

Report of Director of Resources and Housing**Report to** Executive Board**Date:** 17 April 2019**Subject:** Cutting Carbon Annual Report and Leeds Climate Commission

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Summary of main issues

1. Climate Change provides one of the greatest challenges to humanity today, having detrimental impacts on both society and the environment internationally, nationally and locally. The increase in global temperature associated with climate change is irreversibly damaging diverse ecosystems including the Amazon Rainforest and Arctic Tundra. Other well documented impacts of climate change include: the melting of ice and glaciers; ocean warming; sea level rise and species extinction.
2. The frequency and intensity of extreme weather events is increasing. Cyclone Idai, which recently devastated Mozambique is the type of event predicted to occur more frequently by climate change modelling. At a local level, Leeds experienced the major disruption that can be caused by severe weather events following the floods after Storm Eva in 2015.
3. Following the 2017 annual report to Executive Board on cutting carbon, a landmark report from the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned that the window to limit world temperatures to under 1.5 °C and avoid the worst climate change impacts could close within the next 12 years.
4. At Full Council on 27 March 2019, the Council passed a motion declaring a "Climate Emergency". The Leeds Climate Commission has developed science-based carbon reduction targets that are based on Leeds's per capita 'share' of the global carbon budget. These 5 yearly targets are accompanied by an emission reduction roadmap for the District that shows the extent of action that will need to be taken across all sectors. The Climate Commission's report is appended.

5. It is estimated that if we are to have a good chance of avoiding dangerous climate change – that is average warming above 1.5°C, the world can emit no more than 420 giga-tonnes of greenhouse gases by 2050. Leeds' share of this on a per capita basis is estimated at 42 mega-tonnes – this is in effect our city's carbon budget to 2050. If we were to carry on at our current rate of emissions, we would have used our total budget for the period to 2050 within 9 years.
6. The District has achieved a reduction of 43% in emissions from its 2005 baseline. The Leeds Climate Commission have advised that to stay within our carbon budget we must achieve a further reduction of 27% by 2025 and an additional 15% by 2030, equating to an overall reduction of 85% from our 2005 baseline.
7. To date, the vast majority of carbon reduction realised in the District has been achieved through reductions in the carbon emissions from electricity generation in the national grid. These have been achieved mainly through the shift away from coal burning power stations and the increases in renewables (especially off-shore wind farms). While the trend towards greener energy will continue, due to the speed and size of reduction required it is unlikely that it can be achieved by changes to national energy infrastructure alone. Such a significant reduction will require action across every sector including transport, housing, commercial property, industry and agriculture. Importantly, it will therefore require reduction in energy consumption levels, achieved in part by enormous investment in energy efficiency, but it will also require major behavioural change.
8. Although the threats are very real, it is important that the opportunities that a shift to a zero carbon economy provides are also highlighted, providing new economic sectors and the chance to improve quality of life. The Leeds Climate Commission has estimated that Leeds could save £277m a year if it exploited the cost-effective opportunities for energy efficiency and low carbon development.
9. This is clearly not an issue that the Council can tackle on its own. Securing public, investor and business support for carbon reduction is essential. The Council working in partnership with the Leeds Climate Commission, is proposing to hold a 'city conversation' on climate change and the local action required before returning to Executive Board with final recommendations by the end of the year. Beyond what organisations and individuals can do in the city, the report will also seek to articulate the support, both regulatory and financial, which will be required from Government to enable the targets to be met.
10. This report also summarises how the Council has continued to invest in its own portfolio of large scale cutting carbon projects, including the on-going delivery of a large district heating network, a range of improvements in domestic energy efficiency, as well as significant electrification of the council's fleet. There is recognition, however, that the Climate Emergency declared by the Council is a significant milestone that requires the Council and the city to act at a faster pace. Although the Council will take the actions it can within its resources and remit, the level and speed of change required will also require the participation of individuals, communities, businesses and the government. The report proposes that in future all proposals to Executive Board are considered in the light of the Emergency, sitting alongside the Council's commitments to improved health and well-being and inclusive growth

