Contents

1.1 Foreword
1.2 Executive Summary
1.3 The Climate Challenge for Glasgow
1.4 Recommendations from the UK Committee on Climate Change (UK CCC)
1.5 Response to recommendations from the Climate Emergency Working Group
2.0 What we propose to do next - Climate Emergency Implementation Plan
3.1 Climate Emergency Implementation Theme 1: Communication and Community Empowerment
3.2 Climate Emergency Implementation Theme 2: Just and Inclusive Place
3.3 Climate Emergency Implementation Theme 3: Well Connected and Thriving City
3.4 Climate Emergency Implementation Theme 4: Health and Wellbeing
3.5 Climate Emergency Implementation Theme 5: Green Recovery
4.0 Monitoring and Evaluation
5.0 Action Plan
6.0 Appendices
1.1 Foreword

Climate Change is the greatest challenge of our lifetime, and one with potentially devastating implications for all sectors of society if we do not rise to that challenge and act decisively and quickly.

The City Council acknowledge that we have a key role to play in enabling the city to address the global climate and ecological emergency. But Climate Change is not an isolated challenge, and we must ensure a just transition to a low carbon city. If we take considered actions to reduce our carbon emissions, we will also enable safer, calmer streets, cleaner air, warmer homes and more local, nutritious food for everyone. This implementation plan will help to deliver an improved quality of life for our citizens and communities, and support a sustainable, circular economy to thrive in the city.

We recognise that the city council must show leadership on this issue. The city council cannot, however, address this challenge alone; it will take commitment from all of us. With this Climate Emergency Implementation Plan, we call upon existing networks, partnerships, organisations and individuals in the city to work with us.

We are under no illusion that reaching carbon neutrality is a significant undertaking, but the potential rewards, of better lives and a better city, are well worth striving for.

Councillor Anna Richardson
City Convenor for Sustainability and Carbon Reduction
The Climate Emergency Working Group, which included representation from all political groups of the Council as well as a range of representation from key sectors, was established at the meeting of the Environment, Sustainability and Carbon Reduction City Policy Committee on 5 February 2019. The Council declared a climate and ecological emergency at its meeting of 16 May 2019. The working group produced a report, with the input of many expert stakeholders, which made 61 recommendations, with a target for the city to achieve carbon neutrality by the year 2030 at its heart.

Much work has been undertaken across the city to determine how it can address these recommendations and how best it can exercise a leadership role for the city in drawing together the collective action of other agencies, businesses, and communities across the city. This new report now provides an update on the progress which has been made, sets a course for further action, and describes the means by which a city and its people will face the extraordinary challenges of the global climate emergency.

There is an open acknowledgement of the need for more rapid and radical action to reduce harmful emissions into the environment and build a more climate resilient city. Whilst there is an understandable focus on stemming the flow of carbon dioxide into the atmosphere, there is also a corresponding emphasis on working with nature on climate solutions and nurturing our own relationships with the natural environment. The report links the city with other local partners, especially through the city’s Sustainable Glasgow partnership, as well as with national government and its agencies. It sets out a timeline of activities against the 61 recommendations and looks to ensure that these help to deliver a healthier, more equitable and resilient city as a key element of a Glaswegian recovery from the Covid-19 crisis.

The actions which are described in this report cover a range of areas - including transport, the economy and energy - with the need to deliver sustainability and social justice together recognised throughout. They have also been aligned with the Sustainable Development Goals adopted by the United Nations.

These will help to foster a meaningful city conversation amongst our institutions and the communities whom they serve, as well as with other cities across the world also seeking to tackle this climate and ecological emergency. They therefore represent both a response and a rallying call from Glasgow City Council to itself and to the wider city in tackling the climate emergency.

Carbon Neutrality refers to the point at which carbon dioxide emissions emitted by the city are negated by the amount of carbon stored, offset, or sequestered by natural means.
1.3 The Climate Challenge for Glasgow

There is global consensus that climate change is the greatest challenge of our lifetime. Furthermore, it is acknowledged that if we are to keep global warming to safe limits, major transformative action and commitment will be required from a range of state actors, businesses, individuals, and communities. These are unprecedented tasks – and time is rapidly running out.

As we seek to recover from the Covid-19 pandemic, an unforeseeable crisis, we know we need to turn once more to the emergency which we did see coming. Glasgow declared a Climate and Ecological Emergency in 2019 and published a set of recommendations which were drafted by a working group that included representation from all political groups on the city. Principal amongst these recommendations was one for the city to become carbon neutral by 2030, which was endorsed by the city. The city further aims to become zero-emissions by 2045, in line with national ambitions. In essence, these targets mean that emissions produced and mitigated must be in balance.

Glasgow looks to become one of the most sustainable cities in Europe. The city has already achieved (and exceeded) its carbon reduction target of reducing CO2 emissions by 30% by 2020, achieving this goal by 2015, through a combination of energy efficiency and local generation. But this also means that many of the quick wins have been realised. In this light, the city recognises that there needs to be a sharp increase in the scope, scale, and intensity of delivery of projects to set Glasgow on course to achieving its goal for 2030.

We know too that we need to build resilience to the local weather impacts resulting from the city’s efforts to reduce its CO2 emissions.


Net-Zero Emissions refers to the point at which all emissions emitted by the city (CO2, NOx, SOx, PM10, PM2.5) are negated by the amount stored, offset, or sequestered by natural means.
1.3 The Climate Challenge for Glasgow

from global climate change. Parts of the city are already at risk of flooding and climate change threatens to bring the total number of homes and businesses in danger of being flooded from circa 45,000 currently to almost 60,000 by 2080.* Attention must therefore be paid not only to reducing our emissions, but to adapting the city and increasing resilience to the effects of global heating.

In order to achieve our ambitious carbon reduction targets, building adaptive capacity to climate change, and bringing about a green economic recovery from Covid-19, bold leadership and substantial investment is required. We have to acknowledge openly that our current momentum, though laudable, will not result in sufficient action to ameliorate the impacts of climate change and reverse the clearly visible weather trends.

The pace of change is central to Glasgow being able to meet its targets and to meaningfully contribute to reversing climate change. One tonne of CO$_2$ has a persistence of around 100 years in the atmosphere so a tonne of CO$_2$ saved now is worth 100 times a tonne of CO$_2$ saved a century later. This means that ambitious, early interventions will make almost double the CO$_2$ savings compared with a slower rate of change. Time is of the essence and time is not on our side unless rapid action is taken right now.

Effective climate action can also bring about better, more equitable health and wellbeing, a stronger and inclusive economy, and more resilient communities. Climate-smart places, adapted and low-carbon, also generate thriving economies. Glaswegian communities already experience many inequalities around income, opportunity and discrimination. The city believes that sustainability and social justice are intrinsically linked and should be seen as a single combined issue. This plan therefore seeks to incorporate two fundamental principles:

* That actions to address the climate crisis must not further disadvantage people and communities who already experience significant inequalities.

* That actions to create a safer and more sustainable city should also be aimed at building a just and more equal city.

* Source is SEPA’s National Flood Risk Assessment 2018.
1.3 The Climate Challenge for Glasgow

These are extraordinary times for Glasgow, for Scotland and for humanity. A global pandemic has revealed in stark relief the fragility of our social and economic systems, whilst at the same time underlining the need for solidarity and community cohesion. A global movement to challenge racial injustice has uncovered deep-seated complicity in racism across society and uncomfortable truths about our own history as a city. The climate emergency has not gone away and will interact with these other crises in ways which call for us all to think and act anew. At the very least, these recent events have highlighted our ability to act swiftly and with determination when reacting to an emergency, an ability that needs to be utilised in dealing with the climate and ecological emergency.

This plan is about a city and its people. The city council is one agency amongst others which exists to serve Glaswegians. It can, strictly speaking, only act on those things over which it has direct control - such as emissions from its own estate and vehicles. The city council can also act in a much broader influencing role however, as it is the only body in the city with a democratic mandate and a statutory leadership role.

The actions proposed in this plan are aligned with the Sustainable Development Goals, which have been adopted by the United Nations. They ensure that what we do can reach out beyond the traditional performance monitoring approaches of the public sector and engage other sectors and our communities in a meaningful conversation about progress and what it means for the city and its people. They also give us common points of reference when addressing the various actions required to deal with this emergency situation.
The whole world was given stark warning of the dangers which climate change presents and the urgent actions which need to take place to address them by the report of the IPCC in October 2018. This has been accommodated on a Scottish and UK policy basis in the work of the UK Committee on Climate Change (UK CCC). Glasgow City Council’s declaration of a climate emergency was a key local response to the IPCC report and our local progress towards a safer planet will now incorporate the recommendations of the UK CCC.

The UK CCC is an independent, statutory body established under the UK Climate Change Act 2008. Its purpose is to advise the UK and devolved governments on emissions reduction targets, progress made in achieving those targets and adapting to the impacts of climate change.

In its recent annual report to parliament, the UK CCC has set out the urgent steps that must be taken to begin a green and resilient COVID-19 recovery. The committee states that a green recovery is the only option to ensure that a low carbon, resilient economy can arise from what is expected to be the biggest economic shock in a generation.

The report highlights five key investment priorities. Each of them is stated below, together with a short response on how Glasgow City Council and its partners aim to take this advice forward in responding to the climate and ecological emergency.

**Low-carbon retrofits and buildings that are fit for the future:**

Glasgow City Council and its partners will invest in low-carbon infrastructure that will be future and climate-proof, providing good-quality, low-carbon and affordable housing and energy. We will work to reduce our emission footprint via a series of building rationalisation and retrofitting measures, which will see carbon reductions in the order of 50% from current levels. Thereafter larger-scale, bespoke actions will be required. The city will bring about this change through bold action, which will be included in the emergence of key strategies for leading the way to a low and net zero carbon future. These strategies include:

- The Carbon Management Plan (CMP3), which will set out how the city’s own estate can contribute to the achievement of carbon neutrality by 2030.
- The city’s first Local Heat and Energy Efficiency Strategy (LHEES) which will present ambitious targets for absolute carbon reduction across the built environment by 2050 and:
- The City Development Plan (CDP2) which will seek to facilitate those actions that will enable the city to meet the carbon neutrality target and help build climate resilience through our land use policies.

Our approach to decarbonisation will be informed by our work with the UK’s national innovation centre on energy systems to provide a
1.4 Recommendations of the UK Committee on Climate Change (UK CCC)

The city will continue to work with its partners within Glasgow Clyde Valley Green Network (GCVGN), GAT, and the Sustainable Glasgow partnership. We will invest in strategic (coordinated) tree planting, green infrastructure creation, and peatland restoration.

This work will encompass the forthcoming recommendations of the Ecological Emergency Working Group. This group has been established to provide guidance to the city and on the ecological aspects of the climate emergency. Their report and recommendations will be published later in 2020 and combined with this plan to provide a single source of information in response to the climate and ecological emergency.

Strengthening energy networks:

The city currently has projects underway to install energy efficient LED lighting and controls, Building Energy Management Systems (BEMS) and solar photovoltaic (PV) panels in buildings throughout its estate. An initial 5-year programme has been proposed that will reduce the city’s emissions by approximately 27,000 tCO2 - which will see the city’s footprint reduced by 55% compared to its 2005/06 baseline.

The new Carbon Management Plan (CMP3) aims to address the city’s direct carbon emissions, and will commit Glasgow City Council as an organisation to achieve the 2030 carbon neutrality target. The CMP3 will include a strong programme of retrofitting energy efficiency technologies and increasing renewable energy installations.

The city council and partners are working on a Local Heat and Energy Efficiency Strategy (LHEES) for the city, addressing the reduction of carbon emissions across the built environment. The LHEES will create pathways for the city’s heat and energy systems to become low-carbon and highly efficient. The strategy will set a new and ambitious absolute carbon reduction target for 2050, while also considering a range of measures to decarbonise heat and energy systems and increase their efficiency. It will highlight opportunities to use innovative approaches to decarbonise, decentralise and digitise heat and energy production in the future.

