

Glasgow's Climate Plan

2026 - 2030

This document is draft and still has to be updated with images and Graphics

DRAFT

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Foreword

Glasgow, Our Dear Green Place

Cllr Millar Foreword

Glasgow, once the cradle of the industrial revolution, is proud to have built a growing reputation as a global leader in the fight against climate change. Having hosted the crucial COP26 climate summit Glasgow's commitment to creating a sustainable, resilient, and equitable future is clear - in fact it underpins our approach to creating a thriving city for our citizens, businesses, institutions, and visitors.

Since Glasgow's Climate Plan was published in 2021, Scotland has retained its net zero by 2045 target, 5 years ahead of the rest of the UK. However, Scotland has acknowledged that significant action is still needed, and the independent Climate Change Commission emphasizes that Scotland must act immediately and at rapid pace across all sectors to meet its deadline. Glasgow is committed to ensuring that our Climate Plan stays relevant and effective and mirrors this shift in the pace and scale of climate action needed.

Through this revision of Glasgow's Climate Plan, we have identified ways that we can continue to work collectively on projects at the pace and scale that address not only environmental issues but support the required transformation of our economy and help us address key social challenges such as child and fuel poverty. We know that the journey to net zero will require us to overcome hurdles, but if we make significant progress on climate projects, they will deliver co-benefits – such as warmer homes, cleaner air, and green job opportunities, while helping lift families out of poverty.

Within this plan you will read about pioneering initiatives like our Circular Economy Route Map, through which Glasgow is demonstrating that by working within communities, economic prosperity and environmental stewardship can go hand-in-hand. You will also see that Glasgow's dedication extends to nurturing a deep connection with nature, actively preserving and expanding its green spaces for the well-being of both its residents and the environment. Glasgow's ongoing work to develop the Model for Climate Investment, has the potential to unlock the finances needed to deliver our climate ambitions, and deliver on key projects as outlined in our Net Zero Routemap and Local Heat and Energy Efficiency Strategy.

At its heart, this plan retains Glasgow's commitment to become a net-zero carbon city by 2030. This target has driven significant action across the city and has enabled significant success and progress to be made that would otherwise not have been realised. However, now is not the time to slow down or step back from these targets. In fact, this revised plan will show that to continue progress towards this target, we need to further enhance our collaborative approach to prioritising and delivering action. As a result, the revised plan brings together the essential mitigation activities with the equally important adaptation actions needed to make our city more resilient to the impacts of climate change and get as close to net zero as possible by 2030. This revision therefore supersedes not just Glasgow's 2021 Climate Plan but also our 2022 Climate and Adaptation Plan.

We believe that Glasgow stands as an inspiring example of a city actively and passionately building a greener, more equitable, and more resilient future for all. Our recent independent evaluation through the Carbon Disclosure Project and Council Climate Action Scorecards also illustrate our position as a leading city committed to taking climate action.

This plan should make clear Glasgow's undiminished ambition to radically reduce our contribution to climate change, tackle poverty in our city, increase opportunity and equity, and to do it alongside our great citizens and institutions. Success will require us to redouble our efforts and work in partnership with communities and all sectors of the economy across the city to secure a lower carbon future for Glasgow.

<<Photo>>

Why does climate action matter?

Benefits for everyone

The range of Climate actions outlined in this plan contribute to reducing our emissions and help make us all more resilient to the existing impacts of climate change, **but the wider positive gains for us across the city reach much further**. Understanding these wider benefits helps us all to understand the true value of climate action. It also helps us to ensure that tangible benefits are felt by residents and businesses across the city. <<Infographic>>

Focussing on a Just Transition to Net Zero carbon is in the interests of everyone, whether motivated by improvements to our health and wellbeing, addressing fuel and child poverty, supporting community empowerment and cohesion, or to reduce our contribution to, and the impacts of, the climate emergency, we need to continue to take action. Within our Climate Plan we have outlined 18 benefits of climate action for Glasgow, which can be seen below.

<<Chart below will be enhanced to include icons for each of the 18 benefits >>

a	Reduced child poverty	g	Increase in physical activity	m	Innovation opportunities e.g. through the Circular Economy
b	Reduced fuel poverty	h	Improvements to mental health	n	Green jobs / skills / education opportunities
c	Better building conditions for a changing climate (hot / cold / damp / energy) - resilient homes and buildings	i	Ecosystem recovery – animals and plants	o	Efficient delivery of services
d	Improved community agency and democratic involvement	j	Reduced air and noise pollution	p	Improved accessibility of public transport
e	Improved community cohesion, collaboration and ownership	k	Increased access to green space	q	Safer travel, including walking and cycling routes
f	Access to community-led funding / projects	l	Improved quality of local spaces, greening, reduced waste / litter	r	Improved access to fresh locally-produced food

Each of the benefits outlined above and highlighted throughout the climate plan, demonstrate that the actions within will make a real difference to the lives of people in Glasgow. As you read through the climate plan, you will see the benefit icons used to illustrate the varied benefits each action will deliver.

Working Together

We can't address our challenges or meet our climate goals alone—we need our businesses, institutions, and citizens to all continue to contribute to delivering a happier, healthier, and equitable city. Climate change affects everyone differently and it is crucial that the lived experiences and priorities of everyone in the city are considered. It is crucial that everyone feels supported and enabled to share those experiences and have agency in the design and delivery of mitigation and adaptation actions. Our actions in the fight against the climate and ecological emergency must be developed and delivered with our citizens, communities, and businesses, not done to them. Through embedding engagement with citizens, businesses and communities into our climate work, we will strive to make sure climate activity is built upon the input of the people of Glasgow, creating meaningful impact and change. Glaswegians have shown their passion to tackle the climate and ecological emergency, raising their collective voice to support action both in the city and internationally, it is critical that we continue to listen to our citizens and seek to address those issues within our control, and supporting those outside our control. We will support organisations across the city to work together and learn from each other to make sure that climate action is underpinned by what is important to the people of Glasgow.

The decisions that we all make on a daily basis can make a big difference to our progress towards our climate goals. The actions highlighted within this plan aim to enable and support all citizens to make positive climate decisions wherever possible.

Why do we need a climate plan?

Combating climate change and dealing with its consequences is a global issue that needs to be addressed internationally, domestically and locally.

International Context

The annual UN Conference of the Parties on Climate Change (COP) drives global action on climate change. The 2015 Paris Agreement, adopted by 195 nations at COP21 is a legally binding international treaty to combat climate change by holding global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. It requires all countries to submit nationally determined contributions (NDCs) for reducing emissions, adapt to climate change impacts, and provide climate finance.

Glasgow hosted COP26 in 2021 where the Glasgow Pact was adopted, with agreements to build resilience to climate change, to curb greenhouse gas emissions, to provide finance to developing countries, and for the first time, nations were called on to phase down unabated coal power and inefficient subsidies for fossil fuels. Further COPs have maintained a clear intension to keep 1.5°C within reach, mobilised more funding for developing countries, linked climate action with nature conservation, committed to develop renewable energy further, ramped up practical solutions to mitigation and adaptation and developed a centralised carbon crediting mechanism.

However, 2024 was the first time the global average temperature was over 1.5°C above the pre-industrial average and based on current policy settings, the International Energy Agency's (IEA) World Energy Report 2024 (October 2024) advised that *“global carbon dioxide emissions are set to peak imminently, but the absence of a sharp decline after that means the world is on course for a rise of 2.4 °C in global average temperatures by the end of the century, well above the Paris Agreement goal of limiting global warming to 1.5°C.”*

In advance of COP30 in November 2025, a reportⁱ from the World Meteorological Organization (WMO) in October 2025 advised that the global average concentration of CO₂ surged by 3.5 ppm from 2023 to 2024 - the largest increase since modern measurements started in 1957.

UK Context

At a national level, the UK has committed to reach Net Zero greenhouse gas emissions by 2050, with any residual greenhouse gas emissions balanced by removals, and in November 2024 the UK Prime Minister announced the UK's Nationally Determined Contribution (NDC) target to reduce all greenhouse gas emissions by at least 81% by 2035, compared to 1990 levelsⁱⁱ.

The UK Carbon Budgets are provided by the UK's Climate Change Committee (CCC) and set out a balanced pathway to achieve credible emissions reductions across different sectors of the UK economy from 2025 to 2050. In February 2025, the CCC advised "The Seventh Carbon Budget should be set at 535 MtCO₂e for the period 2038-2042, which will require UK emissions to fall to 87% below their 1990 levels."ⁱⁱⁱ

The Committee also reports to UK Parliament on adaptation measures and provided its latest report on progress in adapting to climate change in April 2025. The CCC advised that the UK's preparations on climate change were inadequate and that it "must act without further delay to improve the national approach to climate resilience"^{iv}.

Scottish context

The Climate Change (Scotland) Act 2009 established a statutory framework and introduced a greenhouse gas emissions target of 80% reduction by 2050 from the baseline year 1990, with an interim target of 42% by 2020.

The Act also imposed duties on public sector bodies, requiring that they act in a way:

- *Best calculated to contribute to the delivery of the Act's emissions reduction targets.*
- *Best calculated to deliver any statutory adaptation programme.*

In direct response to the UN Paris Agreement, the Act was amended by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 which set out a greenhouse gas emissions target of 100% reduction by 2045 from the baseline year 1990, or

in other words, identifying a “net-zero emissions target year” of 2045, with interim targets of 56% by 2020, 75% by 2030 and 90% by 2040. However in April 2024, the Scottish Government dropped the 2030 interim target of 75 percent with the Net Zero Secretary stating that the Scottish Government “accepts” that reductions targets for 2030 are now unobtainable. This follows a report published by the UK government’s independent advisors – the Climate Change Committee (CCC) – which warned that Scotland’s 2030 target was no longer credible^v. The 90 percent emissions reduction target by 2040 and net zero emissions target by 2045 remain in place.

In 2025, the Scottish Government produced a draft climate plan template for Scottish Local Authorities and advised that, when developing their own climate plans, they should identify corporate and area wide activities in terms of mitigation (reducing emissions), adaptation and acting in the most sustainable way, in other words they should cover the full scope of the climate change duties.

It further advised that LA Climate Change Plans (CCPs) should cover:

- corporate (organisational) assets and activities and the emissions generated by these, including relevant scope 3 emissions
- area wide activities and emissions, many of which will lie outside the control of the LA but within their sphere of influence.

Also that climate change duties require to be met as LAs ‘exercise [their] functions’ which include:

- corporate operational functions
- delivery of public services within the authority area
- policy making functions or influence
- discharging of other mandatory duties
- exercise of regulatory powers.

Glasgow Context

Glasgow City Council's Strategic Plan puts the challenges and aspirations of Glasgow's people and communities at the heart of every council decision. As part of its purpose, it will shape the authority's response to the climate emergency in line with the broad ambition of the UN's Sustainable Development Goals. The plan sets out four Grand Challenges including:

Fight the climate emergency in a just transition to a net zero Glasgow

Each Grand Challenge is supported by missions that cover ambitious aims including delivering sustainable transport, supporting residents into sustainable and fair work and becoming a net zero carbon city by 2030.

The plan is reviewed annually to ensure it remains fit for purpose and to update commitments in line with changing circumstances.

Glasgow declared a climate emergency in 2019 and the subsequent 2021 Climate Plan influenced the current Strategic Plan and continues to support the Grand Challenges, missions and commitments.

