

# **The report and recommendations of Glasgow City Council's climate emergency working group**

“Glaswegians are proud of their city. Make them proud that we are standing up as a leader in tackling climate change action. Make it a central plank of every initiative and action. Demonstrate the work that can flow from these actions and the benefits it will bring. Make our children see this form of action as a right.”

These are the recommendations of Glasgow's Climate Emergency Working Group. There are 61 in all. Taken together, they offer a comprehensive approach for the city of Glasgow and its people to adopt and embrace towards the challenge of climate change. They call on the Council and its partners to take radical and rapid action and to do so in a renewed spirit of municipal activism.

## 1. Introduction

- 1.1 The world's climate is changing and with it our weather. A working group was therefore established by the Council in recognition of the unprecedented nature of the challenge which climate change presents to us all. It acknowledged the severity of the impacts which a changing climate is having and will have locally and globally. It recognised too the urgency of action to reduce greenhouse gas emissions and support the transition to a safer world.
- 1.2 The background to this was the publication in October 2018 of a new report by the Inter-governmental Panel on Climate Change (IPCC). It set out the precarious nature of the balance in which we now find ourselves as a species – one given all too tangible sign by the difference between keeping global average temperature rises to below 1.5 degrees centigrade and allowing them to rise by 2 degrees (or more). In such an apparently minor difference of 0.5 degrees lies a vast chain of events which will affect the lives of human communities, the future survival of many non-human species, and the health of the eco-systems on which we all rely.
- 1.3 Beyond a 2 degree rise is a more frightening world still, one in which catastrophe lurks. At the moment, this is the trajectory on which the planet is currently set. It is therefore the kind of world which we are currently passing on to our children. It is already one which many scientists have come to regard as a new kind of extinction event for many of the species with which we share our planet – one being brought about by us. This is a truly extraordinary challenge. It will affect all of us – but it will affect the world's poorest and most vulnerable communities disproportionately. Climate change is therefore a rebuke to us all in terms of our stewardship of the environment and our attitudes to social justice.
- 1.4 The working group's key task has been to propose a new and earlier target date for the city to reach carbon neutrality. That target should be seen as the central aim around which all else pivots. However, the group has come to realise that fundamental change in the ways we all go about our lives and business is also needed. We have therefore made a number of other proposals in relation to transport, economic development and community engagement. These represent a very real need for system change in the era of climate change. We do not think incremental improvements in our approach to emissions can any longer be good enough. These are difficult messages, but we live in difficult times and they must be heeded.

- 1.5 People sometimes ask what difference Glasgow can make in a global context. The answer is simple: every action we take makes a difference, no matter how small. Every instance of inaction makes a difference too and leads us further towards trouble. Indeed, we believe that it is by our omissions which future generations will judge us.
- 1.6 Most of the technology which we need to address climate change has already been developed or is actively in development. It is innovation in finance, governance and, above all, in leadership that is needed in order to help us move forward. These are, in many ways, more challenging still as they ask some pretty searching questions about our working culture and practices.
- 1.7 We are only too well aware of how challenging the recommendations which follow are going to be for the Council and its partners. They would be an utterly inadequate response to the climate emergency if they were not so.

## 2. [Our approach](#)

- 2.1 The working group considered a number of presentations from a range of speakers and organisations. We are grateful to all the presenters for taking the time to meet with us and discuss areas of interest to the group. They have helped to stimulate our thinking and to shape our recommendations.
- 2.2 We also commissioned a public survey to get a better sense of how Glaswegians feel about these issues. It received 1,537 responses and a wealth of information and opinion. Children and young people were asked for their views too. Some areas of concern were particularly prominent in these responses and they are reflected in our recommendations. The quotations in this report are all taken from comments made by the public in response to our consultation.
- 2.3 Our survey work illustrated an appetite amongst Glaswegians for more involvement in conversations about climate and more leadership from the Council on the climate emergency. We have looked to address these themes in our recommendations.
- 2.4 The working group heard a lot about the experience of other cities which have sought to address climate issues. A number of Glasgow's peers from across the UK Core Cities network have declared climate emergencies and we have tried to learn from them. We also received evidence from presenters and our public survey about what cities elsewhere in Europe and across the world have been doing. Whilst their circumstances differ and their approaches are diverse, we have concluded that the key element in success for all of them lies in the quality of leadership at political and executive levels.

- 2.5 Some significant changes took place during the time in which the working group met. In particular:
- The Scottish Government declared a climate emergency for the nation.
  - The Committee on Climate Change issued its recommendations to the UK Government and devolved national administrations on new target years for reaching carbon neutrality and net zero emissions.
  - Glasgow City Council declared a climate and ecological emergency for the city.
  - And on a global scale, the impacts of climate change kept on coming in terms of flooding, extreme heat and ecological collapse.
- 2.6 We acknowledge that responding to the climate emergency is not the most common subject which residents raise with local elected members. Poverty, housing and litter are much more likely to figure. These are, of course, vitally important issues and they need collective action directed to them. However, taking action on climate issues is entirely compatible with delivering the Council's other social goals; indeed climate justice should be a key element of the city's social goals. A climate resilient city will protect our most vulnerable residents from disruption to the transport networks on which they rely, whilst low carbon energy systems will provide them with affordable warmth.
- 2.7 The fact that climate change may not be uppermost in the immediate concerns of Glaswegians does not alter its fundamental significance. In this light, the group endorses calls for government at local and national level to tell the truth about climate change and the urgency needed to address it. We believe that local elected members are ideally placed to exercise a community leadership role. This comment from our schools survey illustrates this point all too well:

"The council should create a city wide campaign to raise awareness of the climate emergency and educate people on how they can help."

- 2.8 There is a strong role for national government, at both Scottish and UK levels, in supporting local areas on the climate emergency. Nevertheless, having declared a climate emergency, we can't stop at simply sending a note to ask for more money from Holyrood or Westminster. We need to get on with things and draw on our own native spirit of innovation and partnership. Glasgow should lead Scotland and the world. It goes without saying that we'd like to have a lot more money from Holyrood and Westminster too.
- 2.9 Glasgow is fortunate indeed to have a world class further and higher education sector, creative and engaged businesses, and active communities. We are the city that brought clean water from Loch Katrine. We are the city that pioneered social housing reforms. We were the pre-eminent city of the carbon-based Industrial Revolution. It is transformation time once more for this great city and the Council must play a key role in mobilising the city's resources to deliver a carbon neutral Glasgow.