The city council is also one of the partners within the EU H2020 RUGGEDISED project. This is a smart city project funded under the EU’s Horizon 2020 research and innovation
1.4 Recommendations of the UK Committee on Climate Change (UK CCC)

Programme. It includes three lighthouse cities: Rotterdam, Glasgow and Umeå to accelerate the smart city model across Europe. It is working to address the challenges Glasgow faces from ageing infrastructure, fuel poverty and air pollution.

Improving Infrastructure for walking, cycling and remote working

The city council has undertaken substantial work on the Spaces for People programme during the Covid-19 crisis. This has led to a significant expansion of the segregated cycling and walking infrastructure across the city. These temporary measures provide additional space for physical distancing in public places for people to walk, wheel or cycle while COVID-19 restrictions remain in place.

Glasgow City Council is preparing three new transport strategies which will support the city’s transition to become carbon neutral by 2030. These strategies include:

- The Glasgow Transport Strategy which will present an overarching city transport strategy,
- The City Centre Transformation plan focusing solely on the city centre of Glasgow, and:
- A Liveable Neighbourhoods Plan, looking to embed sustainable practices throughout.

The key goals of the city transport strategies are to develop a range of policies and interventions that support the city’s transition to a carbon neutral city in 2030, to tackle persistent issues of poverty and deprivation in the city, and maximise the role of transport in addressing these. The proposed action is currently subject to consultation with planned publication in 2021.

We are conscious that transport was a key issue of concern in the public survey undertaken on the climate emergency last year. This included active travel (walking, wheeling and cycling) and the need to make the city a better place for pedestrians and cyclists whilst de-privileging the private motor car and improving our current public transport system. Ambitious aspirations were presented in a recommendation for a public transport system with its future as a zero emission asset, potentially free of charge and under municipal regulation or even ownership.

We are mindful that much of this agenda has been significantly disrupted due to the impact of Covid-19. In positive terms, the city has taken this opportunity to fast track work to widen street access for cycling and walking across the city. In more challenging terms, the need for social distancing and public perceptions of safety have reduced public transport usage and put people back in their cars (or at least that half of the Glaswegian population who actually own a car). We therefore acknowledge the original recommendations of the Climate Emergency Working Group in this area and will continue to support work on them, particularly in relation to the city’s aims for a green recovery.

Moving towards a circular economy

There are already a number of good examples of pioneering businesses going further and supporting innovation in the city.

Glasgow is working hard to develop our ambitions for
1.4 Recommendations of the UK Committee on Climate Change (UK CCC)

A circular economy in its forthcoming Circular Economy Route Map, due to be published in 2020.

The route map presents a vision for a city which minimises the extraction and use of precious natural resources and encourages self-sufficiency and resilience. This resilient action will be undertaken whilst supporting local, inclusive and community business growth. A circular economy supports a more inclusive and resilient city.

The city council, together with partners at the Glasgow Chamber of Commerce and Zero Waste Scotland, will continue to support innovative economic activity which focuses on the continuous circulation of products and materials within the local ecosystem (across Glasgow and Scotland). We aim to make our local economy restorative by intention and regenerative by design. In a circular Glasgow, waste will be eliminated by carefully designing products and industrial processes in such a way that materials are nutrients in a perpetual flow in either the biological cycle or the technical cycle.

The circular economy can have a major impact on economic and community resilience. The ‘self-regulating’ market on a global scale creates uncertainty, increasing price volatility, concerns over access to raw materials and rising waste disposal costs. Allied to these concerns are also the enormous carbon emission impacts from transportation in shipping products and materials across the world by aeroplane and container tankers.

A realignment of the economy on circular principles of sharing, reducing, reusing, remanufacturing, and repair also presents opportunities including:

- Alleviating potential raw material supply risks by shortening complex supply chains and increasing resource security.
- Spurring innovation of new products, technologies and services, creating new business opportunities (re-use sector).
- Creating new jobs, resulting in major beneficial social impacts through localising economies with communities and creating and retaining wealth.
- Environmental benefits: less waste, less carbon emissions, better air, water, and soil quality.

Action related to the UK CCC priorities detailed above will allow the city to capitalise on key opportunities to support innovation towards low carbon and adaptation action. The CCC priorities are therefore included in the five proposed Climate Emergency Implementation themes outlined further in this document.
1.5 Response to recommendations from the Climate Emergency Working Group

Following the declaration of a climate and ecological emergency made by Glasgow City Council in 2019, 61 recommendations were made by a cross-party Climate Emergency Working Group. These recommendations set out what the city council’s family should consider in order to meet sustainability and carbon-reduction goals, both now and over the coming years.

The recommendations cover a broad range of policy areas, including education, estates, planning and building, and the environment. The all-encompassing nature of the recommendations necessitate coordinated action not only by the city council, but by the full range of stakeholders in the Glasgow Family and city wide.

We gratefully acknowledge the expert guidance and direction provided to us through the Climate Emergency Working group. This multi-sector, cross party, inclusive and collaborative approach presented a range of thought provoking, aspiring and integrated recommendations. These recommendations have inspired and motivated real change across the organisation. Some of the actions have resulted in direct or indirect action, some have spawned collaborative proposals and initiatives and a few have been considered infeasible at this moment in time. In addition to the detailed response provided in Appendix 1, we will continue to work to address and focus on these recommendations in a thematic and holistic manner, further outlined in section 3 of this document.

Our response to the 61 Climate Emergency recommendations is presented in full in Appendix 1. The responses have been grouped under the UN Sustainable Development Goals (SDGs) in order to illustrate the breadth of work being undertaken in each area and to provide a framework through which to understand the recommendations, and our action on a more global scale.

This response outlines what we have achieved so far, and what is to come. This does not present the answer to the significant challenge ahead of us. Whilst these charts report upon our positive and innovative action to date we know that there remains much more to be done. Through collaboration with our citizens and city stakeholders we must work to address this unprecedented challenge. It is only together that we can and will achieve a low carbon and sustainable future for all.

Through work across energy, transport, development, education, and other areas, we are already reducing the city’s emissions and creating a healthier and greener Glasgow. While progress has been made in these areas, it is recognised that a faster pace and broader, transformational action are urgently required across all sectors.

We believe that Glasgow is in a good position to make the changes that are required through its strong partnerships and collective ambition.
1.5 Response to recommendations from the Climate Emergency Working Group

Resources and effort now need to be focussed to meeting our targets and aspirations. Our progress to date is something we need to build on, but it is not in itself sufficient if the city is to achieve its ambitious carbon neutrality and resilience targets.
In response to the recommendations set out by the Climate Emergency Working Group, the city Family will continue, over the coming years, to create transformational change which will make Glasgow a more climate-resilient and green city.

In order to do this the city council now presents the Climate Emergency Implementation Plan. Many of the actions in this plan will require the involvement of multiple partners on a local and national scale. This reflects the leadership role that the city must take for Glasgow in meeting the carbon neutrality target by 2030, and how this action will require the involvement of a range of city stakeholders from public, private sector and our communities across the city adopting a multi sectoral and collaborative approach. This plan sets out what we believe needs to be done to effectively address the climate emergency and make the city a better place, it will only succeed if we all work together to achieve these goals.

The actions set out in this lay forth the direction of travel required for the city to combat the climate and ecological emergency. The city will work closely with various stakeholders to identify and utilise appropriate funding mechanisms for each of the actions as they are developed.

As a key target is for the city to become Carbon Neutral by 2030 it is worth clearly defining this term. Carbon Neutral: When carbon emissions emitted directly equate to those emissions that are offset/ captured or sequestered. In simple terms this will mean the carbon emissions are balanced. Working towards this carbon neutral target therefore requires the city to significantly reduce carbon emissions whilst working to implement measures to capture (or sequester) those emissions that remain.

To achieve the level of change that is required to respond to the Climate Emergency, the city commits to taking action within five main themes. The five themes have been developed and refined to respond and accommodate all of the following key frameworks:

- The Climate Emergency Working Group report and 61 recommendations;
- The city’s Strategic Plan;
- The UK CCC report;
- The UN Sustainable Development Goals.

Each Climate Emergency Theme will present a number of additional actions for taking forward real and transformative change beyond this point. (Please see the Action Plan in section 5 of this document for a comprehensive list of actions).

In consideration of all of the above the City Council presents the following five key themes through which we will pursue bold and transformative action over the coming years:
2.0 What we propose to do next - Climate Emergency Implementation Plan

Climate Emergency Theme 1
Communication and Community Empowerment

We must continue to move away from siloed or sectoral thinking, taking a more integrated and inclusive approach has proven results in other areas of work. Our action on the climate emergency will allow a move towards more integrated, collaborative, and transformative action.

Climate Emergency Theme 2
Just and Inclusive Place

Climate change has an impact on everyone but often significantly impacts those already facing inequalities or disadvantages. Our work to address the climate emergency, must incorporate a just transition for the city. It can and must help respond to other challenges the city is faced with, closing the gap on health and socio-economic inequalities and building a better, more resilient place.

Climate Emergency Theme 3
Well Connected and Thriving City

This plan seeks to move towards more integrated, collaborative, and transformative action. Through Investing in Communities and adopting a place based approaches. We will ensure that the need to use private vehicles is reduced, there is better quality of housing, more equitable health and wellbeing, lower carbon footprints and more community resilience to the impacts of climate change.

Our communities are shaped by the quality and character of the places and the people who live in them. For Glasgow to flourish, we must ensure that our communities are able to actively participate in the decisions about reducing our carbon footprint and adapt to the effects of climate change. As communities will form a fundamental component of our ability to address the climate emergency successfully, this proposed plan focusses on communities and place based approaches first and foremost.
2.0 What we propose to do next - Climate Emergency Implementation Plan

Climate Emergency Theme 4
Health and Wellbeing

People make Glasgow and our citizens are the city’s greatest asset. It is just and right that they are placed at the centre of our climate emergency action. A city that is well connected, providing equitable access for all, is a healthier city where all of its occupants can thrive and flourish in the face of a changing climate.

Climate Emergency Theme 5
Green Recovery

Adapting to the effects of climate change, has been further complicated by the advent of the Covid 19 pandemic. This will require new ways of thinking and delivering action for the city. Innovation will be key in our continued response to the climate challenge. A sustainable and green recovery from current events will also require a rethinking of our city and its wider infrastructure, including enhancing and re-building green networks and biodiversity. Bringing together and coordinating work in this area will mean that the most impact can be achieved.

In the following section we will explore each Climate Emergency Theme in more detail.
3.1 Climate Emergency Implementation Theme 1: Communication and Community Empowerment

The 26th UN Climate Change Conference of the Parties (COP26) will be hosted by Glasgow in November 2021. This is an exciting opportunity not only to showcase the work the City has undertaken, through initiatives such as ‘Sustainable Glasgow’, ‘Resilient Glasgow’ and ‘People make Glasgow Greener’ but also to build a greener and climate smart legacy for future generations. To ensure that we build a successful and lasting legacy from COP26, we will develop a dynamic Climate Change Communications strategy for the city. This will be undertaken in collaboration with our Sustainable Glasgow Partners and will include a renewed presence on social media and encouraging participation and sharing best practice across all city stakeholders including our citizens [action 1].

Through the City Development Plan 2 (CDP2), the City will continue to use the Placemaking Principle to build quality places in the city. Thus ensuring that neighbourhoods are pleasant to live in, resource efficient, and contain high quality buildings. By promoting connectivity, more sustainable and equitable communities can be shaped. This will be delivered through the new Locality Plans which will help build a healthy, better connected city, where citizens participate in the decisions that are made about their local area [actions 14 and 21].

Helping to bring about Glasgow’s ambition of becoming a co-operative city, a framework of engagement with local energy co-operatives will be established, enabling them to be set up and providing support [action 7].
Significant public engagement will take place across the city to ensure that residents have their say on actions to tackle climate change. This will utilise innovative engagement methods, while working collaboratively with the arts community, academia, and civil society. The City will roll out climate conversations throughout Glasgow. In order to connect with key stakeholders we will engage with our partners within the Community Planning Partnership and Glasgow Life. Parallel engagement pieces will continue to be undertaken to include discussions about how proposed land use and connectivity can help to achieve a carbon-neutral city by 2030 as part of CDP2 and the developing Glasgow Transport Strategy [action 2].