Despite the Scottish Government's relaxing of its interim targets, the council remains committed to its Net Zero target of 2030, seeing this level of ambition as necessary to continue to spur on further progress in climate action. While it is recognised that this goal will be challenging to meet, the urgency of the climate emergency requires cities (where density presents opportunities to progress more quickly than in other areas) to set a faster pace of action. Glasgow will continue to strive towards its ambitious 2030 target, and to use this sense of urgency to galvanise action across the public and private sector.

A Resilient City

Climate impacts are not bound to specific places; they affect all of Scotland and the world in different ways. They can also affect each of us in different ways depending on our community, and economic and social background. This means we need to work together across the city, regionally and nationally to take action.

Glasgow is already experiencing warmer temperatures, more heavy rain, and drier summers due to climate change, and this will continue. We must both adapt to these changes (adaptation) and reduce our emissions (mitigation) to minimise the impacts of climate change. You can explore more detailed information on the impacts on Glasgow [here](#).

There is however significant National governance associated with Adaptation action. The Scottish National Adaptation Plan 3 (SNAP3) sets out the actions that the Scottish Government will take between 2024 and 2029 to increase resilience to climate impacts. It is clear that local authorities play a key role in adaptation and this plan aims to support to all five outcomes set out in the national approach.

As a key partner in the Metropolitan Glasgow Strategic Drainage Partnership, we continue to deliver schemes across the city which reduce flood risks and impacts, improve water quality, bring greenspace improvements through blue-green interventions, and increase drainage capacity. Along with our work on biodiversity and nature based solutions we are taking action to tackle flood and heat risk.

Glasgow City Council also has a responsibility to prepare our public services for current and future climate risks. As a service provider for education, care and critical infrastructure, understanding the risks and developing actions to increase resilience is essential for all in the city. Supported by the Adaptation Capability Framework, we can ensure that adaptation action is embedded throughout council operations.

We cannot do this alone. By participating in the available networks, including Climate Ready Clyde and the Public Sector Climate Adaptation Network, we will support action in the city and at a regional scale.

The diagram below shows some of these key policies, plans and milestones that set the scene for this revision of the Climate Plan.

<<This chart is currently available at www.glasgow.gov.uk/Sustainability. It will be enhanced for the final version of this document>>

Click on each image to find out more

Glasgow Mitigation & Adaptation



A look at our emissions journey

Current emissions overview – the data

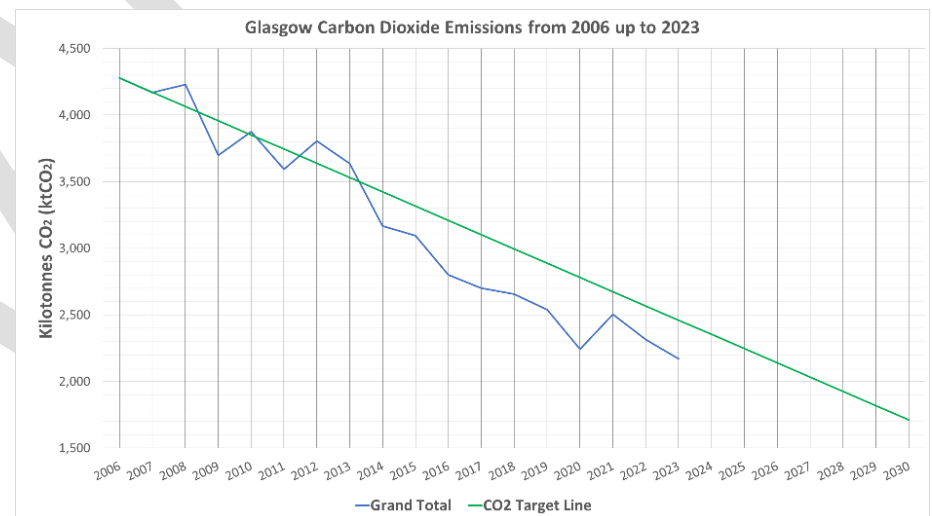
Glasgow has been tracking its carbon emissions for 20 years using data provided by the UK Government. This data is published 2 years in arrears and so the latest information we have at publication relates to 2023.

We met our initial 2020 target of a 30% reduction in carbon emissions by 2015, five years ahead of schedule. Since the baseline year of 2006, Glasgow has reduced its emissions on average by **2.9% per annum**.

Glasgow's carbon dioxide (CO₂)^{vi} emissions in 2023 totalled 2,170.4 kilo-tonnes of carbon dioxide (ktCO₂). This represents a **6.2% reduction from the 2022 total of 2,314.1 ktCO₂** and a **49.3% reduction in emissions from the baseline^{vii}**.

In 2023 Glasgow reduced its emissions by **3.4%**. By maintaining an average annual reduction of 2.9% reduction, emissions can be forecast to reduce by **69.6%** by 2030 from the baseline – this would be a considerable achievement for a post-industrial city like Glasgow. It should be noted however that emissions reductions get increasingly more difficult as we continue to make progress on the low hanging fruit and have to tackle the more stubborn emissions.

<< This chart will be enhanced in the final version >>



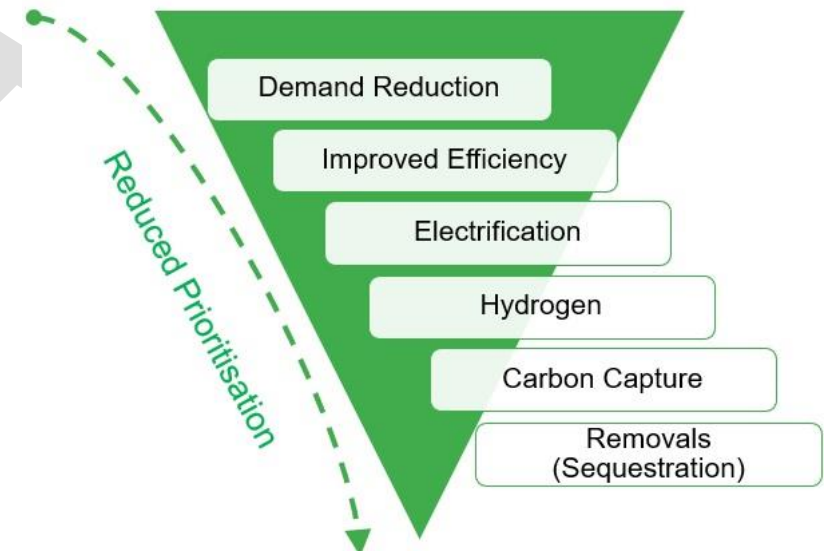
Glasgow's Net Zero Carbon 2030 target

One of the primary actions within the original Climate Plan was to develop a city-wide Net Zero Routemap, the aims of which were:

- help us develop a deeper understanding of the data and science that underpins effective prioritisation of actions, which helps us progress towards our Net Zero carbon target of 2030
- develop an enhanced methodology for tracking and management of emissions reduction activity and create a tool which provides a transparent public facing engagement mechanism
- and to develop a rough order of magnitude cost breakdown to help inform the funding required to implement these actions.

The development of Glasgow's Net Zero Routemap includes the use of a software platform (ClimateView), which assists us in addressing the evolving challenge that climate change presents. Alongside the development of the Net Zero Routemap for Glasgow, there is complementary work being led by the Scottish Climate Intelligence Service (SCIS) at a national level to ensure that all public sector organisations are taking a consistent approach to emissions tracking and recording, which also uses the ClimateView tool.

Energy, Heat, Transport and Waste make up over 95% of the City's emissions, and therefore these were the focus of the study. The hierarchy used to assess the priority and planning of mitigation actions was assessed in line with the Climate Change Committee (CCC) Pathway to Net Zero priorities here:



As a result of this assessment, two pathways were developed.

A **projected pathway**, which forecasts emissions based on the ambitions of the current policy and strategies, and an **accelerated pathway**, which has been modelled on what could be achieved if many of the barriers were removed and opportunities accelerated, including limiting reliance on carbon capture and removals as much as possible. Both pathways are built using the same inventory data, but the type of mitigation action and the speed at which action happens differs between pathways. The projected pathway gets us to roughly a 60% reduction of our emissions from baseline figures by 2030. **The accelerated pathway gets us to roughly an 80% reduction in emissions. The City's net zero target is based upon reducing emissions as much as is possible whilst tackling the residual emissions through carbon removal.** Based on the average percentage emissions reductions seen since 2006, we are exceeding the projected pathway but fall short of the accelerated pathway and the emissions gap outlined in each pathway will require reliance on carbon removal, through activity such as carbon capture or sequestration.

Through our annual emissions reporting we can see the positive impact that city policies and practices are having alongside national policy and activity. This has been underpinned by the ambitious Net Zero carbon 2030 target, which has stimulated a different pace and scale of delivery that would not have been achieved without it. Further emissions reductions are possible, and we can continue to deliver projects which can have significant positive impacts on our emissions but we need to activate different approaches and levers to change.

Within this revision of the Climate Plan, we have committed to continuing to strive towards our Net Zero carbon target by 2030. Actions which lead to the activation of different levers have been prioritised. These include the development of the Model for Climate Investment, and the delivery of large-scale renewable energy supplied heat networks. More information on our prioritised actions can be found in the Action Plan.

And we have, for the first time, developed a **Carbon Budget** which will provide us annual carbon emission targets to aspire to.

Having annualised science-based carbon budgets enables us to track and record progress at a much more granular level. We will be able to see where we stand in relation each yearly budget and understand if we remain on or ahead of target or falling behind the targets and need to address why this is happening.

The chart below shows the carbon budgets set for the city up to 2030. <<this chart will be enhanced for the final version>>

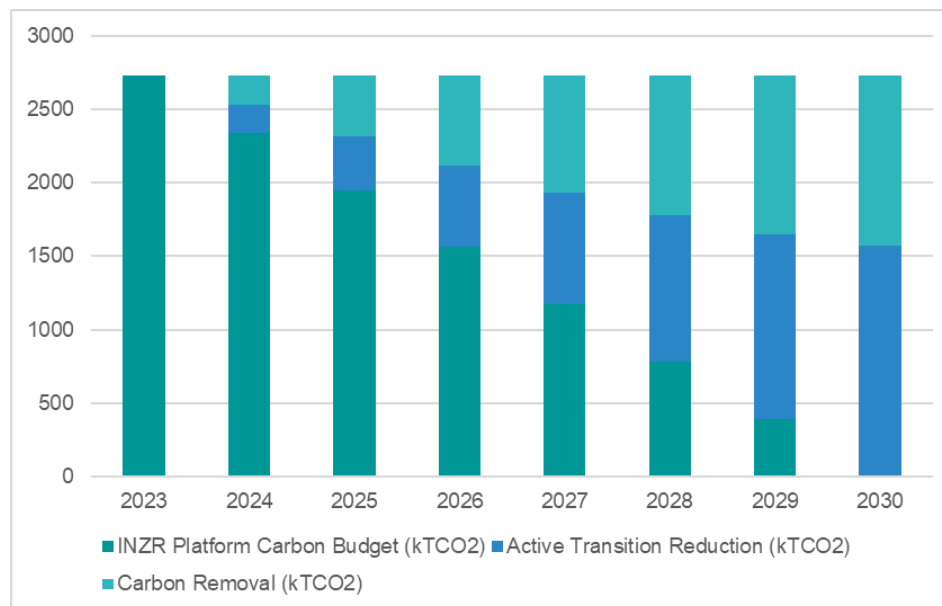


Figure xx: Carbon Budget projection for Glasgow based on the Net Zero Routemap projected pathway

The development of the Routemap has highlighted that a systems-based approach to deploying net zero interventions is required to facilitate systemic change at the pace required. Actions should not be viewed in isolation and need to be considered holistically to ensure that the full impacts of each are understood and delivered with minimal negative impact to those living and working in the city.