Recommendations

Members of the Executive Board are recommended to:-

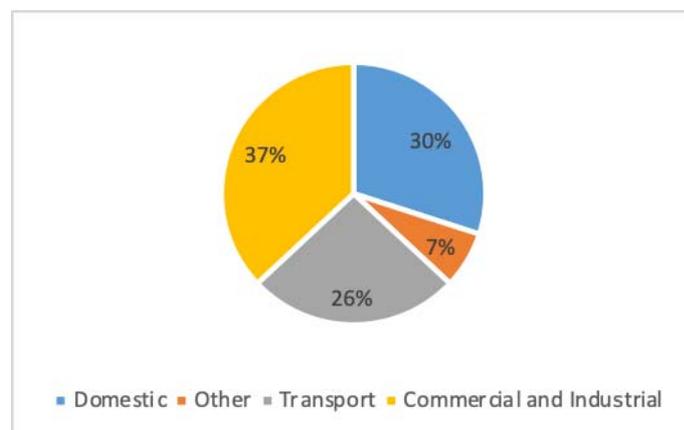
11. Agree the recommendations of the Leeds Climate Commission for science-based emission reduction targets for the city and the accompanying roadmap;
12. Support the facilitation of a city conversation on how to achieve the target and agree to receive a further report by the end of 2019;
13. Support the inclusion of a new section in all Executive Board reports that will highlight the impact of the decision to be taken on the achievement of the climate emergency aims;
14. Note the progress and continue to support the delivery of the portfolio of the Council's cutting carbon projects.

1 Purpose of this report

- 1.1 To outline the background to the climate emergency and the need for urgent action at a city level.
- 1.2 To present the Leeds Climate Commission's proposals for a science-based climate emissions reduction target and accompanying roadmap.
- 1.3 To update the progress the Council has made in reducing carbon emissions through the portfolio of Council led cutting carbon schemes.

2 Background information

- 2.1 The current carbon emissions of the city are shown in the pie chart below:



- 2.2 On a global front, a landmark 2018 report from the United Nations Intergovernmental Panel on Climate Change (IPCC) has warned of the multiple risks of dangerous levels of climate change, and the need to restrict global warming to 1.5°C above pre-industrial levels. It has also warned that achieving the carbon cuts needed to limit warming to these levels will require “rapid and unprecedented changes in all aspects of society”.
- 2.3 The risks of climate change relate especially to the increased frequency and intensity of extreme weather events such as storms, floods, heatwaves, droughts and rising sea levels. These changes could also lead to significant disruption to food and water systems, loss of habitats (such as coral reefs) and growing numbers of species extinctions.
- 2.4 Evidence of these impacts is already accumulating with average global temperatures currently at c1°C above pre-industrial levels. These risks and impacts are forecast to increase steadily with higher levels of warming, with scientists particularly concerned about the potential for natural feedback loops, for example where melting permafrost releases currently locked in stores of methane (a potent greenhouse gas) that will then lead to further climate change.
- 2.5 The science clearly shows that these risks can be significantly reduced if levels of warming are limited. For example, average global temperature increases of 1.5°C rather than 2°C would reduce sea level increases by 10cm less by the end of the century, whilst avoiding the destruction of coral reefs. Restricting warming to

1.5°C rather than 2°C would also see the Arctic Ocean free of ice once per century rather than once per decade. But achieving the 1.5°C target will require transitions in land use, energy, industry, buildings, transport and cities. Globally, it would depend on the phase out of coal and the expansion of renewable energy sources so that they make up half of the global energy mix. The opportunity to limit warming average global temperature increases to 1.5 °C will not last long. Given existing emissions trajectories, the UN IPCC report warns that the window to limit world temperature increases to under 1.5 °C and avoid the worst climate change impacts could close within the next 12 years.