These actions align with the following UN Sustainable Development Goals:
Severe weather impacts will affect all our communities but it is those most vulnerable communities in Glasgow that will be impacted disproportionately. In this way climate impacts become a stress multiplier, adding additional burden upon already existing poverty or inequality. As a result Climate change brings with it huge challenges for building greater social justice and inclusion. The city council will work with other public bodies in Scotland to benchmark our policies and monitor progress over time in addressing Climate Impacts using Adaptation Scotland’s Benchmarking Tool. This work will support how we monitor and evaluate progress against actions identified in this plan to build a more climate resilient city.

The city will implement the Fairer Scotland Duty in decisions and actions made in response to the ClimateEmergency, to help ensure that no one in Glasgow is disproportionately affected by extreme weather or left behind in our transition to a greener, carbon resilient city. This will ensure that strategic decision-making helps to tackle inequality by following Fairer Scotland Duty’s guidance for public bodies [action 44].

The city will develop a Climate Risk Register as part of the climate adaptation planning work, reflecting findings from the UK Climate Change Risk Assessment for Scotland and Climate Ready Clyde Regional Risk and Opportunity Assessment. This will give us a better understanding of risks, vulnerabilities and opportunities for the city, as well as the priorities for action in continuing to build our resilience to climate change [action 41].

The city will work with pension investment funds in the city to encourage the development of divestment strategies from the fossil fuel sector. Exploration of

Actions under this theme align with the following UN Sustainable Development Goals:
3.2 Climate Emergency Implementation Theme 2: Just and Inclusive Place

how investment portfolios are future-proof is critical, ensuring consideration is given to how the future is likely to impact on their ability to meet long-term liabilities and their members’ ability to live in a world that is worth living in [action 45].

The city will work with our partners within Climate Ready Clyde and Sustainable Glasgow to ensure that we help to build the capacity of city-wide organisations not only to transition to a low carbon, circular economy, but also to be in a position to benefit from the opportunities resulting from that transition, whilst reducing our carbon emissions and providing cleaner energy for all [actions 34, 40, 43, 46 and 47].

The 2030 Agenda for Sustainable Development provides a shared plan for peace and prosperity for both people and planet. As part of this, the UN Sustainable Development Goals (SDGs) are a global call to action. Scotland signed up to the SDGs in 2015. Glasgow mapped out our 61 recommendations and this proposed implementation plan in accordance with the UN SDGs. In order to confirm Glasgow’s commitment to the SDGs, we will undertake a Voluntary Local Review (VLR) to voluntarily assess progress toward the global goals. This process will help monitor and evaluate progress on SDG implementation, while also enabling social inclusion, and prioritisation in planning and budgeting. We will also work to ensure that the SDGs are referenced in all council decisions and actions, thereby building a better understanding of our action on a global scale [action 52].


Weathering Change

The Place Standard tool, launched in 2015, has since been used extensively both in Scotland and internationally, and has received recognition from the World Health Organisation. It is used to facilitate meaningful discussion around both physical and social aspects of a place, allowing often complex issues to become accessible. The Place Standard is a key element of participatory placemaking processes, which bring public bodies, community organisations and residents together, in the most effective means of building community resilience to climate change.

Glasgow Centre for Population Health (GCPH), together with Glasgow City Council, Sniffer and Greenspace Scotland, delivered an action research project in the north of Glasgow in 2018. This explored how communities and organisations can work together to increase resilience, particularly in the face of climate change. The team used interviews with community members and key stakeholders, workshops, and other methods of data capture, to capture feedback on quality of neighbourhood and opportunities for improvement with focus on becoming more climate resilient.

The Place Standard, currently under review, will have even greater importance in how communities work with statutory bodies as we go further in mitigating the effects of climate change and reducing our carbon emissions. It will be vital in meeting our city-wide targets, while making sure that social, economic and environmental issues are tackled holistically at a local level.
Building on the valuable work that the city and its partners have been developing over the years, the City Council has commissioned a “scoping study to Net Zero”. This will pave the way for future work where energy planning, land-use planning, housing planning, and mobility planning are integrated, ensuring that the city achieves its carbon neutrality target by 2030. This work is being undertaken by Energy Systems Catapult (ESC) and Connected Places Catapult (CPC) who bring together businesses, scientists, and technical specialists to help accelerate economic, environmental and social impact. The Catapults are part of the UKRI and Innovate UK’s Catapult programme, which is a network of world-leading technology centres designed to transform the UK’s capability for innovation in specific areas.

This approach to net zero will pilot a first-of-its-kind, coordinated holistic planning and stakeholder engagement approach, to provide the city with a robust plan and an effective approach to support the achievement of net-zero emissions. The methodology required to undertake this work will involve bringing together a number of key city partners that are essential to deliver net zero, meaning that the recently re-launched Sustainable Glasgow partnership will play an important part in driving this work [action 8].

Open space across Glasgow can be harnessed to facilitate the generation and delivery of renewable heat and energy. The Open Space Strategy Delivery Plan will investigate the potential opportunities presented by open spaces across the city, while CDP2 will include updated policy regarding the installation of EV infrastructure to support a well-connected and low carbon city. This is supported by extensive work that is ongoing to expand the EV charging infrastructure across the city. By the end 2020 there will be 228 charging bays deployed throughout the city, all of them accessible via the Charge Place Scotland (CPS) charge card. The shift to EVs is an opportunity to challenge the concept of vehicle ownership in Glasgow. Increasing provision of...
EV car club vehicles and electric bikes is also part of our wider vision for sustainable transport in Glasgow [action 31].

The first of its kind Local Heat and Energy Efficiency Strategy (LHEES) will provide a high level vision for a decarbonised, decentralised and digitised built environment. Currently in development, this strategy will include an ambitious new target for an absolute carbon reduction by 2050. This strategy will bring together key priorities around city wide carbon reduction and housing priorities reflecting the urgent need to reduce fuel poverty and increase energy efficiency of buildings [actions 7, 28, and 48].

The LHEES is aligned with the development of Glasgow’s Circular Economy route map, placing the principles of resource efficiency, carbon reduction and circularity at its core. This will look at ways to support local energy schemes allowing residents access to sustainable and renewable energy sources. Local housing will be made more sustainable through retrofitting existing stock with highly energy-efficient and low-carbon heating solutions. Work will also be undertaken to address historic buildings and ensure they are resilient to the impacts of climate change through a process of risk analysis in line with recommendations of Historic Environment Scotland. The city will engage with local developers, landlords and residents to reduce the carbon footprint associated with our own buildings, ensuring that all Glaswegians have access to clean and affordable energy [actions 24, 25, 26, 27 and 28].

Housing has a vital role to play in helping to meet our ambitions for ending fuel poverty and tackling the effects of climate change.
change. These are key to help mitigate the impact of climate change and address economic and health inequalities. Glasgow, as a Local Authority, has a significant part to play in ensuring that Glaswegians are able to live in warm, dry, energy efficient, low carbon homes which they can afford to heat. We are faced with a complex set of challenges and the solutions don’t always address climate change, energy efficiency and fuel poverty simultaneously. The Programme for Government 2020 includes a major commitment to invest £1.6 billion, over the next 5 years in heat and energy efficiency in homes and buildings. A key focus of this investment will be on fabric and insulation of existing homes to eliminate poor energy efficiency as a driver of fuel poverty. We will, therefore, continue to work with Scottish Government to maximise funding for Area Based Schemes to invest in improving energy efficiency and tackling fuel poverty in private sector housing. This work will continue while also preparing the next Glasgow Housing Strategy aligned with the national Housing to 2040 vision and routemap (2021-23). We will prepare an investment improvement plan for older (pre-1919) tenements and private sector housing (2020/21) and will update the Glasgow Standard to ensure all new affordable homes achieve net zero carbon performance [actions 23, 24 and 27].

The city council’s own estate will be made greener and more energy efficient through a range of improvements. This includes over 100 charge points for the city’s EV fleet, bringing more schools under the control of a centralised Building Management Service, LED lighting and controls installed across the estate, and adding Solar Photovoltaic wherever viable to the existing 29 sites currently installed [actions 11, 15, 16, 37, 38 and 39]. Please see EV Charging Infrastructure case study on page 30.

The Circular Economy route map has been developed following stakeholder engagement and responding to issues identified in the Circular Glasgow Scan, including local green jobs. The routemap, the first of its kind in Scotland, presents a 10 year plan to minimise our consumption and maximise the value of our resources. Therefore supporting a green recovery from the current COVID 19 pandemic, but also our Climate and Ecological Emergency. The new City Development Plan will align with our Circular Economy Route map, an important step in reducing carbon emissions in the city and making Glasgow carbon neutral by 2030 [actions 4, 6 and 34 of this plan]. City Development Plan 2 will help to facilitate action proposed by the Regional Transport Strategy and Glasgow Transport Strategy once completed. Embedding this in city-wide policy will helping to bring about a modal shift in transport as well as helping to ensure housing sites are...
3.3 Climate Emergency Implementation Theme 3: Well Connected and Thriving City

within locations supported by sustainable design [actions 9, 10, 12, 14 and 49].

The city welcomes the recently published Scottish Government programme announcing that £50m will be invested in active travel (walking, wheeling and cycling) over the next five years. This will include £275m to support investment in communities including ‘20 minute neighbourhoods’. This concept will enable people to live, learn, and meet their needs within a 20 minute walk. The city will work towards sustainable delivery solutions, creating the opportunity for local people to join in the discussion to build back better, addressing some of the city’s inequalities and support healthier lifestyles for all of our citizens [actions 10 and 14].

Actions under this theme align with the following UN Sustainable Development Goals:

3.3 Climate Emergency Implementation Theme 3: Well Connected and Thriving City

Case Study 1

Glasgow City Council
Affordable Warmth Team

The award-winning Affordable Warmth Team, based in Housing and Regeneration Services, facilitates the installation of external wall insulation (EWI) as part of the Scottish Government's Home Energy Efficiency Programme for Scotland: Area Based Schemes (HEEPS:ABS). HEEPS funding offers opportunities for homeowners and private landlords in the most deprived parts of the city to install external wall insulation and other energy efficiency measures in their project areas. Energy Company Obligation (ECO) funding is used to reduce the overall cost of the works for owners. To complement the EWI programme, GCC works in partnership with Home Energy Scotland and G-HEAT to deliver a comprehensive service including energy efficiency loans and advice. In addition, the Council provides the RSL sector with funding to allow privately owned properties in mixed tenure blocks to participate in retrofit projects. To date, the Affordable Warmth Team have delivered over 75 projects and £104m worth of energy-efficiency measures to households in Glasgow.
Housing and Regeneration Services - Passivhaus developments

Glasgow City Council’s Housing and Regeneration Services, together with partners from across housing associations, the private sector, and universities, are delivering Passivhaus developments around Glasgow. Passivhaus is standard of energy-efficiency in building, meaning that reduced heat loss in a home result in central heating being unnecessary. Examples include:

- A Passivhaus retrofit of a pre-1919 tenement block being undertaken by Southside Housing Association, CCG, John Gilbert Architects, Glasgow University (CaCHE) and Glasgow School of Art (MEARU). This project involves refurbishing a typical (eight flat) Glasgow inner-city sandstone tenement to a standard that tests the cost and efficacy of different comprehensive treatments.
- A 90-unit development in Dundashill that is being delivered by West of Scotland Housing Association. The homes will be built to Passivhaus standards with the aim of being zero-carbon.
- West of Scotland Housing Association’s 36-unit development in Dalmarnock, due to begin later in 2020, which will be built to Passivhaus standards.
- The refurbishment of three high-rise towers in Woodside by Queens Cross Housing Association, which aims to meet the EnerPhit standard of Passivhaus-retrofit. These towers, built in the 1960, have been wrapped externally in Rockwool and finished with a self-cleaning render, and have had their balconies externally insulated and enclosed with triple glazing. This is in addition to the internal installation of Mechanical Ventilation and Heat Recovery units, that purify the air with high-grade filters.
3.3 Climate Emergency Implementation Theme 3: Well Connected and Thriving City
Case Study 3

Electric Vehicle Public Infrastructure

In the UK, transport makes up about 25% greenhouse gas emissions and remains the only sector where reductions in emissions are not being achieved. To combat this, Glasgow City Council (GCC) is introducing a range of sustainable transport options, including the installation of electric vehicle (EV) infrastructure for commercial, residential and visitors use.