### 3. Our recommendations

- 3.1 The nature of the challenge facing the city and the planet is unprecedented. The decision by Glasgow City Council to declare a climate and ecological emergency is therefore very much welcomed by the working group. The Council should use its leadership position in the city to influence other agencies, businesses and people.
- 3.2 The word 'emergency' is generally associated with there being an emergency. If the Council is serious about its declaration then a lot of things need to change and they need to change quickly. One of our respondents summed this point up in these words:

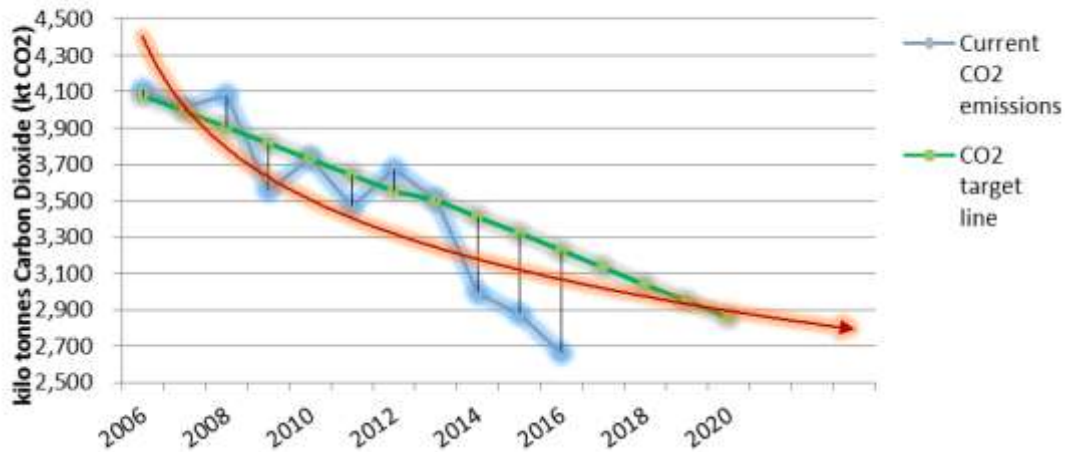
“This calls for complete re-orientation of policy and strategy to how to manage a transition from a fossil fuel local economy to a clean energy one. It means changing everyone's role to make this happen, to create the jobs that will go with it, and changing how we live, travel, and work.”

- 3.3 We have chosen to gather our recommendations around the stated themes of the Council's current strategic plan. As much as possible, each one has been linked to a corresponding numbered priority under each of these themes. A copy of the strategic plan can be viewed at <https://www.glasgow.gov.uk/strategicplan>. This approach allows lead politicians and senior officers to get a straightforward sense of where they especially need to focus their work. At the same time, we are calling for a much greater sense of ownership of climate issues across all of this broad agenda and at all levels of the Council and its partner organisations.
- 3.4 Our recommendations are directed both to the Council and to the wider city. We do think that the Council has a very strong role to play in virtue of its community leadership position and democratic mandate. However, we do also want this report to reach out to Glasgow's vibrant third sector, to our strong business community, and especially to the people who make this such a fantastic city in which to live and work - Glaswegians.

#### A. A sustainable and low carbon city

- A1.1 We are certain that our recommendations can help the Council and wider city to meet the implications of its declaration of a climate emergency. We acknowledge that much good work has been done and that real progress has been made. The Council has previously set a target for the city to reach a 30% reduction on its carbon dioxide emissions by the year 2020 (from a 2005/06 baseline). The graph below illustrates the good news that, on latest data, the city is well on target to meet and exceed this target.

Glasgow carbon dioxide emissions from 2006 up to 2020



A1.2 The Council Strategic Plan, at priority 67, currently has a target year of 2037 for the city to achieve carbon neutrality. Clearly, in response to the declaration of a climate emergency a more challenging target needs to be set. The working group has considered the potential for and implications of setting a new target. We have not had the time or resources to scope out in full detail the work needed to achieve a new target for the city. Our recommendations reflect this, but they also reflect the city's undoubted resources and ambition.

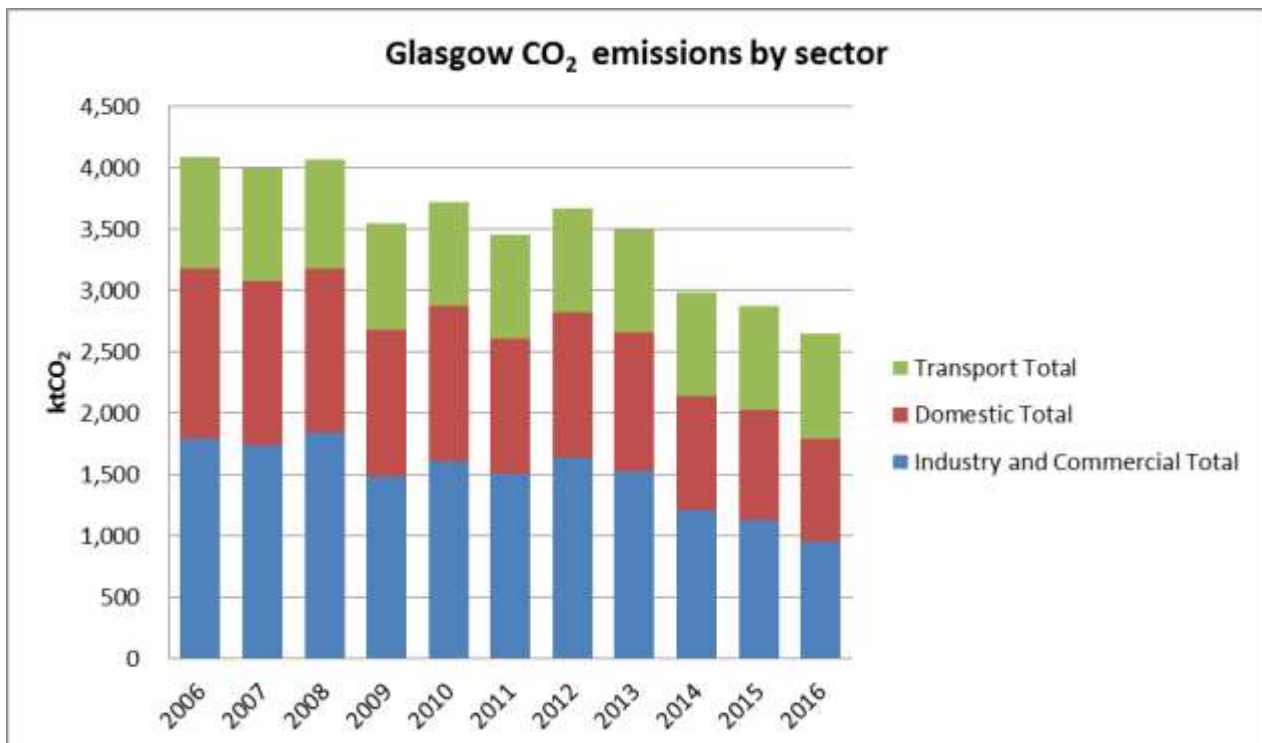
A1.3 We have reflected on the experience of our peer cities across the UK in bringing forward their own targets for achieving carbon neutrality. These vary between the late 2020s and the late 2030s. In that light, our central recommendation is that Priority 67 of the Council Strategic Plan be amended to state that **the Council commits to working with the business community, third sector and Glasgow's citizens and communities to achieve a carbon neutral Glasgow by 2030. We further recommend that the Council works with partner local authorities, the city's academic institutions and other stakeholders to design, fund and commission detailed advice on the timescales, actions and budgets needed to meet or better a carbon neutral Glasgow by 2030 and that the Chief Executive provides interim reports on progress to the Environment, Sustainability and Carbon Reduction City Policy Committee.**

A2.1 We are aware that the Council is currently working on a Local Heat and Energy Efficiency Strategy, which is the principal means through which new carbon emissions reduction targets will be set for the city. This offers a good opportunity for some of our recommendations to find a ready home and to fit in with an acknowledged process. We look forward to seeing the strategy developed and to our recommendations being accommodated within it. We also heard of numerous actual and potential projects which could benefit significantly from a more joined up approach to low carbon energy planning across the city. In this light, one of the areas on which we wish to see greater progress made is in establishing the formal

arrangements for an energy services company for the city. This is already a stated ambition in the Council Strategic Plan in priority 69, but progress towards it needs to increase significantly in order for opportunities to be maximised and to prevent further time being lost.