- 2.6 Recent national and international Youth Climate Strikes in February and March 2019 highlighted the concerns of young people and the need for national governments to increase efforts to respond urgently to the challenge of climate change.
- 2.7 The Paris Agreement on Climate Change includes pledges from national governments that if delivered would limit average levels of warming to c3°C. Next year's climate talks could see a ratcheting up of the national pledges, but there is still much to be done to limit warming to the IPCC's target of 1.5 °C.
- 2.8 Nationally, the UK government has a legal requirement to reduce GHG emissions by an average of 80% from 1990 levels by 2050. Although UK direct emissions have fallen significantly since 1990, the UK is not on track to meet net-zero emissions, nor is it on track to meet current legally-binding greenhouse gas (GHG) emission reductions set out in the Climate Change Act 2008. The Department for Business Energy and Industrial Strategy (BEIS) conceded in its own Clean Growth Strategy published last year, that the UK is likely to miss its fourth (2023-2027) and fifth (2028-2032) carbon budgets.
- 2.9 Climate minister Claire Perry has written to the government's climate change advisers, the national Committee on Climate Change (CCC) seeking advice on reducing the UK's greenhouse gas emissions to net-zero. In turn, the CCC has launched a call for evidence on when and how the country should reach net zero greenhouse gas emissions. Leeds Climate Commission is responding citing the evidence gathered in Leeds on the economic benefits of a transition to a low carbon economy reported in the 2017 Executive Board report.
- 2.10 Many public sectors organisations such as local authorities, NHS Trusts and Universities are now subject to the Emissions Reduction Pledge 2020. This is a set of principles committing organisations to act in pursuit of the voluntary target set in the Clean Growth Strategy to reduce greenhouse gas emissions by 30% by 2020/21, compared to a 2009/10 baseline. Despite the soft nature of this current set up where organisations can currently choose to become involved and actively report back, there is a suggestion of a more ambitious and possibly mandatory target once this first reporting period has ended. Encouragingly on the evidence presented in this report, Leeds City Council has achieved the Emissions Reduction Pledge 3 years early.
- 2.11 At Full Council on 27 March 2019, the Council passed a motion declaring a "Climate Emergency" and this can be seen in the context of an increase in activity across the Leeds City Region and the rest of the country.

- 2.12 To date, Bradford, Calderdale and Kirklees Councils have all passed Climate Emergency motions across the City Region and a number of other local authorities across the country have also declared a Climate Emergency. There is no standard set of commitments that a local authority signs up to when declaring a climate emergency, although the theme of carbon neutrality by 2030 is a strong commitment across multiple councils.

3 Main issues

- 3.1 This report marks an innovation in the way that Leeds is responding to climate change. Rather than focussing mainly on Council-led projects, the main content is the advice from the Leeds Climate Commission to the city (Appendix 1). It is the intention that as the Leeds Climate Commission continues to increase its scope and coverage of activity, that its future reports will act as an independent point of advice to the city, drawing on the expertise of numerous city partners so as to present the challenge of climate change in as comprehensive a manner as possible.

- 3.2 From 2005 to today the District has achieved a reduction of 43% in emissions. City-wide emissions continue to fall largely as a result of decarbonisation of the electricity grid. The rate of decline is expected to diminish in the near future and without further actions at the national or local levels, Leeds will not meet its longer term carbon reduction targets. The Leeds Climate Commission's proposals provide the evidence base and advice for the Council and other city partners on the most cost and carbon-effective measures that can be taken to achieve future carbon reduction targets.

3.3 Leeds Climate Commission Science-Based Target and Carbon Reduction Roadmap

- 3.3.1 Leeds Climate Commission's proposals for a Science-Based Target and Carbon Reduction Roadmap follows and has been agreed in collaboration with the Commission's Strategy Group and will be published on the Leeds Climate Commission website <http://leeds.candocities.org/about-leeds-climate-commission>. The highlights are detailed below.
- 3.3.2 By dividing up global emissions levels that would give us a good chance of limiting global warming to 1.5 °C by population, it is possible to set what are known as 'science based carbon reduction targets'. The targets for Leeds are set out below and these make it clear that the required level and speed of the cut in the cities carbon emissions will be extremely challenging.