All-electric vehicles produce zero direct carbon dioxide (CO2) emissions. Glasgow’s aim is to help people move from internal combustion engines (ICE) to full EV, by providing good geographical coverage of charging points around the city, thus helping to reduce emissions.

By the end 2020 there will be 228 charging bays deployed throughout the city, all of them accessible via the Charge Place Scotland (CPS) charge card.

The shift from ICE vehicles to EVs is an opportunity to challenge the concept of vehicle ownership in Glasgow. There are approximately 260,000 vehicles registered in the City which is unsustainable from a number of perspectives, not least the congestion these cause. Add to that, he average vehicle in the UK is only used for nine hours a week (5% of their time), hence increasing provision of EV car club vehicles and electric bikes is also part of our wider vision for sustainable transport in Glasgow.

Access to chargers is on the understanding that drivers use the infrastructure fairly and considerately.

The vision for EVs in cities has to be one of a shift from ‘gorging’ on fuel to ‘grazing’ on electric charges, i.e. where users of petrol or diesel cars have tended to fill their fuel tank and drive until it is empty (‘gorging’). In the case of EVs, this experience needs to shift to one of a habit of ‘grazing’, where small charges are sought on journeys or when the vehicle is idle. This is particularly useful for users without a dedicated parking space.

Glasgow are committed to giving EV users more places to charge, with plans to build a commercial charging hub under...
3.3 Climate Emergency Implementation Theme 3: Well Connected and Thriving City

Case Study 3

the Kingston Bridge by early 2021. This will offer eleven 50kW rapid chargers and one 150kW ultra rapid charger. Taxis and other commercial vehicles will have a quicker turn around with their charger needs fulfilled in approximately 30 minutes. For non-commercial vehicles there are four hubs planned and work will be commencing in the near future. Tollcross International Swimming Centre will host fourteen 22kW chargers while Glasgow Club Donald Dewar and Glasgow Club Milton will host a mixture of 7kW and 22kW chargers. This will add thirty-six more bays for public use. Working alongside City Parking, GCC have secured a further 18 EV charging bays in the Cathedral car parks adjacent to High Street. This will allow users to charge their cars with only a short walk to the city centre.

Glasgow to date has hosted over 175,912 charging sessions, delivering over 1,700,000 kWh which equates to over 5 million emission-free miles.
There is now a growing sense, both locally and globally, that climate change is also a major public health issue. It has become one of the most significant contemporary challenges to health and wellbeing and should be seen as potentially as serious as the current Covid-19 pandemic in its long-term impacts. In order to counteract these impacts, we will work with our partners to address climate change, whilst also closing the gap on the health inequalities existing in the city. To do this we will set up a Glasgow Just Transition Commission, while also continuing to work with our partners to implement the Fairer Scotland Duty. This will also include a focus on the need to adopt the principles of the waste hierarchy (reduce and re-use of materials) is one of the most important ways in which we can help meet our carbon-reduction targets and create a more sustainable and circular economy. The current Council Waste Strategy expires in 2020,
3.4 Climate Emergency Implementation Theme 4: Health and Wellbeing

and its review will address these issues in the light of national legislation, including the new deposit and return scheme. The national Zero Waste Scotland Strategy aims to embed the principles of a circular economy and a zero waste society. This means minimising the population's demand on primary resources and maximising the reuse, recycling and recovery of resources. We will kick start ambitious targets for creating a more circular economy through the adoption of the circular economy route map due at the end of 2020 and the city’s forthcoming Waste Strategy [actions 32, 33, 34 and 35].

Our global food system is under pressure to feed a growing human population and also to help address the climate and ecological emergency. Agriculture and, indeed, our entire food system are significant contributors to climate change, but they are also vulnerable to the impacts of our changing climate, such as extreme weather events, droughts and pests and diseases. Our food system needs to be protected against the impacts of climate change and can also help to reduce our carbon emissions. The recently published “Food Growing Strategy” will help address some of these challenges. It will complement the review of the Stalled Spaces programme and the Open Space Strategy Delivery Programme. Through these delivery mechanisms we are currently working to identify and deliver new food growing areas. Alongside this work, CDP2 will include land use policies, specifically ensuring that new housing developments include space for food growing. We will support this action by building our understanding of local food systems and encouraging the transition to healthier, more sustainable and climate-smart food system in the city. This will include a communications campaign and guidance to increase the consumption of healthier and sustainable diets. We will work with the Scottish Government and key organisations in the city to facilitate access to locally sourced, seasonal food [action 36].

The city will implement the Local Biodiversity Action Plan (LBAP), helping to ensure that Glasgow has clean air, clean water, and a protected natural environment. This can help
3.4 Climate Emergency Implementation Theme 4: Health and Wellbeing

and mental health of our communities [actions 18, 19, 20 and 22].

Reducing the city’s reliance on the private motor car will play a key role in creating a healthier city and reducing our carbon emissions. This will be achieved in part by requiring increased space for active travel (walking, wheeling and cycling) in new developments through CDP2 policy. This will also be considered in the Glasgow Transport Strategy work to consult and review how roads across Glasgow could be repurposed for other modes of transport. Similarly, development frameworks such as SDFs, LDFs and Masterplans, in collaboration with the City Centre Transformation Plan and Glasgow Transport Strategy, will identify public realm improvements to encourage active travel choices [actions 9, 10 and 14].

To both reduce our carbon footprint and provide an inclusive working environment, the city will continue to support home working and the use of video-conferencing as part of a standard working practice. This trend will strengthen the case for a rationalised Council estate, reducing our carbon impact through the reduced requirement for operational buildings and lower consumption of utilities. There will also be a proportionate reduction in transport thus vehicle emissions and congestion will be lessened [action 51].

Glasgow implemented the first Low Emission Zone scheme in Scotland at the end of 2018. This was introduced with Phase 1 designed to improve on vehicle emissions from the bus fleet within the city centre. This has provided measurable improvements in air quality and will be extended on a phased

https://glasgow.gov.uk/CHttpHandler.ashx?id=31838&p=0
https://www.glasgow.gov.uk/CHttpHandler.ashx?id=31719&p=0
3.4 Climate Emergency Implementation Theme 4: Health and Wellbeing

Basis to include all vehicle types. The legislative process for expanding the scope of the LEZ was paused due to the focus on COVID-19. There will be a delay to the original full implementation date of 1st January 2022, however an indicative timescale for resumption has been prepared. Glasgow City Council remains committed to ensuring this delay is as short as possible, and commits to continuing to improve air quality in the city and address carbon emissions from the transport sector [actions 12 and 49].

These actions align with the following UN Sustainable Development Goals:
Covid-19 has drawn out the importance of greenspace and the natural environment for all of us as a daily walk in the park has become one of the few opportunities for people to get out of their homes. There is a common thread running through both the Covid-19 and climate emergencies, showing the perilous disruption and imbalance between our lives and that of other planetary species and eco-systems. We need to look again at these relationships and fundamentally seek to re-set our place within them. The city are re-thinking their way of working whilst supporting post COVID recovery. This will require investing in more collaborative approaches and supporting our natural ecosystems to build future resilience. We have been developing action to create a more balanced relationship between us and other species, ultimately leading to a healthier, more attractive and equitable city, whilst addressing our climate and ecological emergency [actions 10, 14, 18, 19, 20, 21 and 22].

The city will develop its work as part of the EU H2020 Connecting Nature project and as an “ICLEI City with Nature”. This will see the city develop nature-based solutions (NBS) to address issues in the city. The European Commission define NBS as those which are “inspired and supported by nature, which are cost-effective, and simultaneously provide environmental, social and economic benefits and help build resilience”. In using and embedding NBS, Glasgow will make a just transition to a cleaner, greener economy; moving away from our dependence on hydrocarbons, we will create job opportunities and build resilience.

A number of key current projects supporting this approach include: Park Power (in partnership with Green Space Scotland) this project is currently considering how the city can assess opportunities to use our green and open space for heat and energy generation. This would focus on local generation using low carbon technologies such as ground and surface water source heat pumps.

The city is also working to collate information on the potential for...
3.5 Climate Emergency Implementation Theme 5: Green Recovery

using Glasgow’s greenspace to supply low carbon heat from other natural sources such as air, geothermal (mine water), waste water, coastal/marine, amongst others [actions 22, 29 and 31].

Protecting and improving Glasgow’s natural environment is a major part of mitigating and adapting to the impacts of climate change. To help achieve this, the best opportunities for greening and rewilding, including tree planting and the use of Vacant and Derelict Land sites, will be identified by the Ecological Emergency Plan and Open Space Strategy (OSS) Delivery Plan. Work will also be taken via the OSS Delivery plan to show how to enhance Glasgow’s active travel routes, through improved green network linkages [actions 18 and 22].

To create a more climate-resilient city, we will use the local biodiversity action plan and open space strategy delivery plan, as the means to investigate opportunities to increase and protect biodiversity. This will include the creation of new Local Nature Reserves which will complement the enhanced network of open spaces across the city in helping to mitigate urban heat island effect. Alongside this, GCVGN and its partners will plan how to deliver a Clyde Climate Forest, while Clydeplan is developing a forest and woodland strategy for the region [actions 18 and 21].

By increasing green space in the city and introducing hedgerows and wildflower strips, Glasgow can create and enhance biodiverse green corridors, and help to protect our environment. Native species hedgerows provide food and shelter for a wide variety of invertebrates, small birds, mammals and amphibians in Glasgow. Small birds use hedgerows for nesting. Mammals (e.g. hedgehogs, field
3.5 Climate Emergency Implementation Theme 5: Green Recovery

mouse, voles) and amphibians (common frog, common toad, palmate and smooth newt) use the shelter of the base of hedgerows to move about between habitats. Pollinators find nectar sources in the hedgerow trees/shrubs and from the wildflowers which will grow at the hedgerow base. Thus hedgerows provide green, biodiversity-rich corridors for wildlife to move along and within. Additionally, the tree/shrub species making up the hedgerow will have benefits for carbon capture, air quality and water retention. The city will endeavour to survey and monitor the hedgerows in the city, spatially mapping existing hedgerows, monitoring their retention and investigating potential for creating new sites in line with the local biodiversity action plan, Glasgow pollinator strategy and Open Space Strategy Delivery Plan [action 18 and 21].

The city will work to address the ecological emergency, protecting and enhancing our local biodiversity and ecosystems services. The Local Biodiversity Action Plan (LBAP) and the Open Space Strategy will be key to achieving this. Implementation of the Glasgow LBAP is key to addressing the ecological emergency. The LBAP actions are targeted to create, protect and enhance the key ecosystems in the city – woodland, grassland, wetland, farmland and urban along with their associated species. The Glasgow Pollinator Plan forms part of the LBAP and its actions aim to help halt and reverse the decline in the city’s pollinators. The LBAP supports the national Biodiversity Strategy and therefore contributes more widely to supporting Scotland’s ecology. The Open Space Strategy will help re-set the balance between our health, our infrastructure and our natural environment [action 19 and 20].

Climate Ready Clyde is delivering a climate adaptation strategy and vision for Glasgow and the Clyde valley, helping the city region to become climate resilient. Glasgow will play its role to help the city’s people, economy, and nature to continue to flourish in the face of climate change, aligning our action with our regional partners [actions 41, 42, 43 and 46].

To reduce the impact of waste in the city, the city will lead by example in phasing out all single use plastics by 2022. The Plastic reduction Strategy will pilot this approach by working to achieve three plastic-free schools and delivering a plastic-free shopping zone before 2025 [action 33].

These actions align with the following UN Sustainable Development Goals:
3.5 Climate Emergency Implementation Theme 5: Green Recovery

Case Study 1

North Glasgow
Integrated Water Management System - Glasgow’s Smart Canal

Working in partnership with Scottish Canals and Scottish Water, GCC has delivered Europe’s first ‘smart surface water management canal’ to enable sustainable development and regeneration in North Glasgow.