**A2.2 Under priority 69, we recommend acceleration of the establishment of an energy services company for the city as a necessary step towards producing more locally generated and distributed low carbon energy.**

A3.1 Progress in reducing the city's emissions has been made rather unevenly across sectors. The chart below illustrates the nature of the challenge, indicating that emissions from transport are barely reducing at all. Decarbonising heat and transport in particular are going to be the principal challenges for the city on a local basis if greater progress is to be made.



A3.2 In support of accelerating the delivery of priority 68, the constraints on further developing low carbon district heating systems must be removed. **We recommend that:**

- **The Council continues to seek measures by the Scottish Government to amend non-domestic rates assessments for domestic district heating installations to encourage the use of district heating in place of standalone heating in new build and refurbished homes, and**
- **Subject to action on this issue by the Scottish Government, the Council consults on proposals for the inclusion of district heating systems where feasible in major new housing developments and renewal or refurbishment projects.**

- A3.3 **Under priorities 68 and 80, we recommend establishing new ambitious targets to address the low energy efficiency and high-carbon heating that are a feature of the city's older housing stock, most of which is in private or mixed-tenure ownership.**
- A3.4 **In addition, we recommend that the Council supports the creation of a Scottish Grid factor, to more accurately measure the carbon intensity of local energy consumption.**
- A3.5 **We recommend that there is a Property and Land Strategy to consolidate Council building stock, which can ensure that buildings which are retained are retrofitted to the highest possible standards and building management systems are in place, and those disposed of are done so responsibly.**
- A3.6 **We recommend that the Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.**
- A3.7 **We recommend that the Chief Executive reviews current staffing resource distribution within the Council and brings forward proposals to increase the Council's focus on the climate emergency.**
- A4.1 The working group recognises that there are constraints on what a city like Glasgow can do to reduce its emissions to as close to zero as possible. Discussion therefore needs to take place on the role of tree-planting and other forms of woodland cover in order to ensure that the city has the means of absorbing any remaining emissions. This will build on work with our key partnerships across the city-region, which have already conducted audits in four areas of the city on such issues. Immediate action should be taken to significantly increase the numbers of trees within the city to capture carbon, as trees are more effective at this the larger they are. As there seem to be barriers to getting new trees in local areas at present, the reasons behind these should be identified in order that new trees can be planted in wards throughout the city, on streets as well as in parks.
- A4.2 **In support of accelerating the delivery of priority 71 (promoting and enhancing our city's natural resources), we recommend a review to address existing barriers to tree planting in order to significantly increase the number of trees within the city over the next 5 years.**
- A5.1 Given the very tight nature of Glasgow's boundaries, this kind of discussion might helpfully take place in the broader context of the city-region, seeing how the assets of the metropolitan area can best be mobilised to support its ambitions. We therefore believe that the city needs to take a more expansive look across the metropolitan area to see what opportunities there are for tree planting and other forms of carbon sequestration, as well as more renewable energy projects for which the city's own topography may not be suitable. The working



group commends the recent decision by the area's local authorities to take forward an adaptation strategy and action plan for the city-region and we are calling for a similar debate about mitigation measures.

- A5.2 **In support of priority 71, we recommend that a formal audit and costed plan is brought forward by the Council and its city-region partners on the opportunities for much greater tree planting and other ways of harnessing the natural environment to absorb emissions.**
- A5.3 Following the recent Open Space consultation, and linked in with ongoing work to address the pressing problem of Glasgow's high levels of vacant and derelict land, further analysis should be undertaken to identify areas suitable for 'greening' or 'rewilding'. Once identified, actions should be taken as soon as possible to repurpose land. Depending on the outcome of the current public consultation into the future of Glasgow's public golf courses, it may be that some of these under-utilised sites are also repurposed for food growing, tree planting or as a carbon sink.
- A5.4 **In support of priority 71, we recommend a review to identify vacant and derelict land suitable for greening and rewilding, with a view to its change of use as designated open space.**
- A6.1 The group is highly supportive of the Council's lead role on biodiversity issues. We are only too conscious that climate change is already proving to be disastrous for the non-human species with which we share this planet. Our public consultation indicated very high levels of concern from respondents about plastic waste and its devastating effects on marine life in particular, as well as a corresponding sense that the city's recycling service leaves much to be desired. A typical comment was:
- "We're filling our oceans with plastic and have got to stop. Recycling in this city needs to improve a LOT and people have got to start behaving like they could actually give a toss about their environment."
- A6.2 The working group therefore welcomes the Council's commitment to publish a strategy and action plan on combating plastic waste by the end of this year. Under priority 64, to improve the city's cleanliness and recycling rates, **we recommend that the city works to end single use plastic waste and that it commits to developing Scotland's first plastic free shopping zone.**
- A6.3 **In addition, we recommend a review of current communications with households around food waste bins and the use of recycling bins, with a view to increasing usage of food waste bins.** The deposit return scheme will also have a likely impact on household waste and this should be considered. The Council must also ensure that sufficient resource is available for the collection of these bins, reflecting the issues which uncollected food waste can present for the local environment.

- A7.1 The single most prominent area mentioned by respondents to our public survey was transport. People are deeply unhappy with the current state of public transport and want to see a more rapid transition made to a city where walking and cycling are the norm. They also want a high quality, low emissions public transport system developed under the city's control – and potentially one which is free to use. A radical change to the transport system clearly needs to take place.
- A7.2 The working group has been impressed by the recommendations of the city's Connectivity Commission and we formally lend our support to them. **We recommend that the Council supports the long-term investment as proposed by the Connectivity Commission that is required to build the Glasgow Metro, and to create new local connections to the suburban areas.**
- A7.3 **In support of priorities 53 and 57, we recommend that the Council:**
- **Investigates use of the 'franchising' powers set out in the Transport Bill to regulate the city's bus network and to work on the principles of one network, one timetable, one ticket.**
  - **Works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region's transport network.**
- A7.4 We welcome the unanimous commitment of the Council to exploring, in conjunction with the regional transport partners, options for the acquisition and operation of operational bus assets – seizing the opportunity presented by First Glasgow's sale to protect jobs and services. **We recommend that the Council works with partner local authorities to consider the opportunity presented by First Glasgow being up for sale and for the business case to be explored, including the financial viability of re-municipalisation.** However, we recognise that this may prove not to be feasible. In that case, in support of priority 57, we recommend that the Council works with regional transport partners in committing to utilising the anticipated 'franchising' powers for bus services.
- A7.5 **We recommend that the Council engages with interested local authorities and other stakeholders to initiate a formal assessment of the potential for making the transition to a public transport system that is free to use.**

“One key reason why so many people travel in cars is that the public transport infrastructure is not fit for purpose. When friends/colleagues visit from around the world I am embarrassed by the constant breakdowns/lateness/infrequency and Edwardian hours of operation of our city's public transport. You need to take back the control of public transport in Glasgow!!”