Year	Reduction from 2005 baseline	Reduction required from current levels
2025	70%	47%
2030	85%	74%
2035	95%	91%
2040	97%	95%
2045	99%	98%
2050	100%	100%

3.3.3 Within the report it is recognised that these targets will not be achieved by one organisation alone. Buy-in and ownership of this key issue, is needed from across a wide spectrum of the public, private and third sectors and from the public at large, as well as additional support being required from central government and investors.

3.3.4 Analysis clearly shows though that it is feasible to reduce Leeds' carbon emissions at the scale and rate needed to meet the targets set out above. The actions that are required to meet the above mentioned targets have been broken down into 4 categories:

- Economic actions – these are defined as the actions that we could take that would pay for themselves and provide a return on investment such as LED lighting, hybrid vehicles etc. A review conducted by the Commission has concluded that these actions could deliver over half (51%) of the required cut in the current levels of carbon emissions from the city at no net cost.
- Technically viable actions – these are defined as the actions that are already underway such as the district heating network, improvements to the council's buildings and fleet that can be delivered with existing technologies, albeit at some extra cost.
- Innovative actions – these include actions that could require significant support from national government, such as building houses and commercial buildings so that they are carbon neutral, and existing actions that would need to happen at a much quicker rate, such as the adoption of electric vehicles.
- Global actions – these actions include those that require a change in behaviours such as a move away from a reliance on concrete and steel or a reduction in the consumption of meat and dairy.

3.4 **City Conversation**

- 3.4.1 Holding an effective city conversation is critical to the achievement of the target as without cross sector support the city will not achieve the required reductions in the short timescales.
- 3.4.2 A working group of the Commission is being set up, that will include representation from across the city, to identify the best ways to engage a wide range of stakeholders to take part in a city conversation on climate change. The conversation will seek to engage businesses, large and small, together with trade unions. We will work with those who are already strongly committed to change but also get the views of those people who are not currently engaged in the subject to better understand what may motivate change. We will seek to build on the existing enthusiasm of young people but also seek to broaden this participation through the Youth Council, city events such as Breeze and via schools.
- 3.4.3 It is intended to run the city conversation from June until the end of October using existing networks and events to maximise coverage within tight timescales.
- 3.4.4 The outcomes from the conversation will be fed back in via the December report back to Executive Board that will provide a more detailed Action Plan.

3.5 Leeds City Council-led Cutting Carbon Project Portfolio

- 3.5.1 In order to contribute towards achieving the city-wide carbon reduction targets, and to demonstrate leadership in this field, the Council has a number of cutting carbon schemes in place. These are large scale, long term projects that only the City Council is placed to lead:-
- 3.5.2 **District Heating:** There has been significant progress in the construction of Leeds PIPES – the city’s flagship District Heating Network (DHN) (<http://www.leeds-pipes.co.uk/>) which is due to deliver heating to the first connected flats using low carbon heat from the RERF by June 2019. More detail on the ambition for the network was presented to Executive Board in July 2017. A separate report to Executive Board provides a more detailed update on progress to date and plans for a phase 2 extension.
- 3.5.3 **Corporate Energy Projects including schools:** The council continues to make progress in achieving a reduction in its emissions from corporate buildings and operations.
- During 2018 eight schools had their lighting updated to LED delivering £30,000 savings in cost and 7 tonnes of CO2.
 - The refurbishment of Merrion House has allowed for the significant upgrade in the building’s environmental performance.
 - A fundamental requirement of the specification developed by the design team was that the completed development was to achieve a BREEAM excellent status, which the scheme is on track to achieve. This was further reinforced through the requirement for a 10% betterment on the U values required under building regulations. The new cladding

provides enhanced thermal insulation, air tightness and solar gain control, which reduces energy consumption.