Broadening our emissions reporting

As outlined, we are committed to working towards Glasgow's Net Zero Carbon 2030 target. However, since Glasgow started tracking its emissions journey, there have been significant improvements in what emissions data is available. As a result, one of the key priorities within this plan is to understand how best we can transition from monitoring and reporting on only carbon dioxide (CO₂) to a more comprehensive approach which includes other greenhouse gases, starting with methane and nitrous oxide. Widening our monitoring of greenhouse gas (GHG) emissions is another step towards having more complete, scientifically-aligned,

and transparent climate action. This proposed development in our emissions reporting has been stimulated by our role as an EU Mission City, which requires us to recognise that while CO₂ is the most prevalent GHG, other gases like methane (CH₄) and nitrous oxide (N₂O) are significantly more potent at trapping heat.

As an EU Net Zero Mission city we will access the support of specialists within the European Mission to help us through this change in reporting, and to ensure that we align the requirements on us both as an EU Mission City and also through our statutory reporting. The actions within the plan ensure that we can share a clear narrative on what changes and impacts will result.

Glasgow's Wider Achievements

But our work on climate isn't just about emissions reduction, some of the city's wider climate achievements since the launch of the Climate Plan in 2021 are shown here and more details are available at www.glasgow.gov/Sustainability.

<<this information will be enhanced into infographic in final version>>

2021

Awards / Memberships	Policies / Strategies	Activities
Glasgow hosts COP26 UN Generation Restoration Role Model City Leader of GCC invited to be a member of the Advisory Board of the Cities Commission for Climate Investment (3Ci) Glasgow is the first UK city to achieve EarthCheck Benchmarked Community status under the EarthCheck Sustainable Destinations Programme.	GCC signs the Edinburgh Declaration on post-2020 global biodiversity framework Glasgow becomes first UK city to sign the Circular Cities Declaration Glasgow's Children and Young People's Climate Charter launched GCC signs the C40's "Divesting from Fossil Fuels, Investing in a Sustainable Future" Declaration (Clean Investment Accelerator) Council carries motion to move away from fossil fuel pension investments Signed the Glasgow Declaration which included Climate Action in Tourism to lead and align climate action across tourism stakeholders and	Clyde Climate Forest launched Sustainable Glasgow Website www.sustainableglasgow.org.uk relaunched Climate change conversations take place Sustainable Glasgow launches the Sustainable Glasgow Green Economy Hub Charter

	Glasgow Food and Climate Declaration which brings together local and regional authorities from across the world to speak with a unified voice in committing to putting into practice integrated food policies to tackle the climate emergency. Glasgow Greenprint for Investment published Glasgow Green Deal launched Glasgow City Food Plan published	
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2022

Awards / Memberships	Policies / Strategies	Activities
Glasgow named as a Scottish hub for ICLEI UrbanBYNature Glasgow selected to participate in the EU Mission For 100 Climate-Neutral And Smart Cities by 2030	Council's Net Zero and Climate Progress Monitoring City Policy Committee formed Council's Climate and Sustainability Board established Just Transition Commission and Working Group formed Strathclyde Pension Fund becomes a signatory to The Paris Aligned Investment Initiative Net Zero Asset Owner Commitment. Active Travel Strategy published	Low Emission Zone introduced New electric shuttle bus at Pollok Country Park MGSPD City Deal Drumchapel SWMP completed SWG3 switches on its BODYHEAT system Glasgow's Smart Canal created by North Glasgow Integrated Water Management System (NGIWMS) in partnership with Scottish Canals. This will mitigate flood risk and enable regeneration

	Glasgow became the only UK city to join the Malmö Commitment on Inclusive and Equitable Communities that empowers local and regional governments to prioritize all people and social equity at the core of local sustainable development.	
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2023

Awards / Memberships	Policies / Strategies	Activities
Glasgow awarded A Grade for Adaptation by the Carbon Disclosure Project Glasgow City Council in Top 15 of UK Climate Action Scorecard	Local Heat & Energy Efficiency Strategy (LHEES) launched Glasgow City Council's Sustainable Procurement Strategy published Glasgow City Council's Plastics Reduction Strategy published Just Transition Skills Action Plan approved New Conditions of Let for Events in Glasgow parks Glasgow Tree Plan Portal launched The Thriving Glasgow City Portrait published	Grounds for Recycling campaign supported over 60 of Glasgow's cycle-friendly coffee hangouts and local roasters to join forces and turn used coffee grounds into soil improver. Step Up to Net Zero created green jobs and supported 29 businesses take action towards net zero and circular goals. Glasgow Circular Supper Club launched by the Circular Glasgow Network MGSPD City Deal Garrowhill/Ballieston and Hillington/Cardonald Surface Water Management Plan Phases 2 and 3 completed

2024

Awards / Memberships	Policies / Strategies launched	Activities
Glasgow in Top 20 of the Global Destination Sustainability Index (#2 in UK) Leader, Glasgow City Council invited to become Chair of the Resilient Cities Network until 2026 A Leadership city, Glasgow joined the Carbon Disclosure Project's (CDP) cities A-list, achieving a score of A by demonstrating best practice standards across adaptation and mitigation.	Circular Economy Routemap updated Just Transition Implementation Plan published The Glasgow Transport Strategy – Spatial Development Framework approved Local Biodiversity Action Plan (LBAP) Delivery Plan 2024-2029 Forestry and Woodland Strategy approved Food Growing Strategy – plots to increase to 1,391 across the city by 2026/27 Model for Climate Investment with £4.2m budget approved Net Zero Routemap published The Council's Carbon Management Plan 3 (how the Council will manage emissions across its own estate) published Glasgow City Council passed a motion to endorse calls for a Fossil Fuel Non-Proliferation Treaty.	Glasgow's inaugural Climate Week City Changemakers Programme developed Funding secured for restoration of degraded peatland at Millerston Moss Climate Ready Modern Apprenticeship programme created for GCC Growing Spaces Map enhanced Solar PV arrays fitted on Council estate Work on property retrofit moving forwards. Completed delivery of the Heat and Energy Efficient Scotland: Area Based Schemes (ABS) programme. South City Way active travel route completed Avenues project progressed Over 200 secure cycle storage facilities installed with plans for expansion

		Over 300 EV Chargepoints in place and new concession arrangement progressed
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2025

Awards / Memberships	Policies / Strategies	Activities
Leader of GCC Chair of the Political Oversight Group for Scotland's Climate Delivery Framework Glasgow accepted as a European Net Zero Mission City Glasgow Joint Top in Scotland in Council Climate Action Score Cards. Glasgow ranked #1 in UK and #5 in Europe in the Global Destination Sustainability Index	Circular Economy Route Map updated	Net Zero Neighbourhood Project launched (3Ci) Govanhill £600k LEZ Community Climate Project Support Fund awarded City Deal Canal and North Gateway project providing housing and active travel networks delivered Glasgow's Climate Week Glasgow hosts the international Carbon Neutral Cities Alliance (CNCA) annual conference Climate Municipal Investment (CMI) launched to raise £1m for renewable projects.

Wider Influences on the Climate Plan

While good progress has been made, further opportunities can be identified including availability of better information, and technology. There are also many challenges, as well as a changing social and political landscape, and developing legislation, all of which now requires that the Climate Plan undergo a revision.

This revision considered the following:

Challenges

As part of the review, challenges and key risks were identified and a risk assessment was conducted. Key risks and mitigations are identified later in this Plan.

Our Climate Plan has been updated to include new and updated actions to ensure we deal appropriately with challenging objectives and support us in how we manage the delivery of the plan. Some original actions have also been removed following review if the challenge faced is too great for the city alone to deal with.

Resources and Engagement

The Climate Plan sets out a target for the city as a whole and therefore it relies on involvement of residents, organisations, and visitors to Glasgow. Prioritising engagement across all the diverse groups requires resource and an understanding of each community. As acknowledged by the Climate Change Commission, influencing behaviour change is a critical aspect to working on climate and adaptation projects. But finding capacity to make the changes required alongside the day-to-day activities necessary for the running of home life, organisations and services vital to the city, is a challenge.

At this point in our journey, Glasgow understands the breadth of resources needed to deliver on most aspects of this Climate Plan. This is being supported at a national level by the development of the Scottish Climate Intelligence Service and the range of support available through organisations such as the Sustainable Scotland Network. Glasgow will continue to advocate for additional support and resource to help progress climate action.

Our Climate Plan places a high priority on communication and engagement with individuals and groups across the city, promoting the breadth of benefits of participation.

Funding

There continues to be financial challenges in bringing about the scale and pace of the transformation required to reach our aspirations and targets for Net Zero Carbon by 2030. The development of Glasgow's Net Zero Routemap provided rough order of magnitude costings for each mitigation activity, but adaptation projects are still largely under-developed in terms of cost modelling. Therefore, whilst we have an improved understanding of the costs, there is still a need to identify and access the funding for the delivery of many aspects of the Climate Plan.

Our Climate Plan includes new objectives around Climate Finance and Green Economy recovery to address this challenge.

Governance and progress tracking

Governance mechanisms are important in helping us to achieve our aims of a more equitable, sustainable, and low carbon city. Inconsistent use of measurable outcomes has made monitoring and reporting of progress more difficult.

Our Climate Plan has been developed with learning from the Net Zero Routemap which has provided the scientific evidence and basis for prioritising climate action. The Plan is costed where this is achievable, and includes target dates, measures and sources of data. A Carbon Budget will keep the focus on tracking our progress.

Accelerating climate change

The rate of change of climate change is accelerating and so the pace of transformation will need to increase. There is also a need to ensure there is more focus and prioritisation of actions that can bring about the greatest improvements for people, nature and place.

The outputs from work such as the Net Zero Routemap, LHEES, Circular Economy Routemap, and Thriving City Portrait have provided a pathway and guidance on how to meet our critical objectives and priority areas for action have been identified.

Carbon removal

Glasgow's aspiration is to be net zero carbon by 2030 and as outlined by the Net Zero Routemap, achieving this will require the use of carbon capture and removal methods. It is acknowledged that the city does not have enough land for the volume of trees required to capture the levels of residual carbon emissions. Carbon capture and removal options that might be suitable for our dense urban area are not yet mature enough for consideration. However we are working with the Carbon Neutral Cities Alliance to understand more fully the potential options available to us and are advocating for a national approach to carbon capture and removal.

Our Climate Plan adds a new objective to identify and implement a citywide approach to carbon sequestration in line with a national approach.

Opportunities

This review allowed us to consider additional activities that could be included in the Plan and improve how we communicate about and socialise the Plan.

Broader context

In August 2023 Glasgow created its Thriving City Portrait, which presents a vision for the future of how Glasgow can thrive within planetary boundaries. The holistic approach of the Thriving Glasgow Portrait encourages us to consider the interactions and wider

benefits of social and climate actions as we move forward in this plan. The definitions act as a guide to inspire collaborative action and achieve a shared vision of a future Glasgow.