“Have a public transport network. And by public transport I mean public, not a series of different companies which have quite expensive prices and don't give many combinations possibilities, that make easier and cheaper use your own car, even if you travel by yourself, than using the 'public' transport.”

- A7.6 **Under priority 56, we recommend the development of a feasibility study into integrated ticketing and more physically and digitally accessible travel.** A feasibility study should be undertaken with regional partners into an integrated ticket and travel model of the type available in many other world-class international cities, with a capped daily cost similar to Transport for London's Oyster system. Analysis should be undertaken where possible to review the end-to-end journeys taken by people travelling within or through Glasgow to ensure that available transport links match where people wish to go and to move people out of private motor vehicles. Consideration should be given to digital tools to aid residents and visitors to the city getting around, such as real-time apps. Any new transport infrastructure or large-scale projects should have increased accessibility (such as level access throughout, reliable visual and audio displays, and internet access).
- A7.7 We appreciate that businesses need to take daily deliveries of goods in the city, but think that a model should be developed for this which can shift towards the use of zero emissions vehicles for the final mile(s). **We therefore recommend a review of HGV movements within the city with the aim of limiting their number. This should look at potential models for freight consolidation services within the city centre in order to provide a service to businesses and reduce the numbers of vans and HGVs throughout the city centre.**
- A7.8 **We recommend the publishing of an updated Electric Vehicle strategy, with reference to the recent announcement of Scottish Power's ambitions to support the city, by the end of 2019.** We urge any new strategy to support the provision of EV infrastructure across the city – especially focusing on Business Improvement District areas and town centres.
- A7.9 **We recommend targeting the reduction of illegal parking and engine idling through increased enforcement and public awareness and that the Council should alert members to the resources necessary to ensure this.**
- A7.10 **As part of the development of the Low Emission Zone's Phase 2, we recommend that:**
- **Clear guidance for all vehicles is available within the agreed timescale.**
  - **A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.**

- A8.1 One of the most evidence based, effective and low tech public health interventions is to get people walking about a bit more. Active travel was one of the most frequent issues raised by respondents to our survey, alongside broader concerns about transport. People want a city that fundamentally puts the pedestrian and cyclist first. Much good work has been undertaken, but more still needs to be done if emissions from transport are to be reduced and people induced to take healthier travel options. The recommendations stated below aim to support the city's current efforts and to help shift them towards a more comprehensive and integrated approach to active travel.
- A8.2 To accelerate delivery of priority 55, the prioritisation of sustainable transport across the city, **we recommend that the city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow. We recommend that the Council works to deliver an increase in education and awareness amongst relevant staff and third-parties of design standards such as Transport Scotland's 'Cycling by Design' guidance and records its commitment to have regard to these standards in future changes to the road network.**
- A8.3 **We recommend enforcement of Transport Scotland's sustainable transport hierarchy, including, where necessary, that space currently dominated by the private car is reprioritised to provide a fairer transport system.**
- A8.4 **We recommend that the development of new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.**
- A9.1 **Under priority 65, to support the building of high quality, inclusive active travel infrastructure, we recommend that the Council:**
- **Takes forward the success of the pedestrianisation of parts of the city centre by accelerating the Avenues Projects and by further improving the public realm to encourage active travel choices.**
  - **Ensures that relevant stakeholders such as GoBike and Sustrans are notified of and consulted on developments key to, or which may have an impact on, Glasgow's developing cycling network.**
  - **Makes a commitment to the Glasgow Connectivity Commission's call for the completion of a network of safe, high-quality, segregated cycling arterial routes connecting the city centre to suburbs and peripheral neighbourhoods.**
- A9.2 The rapid adoption and roll-out of such policies will help both to reduce emissions and to encourage greater use of active travel. **In support of these, we also recommend the acceleration of priority 59, by delivering more 20mph speed limits on residential roads.**
- A9.3 **We recommend, as part of priority 59, the early roll-out of 'car-free' zones to other schools and locations attended by large**

**numbers of potentially vulnerable pedestrians, building on lessons emerging from the current pilot.** This will also support the delivery of priority 31, which encourages walking and cycling to school.

A10.1 Emissions from livestock farming are a significant element of greenhouse gas production. The global food production system also contributes to carbon emissions through transport and is itself highly vulnerable to future changes in climate. A healthier diet involves less consumption of processed foods and meat. A more resilient food system involves more locally sourced produce and a recognition of seasonality in that production. An approach which is informed by Fairtrade principles can also reflect our local responsibility to the development of a more sustainable and just global food system. There is clearly an opportunity to do better here and many of our survey respondents talked of the need to promote a plant-based diet as well as to provide more opportunities for local food growing. **Under priority 72, we recommend that the Council and its partners publish a sustainable food strategy for the city within the next year and that the Council considers making space for food growing a requirement of new housing developments.**

## **B. [A thriving economy](#)**

B1.1 It is not unreasonable to say that the city's approach to economic development and the City Deal programme has not had carbon and climate issues at its fore. A lower carbon economy will help to make Glasgow more resilient to the future shocks of both a changing global climate and turbulent global market forces. The climate emergency which Glasgow's residents face also calls on us to reflect very carefully on our current economic model of apparently consequence-free consumption. In this light, the working group commends the innovative work which has been led by the Glasgow Chamber of Commerce on the circular economy. **Under priority 1, we recommend that the Council and partners revise the city's economic strategy to put addressing the climate emergency front and centre of planning for Glasgow's future economy.** This will also help to deliver priority 3 and ensure that these strategies benefit the city and people of Glasgow.

"The Council (and all levels of government) should fiercely advocate for the principles of a Green New Deal, and present the knock-on benefits of this: reduction in inequality; a rise in standard of living and mental wellbeing for the vast majority; safer, cleaner and more citizen-friendly cities (currently our cities are set up and designed for cars, not people); a sense of hope and collectivism."

B1.2 There is understandable concern about the impact on jobs which shifting our economy away from its dependency on fossil fuels will have. Glasgow has seen before the wrenching and destructive effects of rapid economic change. We know we need to protect workers and

also maximise opportunities for the future workforce during the transition to come. This will not happen on its own. It will take planning and engagement with both businesses and trade unions. The Council and partners such as Skills Development Scotland and Scottish Enterprise are best placed to foster such work. **To support delivery of priority 1, we recommend that the Council and partners develop a local version of the Scottish Government’s Just Transition Commission and plan actively for the shift to a carbon neutral economy.**

“Protect workers and provide them with training so they can have a Just Transition into a sustainable future.”