- In addition to the fabric upgrades, the new lift installations utilises 'hall call destination', which maximises lift capacity, thus reducing the overall number of journeys.
- LED light was included throughout, with both motion and light level detection to reduce unnecessary use.
- Low water use sanitary fittings have been installed along with the installation of localised water heating to reduce the unnecessary heating of large quantities of water.

3.5.4 **Street Lighting**

- Following public consultation, in October 2018 Executive Board approved a scheme to swap out all the remaining non-LED bulbs within the 92,000 street lights, approximately 86,000 in total, within Leeds and to introduce more part night operation into a further 8,000 street lights. This is a scheme that will take approximately four years to deliver and will eventually result in a carbon saving of approximately 8,823 tCO₂ per annum.

3.5.5 **Fleet Replacement**

3.5.6 As part of the fleet replacement programme 95 Council diesel vans were replaced with fully electric vehicles saving on average almost 2 tCO₂e for every 10,000 miles travelled. The average annual mileage for the council's small van fleet is 14,000 miles per annum, equating to a carbon saving of 255 tCO₂e. We already have the largest local authority electric fleet in the country but by the end of 2019/20 financial year, we will have increased this to over 300 electric vehicles.

3.5.7 **Domestic Energy Efficiency Initiatives:** We have continued to work with Better Homes Yorkshire, WYCA, and other funders to deliver projects, helping keep people warm in winter and cool in last summer's heatwave.

3.5.8 Warmth for Wellbeing

- The Warmth for Wellbeing scheme, which has been jointly funded by Public Health Leeds and the Council and delivered by Groundwork Leeds and Care & Repair Leeds, has continued to provide face to face advice on energy efficiency and fuel bills, as well as small scale measures and heating repairs to 1532 vulnerable and low income households between October 2018 and September 2019. Throughout its existence, the project has referred people to other funding streams such as Warm Well Homes for larger measures such as heating and insulation. This has recently been retendered and relaunched along with various other services as part of the Home Plus Leeds scheme.

3.5.9 Warm Well Homes

- Warm Well Homes provides larger scale heating and insulation measures to private residents suffering from cold related illness including mental illness,

cardio vascular illness and respiratory illness. Since March 2017 when the scheme commenced, measures have been completed in 121 homes, with a further 20 in progress.

3.5.10 Warm Homes Fund

- As part of the Warm Homes programme, Leeds City Council has received majority funding to install first time central heating in forty private sector households as well as match funding to install it in 500 council homes. The households are all either in, or at risk of fuel poverty and have obsolete electric heating such as storage heating, or individual gas fires.

3.5.11 Spatial Planning Strategy & the Local Plan

- Taken as a whole, the Council's Planning Framework is seeking to help 'future proof' the District from the impacts of climate change. Focus is placed upon the delivery and management of development in sustainable locations and the need for low carbon infrastructure. Specific policies have regard to the need for energy efficiency and renewable energy, the management and mitigation of flood risks, improving air quality, sustainable design and construction, improved space and access standards and vehicle charging points. Notwithstanding this approach, further planning and building regulation reforms are needed at a central government level, to strengthen the response to the Climate Change Emergency.

3.5.12 Next Steps

3.5.13 The Council will use the Commission's roadmap to detail how it could become carbon neutral by 2030. This will include looking at areas such as our current building stock, the way that our staff move around the city and our wider fleet policy. For example, the Council's staff currently undertake 5 million miles in their own vehicles whilst travelling between sites or customers. The Council has an ambition that no Council mileage will be undertaken in a petrol or a diesel car. It will also look at how we can invest in our social housing stock to maximise its fuel efficiency.

3.5.14 As part of producing this detailed roadmap it will also identify any barriers to success and work collectively with other local authorities across the country to ensure that our asks to government to support the climate emergency are cohesive.

3.5.15 In partnership with the Commission, the Council will invite the top ten energy users across the city to lead the way by working in partnership to develop their own carbon neutral roadmap.

