

Climate Adaptation and Resilience Plan

Date: 23 June 2022

Report of: Chief Officer (Sustainable Energy and Air Quality)

Report to: Climate Emergency Advisory Committee

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

What is this report about?

Including how it contributes to the city's and council's ambitions

- Following the last climate adaptation item considered at the Climate Emergency Advisory Committee meeting in March 2022, a range of activity has taken place across the council, and with our partners, to progress our plans to build the city's resilience to the impacts of climate change locally, in line with the government's National Adaptation Programme (NAP) and the latest UK Climate Change Risk Assessment (CCRA). This report summarises some of the learning and activity that has taken place to date. This report also details plans to undertake a deeper council-wide climate risk assessment to further prevent and protect against future climate impacts.

Recommendations

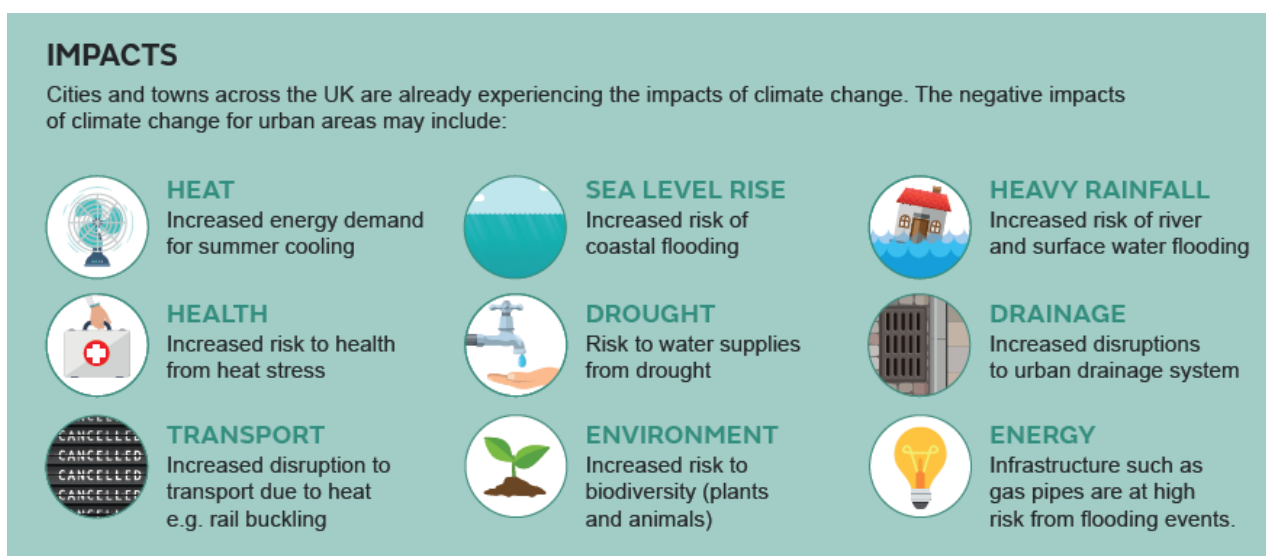
- a) To note the update provided on activity taking place across the council to address the current, future and expected impacts of climate change.
- b) To note the leading role the council is playing in the work on resilience and adaptation across the region in conjunction with the Yorkshire and Humber Climate Commission.
- c) To support the approach to undertake a service-led climate risk assessment, including the delivery of a series of workshops, which will inform council-wide reviews of business continuity plans and the corporate risk register.
- d) To support enhanced city-wide engagement with every community in Leeds over the next 12 months to raise awareness of—and receive feedback on—the council's activity to support climate mitigation and adaptation.
- e) To support the involvement of the committee's working groups in this work moving forward.

Why is the proposal being put forward?