- B2.1 The working group has been impressed by the work which the Glasgow Chamber of Commerce has led with local businesses on developing the circular economy. We want to see an expansion of the circular economy through work for priority 6, which is about supporting small businesses and encouraging business diversity. **We recommend the development of a Circular Economy Route Map for the city and support for the Circular Economy Bill in this term of the Scottish Parliament.**

### C. [A vibrant city](#)

- C1 Glasgow is an outward-looking and internationalist city. It has a strong reputation for standing in solidarity with its own people and for setting its face towards social justice and equality globally. The city is also fortunate to have a unique resource at Glasgow Caledonian University, called the Centre for Climate Justice, which works to support what Mary Robinson calls ‘a just transition to a safer world’. Glasgow should take a strong role in advocating for climate justice on the world stage – and acknowledging too the post-colonial legacy of Glasgow’s own role in empire, the contours of which are still shaping climate conflict.
- C2.1 Glasgow has consistently featured in the top ten of the Global Sustainable Destinations Index. This is a positive achievement on which to build and the city should ensure that it continues to send out positive messages to the world about its transformation into a low carbon and climate ready city. We have an incredible story to tell about our journey with carbon since the beginning of the Industrial Revolution to the present day. The city is developing a new international strategy and we think sustainability should be at the centre of it. We should acknowledge that we export much of our plastic waste to the poorer parts of the planet for recycling and a lot to the world’s oceans as marine litter. **Under priority 16, we recommend that a sustainable city story should be central to accounts of our history and where we see our future going.**

“...the Council needs to communicate clearly with the public about the nature of the problem and the benefits that they will experience through decisive action to address it. It’s really crucial to highlight that most of the

above actions will make our city a much more pleasant place to live, regardless of their impact on greenhouse gas emissions. Ideally, the issue should be framed and dealt with in terms of the ecological crisis more broadly - not just climate change but also our exceedance of other planetary boundaries. Glasgow has a real opportunity to lead the way...”

- C2.2 Glasgow has a world-leading reputation for its arts sector, which has played a key role in the city’s post-industrial regeneration and resurgence. The science of climate issues is vitally important, but it is often presented in ways which can be opaque and off-putting to the general public. This can sometimes feed into a worrying sense that we lack agency to do anything about the crisis and that failure is inevitable. The arts have the capacity to reach out to people’s innate creativity and give them the languages, media and ideas to represent the crisis to themselves and allow them to develop their responses.
- C2.3 We also see the role of the arts as a key underpinning to our recommendations in section F below.
- C3 In support of priority 19, we recommend that we work with other cities and wider networks to share knowledge, collaborate and use our combined voice to create climate resilient strategies, including plans for development of Historic Glasgow and transformation of the River Clyde waterfront.**

#### **D. Excellent and inclusive education**

- D1 The enthusiasm and passion of our children and young people for climate and sustainability issues has been both heartening and humbling. The comments quoted below are from our schools’ survey and they illustrate the breadth of commitment which children are already bringing to this agenda.

“To develop our awareness of climate justice we have links with a school in Malawi and children in both schools have worked on climate change projects relating to litter and renewable energy.”

“We are preparing a climate change assembly so that we can raise awareness to the whole school of our actions and top 5 things that pupils can do to reduce their carbon footprint.”

“We would like to see less plastic in the school canteens and resource food from sustainable sources. We also feel that recycling bins should be emptied more regularly.”

- D2 There is clearly a hunger for greater involvement in these issues from children and young people. Indeed, the next generation of climate leaders is already here. We need to help to equip them with the skills and to provide them with the tools which will give them the best chance of success. Our schools are able to draw upon an established network of eco-committees and these must be supported to get messages

about climate out to children and young people and to foster an open discussion with them about the climate emergency. In support of priorities 22 and 99, **we therefore recommend that Glasgow's schools formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.**

- D3 One thing which has become very clear from our survey and from other links to schools is the concern which children and young people have about plastic waste and its impact on the environment. The school lunch experience has come in for particular criticism and the Council needs to do better in managing waste and seeking locally sourced food. **In support of priority 22, we recommend that the Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.**
- D4 We recognise the need to prepare our young people for a different world of work as our city makes the transition to a greener economy. There are opportunities for young people here and we should be planning for them. We can encourage young people to pursue careers in sustainable construction, for instance, and thereby increase the supply of qualified builders to meet the need to upgrade a large proportion of the building stock across Scotland. This will fit well with the existing focus under priority 28 on the STEM subjects. **We therefore recommend that our schools work closely with local colleges and universities to build the skills and capacity for a greener economy, including a focus on new technologies (such as heat pumps, battery storage, and other forms of low carbon technology), and ensuring the provision of apprenticeships and other opportunities.**
- D5 The school estate forms a major part of the Council's assets. Priorities 26 and 32 refer to the need to invest in it and also to maximise its role at the physical heart of many communities. **We recommend that investment in the school estate and its uses has carbon reduction and climate education as core principles.**

## **E. [A healthier city](#)**

- E1 Much of the thinking and most of the interventions relating to the climate emergency are strongly linked to the public health agenda. That is not surprising, given that when we talk about climate we are talking about the future health, wellbeing and even survival of our species.

“Climate change is the biggest threat to human health that we have known in recent centuries. This makes climate change a public health priority. Although there has been strong scientific evidence of accelerating climate change for several decades, action at the required scale is only beginning to be considered by public bodies. This means that the actions we take must happen quickly and extensively if we are to



avoid the looming ‘tipping point’ after which major climate change is expected to be irreversible.”

- E2 These interventions can both reduce emissions and tackle obesity. They can also help to address some of the long-standing inequalities in Glasgow which contribute to poorer health and reduce community resilience to future climate change.

“Poorer people in the city and disabled people don't own cars. Everything you do for walking, cycling and public transport is good for equality and human rights.”

- E3 **In support of priority 38, service redesign, we recommend that all decisions made by the Health and Social Care Partnership are assessed on the basis of their climate and carbon impacts and integrated with equality and human rights assessments to maximise their positive effects and to reduce any negative impacts.**
- E4 We also see the role of health as a key underpinning to our recommendations in section A above.

