareness of the need to adjust to a changing climate. Climate Emergency Action Committee (CEAC) will provide check and challenge of this work.

143 Following this workshop services will continue to be supported and encouraged to develop their own service-led action plans to take long-term actions that mitigate the risks from climate change. Services will be encouraged to consider three different types of adaptation actions (the “three P’s” framework):

- Actions that **prevent** some hazards from occurring
- Actions that **protect** the city from harm and damage, by reducing exposure to a hazard
- Actions that **prepare** for an effective response to mitigate the harm and damage caused by a hazard by reducing the vulnerability of the people and places exposed.

144 The council is clear that this work is complementary of, not instead of, the council’s commitment to working towards becoming a net zero carbon city as quickly as possible. Becoming a net zero city (climate change mitigation) and preparing for the predicted impacts of climate change (climate change adaptation) are considered equally important strategic goals of the council’s climate action work.

145 Leeds City Council will be one of 13 Local Authorities participating in the Yorkshire & Humber Climate Commission Climate Adaption Programme Pilot, from January to December 2023. The programme aims to support Local Authorities in the Yorkshire and Humber region to develop strategies, plans, procedures and actions as part of their climate adaption. Participation within this pilot will allow the Council to continue developing its own action plan and ensure work is joined up across the wider region.

146 **Local Plan Update**

147 The Local Plan Update went out to consultation from 24th October to 18th December 2022. The five key focus topic areas for the local plan are:

- Dramatically reduce the carbon emissions of new buildings and increase the provision of renewable energy
- Better protect the green spaces and biodiversity we already have, and increase the quality of what is created in the future
- Make it harder to cut down trees and require far more trees to be planted as replacement where it’s unavoidable
- Improve our resilience to flooding and make space for water in new developments
- Improve new places by requiring that they incorporate the highest standards of design and maximise opportunities to create healthier environments

148 In the meantime, officer guidance and Member training will continue to highlight ways we can use current Development Plan and national policy in the determination of planning applications; whilst encouraging developers to prepare for policy change, and positively welcome those who go further, in light of the trajectory of the LPU. At draft policy stage it may be possible to use our new policies as a material consideration, in advance of their adoption, depending on the level and extent of objection that we receive on them.

What impact will this proposal have?

Wards affected: All

Have ward members been consulted? Yes No

149 This plan covers a wide range of both policy and projects, all of which are designed to reduce the carbon emissions of the city and work towards our net zero by 2030 target.

What consultation and engagement has taken place?

150 Significant consultation, communication, and engagement on climate change and related schemes has continued to take place this year.

151 The council recognises that changes required to transition the city towards a net zero economy will not be possible without widespread public support and behaviour changes from residents and organisations alike. The council's public communications and engagement has three fundamental roles: enabling the successful delivery of projects, explaining climate policy, and engaging the public on the changes that they can take (whether individual or organisational) to help accelerate climate action.

152 Alongside targeted project-specific communications support, the council continues to work with partners to engage citizens and businesses through a range of approaches. Members of the cross-party Climate Emergency Advisory Committee's 'Community & Business Engagement' receive regular updates about relevant engagement work in the region and provide constructive oversight.

153 The council has used a number of 'owned' channels to provide updates and engage residents, including both general channels with a broad audience and climate-specific channels. Some of these specific channels include:

- a) A dedicated monthly 'Leeds Climate' newsletter highlighting updates, opportunities for residents and businesses, and spotlighting best practice is currently sent to more than 6,800 subscribers every month
- b) the council's climate focused Twitter account has 3,139 followers and typically reaches over 7,500 users per month
- c) the council's climate change strategy page on the council website was downloaded more than 3,000 times in 2022

154 Across the year the council published 65 news releases on its newsroom related to projects and announcements related to the council's efforts to tackle or adapt to climate change—securing significant coverage from local, regional, specialist, and national media that reached a

wide audience.

- 155 Given the breadth of actions required by the city's climate action plans, a wide range of proactive communications and engagement work has been undertaken, typically on a project-by-project basis. For example, a range of communications helped ensure the successful delivery of schemes to reduce energy costs for low-income homeowners by installing funded solar panels and/or insulation. A mix of targeted social media activities, online and offline stakeholder engagement activities, significant press coverage, and targeted mail drops resulted in more than 2000 residents signing up for the scheme—which ultimately led to more than 900 households passing strict eligibility and feasibility criteria and benefiting from the scheme.
- 156 The Council's Connecting Leeds team regularly consults with residents and wider stakeholders regarding major highways improvements schemes and also smaller schemes which will bring benefits to local communities. Emphasising the importance of meeting the council's climate objectives such as reducing carbon emissions is often central to the case for making such improvements, and the Connecting Leeds team strives to ensure that those potentially affected by such works are given the opportunity to have their say, with feedback used where appropriate to finalise scheme designs.
- 157 Another key area of work to engage on climate-related policy this year is work to engage residents on proposed changes to the city's Local Plan. The Local Plan Update 1 – 'Your Neighbourhood, Your City, Your Planet' – was consulted on from October 2022 to December 2022, with residents and businesses encouraged to have their say on a raft of proposed policies designed to help the council meet its climate emergency commitments. Consultation in 2022 focused on more detailed proposals which were initially consulted on in 2021. A targeted multi-platform campaign was delivered to raise awareness of the consultation, delivering over a million impressions across the campaign driving awareness of the consultation and related webinars and drop in events. Ten webinars and six drop in sessions were delivered by the Local Plan team to engage with communities across Leeds, developing awareness of the proposals that were being consulted upon. The drop in events were supported by the digital campaign to ensure local communities were aware of consultation events in their area. The webinars were also promoted online with a specific focus on engaging young residents aged between 16-24 and residents living in inner Leeds. Overall there were 546 consultation responses, with 421 of those being online responses. 86% of people surveyed said that they found the survey material engaging.
- 158 The council continues to progress work to better communicate and engage residents on the 'vision' for Leeds' net zero and climate adaptation ambitions by publishing an interactive 'Climate Action Plan' early in 2023. The online Plan will bring together a summary of all of the work taking place across the council to decarbonise every sector and adapt to future climate hazards—recognising that the council's breadth of work is spread across multiple service areas and strategies. This interactive document will also identify actions that others can take to accelerate climate action and explain how local action in Leeds fits into the national Net Zero Strategy and National Adaptation Programme. Once this has been published, the council intends to use Leeds' Climate Action Plan as a tool to help engage with every community in Leeds on climate change and the city's progress so far.
- 159 Climate Emergency Advisory Committee (CEAC) is a cross party advisory committee authorised to consider and make recommendations regarding climate change, progression