The ‘smart’ system, using real-time rainfall forecast data and autonomous computer control of water level controls, will lower the canal by up to 100mm prior to storm events, allowing it to act as a ‘smart sponge’ providing capacity for surface water runoff from key regeneration sites in an area of Glasgow otherwise constrained by lack of capacity in the combined sewer network and lack of existing natural watercourses.

This innovative use of the canal showcases the power of collaborative partnership working to repurpose an existing, historic, asset to enable resilient development, whilst avoiding the financial and carbon cost of creating new drainage assets. The capital funding for this project comes from Glasgow City Region City Deal, the Green Infrastructure Fund and Scotland’s 8th City - the Smart City.
3.5 Climate Emergency Implementation Theme 5: Green Recovery

Case Study 2

Cart and Kittoch New Woodland Creation

Neighbourhoods and Sustainability on behalf of Glasgow City Council has collaborated with Central Scotland Green Network Trust - recently renamed Green Action Trust to propose and design a new woodland.

The collaborative approach allowed for GATrust to submit an application to Forestry Scotland for the appropriate grants to fund the creation and the initial five years maintenance establishment. This has been further supported by financial contributions from Neighbourhoods and Sustainability.

This new woodland is being created over 14.5 hectares which is the equivalent of 21 full sized football pitches and will comprise around 22,000 woodland species trees and supporting understory shrubs typical of a Clyde Valley woodland: oak, birch, hazel, cherry, sycamore, hawthorn, Wych elm, holly, rowan though, unfortunately due to ash dieback this integral species to such a woodland mix can not be incorporated.

The woodland is seen as an extension of the existing woodlands that make up the Cart and Kittoch Site of Special Scientific Interest (SSSI) and in doing so it will make important habitat connectivity to adjacent woodlands and other important habitats that can be found over Cathkin Braes. Active travel and access to the open country that is found around the City is an important aspect as this and similar environments are created for people and wildlife.

It is also noted that woodland plantings on such a scale have the benefit of supporting climate mitigation through carbon capture in the timber of the growing trees those ability to capture and hold atmospheric CO2 is increased as essential soil biota develop.

The trees are all native broadleaf species (complete list on the following page). This will create a native woodland which offers the greatest potential for improving biodiversity. Whilst the longevity of the different species can vary (for 60 to hundreds of years) the woodland should be managed sustainably to ensure it is able to regenerate and remain as a woodland in perpetuity.
3.5 Climate Emergency Implementation Theme 5: Green Recovery
Case Study 2

The trees that we will plant are small (around 50cm high). These smaller trees establish much better than larger trees and within 10 years should have grown sufficiently to make the site feel like a woodland.

**Complete species list:**

- Common Alder (Alnus Glutinosa) 10%
- Downy Birch (Betula Pubescens) 20%
- Bird Cherry (Prunus Padus) 10%
- Holly (Ilex Aquifolium) 5%
- Pendunculate Oak (Quercus Robur) 10%
- Sessile Oak (Quercus Patraea) 10%
- Rowan (Sorbus Aucuparia) 20%
- Hawthorn (Cratageous Monogyna) 5%
- Hazel (Corylus Avellana) 10%

This initiative of creating a new woodland on this scale is seen as a first phase and further expansion is under investigation and it is the aspiration that the collaborative approach with GATrust will support this and lead to opportunities of this kind across the City.
3.5 Climate Emergency Implementation Theme 5: Green Recovery
Case Study 3

Participatory Budgeting in Parks and Greenspace and Openspace

The Community Empowerment (Scotland) Act 2015, Part 10 requires public authorities to “facilitate the participation of members of the public in the decisions and activities of the authority, including in the allocation of its resources”. In Glasgow City Council, that commitment to participatory budgeting (PB) translates financially to:

In 2019/20, Neighbourhoods and Sustainability was given £150,000 of funds to be specifically spent through a PB process and to deliver a participatory budgeting project for parks, greenspace and openspace. Until then, the Council’s approach had been to deliver PB projects in areas with high deprivation indexes, aligned to specific topics tackling poverty and inequality. Allocating funds to parks and greenspaces was pushing the boundaries of how PB projects could be delivered and mainstreamed across the range of council services.

The parks development team made the initial decision that this project would evolve through participative dialogue and decision making and embarked on a series of workshops that set out to explain what PB was to groups and organisations working in greenspace across Glasgow.

Leading from these sessions, a PB panel was established which

Climate Emergency Implementation Plan 41
would deliberate and make decisions about the allocation of the funding. The essence of the decision making was that it was deliberative and democratic without influence from facilitators.

The outcomes were:

- that a proportion of the funding would be used to commission a project to strengthen the greenspace groups to encourage more participation. This is the sustainable element and delivers on the potential for mainstreaming the participatory approach.

- that the remaining funding would be used for a small grants scheme 'Wee Green Grants' which would assist local greenspace groups to strengthen how they operated within their communities.

The project has been successful in that it has strengthened the local greenspace community groups, promoted local decision making and demonstrated how PB can be applied in mainstream council service provision, it has been commented as a 'pilot' for this kind of work.

Throughout the series of initial workshops and following PB meetings the Panel came up with a statement of intent and identified a list of priorities for Glasgow's Parks greenspace and openspace.

Climate change, along with other themes have been identified as priority work areas and supported by the statement has been taken seriously with a sustainable, community decision making approach.

The 'Wee Green Grants' scheme allowed successful applicants to put their proposals out to an online public vote, part of the criteria of was to show how their project would meet the priority themes, several of which include climate change and capacity building activity around this area as a focus.

This work lead by NS has been recognised as democratically pioneering, innovative and is continuing through this time of difficulty, change and opportunity.
Enabled by Glasgow City Region City Deal funding, GCC is delivering surface water management plans (SWMPs) in several areas across the city to sustainably drain Glasgow by slowing the rate at which rainfall runoff gets into the drainage network, to reduce flood risk and create capacity in the combined sewer network for development and regeneration.

The SWMPs will deliver a range of blue-green measures to manage surface water in a resilient and adaptable way, and reduce reliance on traditional ‘grey’ approaches that are carbon heavy, lack potential for future adaptation and fail to deliver multiple benefits for biodiversity, urban cooling and air quality that more sustainable approaches do.

Measures being delivered include:
- rainwater downpipe attenuation systems;
- retrofit blue-green infrastructure (raingardens) in existing highways and areas of hardstanding;
- retrofit blue-green infrastructure (basins, ponds and swales) to enhance public open and green space, including schools;
- creating embankments on existing watercourses to manage flow and use the natural landscape to temporarily impound floodwater;
- deculverting of existing watercourses to recreate floodplain storage capacity.

Further information on these projects is available here
http://www.mgsdp.org
Connecting Nature

Connecting Nature is a Horizon 2020-funded, five-year project, delivered by a consortium of over 30 partners across 16 European countries, as well as Brazil, China, South Korea, Georgia and Armenia. Glasgow City Council joins a range of organisations, from local authorities and universities to communities and NGOs, in come together to development nature-based projects in the urban environment. As a front runner city, Glasgow is leading the way in delivering nature-based solutions to the issues that cities are facing, leading the way for the project’s ‘fast follower cities’ to emulate these methods. As part of Connecting Nature, Glasgow City Council is delivering projects such as Stalled Spaces, the Open Space Strategy and Building with Nature, which all contribute to making Glasgow a healthier, greener city.
EU-funded Initiatives at Glasgow City Council
Case Study 2

RUGGEDISED smart street district

As part of the EU Horizon 2020 programme, Glasgow and five other European cities are collaborating to deliver smarter, more sustainable urban living through RUGGEDISED. In 2017, Glasgow was awarded €4.1 million to develop a smart street district in the city. Working with the University of Strathclyde, SP Energy Networks, Siemens, Transport Scotland, Tennents Brewery and Glasgow Housing Association, a range of innovative and sustainable solutions will be developed as part of the smart street. These include district heating, EV charging, a solar PV canopy, power storage, ducted wind turbines, and smart grid controls.
4.0 Monitoring and Evaluation

The city will report annually on progress within our five Climate Emergency Implementation Plan themes. This will also be aligned to report on progress against the delivery of the 17 UN Sustainable Development Goals.

Monitoring and disclosing our progress will be an integral part of our communication with Glasgow’s organisations, communities and individuals.

The city will commence work with Adaptation Scotland to create a bespoke approach to benchmark performance and monitor progress year on year. The city will also benefit from the collation of baseline data and the development of a reporting dashboard currently being established as part of our work within the EU H2020 project Connecting Nature. Collectively the adaptation benchmark work and the connecting nature reporting dashboard will enable progress to be monitored against our 2020 climate adaptation baseline.