Background

- 1 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 local wildlife. 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 and efforts to limit it to 1.5°C are met.
- 2 We are already experiencing changes to our weather, with the UK climate already 1.1 degrees Celsius warmer than pre-industrial levels according to NASA. Broadly speaking, climate-related hazards that Leeds is increasingly likely to experience can be grouped into four themes: extreme and prolonged heat, flooding, drought, and indirect economic impacts resulting from climate-related trade disruption and population displacement elsewhere. The graphic below from the Met Office (Figure 1) shows the expected future impacts of climate change to urban areas like Leeds.
- 3 The Committee on Climate Change (CCC) recommend that while we aim to limit warming to 1.5°C, the evidence shows that we must be prepared for warming up to 4°C. Further international action would reduce these risks and therefore we will continue to monitor and be informed by the CCRA, National Risk Register, and National Adaptation Programme, which are each reviewed and updated on a regular basis.
- 4 The council is clear that this work is complementary of, not instead of, the third Key Pillar of the Best City Ambition to transition to a net zero economy as quickly as possible. Until this happens, Leeds will continue to contribute to climate change and will therefore be amplifying the risks outlined above. Becoming a net zero city (climate change mitigation) and preparing for the predicted impacts of climate change (climate change adaptation) are equally important strategic goals of our climate action work.

Figure 1

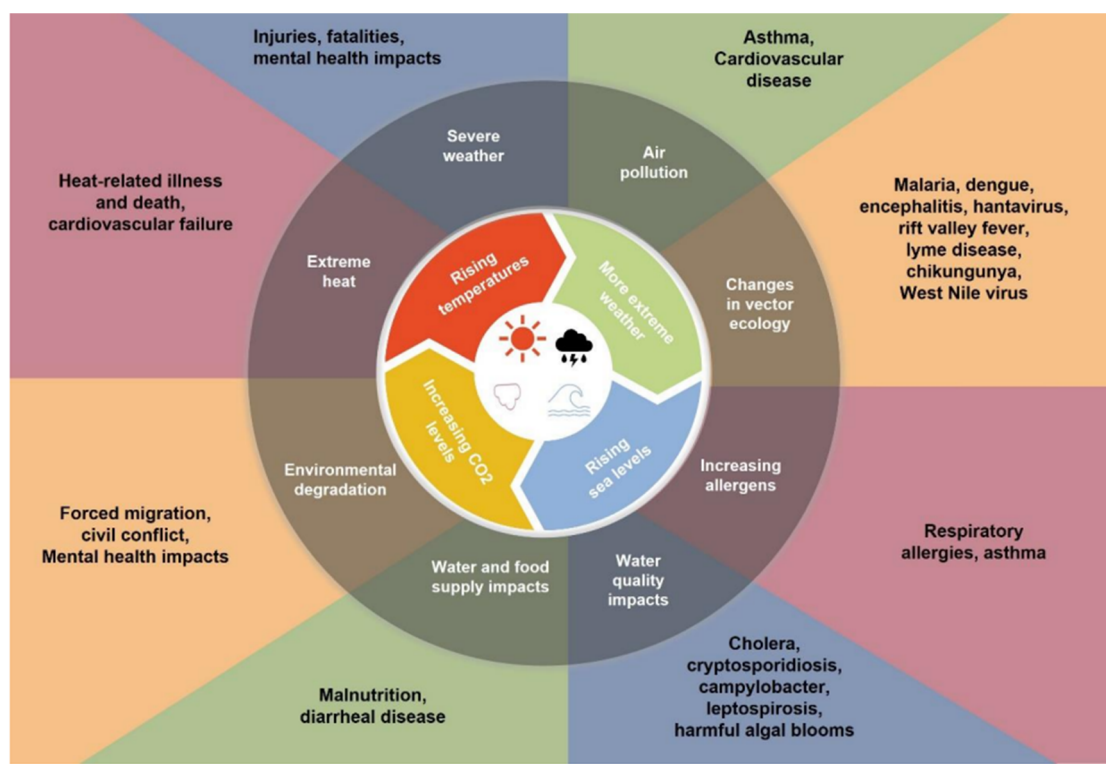


- 5 The [National Adaptation Programme \(NAP\)](#) sets out the governments' plan to prepare for and respond to the impacts of climate change. The [third CCRA](#) was published in January 2022 and set out 61 individual climate risks that will impact our local economy, environment, health and wellbeing. It identifies eight priority areas for the Government to respond to in the next National Adaptation Programme, which is due to be published in

2023. The NAP and CCRA both provide useful context for adaptation planning.

- 6 Supporting the work of the NAP, 81 organisations across the UK's public and private sectors have already been required to produce adaptation reports considering the future risks and business continuity impacts of climate change. These include airport operators, energy generators, financial regulators, digital communications, water companies and many more. Other organisations have done so voluntarily.
- 7 One example of these is the UK Health Security Agency (UKHSA)'s [Third Health and Care Adaptation Report](#), published in 2021. The report summarises the current and future effects of climate change on the health and care sector and outlines practical next steps for the sector to build resilience and adapt. As climate change has the potential to widen existing health inequalities, the report also outlines how to support those most vulnerable to the systemic shocks associated with climate change. This report will have implications for Leeds. Figure 2 is a graphic from the report that details health impacts associated with changing weather and increasing temperatures.