In developing our Climate Plan, we considered the range of themes included in the Portrait as well as how aspirations could be better communicated.

Wider Benefits

It is acknowledged that climate action can have a positive effect on other aspects of city life including addressing fuel and child poverty.

Our Climate Plan takes the opportunity to communicate these wider benefits as part of activities usually described as climate action.

Technology

The rise in the use of Artificial Intelligence (AI) creates complexities regarding positive and negative impacts. On one hand there is undeniable great opportunity in improved data management and interpretation, as well as expected economic benefit, but the infrastructure required can have environmental consequences – with a recent report by the BBC citing that data centres in Scotland are using enough tap water to fill **27 million half-litre bottles a year to assist cooling.**^{viii} However, there may be potential heat network benefit from data centre cooling.

Our Climate Plan addresses the expansion in the use of data and the infrastructure required to support it.

Priorities

The information obtained through the Net Zero Routemap has provided a pathway and guidance on how to meet our critical objectives allows us to determine a clearer prioritised approach to how we deal with the climate challenge.

Our Climate Plan has been updated to show our Priority activities as well as new areas for action.

Broader emissions reporting

Glasgow can capitalise on our networks and obtain support from global agencies. This means we can now look to gain expertise in developing our reporting capabilities.

Our Climate Plan includes actions to include reporting on Scope 3 and broader greenhouse gas emissions.

Resilience

We are already seeing the effects of climate change on our city. Glasgow must adapt to new issues and prepare for further impacts.

Our Climate Plan now incorporates Adaptation actions alongside mitigation activity.

International and National landscape

International Policy

Since the publication of the Glasgow Climate Plan in 2021, the international landscape has been unsettled.

From summer 2021, with the easing of pandemic related restrictions, global economies began opening up and energy prices start to increase. This was referred to as the “**cost of living crisis**”.

The Russian invasion of Ukraine in February 2022 exacerbated wholesale gas price rises and tipped the world into a **global energy crisis**.

This has impacted both energy supply and energy prices.

In the UK in October 2021 the Price Cap level increased with Ofgem citing a 50% increase in the wholesale price of gas. The Ofgem Price Cap increased again by 54% in April 2022 and continued to rise until October 2023. Energy prices have fallen since summer 2023 but are still well above pre-energy crisis levels and a further rise in the price cap was implemented in October 2025.

Even those not in fuel poverty (as defined by the UK and Scottish governments) may struggle with their energy bills with Ofgem, advising that money owed to energy suppliers as at June 2025 is at a record high of £4.4bn^{ix} and the UK Government advising that default rates for payments of energy bills by direct debit were at a record high^x. It is expected that there is little prospect of large cuts to bills in the near future.

In this revision of the Climate Plan we have considered how actions relating to climate change can also address the real issues of fuel poverty and family poverty resulting from changes in energy pricing.

In addition to the global conflicts affecting energy, the policies of the administration in the USA, one of the largest global powers, have led to concerns around climate change action. The USA first attempted to withdraw from the Paris Agreement in 2020 and formally withdrew in 2025 with this coming into effect in January 2026. This impacts on the global ability to reduce carbon emissions and also sends a message that the climate agenda has been downgraded in priority. The USA also seeks to reduce financial support to other countries for climate change mitigation and adaptation efforts significantly impacting the reach of climate efforts.

In our Climate Plan we place communication and engagement as a key priority in addressing the climate challenge.

Energy supply and demand

The global demand for energy rose at a faster-than-average pace in 2024^{xi}, resulting in higher demand for all energy sources, including oil, natural gas, coal, renewables and nuclear power. The greatest increase was for electricity and following on from 2023 when the volume of renewable energy generated across the world broke all previous records^{xii}, in 2024 it was expected that **renewables would account for almost half of global electricity generation by 2030, with the share of wind and solar PV doubling to 30%**^{xiii}. However, the outlook for growth of renewables has been reduced slightly by 5% since last year, predominantly due to global policy changes in China and the USA (which sees a reduction of 50%)^{xiv}

In the UK, achieving net zero will greatly increase electricity demand and it should be noted that the UK is a net importer of energy - in 2024 43.8% of energy used in the UK was imported, up 3.4 percentage points on 2023. This means the UK is reliant on electricity supply from other nations and is vulnerable to global conditions.

In 2024 UK output from coal, oil and gas were all at record low levels with 21.7% of its primary energy obtained from low carbon sources, up from 20.8% in 2023, with 37% of this from bioenergy, 25% from nuclear, and 20% from wind. This can in part be related to price reductions for many clean energy technologies worldwide and in 2024 clean energy investment outnumbered fossil fuel by a factor of ten.^{xv}

While this all shows positive continued (albeit slightly slower) growth of renewables in place of fossil fuels, this raises challenges about the demand on electricity networks. In our Climate Plan we comment on the need to engage with Government and energy distributors to ensure long term viability of much needed transmission infrastructure.

Domestic Policy

UK and Scottish government policy has also impacted on Climate activity.

UK Carbon dioxide emissions were 4.1% lower in 2024 than 2023 and are now 18% lower than 2019. The largest driver of the long-term fall in emissions has been the decrease of emissions from power stations, due to the shift in fuel use from coal to gas and renewables.

In support of the UK's 2025 NDC commitment, improved positive action includes expanded permitted developments which has increased the opportunity for more renewable energy projects.

However, conversely, the UK has shifted its approach to the manufacture of electric vehicles – extending the deadline for the end of Internal Combustion Engine (ICE) manufacture. This has been perceived as a roll back of commitments.

This, and Scotland's removal of the 2030 interim target of 75% emissions reduction, has led to a shift in public opinion of climate change issues. From a national and international perspective, the UK (including Scotland) has been seen to have weakened its stance on climate action and there has been a drop in market confidence.

In October 2025, the Climate Change Committee formally advised the UK Government to prepare as a minimum for weather extremes that will be experienced if global warming levels reach 2°C above preindustrial levels by 2050^{xvi}.

In face of this, the council remains committed to its target of becoming a net zero carbon city by 2030, adamant that the city will not ease up on our ambition. Our Climate Plan also incorporates actions on climate adaptation to ensure our city is resilient to the inevitable impacts of a changing climate.

Legislation

Laws can impact directly on the city's own direction. A desktop review was conducted of local and national legislation enacted since approval of the Climate Plan in June 2021 as well as any upcoming legislation, and the ones with the most impactful changes related to climate activity are shown below.

More information is available at www.glasgow.gov.uk/Sustainability

Our Climate Plan includes many actions that have been revised directly because of changes to legislation.

<<This information will be enhanced in the final version>>

Overarching

Environment [Act](#) 2021

[National Planning Framework 4](#) (NPF4)

Waste and Resources

[Circular Economy \(Scotland\) Act](#) 2024

Environmental Protection (Single-use Plastic Products) (Scotland) [Regulations](#) 2021

Plastic Packaging Tax (General) [Regulations](#) 2022

Producer Responsibility Obligations (Packaging Waste) Amendment (Scotland) [Regulations](#) 2022

Heat

Heat Networks (Scotland) [Act](#) 2021

New Build Heat Standard

Heat in Buildings Bill

Transport

The Building (Scotland) Amendment [Regulations](#) 2022

The Public Charge Point [Regulations](#) 2023

The Town and Country Planning (General Permitted Development) (Scotland) Amendment [Order](#) 2023

Energy

Energy [Act](#) 2023

The Town and Country Planning (General Permitted Development) (Scotland) Amendment [Order](#) 2024

Clean Power 2030 Action [Plan](#)

Great British Energy [Act](#) 2025

City Policy

Some key policies, strategies and plans incorporating climate activity developed by the council family since 2021 are below.

More information on these policies is at www.glasgow.gov/Sustainability

Our Climate Plan includes many actions that have been revised directly because of new policies.

<<This information will be enhanced in the final version>>

Overarching

[Air Quality Action Plan](#)

In addition, the City Development Plan 2 is in preparation and drafts consider the Climate Plan aspirations.

Communication, Engagement and Upskilling

[Children and Young People's Climate Charter](#)

[Just Transition Implementation Plan](#) [Just Transition Skills Action Plan](#)

Governance

Glasgow City Council's [Sustainable Procurement Strategy](#)

Waste and Resources

[Updated Circular Economy Routemap](#) incorporating the [Plastics Reduction Strategy](#)

Heat

[Local Heat & Energy Efficiency Strategy](#) (LHEES)

Transport

[The Glasgow Transport Strategy](#) – Spatial Development Framework

[Active Travel Strategy](#)

Energy

The Council's [Carbon Management Plan 3](#)

Natural Environment and Biodiversity

[New Conditions of Let for Events in parks](#)

[Forestry and Woodland Strategy](#)

[Glasgow Tree Plan Portal](#)

[Local Biodiversity Action Plan \(LBAP\) Delivery Plan 2024-2029](#)

Green Economy

[Glasgow Green Deal](#)

[Greenprint for Investment](#)

[Model for Climate Investment](#)

Describing the Plan

The Climate Plan supersedes previous versions as well as the Climate and Adaptation Plan. However, crucially, it retains the key aspirations of a net-zero carbon city by 2030 and ensuring Glasgow is resilient and able to thrive in a changing climate.

The Plan includes background on the need for a clear set of ambitions regarding climate activity and also a detailed Action Plan showing what the aspirations are and describing these in detail.

The Action Plan has been developed based on all the influences, guidance, opportunities and risks described beforehand and is now arranged into the following sections:

Categories A description of each Category is included within the Summary Action Plan later in this document and the Plan is costed at Category level.

Objectives Each Category includes key Objectives and this new version also clearly shows the wide range of benefits resulting from each of these.

Actions Measurable Actions support each Objectives, and in line with Scottish Government guidance, the Action Plan identifies if the Action will support mitigation or adaptation – with some actions supporting both. Each action has a target delivery date and outcome and identifies if the activity will be delivered by the council, supported or influenced by the council, or delivered by other organisations in the city.

The Categories and Objectives are set out at the end of this document and the full Climate Action Plan is available in the Appendix.

Focus on Delivery

Glasgow's Climate Plan describes the activity required by the city to reduce its contribution to exacerbating climate change and to adapt to the unavoidable impacts already caused by climate change. The sheer scale of the task at hand means that the council cannot do this alone and so it depends on the continued contributions of all stakeholders in the city, through all facets of society, to continue the progress that has already been made.

Following the governance process described in the next Section, each Action has an identified owner which may include the Council, the Sustainable Glasgow Partnership, other public bodies and private organisations. Action owners will be expected to progress delivery and provide updates regularly to the Board.

Where an Action owner is not part of the Council, council officers will engage and seek to obtain progress updates directly or by using publicly available information. The council will also endeavour to support city organisations in their progress.

Actions will be assessed by reference to performance indicators and progress will be reported annually to the appropriate Council Committees.

Cost of Delivery

The estimated cost of the Climate Plan mitigation activity has been developed as part of the Net Zero Routemap and valued at £23.5Bn. This sum can only be brought to bear on this work by bringing together public subsidy and grants with private finance and funding. (*Source: Net Zero Routemap*).

Costs have been identified against Categories in the Action Plan, however there are some mitigation activities that were not covered by the Net Zero Routemap such as Communication and Engagement, Governance, Green Economy, Natural Environment activities and some Built Environment activities, these do not therefore have a cost associated. Most adaptation activities still need to be costed and this will be progressed through the year.

