



Glasgow's Climate Plan

Our Response to the Climate and Ecological Emergency



Contents



References

- 1.1** Foreword
- 1.2** Executive Summary
- 1.3** The Climate Challenge for Glasgow
- 1.4** Recommendations from the Committee on Climate Change (CCC)
- 1.5** Recommendations from the Climate Emergency and Ecological Emergency Working Groups
- 2.0** What we propose to do next - Climate Plan
 - 3.1** Climate Plan Theme 1
 - 3.2** Climate Plan Theme 2
 - 3.3** Climate Plan Theme 3
 - 3.4** Climate Plan Theme 4
 - 3.5** Climate Plan Theme 5
- 4.0** Monitoring and Evaluation
- 5.0** Action Plan
- 6.0** Appendices

- figure 1** - Key components of the Plan
- figure 2** - Glasgow CO2 Emissions (2006 - 2018)
- figure 3** - Transport sector emissions 2006-2017
- figure 4** - Housing sector emissions 2006-2017
- figure 5** - Industry and Commerce sector emissions 2006-2017
- figure 6** - Multisectoral approach to Climate and Ecological Emergency
- figure 7** - Stakeholder map

The purpose of this plan is to set out the city's approach, pathway and strategic actions towards net zero carbon emissions, healthy biodiversity and climate resilience in Glasgow by 2030.

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 and resilient city. If we take considered actions to reduce our carbon emissions, increase resilience to existing risks and climate change already locked-in, and reverse biodiversity decline, we will also enable safer, calmer streets, cleaner air, warmer homes, reduced flood risk, healthier neighbourhoods and more local, nutritious food for everyone. This implementation plan will help to deliver an improved quality of life for our citizens and communities, biodiversity and habitats, supporting 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. This 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 and increasing resilience 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

1.2 Executive Summary

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. When the Council declared a climate and ecological emergency, it also agreed that, following presentation of the Climate Emergency Working group's report, a short life process should be put in place in order to establish whether additional recommendations are required to address the ecological aspects of the emergency specifically. The Ecological Emergency Working Group produced a report, with input from expert and independent stakeholders, which made 25 recommendations, with the ambition to halt and reverse biodiversity and habitat decline in the city.

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 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 and ecological emergency. There is an open acknowledgement of the need for more rapid and radical action to reduce harmful emissions into the environment, reverse biodiversity decline and build a more climate resilient city. Whilst there is an understandable focus on stemming the flow of carbon dioxide in to the atmosphere,

there is also a corresponding emphasis on working with nature on climate solutions and nurturing our own relationships with the natural environment, which our social and economic systems intrinsically depend on. Both reports link 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 from the Climate Emergency Working Group and 25 recommendations from the Ecological Emergency Working Group, looking to ensure that these will 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,



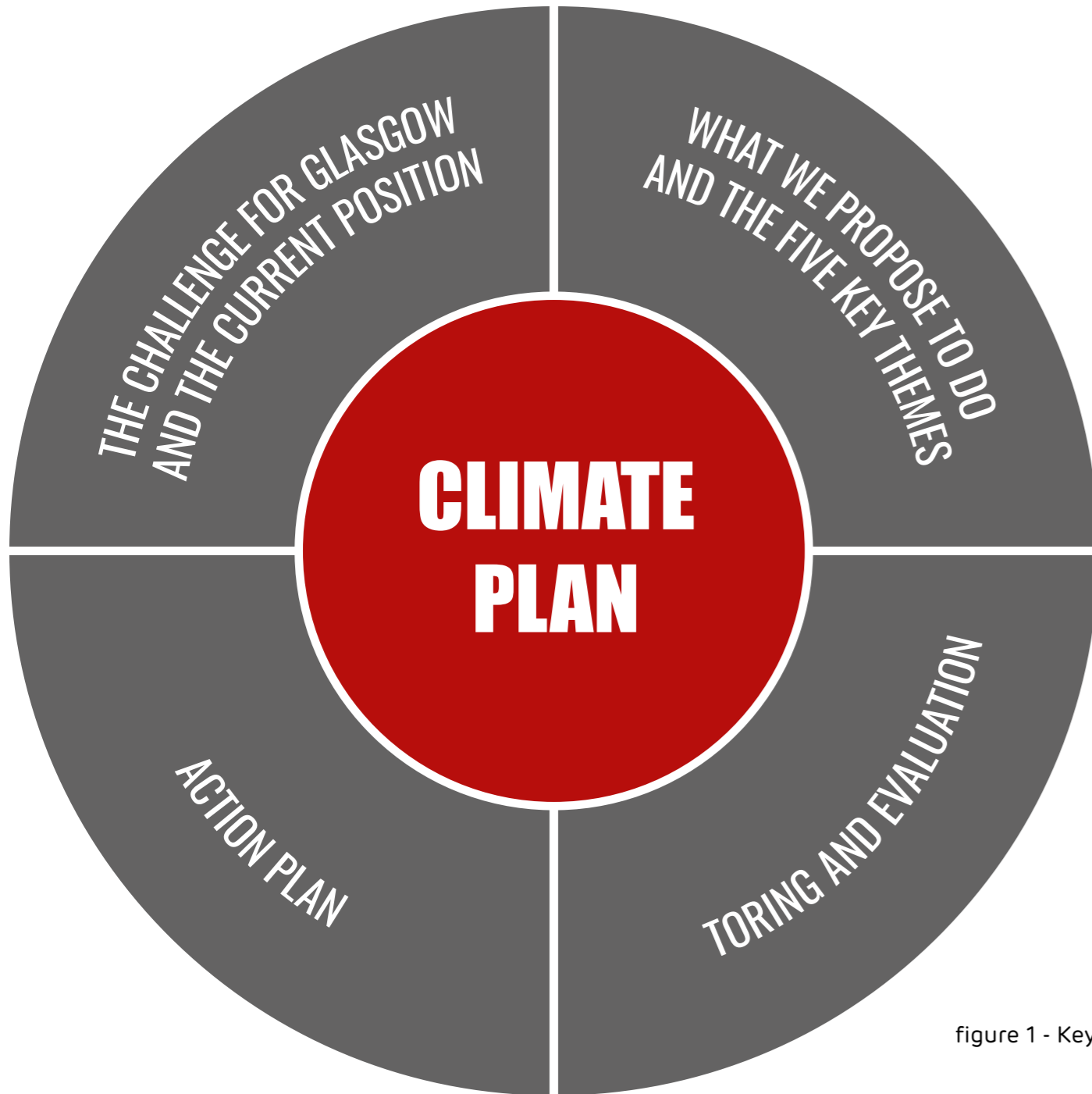


figure 1 - Key components of the Plan

CLIMATE EMERGENCY

natural environment and biodiversity, the economy and energy - with the need for sustainability and social justice core to their delivery. They have also been aligned with the Sustainable Development Goals adopted by the United Nations. These Goals 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.

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. This is an unprecedented global emergency and, accordingly, these are unprecedented tasks – and, crucially, 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, through Sustainable Glasgow, has been working to reduce its CO2 emissions since 2010 and declared a Climate and Ecological Emergency

in 2019, publishing a set of recommendations which were drafted by two working groups that included representation from all political groups on the city. Principal amongst these recommendations was one for the city to become carbon neutral city by 2030, which was endorsed by the city.

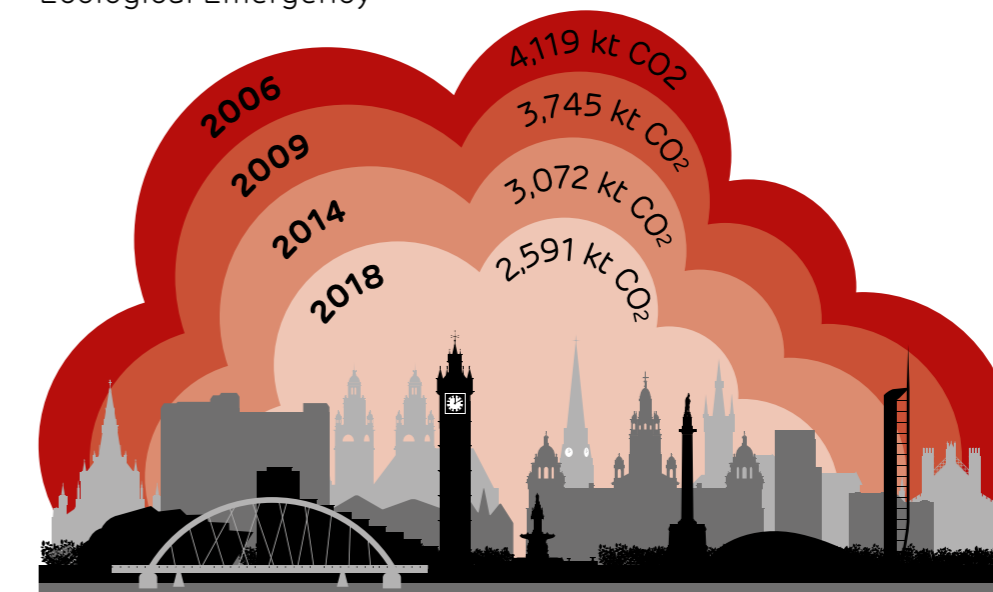


figure 2 - Glasgow CO2 Emissions (2006 - 2018)

CLIMATE EMERGENCY

As a result of the public consultation it is apparent that there is a wider appreciation of the term 'net-zero carbon' over 'carbon neutrality'.

We, therefore, commit to achieving net zero carbon emissions by 2030. The city will continue strive to ensure that all greenhouse gas emissions produced and mitigated in the city are in balance.

Glasgow looks to become one of the most sustainable cities in Europe. The city has already achieved (and exceeded) its 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

1.3 The Climate Challenge for Glasgow

the scope, scale, and intensity of delivery of projects to set Glasgow on course to achieving its net zero carbon goal for 2030.

The most recent data (2018) for city emissions highlights that our total area wide emissions 2,591 kilo-tonnes (ktCO₂). This represents a 37 % reduction on the city's baseline data (2006) and the total emissions which will have to be mitigated by avoiding, reducing and offsetting activities, in that order.

Transport emissions are the biggest challenge for the city, as the sector has seen slower reductions than in other sectors such as Domestic and Commercial & Industrial. However, the COVID 19 pandemic may have had an impact on the city's emissions, particularly in the transport sector. Data published by Google

Environmental Insights for 2020 suggests that transportation-based emissions in Glasgow decreased by 39% in 2020. The city will strive to maintain that reduction and further reduce transport sector emissions.

The city's ambition is to reduce emission through direct mitigation, while also adapting to the impacts of climate change and addressing the ecological emergency, all of which will provide carbon offsetting opportunities, whilst

also improving quality of life and place in the city. The ratio of mitigation and offsetting of emissions will require constant review as new projects and initiatives are introduced. It is, however, the city's ambition to maximise the reduction of emissions and minimise our reliance on offsetting, using this for residual emissions only. We will endeavour to measure the amount of offsetting as a result of ecological emergency and adaptation projects, reporting on this, but the city will not

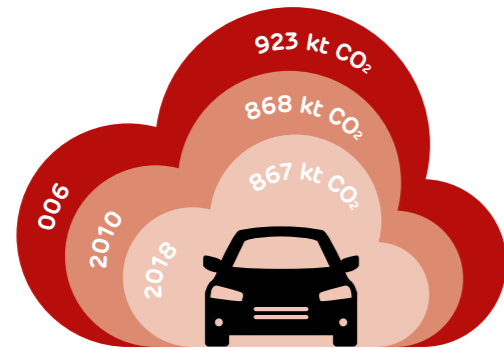


figure 3: Transport sector emissions 2006-2017

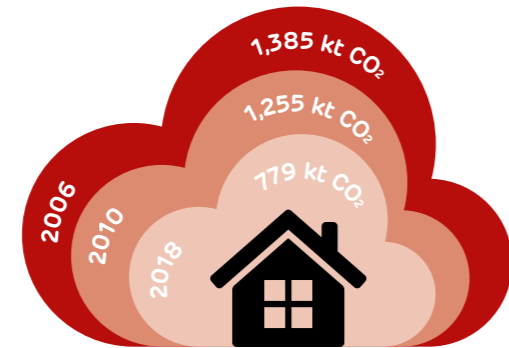


figure 4: Housing sector emissions 2006-2017

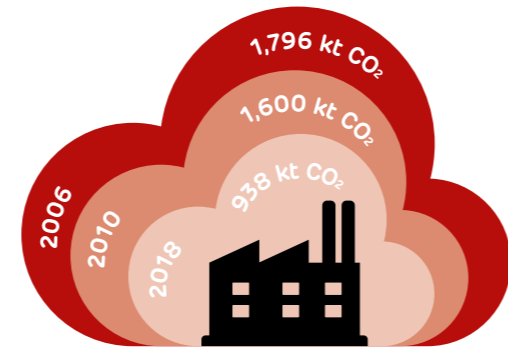


figure 5: Industry and Commerce sector emissions 2006-2017



set a target for offsetting as an alternative to reducing and avoiding emissions through mitigation action.

We know too that we need to build resilience to the local weather impacts resulting 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

1.3 The Climate Challenge for Glasgow

2080 Attention must therefore be paid not only to reducing our emissions, but to adapting the city and increasing resilience to the effects of climate change which are already locked-in.

In order to achieve our ambitious carbon reduction targets, building adaptive capacity to climate change, addressing biodiversity decline, and bringing about a green economic recovery from Covid-19, bold leadership and substantial investment is required. We must acknowledge openly that our current momentum, though laudable, will not result in sufficient action to ameliorate and reverse the impacts of climate so clearly demonstrated in the changing trends in weather in the city. We must also recognise that the impact that Glasgow can make in global terms to slowing climate change is relatively small, which underlines the

need to take action to increase resilience.

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 CO₂ has a persistence of around 100 years in the atmosphere, so a tonne of CO₂ saved now is worth 100 times a tonne of CO₂ saved a

century later. This means that ambitious, early interventions will make almost double the CO₂ 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 and low carbon places, while generating thriving economies, Glaswegian communities already experience many inequalities around income, opportunity and discrimination.



1.3 The Climate Challenge for Glasgow

The city believes that sustainability and social justice are intrinsically linked and addresses these as single, combined issues.

The city council recognises the scale of the transformation required to address the climate and ecological emergency, including technological innovation, behavioural change, finance and policy change. As such, the City will develop a Green New Deal for Glasgow that will transform the city into a fair and prosperous society, with a resource-efficient and competitive net zero carbon economy in 2030.

This plan therefore seeks to incorporate two fundamental principles:

- **Actions to address the climate crisis must not further disadvantage people, and communities**

who already experience significant inequalities. Ensuring that any barriers to their transition to net zero carbon are understood and addressed.

- **Actions to create a safer, resilient and more sustainable city should be aimed at building a just and more equal city.**

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, however the city council can also act in a much broader influencing role, 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.

1.4 Recommendations of the Committee on Climate Change (CCC)

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 embedded in Scottish and UK policy through the work of the Committee on Climate Change (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 CCC.

The 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 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.

1 - 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 in the city and;
- The City Development Plan (CDP2) which will seek to facilitate those actions that will enable the city to meet the net zero carbon 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 Committee on Climate Change (CCC)

robust and integrated roadmap for addressing the energy transition in the city. Building on work and expertise of our partners such as University of Glasgow, University of Strathclyde and Clyde Gateway, in installing district heating systems and solar PV, to name but a few.

Buildings that are fit for the future will also be resilient to exist and future risks, such as flooding and over-heating. This work will be supported by the Sustainable Glasgow Partnership through its Heating and Housing Hub, which brings together key stakeholders to develop and design solutions in this area.

2 - Tree planting, peatland restoration, and green infrastructure:

The city is currently working in collaboration with our partners at Green Action Trust (GAT-

formerly CSGNT) on phase two of a strategic tree planting project. This project will see a total of 22,000 trees planted, around 14.5 ha, equivalent to 21 full size football pitches. This will build on the work of:

- The Local Biodiversity Action Plan;
- Open Space Strategy;
- The City Development Plan.

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 recommendations of the Ecological Emergency Working Group. This group has

been established to provide guidance to the city and on the specific ecological aspects of the climate emergency. Their report and recommendations were published in 2020 and will be combined with this plan to provide a single source of information in response to the climate and ecological emergency.

Retrofit green infrastructure will also be delivered through ongoing programmes of work to reduce flood risk and improve public realm, such as surface water management plans and the Avenues Programme. This work will be supported by the Sustainable Glasgow Partnership through its Greening the City Hub, which brings together key stakeholders to develop and design solutions in this area.

3 - 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 net zero carbon 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

1.4 Recommendations of the Committee on Climate Change (CCC)

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 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.

This work will be supported by the Sustainable Glasgow Partnership through its Green Infrastructure and Transport Hub, which brings together key stakeholders to develop and design solutions in this area.

4 - 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 across the city of active travel the segregated cycling and walking infrastructure largely separated from motorised traffic 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,
- A Liveable Neighbourhoods Plan, looking to implement 20 minutes neighbourhoods in the city and embed sustainable practices throughout.

- Active Travel Strategy setting the ambition and workplan, that will also deliver on the city and neighbourhood networks.

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 net zero carbon city in 2030, to tackle persistent issues of poverty and deprivation in the city and maximise the role of transport in addressing these. A major public engagement on transport issues was held in 2020, and new transport related strategies mentioned above are planned to be published in 2022.

Transport and Moving around were key issues 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



1.4 Recommendations of the Committee on Climate Change (CCC)

cyclists whilst de-prioritising the private motor car and improving our current public transport system.

A part of the climate emergency working group recommendations, 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.

The City Council are mindful that much of this agenda has been significantly disrupted due to the impact of Covid-19. On one hand, the city has taken this opportunity to fast track work to widen street access for cycling and walking across the city. While on the other, the pandemic has dramatically changed the demand for travel in general, particularly reducing peak travel and commuting, creating uncertainty about

what the future of transport will look like.

We therefore acknowledge the original recommendations of the Climate Emergency Working Group in this area and will continue to support work on them, as part of the Glasgow Transport Strategy, the Regional Transport Strategy and the ongoing Glasgow Metro development, particularly in relation to the city's aims for a green recovery.

This work will be supported by the Sustainable Glasgow Partnership through its Green Infrastructure and Transport Hub, which brings together key stakeholders to develop and design solutions in this area.

5 - 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 a circular economy in its recently approved and adopted its innovative Circular Economy Route Map, 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

1.4 Recommendations of the Committee on Climate Change (CCC)

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 (reuse

sector).

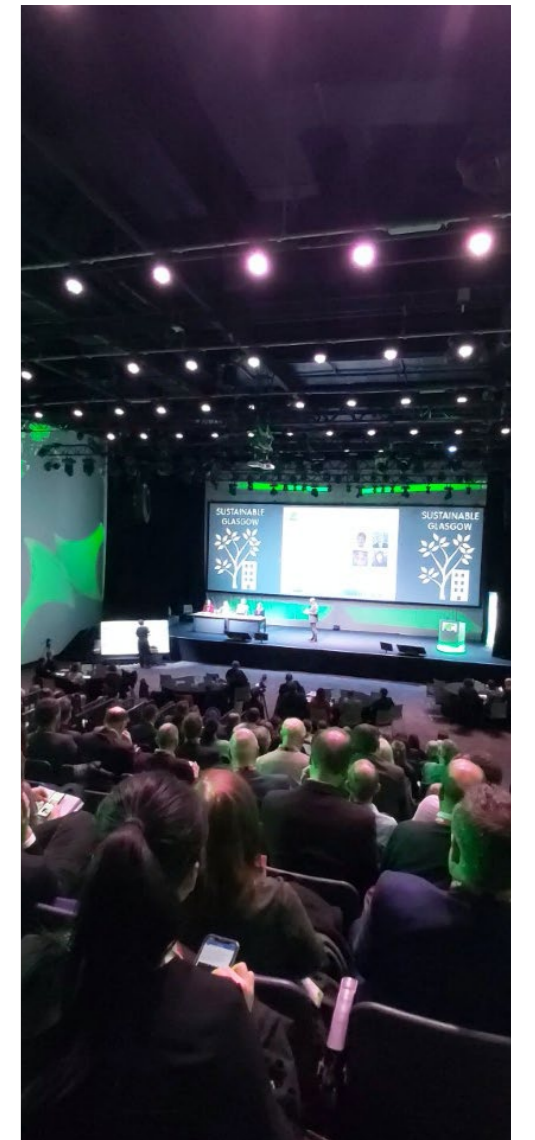
- Creating new jobs, resulting in major beneficial social impacts through localising economies with communities and creating and retaining wealth.
- Environmental benefits: less waste, less carbon emissions, better air, water, and soil quality.

This work will be supported by the Sustainable Glasgow Partnership through its Green Economy and Private Sector Hub, which brings together key stakeholders to develop and design solutions in this area.

This hub and all its partners will be key stakeholders in the development of the Green New Deal for Glasgow, and agreement has been reached to utilise the hub as a critical friend in its development. The

recently appointed Green Economy Manager will produce a detailed plan to support the development of a local wellbeing economy, enabling the required infrastructural, economic and cultural transformation required to meet our emissions reduction targets.

Action related to the 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.



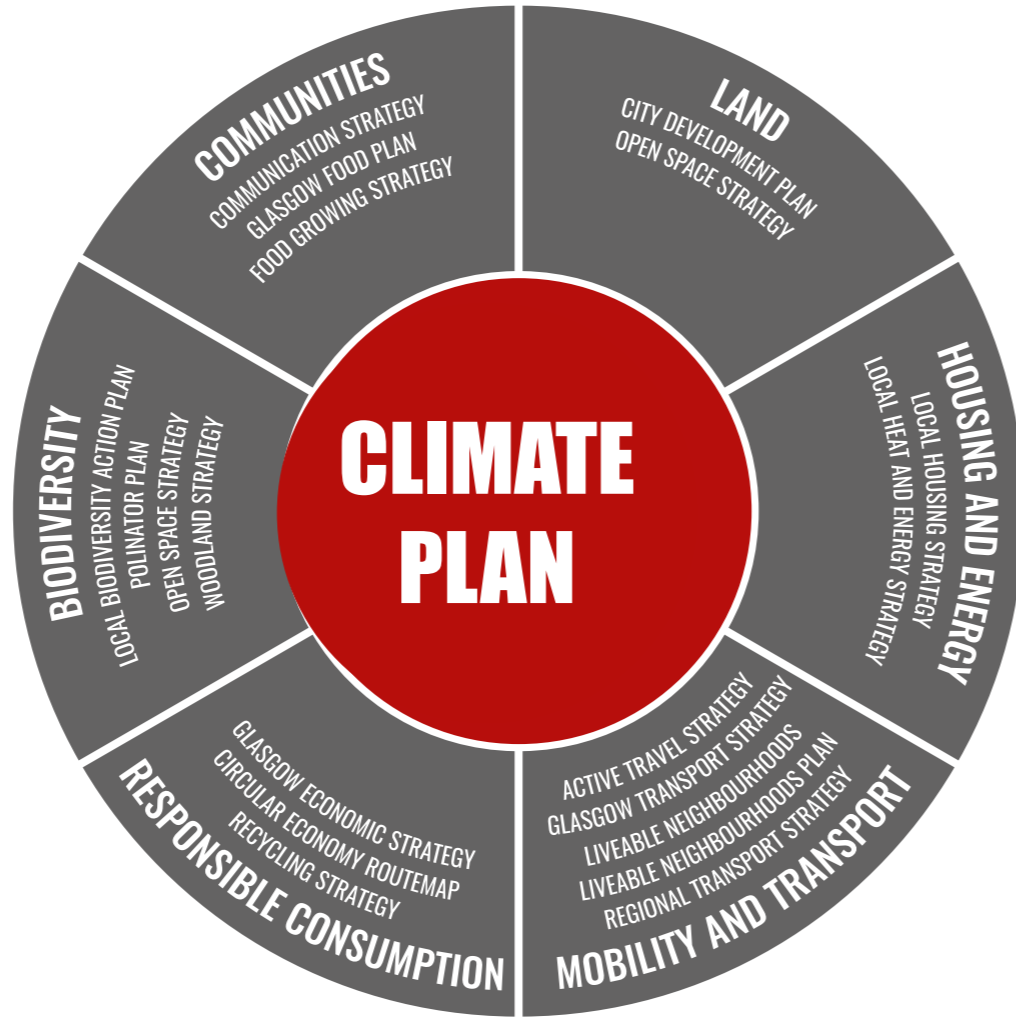
1.5 Response to recommendations from the Climate Emergency Working Group



Following Glasgow City Council's declaration of a climate and ecological emergency in 2019, 61 recommendations were made by a cross-party Climate Emergency Working Group, and a further 25 made by the Ecological Emergency Working Group. These recommendations informed what the city council should consider in order to meet sustainability and carbon-reduction goals, halt and reverse biodiversity and habitat decline in the city both now and over the coming years.

The recommendations cover a broad range of policy areas, including education, estates, planning and construction, natural environment and land use. 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 both Climate Emergency and Ecological Emergency working groups. 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 policies, proposals and initiatives beyond this plan.



1.5 Response to recommendations from the Climate Emergency Working Group



Our response to the 61 Climate Emergency recommendations and 25 Ecological Emergency recommendations are presented in full in Appendix 1 and 2 respectively. Both lists of recommendations are also included in appendix 3 and 4 correspondingly.

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 and regional 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, land use, biodiversity, education, and other areas, we are already reducing the city's emissions and creating a healthier, 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 well positioned to make the changes that are required through its strong partnerships and collective ambition. Resources and effort now need to be focussed to meeting our targets and aspirations. Our progress to



figure 6 - Multisectoral approach to Climate and Ecological Emergency date is positive and something we need to build upon, but it is not in itself sufficient if the city is to achieve its ambitious net zero carbon target, accelerate delivery of its biodiversity action plan and resilience targets.

2.0 What we propose to do next - Climate Plan

In response to the recommendations set out by the Climate Emergency Working Group and Ecological Emergency Working Group, the Council family will continue, over the coming years, to create transformational change which will make Glasgow a net-zero carbon, biodiverse, climate-resilient, and healthier city for people and nature.