#### **F. Resilient and empowered neighbourhoods**

- F1 The city needs to do a lot more to alert local residents to the challenges of climate change and to engage in an open conversation with them. The working group fully acknowledges that difficult decisions will need to be made on how to finance a rapid decarbonisation of the city and that these are best made openly and in constructive dialogue with residents. Engagement with communities in the age of climate change is also particularly significant and the Council has helped to lead a project called Weathering Change in the north of the city to grow local action in partnership with communities on climate issues. **Under priorities 73 and 76, we recommend that the city engages in climate conversations with residents through its Community Planning structures and further recommend that it considers how to roll-out the Weathering Change model in the context of its review of Thriving Places.**
- F2 The third sector has been a consistent presence in the life of the city for a very long time and any sustainable response to the climate emergency must draw on its deep roots within the city's diverse communities. We are particularly conscious of the need to reach out to vulnerable and disadvantaged groups in shaping Glasgow's response to the climate crisis so that their interests are at the forefront of debate – and that we can best do that through representative groups and advocacy organisations in the third sector. **In support of priority 74, we recommend that the Council and third sector use their recently developed concordat as a vehicle for taking forward a dialogue on climate and appropriate action, as well as grant funding decisions.**

- F3 Many of the city’s new residents have experienced climate change and related conflict in their countries of national origin. The city has deservedly earned a good reputation as a welcoming place and climate change is going to continue to drive huge movements of people across the globe. The Council and partners therefore need to prepare to accommodate further migration into the city in ways which are themselves sustainable as its population grows. **Under priority 74, recognising that there is much the city can learn from the experience of new Glaswegians, we recommend that the Council and partners work with community and faith groups to ensure their voices are heard as part of a wider community climate conversation.**

“Inaction on climate change will deny hundreds of millions their human rights right down to their lives, affecting the poorest the worst. Any action against climate change by definition supports human rights and equality.”

- F4 Social justice and equality need to be at the heart of our new, sustainable and low carbon Glasgow. Our transformation must be delivered with our people in all their diverse communities and we believe that a more resilient city can only be built on the foundations of a more just city. **Under priorities 76 and 98, we recommend that all decisions made by the Council and its partners in response to the climate emergency are supported by equality and human rights assessments, as well as the Fairer Scotland duty, to maximise their positive effects and to reduce any negative impacts.**

“Climate change will affect everyone but especially those who are not as well off as they may not be able to afford rising food prices or may not live in a house equipped to deal with extreme weather. You need to make sure those not so well off are given the support to deal with this.”

- F5 The working group is aware of the strong interest in Glasgow in issues around place and design. We think these have a key role to play in setting out a vision for how land in the city is used and how good quality design can contribute to a lower carbon future. We heard about the process involved in developing the next version of the City Development Plan and its Main Issues Report. The city’s establishment of a Place Commission is also welcomed as a potential means of incorporating climate and carbon considerations in design principles and how place-making is undertaken. **In support of priority 82, we recommend that the new City Development Plan presents a vision for a low carbon city that can guide the development of proposals and planning decisions that help our city respond to the climate challenge.**

## **G. [A well governed city that listens and responds](#)**

- G1 There is currently no mention of climate issues in Glasgow’s overarching Community Plan. This isn’t good enough. **In support of**

**priority 95, partners need to revisit the Community Plan and ensure that climate change informs all of it.**

- G2 The climate emergency demands commitment and comprehension from all levels of our organisations. The working group wishes to see leadership from senior officials of our public bodies, as well as elected members. Climate issues are everyone's business and they need to be genuinely and tangibly mainstreamed through organisational life. **In support priority 95, we therefore recommend that Community Planning partners work together to ensure that all senior officers in the city's agencies have undertaken carbon literacy training and become climate leaders themselves, with further plans brought forward to leaven these issues throughout the thinking of all sectors.**
- G3 The working group wants to see momentum gather and we expect to see progress being made. Work needs to start on our recommendations right now. **In support of priorities 93 and 94, we recommend that the Council reports back to the people of Glasgow annually on what it has done to address the climate emergency and what it is planning to do.** This should accompany an ongoing conversation with all the city's diverse communities about the climate crisis and the actions we all should be taking to build a more resilient city which helps to lead a global movement for a safer planet.

#### **4. Risks and challenges**

- 4.1 The working group recognises just how difficult times are right now for public sector finances. Nevertheless, an emergency is an emergency. As a start, the Council and its partners need to start assessing their own budget setting processes for their impacts on carbon and climate. This needs, at the very least, to explore ways of ensuring that budgets do not contribute further to our city's emissions – and allow at the same time exploration of ways of re-focusing existing budgets towards positive climate impacts. **We recommend that the Council acts in an exemplar role by introducing formal climate screening of all its budgets, with the 2020/21 budget being used to pilot budget setting with a clear description of climate impacts.**
- 4.2 We are conscious that climate issues have not figured highly – or at all – in the corporate risk registers of our city's organisations. This cannot continue to be the case and it is hampering the business case development for greater investment in reducing emissions and building climate resilience. We think the biggest risk which the city faces is that wrought by inaction. There needs therefore to be a presumption in favour of supporting climate solutions as much as possible. In this light, we heard about the very positive work which has been undertaken by the Climate Ready Clyde partnership for the city-region, including its risk and opportunities assessment. This has described the challenge and estimated the costs for the metropolitan city of investing in climate resilience. **We therefore recommend the development of a climate risk register by the Council and its partners, accommodating the Climate Ready Clyde findings.**

“Cost is a problem – but this is far outweighed by the cost of not taking action. This needs to be communicated. We can invest in our future, or later face the disastrous and far more expensive consequence.”

- 4.3 The working group also heard of action by other cities to develop municipal climate bonds in order to fund low carbon developments. We commend this model and think the city should explore its potential application to Glasgow. **We recommend that the city’s partners work together to develop business cases for low carbon energy and transport investments through examination of alternative financing models, including the use of municipal climate bonds.**
- 4.4 Procurement has always been a difficult area in which to incorporate social and environmental objectives because it is highly constrained by a narrow legal focus on budgetary value. Good progress has been made by the Scottish Government and the Council in broadening this focus to embrace sustainability considerations. We think more can be done to bring climate issues to the fore and especially to look at how local food production can be encouraged through public sector purchasing power. **We recommend that the Council works with local authority partners and the Scottish Government to consider whether any legislative change is needed to allow local authorities to embed carbon reduction in procurement processes. In the light of the outcome of this exercise, we further recommend that the Council reviews its procurement strategy in response to the climate emergency.**
- 4.5 Local communities should be able to invest in low carbon solutions through mechanisms such as co-operative business models. There is a good opportunity to develop partnerships which will enable residents to support renewable energy in the city and to get local benefit from these resources. **We recommend that the Council’s business support and planning services are made available to support community investment in renewable energy, including the Glasgow Community Energy Co-operative.**
- 4.6 Another major issue in relation to finance is that of pension fund investments in fossil fuel extraction. The working group heard proposals for a programme of divestment from such activities and learned of a growing body of experience from organisations which have done this. They include major funds within our own city, such as the pension fund for the University of Glasgow. We have done this kind of thing before in moving away from investments in the tobacco industry and arms manufacturers, so we can do it again and we should do it for hydrocarbons. We commend the recent call from West Dunbartonshire Council for such action and **recommend that Glasgow City Council works with the other employers and members to make a wholesale shift away from investment in hydrocarbons.** We recognise that there is an increasing risk of stranded assets which could undermine the performance of Strathclyde Pension Fund in years to come, and thus **we recommend that the Strathclyde Pension**

**Fund Committee, as the effective trustees of the Fund, ask for a report at the earliest opportunity on these risks.**

- 4.7 We do not believe in asking impossible things of the Council, but we do want to stretch its thinking towards those things which are just out of reach. Appendix C to this report looks at some of the actions which the Council itself can consider in terms of business planning, finance and practical delivery in order to move more quickly forward. Indeed, if the Council is to lead the contribution to a carbon neutral Glasgow by 2030, project delivery of these must start now. Similarly, this aim will only be achieved if the rest of the city joins the Council in pursuing that target, and we call on them to rise to that challenge. **We recommend that the Council acts as an exemplar organisation for the city and develops a programme of carbon reduction measures for its own estate and activities in response to the target set in this report.**

## **5. [A final comment](#)**

It is clear that the fate of future generations depends on our ability to take radical action to deal with climate change now. We can take inspiration from the youth climate strikers, including Greta Thunberg, who says: “It is still not too late to act. It will take a far-reaching vision, it will take courage, it will take fierce, fierce determination to act now, to lay the foundations where we may not know all the details about how to shape the ceiling. In other words, it will take cathedral thinking. I ask you to please wake up and make changes required possible.”