Following the publication of the first Climate Plan, The Glasgow Green Deal subsequently provided a nine-year programme designed to transform the city's economy and the Greenprint for Investment in 2021 provided a portfolio of investment projects that would support the push for net zero.

The Council has also continued to develop its thinking on climate finance and its engagement with the investor community and has established a Climate Investment Board, chaired by the Leader of the Council.

A specialist team has been tasked with developing the council's relationship with the private sector so investment can be attracted to the city for crucial climate initiatives such as local heating networks, energy efficiency in buildings, renewable energy projects, electric vehicle charging infrastructure, and other schemes that can accelerate decarbonisation of the city.

The approach to a Model for Climate Investment, with a project budget of £4m, was approved in 2024 and, in addition to the creation of a delivery vehicle for net zero projects, the creation of a Climate Investment Vehicle is being explored. This is expected to be a city level investment fund, managed by an external fund manager, and established to help plug the funding gap for net zero projects in the city.

Governance

Overarching Governance

Key to achieving our bold targets and vision for a more sustainable, low carbon and equitable city are effective governance mechanisms. Good governance enables a strategic approach to climate and adaptation activities and supports the implementation of projects, effective progress tracking, risk management, and meaningful collaboration.

The Climate Plan forms the core of a wider **Climate and Sustainability Programme** which is Glasgow City Council's dedicated climate and sustainability governance and implementation structure. The Programme serves to onboard, monitor, and support sustainability projects across the Council's activities and facilitate a strategic approach to the Council's climate mitigation and adaptation activities as well as report on progress of activities led by other city organisations.

Governance of the programme is managed through standard programme management tools and techniques and has been updated to incorporate the necessary activities required across both adaptation and mitigation actions to ensure clear and consistent monitoring of progress and identification of barriers to successful delivery. The revised Climate Action Plan will continue to include short, medium, and long-term actions with a Red/Amber/Green (RAG) scoring for each. The RAG status compares the progress of the Action against its target delivery date and outcome

The Climate Plan, its progress and status, will be reported each year at a meeting of the Full **Council**. It is uncommon for reports to be invited regularly, and this illustrates the importance given to the climate change agenda by Glasgow City Council, and the desire of its elected members to scrutinise activity and support progress.

The Climate Plan is reviewed annually and progress is also reported to the council's **Net Zero and Climate Progress Monitoring City Policy Committee**. Any significant issues or changes are highlighted to this committee.

To support ongoing progress, a **Climate & Sustainability Board** has been established within the council to drive and review the delivery progress of the Programme including discussion and action on key topics relating to the Climate and Sustainability agenda. The Board is chaired by the Executive Director of Neighbourhoods, Regeneration & Sustainability and membership includes Directors from across the Council. The Board provides strategic direction and executive steer in relation to climate activity and recommends when proposals need to be put to the City Administration Committee for a Council decision.

The Board is supported by a **Climate Scoping Group**, which is chaired by the Head of Sustainability and is comprised of senior managers of sustainability, procurement, legal, corporate finance, economic development, property, planning and service departments. Senior officer representation ensures oversight and effective support for projects across Council services.

Underpinning all of this, a **Sustainability Programme Management Office** supports the governance, delivery and monitoring of the Programme, including delivery of the actions within the Climate Plan.



Collaboration across city-wide partners is essential for successful delivery of the Climate Plan. The Sustainable Glasgow Partnership is an innovative partnership that brings together major City stakeholders to collaborate on climate solutions. Sustainable Glasgow is led by a Board, chaired by the Leader of the Council and supported by four thematic hubs that enable public and private sector collaboration to enhance delivery of actions in relation to their specific theme. The Hubs report on progress to the Board on a quarterly basis.

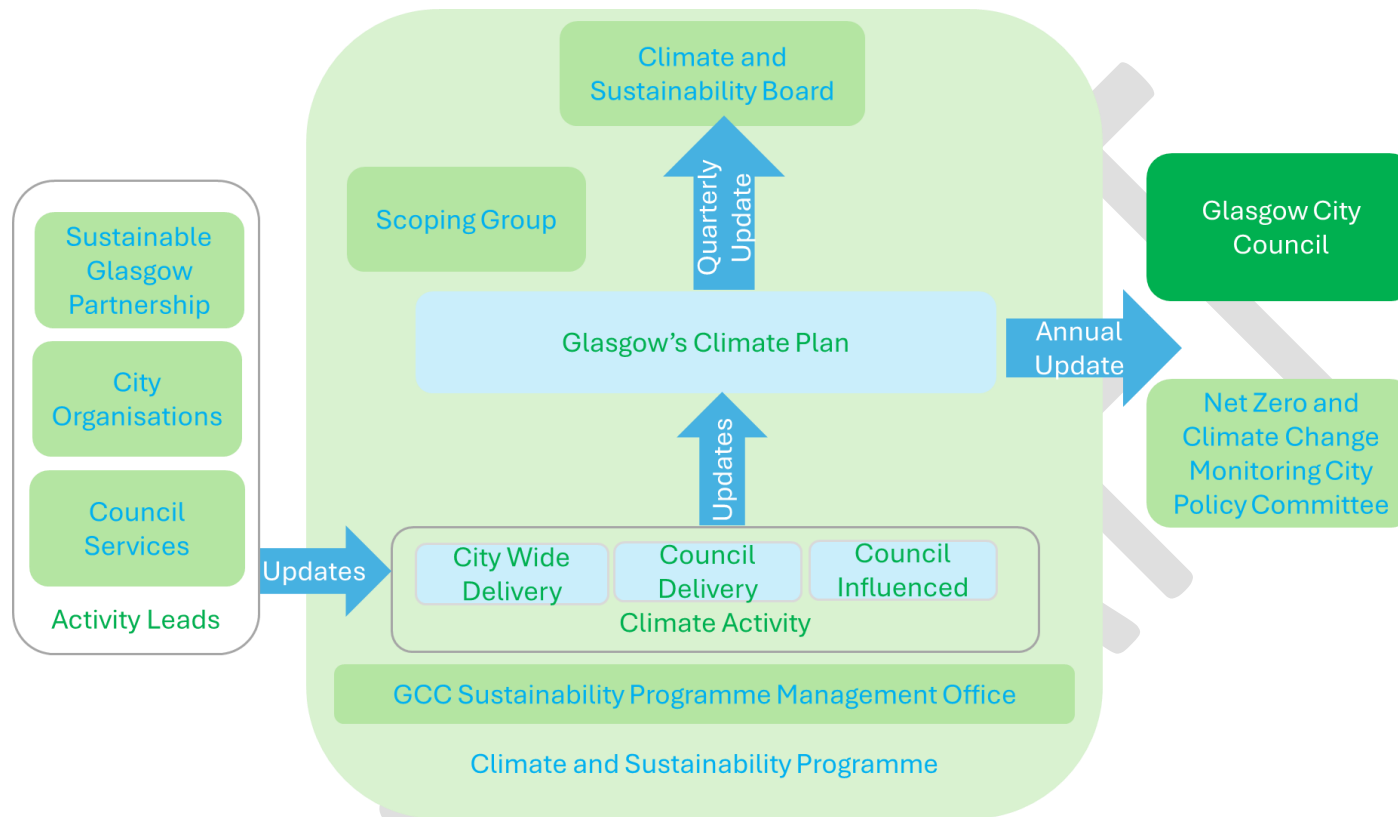


Figure xx: Governance Structure

<<this image will be enhanced in the final version>>

Mitigation Reporting

The Climate Change (Scotland) Act 2009 places climate change duties on relevant public bodies to reduce greenhouse gas emissions, contribute to delivery of the Scottish National Adaptation Plan, and to act in the most sustainable way and the requirements on Local Authorities include that councils must act in a way that is:

- Best calculated to contribute to Scotland's national emissions reduction targets.
- Best calculated to help deliver Scotland's statutory Climate Change Adaptation Programme.
- Considered to be the most sustainable.

Beyond direct emissions, local authorities must also report on:

- How we will align financial resources, such as capital investments and procurement, to reduce emissions.
- Qualitative information on our "wider influence" in mitigating emissions through functions such as land use planning, transport, and economic development.
- A narrative of key actions in our decarbonisation strategy, including a timeline of how targets will be achieved.

The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Order 2015 and The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 require public bodies to submit annual climate change reports.

The primary support for this reporting comes from the **Sustainable Scotland Network (SSN)**, with legislative and policy guidance provided by the **Scottish Government**. This support includes guidance documents, tools, workshops, and networking opportunities to help authorities understand and meet their reporting obligations. Reports are submitted using a standard template and are published on the Sustainable Scotland Network (SSN) website.

Citywide emissions are also be collected and reported on an annual basis using data provided by the Department for Energy Security & Net Zero (DESNZ). It should be noted that this information is 2 years in arrears on publication. This information feeds into our [ClimateView platform](#) and is used to help track, manage and deliver mitigation activity across the city.

Both sets of emissions reports can be viewed on the Council's Environmental Performance webpage.

Carbon Budget

For the first time the progress of the city's mitigation activities will be monitored against an annual Carbon Budget, derived from the Net Zero Routemap, which projects the required amount of carbon dioxide (CO₂) emissions reduction each year. The Carbon Budget will be reviewed and revised annually as more source data becomes available.

It should be noted that the 2023 carbon emission value for Glasgow of 2,170 kTCO₂ obtained from the annual UK Government publication varies slightly from the value of 2,732 kTCO₂ we are using in our Carbon Budget for that year. This is due to additional available sources of local information that we can consider as part of our local monitoring. We will however continue to use both data sets and monitor the trend of both.

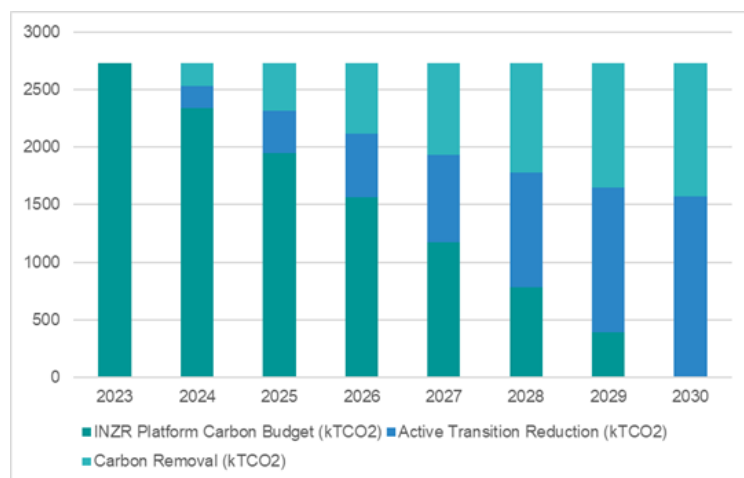


Figure xx: Carbon Budget projection for Glasgow based on the Net Zero Routemap projected pathway (2024)

Year	INZR Platform Carbon Budget (kTCO ₂)	Active Transition Reduction (kTCO ₂)	Carbon Removal (kTCO ₂)
2023	2732	0	0
2024	2342	188	202
2025	1952	365	416
2026	1561	556	615
2027	1171	765	796
2028	781	995	956
2029	390	1259	1083
2030	0	1573	1160

Figure yy: Carbon Budget projection for Glasgow based on the Net Zero Routemap projected pathway (2024)

<<These charts will be enhanced in the final version>>

Adaptation Reporting

There is significant National governance associated with Adaptation action. The Scottish National Adaptation Plan 3 (SNAP3) sets out the actions that the Scottish Government will take between 2024 and 2029 to increase resilience to climate impacts. It is clear that local authorities play a key role in adaptation and this plan aims to support to all five outcomes set out in the national approach.