In order to do this the city council now presents the Climate and Ecological Emergency Plan. The plan aims to address the climate and ecological emergency by:

- 1 Adjust the council's own working practice and estate to become climate ready and future proof.
- 2 Ensure that all the council's decisions, policies and development proposals are climate ready.
- 3 Support organisations across Glasgow to become more climate ready.
- 4 Raise public awareness of climate change and associated biodiversity loss.
- 5 Enable and support local climate action to address the emissions reduction, adapt to climate change and halt biodiversity decline.



2.0 What we propose to do next - Climate Plan

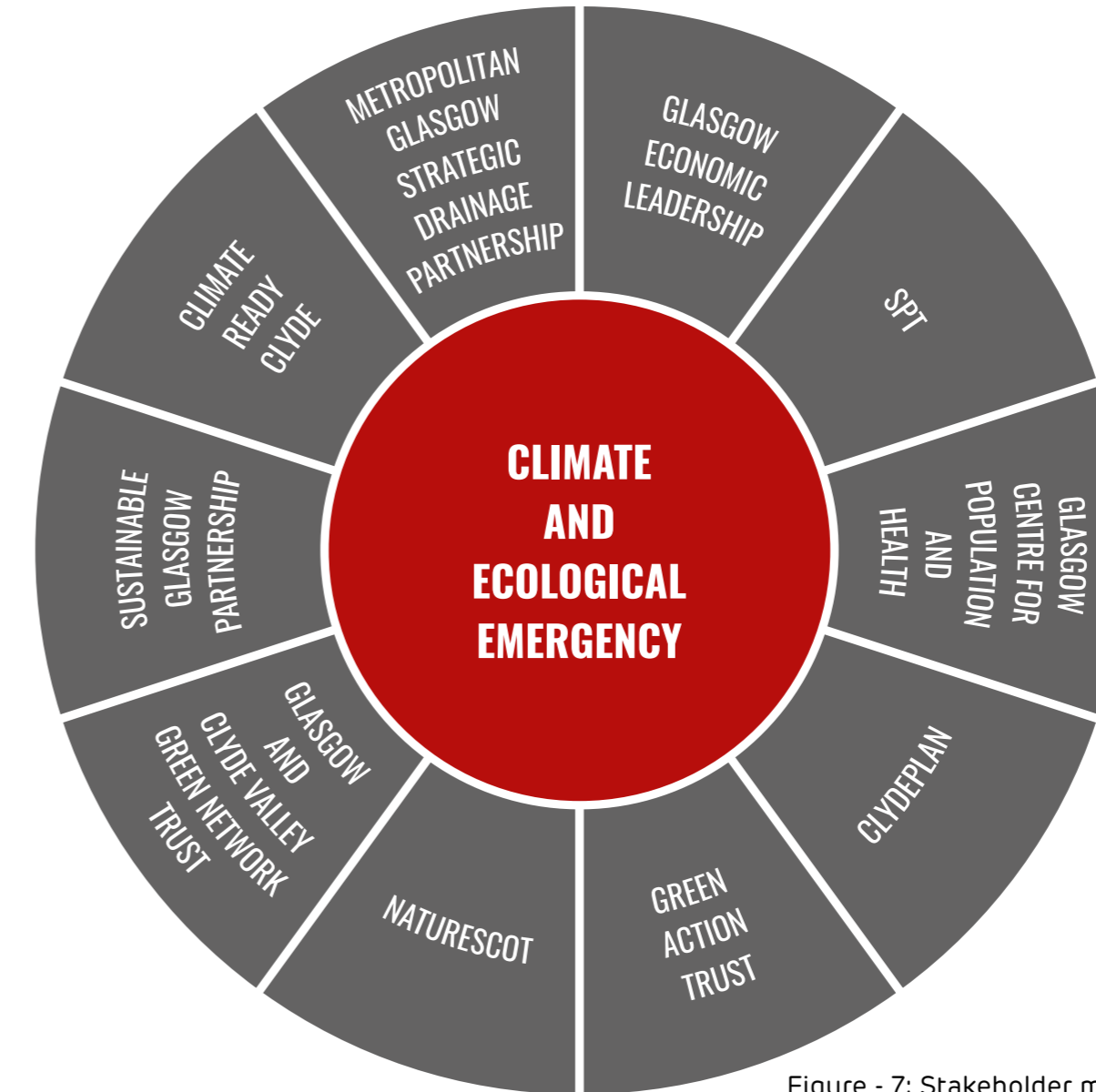


Figure - 7: Stakeholder map



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 net zero carbon 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 and ecological emergency, making 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. This includes the

2.0 What we propose to do next – Glasgow's Climate Plan

creation of a Climate Resilience and Sustainability programme board, led by the executive director of Neighbourhoods, Sustainability and Regeneration Services, and staffed with senior representatives from across the city council. The programme board will oversee progress and direction of climate and ecological emergency actions, managing risks and opportunities iteratively.

The work of the Climate, Resilience, and Sustainability programme office will require significant investment both internally and externally to the city council. The development of a Green New Deal for Glasgow will be critical in establishing the financial landscape from which this can be delivered. Thus, the Green New Deal for Glasgow will help achieve a vision of a net zero carbon city, facilitating the cultural, technological and economic

transformation required to achieve a net zero carbon, sustainable, just, caring, safe and thriving city.

As a key target is for the city to become Net Zero Carbon by 2030. It is worth clearly defining this term again. Net Zero Carbon: 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. Restoring the balance to the natural carbon cycle.

It is worth clarifying that working towards this net zero carbon target therefore requires the city to significantly reduce carbon emissions whilst working to implement measures to capture (or sequester) residual emissions.

To achieve the level of change that is required to respond to

the Climate Emergency, the city commits to action within five main themes. The five themes have been developed and refined to respond and accommodate all the following key documents:

- **Climate Emergency Working Group report and 61 recommendations;**
- **Ecological Emergency Working Group report and 25 recommendations;**
- **The City's Strategic Plan;**
- **The CCC report;**
- **Just Transition Commission report**
- **The UN Sustainable Development Goals.**



Each of the Climate Emergency Theme will present actions for taking forward real and transformative change beyond this point:

In the following section we will explore each Climate Emergency Theme in more detail.

2.0 What we propose to do next - Climate Plan



Climate Emergency Theme 1
Communication and Community Empowerment



Climate Emergency Theme 2
Just and Inclusive Place



Climate Emergency Theme 3
Well Connected and Thriving City



Climate Emergency Theme 4
Health and Wellbeing



Climate Emergency Theme 5
Green Recovery



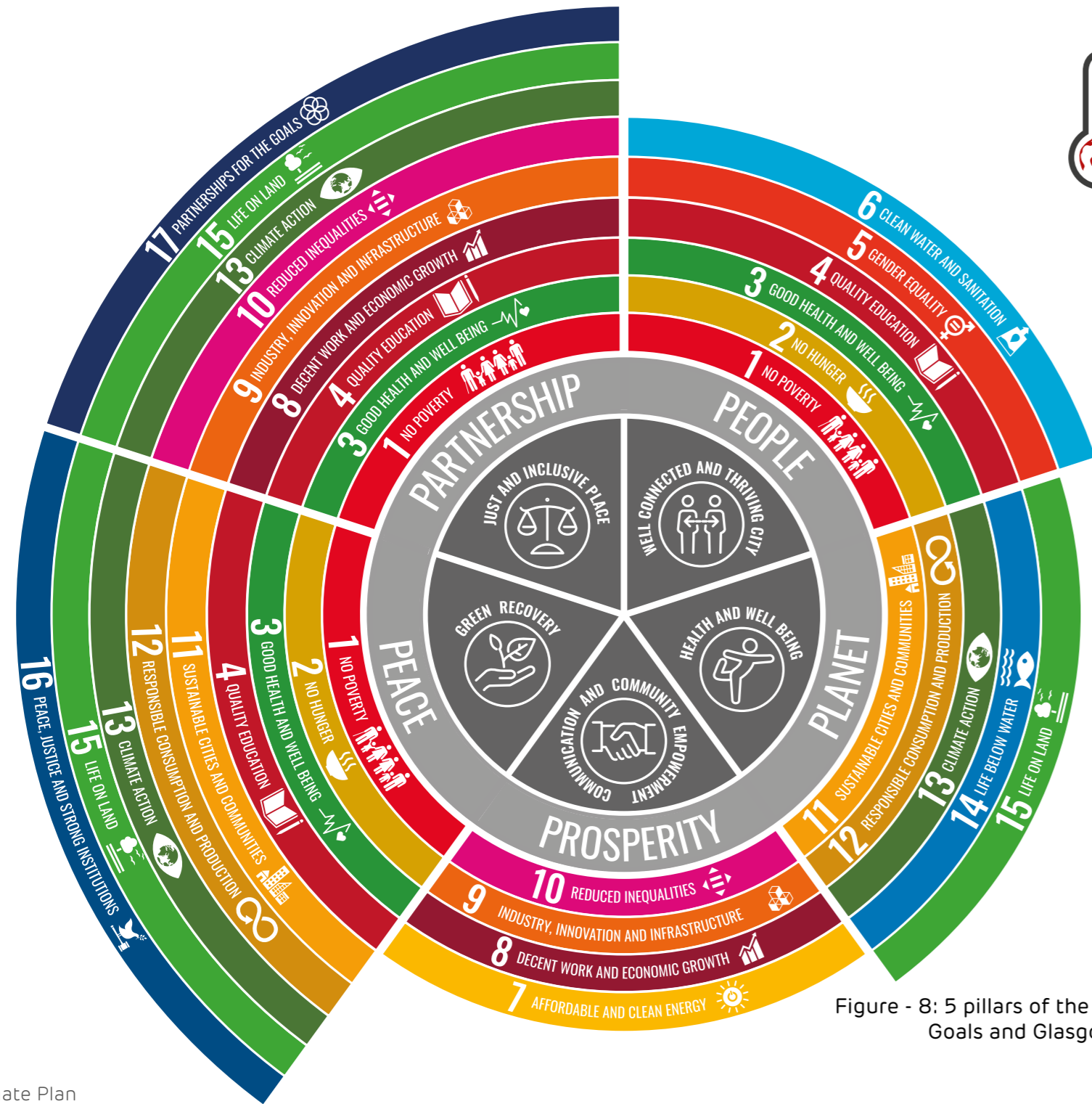
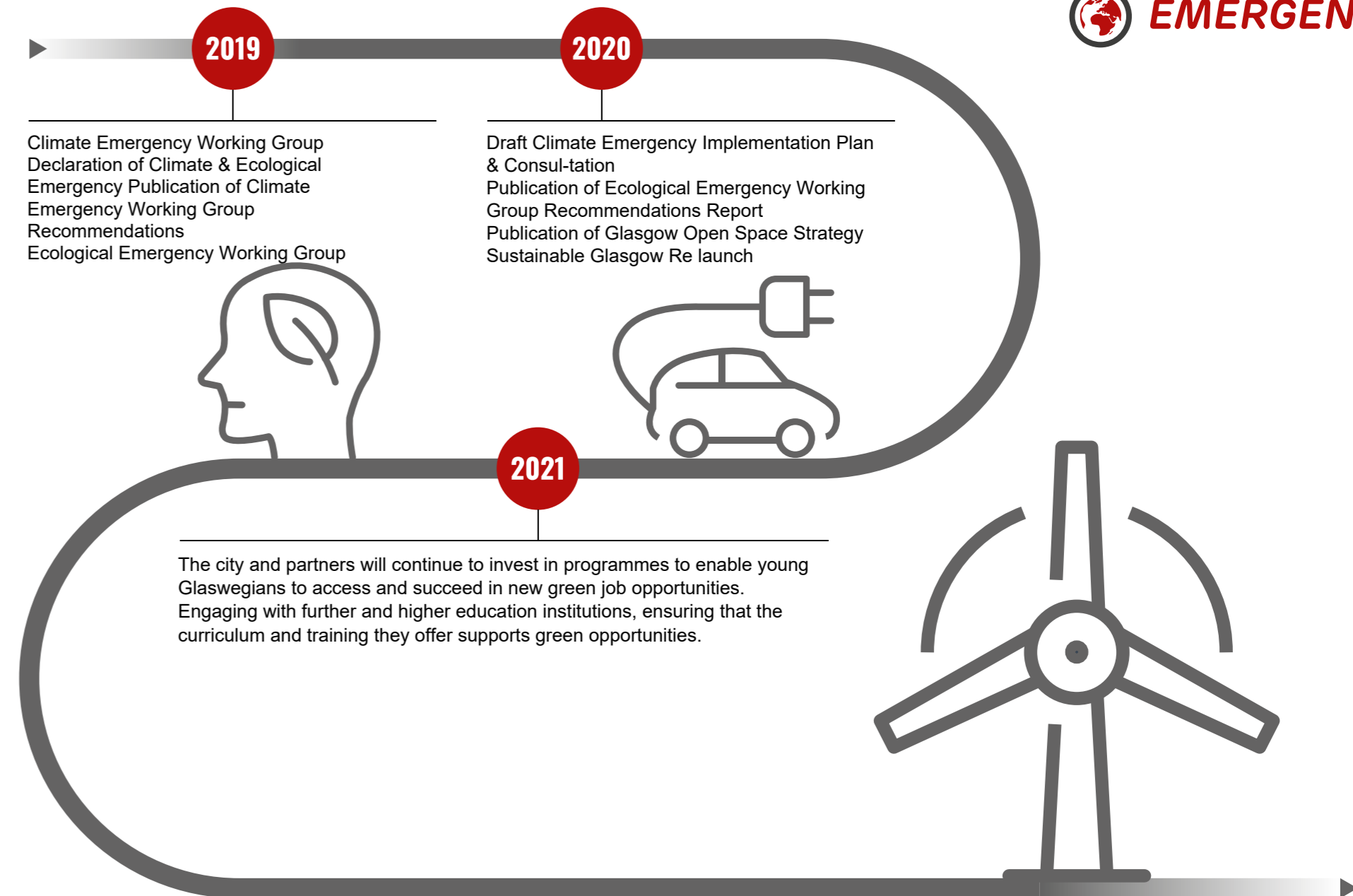


Figure - 8: 5 pillars of the Sustainable Development Goals and Glasgow's Climate Plan Themes



2.0 What we propose to do next - Climate Plan

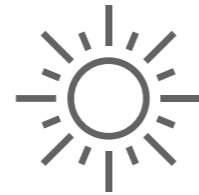


2.0 What we propose to do next - Climate Plan



2022

Annual iterative review of the Climate Plan
 Delivery of energy projects utilising the recovery of heat from geothermal sources learning from Duke Street and Tennent's Brewery projects.
 Delivery of heat and energy generation projects including distribution of heat from parks in Glasgow based on existing feasibility studies.
 All households in Glasgow are enabled to minimise waste arisings and to recycle.
 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.



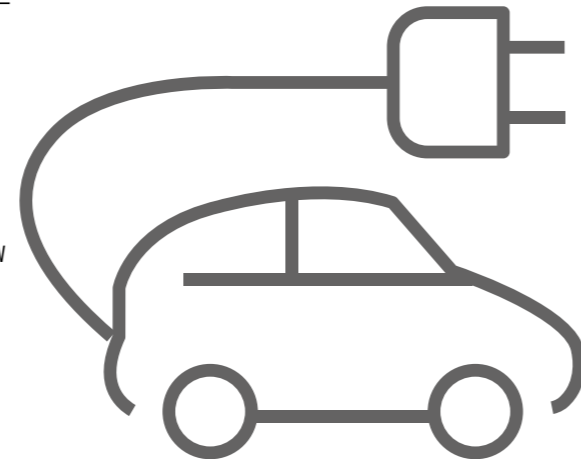
2024

Annual iterative review of the Climate Plan
 Ensure that historic buildings are resilient to the impacts of climate change, protecting Glasgow's rich heritage.
 Adopt an early warning system to prepare for extreme weather events such as heatwaves and flooding.



2023

Annual iterative review of the Climate Plan
 Significant progress in achieving Glasgow's Gold Hybrid plus 20% low and zero carbon generating technologies (LZCGT) or better, for all new build new homes.
 Significant progress in implementing Glasgow's Gold Hybrid plus 20% low and zero carbon generating technologies (LZCGT) or better, to be achieved for all new non-domestic development.
 Significant progress has been made in accelerating the delivery of Local Biodiversity Action Plan, Pollinator Plan and Open Space Strategy.



2025

Annual iterative review of the Climate Plan
 Significant progress in implementing the Glasgow and Clyde Valley Green Network's Blueprint to create green & biodiversity corridors in the city by improving open space provision and increasing tree cover.
 Identify and protect Vacant and Derelict Land for greening and rewilding in combination with renewable energy generation measures, identifying appropriate location, existing priorities and co-benefits of each intervention.
 Develop a Carbon Neutral Innovation and catalyse roll out of this model across the city.
 Upgrade insulation and heating of all building stock in the city, city council leading by example.
 Ban gas heating systems in all new buildings within the city boundary.
 Explore the feasibility of a workplace car park levy, ring fenced to fund sustainable transport in the city.



2026

Annual iterative review of the Climate Plan
 Increase investment in peatland restoration in the city and city region, to increase capacity for carbon sequestration, habitat and species enhancement.
 The Council works with partner organisations, adjacent local authorities, the city's academic institutions and other stakeholders will fund and achieve accelerated implementation of the Glasgow LBAP and Pollinator Plan, incorporating additional outcomes regarding connectivity for biodiversity under the Urban Ecosystem Statement.
 To continue to invest in the school estate, enabling its uses for both carbon reduction, biodiversity gain and climate education as core principles.





**CLIMATE
EMERGENCY**



3.1 Climate plan Theme 1: Communication and Community Empowerment



**CLIMATE
EMERGENCY**



**UN CLIMATE
CHANGE
CONFERENCE
UK 2021**

2028

Annual iterative review of the Climate Plan
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



2029

Annual iterative review of the Climate Plan To continue to work with Education Services in the city, Scottish Government and Keep Scotland Beautiful to formally engage with pupils on the climate and ecological emergency and the actions which can be taken to address them.



2030

Annual iterative review of the Climate Plan
The city makes significant progress in the transition Glasgow's economy from linear to circular, making it more inclusive and sustainable.
Increase the amount of renewable energy such as solar thermal, PV or heat pumps in the city to represent 20 % of total energy demand.
Work with bus operators to support rapid transition to cleaner public transport as part of the City's Low Emissions Zone.
Transition the fleet of private hire vehicles to zero emission vehicles by 2030.
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.
New City Climate Plan is adopted setting out targets and key actions for building a net zero city by 2045 and beyond.



The aims of this theme are:

- **To engage with communities about the climate challenge**
- **To foster participation and collaboration, and**
- **To enable local action.**

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 legacy from COP26, we will develop a dynamic Climate Change Communications strategy for the city. This will be co-designed with our Sustainable Glasgow

Partners and local communities of interest, identity and place in the city. The strategy will include a renewed presence on social media, and other channels identified by communities, encouraging participation and sharing best practice across all city stakeholders including our citizens [action 1]. We aim to co-create the strategy with communities, community organisations and stakeholders such as Sustainable Glasgow partners, Climate Ready Clyde, MGSDP, SPT, GCVN, Glasgow Centre for Population and Health, Clyde Gateway, Glasgow Science Centre, Lateral North and others.

This strategy will include working with young people in the city to co-develop a Children's Climate Charter for Glasgow. Committing current generations to protecting and enhancing our city, allowing future generations to inherit a

sustainable, just, resilient and equitable city, where they can thrive.

The city and partners will map communities of interest, identity and place across Glasgow with a view to understanding what their priorities are, how their participation can be supported and what type of participation they would favour. This will be an opportunity to ask communities what they think of the conference and what they'd like to see as a legacy from COP26.

This legacy has the potential to be a better connected, cleaner, more accessible, greener, healthier and equitable place where everyone in the city participates and succeeds in the opportunities presented by a net zero carbon economy.

This communications strategy will be an overarching



3.1 Climate plan Theme 1: Communication and Community Empowerment



framework for engaging Glaswegians in the transition to a climate ready and net zero carbon city, by providing clear and accessible information, building capacity and fostering local action to address the global climate and ecological emergency. It will include working with formal education and schools, but also community institutions, communities of place, interest and identity.

According to the Scottish Government's Draft Public Engagement Strategy: Net Zero Nation, over 60% of measures to achieve net zero emissions will require societal change. In this context, it is essential that our communities understand the nature and scale of the climate challenge, having the opportunity to shape and influence local and national decisions about how to address the climate and ecological emergency.

Significant public engagement will take place across the city to ensure that residents have their say on actions to tackle climate change and improve their neighbourhoods, including topics such as food, energy, transport, natural environment, health and climate justice. This will utilise innovative engagement methods, while working collaboratively with the arts community, academia, and civil society.

To support this, the City will roll out climate conversations [action 2] throughout Glasgow and enable residents to access information and make recommendations for change. In order to connect with key stakeholders, we will engage with our partners within the Community Planning Partnership and Glasgow Life.

Engagement will continue to be undertaken with young people to include, amongst other topics, discussions about how proposed land use and connectivity policies can help to achieve a resilient and net zero carbon city by 2030, as part of the City Development Plan 2 and the Glasgow's Transport Strategy.

Communications and engagement about the climate and ecological emergency must also include work with Education Services and the curriculum for excellence, exploring opportunities for outdoor learning to mainstream climate change awareness and to help foster action [action 25]. This will build on the success of the sustainable development education programme with schools in Glasgow, from early years to secondary, as well as learning from the implementation of the national

programme: Climate Ready Classrooms rolled out by Keep Scotland Beautiful on behalf of the Scottish Government.

Recognising the importance of staff development and continuous education, the city council commits itself to become a climate literate organisation through the roll out of Carbon Literacy and Ecological Emergency training, while advocating the roll out of climate literacy training in other organisations across the city. The city council will continue to roll out its carbon literacy and Ecological Emergency training Course to raise awareness of the climate and ecological emergencies, but above all to foster individual and collaborative action on climate change from all areas of the council family. This will be expanded to include a mandatory GOLD course with the aim to raise awareness of

the ecological emergency and actions that can be taken to address it [action 4].

Finally, the city will continue to work with local, national and international partners to raise awareness of both climate and ecological emergencies fostering collaborative transformative action. A significant first step in doing this is the creation of a city climate change declaration where local institutions pledge to become net zero carbon by 2030 or sooner, the first step in achieving this is the development of the Sustainable Glasgow Charter by the Green Economy and private sector hub [action 3]. The city will also join others in signing the Edinburgh Declaration on post - 2020 global biodiversity framework as part membership of ICLEI cities for nature [action 12].





3.2 Climate plan Theme 2: Just and Inclusive Place

The aims of this theme are to:

- **Ensure that the transition to a net-zero society is a catalyst for building a fairer, healthier, prosperous, resilient and greener city for all**
- **Ensure that people are at the centre of the transition to net zero, creating benefits and opportunities for all in the city.**
- **Equip people with the skills and education they need to benefit from the transition to net-zero**
- **Empower and invigorate our communities, strengthening local economies**
- **Share the benefits of climate action widely, ensuring that costs are distributed based on ability to pay**

The City will do this by setting up its own local Just Transition Commission [action 11] implementing the recommendations from

the national Just Transition Commission, while also implementing the Fairer Scotland Duty in all decisions and actions made in response to the Climate Emergency, to help ensure that no one in Glasgow is disproportionately affected by extreme weather or left behind in our transition to a greener, low carbon and resilient city. This will ensure that strategic decision-making helps to tackle inequality by following Fairer Scotland Duty's guidance for public bodies [action 20].

The city will work with Strathclyde Pension Fund and other pension investment funds in the city to encourage the development of climate change strategies, including divestment from fossil fuels. Exploring how investment portfolios are future-proof is critical, ensuring consideration is given to how Climate Change is likely to impact on their ability



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



3.2 Climate plan Theme 2: Just and Inclusive Place

to meet long-term liabilities and their members' ability to live in a world that is worth living in [action 34]. We will work with local pension funds and investment managers to share best practices of responsible and climate resilient investment. SPFO will lead by example in their activity to support the Task Force on Climate related Finance Disclosure.

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 13].

The city and partners will continue to invest in programmes to enable young Glaswegians and those in sectors most affected by the transition to a net zero carbon economy 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 [action 5]. The City will work with



THE GLOBAL GOALS For Sustainable Development



3.2 Climate plan Theme 2: Just and Inclusive Place

Education Services to promote climate ecological emergency learning opportunities, from early years until secondary school, as part of the curriculum for excellence and outdoor education [action 27].

The impacts of our changing climate, such a severe weather events, will affect all of our communities, but it is those most vulnerable communities in Glasgow that will be most impacted. In this way climate impacts become a stress multiplier, adding additional burden upon already existing stresses, such as poverty or inequality.

As a result, Climate change brings 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. including engagement and capacity building with elected members and senior management teams.

This work will support how we monitor and evaluate progress against actions identified in this plan to build a more climate resilient city, while also supporting the development of 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 19].

The city and partners will then develop and adopt an early warning system to prepare for extreme weather events such as heatwaves and flooding [action 28]. The city will also ensure that historic buildings and their rich heritage are resilient to the impacts of climate change, protecting Glasgow's rich heritage [action 29]. The city will work with our partners within Sustainable Glasgow and Climate Ready Clyde to ensure that we help to build the capacity of citywide organisations not only to transition to a zero 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 58, 16]. The city will adopt a Community Wealth building approach to supporting our local businesses and communities, working in



partnership to create a fairer local economy, reducing poverty and inequality, as well as becoming more resilient in the face of our changing climate. The Green New Deal will form a framework for planning for a green recovery and just transition to a low carbon society, with wellbeing and circular economy principles at its heart.