Figure 2



- 8 It is prudent to ensure that the council is doing all we can to make informed considerations of the impact of climate change on our services and communities and to take proportionate action to protect lives, livelihoods and local wildlife. Doing so would not only protect the city in the future but also has the potential to deliver immediate benefits to Leeds residents, such as an enhanced quality of life.
- 9 Regardless of the hazard, there are four general aims of climate adaptation: we can adapt our city to **prevent** some hazards from occurring; we can **protect** the city from harm and damage by mitigating exposure and vulnerability to hazards; we can effectively **respond** to hazards when they do occur; and we can plan to **recover** quickly after a hazard has occurred. Each of these approaches will be important to a degree and so, throughout this process, the council must consider how best to balance these four aims.

Risk Management and Emergency Response

- 10 The council has risk management arrangements in place which feed into a corporate risk register, updated and reported to the Corporate Leadership Team each quarter for review and discussion. A comprehensive update is provided to Executive Board via the Annual Corporate Risk Management Report. The corporate risk register houses the most significant, cross-cutting risks that could impact on the outcomes we aim to deliver via the Best City Ambition. Climate change – including failure to adapt to and mitigate more extreme weather conditions brought about by climate change, resulting in an adverse impact on Leeds (its people, communities, infrastructure, economy, and natural environment) – is one of over 20 corporate risks and is currently rated as ‘very high’. Beyond the corporate risk register, directorates identify and manage their own risks, which are also monitored on a quarterly basis.
- 11 The council also has an overarching business continuity management arrangement as well as individual business continuity plans (BCP) for services identified as being ‘critical’. The BCPs outline the steps required to recover service delivery to an agreed level following a disruptive incident. The council’s BCPs already include some arrangements for workforce planning and service delivery following a severe weather event, however this work provides an opportunity to review service level business continuity plans to ensure that service resilience considers the potential impacts of future climate change, such as the potential for an increased frequency and extent of impacts.
- 12 The West Yorkshire Local Resilience Forum (WYLRF - also known as West Yorkshire Prepared) is made up of the region’s key emergency responders and specific supporting agencies, including the council. The partnership works to help communities prepare for, respond to and recover from emergencies and major incidents, such as severe weather events, as well as working to protect critical local infrastructure. The WYLRF shares information between local, regional and national partners and its work is used to inform the council’s own Severe Weather Plan, corporate risk register, and business continuity plans. The WYLRF is well placed to play an important role in managing the response to climate-related hazards in the future.

Future approach

- 13 There is already significant work taking place across the council to address some of the impacts of climate change and the council has previously demonstrated the robust arrangements in place for dealing with severe weather (e.g. flooding) and planning for potential economic shocks. Nevertheless, a comprehensive climate risk assessment of all council services has not yet been undertaken.
- 14 The council intends to undertake a service-led risk assessment over the next 12 months to identify any gaps and opportunities to ‘future proof’ and enhance existing policy. This work will be co-ordinated by officers from Sustainable Energy and Air Quality and Flood Risk Management. Following an initial audit of service plans, officers will deliver a series of workshops with council teams with support from academic partners. The aim of these workshops will be to enable services to identify climate-related risks to their operations and service users, raise awareness of activity that is already taking place to address such risks, and understand how teams can build further climate resilience within their own policies and frameworks, including service level risk registers and business continuity plans. It is proposed that the committee’s working groups monitor and advise on this ongoing work

across the council.