3.5.16 The City Conversation outlined in paragraph 3.4 will take place from June through to the end of October.

3.5.17 **Monitoring**

3.5.18 A report will be brought back to Executive Board annually to report on progress and an interim report will be taken to scrutiny board to enable progress to be

regularly monitored. A cross party steering group will also be set up to enable on-going engagement on this critical issue.

3.5.19 In the first Executive Board report, the Council will set out key ambitions with a roadmap to achieving them.

4 Corporate Considerations

4.1 Consultation and Engagement

4.1.1 The Council is now able to consult and engage regularly with the Leeds Climate Commission which is made up of a Strategy group comprising a Chair (initially from the University of Leeds), Vice-Chair (from Leeds City Council) and representatives from key organisations or sectors from across the public, private and third sectors, including at least one person from each Working Group.

4.1.2 There are currently four Working Groups, with the following remits:

- Low Carbon Working Group: Information gathering by monitoring the performance of actual and proposed projects in the city, capturing carbon reduction data in an agreed format and preparing reports. Project portfolio delivery, funding and finance by taking a city-wide view of the carbon reduction and resilience projects and how they could be financed, including securing funding for the work of the Commission;
- Climate Resilience Working Group: Reviewing the range of climate adaptation initiatives in the city, and establishing the economic case for climate adaptation.
- Engagement & Communication Working Group: Facilitating the provision of authoritative and influential city wide communication material on climate change in the city.
- The Project Development and Financing Initiative: Set up to explore ways to significant increase levels of investment in low carbon and climate resilient development across the city.

4.1.3 All of the Leeds Climate Commission has been engaged in the development of the science-based emission reduction target for city and accompanying roadmap and will be involved in the city conversation process outlined earlier in the report.

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 There are no immediate implications for equality and diversity or cohesion and integration arising from this report. Each scheme within the Council's portfolio of low carbon projects is subject to the appropriate screening assessment.

4.3 Council policies and the Best Council Plan

4.3.1 There are three Best City and one Best Council key performance indicators of direct relevance to this report. Performance information is reported regularly via the Council's performance reporting framework and is used to inform project development and progress.

- Reduced carbon emissions across the city
- Number of households in fuel poverty
- Improved energy and thermal efficiency performance of houses
- Lower CO2 emissions from council buildings and operations

4.3.2 It is anticipated that future reporting of carbon reductions will be recalibrated to the 2005 baseline of total Greenhouse Gas (GHG) Emissions which were about 6,800 mtonnes CO2e. This is a more accurate and complete figure than the city has been able to use in the past which has focussed only on carbon dioxide rather than the complete basket of GHG.

4.3.3 The Best Council Plan 2018/19 – 2020/21 maintains the Council’s long-term ‘Best City’ strategic focus on tackling poverty and inequalities through a combination of strengthening the economy and doing this in a way that is compassionate and caring, allowing us to support our most vulnerable children and adults. The projects described in this report contribute directly to the following Best City priorities:-

- Housing: The Domestic Energy Efficiency & Fuel Poverty Initiatives in the Council’s portfolio of cutting carbon projects improve housing quality and tackle fuel poverty in the city;
- Safe, strong communities: The Domestic Energy Efficiency & Fuel Poverty Initiatives in the Council’s portfolio of cutting carbon projects tackle fuel poverty in the city and help people out of financial poverty;
- Inclusive growth: The work of the Leeds Climate Commission in unlocking investment in the low carbon economy supports growth and investment, helping everyone benefit from the economy to their full potential and supports businesses and residents to improve skills,
- Health and wellbeing: The Domestic Energy Efficiency & Fuel Poverty Initiatives in the Council’s portfolio of cutting carbon projects reduce the likelihood of residents experiencing cold-related illnesses;
- 21st Century infrastructure: The District Heating and Corporate Energy Projects in the Council’s portfolio of cutting carbon projects promote the low carbon economy in the city.