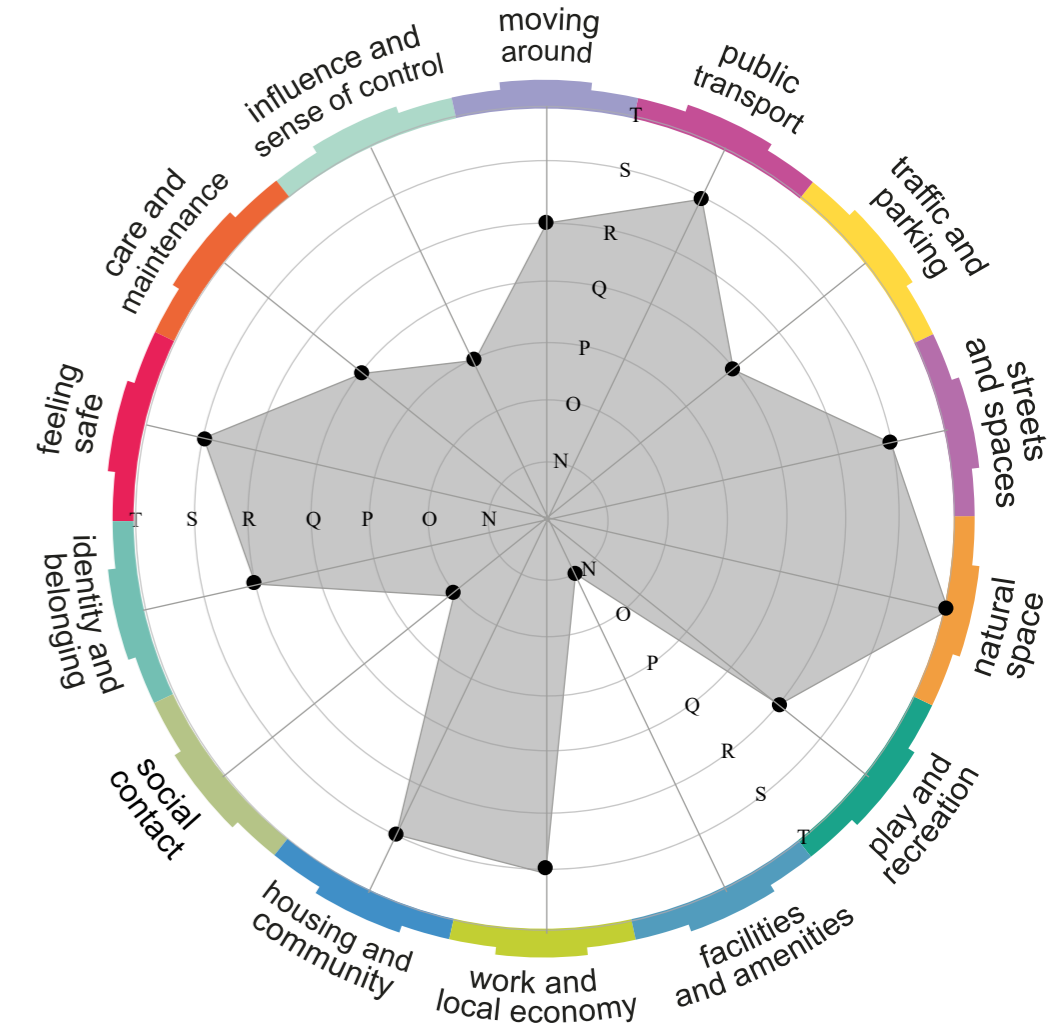
3.2 Climate plan Theme 2: Just and Inclusive Place Case Study 1

Using the Place Standard tool

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 be become accessible. The Place Standard is a key element of participatory place making processes, which bring public bodies, community organisations and residents together, in the most effective means of building community resilience to climate change.

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.



3.2 Climate plan Theme 2: Just and Inclusive Place Case Study 2

Weathering 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.



3.3 Climate plan Theme 3: Well Connected and Thriving City

This theme aims to:

- **Support the development of low-carbon retrofits and new buildings that are fit for the future;**
- **Help to strengthen energy networks and;**
- **Support decarbonisation of transport systems by helping to improve infrastructure for walking, cycling, wheeling and reducing the need to travel.**

Glasgow is Scotland's most renowned post-industrial city. It is the metropolitan centre of a unique and diverse regional housing system which has changed significantly over the past quarter of a century. There are unique opportunities and challenges linked to Glasgow's built heritage and industrial legacy.

Glasgow's Housing Strategy addresses the key issues set

out in the Scottish Government's Housing Strategy - 'Housing to 2040' - with a focus on delivering affordable and sustainable housing that can meet the needs and demand of Glasgow's people. This includes new supply of high quality low and zero-carbon homes the meet the 'Glasgow Standard' as well as an emphasis on meeting the challenges associated with holistic, whole building approach to investment and improvements to existing homes, particularly older tenements, to make them low and zero carbon fit for the future ('Safeguarding Pre-1919 Tenement Stock' report March 2021).

A key issue is resources and financing available for investment in existing homes. The Home Energy Efficiency Programmes Scotland: Area Based Schemes (HEEPS: ABS) is a national fund that is allocated to local authorities based on a

distribution formula that applies weighted measures for fuel poverty, building attributes, and other factors. Glasgow receives a significant allocation due to its comparative deprivation and incidence of low-income households as well as extensive, non-traditional and solid wall construction housing types, including tenements. Glasgow City Council has a successful track record of engaging private households, as well as Registered Social Landlords, to deliver HEEPS: ABS projects in target areas across Glasgow. Projects are delivered in partnership and with consent of private owners, who are required to make a financial contribution. The projects must balance a combination of non-traditional construction types

requiring higher costs technical specifications for works, housing valuations, comparative households' incomes within target areas and grant benchmarks.

A key priority is to maximise the additional funding and resources that can be leveraged through HEEPS: ABS grants, such as Energy Company Obligation (ECO). However, it is challenging where owners are not able or not willing to make a significant financial contribution. There are also eligibility restrictions on HEEPS: ABS grants for private landlords. Developing viable and deliverable finance packages for investment in improving the sustainability of existing housing is a key challenge.



CATAPULT



3.3 Climate plan Theme 3: Well Connected and Thriving City

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 domestic and non-domestic 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 route map (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, also including built in measures to enhance biodiversity – e.g. bird and bat boxes [actions 23, 24 and 39].

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 net zero carbon 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



3.3 Climate plan Theme 3: Well Connected and Thriving City

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 several 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 6].

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. 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 domestic and non-domestic buildings, it will include reviewing the need for an Energy Services Company [actions 14, and 50]. This plan and the LHEES, will both support Glasgow's ambition of becoming a cooperative city, through alignment with the circular economy principles and a framework of engagement with local energy co-operatives, enabling them to be set up and providing support [action 46].

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 access to sustainable and renewable energy sources. Local developments will be made more sustainable through retrofitting existing stock with highly energy-efficient and low-carbon heating solutions and considering flood risk. 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 9, 14, 23, 24, 39].

These actions 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 can live in warm, dry, energy efficient, resilient, low carbon homes which they can afford to heat. In order to help strengthen energy networks in the city, open space across Glasgow can be harnessed to facilitate the generation and delivery of renewable heat and energy. The city is working with Sustainable Glasgow partners to deliver an Innovation District in the city [action 51] with a view to rolling the model across the city.

The Open Space Strategy Delivery Plan will investigate the potential opportunities presented by open spaces across the city [action 17]. While the city council's own estate will be made greener and more energy efficient through a range of improvements. This includes installing over 100 charge points



3.3 Climate plan Theme 3: Well Connected and Thriving City

for the city Council's EV fleet, bringing more schools under the control of a centralised Building Management System, LED lighting and controls installed across the estate, and adding to the existing 29 sites currently retrofitted with Solar Photovoltaic panels wherever viable [actions 10, 41, 51]. In order to help decarbonise transport networks and improve infrastructure for walking, wheeling, and cycling, as well as reducing the need to travel through effective remote working and implementation of 20-minute neighbourhoods, the city has a number of challenges.

The city will also continue to work to overcome these challenges and support effective climate action through continued improvement of Planning and Building Standards. The city council are developing a suite of Spatial Supplementary Guidance to



3.3 Climate plan Theme 3: Well Connected and Thriving City

the City Development Plan for priority areas identified in the City Development Plan. These six Strategic Development Frameworks (SDFs) and three Local Development Frameworks, once approved become Supplementary Guidance to the Development Plan. To date three SDFs have been approved for the River Corridor, Govan Partick and the City Centre, with work ongoing to develop SDFs for Glasgow North, the Inner East and Easterhouse. Local Development Frameworks are also being prepared for Pollock, Drumchapel and the South-Central area.

These documents promote the delivery of active travel networks, integrated green infrastructure, local biodiversity networks, the re-use of brownfield land and in particular the concept of 20 minute neighbourhoods to ensure that people have access to the

facilities and services that they need within walking distance in their local neighbourhoods, thus reducing the need to travel and minimising the impact on the environment. They recognise and promote the importance of place and placemaking and good design in tackling climate change.

Each document is, or will be supported, by an Action Plan which can be updated to reflect emerging priorities, new legislation or new opportunities which emerge. They are prepared with the climate emergency at the forefront of our thinking. As an example of these we used the South Central LDF as a pilot in partnership with Architecture and Design Scotland to develop the LDF under their Place Planning for Decarbonisation Programme. This meant that the consultation programme for the South Central LDF had

the climate emergency at its forefront, with key questions about how place and place strategies can reduce carbon dependency used to shape our engagement with local stakeholders and communities. The outcomes of this consultation process will be reflected in the adopted LDF once complete. Learning from this process will also influence the development of future spatial strategy documents. In addition to the above, the city are also responsible for the development and delivery of Town Centre Action Plans and other smaller scale spatial guidance such as masterplans, all of which reflect the importance of well designed, attractive places in tackling the climate emergency.

Transport accounts for a third of the carbon emissions produced by the city and if we are to decarbonise the sector, major



changes are required to how people move about in the city. Transport is also directly linked to health inequality, deprivation and economic performance. The new transport strategy and Liveable neighbourhoods plan will be integral to the success not only in achieving the city's net zero carbon targets, but also improving infrastructure for walking, wheeling and cycling, reducing the number of private vehicles on the road, as well as access to equitable, affordable, clean and reliable public transport.

The Liveable Neighbourhoods Plan will set out policy regarding transport infrastructure to support a well-connected and low carbon city [action 55], this will be supported by the City Development Plan 2 (CDP2) which will also help to facilitate action proposed by the Regional Transport Strategy, Glasgow Transport Strategy



3.3 Climate plan Theme 3: Well Connected and Thriving City

once completed. Embedding this in city-wide policy will help to bring about a modal shift in transport while also ensuring that housing sites are within locations supported by sustainable design [actions 50, 22, 52] and reducing the need to travel.

Investment in transport infrastructure in the city will prioritise public transport and active travel with a view to reducing the need to travel, improving public transport and active travel networks and reducing the number of private vehicles on the road, enabling those vehicles which are on the road to transition to cleaner fuel alternatives.

This is supported by the work of the Glasgow City Region Bus Partnership which brings together all eight Glasgow City Region local authorities, Strathclyde Partnership for

Transport (SPT), bus operators and other bus interest groups to agree areas of joint work in developing a bid to the Bus Partnership Fund. Additionally, Glasgow will in parallel explore other options for bus delivery in the City as described in the Transport (Scotland) 2019 Act and with the aim of achieving the best bus service possible for the citizens of Glasgow, whilst contributing to a greener, better connected City [actions 25, 26].

Decarbonisation of the transport sector is supported by work with private hire operators in the city to enable the transition to low carbon vehicles [action 54]. This will be further complemented by extensive ongoing work to expand the Electric Vehicles (EV) charging infrastructure across the city. By the end of 2020 there are 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 51]. This is further complemented by the city trialling hydrogen powered vehicles, including investment in a fleet of 19 hydrogen-powered refuse collection trucks and a green refuelling station in the city following the announcement of £6.3m in UK government funding.

To both reduce our carbon footprint and provide an inclusive working environment, the city will explore continued home working and the use of video-conferencing as part of a standard working practice. Due to the Covid-19 pandemic, the Council had to rapidly adopt new ways of working



to ensure people stayed safe while being able to continue serving the city. This adoption of new and more agile working practices strengthens the case for a further 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 7]. We do note however, that we must be careful not to transfer emissions generation from the council estate to the domestic sector, thus we will carefully consider how we best realise the benefits and impacts of changing working practices.

The city welcomes the recently published Scottish Government programme announcing that £500 million will be invested in active travel (walking, wheeling



3.3 Climate plan Theme 3: Well Connected and Thriving City

and cycling) over the next five years. This will include £2.75m 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 our citizens [actions 50, 55].

The Circular Economy route map has been adopted following extensive stakeholder engagement and responding to issues identified in the Circular Glasgow Scan. 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, not only

supporting a green recovery from the current COVID 19 pandemic, but also a response to our Climate and Ecological Emergency. The new City Development Plan will also 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 40, 58].

In order to support the effective transition to a net zero carbon economy and appropriately resource the delivery of transformational action around buildings, mobility, transport infrastructure and energy generation in the city, the city will develop a Green New Deal for Glasgow. This will include a portfolio of investable projects that can stimulate job creation whilst also maintaining encouraging emissions and biodiversity trajectories observed as a result of the Covid-19 pandemic [action 16].



3.3 Climate plan 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.



3.3 Climate plan Theme 3: Well Connected and Thriving City Case Study 2

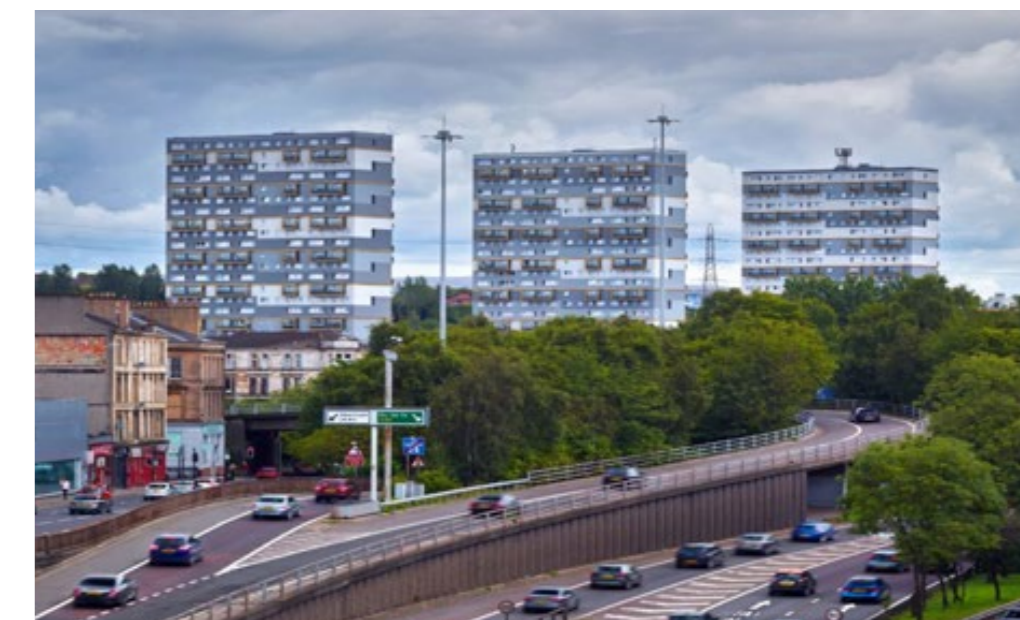
Housing and Regeneration Services - Passivhaus developments

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 plan 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 thus helping to reduce emissions.

By the end 2020 there will be 228 charging bays deployed throughout the city, all of them

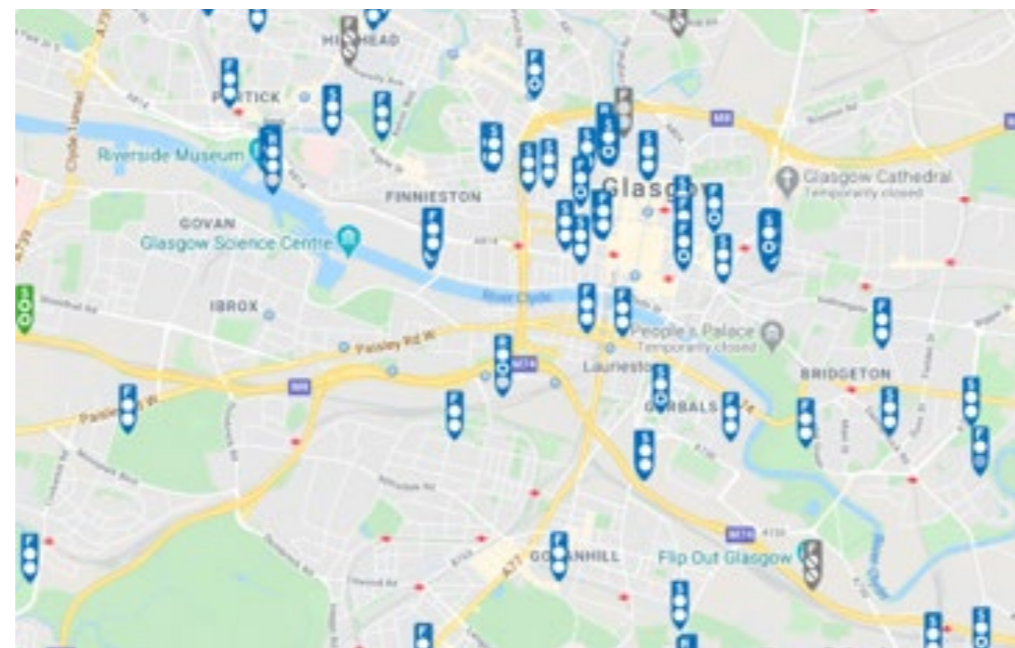
accessible via the Charge Place Scotland (CPS) charge card.

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, the 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',

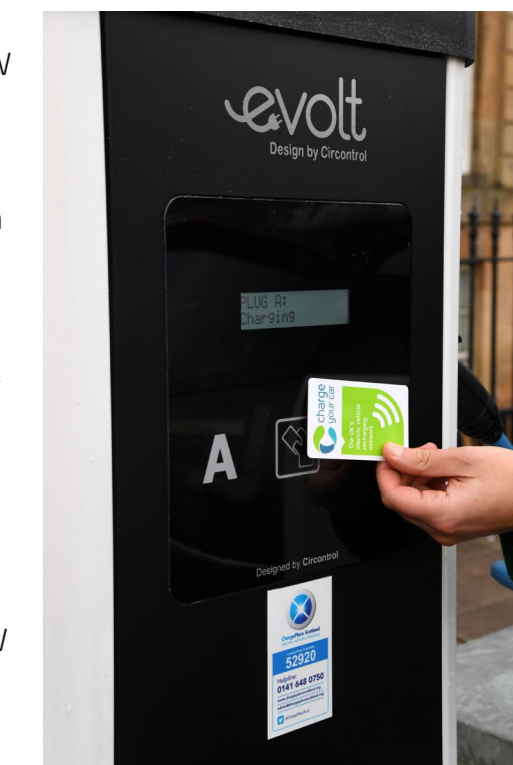


where small charges are sought on journeys or when the vehicle is idle. This is particularly useful for users without a dedicated parking space. Glasgow are committed to giving EV users more places to charge, with plans to build a commercial charging hub under

3.3 Climate plan 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**.



3.4 Climate plan Theme 4: Health and Wellbeing

The aims of this theme are:

- **To protect and enhance local habitat connectivity and biodiversity in the city.**
- **To support creation and maintenance of good quality, multifunctional open space to help reconnect communities with nature.**
- **To support equitable access to good quality open space and green infrastructure in the city.**

Climate change presents significant challenges to human health and biodiversity. An increase in extreme climate events, such as heatwaves or flooding, threaten human health and wellbeing, both directly and indirectly, through impaired ecosystem functioning and reduced ecosystem services.

There is 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 could potentially be as serious as the current Covid-19 pandemic, in its long-term impacts.

It has been known for some time that good quality natural landscape in urban areas can affect how people feel, affecting their physical and mental health. The benefits are varied, including physical benefits from green infrastructure, for example improved air quality, less noise pollution and reduced risks from flooding or heatwaves, benefits for recreation and interaction with nature. These spaces also have an impact on mental wellbeing, social networks and resilient communities supporting evidence that urban green space can support



3.4 Climate plan Theme 4: Health and Wellbeing

public health. The Covid-19 pandemic has shown just how crucial access to good quality natural landscape is, and just how important Glasgow's many parks are to the well-being of its citizens.

We will work with our partners to address climate change, whilst also closing the gap on the health inequalities existing in the city. To support this, we will set up a Glasgow Just Transition Commission, while also continuing to work with our partners to implement the Fairer Scotland Duty following consultation and guidance from the Scottish Government [action 11,20].

The city will work to address the ecological emergency, protecting and enhancing our local biodiversity and ecosystems services. The Local Biodiversity Action Plan (LBAP), the City Development Plan 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, protecting, enhancing and expanding Local Nature Reserves, and

Sites of Importance for Nature Conservation and other biodiverse sites in the city, including peatland restoration and maintenance of existing sites [action 38 and 20].





3.4 Climate plan Theme 4: Health and Wellbeing

The City Development Plan protects these environmental designations and other open spaces from inappropriate development.

The city will accelerate implementation of the Local Biodiversity Action Plan (LBAP) and Pollinator Plan (PP) helping to ensure that Glasgow has clean air, clean water, and a protected natural environment [action 21]. This can have benefits for the physical and mental health of our communities. The importance of good quality and accessible green space became even more evident during the COVID 19 pandemic.

Reducing the city's reliance on the private motor car will also 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. CDP policy also has a role in ensuring that new development which generates movement of people will be located in the most sustainable locations. 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 Strategic Development Frameworks, Local Development Frameworks and Masterplans, in collaboration with the City Centre Transformation Plan and the Liveable Neighbourhoods Plan, will identify public realm improvements to encourage active travel choices [actions 33 and 50].

Glasgow implemented the first Low Emission Zone scheme in Scotland at the end of 2018. This was introduced with Phase 1 designed to improve



3.4 Climate plan Theme 4: Health and Wellbeing



on vehicle emissions from the bus feet within the city centre. This has provided measurable improvements in air quality and will be extended on a phased 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. Despite the delay to the original full implementation date of 1st January 2022, 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 addressing carbon emissions from the transport sector [actions 22 and 52].

This will also include a focus on expanding the "Spaces for people" infrastructure and reducing the need for the private car in the city, as part of the Low Emission





3.4 Climate plan Theme 4: Health and Wellbeing

Zone implementation and the second iteration of the City Development Plan [actions 50, 55].

Furthermore, a renewed 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, while creating a more sustainable and circular economy. The new Resource and Recycling Strategy addresses 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 recent adoption of the circular economy route map and the city's Resource and Recycling Strategy [actions 18,43, 45 and 58]. 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 45].

Finally, and very importantly, our global food system is under pressure to feed a growing human population and to help address the climate and ecological emergency. Agriculture and our entire food system are significant contributors to climate change, with the food system being responsible for a quarter of

global emissions, 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" and 'Glasgow City Food Plan' will help address some of these challenges. The Food Growing Strategy will complement the review of the Stalled Spaces programme and the Open Space Strategy Delivery Plan. Through these delivery mechanisms we are currently working to identify and deliver new food growing areas. Alongside this work, City Development Plan 2 will include land use policies, specifically ensuring that new housing developments include space for food growing. While the



CLIMATE EMERGENCY



3.4 Climate plan Theme 4: Health and Wellbeing

consumption of healthier and sustainable diets, but also support for more local food growing opportunities and shorter food supply chains [action 31]. We will work with the Scottish Government, Glasgow Food Policy Partnership, Glasgow Community Food Network, Glasgow City Council, Sustainable Glasgow Partnership and other key organisations in the city to facilitate access to locally sourced, seasonal food [action 30]. This will support the development of a food system that protects nature, reduces food miles and minimises waste, while also promoting healthy, seasonal and ethically sourced food available to all.

Glasgow Food Plan will address the environmental, social, economic and health impacts of our food systems, aiming to put equity, sustainability and health at the centre of our food system., the city recently developed a Glasgow Food and Climate Declaration with the aim of uniting sub-national governments and local authorities with a pledge to accelerate the development of integrated food policies. We will support the actions under the 'Food Growing Strategy' and the vision set out by 'Glasgow City Food Plan' by helping to increase opportunities for local growing, building our understanding of local food systems and encouraging the transition to healthier, more sustainable and climate-smart food system in the city [action 32]. This will include a communications campaign and guidance to increase the



CLIMATE EMERGENCY





3.5 Climate plan Theme 5: Green Recovery



This theme aims to support the development of a local wellbeing economy to enable a Green Recovery from the COVID 19 pandemic while also addressing the global climate and ecological emergencies, specifically:

- **Supporting a transition towards a circular economy**
- **Supporting tree planting and maintenance, peatland**

- **restoration, and green infrastructure**
- **Supporting improved infrastructure for walking, cycling and remote working**

Covid-19 has drawn out the importance of greenspace and the natural environment for all of us as a daily walk in the park became 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 reset 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 21, 35, 37, 38, 47 and 50].



The city will develop its work as part of the EU H2020



3.5 Climate plan Theme 5: Green Recovery



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 using Glasgow's greenspace to supply low carbon heat from other natural sources such as air, geothermal (mine water), waste water, coastal or marine, amongst others [actions 37 and 33].

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 effective use of Vacant and Derelict Land sites, as recommended by the Ecological Emergency Plan, will be implemented via the Open Space Strategy (OSS) Delivery Plan. The OSS Delivery plan will also to map out opportunities to enhance Glasgow's active travel routes, through improved green network linkages [actions 36 and 37].

To create a more climate-resilient city, we will use the local biodiversity action plan, and open space strategy delivery plan and City Development 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.



3.5 Climate plan Theme 5: Green Recovery

Alongside this, GCVGN and its partners will plan how to deliver a Clyde Climate Forest, while also developing an Urban Woodland Strategy for the city and aligned with Clydeplan's regional forest and woodland strategy [actions 35 and 36].