- 15 In July 2021, the council carried out an 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. An update on the progress of this work will be provided as a separate item on this agenda.
- 16 The council's website will be updated in the coming months to reflect, and signpost to, current plans and policies in relation to climate adaptation, along with information and guidance for residents and businesses summarising the hazards and how to build preparedness within Leeds communities.
- 17 Alongside work taking place to assess climate risk in Leeds, the Yorkshire and Humber Climate Commission has set up a task and finish group, led by Environment Agency and Leeds City Council representatives, to develop a programme for local authorities to support adaptation and resilience planning. This will build upon lessons learned in Leeds and ensure joined up thinking across the region. It will also allow the council to play a leading role in piloting and developing the knowledge, skills, and tools all local authorities will need to develop their own adaptation plans.
- 18 The current arrangements and recent developments for flooding, extreme and / or prolonged heat, water supply issues and drought, and climate-related economic impacts are set out below.

Flooding

- 19 The potential direct impacts of future flooding include risk to life and physical / mental wellbeing, damage to property and infrastructure, destruction of agriculture, and harm to the environment. Leeds has previously experienced many of these impacts. The Boxing Day floods in 2015 following Storm Eva had devastating consequences for our communities and businesses, and directly cost Leeds an estimated £36.8m and the city region more than £500m with indirect costs and economic impacts estimated to be much higher although harder to fully quantify.
- 20 The Environment Agency has a strategic overview of all sources of flooding and coastal erosion, as defined in the Flood and Water Management Act 2010. Lead local flood authorities (LLFAs) have the lead operational role in managing the risk of flooding from surface water and groundwater and ensuring that [a Local Flood Risk Management Strategy](#) (LFRMS) is published and regularly reviewed for their area. The council is the LLFA for Leeds, working in conjunction with the other Risk Management Authorities (RMAs) such as the Environment Agency and Yorkshire Water, who have a statutory role for managing flood risk from sewers. The council must maintain a register of key assets and investigate significant flood incidents as well as play a statutory consultee role on all planning applications with respect to flood risk from surface and ground water. Infrastructure disruption as a result of flooding, such as damage to power networks, is coordinated locally through the WYLRF and is led nationally by the approach set out in the Government's National Infrastructure Strategy.
- 21 Flooding can also have a direct impact on the health and wellbeing of our communities, with increased risk of mental health issues and illness associated with water pollution. According to the CCRA, there is also a greater risk of vector-borne diseases if flooding provides new habitats for species of insects that transmit disease (see Figure 2). The LFRMS recognises the risks set out above and the associated impacts from an infrastructure perspective, but there is a need for further engagement with Environment Agency, UKHSA and Yorkshire Water to better understand risks to health and wellbeing

associated with flooding and opportunities to manage them.

- 22 In 2017, the council completed Phase 1 of the Leeds Flood Alleviation Scheme (FAS1). This innovative mix of hard engineered defences and moveable weirs reduced flood risk to 3500 homes and businesses in the city centre. FAS1 reduces flood risk to a 1% probability of occurring in any given year, which is also known as a '1-in-100-year level of flood protection. The FAS1 design also considers the increased protection required to maintain this standard until 2069 because of the increased risk of flooding predicted as a result of climate change.
- 23 In March 2022, work began on the Flood Alleviation Scheme Phase 2 (FAS2). Leeds FAS2 combines catchment-wide natural flood management and traditional engineering that stretches for 14km along the River Aire between Leeds Train Station and Apperley Bridge. When it is complete in Autumn 2023, Leeds FAS2 will reduce flood risk to a 0.5% probability of occurring in any given year (a 1-in-200-year level of flood protection) for 1,048 homes and 474 businesses as well as the area protected by FAS1. Like FAS1, FAS2 also includes an allowance for climate change up to 2069. Once completed, FAS2 will protect against flood events similar to the Boxing Day floods in 2015. The climate change allowance is achieved through nature-based measures across the whole catchment that will mature and offer increased protection over time by reduce peak flows in the catchment by 5-10%.
- 24 The West & North Yorkshire Chamber of Commerce has worked closely with Leeds City Council throughout the FAS development to support the city's 32,000 businesses. Developing the 'Waterfront Charter' in March 2017, the chamber has focused on the future growth of the Leeds Waterfront. The West Yorkshire Combined Authority, Local Enterprise Partnership and the councils Economic Development team worked closely with flood affected businesses following Storm Eva. The city has since seen further flood events—most notably Storms Ciara and Dennis in 2020—that have put further pressure on businesses and communities as they face financial uncertainty (insurability, lending confidence) and these impacts cascade onto supply chains and the local workforce.
- 25 The council's Local Flood Risk Management Strategy (LFRMS) was first published in 2014 and subsequently refreshed in 2018 to better reflect the changes to risk and the measures implemented in the city. One additional key element of the refresh was to highlight the impacts that climate change will have on the city with respect to flooding. Another key principle of the strategy is to engage with communities and businesses around the impacts of flooding and the Flood Risk team now includes a dedicated communications officer.
- 26 In addition to the LFRMS the council also conducts Preliminary and Strategic Flood Risk Assessments (SFRA) that identify and prioritise areas of the city in relation to flood risk that help inform the Local Plan and planning policies. The SFRA is currently being updated as part of the Local Plan Update and this will provide the clearest picture we have of the flood risk across the city. By considering how future climate change will predict local flooding, once published the SFRA will allow informed decisions on investment and infrastructure development and thereby support inclusive growth of the city and enable housing needs to be addressed in a more climate-resilient way.