## Appendix A: **Membership of the Climate Emergency Working Group**

Organisations represented on the working group were encouraged to send substitute members to ensure continuity of participation in the group's meetings, with all attendees listed below.

Councillor Martha Wardrop (Chair)	Scottish Green Party
Councillor Maggie McTernan	Scottish Labour & Co-operative Party
Councillor Franny Scally	Scottish National Party
Bailie Kyle Thornton	Scottish Conservative & Unionist Party
Councillor Robert Connelly	Scottish Conservative & Unionist Party
Cheryl McCulloch	Glasgow Chamber of Commerce
Professor Tahseen Jafry	Centre for Climate Justice
Myke Hall	Extinction Rebellion
Daryl Tayar	Extinction Rebellion
Guy Bowen	Extinction Rebellion
Lykke Harris	Extinction Rebellion
Lewis Coenen-Rowe	Divest Strathclyde
Isla Scott	Divest Strathclyde
Geraldine Clayton	Divest Strathclyde
Aoife Hutton	2050 Climate Group
Karen Cornfield	2050 Climate Group
Gail Wilson	Stop Climate Chaos Scotland
Ellie Harrison	Get Glasgow Moving
Becky Menzies	Get Glasgow Moving
Calum Cook	Get Glasgow Moving
Gavin Thomson	Get Glasgow Moving
Professor James Curran	Climate Ready Clyde

## Appendix B: **The Working Group's recommendations**

### We recommend that:

1. The Council commits to working with the business community, third sector and Glasgow's citizens and communities to achieve a carbon neutral Glasgow by 2030.
2. The Council works with partner local authorities, the city's academic institutions and other stakeholders to design, fund and commission detailed advice on the timescales, actions and budgets needed to meet or better a carbon neutral Glasgow by 2030 and that the Chief Executive provides interim reports on progress to the Environment, Sustainability and Carbon Reduction City Policy Committee.
3. Acceleration of the establishment of an energy services company takes place for the city as a necessary step towards producing more locally generated and distributed low carbon energy.
4. The Council continues to seek measures by the Scottish Government to amend non-domestic rates assessments for domestic district heating installations to encourage the use of district heating in place of standalone heating in new build and refurbished homes.
5. Subject to action on this issue by the Scottish Government, the Council consults on proposals for the inclusion of district heating systems where feasible in major new housing developments and renewal or refurbishment projects.
6. New ambitious targets are established to address the low energy efficiency and high-carbon heating that are a feature of the city's older housing stock, most of which is in private or mixed-tenure ownership.
7. The Council supports the creation of a Scottish Grid factor, to more accurately measure the carbon intensity of local energy consumption.
8. There is a Property and Land Strategy to consolidate Council building stock, which can ensure that buildings which are retained are retrofitted to the highest possible standards and building management systems are in place, and those disposed of are done so responsibly.
9. The Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.
10. The Chief Executive reviews current staffing resource distribution within the Council and brings forward proposals to increase the Council's focus on the climate emergency.
11. A review is undertaken to address existing barriers to tree planting in order to significantly increase the number of trees within the city over the next 5 years.
12. A formal audit and costed plan is brought forward by the Council and its city-region partners on the opportunities for much greater tree planting and other ways of harnessing the natural environment to absorb emissions.
13. A review takes place to identify vacant and derelict land suitable for greening and rewilding, with a view to its change of use as designated open space.
14. The city works to end single use plastic waste and it commits to developing Scotland's first plastic free shopping zone.

15. A review of current communications with households around food waste bins and the use of recycling bins takes place, with a view to increasing usage of food waste bins.
16. The Council supports the long-term investment as proposed by the Connectivity Commission that is required to build the Glasgow Metro, and to create new local connections to the suburban areas.
17. The Council investigates use of the 'franchising' powers set out in the Transport Bill to regulate the city's bus network and to work on the principles of one network, one timetable, one ticket.
18. The Council works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region's transport network.
19. The Council works with partner local authorities to consider the opportunity presented by First Glasgow being up for sale and for the business case to be explored, including the financial viability of re-municipalisation.
20. The Council engages with interested local authorities and other stakeholders to initiate a formal assessment of the potential for making the transition to a public transport system that is free to use.
21. A feasibility study is developed into integrated ticketing and more physically and digitally accessible travel.
22. A review of HGV movements within the city is undertaken with the aim of limiting their number. This should look at potential models for freight consolidation services within the City Centre in order to provide a service to businesses and reduce the numbers of vans and HGVs throughout the city centre.
23. An updated Electric Vehicle strategy, with reference to the recent announcement of Scottish Power's ambitions to support the city, is produced by the end of 2019.
24. The reduction of illegal parking and engine idling is targeted through increased enforcement and public awareness and that the Council should alert members to the resources necessary to ensure this.
25. As part of the development of the Low Emission Zone's Phase 2, clear guidance for all vehicles is available within the agreed timescale.
26. A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.
27. The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.
28. The Council works to deliver an increase in education and awareness amongst relevant staff and third-parties of design standards such as Transport Scotland's 'Cycling by Design' guidance and records its commitment to have regard to these standards in future changes to the road network.
29. Transport Scotland's sustainable transport hierarchy is enforced, including, where necessary, that space currently dominated by the private car is reprioritised to provide a fairer transport system.
30. The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.
31. The Council takes forward the success of the pedestrianisation of parts of the city centre by accelerating the Avenues Projects and by further improving the public realm to encourage active travel choices.