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 and enhance 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 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 trees and 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 [actions 35 and 48].

Our partners at Climate Ready Clyde are 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 11, 19].

In order to deliver an effective green recovery, the city will develop a Green New Deal for Glasgow. This will include a portfolio of investable projects that can stimulate job creation whilst also maintaining encouraging emissions and biodiversity trajectories observed as a result of the Covid-19 pandemic. The city



will develop this approach as a framework for planning for a green recovery, using our role as host of COP26 to lead, and learn from others in the city and beyond on how to develop a Green New Deal for Glasgow further. In developing a Green New Deal for Glasgow, the Council will seek to bring together all relevant activities related to a green recovery, identifying new opportunities with an overarching approach being documented through a series of commitments published in 2021 [action 16].

Part of this work will be supported by the development of a strong circular economy, as adoption of circular principles will also help support health and wellbeing of people and nature, strengthening the local economy by retaining value within the city economy. Glasgow's recently adopted circular economy routemap,

which contains several actions that will strengthen a local circular economy, provides a view as to how we utilise existing vacant properties and significantly help blossoming circular businesses, whilst filling vacant properties, boosting business growth numbers and employment [action 40].



These actions align with the following UN Sustainable Development Goals:

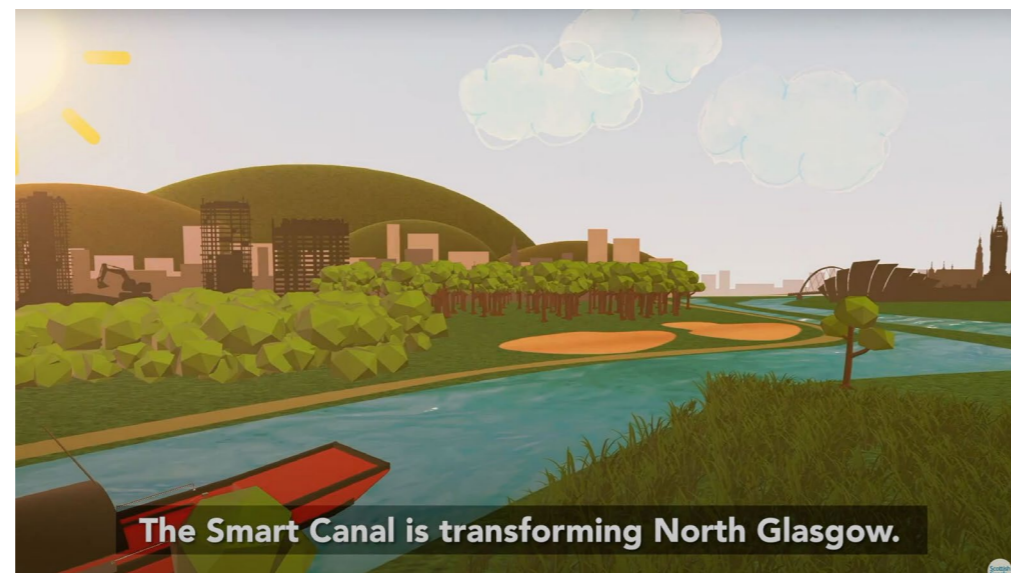
3.5 Climate plan Theme 5: Green Recovery Case Study 1

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



Glasgow's Smart Canal - transforming North Glasgow - animation



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.

<http://www.centernalscotlandgreennetwork.org>
<https://greenactiontrust.org>

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



**3.5 Climate plan Theme 5:
Green Recovery
Case Study 2**

to regenerate and remain as a woodland in perpetuity
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 (<i>Alnus Glutinosa</i>)	10%
Downy Birch (<i>Betula Pubescens</i>)	20%
Bird Cherry (<i>Prunus Padus</i>)	10%
Holly (<i>Ilex Aquifolium</i>)	5%
Pendunculate Oak (<i>Quercus Robur</i>)	10%
Sessile Oak (<i>Quercus Patraea</i>)	10%
Rowan (<i>Sorbus Aucuparia</i>)	20%
Hawthorn (<i>Cratageous Monogyna</i>)	5%
Hazel (<i>Corylus Avellana</i>)	10%



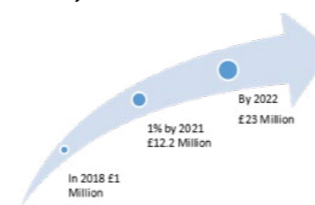
This initiative of creating a new woodland on this scale is seen as a first phase and further expansion is under investigation and it is the aspiration that the collaborative approach with GATrust will support this and lead to opportunities of this kind across the City.



**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



3.5 Climate plan Theme 5: Green Recovery Case Study 3

PB panel was established which 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



3.5 Climate plan Theme 5: Green Recovery Case Study 4

Case Study - Surface Water Management Plans

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.

Retrofit Highway Raingarden in South East Glasgow



Retrofit Surface Water Exceedance Ampitheatre at Croftfoot Primary School

Further information on these projects is available here

<http://www.mgsdp.org>



EU-funded Initiatives at Glasgow City Council
Case Study 1



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.

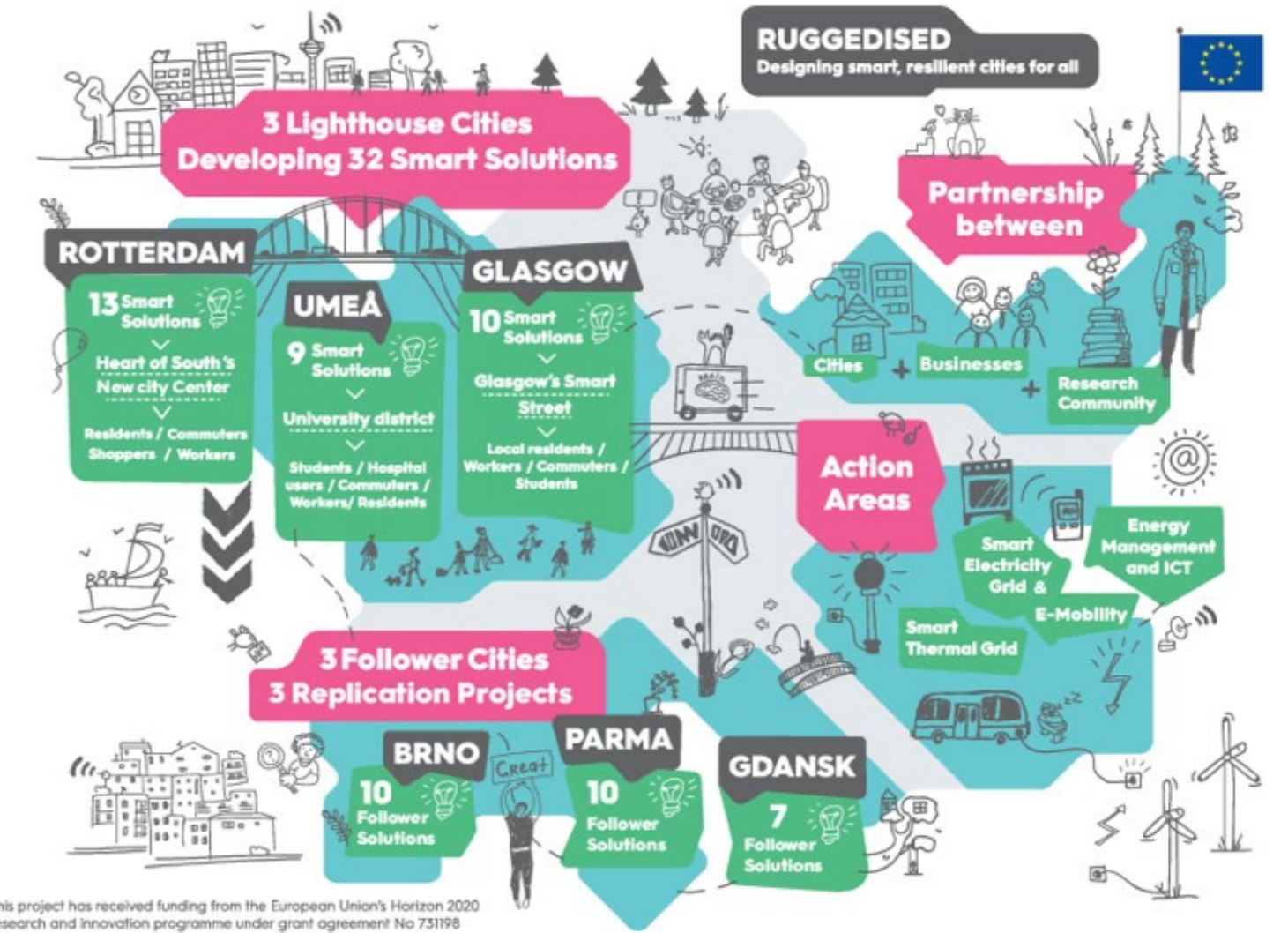


EU-funded Initiatives at Glasgow City Council
Case Study 2



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 & Ecological Emergency 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.

Lastly, the council will create a Climate, Resilience and Sustainability programme to coordinate and manage the work packages resulting from the committed actions stated in the CEIP, deliverables from the Resilient Glasgow programme and the integration with the Sustainable Glasgow partnership. This delivery programme will be supported by a Programme Management Office (PMO) as per the standard council approach

4.0 Monitoring and Evaluation

used for critical programmes such as the City Deal delivery programme. This programme will be governed by a Climate, Resilience, and Sustainability programme board, led by the executive director of Neighbourhoods, Regeneration, and Sustainability Services, and staffed with senior representatives from across the city council. The CRS Board will oversee progress and direction of the actions contained within the Climate and Ecological Emergency Plan actions, as well as new actions that will arise as we progress towards Net-Zero Carbon, managing risks and opportunities iteratively.

The City will report to committee annually, adopting an iterative process to revising our target, inclusion of new projects and actions.

This programme and PMO will support the technical Subject Matter Experts (SMEs) across the council and beyond in developing and delivering the identified projects to address the climate and ecological emergency.



5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
1	develop a dynamic Climate Change Communications strategy for the city. This will be developed with Sustainable Glasgow and aligned with COP 26.	Sustainable Glasgow, COP26 Collective and Stakeholders, Communities of interest, place and identity	<p>We will establish who we need to engage with, the principles and purpose of the engagement.</p> <p>We will launch a Sustainable Glasgow Website where clear and concise information about the challenge of climate change and local policy and action can be found. This will include space for collaboration such as blogs and collaborative documents</p> <p>We will create a network that brings communities and organisations together to share ideas and projects.</p> <p>Co-Develop a Children's Climate Change Charter with children and young people in the city</p> <p>The city will work with local partners to achieve measurable progress in embedding children's rights within local systems and services, embedding the principles of the UN Child Friendly City.</p> <p>Work with partner organisations and communities to implement the principles of the City Charter.</p>	1, 2, 40,41, 47,48, 49,54	1, 22, 23, 25	2021	<p>Number of organisations engaged with.</p> <p>Number of individuals engaged with.</p>	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
2	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.	GCC, Creative Carbon Scotland, SNIFFER, GCPH, Greenspace Scotland, Sustainable Glasgow.	<p>We will work with our partners to enable a conversation about declaring a climate emergency and communicate clearly progress to address climate change locally. We will ensure that all equality groups are included and enabled to participate</p> <p>We will ensure that the proposed actions align with the National Standards for Community Engagement.</p> <p>We will align the communication strategy with community conversations, Place Standard Tool and other democratic participation tools such as participatory budgeting and community wealth in order to enable community action.</p> <p>We will support and promote, local environmental volunteering groups to enhance biodiversity locally, including working with the SSPCA to raise awareness of wildlife crime and responsible pet ownership.</p>	1, 2, 52, 48, 49, 54	21	2021	<p>Number of organisations participating in conversations</p> <p>Number of individuals participating in the conversations</p> <p>Number of recommendations/ proposals referenced in policy development Local action taken forward as a result of the engagement.</p>	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
3	Create a declaration for city institutions to pledge to become Carbon Neutral by 2030 or sooner.	Sustainable Glasgow	Develop Scope of the declaration Engage with Sustainable Glasgow Partners to develop a City Charter Partners sign up to the declaration Establish a Climate and Ecological Emergency City Awards for (i) innovative development (reversing biodiversity decline, net zero carbon, net zero emissions) and (ii) for net zero businesses Partners report on commitments	1, 2, 54, 57	1, 20	2021	Number of partners signing up to the city declaration Local action reported	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
4	The city commits itself to become a Climate Literate organisation through the roll out of Carbon Literacy and Ecological Emergency training. The city also commits to advocating the roll out of climate literacy training in other organisations across the city.	Glasgow Community Planning Partnership, Keep Scotland Beautiful (KSB), Sustainable Glasgow	Develop and accredit a mandatory carbon literacy course in collaboration with local partners Deliver course to elected members and senior management Develop a GOLD course to be mandatory and complement the carbon literacy course. Assess progress and evaluate course, reflecting on need to updates. Deliver train the trainer climate literacy course to build capacity internally for rolling out carbon literacy Deliver mandatory course to all in the Glasgow Family Develop a mandatory Climate and Ecological emergency course to complement the carbon literacy training	1, 2, 53	25	2021	Number of employees trained Level of climate change action embedded in decision making	Yes/ Partially
5	The city and partners will continue to invest in programmes to enable young Glaswegians to access and succeed in new green job opportunities.	Skills Development Scotland Local Universities and Colleges Development Scotland	Engage with early years, primary schools, secondary schools, further and higher education institutions. Work together to ensure that the curriculum and training they offer supports climate and ecological emergency awareness and access to green job opportunities in the city.	42, 44	23	2021	Number of schools engaged with Number of green job opportunities taken up by Glasgow residents	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
6	Develop a first of its kind Net Zero Plan for the city to achieve its net zero carbon emissions target.	Sustainable Glasgow, Connected Places Catapult, Energy Systems Catapult, City Stakeholders	Engage with Sustainable Glasgow Partners and other organisations in the city to understand current challenges and opportunities. Establish baseline data and information. Explore a method for benchmarking the city's yearly climate, resources, environmental impact and carbon offset data (a city or community environmental impact assessment) to target net zero criteria. Publish Net Zero report and implement recommendations	1,2,4, 5, 9,61	1, 2	2021	% Emissions reduction.	Partially
7	Promote homeworking and videoconferencing to reduce traffic congestion, as part of a range of effective working practices in post COVID 19 world.	Scottish Government	Building on effective home working during the pandemic, city council to develop and implement remote working policy. The city will enable staff to work remotely where possible reducing the need to travel and identifying emissions savings.	61		2021	Number of staff working remotely % Emission reduction	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
8	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.	Private Landlords Scottish Government RSLs Owner Occupiers- (in mixed tenure blocks) Contractors ECO providers - (fuel utilities) Home Energy Scotland (HES) EST - (HEEPS Loans) Energy Advice provider	Implement HEEPS:ABS	3, 38		2021	£Million budget for HEEPS: ABS £Million spend achieved £ Million additional resources leveraged (ECO funding and others) Number of households benefiting from improvements	Yes
9	Prepare an investment improvement plan for older (pre-1919) tenements and private sector housing.	Housing Association Development Sector Scottish Government Private Sector Landlords	Data baseline Retrofit demonstrator Pilot projects in strategic partnership initiative area Agree investment improvement plan	3		2021	Baseline established Demonstrator complete including cost: benefit analysis Pilot project completed £million total financing for IIP Projected number of households (count)	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
10	Undertake a Carbon Impact Assessment for every key action taken by the city, by making it a requirement of all committee papers - similar to the Equality Impact Assessment (EQIA) process.	Glasgow City Council	Engage with Internal stakeholders Develop a process for assessing carbon impact of strategic decisions Develop and deliver staff training on Carbon Impact Assessment Explore a method of assessing the impact of new development on city's resources and infrastructure aimed at reducing carbon impact at planning stage to target net zero development.	46,61		2021	Number of strategic decisions and projects undertaking carbon impact assessment Emissions reductions as a result of impact assessments	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
11	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.	Community Planning Partnership, Scottish Government	Engage with Sustainable Glasgow Partners to establish a local Just Transition Commission Develop an understanding of the recommendations made by the Just Transition Commission and how they relate to the city Develop a Just transition implementation plan for Glasgow in collaboration with Unions, employers, academic institutions and communities of place, identity and interest in the city	38	1,21	2021	Number of local young people accessing green job opportunities Number of local businesses supported through transition to zero carbon and circular economy Number of people supported to retrain and transfer skills to access green job opportunities Number of people with access to good quality open and green space Number of people with access to accessible, affordable and efficient transport.	No
12	Sign the Edinburgh Declaration on post-2020 global biodiversity framework as part membership of ICLEI cities for nature.	ICLEI, Scottish Government, Nature Scotland	Engage with other cities in Europe. Sign the Edinburgh Declaration Knowledge exchange with other cities in Scotland and beyond Report on progress against commitments made	3	1,20	2021	Level of awareness of ecological emergency and potential solutions.	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
13	Undertake a Voluntary Local Review (VLR) to confirm Glasgow's commitment to the UN SDGs.	Potential for knowledge exchange with Bristol, Helsinki and Pittsburgh	Engage with internal and external stakeholders to understand the UN SDG's and 2030 agenda Assess current progress against UN SDG's Prioritise action in collaboration with city organisations and communities Publish VLR report and commitments to SDG's.	1,3	1,20,25,22	2021	Number of groups engaged in the process Local climate and sustainability action as a result of engagement.	Partially
14	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.	Scottish Government Sustainable Glasgow All development sector	Undertake stakeholder consultation on plans and proposals made by the LHEES Engage with Sustainable Glasgow Partners to secure funding and resources to support implementation of LHEES. Adopt LHEES and implement projects to increase investment in renewable energy and heat.	59,61		2022	% renewable energy generated % renewable heat generated % Emissions Reduction	Partly

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
15	Deliver projects that utilise the recovery of heat from geothermal sources learning from Duke Street and Tennent's Brewery projects.	Sustainable Glasgow	Engage with Sustainable Glasgow Stakeholders Establish learnings from geothermal energy projects Secure funding and identify appropriate locations in the city	4,5		2022	% Renewable heat generated % Emissions reduction	Partially
16	Develop a Green New Deal for Glasgow, including a portfolio of investable projects and exploring new green financing models	Scottish Government	Appointment of Green Economy Manager Engagement with Scottish Government and other organisations globally, nationally and locally. Explore and establish new green finance models including green affordable loans, green mortgages offered to city residents. Develop a Green New Deal for the city.	57	1	2022	£ Millions investment	No
17	Deliver heat and energy generation projects including distribution of heat and energy from parks in Glasgow based on existing feasibility studies.	Greenspace Scotland Scottish Government Sustainable Glasgow	Engage with the Scottish Government, Greenspace Scotland and Sustainable Glasgow to develop feasibility studies around potential for parks to generate heat and energy	4,5	1	2022	% Renewable heat generated % Emissions reduction	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
18	Enable and encourage all households in Glasgow to minimise waste arisings and to repair, reuse and recycle.	Zero Waste Scotland, Scottish Government	Implement and resource the Resource and Recycling Strategy. Engage with local communities to deliver a recycling campaign encouraging and enabling recycling	15		2022	% Recycled materials	Yes
19	Develop a Climate Risk assessment for the City, highlighting risks and opportunities of climate impacts on the city and its people.	Sustainable Glasgow, Climate Ready Clyde	Engage with internal stakeholders including elected members to raise awareness of climate impacts in the city Undertake a climate risk assessment for the city considering the findings highlighted in the next UK Climate Change Risk Assessment and Climate Ready Clyde Risk and Vulnerability Assessment for the city region Develop a city-wide climate adaptation strategy embedded in city planning policy.	55	1	2022	Number of organisations engaged with Number of people with reduced risk of flooding and overheating Number of properties with reduced risk of flooding/ overheating Number of businesses protected from extreme weather events Number of infrastructure with reduced risk of flooding and extreme heat	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
20	Implement the Fairer Scotland Duty in decisions and actions made in response to the Climate Emergency, ensuring that strategic decision-making helps to tackle socio-economic inequality by following Fairer Scotland Duty's guidance for public bodies.	Community Planning Partnership, Sustainable Glasgow	Engage with the Scottish Government's Fairer Scotland Duty consultation Engage With internal stakeholders and communities of place, identity and interest to develop implementation plan delivering on Fairer Scotland Duty	50	20	2022	Number of strategic decisions considering Fairer Scotland Duty	No
21	Develop a Peat Free Procurement Strategy for the city council	Sustainable Glasgow Partnership	The council will engage with procurement units to understand what products are currently used and procured. The council will engage with suppliers to establish that 100% peat free products will be required and what the best alternative products available might be for specific projects such as nursery and bedding plants. The Council will develop a peat free procurement strategy.	1,2	16	2023	% peat free products	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
22	Explore options to utilise the ongoing development of the city centre. Glasgow's Low Emission Zone to contribute towards carbon reductions from transport in the city centre.	Scottish Government, Sustainable Glasgow	Implementation Low Emission Zone City Development Plan 2 and Glasgow Transport Strategy support Low Emission Zone and reduce the number of private vehicles on the road	2,26	1	2023	% transport emissions	Partially
23	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.	All development sector	Engage with developers Engage with planning professionals Develop tools to enable effective monitoring	3,51		2018 Significant progress by 2023	Number of developments implementing Glasgow's Gold Hybrid Plus	Yes
24	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.	All development sector	Engage with developers Engage with planning professionals Develop tools to enable effective monitoring	3,51		2018 Significant progress by 2023	Number of developments implementing Glasgow's Gold hybrid plus	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
25	Develop a Glasgow Bus Partnership in line with the provisions of the Transport (Scotland) Act 2019.	SPT GCC Transport Scotland Transport Operators Transport interest groups	Continue to engage with transport operators, neighbouring local authorities Transport Scotland, SPT and interest groups to set up the partnership Continue to engage with Bus partnership to agree and develop a workplan Formally constitute the Bus Partnership pending Transport Scotland regulations to further inform the Act	17,20		2023	Formally Setting Up the Bus Improvement Partnership	Yes
26	Explore alternative options for bus delivery in Glasgow in line with those options laid out in the Transport (Scotland) Act 2019	SPT GCC Transport Scotland Transport Operators Transport interest groups	Appraisal of bus ownership options Publication of findings	17,20		2023	Report highlighting preferred options and supporting evidence	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
27	Develops opportunities, as part of the Curriculum for Excellence, for all education establishments to access outdoor learning, including outreach biodiversity work.	NatureScot Sustainable Glasgow Active Schools STEM Scottish Government Eco Schools	To engage with partners in the city, including education establishments currently participating in Eco Schools Programme, Climate Ready Classrooms, and implementing Sustainable Development Education. The city council and partners to continue to work with Education Services, NatureScot, Scottish Government and Eco Schools Scotland to support outdoor learning and biodiversity outreach work across all educational establishments in the city.	1	22, 23	2024	Number of schools engaged with Level of awareness of the climate and ecological emergencies	
28	Develop and adopt an early warning system to prepare for extreme weather events such as heatwaves and flooding.	Climate Ready Clyde	Engage with MGSDP, Corporate Resilience Unit, Climate Ready Clyde and neighbouring Local Authorities to establish the need for an early warning system. Work with partners to develop and adopt an early warning system for extreme weather in the city	55	1	2024	A working system available and operational.	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
29	Ensure that historic buildings are resilient to the impacts of climate change, protecting Glasgow's rich heritage.	Glasgow City heritage Trust, Glasgow Life	Engage with Heritage Trust and Glasgow life to understand impacts of climate change, including flood risk, on historic buildings. Implement Historic Environment Scotland guidance on Adaptation of historic buildings to the impact of Climate Change.	55		2024	% Historic buildings in the city at reduced risk of damage as a result of increased precipitation and longer periods of dry weather	No
30	The city will support Glasgow's local food economy by exploring ways for procurement to support local businesses, ethically sourced, sustainable and healthy food.	GCFP NHSGGC HSCP Visit Scotland NFU Sustainable Glasgow	Engage with GCFP, HSCP and Education services to understand local food economy and Engage with GCFP and Procurement Unit at Glasgow City Council to review procurement strategy. Explore ways for public procurement to support local businesses, ethically sourced and sustainable food.	36,3	12	2024	% Food procured for Schools locally sourced % Food served in council premises locally sourced	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
31	The city and partners will develop a communications and education campaign highlighting the health and environmental benefits of sustainable lower-carbon and plant-based options generally.	Sustainable Glasgow HSCP GFPP	Engage with GCFP to understand food landscape in the city, including food growing opportunities, access to affordable, healthy and sustainable food. Work with partners to develop an education and communications campaign raising awareness of the health and environmental benefits of sustainable, lower carbon diets.	36,3	12	2024	Number of people engaged with % plant based diet in the city	
32	To understand meat consumption in the city and better support promotion of healthy, tasty, low carbon and ethically sourced food, city and partners will establish a baseline meat consumption in the city.	Sustainable Glasgow HSCP GFPP	Engage with partners ay GCFP in the city to undertake a study about food habits in the city, including establishing a baseline meat consumption. Work with HSCP, Sustainable Glasgow and other organisations in the city to promote equitable access to healthy, tasty, sustainable and affordable food to all.	36,3	12	2024	% meat consumption in the city % Access to affordable, healthy and sustainable food	

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
33	Undertake a feasibility study about a Workplace Parking Licensing (WPL) scheme, ring fenced to fund sustainable transport in the city.	Scottish Government	Engagement with Scottish Government and Local stakeholders Undertake a study about challenges and opportunities of a Workplace Parking Licensing scheme. Publish report and findings	20,21,22,30,31,32,33,34		2025	A report and recommendations will be published	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
34	The city will work with Strathclyde Pension Fund and other pension fund investors in the city to develop and adopt climate change strategies, with a view to ensuring that those funds can, in meeting their objectives, align with the objectives of the Paris agreement and subsequent national and international agreements.	SPFO Pension Fund investment managers	SPFO will specifically develop a Climate change strategy to support transition to net zero carbon economy, investing in local green infrastructure and renewable energy projects SPFO continues to support the TCFD framework and disclosure.	60	1	2025	% investments in local renewable energy % of investments in Green Infrastructure projects % reduction in 'polluting' investments With reference to the full council motion, stating that formal commitments to fossil fuel divestment are made by SPFO ahead of COP26, SPFO and their Board of trustees will consider the motion and publish their response. We will work with pension operators across the city (including SPFO) to respond appropriately. The intention would require pension operators across the city to ensure divestment is undertaken as quickly as possible and no later than 2029.	Partly