Extreme and prolonged heat

- 27 According to the UKHSA, the UK experienced a record number of heat-associated deaths in 2020 with 2,556 all-cause excess deaths (excluding deaths from COVID-19) recorded in the UK during episodes of heat. UKSHA project that, without further action, the number of heat related deaths could triple by 2050. The UKCCRA predicts that extreme and prolonged heat are likely to become more frequent and potentially more severe as the

climate warms.

- 28 A summary of the health-related risks associated with extreme and prolonged heat are set out in Figure 2. Vulnerable groups include older people (65 years of age and above), the very young (under 5 years of age) and people with pre-existing medical conditions. [The Heatwave Plan for England](#) also identifies some of the non-health impacts that extreme and/or prolonged heat can have on infrastructure, including service disruption and economic losses caused by infrastructure failure, increased demand on the power grid, and agriculture/forestry loss.
- 29 Like other types of severe weather, prolonged and extreme heat can be forecast at a regional level which enables action to be taken to mitigate the risks. Last year, the Met Office launched a new 'extreme heat' impact-based weather warning to recognise the need to prepare for the potential widespread disruption and adverse health effects that extreme heat (which may be separate to prolonged heatwaves) can cause. This new warning sits alongside the established 'Heatwave' and 'Heat health alert' warnings.
- 30 When it comes to preparing for and managing extreme or prolonged heat, [the Heatwave Plan for England](#) recommends a series of actions that should be taken by local authorities and partners to reduce the local risks to health from prolonged exposure to severe heat. The heat-health alert system set out within the Heatwave Plan comprises of 5 main levels (levels 0-4). The levels cover scenarios ranging from long-term planning for severe heat to responding to a major national emergency. The Plan is currently being reviewed and is expected to be replaced by a consolidated 'Single Adverse Weather and Health Plan for England' next year.
- 31 Locally, the implementation of the Heatwave Plan for England is reflected within two locally managed action plans. The council's public health team are refreshing their 'Heat and Heatwave Plan for Leeds 2022' which takes a preventative approach to support those most at risk if a heatwave occurs and reflects levels 0, 1 and 2 of the national plan. The council's Resilience and Emergencies Team manage the corporate Severe Weather Plan which sets out the approach to responding to and managing a heatwave (levels 3 and 4 of the national plan) once it occurs. Government intervention is likely during a level 4 heatwave.
- 32 Infrastructure disruption as a result of extreme heat, such as damage to power networks, is managed locally through the WYLRP but is ultimately led nationally by the approach set out in the Heatwave Plan for England, National Infrastructure Strategy and Critical National Infrastructure arrangements.
- 33 Given the increasing and predicted risks from extreme and prolonged heat, as identified in the UKCCRA, it is recommended that long-term actions are also taken to protect our people, buildings, infrastructure and environment by reducing exposure and vulnerability to severe heat. Doing so would complement work to ensure robust plans are in place to respond to extreme or prolonged heat.
- 34 The design of our buildings and adoption of passive cooling measures (including green and blue infrastructure) will have a key role to play in helping to protect residents from extreme and prolonged heat. Improving the thermal efficiency of properties will also help to reduce exposure to extreme heat although it is likely to be less effective during longer heatwaves without cooling measures.
- 35 The Future Building Standard will introduce greater requirements for cooling measures in regulations for new buildings once it is implemented nationally, however there may be an opportunity for local policy to do more to make our buildings resilient to heat. Future risks from severe heat also underscore the importance of the council's work so far to improve the thermal efficiency of public buildings, social housing, and low-income private housing—as

well as highlighting the need to retrofit significant numbers of the city's remaining domestic and commercial buildings.