32. The Council ensures that relevant stakeholders such as GoBike and Sustrans are notified of, and consulted on developments key to, or which may have an impact on, Glasgow's developing cycling network.
33. The Council makes a commitment to the Glasgow Connectivity Commission's call for the completion of a network of safe, high-quality, segregated cycling arterial routes connecting the city centre to suburbs and peripheral neighbourhoods.
34. The Council delivers more 20mph speed limits on residential roads.
35. The early roll out of 'car-free' zones to other schools and locations attended by large numbers of potentially vulnerable pedestrians takes place, building on lessons emerging from the current pilot.
36. The Council and its partners publish a sustainable food strategy for the city within the next year and that the Council considers making space for food growing a requirement of new housing developments.
37. The Council and partners revise the city's economic strategy to put addressing the climate emergency front and centre of planning for Glasgow's future economy.
38. The Council and partners develop a local version of the Scottish Government's Just Transition Commission and plan actively for the shift to a carbon neutral economy.
39. The development of a Circular Economy Route Map for the city takes place and support is given for the Circular Economy Bill in this term of the Scottish Parliament.
40. A sustainable city story should be central to accounts of our history and where we see our future going.
41. We work with other cities and wider networks to share knowledge, collaborate and use our combined voice to create climate resilient strategies, including plans for development of Historic Glasgow and transformation of the River Clyde waterfront.
42. Glasgow's schools should formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.
43. The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.
44. Our schools work closely with local colleges and universities to build the skills and capacity for a greener economy, including a focus on new technologies (such as heat pumps, battery storage, and other forms of low carbon technology), and ensuring the provision of apprenticeships and other opportunities.
45. Investment in the school estate and its uses has carbon reduction and climate education as core principles.
46. All decisions made by the Health and Social Care Partnership are assessed on the basis of their climate and carbon impacts and integrated with equality and human rights assessments to maximise their positive effects and to reduce any negative impacts.
47. The city engages in climate conversations with residents through its Community Planning structures and considers how to roll-out the Weathering Change model in the context of its review of Thriving Places.

48. The Council and third sector use their recently developed concordat as a vehicle for taking forward a dialogue on climate and appropriate action, as well as grant funding decisions.
49. The Council and partners work with community and faith groups to ensure that the voices of new Glaswegians are heard as part of a wider community climate conversation.
50. All decisions made by the Council and its partners in response to the climate emergency are supported by equality and human rights assessments, as well as the Fairer Scotland duty, to maximise their positive effects and to reduce any negative impacts.
51. The new City Development Plan presents a vision for a low carbon city that can guide the development of proposals and planning decisions that help our city respond to the climate challenge.
52. Partners need to revisit the Community Plan and ensure that climate change informs all of it.
53. Community Planning partners work together to ensure that all senior officers in the city's agencies have undertaken carbon literacy training and become climate leaders themselves, with further plans brought forward to leaven these issues throughout the thinking of all sectors.
54. The Council reports back to the people of Glasgow annually on what it has done to address the climate emergency and what it is planning to do.
55. The Council acts in an exemplar role by introducing formal climate screening of all its budgets, with the 2020/21 budget being used to pilot budget setting with a clear description of climate impacts.
56. A climate risk register is developed by the Council and its partners, accommodating the Climate Ready Clyde findings.
57. The city's partners work together to develop business cases for low carbon energy and transport investments through examination of alternative financing models including the use of municipal climate bonds.
58. The Council works with local authority partners and the Scottish Government to consider whether any legislative change is needed to allow local authorities to embed carbon reduction in procurement processes. In the light of the outcome of this exercise, we further recommend that the Council reviews its procurement strategy in response to the climate emergency.
59. The Council's business support and planning services are made available to support community investment in renewable energy, including the Glasgow Community Energy Co-operative.
60. The Council works with the other employers and members [of Strathclyde Pension Fund] to make a wholesale shift away from investment in hydrocarbons and that the Strathclyde Pension Fund Committee, as the effective trustees of the Fund, ask for a report at the earliest opportunity on these risks.
61. The Council acts as an exemplar organisation for the city and develops a programme of carbon reduction measures for its own estate and activities in response to the target set in this report.

## Appendix C: **Potential Council low carbon projects**

Our second recommendation calls on the city's partners to engage in the detailed planning to map out Glasgow's route to carbon neutrality by 2030. We also recommend that the Council acts as an exemplar in reducing carbon emissions.

The Council is responsible for about 5% of the city's total emissions. Council staff have considerable experience in delivering projects to reduce emissions, and have produced a Carbon Management Plan for a number of years. There are therefore a number of interventions for which emissions reductions and payback periods are well understood. Below are some examples of potential actions for the Council to accelerate its own emissions reductions, with expected carbon and financial payback periods based on previous projects undertaken by the Council's Carbon Management Team.

- Replacement of building lights with energy efficient LEDs. This would involve LED replacements for existing fluorescent, metal halide and sodium lamps. Such an investment scores well for both carbon savings, at an average reduction of over 40tCo<sub>2</sub> per annum for each system installed, and financial payback typically in six years. It is possible to do this in association with other planned investment in buildings, which can reduce costs and minimise disruption to building users. The Council does not currently have a plan to replace existing lights with LEDs other than on a re-active basis as lamps fail.
- Retrofit of building management systems across premises. Investment in modern building management systems helps the council achieve savings on energy usage. On average, a greater level of carbon emissions can be saved for a smaller initial investment than the LED intervention, giving a typical financial payback of under four years. Again, it may be possible to do this in association with other planned investment to reduce costs and minimise disruption.
- Replacement of Council vehicles by electric ones. While this requires a large initial investment, it provides a relatively rapid payback period due to lower costs of electricity compared to diesel. This is already the subject of a report to the Council on the overall decarbonisation of its fleet, which includes exploration of different potential fuel sources, especially for the larger vehicles in the Council's fleet.

These interventions are based on existing technologies and will bring down emissions. At the same time, the Council must make some difficult calculations about the best use of its capital resources to deliver carbon reductions. The most obvious example of this is the potential to phase out boilers that use heating oil for ones that use natural gas as a fuel supply, which would provide some reductions in emissions. However, because of the long payback period for such an investment, typically over fifteen years, the business case should consider the potential for a phased programme of moving straight to alternative fuel sources, which produce very low or zero carbon emissions.

The interventions noted above illustrate the sort of issues that must inform further discussion within the Council on reducing its emissions. Some of the actions noted above can readily link to planned activities and others would

need incorporating in revised plans. Specific action on each intervention would need to take account of planned asset replacement and maintenance programmes and ensure that they adopt fuller opportunities for investing in low carbon activities. They therefore offer a basis for consideration by the Council of its capacity to accelerate its low carbon agenda.

The working group expects business cases to be worked up on these and other interventions to inform discussions around the Council's capital investment programme. In selecting a programme of investment to deliver its carbon neutral target, the Council will consider a range of factors including the pace of delivery for a given investment, the differential delivery of emissions reductions across actions, and the speed of payback for a specific intervention.

While the Council is in control of decisions needed to move forward on these interventions, we recognise that other recommendations within our report will rely on partnership working. Our recommendation for setting up an ESCO for example, or enabling communities to participate in renewable energy initiatives, may be assisted by the Council agreeing to provide access to its assets to permit the installation of renewable energy technologies. Converting a large proportion of the Council's fleet to electric vehicles is part of a wider acceleration of the transfer to this technology over which the Council needs to work closely with the Scottish Government and Scottish Power Energy Networks. Acceleration of tree planting across the city may best be done in partnership with Central Scotland Green Network and partner local authorities.

Whether working on its own or in partnership, the working group members call on the Council to recognise that action to accelerate our response to the climate emergency has to start now if we are to achieve the goal of a carbon neutral Glasgow by 2030.