We will work with Community Planning Partnership, Glasgow Life, and community organisations, to better engage with communities in truly collaborative processes. This will build our understanding of community action, risks, opportunities and local knowledge. We will embed smart climate change action and decision making in all that we do. The city will work with community institutions to establish a baseline of current action, knowledge, data, needs and successes, establishing jointly agreed indicators and monitoring progress annually against those.
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The city will develop a dynamic Climate Change Communications strategy for the city. This will be developed with Sustainable Glasgow and aligned with COP 26.</td>
<td>Sustainable Glasgow, COP26 Collective and Stakeholders</td>
<td>1, 2, 40, 41, 47, 48, 49, 54</td>
<td>2021</td>
</tr>
<tr>
<td>2</td>
<td>Glasgow Community Planning Partnership, Glasgow Life and Glasgow City council engage in a series of climate conversations across the city, in collaboration with community institutions. Fostering community confidence, empowerment and participation using the Place Standard tool and participatory budgeting.</td>
<td>GCC, Creative Carbon Scotland, SNIFFER, GCPH, Greenspace Scotland, Sustainable Glasgow</td>
<td>1, 2, 48, 52, 49, 54</td>
<td>2021</td>
</tr>
<tr>
<td>3</td>
<td>Create a declaration for city institutions to pledge to become Carbon Neutral by 2030 or sooner.</td>
<td>Sustainable Glasgow</td>
<td>1, 2, 54, 57</td>
<td>2021</td>
</tr>
<tr>
<td>4</td>
<td>The city and partners to support the adoption of circular practices across the city through capacity building programmes, in line with the new Circular economy route map for the city.</td>
<td>Glasgow Chamber of Commerce, Zero Waste Scotland (ZWS)</td>
<td>39</td>
<td>2025</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The city commits itself to become a carbon literate organisation through the roll out of Carbon Literacy training. The city also commits to advocating the roll out of carbon literacy training in other organisations across the city.</td>
<td>Glasgow Community Planning Partnership, Keep Scotland Beautiful (KSB), Sustainable Glasgow</td>
<td>1, 2, 53</td>
<td>2021</td>
</tr>
<tr>
<td>6</td>
<td>The city and partners will continue to invest in programmes to enable young Glaswegians to access and succeed in new green job opportunities. Engaging with further and higher education institutions, ensuring that the curriculum and training they offer supports green opportunities.</td>
<td>Skills Development Scotland, Local Universities and Colleges</td>
<td>42, 44</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Establish a framework of engagement with local energy co-operatives, enabling them to be set up and providing support.</td>
<td>Scottish Government, Sustainable Glasgow</td>
<td>59</td>
<td>2025</td>
</tr>
<tr>
<td>8</td>
<td>Develop a first of its kind Net Zero Plan for the city to become Net Zero by 2045.</td>
<td>Sustainable Glasgow, Connected Places Catapult, Energy Systems Catapult, City Stakeholders</td>
<td>1, 2, 4, 5, 9, 61</td>
<td>2021</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Explore the feasibility of a workplace car park levy, ring fenced to fund sustainable transport in the city.</td>
<td>Scottish Government</td>
<td>20, 21, 22, 30, 31, 32, 33, 34</td>
<td>2025</td>
</tr>
<tr>
<td>10</td>
<td>Deliver a comprehensive active travel network and make Spaces for People permanent as part of this network subject to public consultation.</td>
<td>Scottish Government</td>
<td>31, 34,</td>
<td>2025</td>
</tr>
<tr>
<td>11</td>
<td>Enable rapid and strategic shift to electric vehicles through increasing the current rate of deployment of EV charging infrastructure.</td>
<td>Scottish Government, Transport Scotland, Sustainable Glasgow</td>
<td>24, 28, 29, 30</td>
<td>2030</td>
</tr>
<tr>
<td>12</td>
<td>Work with bus operators to support rapid transition to cleaner public transport as part of the City's Low Emissions Zone.</td>
<td>Scottish Government, Bus Operators</td>
<td>16, 33,</td>
<td>2030</td>
</tr>
<tr>
<td>13</td>
<td>Deliver rapid transition of council's fleet to electric, supporting the city's existing fleet strategy's target of becoming low carbon by 2030.</td>
<td>Scottish Government</td>
<td>9, 23</td>
<td>2030</td>
</tr>
<tr>
<td>14</td>
<td>Transition the fleet of private hire taxis to zero emission vehicles by 2030.</td>
<td>Local Taxi Operators, Scottish Government</td>
<td>16, 28,</td>
<td>2030</td>
</tr>
</tbody>
</table>
### 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Reduce the need to own and use a car through measures in the City Development Plan 3, Locality Plans and Glasgow Transport Strategy. Including, Low Emission Zones, Bus gates.</td>
<td>Transport Scotland, Scottish Government</td>
<td>29, 31, 33, 34, 35</td>
<td>2030</td>
</tr>
<tr>
<td>16</td>
<td>Explore the feasibility of subsidised public transport through salary sacrifice scheme similar to that available to on site staff.</td>
<td>SPT, Scotrail, Bus Operators</td>
<td>30, 61</td>
<td>2022</td>
</tr>
<tr>
<td>17</td>
<td>Explore the feasibility of subsidised EV purchase of EV for city staff through salary sacrifice scheme.</td>
<td>Transport Scotland</td>
<td>30, 61</td>
<td>2022</td>
</tr>
<tr>
<td>18</td>
<td>Implement the Glasgow and Clyde Valley Green Network’s Blueprint to create green &amp; biodiversity corridors in the city by improving open space provision and increasing tree cover.</td>
<td>GCVGN, GAT, Greenspace Scotland</td>
<td>12, 13</td>
<td>2025</td>
</tr>
<tr>
<td>19</td>
<td>Expand Local Nature Reserves in the city and protect wider areas of open space in the city for greening and public use.</td>
<td>GCVGN, GAT, Greenspace Scotland, Scottish Government, Nature Scotland</td>
<td>12, 13</td>
<td>2025</td>
</tr>
<tr>
<td>20</td>
<td>Increase investment in peatland restoration in the city region to increase capacity for carbon sequestration.</td>
<td>Scottish Government, Nature Scotland</td>
<td>12</td>
<td>2030</td>
</tr>
</tbody>
</table>
### 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Increase tree planting on council owned or managed land, which will deliver 21% canopy cover citywide, supporting Scotland’s national target of 21% tree cover by 2032. tree cover over Glasgow’s city boundary.</td>
<td>GCVGN, GAT, Greenspace Scotland, Nature Scot</td>
<td>12, 13, 61</td>
<td>2025</td>
</tr>
<tr>
<td>22</td>
<td>Identify Vacant and Derelict Land for greening and rewilding in combination with renewable energy generation measures.</td>
<td>GCVGN, GAT, Greenspace Scotland, Nature Scot</td>
<td>12, 13</td>
<td>2025</td>
</tr>
<tr>
<td>23</td>
<td>Continue to work with Scottish Government to maximise funding for Area Based Schemes to invest in improving energy efficiency and tackling fuel poverty in private sector housing.</td>
<td>Private Landlords, Scottish Government</td>
<td>3, 38,</td>
<td>2021</td>
</tr>
<tr>
<td>24</td>
<td>Prepare an investment improvement plan for older (pre-1919) tenements and private sector housing.</td>
<td>Housing Associations, Development Sector</td>
<td>3</td>
<td>2021</td>
</tr>
<tr>
<td>25</td>
<td>Require Glasgow’s Gold Hybrid plus 20% low and zero carbon generating technologies (LZCGT) or better, to be achieved for all new build new homes.</td>
<td>All development sector</td>
<td>3, 51</td>
<td>2018</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Require Glasgow’s Gold Hybrid plus 20% low and zero carbon generating technologies (LZCGT) or better, to be achieved for all new non-domestic development.</td>
<td>All development sector</td>
<td>3,51</td>
<td>2018</td>
</tr>
<tr>
<td>27</td>
<td>Encourage and enable retrofit of all existing owner occupied housing to EPC level C or above.</td>
<td>Scottish Government</td>
<td>3</td>
<td>2025</td>
</tr>
<tr>
<td>28</td>
<td>Adopt the Local Heat and Energy Efficiency Strategy (LHEES) which will identify areas suitable for investment in renewable energy generation and heating in the city.</td>
<td>Scottish Government Sustainable Glasgow All development sector</td>
<td>59, 61</td>
<td>2021</td>
</tr>
<tr>
<td>29</td>
<td>Develop a Carbon Neutral Innovation District in the GCID. This will act as a catalyst and exemplar for rolling out across the city.</td>
<td>Sustainable Glasgow</td>
<td>61</td>
<td>2025</td>
</tr>
<tr>
<td>30</td>
<td>Deliver projects that utilise the recovery of heat from geothermal sources learning from Duke Street and Tennent’s Brewery projects.</td>
<td>Sustainable Glasgow</td>
<td>4,5</td>
<td>2022</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Deliver heat and energy generation projects including distribution of heat from parks in Glasgow based on existing feasibility studies.</td>
<td>Greenspace Scotland, Scottish Government, Sustainable Glasgow</td>
<td>4, 5</td>
<td>2022</td>
</tr>
<tr>
<td>32</td>
<td>Enable and encourage all households in Glasgow to minimise waste arisings and to recycle.</td>
<td>Zero Waste Scotland, Scottish Government</td>
<td>15</td>
<td>2022</td>
</tr>
<tr>
<td>33</td>
<td>Ban unnecessary single use plastics in the city, using council facilities, including schools as a pilot.</td>
<td>Zero Waste Scotland, Scottish Government, Glasgow Chamber of Commerce</td>
<td>14</td>
<td>2025</td>
</tr>
<tr>
<td>34</td>
<td>Work with partners in the city to transition Glasgow’s economy from linear to circular, making it more inclusive and sustainable.</td>
<td>Scottish Government, Zero Waste Scotland, Sustainable Glasgow Partnership</td>
<td>39</td>
<td>2030</td>
</tr>
<tr>
<td>35</td>
<td>Introduce appropriate resourcing dedicated to monitoring and enforcement of kerbside waste recycling in the city in line with the new Waste Strategy and Scottish Government Circular Economy Bill.</td>
<td>Scottish Government</td>
<td>15, 39</td>
<td>2025</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>To understand and baseline meat consumption in the city, significantly reducing meat consumption in the city through communications campaigns highlighting benefits of lower-carbon plant based options generally.</td>
<td>Visit Scotland, NHS GGC, Glasgow Marketing Bureau,</td>
<td>36, 3</td>
<td>2025</td>
</tr>
<tr>
<td>37</td>
<td>Upgrade insulation and heating of all building stock in the city, city council leading by example.</td>
<td>City Building</td>
<td>3, 45, 61</td>
<td>2025</td>
</tr>
<tr>
<td>38</td>
<td>Increase the amount of renewable energy such as solar thermal, PV or heat pumps in the city to represent 20 % of total energy demand.</td>
<td>City Building</td>
<td>3, 45, 61</td>
<td>2030</td>
</tr>
<tr>
<td>39</td>
<td>Undertake a Carbon Impact Assessment for every action taken by the city, by making it a requirement of all committee papers - similarly to the Equality Impact Assessment (EQIA) process.</td>
<td>Glasgow City Council</td>
<td>46, 61</td>
<td>2021</td>
</tr>
<tr>
<td>40</td>
<td>Ban gas heating systems in all new buildings within the city boundary.</td>
<td>Scottish Government, Sustainable Glasgow</td>
<td>3, 61</td>
<td>2030</td>
</tr>
</tbody>
</table>
5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Develop a Climate Risk assessment for the City, highlighting risks and opportunities of climate impacts on the city and its people.</td>
<td>Sustainable Glasgow, Climate Ready Clyde</td>
<td>55</td>
<td>2022</td>
</tr>
<tr>
<td>42</td>
<td>Develop and adopt an early warning system to prepare for extreme weather events such as heatwaves and flooding.</td>
<td>Climate Ready Clyde</td>
<td>55</td>
<td>2025</td>
</tr>
<tr>
<td>43</td>
<td>Set Up Glasgow’s Just Transition Commission to ensure the burden of climate impacts is shared equitably and that all in Glasgow have equitable opportunities of access and success in our low carbon economy.</td>
<td>Community Planning Partnership, Scottish Government</td>
<td>38</td>
<td>2021</td>
</tr>
<tr>
<td>44</td>
<td>Implement the Fairer Scotland Duty in decisions and actions made in response to the Climate Emergency, ensuring that strategic decision-making helps to tackle inequality by following Fairer Scotland Duty’s guidance for public bodies.</td>
<td>Community Planning Partnership, Sustainable Glasgow</td>
<td>50</td>
<td>2021</td>
</tr>
<tr>
<td>45</td>
<td>The city will encourage pension fund investors in the city to develop a strategy for divestment from the fossil fuel industry.</td>
<td>Pension fund investors</td>
<td>60</td>
<td>2025</td>
</tr>
<tr>
<td>46</td>
<td>The city will explore new green financing models.</td>
<td>Scottish Government</td>
<td>57</td>
<td>2022</td>
</tr>
</tbody>
</table>
## 5.0 Action Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Proposed Partners</th>
<th>CEWG</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Ensure that historic buildings are resilient to the impacts of climate change, protecting Glasgow’s rich heritage.</td>
<td>Glasgow City heritage Trust, Glasgow Life</td>
<td>55</td>
<td>2025</td>
</tr>
<tr>
<td>48</td>
<td>Review the need for an energy services company (ESCO) for the city as appropriate in relation to local energy generation and distribution projects.</td>
<td>Scottish Government</td>
<td>3</td>
<td>Ongoing</td>
</tr>
<tr>
<td>49</td>
<td>Explore options to utilise the ongoing development of Glasgow’s Low Emission Zone to contribute towards carbon reductions from transport in the city centre.</td>
<td>Scottish Government, Sustainable Glasgow</td>
<td>2,26</td>
<td>2023</td>
</tr>
<tr>
<td>50</td>
<td>Sign the Edinburgh Declaration on post-2020 global biodiversity framework as part membership of ICLEI cities for nature.</td>
<td>ICLEI, Scottish Government, Nature Scotland</td>
<td>3</td>
<td>2020</td>
</tr>
<tr>
<td>51</td>
<td>Promote homeworking and videoconferencing to reduce traffic congestion, as part of a range of effective working practices in post COVID 19 world.</td>
<td>Scottish Government</td>
<td>61</td>
<td>2022</td>
</tr>
<tr>
<td>52</td>
<td>Undertake a Voluntary Local Review (VLR) to confirm Glasgow's commitment to the UN SDGs.</td>
<td>Potential for knowledge exchange with Bristol, Helsinki and Pittsburgh</td>
<td>1,3</td>
<td>2021</td>
</tr>
</tbody>
</table>
## What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 16:</th>
<th>Glasgow City Council (GCC) is coordinating a response to the recommendations made by the Connectivity Commission. Work is ongoing to explore the feasibility of a Glasgow Metro.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city 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.</td>
<td>GCC is continuing work with partners to research into how most effectively to connect areas of the city that are currently isolated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendations 18 &amp; 30:</th>
<th>Officers of the city’s Neighbourhoods and Sustainability service are currently participating in SPT’s Regional Transport Strategy working group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 The city works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region’s transport network.</td>
<td>A Strategic Transport Group is also in place which aims to improve communication and collaboration between partners on transport issues facing Glasgow.</td>
</tr>
<tr>
<td>30 The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.</td>
<td>Work is ongoing on the new Glasgow Transport Strategy and modal shift targets will be considered.</td>
</tr>
</tbody>
</table>
### Recommendation 27:

The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

### Recommendation 27, 29 & 30:

**27** The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

**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.

The Glasgow Transport Strategy (LTS) is under preparation.