4.4 Resources and value for money

4.4.1 To successfully deliver many of the projects identified under the breakthrough project, a cross Council and cross partner approach is required as it cuts across so many areas of work (e.g. public health, planning, parking, transport, environmental health, highways, waste management, Housing Leeds).

4.4.2 Where possible, the Council is identifying and bidding for grants to support the development of this work. The ongoing collaboration with the University of Leeds and Leeds Beckett University is intended to continue to help to secure additional resources for the city.

4.4.3 Leeds Climate Commission adds value to the work in the city by catalysing activity and unlocking additional resources. Numerous case studies of citywide activities are included in the Annual Report available on the Climate Commission website <http://leeds.candocities.org/about-leeds-climate-commission>.

4.5 **Legal Implications, Access to Information and Call In**

4.5.1 There are no legal implications arising from this report.

4.6 **Risk Management**

4.6.1 Significant elements of performance are determined by factors beyond the Council's direct control (such as the carbon intensity of the electricity grid and the energy performance of private dwellings in the city).

4.6.2 The instability in government policies that support energy efficiency works and renewable technologies makes it very difficult to establish long term plans and robust business cases. It has to be recognised that in order to achieve lower levels of fuel poverty as set out in the Affordable Warmth Strategy and to deliver the associated carbon savings, significant investment in energy efficient works would need to occur and in recent years the level of support from central government has diminished.

4.6.3 To meet the average 'Band C' criteria, there would need to be a significant programme of energy efficiency works, and investment by Government. In Leeds, we would need to insulate around 75,000 solid walled properties and upgrade their heating where needed at a cost of roughly £10,000 per property, amounting to approximately £750 million. There would also need to be insulation and heating upgrades to a further 26,500 non-solid walled properties at roughly £2,000 per property, costing £53 million. This would mean a total cost of £803 million.

4.6.4 The second energy efficiency target of "No properties below Band E by 2030" will also require significant investment, but is more achievable and would be targeted at households with the highest levels of fuel poverty. EPC data suggests there are around 19,000 households in Leeds with a SAP band F & G. This would equate to improving approximately 1,500 properties per year, which with costs of £5,000 - £10,000 per property would cost £7.5-£15m.

4.6.5 As the Council has to bid for funding to support many of the activities that it wants to undertake in this area, if the Council is unsuccessful in winning the funds, it will impact on our ability to deliver our identified projects.

5 **Conclusions**

5.1 There has been an increased sense of urgency on the need to respond to climate change, driven partly by the acknowledgement that patterns of more severe weather can now be associated more convincingly with a global climate that is changing due to human activity. Analysis by global scientists is clear and has resulted in governments recognising the need for more consistent policy in this area. Leeds has joined other cities in declaring a climate emergency.

5.2 Leeds' decision to establish an independent Climate Commission charged with advising the city has been recognised as an example of good practice in the UK.

The work of the Commission in seeking to unlock low carbon investment is attracting national attention. The Commission have proposed a science-based target for Leeds accompanied by an emission reduction roadmap for the city and are proposing to assist with a 'city conversation' on these before returning to Executive Board with final recommendations by the end of the year.

5.3 The City Council's own portfolio of cutting carbon projects demonstrates the Council's leadership in this area and shows how large scale carbon reduction projects result in social, economic and environmental benefits for the city.

6 Recommendations

6.1 Members of the Executive Board are recommended to:-

- Agree the recommendations of the Leeds Climate Commission for science-based emission reduction targets for the city and the accompanying roadmap;
- Support the facilitation of a city conversation on how to achieve the target, based on the roadmap prepared by the Leeds Climate Commission; and agree to receive a further report by the end of 2019;
- Support the inclusion of a new section in all Executive Board reports that will highlight the impact of the decision to be taken on the achievement of the climate emergency aims;
- Note the progress and continue to support the delivery of the portfolio of the Council's cutting carbon projects.

7 Background documents¹

7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.