The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) delivers schemes across the city which reduce flood risks and impacts, improve water quality, bring greenspace improvements through blue-green interventions, and increase drainage capacity. Although much of this activity is region-wide, our Climate Plan includes monitoring and reporting of key parts of this activity which has a direct bearing on the city.

Glasgow City Council also has a responsibility to prepare our public services for current and future climate risks. But we cannot do this alone. Fully participating in the available networks including Climate Ready Clyde and the Public Sector Climate Adaptation Network will support action at a local and regional scale.

Risk Management

The Council maintains a Corporate Risk Register^{xvii} which is reviewed on a half yearly basis and includes a specific risk item on climate which has remained a consistent 12/15 for the past two years:

Insufficient response to climate and ecological emergency

The Climate and Sustainability Programme maintains its own risk register in the same format where key risks are collated from each of the Climate Plan actions. Each action in the Climate Plan is managed using standard project management tools and techniques including risk and issues logs.

As part of the development of this plan, key risks have already been identified and will be regularly monitored and where viable, reduced or mitigated. Some of the key risks are closely related to the Challenges mentioned earlier and include:

Risk	Description	Mitigation	Risk Rating
Resources	Risk of insufficient Resources	Identification of external finance	M
Data	Risk of insufficient data to allow robust progress monitoring	Use of the Net Zero Routemap output, use of Climate View, engagement with national and international bodies	L
External Issues	Risk of external issues impacting delivery of the Climate Plan	Provide support to residents and organisations, climate communication and engagement, advocate for climate support	M
Stakeholders	Risk that other pressures will impact the involvement of key stakeholders	Communicate wider benefits of climate action	M

Review

This revision adopts an iterative approach to ensure accounting for the continual changes and advancements in climate change mitigation and adaptation approaches and technology.

A Change Request process requiring approval by the Climate and Sustainability Board will ensure that any further revisions obtain suitable scrutiny.

Revisions are further managed through the commitment to undertake an annual progress review and provide an update to Council Committee on successes, challenges, recommended additional action or support required.

Get in touch

If anything you've seen or read in this document interests you, and you want to learn more or get involved with climate action please contact the Sustainability Team at Glasgow City Council on sustainability@glasgow.gov.uk

DRAFT

The Climate Action Plan

The following Plan shows the Categories and key Objectives. The full Climate Action Plan can be reviewed in the Appendix.

<< The following pages will be enhanced in the final version with icons>>

DRAFT

Communication, Engagement and Skills

Priority 1

To achieve the actions within this plan and reach our targets we need everyone to work together. By sharing information about climate topics, continuing to build skills and prioritising engaging everyone on the journey, we can create a strong foundation for all climate activity. The actions highlighted within this theme align closely with the Scottish Government aim for engagement:

“Everyone in Scotland recognises the implications of the global climate emergency, fully understands and contributes to Scotland’s response, and embraces their role in the transition to a net zero and climate ready Scotland.” ‘Net Zero Nation: public engagement strategy’

By making sure it is easy for everyone to be involved with climate action, we can reduce the inequality of impacts and increase the opportunity to help realise the goals of the Just Transition. This supports our goal for every Glaswegian to be able to reskill and upskill to participate in the just transition to a net zero and climate resilient economy (source ‘Just Transition Skills Action Plan’).

Building on the clear intention within this plan for climate communication, engagement and skills development, the actions within this theme prioritise availability of accessible information about climate topics and on developing and continually improving the way we work together to make sure everyone has the opportunity to get involved and bring people to the heart of climate action. Having this focus is the only way we can reach a just transition towards a climate friendly and resilient city.

	Objective	Benefits	M	A	GCC	City	Target Date	Leads	Key Partners
1	Deliver Climate Communications to raise awareness of climate impacts, actions and opportunities.	a, b, d, e, g, o	M	A	D		2026	GCC	Sustainable Glasgow Partnership
2	Embed a participatory approach in climate action	d, e, o	M	A	D		Ongoing	GCC	
3	The Council will support businesses in Glasgow to adopt mitigation and adaptation measures.	n, m	M	A	I	D	Ongoing	GCC, GCC on behalf of SGP	Sustainable Glasgow Partnership

4	People in Glasgow able to access climate training	d, n, o	M A D D	2026 - 2030	GCC, GCC on behalf of SGP	Sustainable Glasgow Partnership, City organisations
5	Deliver the Just Transition Skills Action Plan (JTSAP)	d, n	M A D D	2030	GCC, DYW Glasgow	Skills Development Scotland, Local Universities and Colleges Local Employability Partnership (LEP)
6	Implement the Glasgow Roadmap for Target 2030 – Sustainable Learning Settings	d, n, o	M A D	2027	GCC	NatureScot, Sustainable Glasgow, Active Schools, STEM, Scottish Government, Eco Schools, Young Scot, SAMH, KSB, youth groups (inc community-led e.g. Provanhill), community spaces e.g. courtyard pantry

Governance

Priority 1

Glasgow's declaration of a climate and ecological emergency has paved the path to making climate change a cross-cutting priority for the city. Glasgow City has made strong commitments to climate leadership, but continuing to deliver on these requires coordinated action across departments, sectors, and communities. Therefore, embedding climate change in all decision-making and planning processes and in the creation of policies and strategies is of ultimate importance.

Seeing climate change through the lenses of both mitigation and adaptation strategies is critical to ensure any actions aimed at achieving net zero targets, avoid any potential negative environmental and social impacts, and lead to a city which is resilient to climate impacts. Transparent decision-making, inclusive engagement, and robust monitoring systems are essential to ensure accountability and progress. Strong governance ensures that climate action is equitable, inclusive, and aligned with the city's broader social and economic goals.

	Objective	Benefits	M	A	GCC	City	Date	Leads	Key Partners
1	Ensure that a Climate Change Impact Assessment (CCIA) is carried out for key policies and actions taken by the Council.	a, b, d, e, g, o	M	A	D		2027	GCC	
2	Ensure climate change considerations are incorporated into all Glasgow's planning processes.	d, e, o	M	A	D	D	2027	GCC	
3	Completion of the Net Zero Masterplan for Drumchapel, and embedding of learning into future approaches to the integration of climate considerations into masterplanning across the city	n, m	M	A	D	D	2028	GCC	
4	The Council will continue to include Sustainability mitigation and adaptation requirements and climate resilience in its purchasing decisions, building on its Sustainable Procurement Strategy, and utilising the Scottish Government's Sustainability Guidance and Test in all appropriate tenders and provide guidance on specific goods / services and works.	d, n, o	M	A	D		2026	GCC	GCHSCP

5	Introduce monitoring by the Council of Scope 3 emissions and align with any statutory reporting requirements	d, n	M	D	2027	GCC	GCC supply chain		
6	Create a methodology for the inclusion of Greenhouse Gas emissions reporting for Glasgow.	d, n, o	M	D	2027	GCC	Net Zero Cities Mission technical advisors		
7	Leverage data and technology to drive progress in climate action, while proactively addressing and reducing the environmental footprint that may result from increased adoption of digital technologies.	a, b, d, e, g, o	M	A	D	D	2030	GCC	CGI, City Organisations, Sustainable Glasgow Partnership
8	Support and promote the principles of Fairtrade, through sharing of information with key stakeholders to stimulate fairtrade activity in the city.	d, e, o	M	I,D	2027	GCC	Supplier Development Programme, Glasgow Social Enterprise		
9	The Council stresses its ongoing commitment to climate advocacy, including its continued advocacy for greater resources, powers and policy responses to support the rapid transition to net zero.	n, m	M	A	D	2026	GCC		
10	The Council to maintain memberships of climate organisations, partner with neighbouring local authorities and engage with Scottish, UK and European bodies.	m	M	A	D	ongoing	GCC	EU Mission Cities, SSN, Scottish Government, SCIS, CNCA, UK Core Cities Network, UKGBC, Glasgow City Region, WDC/GCC Collaboration Partnership, Climate Ready Clyde	

Transport

Transport is the second highest emitting sector and although reductions have been achieved, the pace has been slow. In order to further reduce transport contributions to climate change, it is essential to improve the convenience of sustainable transport modes and active travel, thus reducing the number of miles travelled in cars. Public transport is the backbone of how people move around a sustainable city, so Glasgow's system needs to be affordable and accessible for everyone, safe, with facilities for ticket and infrastructure integration. A transport system that is powered through electricity and renewable and low carbon sources will maximise carbon reduction efforts.

Further to reducing the carbon contribution from transport, building resilient transport systems is critical. With more flooding, heatwaves, and extreme weather events, the transport infrastructure needs to be climate-proof to resist weather impacts and avoid service interruptions or risks to the population's health and wellbeing. The following actions aim to develop a resilient, decarbonised city transport system.

Personal Transport

Priority 2

Estimated Cost: £13,284,670,459

Objective	Benefits	M	A	GCC	City	Date	Leads	Key Partners
1 Deliver the Glasgow Transport Strategy	g, h, j, k, q, o	M	A	I, D	D	2030	GCC	Scottish Government, Sustainable Glasgow Partnership
2 Improve the bus and rail network	h, j, k, n, o, p	M		I, D	D	2030	SPT, Scotrail, GCC	Transport Scotland, Glasgow City Region, Transport operators, Transport interest groups, Glasgow City Region Bus Partnership, Sustainable Glasgow Partnership

3	Improve affordability of public transport for users	h, j, k, p	M	D	D	2026	SPT, Scotrail, GCC on behalf of SGP	GCC, Glasgow Chamber of Commerce, City Organisations
4	Deliver a comprehensive active travel network and reduce the need to use a car for short everyday journeys.	g, h, j, k, l, o, q	M	A	D	2030	GCC	SPT, GCC, Transport Scotland, Community Groups, Funding Partners
5	In line with the Transport Strategy, and their own policies, transport stakeholders in the city to support rapid transition to cleaner public transport.	j	M	D	D	2030	GCC, SPT	Transport Scotland, SPT, bus and train operators.
6	Support a rapid and strategic shift to personal electric vehicles	j	M	I	D	2030	GCR	TS, GCC, network operators, Taxis, Utility Companies, GCC
7	Encourage the implementation of working patterns and initiatives city wide to reduce travel related emissions and make cost savings	h, j, o	M	D	D		GCC	Employers, Internet Providers, GCOM, City Organisations, Sustainable Glasgow Partnership, Glasgow Chamber of Commerce

Freight Transport

Priority 3

Estimated Cost: £706,680,012

Objective	Benefits	M	A	GCC	City	Date	Leads	Key Partners
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Through delivery of the Fleet Strategy 2020-2030 (as updated 2023), deliver rapid transition of council's fleet to low carbon by 2030.	j	M	D		GCC	Scottish Government, electricity operators
Work with organisations across the city to reduce emissions from freight transport	j	M	I	D	2030 GCC	SGP, City organisations, Glasgow City Region

Heat

Priority 3

How we heat our buildings contributes to a significant proportion of the city's carbon emissions. Addressing emissions from heating and hot water is critical for both mitigation and adaptation. Glasgow has the highest heat demand of Scotland, due to the relatively compact and dense nature of the city, which presents potential for substantial carbon reductions, and new opportunities for social and economic models of heat delivery.