Work is underway to prepare the new Glasgow Transport Strategy. It is proposed that it will have a policy focus on the sustainable transport hierarchy as stated in Scottish planning and transport policy. The strategy also aims to rebalance the city's transport network and services, and has tackling inequalities as one of the four draft outcomes (for public consultation in late 2020).

The Spaces for People programme is accelerating the implementation and enforcement of Transport Scotland's sustainable transport hierarchy.
### Future Action:

<table>
<thead>
<tr>
<th>Recommendation 17:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city 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, and one ticket.</td>
</tr>
<tr>
<td>The city council are working to analyse accessibility in the city. These issues will be explored through the development of the Glasgow Transport Strategy and ongoing work on Bus Service Improvement Partnerships, as required by the Transport (Scotland) Act 2019 and Transport Scotland funding programmes. The city is currently reviewing accessibility of high frequency bus services through the city centre and will work to prioritise action where it is most needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 18:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region’s transport network.</td>
</tr>
<tr>
<td>Collaborative work at regional level will be undertaken through the Strategic Transport Group. This will then be used to inform both local and regional transport strategies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 20 &amp; 21:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 The city 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.</td>
</tr>
<tr>
<td>As part of the Glasgow Transport Strategy, these options will be appraised at a high level. Further work will then be required on the technical feasibility of these and funding will be sought to support this detailed work.</td>
</tr>
</tbody>
</table>

| 21 A feasibility study is developed into integrated ticketing and more physically and digitally accessible travel. |
### What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 15:</th>
<th>The current Waste Strategy (including food waste) expires in 2020. It will be reviewed in the light of new legislation (including deposit &amp; return scheme, circular economy).</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Recommendation 36:</td>
<td>Glasgow Food Growing Strategy and Glasgow’s Food Plan are currently in development. This includes thematic working groups on various issues, including Food Waste.</td>
</tr>
<tr>
<td>The city and its partners publish a sustainable food strategy for the city within the next year and that the city considers making space for food growing a requirement of new housing developments.</td>
<td>The Food Plan will be a route to making connections that can support the city to achieve transformational change more quickly.</td>
</tr>
</tbody>
</table>

### Future Action:

<table>
<thead>
<tr>
<th>Recommendation 15:</th>
<th>The city’s Waste Strategy is currently being reviewed. Communication will be a core element of this work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendation 36:

**The city and its partners publish a sustainable food strategy for the city within the next year and that the city considers making space for food growing a requirement of new housing developments.**

**A Food Growing Strategy is set to be published in late 2020.**

**The new City Development will include a policy to ensure new housing developments include space for food growing.**

**The Open Space Strategy to identify existing and proposed food growing areas.**

### Recommendation 36:

**The city and its partners publish a sustainable food strategy for the city within the next year and that the city considers making space for food growing a requirement of new housing developments.**

**The new City Development Plan (CDP2) to include a policy to ensure new housing developments include space for food growing.**
### What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 11 &amp; 13:</th>
<th>The Ecological Emergency Working Group is assessing opportunities for tree planting, rewilding, and greening, including the use of Vacant and Derelict Land. The group will publish its recommendations in late 2020.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Work is under way on the OSS delivery plan, which will set out how the city’s open space needs are to be met, including cooling, flood mitigation, biodiversity, health and wellbeing.</td>
</tr>
<tr>
<td>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.</td>
<td>Together with the Lost Woods project, primary school children across the city have grown seedlings which will be planted on Vacant &amp; Derelict Land sites.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 12:</th>
<th>A draft Clydeplan Forest and Woodland Strategy has been produced. Glasgow and Clyde Valley Green Network (GCVGN) produced a blueprint to support the city region’s green infrastructure and help adapt to the impacts of climate change. GCVGN are now looking at funding and creating a Climate Forest in the city region.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A formal audit and costed plan is brought forward by the city and its city-region partners on the opportunities for much greater tree planting and other ways of harnessing the natural environment to absorb emissions.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendation 24:

The reduction of illegal parking and engine idling is targeted through increased enforcement and public awareness and that the city should alert members to the resources necessary to ensure this.

The city’s Public Health service is undertaking idling enforcement and extensive media campaigns in collaboration with the Scottish Government and neighbouring local authorities. This will continue with support of Scottish Government funding to continue a focus upon to idling enforcement.

### Recommendation 27:

The city’s new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

Work on the Glasgow Transport Strategy is underway.

Work is underway to prepare a new Active Travel Plan for Glasgow, to replace the existing Strategic Plan for Cycling. This Plan will be associated with the city’s new Glasgow Transport Strategy.

The city is also preparing Supplementary Guidance to the City Development Plan to help deliver key aspects of the Open Space Strategy (OSS).

All should provide for better local access to open space of varying types, facilitating better access by sustainable modes of travel.
### 6.0 Appendices: Appendix 1
Response to 61 Recommendations of the Climate Emergency Working Group

<table>
<thead>
<tr>
<th>Recommendation 35:</th>
<th>A car-free zones (around schools) pilot is to be rolled out across the city, with another 21 schools in the city having been identified to become car-free zones by October 2020, on a trial basis. This action is particularly supported in terms of air quality, reducing exposure by vulnerable groups and promoting active travel options.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

**Future Action:**

<table>
<thead>
<tr>
<th>Recommendation 11:</th>
<th>The city and partners are working to develop a woodland strategy for the city. CDP2 and the Open Space Strategy will facilitate this in identifying potential sites for tree planting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 12:</th>
<th>The city ‘s woodland officer will work with key partners to develop its woodland strategy, identifying opportunities for tree planting, the potential for carbon capture, costs and wider societal benefits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A formal audit and costed plan is brought forward by the city and its city-region partners on the opportunities for much greater tree planting and other ways of harnessing the natural environment to absorb emissions.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendation 27 & 29:

27 The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

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.

Work on the new Glasgow Transport Strategy and associated Active Travel Plan is underway, including data analysis and public engagement in order to inform actions to deliver on a more active Glasgow and removing existing barriers.

CDP2 policy will ensure new development proposals incorporate means to increase active travel where appropriate, ensuring areas with good accessibility to public transport are developed at appropriate densities and that car usage is lowered by corresponding reduction in parking levels.

### Recommendation 28:

The city 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.

CDP2 will make explicit reference to Transport Scotland’s ‘Cycling by Design’ guidance in its active travel policy.
### What we’ve achieved so far:

#### Recommendation 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.

**Partnership working to embed the green economy in education and build skills and capacity includes:**

- Young Taskforce programme in early year, primary and secondary schools.
- Positive Destination Policy, in which all young people have access opportunities to further and higher education.
- STEM Sustainable tech programme, where young people receive support from private businesses to incentivise innovation.
- Teachers and school staff receive training as part of CPD; climate action is a key aspect of these programmes.

### Future Action:

#### Recommendation 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.

**Continue to implement current programmes to enable young Glaswegians to access and succeed in new green job opportunities resulting from a transition to a low carbon city.**

The Council will engage with further and higher education institutions, ensuring that the curriculum and training they offer supports green opportunities.
### 6.0 Appendices: Appendix 1
Response to 61 Recommendations of the Climate Emergency Working Group

**What we’ve achieved so far:**

<table>
<thead>
<tr>
<th>Recommendation 1:</th>
<th>The Sustainable Glasgow partnership has been re-launched, with energy being a core area of its remit. This is a multi-sectoral group, including representatives from the public, business and academic sectors.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation 4 &amp; 5:</strong></td>
<td>A new LHEES (Local Heat and Energy Strategy) is currently under development, addressing the production of more locally generated and distributed low-carbon energy and issues relating to non-domestic rates.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendation 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.

PALS (Property and Land Service) is currently working on a strategy to rationalise Council assets and make them more efficient.

### Recommendation 9 & 61:
9 The Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.
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.

The Council is working on the next iteration of CMP3 (Carbon Management Plan 3), including targets for carbon neutrality and net-zero carbon (2030 and 2045 respectively).

### Future Action:

### Recommendation 3:
Acceleration of the establishment of an energy services company (ESCO) takes place for the city as a necessary step towards producing more locally generated and distributed low carbon energy.

The Council is working with partners to establish an energy supply company (ESCO) as part of the forthcoming LHEES.
### Recommendations 4 & 5:

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.

### Recommendation 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.

### Recommendation 9 & 61:

9. The Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.

The Council will continue to work with partners in Sustainable Glasgow to identify area-based opportunities to retrofit existing housing stock with highly energy-efficient and low-carbon heating solutions.

CMP3 to include a list of projects to achieve the carbon neutral target and provide leadership in addressing the climate emergency.
### 6.0 Appendices: Appendix 1
Response to 61 Recommendations of the Climate Emergency Working Group

<table>
<thead>
<tr>
<th>Recommendation 9 &amp; 61:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>The Council will explore new green financing models such as Municipal Climate Bonds.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 57:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>The Council will establish a framework of engagement with local energy co-operatives, enabling them to be set up and providing support.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 59:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>The Council will work with Strathclyde Pension Fund (SPF) to undertake a risk analysis of future climate impacts on its investment portfolio, ensuring that its current investments are able to provide a return to its members in the next 20, 30, 50 years.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 60:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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 fund trustees ask for a report at the earliest opportunity on these risks.</td>
<td></td>
</tr>
</tbody>
</table>
What we’ve achieved so far:

**Recommendation 27:**
The city’s new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

The council aims to coordinate investment in the city’s transport infrastructure through the Glasgow Transport Strategy and developing CDP2. Inclusive economic success, and transport’s contributing role to that, is one of four draft outcomes proposed for the Glasgow Transport Strategy (to be tested through public consultation in late 2020).

**Recommendation 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.

The Glasgow Economic Strategy has been revised to address the climate emergency.

The strategy sets out the ambition to create a more cohesive and resilient economy that improves the opportunities, life chances and wellbeing of every citizen in the city while also addressing the city’s target of becoming carbon neutral by 2030.

**Recommendation 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.

The Council to continue to work with its partners in Sustainable Glasgow and the Glasgow Economic Leadership Board to implement the principles of the Just Transition Commission, delivering on the ambition to create a more cohesive and resilient economy that improves the opportunities, life chances and wellbeing of every citizen in the city while also addressing the city’s target of becoming carbon neutral by 2030.
**Future Action:**

**Recommendation 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.

The Council will continue to work with neighbouring local authorities and other key partners to bring about a green recovery, inclusive growth at the regional level through infrastructure development, transport improvements, and in other areas.
## What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 3:</th>
<th>The LHEES will set out innovative ways to meet the energy needs of the city and find solutions to emerging issues, for instance through establishing an ESCO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleration of the establishment of an energy services company (ESCO) takes place for the city as a necessary step towards producing more locally generated and distributed low carbon energy.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 4:</th>
<th>The Council is developing the use of district heating within housing developments in the city.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 13:</th>
<th>The Council is currently working on European funded RUGGEDISED project, working to set up a ‘smart street’ in the city centre.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
**Recommendation 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.

| An electrical vehicle charging-point policy was approved in February, including details of the delivery of EV strategy across the city. |
| An EV charging tariff for Glasgow will be developed. |
| CDP2 will support the above strategy by including updated policy guidance on the installation of EV infrastructure, including consideration of where pedestrian and cycle infrastructure should take priority. |

**Recommendation 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.

| First Bus is no longer for sale. GCC and partners will continue to work together to improve public transport infrastructure and remove existing accessibility barriers. |

**Future Action:**

**Recommendation 7:**
The Council supports the creation of a Scottish Grid factor, to more accurately measure the carbon intensity of local energy consumption.

| Sustainable Glasgow is to facilitate discussions with the Scottish Government, UK Government and energy networks to deliver on a Scottish Grid factor. |
6.0 Appendices: Appendix 1
Response to 61 Recommendations of the Climate Emergency Working Group

What we’ve achieved so far:

Recommendation 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.

Glasgow Transport Strategy is currently being prepared and will review accessibility to high frequency bus services through the city, highlighting areas requiring improvement.

Future Action:

Recommendation 49 & 50:
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.

The Council is working with its partners in the community planning partnership, GCPH, SNNIFFER and Creative Carbon Scotland to develop an effective communications plan, fostering community information, empowerment and participation.