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
35	Develop an Urban Woodland Strategy for the city	GCVGN, GAT, Greenspace Scotland, NatureScot	A Tree Forum of stakeholders is established to oversee the development of the strategy. Engagement with internal and external stakeholders Explore barriers to tree planting and maintenance of existing trees Develop a costed implementation plan, which delivers increased canopy cover, considers biodiversity net gain, habitat connectivity and carbon management.	12, 13, 61	5, 6, 7	2025	% canopy cover in the city	partially
36	Accelerate Implementation of the Glasgow and Clyde Valley Blueprint for a Green Network to create green & biodiversity corridors in the city by improving open space provision and increasing tree cover, while also providing opportunities for active travel corridors.	GCVGN GAT Greenspace Scotland NatureScot MGSDP	The city will support engagement with our city-region partners. The city will seek to address existing barriers to implementation of green network Blueprint. The city will ensure that habitat connectivity, biodiversity corridors and active travel network enable better connectivity of people and nature across the city. The city will support the green network blueprint through accelerating the delivery of the Open Space Strategy and Local Biodiversity Action plan.	12, 13	9, 10, 11, 14, 17, 18	2025	% Tree cover Air quality levels Length of hedgerows and wildflower strips planted (Km) Length of active travel network	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
37	Identify and utilise Vacant and Derelict Land for greening and rewilding in combination with renewable energy generation measures and reducing flood risk.	GCVGN GAT Greenspace Scotland NatureScot	undertake a of vacant and derelict land relating to opportunities for these sites to contribute to renewable energy generation, Open Space Strategy and the Local Biodiversity Action Plan. This will consider potential to retain, where present, the priority habitat. Open Space Delivery Plan help manage competing demands on land use.	12,13	9,18	2025	% VDL protected by the CDP % VDL used for renewable energy generation % VDL used for flood risk management OSS will determine best future use for Vacant and Derelict Land to meet targets for housing, food growing. It will ensure that the city protect & develop in a way that protects urban biodiversity.	Partially
38	Support new and further extensions to Local Nature Reserves in the city, protecting and enhancing biodiversity and habitat connectivity.	GCVGN, GAT, Greenspace Scotland, Scottish Government NatureScot	The Council engages with other stakeholders in the city to increase investment and secure support from landowners and communities for protection of existing LNR and SINCs, as well as extending and creating new. The city will take forward 30+ Aspirational LNRs	12,13	8,18	2025	Area hectares of LNR's per capita	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
39	Encourage and enable retrofit of all existing owner-occupied housing to EPC level C or above, and to reduce flood risk (where appropriate).	Scottish Government Home Energy Scotland	The City will undertake engagement with owner occupiers in the city The city will explore potential for financial incentives and enforcement powers, subject to national legislation	3		2025	Number of housing with EPC level C or above	Partially
40	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.	Glasgow Chamber of Commerce, Zero Waste Scotland (ZWS)	Engagement with local businesses and academic institutions Engagement with Schools and Community organisations Training for public sector and private sector leaders Implementation of Circular Economy routemap	39	1,20	2025	Level of awareness of sustainable production and consumption % Jobs in circular economy	Partially
41	Upgrade insulation and heating of all building stock in the city, and install measures	Sustainable Glasgow	Thermographic survey to identify where each of the properties are poorly performing. Architectural appraisal and design of proposed	3, 45, 61		2025	Number of buildings insulated Building performance Number of buildings with	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
	to reduce flood risk, city council leading by example.		insulation and new windows for the property to avoid unintended consequences in later years. Mechanical and Electrical design for new low energy heating and ventilation systems. Considering where applicable heat networks to join a series of buildings.				property flood resilience measures installed	
42	Ban gas heating systems in all new buildings within the city boundary.	Scottish Government, Sustainable Glasgow	The city council will collaborate with local partners to implement and enforce guidance established through updated Building Regulations for Housing	3,61		2025	Number of new developments with low carbon heating systems	No
43	Introduce appropriate resourcing dedicated to monitoring and enforcement of kerbside waste recycling in the city in line with the new Resource and Recycling Strategy and Scottish Government Circular Economy Bill.	Scottish Government	Implementation of the City's Resource and Recycling Strategy Resourcing of Kerbside recycling education and enforcement Engagement with local communities	15,39		2025	% Materials recycled in the city	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
44	Develop a Carbon Neutral Innovation District in the GCID. This will act as a catalyst and exemplar for rolling out across the city.	Sustainable Glasgow	Engage with local stakeholders Develop concept of the Carbon neutral innovation district Pilot zero carbon innovation solutions and nature-based solutions Share lessons learnt and secure resources to roll innovation districts out across the city's localities and adapted to individual needs.	60	1,10,11,14,20	2025	% Carbon emissions saved % Biodiversity gain % community's connection to nature Number with sustainable surface water management (i.e. capture, storage and local use)	No
45	Support the delivery of the plastic reduction strategy to achieve its goal of no unnecessary plastic by 2030.	Zero Waste Scotland, Scottish Government, Glasgow Chamber of Commerce	Engage with local schools and businesses Identify a location to pilot banning use of unnecessary single use plastics Share lessons learnt Resource roll out across the city	14	1,20	2025	Number of facilities where unnecessary single use plastics are banned Level of plastic waste reduction	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
46	Establish a framework of engagement with local energy co-operatives, enabling them to be set up and providing support.	Scottish Government Sustainable Glasgow	<p>We will map out local energy cooperatives active in the city</p> <p>We will engage with local cooperatives to understand their needs, challenges and opportunities</p> <p>We will engage with Scottish Government to develop policy framework and align with national legislation.</p> <p>We will develop a framework to support local energy cooperatives, help overcome challenges and capitalise on opportunities</p>	59	20	2025	<p>Number of energy cooperatives engaged with</p> <p>Number of energy cooperatives created</p>	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
47	Increase investment in peatland restoration in the city region to enhance biodiversity and increase capacity for carbon sequestration.	Scottish Government NatureScot Local landowners Neighbouring Local Authorities	<p>The City will develop engagement with all local and regional stakeholders, including land owners to ensure that Glasgow's peatlands are restored and protected. Council and partners recognise importance of peatlands for carbon sequestration and biodiversity. The city and partners commit investment to protection and restoration of peatland to prevent carbon emissions and also biodiversity loss. The city develops proposals to ensure that the peatlands are enhanced, including quantifying carbon capture storage and their impact. The city monitors and quantifies progress</p>	12	15	2026	<p>Carbon impact of peatland restoration</p> <p>Increase in indicator species</p>	Partially

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
48	The Council works with partner organisations, adjacent local authorities, the city's academic institutions to fund accelerated implementation of the Glasgow LBAP, Open Space Strategy Delivery Plan and Pollinator Plan.	Sustainable Glasgow NatureScot GCVGN RSPB Butterfly Conservation Neighbouring Local Authorities	Sustainable Glasgow NatureScot GCVGN RSPB Butterfly Conservation Neighbouring Local Authorities	1,2	1,2	2026	Number of actions within LBAP and PP Number of LNRs and SINC maintained and protected Level of community interaction with biodiversity through awareness, engagement or local activity. Number of biodiversity enhancements to existing open spaces delivered and recorded through the OSS Delivery Plan process	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
49	To continue to invest in the school estate, for both carbon reduction, biodiversity gain, reduce flood risk and climate education as core principles.	Sustainable Glasgow City Building	Continue to engage with Education Services Develop an investment and improvement plan for the education estate Embed carbon reduction and biodiversity enhancement measures and surface water management in business cases Continue to deliver improvements to the education estate by investing in low carbon energy technologies Design and implement sustainable and wildlife friendly green landscaping, including planting and greening infrastructure, such as green walls and roofs, with support for the provision of natural play areas and school gardens.	1,2	23,24	2026	Number of renewable energy solutions Number of Green walls, roofs and natural play areas in local schools Number of retrofit surface water management interventions	

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
50	Review the need for an energy services company (ESCO) for the city as appropriate in relation to local energy generation and distribution projects.	Scottish Government	Develop engagement with local stakeholders and the Scottish Government to understand demand for an ESCO. Consider ownership; clients; technology; project financing. Publish a report outlining findings and recommendations	3	1	report progress annually	Uptake of ESCO Number of Local Energy Projects	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
51	Deliver a comprehensive active travel network, incorporating the spaces for people measures (following consultation) and enabling 20-minute neighbourhoods through the liveable neighbourhoods plan	Sustrans Scottish Government Sustrans	<p>Develop a proposed network of feasible routes that will connect communities and support habitat connectivity.</p> <p>Assess active travel routes for opportunities to enhance and connect biodiversity. Undertake stakeholder engagement on the proposed network.</p> <p>Develop Active Travel Strategy and Action Plan</p> <p>Design and implementation of the active travel network at both city and neighbourhood levels consistent with the emerging Cycle by Design guidance for high levels of service</p> <p>Utilising the Liveable Neighbourhoods Toolkit to help facilitate a bespoke approach in creating corresponding 20-minute neighbourhoods</p>	31,34	10	2030	The percentage of journeys less than 2 miles that are made by walking.	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
52	Enable a rapid and strategic shift to electric vehicles through increasing the current rate of deployment of EV charging infrastructure.	Scottish Government, Transport Scotland, Sustainable Glasgow	Invest in EV infrastructure in the city Engage with organisations and communities in the city	24,28,29,30	1	2030	Share of low emission vehicles in the overall modal split – % change	Yes
53	Work with transport stakeholders in the city to support rapid transition to cleaner public transport as part of the City's Low Emissions Zone.	Scottish Government Transport Scotland SPT Bus Operators	Engage with Transport Authorities in the city Engage with public transport operators in the city Develop consistent carbon emission measurement in the city Assess potential for expanding LEZ in the city Enable and support the transition to a cleaner, low carbon transport in the city	16,33	1	2030	Change in NO2 at each monitoring location, averaged over a three-year period. % change in PM 10 at each monitoring location, averaged over a three-year period. Share of public transport journeys in the overall modal split – % change.	Yes

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
54	Deliver rapid transition of council's fleet to electric, supporting the city's existing fleet strategy's target of becoming low carbon by 2030.	Scottish Government	Engage with Fleet manager Accelerate delivery of EV charging infrastructure in the city Resource and accelerate the transition of the council's fleet to low carbon	9,23	1	2030	Share of low emission vehicles in the overall modal split – % change	Yes
55	Transition the fleet of private hire vehicles to zero emission vehicles by 2030.	Local Taxi Operators Scottish Government	Engage with taxi and private hire vehicles to enable shift Engage with the Scottish Government to offer support and encourage the transition locally Enable the transition to low carbon vehicles	16,28	1	2030	Share of low emission vehicles in the overall modal split in the sector – % change	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
56	Reduce the need to own and use a car through measures in the City Development Plan 2, Glasgow Transport Strategy and the Liveable Neighbourhoods	Transport Scotland SPT Sustrans Scottish Government	City Development Plan to set out how 20-minute neighbourhoods can be achieved with the Liveable Neighbourhoods Plan proposing the specific interventions. The Local Transport Strategy will to set out how the city will achieve decarbonisation of the transport network and consider proposals to pilot free public transport within the City. Low Emission Zone to be implemented and extension to be considered CDP2, to include measures to make using a car less attractive, use of Public transport, active travel more attractive. locational policy (vis-à-vis sustainable locations), etc	29, 31, 33, 34, 35	1, 10	2030	Share of cycling and walking journeys in the overall modal split – % change. Share of public transport journeys in the overall modal split – % change and/ or comparison to the national average	
57	Explore the feasibility of subsidised public transport through salary sacrifice scheme similar to that available to on site staff.	SPT Scotrail Bus Operators	City Council to identify barriers to implementing subsidised public transport City council to share experiences with other organisations in the city and beyond to identify benefits of the approach City to implement a subsidised public transport scheme for staff	30, 61	1	2030	Level of uptake of the scheme Number of staff utilising public transport to travel to work	No

5.0 Action Plan



No.	Description	Partners	How are we going to get there	CEWG	EEWG	Timescale	How will we measure progress	Funded
58	The City to incorporate the principle of biodiversity net gain into the Community Planning Partnership decision making.	Community planning Partnership NatureScot	Engagement with Community Planning Partnership and Strategic Board Co-develop a process for assessing biodiversity impacts and net gain of strategic decision making Training for Key Community Partnership staff on Ecological emergency and biodiversity net gain and assessment process Implement Biodiversity net gain assessment in all CPP strategic decisions Monitor progress and review process iteratively	1, 2	19	2030	Number of decisions acknowledging assessment of biodiversity net gain	No
59	Work with partners in the city to accelerate the transition of Glasgow's economy from linear to circular, making it more inclusive and sustainable.	Scottish Government, Zero Waste Scotland, Sustainable Glasgow Partnership	Continue to engage and educate internal and external stakeholders to support strong leadership, communicate the vision and concept set out in the Circular Economy Route map for the city, strategically and operationally. Resource and support projects identified in the circular economy routemap in collaboration with the green finance manager for the city region	39	1, 2, 21	2030	% of resource demand in the city. Number of eco-innovation activities following the principles of a circular economy Uptake of new forms of consumption (sharing, repair and repurpose.)	Partially

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 16:</p> <p>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.</p>	<p>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.</p> <p>GCC is continuing work with partners to research into how most effectively to connect areas of the city that are currently isolated.</p>
<p>Recommendations 18 & 30:</p> <p>18 The city works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region's transport network.</p> <p>30 The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.</p>	<p>Officers of the city's Neighbourhoods and Sustainability service are currently participating in SPT's Regional Transport Strategy working group.</p> <p>A Strategic Transport Group is also in place which aims to improve communication and collaboration between partners on transport issues facing Glasgow.</p> <p>Work is ongoing on the new Glasgow Transport Strategy and modal shift targets will be considered.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 27:</p> <p>The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p>	<p>The Glasgow Transport Strategy (LTS) is under preparation.</p>
<p>Recommendation 27, 29 & 30:</p> <p>27 The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p> <p>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.</p> <p>30 The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.</p>	<p>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).</p> <p>The Spaces for People programme is accelerating the implementation and enforcement of Transport Scotland's sustainable transport hierarchy.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



Future Action:

<p>Recommendation 17: 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.</p>	<p>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 most needed.</p>
	<p>The city is currently reviewing the accessibility of high frequency bus services through the city centre and will work to prioritise action where it is most needed.</p>
<p>Recommendation 18: The city works with neighbouring local authorities and the Scottish Government to clarify the governance of the city region's transport network.</p>	<p>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.</p>
<p>Recommendation 20 & 21: 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. 21 A feasibility study is developed into integrated ticketing and more physically and digitally accessible travel.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>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.</p>	<p>The current Waste Strategy (including food waste) expires in 2020. It will be reviewed in the light of new legislation (including deposit & return scheme, circular economy).</p>
<p>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.</p>	<p>Glasgow Food Growing Strategy and Glasgow's Food Plan are currently in development. This includes thematic working groups on various issues, including Food Waste. The Food Plan will be a route to making connections that can support the city to achieve transformational change more quickly.</p>

Future Action:

<p>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.</p>	<p>The city's Waste Strategy is currently being reviewed. Communication will be a core element of this work.</p>
---	--

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 36:</p> <p>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.</p>	<p>A Food Growing Strategy is set to be published in late 2020.</p> <p>The new City Development will include a policy to ensure new housing developments include space for food growing.</p> <p>The Open Space Strategy to identify existing and proposed food growing areas.</p>
<p>Recommendation 36:</p> <p>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.</p>	<p>The new City Development Plan (CDP2) to include a policy to ensure new housing developments include space for food growing.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 11 & 13:</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p> <p>Together with the Lost Woods project, primary school children across the city have grown seedlings which will be planted on Vacant & Derelict Land sites.</p>
<p>Recommendation 12:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 24:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 27:</p> <p>The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p>	<p>Work on the Glasgow Transport Strategy is underway.</p> <p>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.</p> <p>The city is also preparing Supplementary Guidance to the City Development Plan to help deliver key aspects of the Open Space Strategy (OSS).</p> <p>All should provide for better local access to open space of varying types, facilitating better access by sustainable modes of travel.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 35:</p> <p>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.</p>	<p>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.</p> <p>This action is particularly supported in terms of air quality, reducing exposure by vulnerable groups and promoting active travel options.</p>
<p><i>Future Action:</i></p>	
<p>Recommendation 11:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 12:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 27 & 29:</p> <p>27 The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p> <p>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.</p>	<p>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.</p> <p>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.</p>
<p>Recommendation 28:</p> <p>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.</p>	<p>CDP2 will make explicit reference to Transport Scotland's 'Cycling by Design' guidance in its active travel policy.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 44:</p> <p>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.</p>	<p>Partnership working to embed the green economy in education and build skills and capacity includes:</p> <ul style="list-style-type: none"> • 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:

<p>Recommendation 44:</p> <p>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.</p>	<p>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.</p> <p>The Council will engage with further and higher education institutions, ensuring that the curriculum and training they offer supports green opportunities.</p>
---	--

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 1:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 4 & 5:</p> <p>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.</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 8:</p> <p>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.</p>	<p>PALS (Property and Land Service) is currently working on a strategy to rationalise Council assets and make them more efficient.</p>
<p>Recommendation 9 & 61:</p> <p>9 The Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.</p> <p>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.</p>	<p>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).</p>

Future Action:

<p>Recommendation 3:</p> <p>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.</p>	<p>The Council is working with partners to establish an energy supply company (ESCO) as part of the forthcoming LHEES.</p>
---	--

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendations 4 & 5:</p> <p>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.</p> <p>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.</p>	<p>Continuing to work with the Scottish Government to influence national legislation change regarding the requirement for district heating in new and refurbished developments.</p>
<p>Recommendation 6:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 9 & 61:</p> <p>9 The Council takes forward a programme of investment in its assets designed to help deliver carbon neutrality for the city by 2030.</p>	<p>CMP3 to include a list of projects to achieve the carbon neutral target and provide leadership in addressing the climate emergency.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 9 & 61:</p> <p>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</p>	
<p>Recommendation 57:</p> <p>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.</p>	<p>The Council will explore new green financing models such as Municipal Climate Bonds.</p>
<p>Recommendation 59:</p> <p>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.</p>	<p>The Council will establish a framework of engagement with local energy co-operatives, enabling them to be set up and providing support.</p>
<p>Recommendation 60:</p> <p>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.</p>	<p>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.</p>

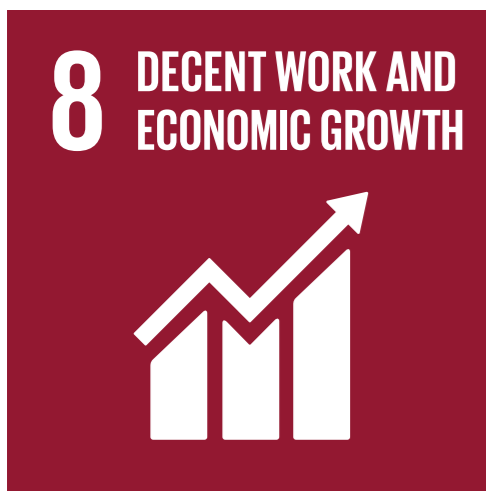
6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



**CLIMATE
EMERGENCY**

What we've achieved so far:



<p>Recommendation 27:</p> <p>The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p>	<p>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).</p>
<p>Recommendation 37:</p> <p>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.</p>	<p>The Glasgow Economic Strategy has been revised to address the climate emergency.</p> <p>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.</p>
<p>Recommendation 38:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



**CLIMATE
EMERGENCY**

Future Action:

<p>Recommendation 37:</p> <p>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.</p>	<p>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.</p>
---	---

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



**CLIMATE
EMERGENCY**

What we've achieved so far:



<p>Recommendation 3:</p> <p>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..</p>	<p>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.</p>
<p>Recommendation 4:</p> <p>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.</p>	<p>The Council is developing the use of district heating within housing developments in the city.</p>
<p>Recommendation 13:</p> <p>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.</p>	<p>The Council is currently working on European funded RUGGEDISED project, working to set up a 'smart street' in the city centre.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



**CLIMATE
EMERGENCY**

<p>Recommendation 23:</p> <p>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.</p>	<p>An electrical vehicle charging-point policy was approved in February, including details of the delivery of EV strategy across the city.</p> <p>An EV charging tariff for Glasgow will be developed.</p> <p>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.</p>
<p>Recommendation 19:</p> <p>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.</p>	<p>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.</p>
<p><i>Future Action:</i></p>	
<p>Recommendation 7:</p> <p>The Council supports the creation of a Scottish Grid factor, to more accurately measure the carbon intensity of local energy consumption.</p>	<p>Sustainable Glasgow is to facilitate discussions with the Scottish Government, UK Government and energy networks to deliver on a Scottish Grid factor.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 17:</p> <p>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.</p>	<p>Glasgow Transport Strategy is currently being prepared and will review accessibility to high frequency bus services through the city, highlighting areas requiring improvement.</p>
<p><i>Future Action:</i></p>	
<p>Recommendation 49 & 50:</p> <p>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.</p> <p>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.</p>	<p>The Council is working with its partners in the community planning partnership, GCPH, SNIFFER and Creative Carbon Scotland to develop an effective communications plan, fostering community information, empowerment and participation.</p> <p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 22 & 27:</p> <p>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.</p> <p>27 The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.</p>	<p>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.</p>
<p>Recommendation 31:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 31 (continued):</p>	<p>The avenues programme is a major part of tackling the city centre air quality issues and has been partially modelled into the LEZ programme.</p>
<p>Recommendation 52: Partners need to revisit the Community Plan and ensure that climate change informs all of it.</p>	<p>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.</p>
<p>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.</p>	<p>A climate-impact assessment method for screening of Council budgets is currently being developed.</p>

Future Action:

<p>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.</p>	<p>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.</p>
---	---

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>Register GoBike and Sustrans as CDP2 consultees</p>
<p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 38 & 39: 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.</p>	<p>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.</p>
<p>Recommendation 46: All decisions made by the Health and Social Care Partnership are assessed on the basis of their climate and carbon impacts and integrated with equality and human rights assessments to maximise their positive effects and to reduce any negative impacts.</p>	<p>The HSCP will work with others to establish a consistent methodology for decision making regarding climate and carbon impact.</p>
<p>Recommendation 56: A climate risk register is developed by the Council and its partners, accommodating the Climate Ready Clyde findings.</p>	<p>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.</p>
<p>Recommendation 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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 38 & 39: 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.</p>	<p>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.</p>
<p>Recommendation 45: Investment in the school estate and its uses has carbon reduction and climate education as core principles.</p>	<p>PALS is currently developing a strategy for the education estate with low-carbon and climate resilience at its heart.</p>
<p><i>Future Action:</i></p>	
<p>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.</p>	<p>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."</p>
<p>Recommendation 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.</p>	<p>In light of the climate emergency declaration the council will explore innovative green financing models such as Municipal Climate Bonds.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



<p>Recommendation 1 & 61:</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p>
<p>Recommendation 2:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 1 & 61:</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p>
<p>Recommendation 2:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 6:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 10:</p> <p>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.</p>	<p>Discussions are ongoing regarding resources and the approved budget allocations to address issues related to the Climate Emergency.</p>
<p>Recommendation 53:</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 58:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



Future Action:

<p>Recommendation 2:</p> <p>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.</p>	<p>Key decisions regarding the Catapult scoping study and Integrated Net Zero plan are set to be made later in 2020.</p> <p>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.</p>
<p>Recommendation 11 & 13:</p> <p>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.</p> <p>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.</p>	<p>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.</p>
<p>Recommendation 47:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 51:</p> <p>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.</p>	<p>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.</p>
	<p>Ensuring that carbon neutral targets inform the new City Development Plan's strategy, policies and proposals.</p>
	<p>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.</p>



What we've achieved so far:

<p>Recommendation 14 & 43:</p> <p>14 The city works to end single use plastic waste and it commits to developing Scotland's first plastic free shopping zone.</p> <p>43 The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.</p>	<p>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.</p>
<p>Recommendation 15:</p> <p>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.</p>	<p>The Bin Replacement Programme, in which residents or householders receive new bins and refreshed information on waste disposal and recycling, is ongoing.</p>
<p>Recommendation 22:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 26:</p> <p>A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.</p>	<p>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.</p>
<p>Recommendation 34:</p> <p>The Council delivers more 20mph speed limits on residential roads.</p>	<p>20mph speed limits in residential areas have recently been approved by committee and are to be rolled out across the city.</p>

Future Action:

<p>Recommendation 14 & 43:</p> <p>14 The city works to end single use plastic waste and it commits to developing Scotland's first plastic free shopping zone.</p> <p>43 The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.</p>	<p>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.</p>
---	---

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



<p>Recommendation 15:</p> <p>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.</p>	<p>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.</p> <p>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).</p>
<p>Recommendation 26:</p> <p>A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.</p>	<p>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.</p>
<p>Recommendation 36:</p> <p>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.</p>	<p>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.</p>

6.0 Appendices: Appendix 1

Response to 61 Recommendations of the Climate Emergency Working Group



What we've achieved so far:



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

Future Action:

<p>Recommendation 25:</p> <p>As part of the development of the Low Emission Zone's Phase 2, clear guidance for all vehicles is available within the agreed timescale.</p>	<p>The Council will continue to contribute to Transport Scotland-led working groups regarding the Low Emissions Zone phase 2.</p>
<p>Recommendation 42:</p> <p>Glasgow's schools should formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.</p>	<p>Working together with Education Scotland to continue to deliver SDE strategy and build on current success, including climate action.</p>

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

6.0 Appendices: Appendix 2

The Climate Emergency Working Group's 61 recommendations

- 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.