Transitioning to low-carbon heating solutions, such as district heating, and energy-efficient retrofits, will significantly reduce emissions and improve comfort for residents. The wide range of actions included within the Local Heat and Energy Efficiency Strategy, alongside the Housing Strategy will deliver important results which will address not only decarbonisation of heat supply but also address fuel poverty. Likewise, progressing the Carbon Management Plan 3 will help reduce heat related carbon emissions in the council's buildings.

Non Residential Heat Priority 3 Estimated Cost: £1,025,486,007

	Objective	Benefits	M	A	GCC City	Leads	Key Partners
1	Deliver the Local Heat and Energy Efficiency Strategy (LHEES)	a, b, m, n, o	M	I, D	2030	GCC	SFT, SG, SPEN, National Wealth Fund, Industry Partners, development sector
3	The Council will Deliver its Carbon Management Plan 3 and projects supporting heat recovery	j, o	M	D	2030	GCC	Sustainable Glasgow

Residential Heat Priority 3 Estimated Cost: £1,025,486,007

	Objective	Benefits	M	A	GCC	City		Leads	Key Partners
1	Deliver the Local Housing Strategy	a, b, c, h, m, n		A	I	D	2030	GCC	Homeowners / renters, RSLs, Private Landlords, Retrofit Designers, Retrofit Agency/Org, Installers, SG, UKG, Ofgem, Energy Companies, Installers, heat pump system designers

Built Environment

Priority 3

Glasgow's built environment plays a central role in shaping the city's carbon footprint and resilience to climate change. As the city grows and regenerates, it's essential to ensure that planning and housing sectors support green, resilient, and inclusive communities, leaving no one behind. Creating new thriving places is essential in meeting the needs of residents and visitors now and for the households, built environment and transport infrastructure of those who will choose to live and work here in future years.

The city has committed to meeting house needs in Glasgow and creating the policies for new developments to be climate ready. This entails building and providing homes and a built environment that are not only affordable but also low carbon, energy efficient, and climate resilient. Providing that will require improved fabric energy efficiency and clean heating systems for residential buildings, while also safeguarding Glasgow's historic buildings, and implementing alternatives to the retrofit of pre-1919 tenements.

Buildings are responsible for a significant share of emissions, primarily through heating and energy use. Meeting net zero carbon targets and adapting to climate hazards is crucial. Ensuring the built environment is resilient and effectively adapted to weather events, and reducing emissions associated with how we heat our buildings present opportunities to create an environment where Glasgow can ensure a just transition to net zero and an adapted city that is equitable for all.

	Objective	Benefits	M	A	GCC	City	Leads	Key Partners
1	Through City Development Plan 2, ensure that all new developments and drainage systems are 'climate ready' for future impacts.	c, o	M	A	I	D	2027 GCC - MGSDP	Scottish Water
2	Optimise resilience of historic buildings to the impacts of climate change, protecting Glasgow's rich heritage.	c, n		A	I, D	D	2027 GCC	Historic Environment Scotland, Scottish Government, GCHT, GBPT
3	Encourage and enable retrofit where financially and technically feasible to maximise flood risk resilience in all properties.	c, o		A	D		2027	

4	Private Developers , Landlords and builders to maximise performance through retrofit of targetted buildings.	c, h	A I D	2026	GCC	Multi Ownership across all sectors ?
5	Continue to invest in the school estate for reduction of flood risk	c, o	A D	2030	GCC	
6	Support long term adaptation maintenance in city wide projects.	i, l	A D	2027		
7	Optimise Water Use by Council Estate	o	M A D		GCC	
8	Develop Climate Resilient Transport systems	c, g, h, j, l, p, q	A D D	2030	GCC	Sustainable Glasgow Partnership, SPT, SEPA, Transport Scotland, MGSDP, NatureScot, Developers, Communities, Area Partnerships, TS

Energy

Priority 1

Estimated Cost: £576,641,066

The city still relies heavily on fossil fuels, particularly for heating and transport, and crucially fuel poverty remains a concern, with around 25% of the population struggling with their energy bills. Decarbonising the energy sector offers impactful opportunities to reduce emissions and improve quality of life. The greatest share of emissions in Glasgow city comes from energy and heat. Overall energy consumption within the city is estimated at around 9,600TWh/a with around 5,200GWh/a (54%) attributed to the serving of some form of heating demand across the residential and non-residential sectors.

Through the Carbon Management Plan 3, Glasgow City Council are concentrating efforts to reduce the energy consumption in its buildings and reduce the whole organisation's carbon footprint. At a city-wide scale, deploying heat networks and increasing the rollout of renewable energies and the Community Renewable Energy Framework CREF will lead to the deployment of more sustainable energy sources, alongside creating green jobs and working to address fuel poverty. In order to achieve the priorities within this section at scale and pace there needs to be a focus on securing financing to accelerate delivery.

	Objective	Benefits	M	A	GCC	City		Leads	Key Partners
1	In line with the Carbon Management Plan 3 (CMP3), the Council will develop investment plans and manage carbon emissions for its own estate including investment in low carbon technologies and reduction in consumption.	o	M	A	D		2030	GCC	ALEOs
2	Develop feasibility studies and deliver projects that that maximise the production of renewable energy across the city	a, b, h, m, n, o	M		D	D	2030	GCC	DNO(Scottish Power Energy Network), Sustainable Glasgow
3	Support Community renewable energy generation through the implementation of the Community Renewable Energy Framework (CREF)	d, e, f, n	M		I,D	D	2026	GCC	Glasgow Community Energy, Local Energy Scotland, Scottish Government, Sustainable Glasgow,

							"People Make Glasgow Renewable"	
4	Maximise positive action to reduce the impact of industrial facilities and infrastructure energy consumption on the environment	j, l	M	I	D	2030	GCC	City Organisations, Sustainable Glasgow Partnership

Waste and Resources and Circular Economy

Priority 3

There is a growing body of evidence that demonstrates how a circular economy provides tools to tackle emissions, while addressing a just transition to a green economy for cities, communities and businesses. Glasgow has ambitious policies to improve waste reduction and recycling. Glasgow's Circular Economy Route Map to 2030 outlines the vision of a circular city. Its implementation will help encourage residents, visitors, organisations and business to reuse and recycle, following the waste and circular hierarchy.

Glasgow aims to prevent waste at source, promote reuse and repair, and ensure that recycling is accessible and effective. The city is also working to promote the use of lower-carbon, plant-based packaging options through procurement, supporting sustainable lifestyles and reducing the environmental impact of food and goods. A thriving circular economy will not only cut emissions but also create green jobs, reduce resource dependency, and foster innovation across industries.

Objective	Benefits M A GCC City	Leads	Key Partners
1 Deliver Glasgow's Resource and Recycling Strategy 2020-2030 and continue to encourage and enable residents, businesses and organisations to reuse, repair and recycle in line with the waste & circular hierarchy.	l, o M A I, D	2027 GCC	Zero Waste Scotland, Scottish Government., Scottish Environmental Services Association, Resource Management Association Scotland, Glasgow Chamber of Commerce, Sustainable Glasgow Partnership, SEPA
2 Ensure citizens of Glasgow have access to healthy, affordable fresh food	a, e, g, h, i, j, l, n, o, r	2027 GCC	Sustainable Glasgow, GHSCP, GCC, GCFP

3 Deliver the Circular Economy Route Map for Glasgow 2026-2030.

a, e, h, M A I, D D 2030 GCC
i, l, m,
n, o

Glasgow Chamber of
Commerce, Circular
Glasgow, Zero Waste
Scotland (ZWS),
Scottish Environment
Protection Agency
(SEPA), city
organisations,
Suppliers,
End Users, Council
Employees

Green Economy

Priority 3

Glasgow's commitment to reducing the city's contributions to climate change goes beyond mitigating emissions and adapting to climate hazards, the city has committed to ensuring a just transition to a green economy. This transition offers opportunities to create green jobs, attract investment, and build resilience. Sectors such as construction, energy, transport, and manufacturing are poised for transformation through innovation and sustainability.

To achieve a just transition to a green economy, the city needs robust and sustained support. Glasgow City Council has already started implementing various measures to support this transition, many of which are encapsulated in documents such as the Just Transition Skills Action Plan and the Sustainable Procurement policy as well as a Green Investment Model, and a Municipal Investment Community Investment Platform, among others. Additional investment and funding sources will be important to further strengthen the climate agenda and support projects aiming at decarbonising activities and climate-proof the city. Supporting low-carbon industries, reskilling workers, and fostering entrepreneurship will ensure that the city remains competitive and inclusive.

	Objective	Benefits	M	A	GCC	City		Leads	Key Partners
1	Continue to support the local economy	f, m, n, o	M	A	I		2026	GCC, including on behalf of Sustainable Glasgow Partnership	Scottish Government, City partners, investors, Glasgow Chamber of Commerce, local businesses (private & third sector) Scottish Futures Trust, National Wealth Fund, Scottish Enterprise
2	Ensure that the city's inward investment agenda supports net zero funding ambitions and implement Glasgow's Green Investment Model	n, m, o	M		D	D	2026	GCC	Scottish Government, City partners, investors, Glasgow Chamber of Commerce, local businesses (private & thrid sector) Scottish

							Futures Trust, National Wealth Fund, Scottish Enterprise, SDI, DBT
3	Establish a Community Municipal Investment opportunity	e, o	M A D	2026	GCC		
4	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.	i, k, l, n, o	M I,D D	2030	SPFO		SPFO Pension Fund investment managers.

Climate Risk Assessment, Planning and Response

Priority 3

In this Climate Plan we have highlighted how adaptation and mitigation actions both contribute towards our city-wide approach to tackling the Climate Emergency. It is important to consider both aspects when taking climate action as there can be positive trade-offs, or unseen impacts of the changes made. In all mitigation actions taken, consideration to current and future climate risks should be given to ensure long term impacts of the changes made. Similarly in all adaptation action, it is important to strive not to increase emission as a result. By taking this dual approach to action, we can create multi benefit and resilient changes in our city.

Glasgow faces a range of climate risks, including increased rainfall, flooding, heatwaves, and shifting weather patterns. As the climate changes and weather events increase their intensity, it will be essential to develop a deeper understanding of the potential risks that climate hazards could pose to Glasgow City Council, residents and visitors, the built environment, natural habitats, and the economic environment of the city. There are a range of actions also included which are focussed on building the resilience of both places and communities to these changes as we strive to become a thriving city.

	Objective	Benefits	M	A	GCC	City	Leads	Key Partners
1	Develop a managed approach to climate risk and opportunity	i, k, l, o		A	D		2027 GCC	Climate Ready Clyde
2	Continue to support regional adaptation action through the Climate Ready Clyde Regional Partnership	i, l, o		A	D	D	2026 GCC	CRC, Verture
3	Risk assess the city for flood	i, k, l, o		A	D		2030 GCC	MGSDP, Scottish Water, SEPA, Transport Scotland
4	Improve the existing coordinated and strategic response to climate and weather events.	i, k, l, o		A	D		2026 GCC	Scottish Water, Scottish Fire and Rescue Service
5	Install 'smart' systems to gather data and inform emergency responses and maintenance needs.	i		A	D		2030 GCC	
6	Develop an adaptation pathway for the tidal River Clyde.	i, j, o		A	D		2030 Glasgow City Region	Universities, Climate Ready Clyde, Sustainable Glasgow

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Natural Environment and Biodiversity

Priority 3

Glasgow's natural environment is a vital asset in the city's response to climate change, supporting both mitigation and adaptation efforts. The city is home to a variety of habitats, including urban woodlands, rivers, parks, and green corridors, which provide essential ecosystem services and support a wide range of species. It is therefore important to protect them, and where possible increase their size and number.