The Council will explore how decisions and actions made by itself and its partners in response to the climate emergency declaration can be supported by equality and human rights assessments and in line with the Fairer Scotland Duty.
### Recommendation 22 & 27:

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.

27 The city’s new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.

### Recommendation 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.

GTS and Regional Transport Strategy (RTS) working to make transport in Glasgow and the City region more sustainable, including active travel and public transport infrastructure. The GTS is also going to develop policies on issues around the movement of goods where this is within the power of the Council, and approaches to partnership working where it is not. Pedestrianisation and active travel infrastructure to be included in the City Centre Transformation Plan (Avenues+ programme). Developer contributions will continue to be sought for public realm improvements within the City Centre where development proposals cannot accommodate on-site open space requirements.
6.0 Appendices: Appendix 1
Response to 61 Recommendations of the Climate Emergency Working Group

Recommendation 31 (continued):
The avenues programme is a major part of tackling the city centre air quality issues and has been partially modelled into the LEZ programme.

Recommendation 52:
Partners need to revisit the Community Plan and ensure that climate change informs all of it.
The Community Planning Partnership (CPP) Vision is being reviewed. Officers in Neighbourhoods and Sustainability and Corporate Services are to work with the CPP to include climate action in the new visioning exercise.

Recommendation 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.
A climate-impact assessment method for screening of Council budgets is currently being developed.

Future Action:

Recommendation 22 & 30:
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.
30 The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.
CDP2 is to incorporate RTS and LTS proposals once approved, helping to bring about a modal shift in transport as well as helping to ensure housing sites are in sustainable locations.
### Recommendation 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.

Building on existing supplementary guidance and CDP1 policy, the Council will review roads across the city that could be repurposed for other modes of transport.

### Recommendation 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.

Register GoBike and Sustrans as CDP2 consultees.

### Recommendation 31 & 41:
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.

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.

Strategic Development Frameworks, Local Development Frameworks and masterplans, in collaboration with City Centre Transformation Plan, will identify public realm improvements to encourage active travel choices. The Council’s new Active Travel Plan will articulate these in a transparent way to all stakeholders.
### 6.0 Appendices: Appendix 1

**Response to 61 Recommendations of the Climate Emergency Working Group**

<table>
<thead>
<tr>
<th>Recommendation 38 &amp; 39:</th>
<th>A Circular Economy route map was developed following stakeholder engagement and responding to issues identified in the Circular Glasgow Scan. The plan will be published in late 2020.</th>
</tr>
</thead>
</table>
| 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. |                                                                                                                                                                                                                   |
| Recommendation 46:      | The HSCP will work with others to establish a consistent methodology for decision making regarding climate and carbon impact.                                                                                                                                 |
| 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. |                                                                                                                                                                                                                   |
| Recommendation 56:      | The Council will develop a Climate Risk Register as part of its climate adaptation planning work, reflecting findings from the UK Climate Change Risk Assessment for Scotland and Climate Ready Clyde’s Regional Risk and Opportunity Assessment. |
| A climate risk register is developed by the Council and its partners, accommodating the Climate Ready Clyde findings. |                                                                                                                                                                                                                   |
| Recommendation 58:      | Officers in Neighbourhoods and Sustainability to work with officers in the Corporate Procurement unit to enable the Sustainable Procurement Framework to become more flexible and agile in the face of our climate emergency. |
| 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. |                                                                                                                                                                                                                   |
### What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 38 &amp; 39:</th>
<th>What we’ve achieved so far:</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>A City Circular economy route map based on Circular Glasgow Scan to be published in winter 2020. The routemap will set out how the city can make the transition to a fairer, more equitable and thriving low carbon economy, addressing climate emergency and socio-economic inequalities in the city.</td>
</tr>
<tr>
<td>Recommendation 45:</td>
<td>PALS is currently developing a strategy for the education estate with low-carbon and climate resilience at its heart.</td>
</tr>
<tr>
<td>Investment in the school estate and its uses has carbon reduction and climate education as core principles.</td>
<td></td>
</tr>
</tbody>
</table>

### Future Action:

<table>
<thead>
<tr>
<th>Recommendation 38:</th>
<th>What we’ve achieved so far:</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>In complying with the Scottish Climate Change Bill the city should increase action to reduce greenhouse gas emissions while taking into account “the imperatives of a just transition of the workforce and the creation of decent work and quality jobs.”</td>
</tr>
<tr>
<td>Recommendation 57:</td>
<td>In light of the climate emergency declaration the council will explore innovative green financing models such as Municipal Climate Bonds.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
### What we’ve achieved so far:

**Recommendation 1 & 61:**

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.

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.

**Recommendation 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.

The Sustainable Glasgow Partnership was relaunched in early 2020 and partners committed to working together towards achieving carbon neutrality and the city, while also addressing climate resilience and a just transition to a low carbon resilient city.

The Council’s Carbon Management Plan is being reviewed and CMP3 aims to support the achievement of the city’s carbon neutrality target by 2030, while also providing leadership and influencing others in the city to take action.

The Council and Sustainable Glasgow Partners have appointed the Catapult programme to undertake a scoping study and full Integrated City Plan to Net Zero. This will help Glasgow achieve its ambitious carbon-reduction targets for 2030 and 2045.
### Recommendation 1 & 61:

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.

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.

The Sustainable Glasgow Partnership was relaunched in early 2020 and partners committed to working together towards achieving carbon neutrality and the city, while also addressing climate resilience and a just transition to a low carbon resilient city.

The Council’s Carbon Management Plan is being reviewed and CMP3 aims to support the achievement of the city’s carbon neutrality target by 2030, while also providing leadership and influencing others in the city to take action.

### Recommendation 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.

The Council and Sustainable Glasgow Partners have appointed the Catapult programme to undertake a scoping study and full Integrated City Plan to Net Zero. This will help Glasgow achieve its ambitious carbon-reduction targets for 2030 and 2045.

### Recommendation 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.

The LHEES is being prepared, which will identify area-based opportunities to retrofit existing housing stock with high energy efficient and low carbon heating solutions.
### 6.0 Appendices: Appendix 1

**Response to 61 Recommendations of the Climate Emergency Working Group**

<table>
<thead>
<tr>
<th>Recommendation 10:</th>
<th>Discussions are ongoing regarding resources and the approved budget allocations to address issues related to the Climate Emergency.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 53:</th>
<th>The Council, in collaboration with KSB, are delivering carbon literacy training to its political leaders and senior management team. This will be rolled out across the council family and offered to our Community Planning Partners during 2020/2021.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 58:</th>
<th>The Council has adopted the Scottish Government's Flexible Framework Sustainable Assessment Tool (FFSAT) and Sustainability Test (ST) which allows it to consider the sustainability risks and opportunities of the procurement process, includes carbon reduction opportunities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
### Future Action:

| Recommendation 2: | Key decisions regarding the Catapult scoping study and Integrated Net Zero plan are set to be made later in 2020.  
The Transport Bill requires that a mandatory objective of the Low Emission Zone is to contribute to carbon reduction plans. The council will explore options to utilise the ongoing development of Glasgow's Low Emission Zone to contribute towards carbon reductions from transport in the city centre. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 11 &amp; 13:</th>
<th>The Open Space Strategy Delivery Plan process will identify the best opportunities for tree planting, greening and rewilding, including use of Vacant and Derelict Land sites.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 47:</th>
<th>The Community Planning Partnership are to consider collaborating with the sustainability team and Glasgow Life to roll out climate conversations across the city, fostering community confidence, empowerment and participation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
**Recommendation 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.

**Public engagement for the new City Development Plan will include discussions about how proposed land use and connectivity can help to achieve a carbon neutral city by 2030.**

**Ensuring that carbon neutral targets inform the new City Development Plan's strategy, policies and proposals.**

**The new National Planning Framework 4 (NPF4) will also help inform the plan, which is expected to be adopted in around 5 years. There are major implications for energy/heat usage and generation, transport, built and urban form, local provision of services, and ability for future residents to live low-carbon lifestyles by accessing needs and requirements at local level.**
### What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 14 &amp; 43:</th>
<th>A Plastic Reduction Strategy was approved in early 2020, which includes plans to phase out all single-use plastics throughout Glasgow by the end of 2022.</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 The city works to end single use plastic waste and it commits to developing Scotland’s first plastic free shopping zone.</td>
<td></td>
</tr>
<tr>
<td>43 The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation 15:</strong></td>
<td>The Bin Replacement Programme, in which residents or householders receive new bins and refreshed information on waste disposal and recycling, is ongoing.</td>
</tr>
<tr>
<td>Life Below Water</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation 22:</strong></td>
<td>The new City Centre Transformation Plan will address freight vehicle traffic through the city centre and the unintended consequences of potential proposals, and positive proposals for sustainable last mile deliveries.</td>
</tr>
<tr>
<td>Life on Land</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
### Recommendation 26:

A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.

The public consultation for the Low Emission Zone ended in late March 2020 and SEPA is currently looking at models at a regional level, which will potentially address concerns about unintended consequences or impacts in geographical areas beyond the Low Emission Zone. The final LEZ boundary will be significantly bigger than the area of pollution exceedance.

### Recommendation 34:

The Council delivers more 20mph speed limits on residential roads.

20mph speed limits in residential areas have recently been approved by committee and are to be rolled out across the city.

### Future Action:

#### Recommendation 14 & 43:

14 The city works to end single use plastic waste and it commits to developing Scotland’s first plastic free shopping zone.

43 The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.

The council’s Plastic Reduction Strategy includes proposals to pilot three plastic-free schools and take the first steps to delivering a plastic-free shopping zone.
**Recommendation 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.

**Plans to pilot:**
Plans to pilot moving residential properties currently in the managed weekly waste collection cycle to a three-weekly cycle, targeting 8,000 properties in the east end of the city.

**The current Waste Strategy:**
The current Waste Strategy (including food waste) expires in 2020. It will be reviewed in light of new legislation (including deposit and return, circular economy).

<table>
<thead>
<tr>
<th>Recommendation 26:</th>
<th>The final Low Emission Zone scheme is expected by early 2022 due to COVID 19 delays. Enforcement of LEZ will be in place within one year of the scheme being adopted.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendation 26:</strong></td>
<td>A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.</td>
</tr>
<tr>
<td><strong>Recommendation 36:</strong></td>
<td>The Council is developing a food plan (Sustainable Food Cities) for the city. As part of this there are future actions around education, communication and awareness raising to enable higher uptake of food recycling.</td>
</tr>
<tr>
<td><strong>Recommendation 36:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
### What we’ve achieved so far:

<table>
<thead>
<tr>
<th>Recommendation 41:</th>
<th>Glasgow is working as part of the seven cities in the Scottish Cities Alliance, collaborating to reduce carbon emissions and stimulate innovation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Glasgow is working with other agencies and local authorities in ongoing development of a River Clyde Flood Model.</td>
</tr>
</tbody>
</table>

#### Future Action:

<table>
<thead>
<tr>
<th>Recommendation 25:</th>
<th>The Council will continue to contribute to Transport Scotland-led working groups regarding the Low Emissions Zone phase 2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>As part of the development of the Low Emission Zone's Phase 2, clear guidance for all vehicles is available within the agreed timescale.</td>
<td>Working together with Education Scotland to continue to deliver SDE strategy and build on current success, including climate action.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recommendation 42:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasgow’s schools should formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.</td>
<td></td>
</tr>
</tbody>
</table>
6.0 Appendices: Appendix 2
The Climate Emergency Working Group’s 61 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. Page 24

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
6.0 Appendices: Appendix 2
The Climate Emergency Working Group’s 61 recommendations

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. Page 25

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.
A sustainable city story should be central to accounts of our history and where we see our future going.

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.

Glasgow’s schools should formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.

The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.

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.

Investment in the school estate and its uses has carbon reduction and climate education as core principles.

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.

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.

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.

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.

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.

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.

Partners need to revisit the Community Plan and ensure that climate change informs all of it.

Community Planning partners work together...
6.0 Appendices: Appendix 2
The Climate Emergency Working Group's 61 recommendations

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 fund trustees 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.