6.0 Appendices: Appendix 2

The Climate Emergency Working Group's 61 recommendations

- 26** A process and timescale is established for consulting on a potentially expanded geographical area for the LEZ.
- 27** The city's new transport strategy develops our proposals and those of the Connectivity Commission to deliver a more active Glasgow.
- 28** The Council works to deliver an increase in education and awareness amongst relevant staff and third-parties of design standards such as Transport Scotland's 'Cycling by Design' guidance and records its commitment to have regard to these standards in future changes to the road network.
- 29** Transport Scotland's sustainable transport hierarchy is enforced, including, where necessary, that space currently dominated by the private car is reprioritised to provide a fairer transport system.
- 30** The development of the new local and regional transport strategies should include ambitious targets for modal shift with associated delivery plans.
- 31** The Council takes forward the success of the pedestrianisation of parts of the city centre by accelerating the Avenues Projects and by further improving the public realm to encourage active travel choices. 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.



6.0 Appendices: Appendix 2

The Climate Emergency Working Group's 61 recommendations

- 39** The development of a Circular Economy Route Map for the city takes place and support is given for the Circular Economy Bill in this term of the Scottish Parliament.
- 40** A sustainable city story should be central to accounts of our history and where we see our future going.
- 41** We work with other cities and wider networks to share knowledge, collaborate and use our combined voice to create climate resilient strategies, including plans for development of Historic Glasgow and transformation of the River Clyde waterfront.
- 42** Glasgow's schools should formally engage with pupils on the climate emergency and the actions which can be taken to tackle it.
- 43** The Council develops a more sustainable approach to school meals and pilots the changes needed to move towards plastic-free school catering.
- 44** Our schools work closely with local colleges and universities to build the skills and capacity for a greener economy, including a focus on new technologies (such as heat pumps, battery storage, and other forms of low carbon technology), and ensuring the provision of apprenticeships and other opportunities.
- 45** Investment in the school estate and its uses has carbon reduction and climate education as core principles.
- 46** All decisions made by the Health and Social Care Partnership are assessed on the basis of their climate and carbon impacts and integrated with equality and human rights assessments to maximise their positive effects and to reduce any negative impacts.
- 47** The city engages in climate conversations with residents through its Community Planning structures and considers how to roll-out the Weathering Change model in the context of its review of Thriving Places. Page 26
- 48** The Council and third sector use their recently developed concordat as a vehicle for taking forward a dialogue on climate and appropriate action, as well as grant funding decisions.
- 49** The Council and partners work with community and faith groups to ensure that the voices of new Glaswegians are heard as part of a wider community climate conversation.
- 50** All decisions made by the Council and its partners in response to the climate emergency are supported by equality and human rights assessments, as well as the Fairer Scotland duty, to maximise their positive effects and to reduce any negative impacts.
- 51** The new City Development Plan presents a vision for a low carbon city that can guide the development of



6.0 Appendices: Appendix 2

The Climate Emergency Working Group's 61 recommendations

- proposals and planning decisions that help our city respond to the climate challenge.
- 52** Partners need to revisit the Community Plan and ensure that climate change informs all of it.
- 53** Community Planning partners work together to ensure that all senior officers in the city's agencies have undertaken carbon literacy training and become climate leaders themselves, with further plans brought forward to leaven these issues throughout the thinking of all sectors.
- 54** The Council reports back to the people of Glasgow annually on what it has done to address the climate emergency and what it is planning to do.
- 55** The Council acts in an exemplar role by introducing formal climate screening of all its budgets, with the 2020/21 budget being used to pilot budget setting with a clear description of climate impacts.
- 56** A climate risk register is developed by the Council and its partners, accommodating the Climate Ready Clyde findings.
- 57** The city's partners work together to develop business cases for low carbon energy and transport investments through examination of alternative financing models including the use of municipal climate bonds.
- 58** The Council works with local authority partners and the Scottish Government to consider whether any legislative change is needed to allow local authorities to embed carbon reduction in procurement processes. In the light of the outcome of this exercise, we further recommend that the Council reviews its procurement strategy in response to the climate emergency.
- 59** The Council's business support and planning services are made available to support community investment in renewable energy, including the Glasgow Community Energy Co-operative.
- 60** The Council works with the other employers and members [of Strathclyde Pension Fund] to make a wholesale shift away from investment in hydrocarbons and that the 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.



6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
1	The Council commits to working with other public bodies, third sector, business community, Glasgow's citizens and communities and adjacent local authorities to halt and reverse the decline in biodiversity.	17 & 14,15	"Glasgow LBAP made up of 16 organisations to implement action for the city's biodiversity over 70 Friends of Parks & Greenspaces Groups - some of these carry out biodiversity/ greening projects"	Sustainable Glasgow board and Hubs to discuss how this can be progressed and embedded in the partnership's activities going forward.
2	The Council works with partner organisations, adjacent local authorities, the city's academic institutions and other stakeholders to fund and achieve accelerated implementation of the Glasgow LBAP and Pollinator Plan within a significantly reduced target time frame and incorporating additional outcomes regarding connectivity for biodiversity under the Urban Ecosystem Statement. Interim reports on progress to be provided to the Environment, Sustainability and Carbon Reduction City Policy Committee.	17 & 14,15	Currently LBAP and PP are being implemented to existing timescales 2017-2023	Sustainable Glasgow board and Hubs to discuss how this can be progressed and acceleration supported by the partnership's action plan going forward.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
3	The Chief Executive reviews current staffing, resource distribution and training for addressing the ecological emergency within the Council and brings forward proposals to increase the Council's focus in this area.	13, 14 & 15	Currently being considered under the Climate Resilience Project Management Office and board	CRS PMO to consider and include in work packages to be resourced and implemented. The CRS Programme board will be chaired by the executive director of NRS.
4	The new City Development Plan, and associated guidance, strengthens and extends existing requirements on the protection and enhancement of biodiversity and includes a default requirement for overall biodiversity net gain, as well as for specific actions such as the provision of swift bricks and bird and bat boxes, to guide the development of proposals and planning decisions. This should be supported through additional professional development for all planning officers. The City's Open Space Strategy Delivery Plan will identify the open spaces that should be used to provide more opportunities for biodiversity and for habitat connectivity and the Council will act, with its partners, to deliver these opportunities.	14, 15 & 17	In addition to existing guidance under CDP SG7 and IPG 6, NRS officers are currently working on 'positive effects for biodiversity' (Biodiversity Net Gain) guidance aligned with national legislation NPF4.	The council via the City Development Plan and Open Space Strategy - Delivery Plan will use the Open Spaces and Vacant & Derelict Land in the city to both reduce emissions and address the impacts of a changing climate for nature, biodiversity and people.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
5	A Forestry and Woodland Strategy for Glasgow will be undertaken, and a costed implementation plan prepared, which delivers increased canopy cover, considers biodiversity net gain, habitat connectivity and carbon management. Through its contribution to the Clydeplan Draft Forestry and Woodland Strategy and the Blueprint for a Green Network, it will support engagement with our city-region partners. This strategy will seek to address existing barriers to tree protection and tree planting, including any recommendations to national government related to regulatory matters, and will be accompanied by a costed implementation plan which sets a target for an increase in canopy cover relative to the baseline of 15% in 2015. A Tree Forum of stakeholders will be established to oversee both this recommendation and recommendation number 7.	15 & 13	A forum has been established in January 2021 to consider and explore the development of an Urban Forestry and woodland Strategy, including vision, objectives, existing barriers and opportunities.	The council and partners will produce a forestry and Woodland Strategy by 2025, aligned with the Open Space Strategy Delivery Plan. This will be developed for Glasgow supporting the regional woodland strategy, Clyde climate forest and GCVGN Blueprint. The Strategy will include a costed implementation plan, delivering increased canopy cover, biodiversity net gain, habitat connectivity and carbon offsetting.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
6	The Council will use the My Park Scotland crowdfunding platform to support partnership working with existing charitable trusts to increase resources for the protection, planting and maintenance of trees through public donations similar to the "Tree Time Edinburgh City", "Replant Bristol" and Street Trees in New York.	15 & 17	Council currently exploring this model. However, options to increase tree planting or woodland creation location for appropriate trees in the appropriate location may be more challenging than funding.	The council and sustainable Glasgow partners will continue to explore funding options and adopt strategic approach to protecting existing trees, identifying the most appropriate location and species of tree. This will be associated with the community engagement as part of the Climate and ecological emergency plan, but also as part of the development of the Woodland Strategy for the city.
7	The Council to support the process to introduce the primary legislation which will safeguard amenity while creating a more efficient and effective way to deal with the high number of Section 172 notifications received by planning authorities.	15	Council currently exploring how national legislation review can support this.	The city will continue to engage with the Scottish Government to support the review of national legislation enabling future iterations of the City Development Plan to include delivery of this recommendation.
8	The Council supports new, and further extensions to, Local Nature Reserves to improve green corridors and pollinator ways and protect and enhance habitats and species throughout the city.	14 & 15	There currently 30+ Aspirational LNRs identified and they will to be taken forward through the City Development Plan. LNR's can only be declared if the city council owns land or has agreement of the land owner.	LNR and other means to protect habitats, both protecting and maintaining existing ones, as well as creating new (when the council own the land) will be reflected the new City Development Plan.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
9	A review takes place of vacant and derelict land relating to opportunities for these sites to contribute to the Open Space Strategy, the Local Biodiversity Action Plan and managing flood risk. This must consider potential to retain, where present, the priority habitat 'Open Mosaic Habitat on Previously Developed Land' as outlined in: Habitats On Previously Developed Land	14 &15	<p>This is being considered by the urban woodland forum as part of the woodland strategy and Open Space strategy delivery plan.</p> <p>In Cadder Fields, there is woodland management and community engagement underway.</p> <p>In Dawsholm Park, LNR VDL site, there is wildflower planting and path works ongoing. Work to map V&DL can link existing habitats and has the potential to support good quality open space for nature, biodiversity and active travel.</p>	Open Space Delivery Plan help manage competing demands on land and land use. It will determine best future use for Vacant and Derelict Land to meet targets for housing, food growing, SWMW. It will ensure that the city protect & develop in a way to protect urban biodiversity. Balancing the needs for transport, development, habitat connectivity, access to open space, food growing, energy generation.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
10	The Council and its partners ensure that current and proposed active travel routes are assessed for opportunities to enhance their biodiversity, for example through creation/retention of hedgerows and wildflower strips. Opportunities should be taken to maximise the potential of the green network, including river corridors, the canal corridor, through parks and on former rail formations, to provide routes that provide for engagement with nature. On more direct commuter routes, e.g. on road-space, opportunities should be taken to maximise nature as part of a wider placemaking approach and managing surface water to reduce flood risk.	14 &15	NRS Biodiversity comment on proposals from Planning Applications	The Council and its partners ensure that current and proposed active travel routes are assessed for opportunities to enhance their biodiversity, for example through creation/retention of hedgerows and wildflower strips. Opportunities should be taken to maximise the potential of the green network, including river corridors, the canal corridor, through parks and on former rail formations, to provide routes that provide for engagement with nature. On more direct commuter routes, e.g. on road-space, opportunities should be taken to maximise nature as part of a wider placemaking approach and managing surface water to reduce flood risk.
11	The new City Development Plan identifies the benefits of green roofs / walls and sets out a strong presumption that new buildings will include green roofs / walls, wherever possible, to deliver benefits for biodiversity and surface water management. The Council actively promotes the installation of green roofs/green walls on appropriate new and existing city buildings.	13 & 15	Green roofs and walls can provide multiple functions-the function desired will dictate the type of green roof. There is competing demand for roof space for low carbon energy generation & renewables, biodiversity, water management, cooling.	The new City Development Plan identifies the benefits of green roofs / walls and sets out a strong presumption that new buildings will include green roofs / walls, wherever possible, to deliver benefits for biodiversity and surface water management. The Council actively promotes the installation of green roofs/green walls on appropriate new and existing city buildings.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
12	Food growing sites (allotments and community gardens) are located out with biodiversity diverse sites and are supported to deliver biodiversity net gain and habitat connectivity.	13 & 15	The city published its first Food Growing Strategy to identify and provide local food growing opportunities, while also contributing to biodiversity net gain.	The council and partners will continue to deliver the food growing strategy. Food growing will not be permitted in LNR, or sites of importance for nature conservation. The City Development Plan will continue to be supportive of local food growing, but this will not be permitted in LNR's or SINC's.
13	The Council's wildflower meadow and grassland management across the city is increased for pollinators, and a five-year action and engagement plan for wildflower creation is developed. In addition, engage with other large landowners in Glasgow to encourage similar habitat creation and consult with communities and neighbours.	15	A 5-year Wildflower/Green Connectors Action Plan has been developed which includes wildflower creation, hedgerow and trees to create habitat linkages. Cart & Kittoch Woodlands Phase 1 & 2 carried out with Green Action Trust.	The city will implement Wildflower/Green Connectors Action Plan.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
14	Installation of Sustainable Drainage Systems (SuDS) in new developments or re-developments should provide biodiversity net gain through provision of habitats identified within the LBAP.	14 & 15	Under the current City Development Plan, SuDS, similarly to other developments, require biodiversity net gain.	Installation of Sustainable Drainage Systems (SuDS) in new developments or re-developments can provide biodiversity net gain through provision of habitats identified within the LBAP. Retrofit surface water management for biodiversity net gain should be considered in all public realm / streetscape projects – following the example of the Avenues Programme approach and ensuring that no opportunities for net gain are being missed.
15	The Council seeks further resources to develop engagement with all stakeholders to ensure that Glasgow's peatlands are restored and protected. In addition, the Council develops proposals to ensure that the peatlands are enhanced, including quantifying carbon capture storage and their impact.	13, 15 & 17	Peatland restoration carried out by Seven Lochs Wetland Park Commonhead Moss. This included installation of over 50 dams and birch regen removed over several year to increase water levels.	Council and partners to recognise importance of peatlands for carbon sequestration but also biodiversity. Committing investment to protection and ongoing restoration to prevent carbon emissions and biodiversity loss.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
16	The Council develops a peat-free procurement policy.	13 & 15	<p>The council will now be purchasing all* compost as peat free.</p> <p>Except for some plants in the nursery or Botanic Gardens where peat-based compost is essential, albeit small scale.</p> <p>The council's current bedding plant producing contractor (Pentland Plants) have reduced their compost peat levels by 15% and there is ongoing discussion to increase this to 25%.</p> <p>This contract will end in 6 months, and the council will specify in their new tender that 100% peat free grown bedding plants will be required.</p>	The council to produce peat-free procurement policy by 2023.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
17	Strategic mapping and operational planning, should be carried out to enable parks and greenspaces, cemeteries, former landfill sites, and green/grey/blue corridors in the city to highlight opportunities to enhance biodiversity, provide space for nature, encourage pollinator-friendly planting in formal areas and creating habitat mosaics in larger parks/greenspaces as part of multi-functional usage.	15	The city is working with the Open Space strategy Team to map current provision and where opportunities to enhance biodiversity exist.	This work will continue, while the Open Space Strategy Delivery plan will include mapping of opportunities and actions to enhance biodiversity and habitat connectivity in the city.
18	The Council continues to implement its policy on Invasive Non-Native Species INNS and carry out treatment programmes and develops mapping of INNS city-wide to allow for monitoring and future treatment programmes as appropriate; and works with partner organisations with the aim of controlling/managing INNS along the city's river corridors, LNRs and at other key sites.	14 & 15	This recommendation is currently being addressed by the NRS operations team.	This work is to continue to progress as part of the LBAP, Pollinator Plan and OSS acceleration.
19	Work with Community Planning to incorporate the principle of biodiversity net gain into their decision making	14, 15 & 17	Discussions with CPP are yet to take place.	This will be included as an action in the Climate and Ecological Emergency Plan for the city.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
20	Ecological issues should be mainstreamed throughout the Council and other public bodies.	13, 14, 15 & 17	LBAP, Pollinator Plan and Open Space Strategy are currently being implemented and help mainstream ecological emergency, fostering coordinated action	Further work aligned with the LBAP, PP, OSS will help to mainstream ecological considerations into decision making for the council and Sustainable Glasgow partners.
21	Support and promote, using various means, local environmental volunteering groups to enhance biodiversity in their localities including working with the SSPCA to raise awareness of wildlife crime and responsible pet ownership.	13, 14 & 15	<p>The city council currently supports and promotes over 70+ parks and greenspace groups who carry out activities in their local park or greenspace, many of those activities include biodiversity e.g. putting up bird and bat boxes, planting wildflowers and trees for pollinators and other wildlife.</p> <p>This includes the Participatory Budgeting and Wee Green Grants programmes which have funded some biodiversity projects and development</p>	The city council will continue to work with national wildlife organisations such as SSPCA to promote responsible pet ownership and will look at various options to enhance this message at various points throughout the year.

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
	<p>of an online newsletter, Parklife, to encourage further participation.</p> <p>Other organisations such as RSPB (Scotland), SWT and GNHS are represented on the LBAP Partnership and these either have, or are, local environmental volunteering group</p>			
22	Work in partnership with Education Services, support Glasgow's teachers to access training and resources to formally and informally engage with pupils on the ecological emergency and the actions which can be taken to tackle it; with development of support for outdoor learning across all staff in educational establishments including Early Years.	13, 14, 15 & 17	Education Services currently participating in Eco Schools Programme, Climate Ready Classrooms, and implementing Sustainable Development Education, STEM and 'Outdoor Now' guidance for teachers.	The city council and partners to continue to work with Education Services, Skills Development Scotland and Scottish Government and Eco Schools Scotland to support outdoor learning across all educational establishments in the city.
23	The Council develops opportunities, as part of the Curriculum for Excellence, for all education establishments to access outdoor learning and undertake outreach biodiversity work.	13, 14, 15 & 17	Education Services currently participating in Eco Schools Programme, Climate Ready Classrooms, and implementing Sustainable Development Education, STEM and 'Outdoor Now' guidance for	The Council develops opportunities, as part of the Curriculum for Excellence, for all education establishments to access outdoor learning and undertake outreach biodiversity work.
			teachers. Retrofit surface water management also being delivered at a number of schools.	

6.0 Appendices: Appendix 3
Ecological Emergency Working Group Recommendations



No.	Recommendation	UN SDG's	Current Position	Future Plans
24	Investment in and improvement of the education estate should protect and enhance biodiversity through sustainable and wildlife friendly green landscaping, associated planting and greening infrastructure, including green walls, with support for the provision of natural play areas and school gardens.	13 & 15	The city is working with Education Services to invest in Education estate, including renewable energy technologies and greening the infrastructure as part of the Energy and carbon masterplan and Open Space Strategy.	The city will continue to invest in the Education Estate, enhancing green infrastructure and biodiversity connectivity while also investing in renewable energy technologies, such as solar PV and others.
25	teachers. Retrofit surface water management also being delivered at a number of schools.	13, 14 & 15	The council developed a carbon literacy training course for staff.	The city council will build on the development of the carbon literacy training and develop an additional mandatory climate and ecological emergency course to be delivered on GOLD.

6.0 Appendices: Appendix 3
The Report and Recommendations of Glasgow City Council's Ecological Working Group (DRAFT)



1.0 Introduction

1.1 Globally, biodiversity is declining. One million species are at risk of extinction from human activities. Climate change is intensifying biodiversity loss. There is evidence to suggest that the world is currently experiencing its sixth mass extinction event.

1.2 The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report 2019 shows 5 main drivers for biodiversity loss: land-use change, impact of climate change, pollution, invasive alien species and the exploitation of natural resources. Changes in land-use is the major driver, with the impact of climate

change likely to be one of the most important drivers in the future.

1.3 The State of Nature Scotland 2019 report highlighted a 24% reduction in average species abundance since 1994 and a 14% reduction in average species distribution since 1970. The State of the UK's Butterflies report 2015 showed that 75% of butterfly species had declined in range or abundance over the past 40 years.

2.0 Glasgow's Approach

2.1 Glasgow City Council announced a climate and ecological emergency on 16th May 2019. The Council set up a climate emergency working group

to prepare a report and recommendations.

2.2 When the Council declared a climate and ecological emergency, it agreed that, following presentation of the climate emergency working group's report, a short life process should be put in place in order to establish whether additional recommendations are required to address the ecological aspects of the emergency specifically.

2.3 Glasgow currently has over 6000 species recorded and a variety of priority habitats within the urban setting. The Glasgow Local Biodiversity Action Plan (LBAP) sets out aims and objectives to protect and enhance local biodiversity in the city. The Glasgow

Pollinator Plan links to the LBAP and supports the national Pollinator Strategy for Scotland.

2.4 The ecological emergency working group acknowledges the existing good work of the LBAP partnership at the local authority level which was set up following the Rio Earth Summit in 1992, in response to the UK becoming a signatory to the Convention on Biological Diversity. Glasgow City Council works in partnership with both national environmental agencies and local biodiversity organisations to deliver local biodiversity action plans. It employs dedicated biodiversity officers who support the partnership. The focus

is on three actions in relation to nature in the local area: conservation, communication and education for biodiversity through the implementation of the LBAP and Pollinator Plan. This was highlighted in the report from the climate emergency working group, 'the group is highly supportive of the Council's lead role on biodiversity issues.'

The Woodland Trust, Seven Lochs Wetland Park, NatureScot (previously Scottish Natural Heritage), Royal Society for the Protection of Birds (Scotland), and Butterfly Conservation (Scotland). We are grateful to all the presenters for taking the time to meet with us and discuss areas of interest to the group. They have helped to stimulate our thinking and to shape our recommendations.

Giving Nature a Home and the state of butterflies and moths in Scotland. 3.3 We also commissioned a public survey to get a better sense of how Glaswegians feel about these issues. Although the end of the consultation period coincided with the start of the Covid-19 lockdown, it received 917 responses and a wealth of information and opinion. The consultation was carried out between February and March 2020, and was made available to the general public and all stakeholders through the council's website (www.glasgow.gov.uk/consultations). The consultation was extensively promoted through the Council's social media channels, including Twitter and Facebook. Some

areas of concern were particularly prominent in these responses and they are reflected in our recommendations. 3.4 Discussion on the LBAP, city-wide grassland management and the Glasgow Open Space Strategy and Connecting Nature project looked at the quality of greenspaces in the city, the multifunctional nature of city greenspaces and how space for nature can be incorporated and mapped for monitoring. It also highlighted the importance of the planning process and city development plan in protecting greenspaces and biodiversity and the principle of biodiversity net gain in developments. Importantly there was discussion about habitat linkages and how these

can be created and maintained, for example through reduced grass cutting, wildflower strips and hedgerows and by the creation of green roofs and green walls which are biodiverse for bees and other pollinators. 3.5 Survey respondents backed up the group's discussions when they said that the Council should support planners and developers to step up protection and enhancement of green space and biodiversity (55%); that the Council should work with other public sector land owners to maximise green corridors and pollinator ways through the city (53%); that we should increase connections across the city between green spaces, for both people and wildlife (51%)

and for more open space to be allocated for nature in the city (50%). There was also enthusiasm for grassland management with 53% of respondents wanting to 'restore and extend wildflower meadows' when asked 'which of the following do you consider important?' with options to restore and extend woodlands and hedgerows; increase the urban tree canopy cover; restore and extend wildflower meadows; protect soil by reducing disturbance and fertiliser use; reduce carbon in management of the natural environment i.e. less cuts of grass per year; restore and extend wetlands and restore peatlands. 3.6 Discussion on the vacant and derelict land strategy, a tree planting

strategy and restoration of peatlands looked at land use in the city and the contributions that woodlands and peatlands make to biodiversity, carbon sequestration, shade provision and rain and flood management. The group felt that VDL sites should be assessed for their potential as greenspaces and this should include surveying for existing biodiversity interest before any 'greening' takes place. VDL sites could contribute space for tree planting across the city. 3.7 It was discussed that a tree planting strategy should identify spaces across the city where there is potential for tree planting which does not damage existing valuable habitat such as meadows.

It was agreed by the group that planting the right trees in the right places has benefits not only for carbon capture and climate change mitigation, but also for people's health and community engagement opportunities. Maintenance of trees and woodlands is essential. 3.8 This was backed up by survey respondents who, when asked which actions the Council and the city should do to address the ecological crisis, said to increase planting of native trees and plant species on and around active travel routes (49%). Additionally, in terms of how the city can achieve carbon neutrality by 2030, survey respondents feel that priorities should be to restore and extend woodlands and hedgerows (78%) and increase the

3.0 Ecological Short Life Working Group

3.1 The working group considered a number of presentations from a range of speakers and organisations covering: Neighbourhoods and Sustainability, Development and Regeneration Services,

3.2 Presentations were given on the following topics: the LBAP, city-wide grassland management, Glasgow's open space strategy and Connecting Nature, the vacant and derelict land (VDL) strategy, tree planting strategy, restoration of peatlands, the State of Nature report,

urban tree canopy cover (56%).

3.9 The working group's discussion on peatlands looked at the need to redress previous poor management of raised bogs in the city and to protect them from development. It was highlighted that Scotland's peatlands are its single most important terrestrial carbon store- over 20 times that of its forests. Interestingly, only 25% of survey respondents thought that restoring peat bogs should be a priority for the Council and the city to address the ecological crisis. However, this may be an artefact of the way the question was worded, with respondents only allowed to choose their top five priorities. It may also be that residents are

unaware of the existence of peatlands, more often a rural feature, within the Glasgow boundary (see Appendix C, Q1). An issue for Glasgow is that though many peat-rich areas are protected for their nature conservation value they are not owned by the Council so appropriate management will require communication and engagement with land owners.