Implementing the Local Biodiversity Action Plan alongside the Pollinator Plans, the Forestry and Woodland Strategy and the Open Space Strategy, will be fundamental in maintaining and growing canopy cover across the city. This will prolong their benefits to health and wellbeing, as carbon sinks and protecting the city's biodiversity.

What's more, nature-based solutions are central to Glasgow's climate strategy, offering low-cost, high-impact interventions that deliver multiple benefits. Delivering more of these solutions across the city will bring about more instances for absorbing carbon emissions and reducing impacts from weather events. Through measures to protect and expand the natural environment and biodiversity, Glasgow can create a greener, healthier, and more resilient city for future generations.

	Objective	Benefits	M	A	GCC	City	Leads	Key Partners
1	Accelerate implementation of the LBAP, Pollinator Plans & Tree Plan to support and enhance Glasgow's natural environment	i, k, l, o	M	A	D	D	2030 GCC	GCVGN, GAT, Greenspace Scotland, NatureScot, MGSDP, GCR
2	Promote implementation of nature-based solutions (NBS) and climate resilience across the City by utilising the Environmental Digital Twin.	i, l, o	M	A	D		2030 GCC	Glasgow City Council, NatureScot, Greenspace Scotland, Universities
3	Deliver the Forestry and Woodland Strategy	i, k, l, o	M	A	D		2030 GCC	GCVGN, GAT, Greenspace Scotland, NatureScot

4	Support the development and management of existing, new and further extensions to Local Nature Reserves in the city, consider the placement of these sites in the wider ecological network, protecting and enhancing biodiversity and habitat connectivity, taking into account changing climate.	i, k, l, o	M A D D	2030	GCC	GCVGN, GAT, Greenspace Scotland, Scottish Government NatureScot.
5	Deliver the Local Biodiversity Action Plan working with partner organisations to promote ecological connectivity and build resilient habitats in response to climate change.	i	M A I, D D	2030	GCC	Sustainable Glasgow, NatureScot, GCVGN, RSPB, Butterfly Conservation & Neighbouring Local Authorities.
6	Identify and utilise Vacant and Derelict Land for Nature Based Solutions.	i, j, o	M A D	2030	GCC	GCVGN, GAT, Greenspace Scotland, NatureScot, MGSDP, Universities, Climate Ready Clyde, Greenspace Scotland, GCPH, Scottish Government
7	Invest in biodiversity enhancements within the Education estate as included in Target 2030	i, k, n	M A D	2026	GCC	Sustainable Glasgow, City Building
8	Deliver the actions from the Open Space Strategy taking a place-based approach using Nature Based Solutions to deliver climate resilient places.	i, l, o	M A D D	2026	GCC	

Carbon removal

Priority 3

Estimated Cost: £3,024,000,000

Achieving Net Zero Carbon will require clear implementation of the mitigation actions detailed in this Climate Plan. However, even with those actions, it is unlikely that as a big urban city we will reach absolute zero emissions. There will be a need therefore to further remove any residual emissions. Therefore, nature-based solutions and carbon removal technologies will be essential to complement the delivery of those ambitious and challenging mitigation measures. The setting of annual carbon budgets will enable us to track our progress in all areas of our net zero journey.

Working with external partners will be needed to explore the extent of natural capital growth required to overcome the emissions gap, identify the best practice going forward, and align our efforts to national guidance. Opportunities for carbon sequestration would benefit from greater research, to further understand the capacity of the city.

While emission reductions remain the priority, carbon removal offers a pathway for hard to address emissions sectors and legacy emissions. It also provides co-benefits such as biodiversity enhancement, improved air quality, and community engagement in climate action.

Objective		Benefits	M	A	GCC	City	Leads	Key Partners
1	Create a methodology for recording sequestration activity within the city to contribute towards the Net Zero Carbon target of 2030	i	M	A	D	D	2030 GCC	SCIS, CNCA, city organisations

Glossary of terms

Word/ Phrase	Definition
Climate Adaptation	Adaptation is making changes to better prepare and protect against climate impacts, whilst also taking advantage of any opportunities that occur as a result of the impacts.
Climate Change	The changing climate and weather being experienced globally as a result of increasing temperature from global warming.
Climate Justice	Recognises that the people who have created the least emissions are usually the same people who are now being affected by climate impacts the most.
Climate Mitigation	Mitigation means reducing the emission of greenhouse gases that are released to the atmosphere.
Climate resilience	A state of being capable of accommodating climate change. Could be a mindset, environment or a culture
Climate vulnerability	A state of being at risk of being destabilised by climate change. Could be a mindset, environment or culture
Global Warming	More GHGs in the atmosphere are leading to more heat being trapped in the atmosphere. This is leading to an increase in temperature globally.
Greenhouse Effect	The process where Greenhouse Gases trap and hold heat in the atmosphere, preventing heat from escaping to space. An essential process to keep Earth warm.
Greenhouse Gas	A gas which can trap and store heat in the atmosphere. Also known as GHGs and includes Carbon Dioxide, Methane, Nitrous Oxide and F-gases.
Heat Network	A system where heat is supplied from a central source to consumers by distributing hot water in underground pipes
Heat pump	A heat pump is a cleaner, more efficient alternative to a gas boiler. It collects heat from the air, water, or ground and uses electricity to raise it to a useful temperature for heating your home or building.
Net Zero	When the amount of emissions being added to the atmosphere by emission sources is the same as the amount of emissions being removed from the atmosphere by emission sinks, emissions are balanced and the overall amount of emissions in the atmosphere does not change.
Renewable Energy	Energy which is not finite (does not run out). There is a limited amount of fossil fuels, and they will eventually run out. This term usually refers to energy which will not run out like wind or solar.

Sustainable Development Goals	Global goals set by the United Nations to protect the planet, end poverty and provide peace and prosperity for everyone by 2030
Nature Based Solutions	Addressing climate change by protecting, restoring or sustainably managing natural ecosystems to help mitigate and adapt to climate change.
Just Transition	Means that the journey to reduce emission and adapt to climate impacts is fair and creates a better future for everyone – regardless of where they live, what they do, and who they are
Fuel Poverty	Inability to meet the energy cost at home. The cost to maintain satisfactory level of heating are over 10% of household's monthly income after housing costs have been taken away.
Decarbonisation	Removal of emissions released from a project, building, company. For example, decarbonisation of a building would mean removing all emission sources from the building.
Energy Efficiency	Using energy (electricity, gas, petrol etc) in a way that reduces waste as much as possible.
Fossil fuel	A fuel derived from geological deposits of plant and animal remains, such as coal, oil, or natural gas.
Circular Economy	In a circular system, materials and products never become waste, instead they keep being used, and nature is revived. A Circular Economy is based on three principles: • Eliminate waste and pollution • Circulate products and materials • Regenerate nature and it is underpinned by a transition to renewable energy.
Co-Benefits	Great additional benefits that you might see from taking climate action. They help us to understand that taking climate action not only helps the planet, but people and our economy too.
Biodiversity	This refers to the variety of plant and animal life in an area and how they interact within habitats and ecosystems (like lakes and native forests).
Ecosystem	A biological community where living organisms (plants, animals, microbes) and non-living components (air, water, sunlight, soil) interact with each other
Carbon budget	A carbon budget is a way for countries to limit how much greenhouse gases they emit over a fixed time in policy or law.
Planetary boundaries	The planetary boundaries are nine systems with a defined limit. Crossing the limits increases the risk of generating large-scale abrupt or irreversible environmental changes.
Green Economy	A green economy is low-carbon, resource efficient and socially inclusive.

Sustainable procurement	This means that during purchasing decisions, Environmental, Social, and Governance (ESG) factors are included.
Blue-Green infrastructure	Natural infrastructure designed to include features which have several benefits such as managing rainwater, mitigating flood risk, improving air quality, and enhancing biodiversity and community well-being. Examples include ponds, lakes, rivers, streams (blue) and parks, gardens, woodlands, street trees and green roofs (green).
Carbon Capture and Removal	This means using technology to take carbon dioxide from the atmosphere or to capture the carbon dioxide before it is emitted to the atmosphere.
Offsetting	An action or activity (such as the planting of trees or carbon sequestration) that compensates for the emission of greenhouse gases to the atmosphere.
Carbon Sequestration	The removal and storage of carbon from the atmosphere.

REFERENCES

- ⁱ World Meteorological Organization, Greenhouse Gas Bulletin – no. 21, 16 October 2025, extracted on 16 October 2025 from <https://wmo.int/files/greenhouse-gas-bulletin-no-21>
- ⁱⁱ UK Government, London, 2025 <https://assets.publishing.service.gov.uk/media/679b5ee8413ef177de146c1e/uk-2035-nationally-determined-contribution.pdf>
- ⁱⁱⁱ Climate Change Committee, London, 2025 <https://www.theccc.org.uk/wp-content/uploads/2025/02/The-Seventh-Carbon-Budget.pdf>
- ^{iv} Climate Change Committee, London, 2025 <https://www.theccc.org.uk/publication/progress-in-adapting-to-climate-change-2025/>
- ^v Climate Change Committee, London, 2024 <https://www.theccc.org.uk/publication/progress-in-reducing-emissions-in-scotland-2023-report-to-parliament/>
- ^{vi} 1 kilo-tonne (kt) is equal to 1000 tonnes.
- ^{vii} UK Government, DESNZ, London, 2025 https://www.data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/local_authority_carbon_dioxide_emissions
- ^{viii} BBC, London, 2025 <https://www.bbc.co.uk/news/articles/c77zxx43x4vo>
- ^{ix} OFGEM, 2025 <https://www.ofgem.gov.uk/data/debt-and-arrears-indicators>
- ^x UK Government, London, 2025 <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/datasets/monthlydirectdebitfailurerateandaveragetransactionamount>
- ^{xi} IEA, Paris, 2025, <https://www.iea.org/news/growth-in-global-energy-demand-surged-in-2024-to-almost-twice-its-recent-average>
- ^{xii} *Renewables 2023*, IEA, Paris, 2024 <https://www.iea.org/reports/renewables-2023>, Licence: CC BY 4.0
- ^{xiii} IEA, Paris, 2024 <https://www.iea.org/reports/renewables-2024/executive-summary>
- ^{xiv} IEA, Paris, 2025 <https://www.iea.org/reports/renewables-2025/executive-summary>
- ^{xv} UK Government, London, 2025 https://assets.publishing.service.gov.uk/media/688890c3a11f859994409132/UK_Energy_in_Brief_2025.pdf
- ^{xvi} Climate Change Committee, London, 2025 <https://www.theccc.org.uk/publication/letter-ccc-letter-to-minister-hardy-advice-on-the-uks-adaptation-objectives/>
- ^{xvii} GCC, Glasgow, June 2025 <https://onlineservices.glasgow.gov.uk/councillorsandcommittees/viewDoc.asp?c=P62AFQDNNTDXNTZ32U>