towards net-zero and sustainability. The main committee has continued to host open forum, allowing members of the public to present on issues that they wish the committee to consider via video link, via pre-recorded video, or submitted text. This is considered an important aspect as it provides an opportunity for public engagement. The CEAC Working Groups allow elected members to explore issues in more depth, often hearing from external speakers as well as officers from across the council. These are beneficial in providing a forum to scrutinise the progress against a number of key themes and supporting the development of policy and allows opportunity to input collectively into local and national consultation responses.

What are the resource implications?

160 In terms of energy strategy, particularly in light of current energy prices and the expected increasing costs of fossil-fuel based energy generation, the proposed measures to reduce energy consumption, improve energy efficiency and increase the level of energy consumed from renewables or low-carbon sources will all serve to minimise the cost impacts to the council. Grant funding will continue to be sought from government in support of the ongoing expansion of decarbonisation measures across the council's buildings, the city's housing stock and transport infrastructure.

What are the legal implications?

161 No specific legal implications.

What are the key risks and how are they being managed?

162 One of the key risk to reaching net zero are access to finance as many of the measures that have a short payback such as LED lighting or solar panels have already been implemented and the measures that are left such as the transition from gas heating are significantly more costly to install than an equivalent gas boiler and can also be more costly to run. In the heat and building strategy the government has signalled that its intention is to make heat pumps as cheap to run and buy by 2030 – however this will make a net zero by 2030 target challenging to achieve. To help mitigate this risk the council will continue to explore how private finance can support the delivery of net zero.

163 Many of the actions that need to be taken to meet net zero are not within the direct control of the council. Using the example of owner occupied housing, the council can support home owners to make the right decisions and work is on-going to try and establish a housing retrofit hub (see paragraph 91) but ultimately the council has no powers to force home owners to take the required action. This means that national policy has a key role to play in using levers available to encourage swifter action by homeowners.

164 As many of the barriers to change sit outside of the direct control of the council, one of the key ways to manage the risks is to work with national government and to highlight the challenges that will prevent the city reaching net zero. The council will continue to highlight the key barriers to progress, working with partners such as LGA, UK100, core cities as well as with local authorities at a regional level.

165 Should the council be seen to be falling behind in planning and delivery of charge infrastructure the recent government consultation suggests there could be a risk of government mandating plans or applying a statutory obligation onto councils to plan and deliver charging. This may not be as flexible or appropriate as our own planning and delivery would be, so it is important to mitigate against such an imposition of this duty by being pro-active.

Does this proposal support the council's three Key Pillars?

Inclusive Growth

Health and Wellbeing

Climate Emergency

166 In summary, responding to climate change is central to the overall vision for the future of Leeds as set out in the Best City Ambition.

167 The council intends to achieve net zero and adapt to climate change in a fair way that improves standards of living in all the city's communities and is supportive of our economy. Reducing poverty and improving the health and wellbeing of residents is also key to reducing vulnerability of climate-related hazards.

168 Although this report primarily focuses on the council's approach to the climate emergency, much of the work undertaken provides multiple co-benefits. The council and partners have delivered climate action related schemes worth more than half a billion pounds in recent years, helping to create and support many hundreds of local jobs.

169 This work also supports the city's health and wellbeing priority. We will reduce fuel poverty and cold-related illness by making our buildings more energy efficient; enable physical activity and public safety by improving our transport infrastructure; promote healthier and lower carbon diets; increase life expectancy by transitioning to cleaner energy, heating and transport; and improve access to green spaces which are proven to have clear benefits to both mental and physical wellbeing.

170 Further detail about the specific impacts on health and wellbeing and inclusive growth of our climate action are highlighted in previous reports focused on particular policies or programmes.

Options, timescales and measuring success

What other options were considered?

171 As this report provides a general update on progress this section is not considered relevant.

How will success be measured?

172 Success will be measured by the reduction in carbon emissions at both a council level but also at a city level.

What is the timetable for implementation?

173 This report provides an update on general progress rather than details on specific actions.

Appendices

174 Appendix 1 – Net Zero Housing Plan

175 Appendix 2 – Overview of the consultation responses (food strategy)

176 Appendix 3 – Final Food Strategy

177 Appendix 4 – Carbon Disclosure Project Submission

Background papers