- 36 Finally, in addition to the immediate risks posed by extreme or prolonged heatwaves the UKCCRA also identifies risks to people and the environment associated with the more gradual warming of our climate.
- 37 The UKHSA has identified an increased risk to public health from vector-borne diseases (such as West Nile Virus and Lyme Disease) as a result of warmer temperatures extending the season of indigenous disease-carrying insects ticks whilst also making the UK more hospitable to species of disease-carrying insects new to the UK. Locally, the council's public health teams support the work of UKHSA to monitor infectious diseases and manage them when they occur. This work may become increasingly important as the climate changes.
- 38 Warming temperatures can also pose a risk to soil health and local wildlife, either directly (some local wildlife may struggle to adapt) or indirectly (warmer temperatures could better accommodate invasive species that threaten local wildlife). Further engagement is needed with Environment Agency and the Department for Environment, Food and Rural Affairs (DEFRA) to better understand these risks locally and to identify local responsibilities and opportunities.
- 39 Building on a service-led climate change risk assessment the council will identify opportunities to: make council services, building and land more heat-resilient; increase the uptake of passive cooling measures; and take targeted action to protect the most vulnerable to heat. Further work and engagement will also be undertaken with regional and national partners including the Environment Agency, DEFRA, Natural England, UKHSA and others.
- 40 Whilst the CCRA highlights the risks of a warming climate, the NAP has identified several potential opportunities that may be relevant locally which need further exploration. These include: greater opportunities for tourism, improved agricultural productivity (for certain crops), reduced winter heating demand, and fewer cold-related deaths. Further work will be undertaken to engage with Visit Leeds on their long-term plan and with the Environment Agency and DEFRA to better understand opportunities and local responsibilities to support farmers with climate adaptation.

Water supply issues and drought

- 41 The CCRA identifies several risks related to reduced rainfall and water supply disruption in the future. These can be summarised as: business and infrastructure disruption, reduced agricultural or forestry productivity, an increased risk of wildfires, and harm to local wildlife and soil health. Coupled with higher temperatures, British summers are expected to experience less rainfall than present.
- 42 Research commissioned by the UK Committee on Climate Change estimated that the demand for water in England will exceed supply by between 1.1 billion and 3.1 billion litres per day by the 2050s, depending on the extent of climate change and population growth. Yorkshire Water have stated that the region's supply of water has potential to be less than the demand for water by 2038 if no action is taken.
- 43 Yorkshire Water has a duty to manage water supply for Leeds and the wider region. They are required to fulfil statutory responsibilities relating to water supply and environmental management. Their operations are regulated by both OFWAT and the Environment Agency.

- 44 Leeds City Council works alongside the Environment Agency and Yorkshire Water as part of the West Yorkshire Local Resilience Forum. In the event of impending water supply disruption, the WYLRF would have significant advance notice and the Forum would lead on co-ordinating the response to it. Actions to prevent and respond to a regional water supply drought are set out in Yorkshire Water's [Drought Plan 2022](#). Yorkshire Water has also published a [Water Resources Management Plan](#) to outline how they plan to provide a secure supply of water to all customers over the next 25 years. Broadly, this includes measures to identify new supplies of water, reduce leakage across the system, and promote improved water efficiency and other demand reduction measures. This plan also states that in the event of water supply issues, the most vulnerable customers will be prioritised.
- 45 Fixing leakage within the water system will be extremely important to prevent the future risk of droughts. Yorkshire Water has committed to reduce leakage by 40% between 2018-2025, with plans to spend £325m on reducing leakage as part of their Water Resources Management Plan.
- 46 Residents and businesses also have a role to play to reduce water consumption, such as using more water efficient technologies and adopting behaviours that minimise water wastage. Additionally, businesses can also consider water supply disruption as part of their business continuity plans—a consideration which the council and West Yorkshire Local Resilience Forum already encourages.
- 47 Locally, improving the water efficiency of the city's buildings can help to reduce the per head demand for water without impacting quality of life. Since 2019, Leeds City Council's water efficiency planning standard has exceeded the national standard and sets out that residential developments of 10 or more dwellings (including conversion), where feasible, are required to meet a maximum water consumption standard of 110 litres per person per day. This reflects the tighter optional standard in building regulations. Work is also being undertaken to develop the high-level design principles to guide a review of the council's approach to new builds to include water efficiency. Such principles will then be developed into more detailed technical guidance notes for scheme development.
- 48 Further work will be undertaken to better understand how council services can support greater water efficiency, become more drought resilient where necessary, and help to reduce the city's overall water consumption. Further work will also be undertaken to engage with the Environment Agency and DEFRA to better understand opportunities and local responsibilities to support farmers with climate adaptation.