3.10 Discussion on the State of Nature Report, Giving Nature a Home and the State of Butterflies and Moths in Scotland focussed on the alarming decline in species abundance and distribution across Scotland and looked at reasons why our biodiversity is declining and being lost; and what the main causes of this

are nationally and with respect to Glasgow. The IPBES main drivers are relevant to Glasgow as well as nationally and it was agreed that restoring habitats, habitat linkages and the health and function of ecosystems is vital to reversing these declines. It was agreed that it was important to keep biological records in Glasgow up-to-date for site monitoring and management.

3.11 The majority of survey respondents agreed that our biodiversity is declining and being lost (96%). When asked about the main causes, 98% agreed that human activity, changes in land use and pollution have an impact on biodiversity loss.

3.12 Interestingly, only 39% of

respondents were worried about the effects of biodiversity loss on them personally compared to 84% being worried about the effects of biodiversity loss on future generations which suggests that people care more widely about societal and community effects than simply about themselves. Large numbers of respondents were also worried about the effects of biodiversity loss on human health (68%); the effects of biodiversity loss on the environment (85%) and the loss of wildlife due to habitat destruction (85%).

3.13 Our survey work demonstrates an appetite amongst Glaswegians for more involvement in conversations about biodiversity and the ecological emergency.

Most respondents feel this could best be done through social media (69%) and holding community workshops/community drop-ins (59%) while a further 59% are keen for opportunities to volunteer. Partnership working with schools and colleges is felt to be of benefit by 55% of respondents and 49% want increased opportunities to join 'Friends of Parks & Greenspaces' groups and food growing groups.

3.14 Respondents also highlighted active travel (walking and cycling), parks and greenspaces, and food growing (allotments and community gardens) as important for 'greening' and reducing carbon footprint.

3.15 Respondents were asked for additional comments

regarding their level of worry about a range of ecological issues. Here respondents mentioned a level of despair at the continued failings of governments, organisations and businesses to take the issue seriously and to implement actions to tackle the problem. There was also concern that sections of the population still failed to understand the issue or grasp the seriousness of the situation. As a result of this, there was strong support for greater education about the importance of action and how the environment, nature and the role we play in it are linked.

4.0 Recommendations

4.1 Three of the

recommendations within the climate emergency working group's report and recommendations relate to the natural environment and are directly relevant to the ecological emergency. These recommendations are thus incorporated into the ecological working group's recommendations:

A formal audit and costed plan are 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.

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.

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.

4.2 It is important that any tree planting is of native species with a diversity and mix of species being chosen to benefit invertebrates, birds and other wildlife. There may be differences in management approaches in designing woodland for biodiversity and woodland for carbon offsetting and it is vital that biodiversity is fully considered in any decision-making on tree and woodland management.

4.3 Any review of vacant and derelict land with a view to greening and re-wilding must include

ecological surveys of what already exists at a site and consider the priority habitat 'Open Mosaic Habitat on Previously Developed Land' before any 'greening' measures are put in place.

Areas, but also as part of the Ecological and Climate Emergencies. This loss is exacerbated by the fact that even if replacement trees are planted, the trees chosen for planting are much smaller species that will never reach the stature of the original trees.

It is necessary that biodiversity enhancement is fully considered and integral to the audit, costed plan and review noted in the first two recommendations. It is also essential that any new planting must have appropriate revenue contributions assigned to ensure adequate management is in place.

As an outcome of the working group's activities, our additional and related recommendations:

A formal audit and costed plan that fully considers and integrates biodiversity enhancement 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.

A review takes place of vacant and derelict land relating to opportunities for these sites to contribute to the Open Space Strategy and the Local Biodiversity Action Plan. This must consider potential to retain, where present, the priority habitat 'Open Mosaic Habitat on Previously Developed Land' as outlined in: Habitats On Previously Developed Land

The Council commits to working with other

public bodies, third sector, business community, Glasgow's citizens and communities and adjacent local authorities to halt and reverse the decline in biodiversity.

A review is undertaken to address existing barriers to tree protection and tree planting in order to significantly increase the number of trees within the city over the next 5 years.

The Council to support the process to introduce the primary legislation which will safeguard amenity while creating a more efficient and effective way to deal with the high number of Section 172 notifications received by planning authorities.

Also increase support for tree planting by setting a

target to increase canopy cover with reference to the existing baseline of 15% for 2015, assisted by a tree forum to bring together plans for city trees and to increase awareness with target areas linked to schools. Support the work of the Open Space Strategy and Glasgow and Clyde Valley Green Network Partnership which contributes to understanding where tree planting will be particularly beneficial for nature by providing better habitat connections.

The Council will use the My Park Scotland crowdfunding platform to support partnership working with existing charitable trusts to increase resources for the protection, planting and maintenance of trees

through public donations similar to the "Tree Time Edinburgh City", "Replant Bristol" and Street Trees in New York.

4.5 The Glasgow LBAP and Pollinator Plan contain actions to implement their main aims and objectives. The Plans run for a 10-year period. However, in light of the Ecological Emergency, and with time running out to make the changes needed globally, nationally and locally, the group recommends that funding and resources are made available to implement the Plans more quickly. In addition, monitoring and review of progress made is essential at a local level in Glasgow to feed into national biodiversity strategies and provide accurate national monitoring and progress

reports.

Our recommendation: The Council works with partner organisations, adjacent local authorities, the city's academic institutions and other stakeholders to fund and achieve accelerated implementation of the Glasgow LBAP and Pollinator Plan within a significantly reduced target time frame and incorporating additional outcomes regarding connectivity for biodiversity under the Urban Ecosystem Statement. Interim reports on progress to be provided to the Environment, Sustainability and Carbon Reduction City Policy Committee.

4.6 The working group discussed the importance of the city

development plan in protecting greenspace and biodiversity and survey respondents (55%) said that the council should support planners and developers to step up protection and enhancement of green space and biodiversity. It is vital that the planning process takes cognisance of the importance of biodiversity in making decisions about developments and land-use changes across the city supported by relevant models such as Building with Nature certification.

Our recommendation: The new City Development Plan, and associated guidance, strengthens and extends existing requirements on the protection and enhancement of

biodiversity and includes a default requirement for overall biodiversity net gain, as well as for specific actions such as the provision of swift bricks and bird and bat boxes, to guide the development of proposals and planning decisions. This should be supported through additional professional development for all planning officers. The City's Open Space Strategy Delivery Plan will identify the open spaces that should be used to provide more opportunities for biodiversity and for habitat connectivity and the Council will act, with its partners, to deliver these opportunities.

shown to provide suitable habitat for bees and other invertebrates. There is great potential for green roofs to be installed on existing and new buildings in the city. Green roofs also play a role in water management and sustainable urban drainage systems contribute to climate mitigation and temperature regulation.

Our recommendation: The new City Development Plan identifies the benefits of green roofs and sets out a strong presumption that new buildings will include green roofs, wherever possible, to deliver benefits for biodiversity and surface water management. The Council actively promotes the installation of green roofs/green walls on appropriate city buildings.

4.7 Green roofs with biodiverse planting (including a wide range of wildflower species) have been

4.8 Survey respondents (50%) asked for more open space to be allocated for nature in the city. This could be achieved by declaring more Local Nature Reserves (LNRs) throughout the city. Glasgow currently has 12 LNRs. Designating LNRs in strategic locations would also help to increase green corridors, pollinator pathways and allow for woodlands, hedgerows and wildflower meadows to be maintained, established or enhanced.

Our recommendation: The Council supports new, and further extensions to, Local Nature Reserves to improve green corridors and pollinator ways and protect and enhance habitats and species throughout the city – see Appendix D.

4.9 Active travel was one of the most frequent issues raised by respondents to the climate emergency survey, alongside broader concerns about transport. It was also a concern of ecological emergency survey respondents with comments received about increasing cycling infrastructure; and the promotion of walking and cycling options. Active travel has benefits to public health and to help mitigate climate change and this has been addressed through the Climate Emergency Working Group's recommendations with regard to the city's new transport strategy. However, active travel routes are not currently all biodiverse. The council has been working with the Glasgow and Clyde Valley

Green Network Partnership to identify opportunities for delivering better active travel opportunities through "green space" as part of the GCVGNP Green Network Blueprint. This analysis will be incorporated into the OSS Delivery Plan.

Our recommendation: The Council and its partners ensure that current and proposed active travel routes are assessed for opportunities to enhance their biodiversity, for example through creation/retention of hedgerows and wildflower strips. Opportunities should be taken to maximise the potential of the green network, including river corridors, the canal corridor, through parks and on former rail formations, to provide routes that

provide for engagement with nature. On more direct commuter routes, e.g. on road-space, opportunities should be taken to maximise nature as part of a wider placemaking approach.

4.10 Food growing (allotments and community gardens) is seen by survey respondents as important for 'greening' and there is a wish for food growing sites to be expanded. The Council is currently producing its Food Growing Strategy for the city and there is a high level of interest in community groups for food growing locally. Each Scottish Local Authority also has a statutory duty under Part 9 of the Community Empowerment (Scotland) Act 2015 to address allotment provision

when certain triggers around waiting lists are activated. There is great potential for allotments, community gardens and other food growing initiatives to contribute to creating, protecting and enhancing biodiversity especially where food is grown organically without herbicide usage, and this should be supported. Site locations should have no adverse impact on priority habitats and/or species and site investigations should include an ecological survey prior to any decisions being made.

Our recommendation: Food growing sites (allotments and community gardens) are located out with biodiversity diverse sites and are supported to deliver biodiversity net gain and habitat

connectivity.

4.11 Managing grasslands and wildflower meadows across the city for pollinators and other wildlife are key actions within the LBAP and Pollinator Plan and vital to protecting and hopefully increasing pollinator populations in Glasgow. It is essential that this work continues to be maintained and extended and beneficial for the Council to work with others to do so to ensure connectivity and a full network of pollinator ways and that local communities are fully engaged with the process and consulted.

Our recommendation: The Council's wildflower meadow and grassland management across the city is increased for pollinators, and a five year

action and engagement plan for wildflower creation is developed. In addition engage with other large landowners in Glasgow to encourage similar habitat creation and consult with communities and neighbours.

Our recommendation: Installation of Sustainable Drainage Systems (SUDS) in new developments or re-developments should provide biodiversity net gain through provision of habitats identified within the LBAP.

from development and the damage by previous poor management needs to be addressed. Lowland raised bogs are located in North East Glasgow. Large areas of the peatland-rich land are privately owned and there are damaged peatlands due to abandonment and fires.

Our recommendation: The Council seeks further resources to develop engagement with all stakeholders to ensure that Glasgow's peatlands are restored and protected. In addition, the Council develops proposals to ensure that the peatlands are enhanced, including quantifying carbon capture storage and their impact.

The Council develops a peat free procurement policy.

4.14 Glasgow is known as the 'dear green place' due to its large number of parks, cemeteries and other greenspaces and survey respondents see these as important to 'greening' the city as well as for carbon capture. Many parks and greenspaces already contain some biodiversity habitats and species but there is potential for most, if not all, of them to further contribute to halting and reversing the decline in biodiversity and providing opportunities for 're-wilding'.

Our recommendation: Strategic mapping and operational planning, should be carried out to enable parks and greenspaces, cemeteries, former landfill sites, and green/grey/blue corridors

in the city to highlight opportunities to enhance biodiversity, provide space for nature, encourage pollinator-friendly planting in formal areas and creating habitat mosaics in larger parks/greenspaces as part of multi-functional usage.

4.15 The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report 2019 shows one of the main drivers for biodiversity loss is invasive non-native species (INNS).

The Department for the Environment, Food and Rural Affairs (DEFRA) (2009) has defined INNS as 'Any non-native animal or plant that has the ability to spread causing damage to the environment, the

economy, our health or the way we live.' There are many well documented cases of notorious species which are, or are perceived as being, problematic. For plants, such cases mainly relate to tall and vigorous growing high profile species such as Giant Hogweed. However there are many more species which are not viewed as problems and many species which people think of as being part of the native flora, are in fact non-natives.

The Audit of Alien Species in Scotland report (2001) suggested that 988 non-native species were established in Scotland. Studies for the flora of Glasgow show that out of some 1560 species recorded as 'growing wild' in the city, more than half

were non-native. The WANE Act (2011) brought in new provisions governing the introduction of non-native species in Scotland. In Glasgow we have a 'Policy on invasive non-native plant species in Glasgow' but currently no specific non-native animal policies. The Council runs a Japanese Knotweed annual treatment programme which uses herbicide spraying and stem injection to control the species. Giant Hogweed is also controlled where it is considered a threat. There has been large scale *Rhododendron ponticum* removal from key sites.

Our recommendation: The Council continues to implement its policy on Invasive Non-Native Species INNS and carry out treatment programmes

and develops mapping of INNS city-wide to allow for monitoring and future treatment programmes as appropriate; and works with partner organisations with the aim of controlling/managing INNS along the city's river corridors, LNRs and at other key sites.

4.16 The Climate Emergency Working Group report has already noted that 'the climate emergency demands commitment and comprehension from all levels of our organisations. The working group wishes to see leadership from senior officials of our public bodies, as well as elected members. Climate issues are everyone's business and they need to be genuinely and tangibly mainstreamed through organisational life' and the same holds true for the

4.12 Water management and flood alleviation schemes are essential to climate change mitigation in Glasgow. There is great potential for sustainable drainage systems (SUDS) to benefit biodiversity if they are designed with nature in mind. For example, SUDs can have shallow permanent ponds, wildflower banks and accessible perimeters for animals, however some SUDS such as dry swales seeded with grass or underground systems have little or no benefit.

4.13 The working group had a presentation and discussion on peatlands. According to the International Union for the Conservation of Nature (IUCN) 'peatland conservation is a prime example of a nature-based solution to climate change'. During the presentation, the group heard that Scotland's peatland is its single most important terrestrial carbon store-over 20 times that of its forests. Yet, in Glasgow, our peatlands need protection

ecological emergency.

Our recommendations:
Work with Community Planning to incorporate the principle of biodiversity net gain into their decision making.

Ecological issues should be mainstreamed throughout the Council and other public bodies.

4.17 Volunteers and active community groups are vital to carry out local action for the environment and biodiversity. There are already existing opportunities to do so through Friends of Parks and Greenspaces groups and third sector organisations such as The Conservation Volunteers (TCV) working in partnership with the Council. However,

survey respondents highlighted interest in volunteering with 59% 'keen for opportunities to volunteer'. Additionally, almost 49% want increased opportunities to join 'Friends of Parks & Greenspaces' groups and food growing groups.

Our recommendation:
Support and promote, using various means, local environmental volunteering groups to enhance biodiversity in their localities including working with the SSPCA to raise awareness of wildlife crime and responsible pet ownership.

4.18 Over 90% of survey respondents who were a parent, guardian or carer of school age children said that educational establishments (schools,

early years.) could do more to increase children's knowledge of ecology and causes of biodiversity loss and to increase children's experience and understanding of nature around them. It was noted that schools already do a lot of good educational work on the environment but also that teachers should have the time, training and resources needed to ensure children and young people have the opportunities to learn about the environment and nature.

Our recommendations:
Work in partnership with Education Services, support Glasgow's teachers to access training and resources to formally and informally engage with pupils on the ecological emergency and the actions

which can be taken to tackle it; with development of support for outdoor learning across all staff in educational establishments including Early Years.

The Council develops opportunities, as part of the Curriculum for Excellence, for all education establishments to access outdoor learning and undertake outreach biodiversity work.

4.19 When asked to provide any further comments about their children and education, it was noted that every school should have access to good quality useable greenspace.

Our recommendation:
Investment in and improvement of the education estate should protect and enhance biodiversity through

sustainable and wildlife friendly green landscaping, associated planting and greening infrastructure, including green walls, with support for the provision of natural play areas and school gardens.

4.20 When survey respondents were asked what else do they thought the city's private and public sector organisations should be doing to help support Glasgow's biodiversity, respondents highlighted that 'the Council should lead by example both to the public and as an employer' and that 'the Council should practice the same actions and recommendations with its land and green space as it asks the public to do'. As a public body the Council has a legal duty to 'further the conservation

of biodiversity'. It makes sense to raise awareness of the ecological emergency to all council staff.

Our recommendation:
the Council develops ecological and climate emergency awareness mandatory training for all staff through its online training platform (GOLD).

6.0 Appendices: Appendix A

The Short Life Working Group Recommendations



1. The Council commits to working with other public bodies, third sector, business community, Glasgow's citizens and communities and adjacent local authorities to halt and reverse the decline in biodiversity.
2. The Council works with partner organisations, adjacent local authorities, the city's academic institutions and other stakeholders to fund and achieve accelerated implementation of the Glasgow LBAP and Pollinator Plan within a significantly reduced target time frame and incorporating additional outcomes regarding connectivity for biodiversity under the Urban Ecosystem Statement. Interim reports on progress to be provided to the Environment, Sustainability and Carbon Reduction City Policy Committee.
3. The Chief Executive reviews current staffing, resource distribution and training for addressing the ecological emergency within the Council and brings forward proposals to increase the Council's focus in this area.
4. The new City Development Plan, and associated guidance, strengthens and extends existing requirements on the protection and enhancement of biodiversity and includes a default requirement for overall biodiversity net gain, as well as for specific actions such as the provision of swift bricks and bird and bat boxes, to guide the development of proposals and planning decisions. This should be supported through additional professional development for all planning officers. The City's Open Space Strategy Delivery Plan will identify the open spaces that should be used to provide more opportunities for biodiversity and for habitat connectivity and the Council will act, with its partners, to deliver these opportunities.
5. A Forestry and Woodland Strategy for Glasgow will be undertaken, and a costed implementation plan prepared, which delivers increased canopy cover, considers biodiversity net gain, habitat connectivity and carbon management. Through its contribution to the Clydeplan Draft Forestry and Woodland Strategy and the Blueprint for a Green Network, it will support engagement with our city-region partners. This strategy will seek to address existing barriers to tree protection and tree planting, including any recommendations to national government related to regulatory matters, and will be accompanied by a costed implementation plan which sets a target for an increase in canopy cover relative to the baseline of 15% in 2015. A Tree Forum of stakeholders will be established to oversee both this recommendation and recommendation number 7.
6. The Council will use the My Park Scotland crowdfunding platform to support partnership working with existing charitable trusts to increase resources for the protection, planting and maintenance of trees through public donations similar to the "Tree Time Edinburgh City", "Replant Bristol" and Street Trees in New York.
7. The Council to support the process to introduce the primary legislation which will safeguard amenity while creating a more efficient and effective way to deal with the high number of Section 172 notifications received by planning authorities.
8. The Council supports new, and further extensions to, Local Nature Reserves to improve green corridors and pollinator ways and protect and enhance habitats and species throughout the city.
9. A review takes place of vacant and derelict land relating to opportunities for these sites to contribute to the Open Space Strategy and the Local Biodiversity Action Plan. This must consider potential to retain, where present, the priority habitat 'Open Mosaic Habitat on Previously Developed Land' as outlined in: Habitats On Previously Developed Land
10. The Council and its partners ensure that current and proposed active travel routes are assessed for opportunities to enhance their biodiversity, for example through creation/retention of hedgerows and wildflower strips. Opportunities should be taken to maximise the potential of the green network, including river corridors, the canal corridor, through parks and on former rail formations, to provide routes that provide for engagement with nature. On more direct commuter routes, e.g. on road-space, opportunities should be taken to maximise nature as part of a wider placemaking approach.
11. The new City Development Plan identifies the benefits of green roofs and sets out a strong presumption that new buildings will include green roofs, wherever possible, to deliver benefits for biodiversity and surface water management. The Council actively promotes the installation of green roofs/green walls on appropriate city buildings.
12. Food growing sites (allotments and community gardens) are located out



with biodiversity diverse sites and are supported to deliver biodiversity net gain and habitat connectivity.

gain through provision of habitats identified within the LBAP.

cemeteries, former landfill sites, and green/grey/blue corridors in the city to highlight opportunities to enhance biodiversity, provide space for nature, encourage pollinator-friendly planting in formal areas and creating habitat mosaics in larger parks/greenspaces as part of multi-functional usage.

managing INNS along the city's river corridors, LNRs and at other key sites.

13. The Council's wildflower meadow and grassland management across the city is increased for pollinators, and a five year action and engagement plan for wildflower creation is developed. In addition engage with other large landowners in Glasgow to encourage similar habitat creation and consult with communities and neighbours.

15. The Council seeks further resources to develop engagement with all stakeholders to ensure that Glasgow's peatlands are restored and protected. In addition, the Council develops proposals to ensure that the peatlands are enhanced, including quantifying carbon capture storage and their impact.

18. The Council continues to implement its policy on Invasive Non-Native Species INNS and carry out treatment programmes and develops mapping of INNS city-wide to allow for monitoring and future treatment programmes as appropriate; and works with partner organisations with the aim of controlling/

19. Work with Community Planning to incorporate the principle of biodiversity net gain into their decision making

20. Ecological issues should be mainstreamed throughout the Council and other public bodies.

21. Support and promote, using various means, local environmental volunteering groups to enhance biodiversity in their localities including working with the SSPCA to raise awareness of wildlife crime and responsible pet ownership

22. Work in partnership with Education Services, support Glasgow's teachers to access training and resources to formally and informally engage with pupils on the ecological emergency and the actions which can be taken to tackle it; with development of support for outdoor learning across all staff in educational establishments including Early Years.

23. The Council develops opportunities, as part of the Curriculum for Excellence, for all education establishments to access outdoor learning and undertake outreach biodiversity work.

24. Investment in and improvement of the education estate should protect and enhance biodiversity through sustainable and wildlife friendly green landscaping, associated planting and greening infrastructure, including green walls, with support for the provision of natural play areas and school gardens.

25. The Council develops ecological and climate emergency awareness mandatory training for staff through its online training platform (GOLD).

14. Installation of Sustainable Drainage Systems (SUDS) in new developments or re-developments should provide biodiversity net

16. The Council develops a peat-free procurement policy.

17. Strategic mapping and operational planning, should be carried out to enable parks and greenspaces,

6.0 Appendices: Appendix B

Membership of the Ecological Working Group

Cllr Martha Wardrop (Chair)	Glasgow City Council
Cllr Kyle Thornton	Glasgow City Council
Cllr Matt Kerr	Glasgow City Council
Cllr Laura Doherty	Glasgow City Council
Seamus Connolly	NS Glasgow City Council
Rachel Smith	NS Glasgow City Council
Carol MacLean	NS Glasgow City Council
Rachel Morrison	NS Glasgow City Council
Gavin Jackson	NS Glasgow City Council
Alan Duff	DRS Glasgow City Council
Sean Kelly	DRS Glasgow City Council
Dave Lang	NatureScot
Paul Walton	Royal Society for the Protection of Birds
Scott Shanks	Royal Society for the Protection of Birds
Fiona Weir	Royal Society for the Protection of Birds
Paul Kirkland	Butterfly Conservation Scotland
Anthony McCluskey	Butterfly Conservation Scotland
Arina Russell	The Woodland Trust
Rebecca Strofton	The Conservation Volunteers



6.0 Appendices: Appendix C

Public Ecological Emergency Survey Summary (March 2020)



Introduction

This report provides a summary of the online public consultation into the Ecological Emergency.

Background

The consultation was carried out between February and March 2020, and was made available to the general public and all stakeholders through the council's website (www.glasgow.gov.uk/consultations). The consultation was extensively promoted through the Council's social media channels, including Twitter and Facebook. In total, there were 917 responses received.

This report contains a number of charts and tables, where percentages do not sum to 100%, this may be due to computer rounding, the exclusion of 'don't know' categories or multiple answers.

Question 1: Which of the following actions do you think the Council and the city should do to address the ecological crisis? (Please select your top five priorities)

Action	Rank	Percentage (%)
Support planners and developers to step up protection and enhancement of green space and biodiversity	1	55%
Work with other public sector land owners to maximise green corridors and pollinator ways through the city	2	53%
Increase connections across the city between green spaces, for both people and wildlife	3	51%
Allocate more open space for nature in the city	4	50%
Increase planting of native trees and plant species on and around active travel routes	5	49%
Plant trees and hedgerows	6	48%
Plan for tree succession to ensure there are enough trees of different ages and sizes	7	45%
Create more wildflower meadows	8	44%
Increase numbers of street trees	9	38%
Install green roofs on new buildings	10	37%
Make sure maintenance is provided for to sustain public support for biodiversity measures	11	37%

Respondents suggested a range of further actions that the Council and the city should take to address the ecological crisis.

There was support for action which promoted food growing opportunities, particularly existing and new allotments and community growing spaces across the city. Respondents highlighted other areas which could be used including parks, vacant and derelict buildings and land, as well as shared back court areas. It was also suggested that action be taken to address the issue of herbicides and pesticides, which damage the environment and wildlife, being used both in food production and in landscaping to control weeds, etc.

As well as encouraging more growing spaces, some respondents wanted to see action which would create more general green spaces across the city, including re-wilding and the introduction of green walls/roofs and rain gardens.

Respondents particularly wanted to see action to address the issue of green belt land being used for housing and industrial development when there was already a substantial amount of unused brownfield land within the city.

‘Perhaps using brownfield sites for development of housing instead of allowing the destruction of green belt as a priority! There’s loads of unused land in the city that should be prioritised for housing first before destroying more green land at the edges of the city.’

Action	Rank	Percentage (%)
Increase public awareness of the benefits to physical and mental health of being in contact with nature	12	37%
Maximise support for wild bird populations through provision of established solutions such as nesting bricks for swifts, and house sparrow meadow plots	13	35%
Talk to other local authorities in the UK and abroad about measures to address the ecological emergency in urban settings	14	34%
Designate more Local Nature Reserves	15	33%
Install green walls on city buildings	16	30%
Create more ponds/wetlands	17	28%
Install rain gardens in city streets	18	25%
Restore peat bogs	19	25%
Eradicate invasive non-native species	20	21%

Base: 904

Another area where respondents highlighted action around was public transport. To encourage greater use of public transport, it was suggested action should be taken to improve the infrastructure and integration, as well as reduce cost. There was also comment made that public transport could be made greener, through the introduction of more electric vehicles.