Economic impacts

- 49 HM Treasury state in the [Net Zero Review](#) published in 2021:

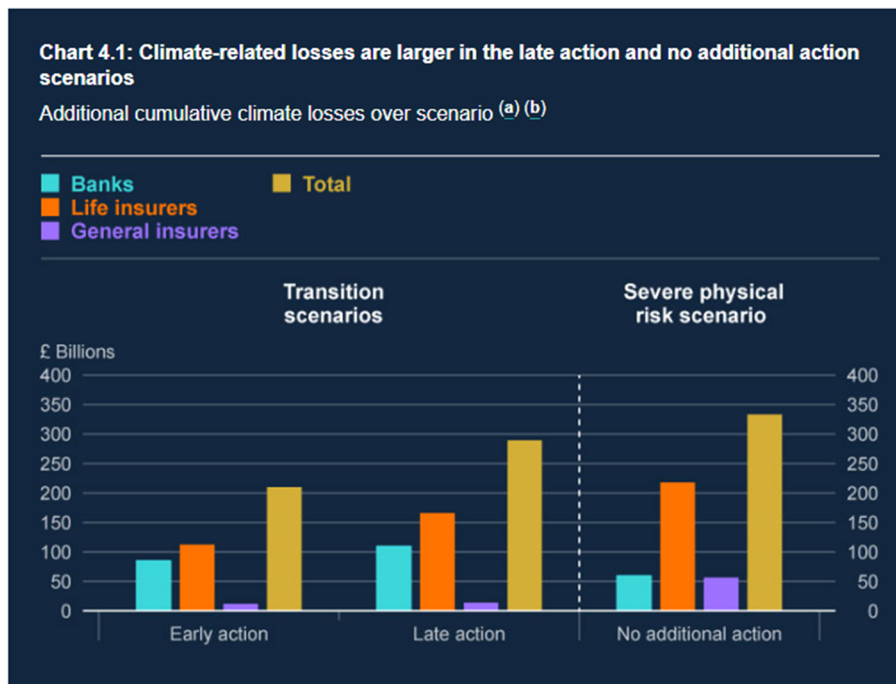
“The costs of global inaction significantly outweigh the costs of action. Higher temperatures and an increased prevalence of extreme weather events could lead to reduced productivity growth in the UK and significant damage to UK capital stock. Most studies do not reflect the economic impact of indirect effects and global spillovers; for example, damage to global supply chains affecting trade, reduced production in trading partner nations pushing up the cost of imported goods, and changes to migration from regions heavily affected by climate change. The true cost of a warmer climate to the UK economy could be higher than current estimates.”

- 50 The CCRA sets out key risks to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks. A National Resilience Strategy is currently in development and is expected to provide further guidance to local authorities in relation to supply chain resilience and other economic disruptions that can be caused by

climate change.

- 51 The council will review arrangements in place to ensure appropriate supply chain resilience across the council as part of the climate change risk assessment work. This work will build on previous experience preparing the city for the potential economic disruptions caused by national and international events and supply chain disruption experienced during the Covid-19 pandemic. The council has well-established links to economic forums and business networks and regularly engages and discusses business intelligence with the private sector. Building resilience, including climate-related resilience, is a key aim of the Leeds Economic Recovery Framework.
- 52 The council has also made commitments to procure more food served and sold by the local authority from Yorkshire and its surrounding regions. As well as reducing the carbon emissions from food transportation, this commitment will also support regional food producers—helping to improve the resilience of our food system from climate-related shocks, e.g. shortages relating to global supply chain disruption. A Leeds Food Strategy and action plan is currently in development with key partners across the region and will be considered at Executive Board in Autumn 2022.
- 53 The CCRA also sets out risks to finance, investment and insurance including access to capital for businesses, as well as specific risks to the UK finance sector from climate change overseas. Leeds is the largest UK financial sector outside of London, with financial services accounting for £38% of the city’s economic output. Last month, the Bank of England warned that banks and insurers that fail to manage climate risks as a “first-order” issue could face a 10% to 15% hit to annual profits and higher capital requirements, after undertaking a stress test of how Britain’s financial system will cope with climate change and the transition to net zero (Figure 3). We will be exploring this issue further to understand local responsibilities in implementing HM Treasury’s Green Finance Strategy, which is due to be updated soon.

Figure 3



Sources: Participating firms’ submissions and Bank calculations.

(a) Incremental additional losses compared with losses that would be expected to occur in a hypothetical counterfactual scenario in which there are no additional headwinds from climate risks.

(b) For banks, chart shows cumulative 30-year impairment losses on bank lending. For life insurers it shows additional investment losses at year 30. For general insurers it shows additional investment losses at year 30, plus the cumulative increase in average annual loss over 30 years relative to year zero.

- 54 The Government's [Integrated Review of Security, Defence, Development and Foreign Policy](#) sets out that climate change has the potential to re-shape patterns of migration and displacement. The routes to migrate to UK are determined by national policies, however, the '[Migration in Leeds 2021-2025](#)' strategy sets out the council's long-term strategic direction on migration, which aims to ensure people who migrate to Leeds can establish their lives quickly and successfully.

What impact will this proposal have?

Wards Affected: All (City-wide)

Have ward members been consulted? Yes No

- 55 Climate change will continue to have an impact for decades and will continue to do so until global net zero is achieved. The work outlined in this report will inform action to be taken across the council to protect our services, communities, businesses and environment from the worst impacts of climate change.

What consultation and engagement has taken place?

- 56 This item will provide members of the Climate Emergency Advisory Committee with an opportunity to reflect and comment on the plans set out prior to Executive Board in July 2022.
- 57 In the next 12 months, a city-wide public engagement exercise will take place to seek the views of residents and businesses on our climate action.

What are the resource implications?

- 58 There are no direct resource implications as a result of this report.
- 59 Future workshops with services will identify if there are any resource implications associated with embedding climate adaptation and resilience into existing schemes and policies. In the short term, plans and policies may need to be reviewed and revised. Longer term resources, practices and processes may also need to change to reflect the measures needed to mitigate the risks identified and to support adaptation measures. Equally, infrastructure projects may need to be revised or specifically implemented to support adaptation.

What are the legal implications?

- 60 There are no legal implications as a result of this report.

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

- 61 Corporate and service level risk registers will be amended where appropriate to reflect the climate risks identified through the workshops with individual services.

Does this proposal support the council's 3 Key Pillars?

Inclusive Growth Health and Wellbeing Climate Emergency

- 62 Responding to climate change is central to our overall vision for the future of Leeds, as set out in the Best City Ambition. This initial plan sets out how we will adapt to the hazards of climate change and protect our most vulnerable residents, doing so in a fair way which improves standards of living in all the city's communities and supports our economy. The

specific impacts on health and wellbeing and inclusive growth are highlighted throughout this report.

Options, timescales and measuring success

a) What other options were considered?

63 This approach has been developed using the Local Partnerships Climate Adaptation Toolkit, a resource specifically designed for local authorities to use to develop a climate adaptation and resilience plan.

b) How will success be measured?

64 Key risks identified through the climate risk assessment will be monitored through the Corporate Risk Register.

c) What is the timetable for implementation?

65 Workshops are expected to take place in Autumn 2022, with further action developed, including a city-wide public engagement exercise, within the next 12 months.

Appendices

66 None.

Background papers

67 None.