The improvement in public transport was seen in parallel with action to reduce the amount of private vehicles on the city’s roads. Respondents thought action should be taken to discourage the use of cars by:

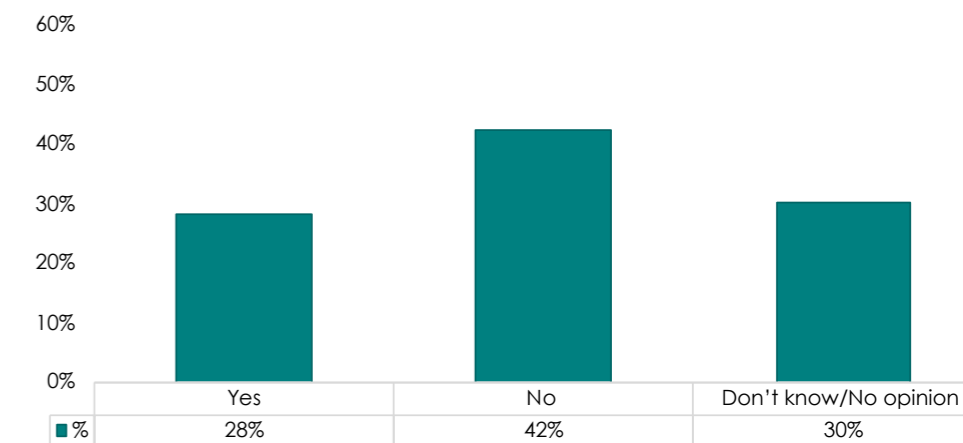
- **banning most polluting cars**
- **reducing parking spaces available**
- **pedestrianising city centre streets**

The reduction of car usage was also seen as an opportunity to encourage active travel options, including cycling and walking. Action was identified to increase the cycling infrastructure within the city including segregated cycle lanes, more cycle stations and improved cycle hire scheme.

‘provide schemes to incentivise cycling in the city (improved cycle lanes, better provision for bicycle parking at stations and on street, day hire bicycles/ebikes, bike to work purchase scheme), introduce measures to reduce the use of internal combustion engines within city limits.’

Finally, respondents wanted to address the issue of recycling, both in terms of reducing the amount of waste produced and to improve the availability of recycling. Respondents highlighted other cities which had banned the use of all single use plastics as an example which Glasgow should follow.

Question 2: Are you aware of actions that other cities have taken



Base 882

Question 3: If yes, which city? Please provide any information/or links on specific approaches that might be useful

Respondents highlighted a range of other cities across the UK, as well as in Europe and beyond which have approaches to active travel, public transport, city greening, food growing, recycling, etc. The main cities mentioned, included:



Question 4: How can we involve you in discussions about ecological issues?

Methods of involvement	Percentage (%)
Through social media	69%
Hold community workshops/community drop-ins	59%
Promote opportunities for ecological volunteering	59%
Partnerships with schools and colleges	55%
Increase opportunities to join Friends of Parks & Greenspaces groups, food growing groups	49%
I don't want to be involved	2%

Base: 856

Respondents highlighted several other ways how they could be kept involved in the discussion about ecological issues. As well as methods such as events, workshops and community assembly's, respondents emphasised the role of existing community groups, including community councils and 3rd sector organisations as a way of getting more people involved. The role of employers and businesses was also mentioned to encourage involvement among their staff and customers.

It was also stated that better information about opportunities to get involved should be used including through churches, schools and other community facilities such as libraries and community centres.

Question 5: The Council has currently set a target year of 2030 for the city to achieve carbon neutrality (key actions could include carbon capture and carbon storage by the natural environment)

Which of the following do you consider important? Please tick your top three priorities:

Action	Rank	Percentage (%)
Restore and extend woodlands and hedgerows	1	78%
Increase the urban tree canopy cover	2	56%
Restore and extend wildflower meadows	3	53%
Protect soil by reducing disturbance and fertiliser use	4	43%
Reduce carbon in management of the natural environment i.e. less cuts of grass per year	5	40%
Restore and extend wetlands	6	33%
Restore peatlands	7	31%

Base: 836

As well as those listed above, respondents highlighted three main areas which they thought were missing from the list, including:

- **Transport**
- **Parks and green spaces**
- **Food growing and production**

Respondents highlighted promoting active travel options such as walking and cycling, reducing or banning private cars, particularly high polluting vehicles, while improving the reliability and affordability of public transport.

Again, the issue of parks and green spaces was highlighted, in terms of both the protection of what currently exists in the city as well as expanding it along roads and path verges and on roof tops. There was strong support for the re-purposing of existing brownfield sites and under used spaces across the city. These was also a clear indication that there should be no more building on greenfield areas around the city. There was again support for banning the use of chemicals (herbicides and pesticides) in food growing and in controlling weeds.

Finally, respondents wanted food growing given greater importance through the expansion of allotments and community gardens, which would help with the greening of the city and reduce the carbon footprint of the food we buy and eat.

Question 6: To what extent do you agree/disagree with the following statements:

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
Our biodiversity is declining and being lost	96%	2%	1%	1%	837
Many animal and plant species are facing extinction	95%	3%	2%	1%	830
Our biodiversity is declining due to human activity	98%	1%	1%	-	836
Changes in land use have an impact on our biodiversity	98%	1%	1%	-	833
Pollution has an impact on our biodiversity	98%	1%	-	-	832
Invasive non-native species have an impact on our biodiversity	80%	14%	3%	3%	831
Exploitation of animals and plants are having an impact on our biodiversity	84%	11%	2%	3%	831
I have a good knowledge about the causes of ecological change	78%	16%	5%	1%	832

Base: 836

Question 7: To what extent, or otherwise, are you worried about the following...

Statements	A great deal	A fair amount	Not very much	None/ Not at all	Don't know/ No opinion	Base
The effects of biodiversity loss on me personally	39%	46%	14%	-	1%	831
The effects of biodiversity loss on future generations	84%	14%	1%	1%	-	833
The effects of biodiversity loss on human health	68%	27%	5%	-	1%	831
The effects of biodiversity loss on the environment	85%	13%	1%	-	-	831
The loss of wildlife due to habitat destruction	85%	14%	1%	-	-	824
The loss of wildlife due to climate change	80%	17%	2%	1%	-	825
The effects of pollinator loss on agriculture and horticulture	77%	20%	2%	1%	-	827
The effects of biodiversity loss on the economy	35%	37%	21%	4%	2%	828
Other people not understanding the importance of biodiversity loss	70%	24%	4%	1%	1%	828

Base: 836

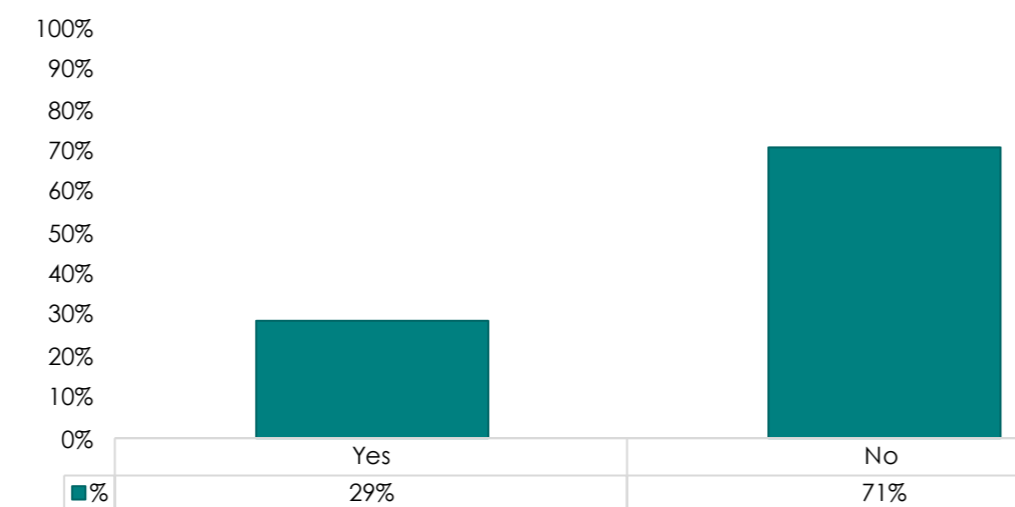
Respondents were asked for additional comments regarding their level of worry about a range of ecological issues. Here respondents mentioned a level of despair at the continued failings of governments, organisations and businesses to take the issue seriously and to implement actions to tackle the problem. There was also concern that sections of the population still failed to understand the issue or grasp the seriousness of the situation. As a result of this, there was strong support for greater education about the importance of action and how the environment, nature and the role we play in it are linked.

There were comments received that we should no longer be debating these issues where there is scientific evidence and that it was now important to commit to taking action.

Respondents also highlighted the need for not just individuals to take action but for businesses and governments to act to address the ecological emergency. It was stated that currently too much emphasis is being placed on protecting the economy and profits, as a reason for not addressing the current emergency.

'All too often biodiversity loss is put on a low priority in the pursuit of profits by big business/developers or is treated in a tokenistic way.'

Question 8: Are you a parent, guardian or carer of school aged children?



Base: 845

Question 9: How much do you agree or disagree with the following statements?

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
My children have a good knowledge about the causes and effects of biodiversity loss	75%	15%	19%	1%	237
My children's concerns about biodiversity loss have made me more concerned about an ecological emergency	48%	32%	19%	1%	235
My children want me / our household to take action to fight biodiversity loss	67%	21%	10%	2%	235
Educational establishments (schools, colleges etc.) could do more to increase children's knowledge of ecology and causes of biodiversity loss	92%	6%	2%	1%	236
Educational establishments (schools, colleges etc.) could do more to increase children's experience and understanding of nature around them.	95%	2%	2%	1%	237
Invasive non-native species have an impact on our biodiversity	80%	14%	3%	3%	831
Exploitation of animals and plants are having an impact on our biodiversity	84%	11%	2%	3%	831
I have a good knowledge about the causes of ecological change	78%	16%	5%	1%	832

Base: 836



When asked to provide any further comments about their children and education, it was noted that every school should have access to good quality useable greenspace, and that teachers should have the time, training and resources needed to ensure children and young people have the opportunities to learn about the environment and nature.

'Glasgow schools have a good record of delivering the curriculum for excellence through outdoor learning but teachers need more confidence and time and knowledge to be able to take children out of doors for lessons in Greenspaces.'

It was also highlighted that by allowing children to play and learn outside in nature, there are clear benefits to both mental and physical health, as well as giving them a better understanding and appreciation of their environment.

'Children need to be outside far more, science and art subjects can easily take place outdoors and do so in other countries such as Denmark, Finland and Norway. Being outdoors decreases obesity, reduces depression, increases general happiness and creates greater respect and understanding of nature.'

Respondents also stated that children and young people, through schools currently do a lot, and in fact it is adults who are not taking action and setting a bad example for younger generations.

Question 10: How much do you agree or disagree with the following statements?

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
Tackling the ecological emergency should be a priority for Glasgow	95%	3%	1%	-	816
Tackling the decline of animal and plant species should be a priority for Glasgow	92%	7%	1%	-	809
Creating, restoring and enhancing wildflower meadows for pollinators should be a priority for Glasgow	91%	7%	2%	-	813
Public sector organisations have a responsibility to make it easier for individuals to make environmentally-friendly choices	96%	3%	1%	-	813
Businesses have a responsibility to protect biodiversity on their land	98%	1%	1%	-	812
Invasive non-native species have an impact on our biodiversity	80%	14%	3%	3%	831
Exploitation of animals and plants are having an impact on our biodiversity	84%	11%	2%	3%	831
I have a good knowledge about the causes of ecological change	78%	16%	5%	1%	832

Base: 836

Question 11: How much do you agree or disagree with the following statements regarding tackling the Ecological Emergency?

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
My actions can help protect the diversity of animals and plants on our planet	92%	5%	2%	-	814
Reducing my own impact on biodiversity is not a personal priority	13%	5%	80%	1%	813
Businesses can help	97%	2%	1%	-	810
Public sector organisations can help	99%	1%	-	-	811
Actions of politicians at a local level can help	96%	3%	1%	-	810
Actions of politicians at a national level can help	98%	1%	1%	-	808
Actions of third sector organisations can help	95%	3%	1%	1%	807
Actions of educational establishments (schools, colleges) can help	97%	2%	1%	-	810

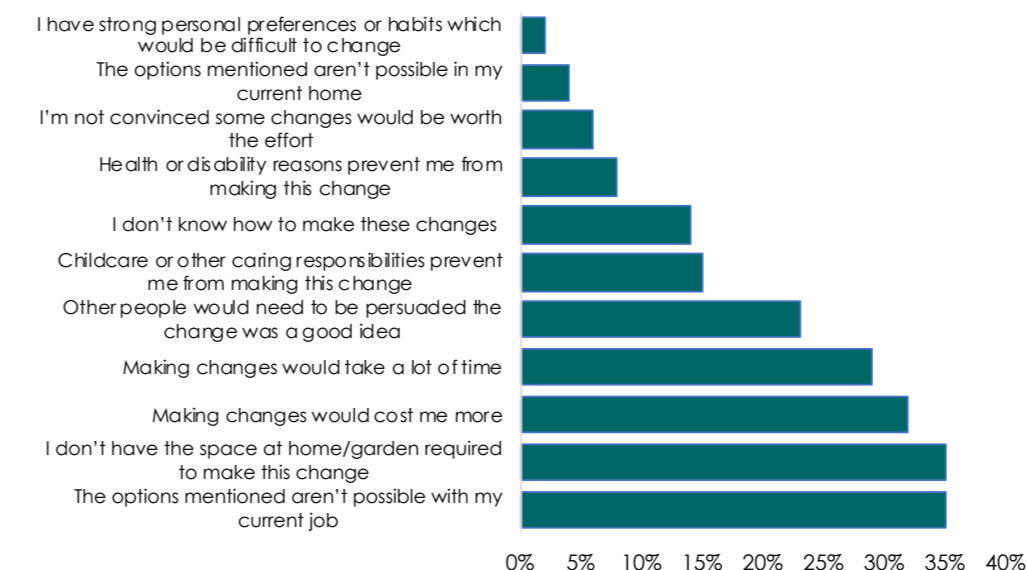
Base: 836

Question 12: In the next 12 months, how likely/unlikely are you to do the following:

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
Leave an area of grass long/weeds/dead wood in my garden	66%	6%	6%	22%	794
Plant wildflowers for pollinators in my garden/balcony/window box	77%	6%	6%	11%	792
Put up bird boxes and/or bird feeders in my garden	67%	7%	9%	16%	723
Create a garden pond	18%	11%	45%	25%	784
Grow my own herbs or food on my balcony, windowsill or garden	73%	8%	12%	7%	790
Use fewer chemicals in the home and garden	82%	6%	4%	8%	792
Use peat-free compost	64%	10%	4%	22%	788
Plant native berry bearing shrubs and/or trees to help feed birds	48%	16%	5%	1%	832
	12%	17%	23%	785	
Avoid disturbing breeding/nesting areas for wildlife in the garden	78%	4%	1%	17%	789
Help out at one of the city's local nature reserves or parks and greenspaces	46%	23%	25%	5%	789
Drop litter or dump rubbish as it can kill small animals	6%	-	83%	11%	787
Join a wildlife charity or other organisation that supports biodiversity	47%	25%	23%	5%	786

Statements	Agree	Neither nor	Disagree	Don't know/No opinion	Base
Buy souvenirs that exploit the natural world here or abroad	2%	4%	82%	12%	787
Contact a political representative to request action on biodiversity loss	50%	21%	26%	3%	784
Submit a response to a planning application due to greenspace or biodiversity issues	53%	20%	21%	5%	787

Question 13: Thinking about any areas where you personally would be willing to change if there were not barriers – what are those barriers?



Base: 699

Question 14: What else do you think the city's private and public sector organisations should be doing to help support Glasgow's biodiversity?

Respondents highlighted that the Council should lead by example both to the public and as an employer. The Council should practice the same actions and recommendations with its land and green space as it asks the public to do. The Council, as a larger employer within the city, should also put into practice schemes which it promotes to other employers around travel, energy efficiency and waste.

'They should be setting an example for everyone in allowing more areas to be less-intensively managed - so many public greenspaces are kept constantly mown, but there's no need for this as it's very bad for wildlife, and wastes a lot of money and fuel in mowing them.'

There was strong support for action to be take through the planning process to prevent the further reduction of the natural environment by protecting green space, trees or wildlife. Where this was not possible it was suggested that planning be used to enforce any loss or reduction is replaced.

'Insist that ALL planning applications must replace all lost and enhance biodiversity in line with statutory undertakers biodiversity duties. Insist that ALL planning applications must have a positive environmental impact equal to or better than



the capital carbon impact from construction of any development.'

Respondents highlighted the need for additional funding to be made available to support the initiatives needed. Funding needed to be increased and be provided long term to ensure that projects and schemes would be sustainable and effective. Respondents also mentioned the idea of financial rewards and incentives for residents and businesses who implemented green projects/ schemes.

Similarly, with previous answers provided, respondents wanted to see the Council increase the amount of green space across the city, through rewilding and re-purposing derelict and underused spaces.

Again, there was clear support for private and public sector organisations tackling the issues of transport within the city by reducing car usage, improving public transport and promoting active travel.

The use of education was again raised, both within schools and among the general public. There was support for raising awareness of the importance of action, especially the positive impact it would have on the environment and nature.

Food growing and waste reduction were also mentioned by respondents as actions which could be taken or implemented further by both private and public sector organisations.

Question 16: What barriers might the city's private and public sector organisations be facing that prevent them doing more to protect and enhance biodiversity?

The main barrier highlighted by respondents was resources, both in terms of funding and people.

'Lack of financial resources, lack of skilled personnel'

Respondents believed that resources being available and used correctly was critical in address the ecological emergency and would pose the greatest risk to its success. Respondents identified the previous and ongoing cuts to Council budgets and the impacts it has had and will continue to have on the environmental services, such as park maintenance, rangers and education provision.

Respondents saw this lack of funding and resources as a clear indication of a lack of political will to address to environmental and ecological issues facing the city. It was highlighted that there was greater need for political leadership both nationally and locally.

There was also a feeling that there was a level of apathy among people and organisations, both public and private, towards the challenges facing the city and beyond. This apathy causes a



lack of drive, enthusiasm and motivation and combined with an unawareness and lack of knowledge was preventing action being taken.

'apathy, conflicting priorities, worrying about the challenges happening today, hard to find time to prevent a crisis tomorrow.'

'Lack of awareness, lack of knowledge of how to make these Changes.'

'lack of knowledge on where to get resources or information about how and why they should protect and enhance biodiversity in the first place.'

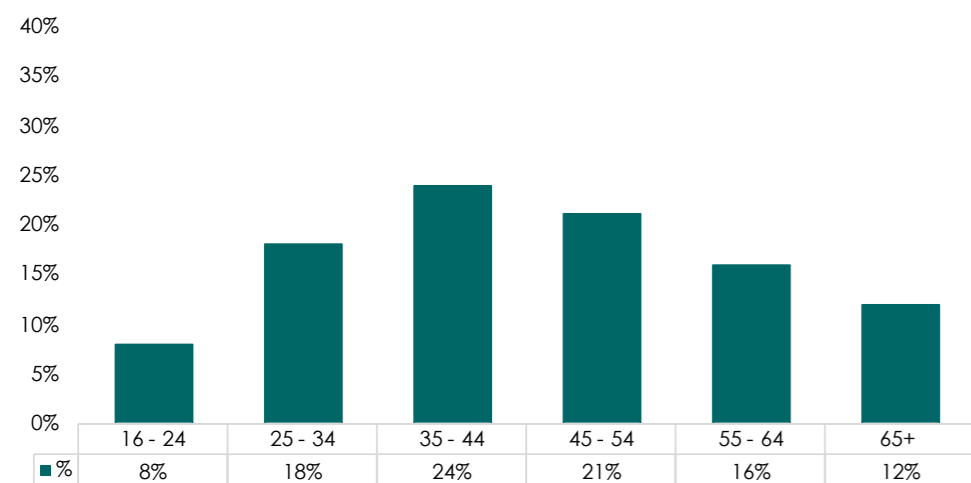
Respondents believed that the current economic system acted as a barrier to private companies tackling the ecological issues we face. With the focus on short term profits, especially where shareholders were involved, limiting their willingness to protect the environment.

'Fear of economic implications - focus on profit not environment for private businesses.'

About You

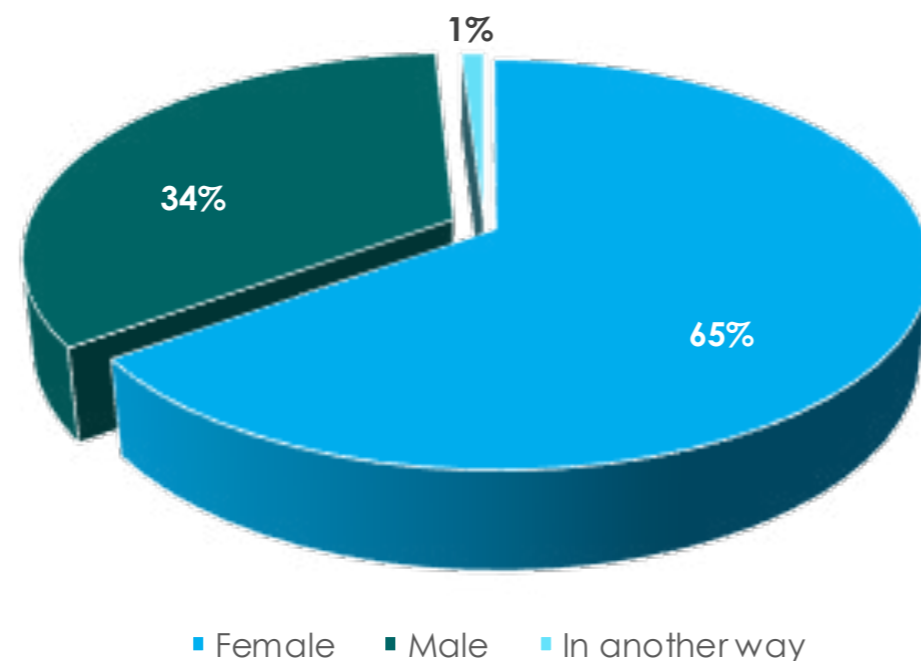
Respondents were asked to provide demographic information. This information was optional and can be used for both additional analysis and equalities monitoring.

Respondents of the consultation were self-selecting, and the following information provides further breakdown of those respondents.



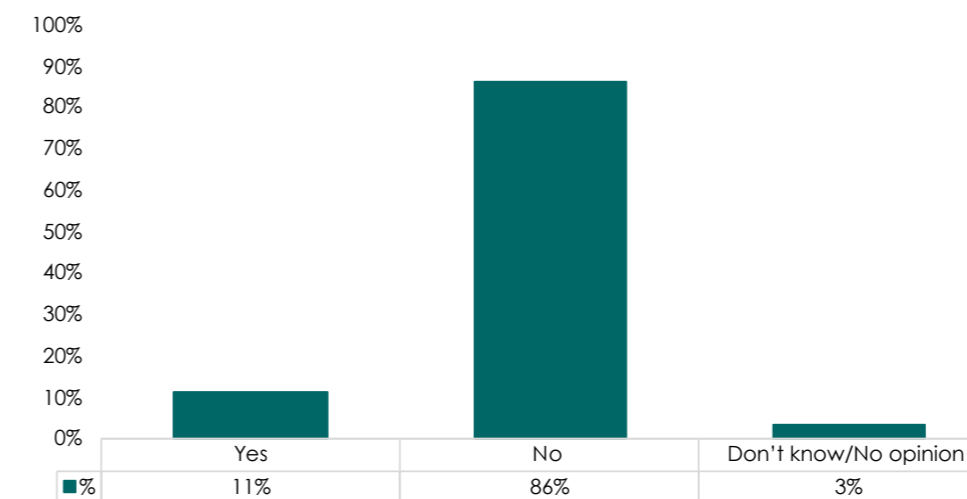
Base: 731

Question 18: Which of the following describes how you think of yourself?



Base: 744

Question 19: Do you have any long-term illness, health problem or disability which limits your daily activity or the work you can do? The main barrier highlighted by respondents was resources, both in terms of funding and people.



Base: 739

Question 20: Which of the following best describes your ethnicity?

Ethnicity	Percentage (%)
Scottish	62%
British	27%
Irish	4%
Other white background	10%
Mixed background	-
Indian	1%
Pakistani	*
Bangladeshi	-
Other Asian background	-
Caribbean	-
African	*
Other black background	-
Chinese	*
Any other background	-
Submit a response to a planning application due to greenspace or biodiversity issues	53%

Base: 733 (* less than 1%)

6.0 Appendices: Appendix D Public Ecological Emergency Survey Summary (March 2020)

The Short Life Working Group, having heard about:

- The recently designated Claypits Local Nature Reserve, and how the LNR designation process could be progressed as part of wider proposals to address Vacant & Derelict Land, provide for active travel and Sustainable Urban Drainage for a particular site, and deliver the Open Space Strategy locally, and
- The current or potential 'natural interest and/or educational value' of the following locations have asked officers to engage with stakeholders with regard to the potential for land near the following locations to be brought forward in future as proposed Local Nature Reserves, or as extensions to existing ones:

Binghams Pond
Bishop Loch LNR
Blairtummock Park
Castlemilk Park
Cathkin Braes LNR
Cadder Wood
Cardowan Moss LNR
Cleddans Burn
Commonhead Moss
Cranhill Park
Croftfoot Park
Crookston Wood



6.0 Appendices: Appendix E Biodiversity Duty Report.

Glasgow City Council will be submitting its Biodiversity Duty Report to the Scottish Government in January 2021.

As required by the legislation, this report covers the three years
April 2017- March 2018,
April 2018- March 2019 and
April 2019-March 2020.

Early Braes
Festival Park
Garscadden Burn Park
Hamiltonhill Claypits LNR
Househill Park
Hurlethill
Malls Mire
Red Road
Todd's Well
Dawsholm Park

