

Appendix 2

Key Activities

1 Theme 1 - Communication and Community Empowerment

- 1.1 Development of an Engagement and Communication Framework** – This will identify the mechanisms required for full engagement on Climate and Sustainability issues across multiple stakeholder groups enabling meaningful citizen participation in climate change decision making and, perhaps most importantly, stimulating local action to address the climate and ecological emergency. Work to map existing climate engagement events in the City is underway and a working group has been set up that includes key internal and external stakeholders. The Framework is expected to be published in late 2024.
- 1.2 Climate Literacy Training** – Glasgow City Council has provided Climate Literacy Training to Elected Members and Council staff since 2020 in partnership with Keep Scotland Beautiful and has also rolled out “Train the Trainer” courses to allow Council departments to train their own teams – for example around 80 staff from the Economic Development section. Training was also provided in the summer in Gaelic to the students, parents and staff at Glasgow Gaelic School. Further rollout, utilising the Council’s online learning platform is planned for 2024. This requires updating of the materials and translation into an online format, work which is underway. Further work is being done to ensure the training remains accredited by Keep Scotland Beautiful or another accreditation body.
- 1.3 Development of a Community Renewable Energy Framework (CREF)** – This initiative aims to support the increased generation of energy from renewable sources by identifying a portfolio of sites which are suitable for community led renewable energy development and outlining the process by which communities can work with the Council. Work is currently being undertaken to identify suitable sites that can be marketed to community groups and to address barriers in making sites available for transfer for renewables projects. The Framework will be presented to the Net Zero and Climate Progress Monitoring City Policy Committee in November 2023.

2 Theme 2 - Just and Inclusive City

- 2.1 Net Zero Routemap** – Engagement is ongoing with other Local Authorities who have undertaken similar projects to understand the best approach and potential issues. Procurement for a consultant to develop the Routemap is currently underway, with an invitation to tender issued to market and responses expected at start of November and, following evaluation, an appointment to be made by end of 2023 with a consultancy firm appointed to lead this work over a 12-month period commencing January 2024. This work will evaluate various technical and economic scenarios and advise on the most appropriate and expedient route to Net Zero Carbon emissions.
- 2.2 Thriving Cities Initiative** – The Thriving Cities Initiative (TCI) is a key programme of work led by C40, a global network of mayors from the world’s leading cities that are united in action to address the climate crisis. TCI uses an

iterative approach to support cities in addressing unsustainable consumption to help achieve the targets of the Paris Agreement and improve equity, quality of life and economic livelihoods in cities. A report was provided to the Net Zero and Climate Progress Monitoring City Policy Committee in [August 2023](#) and the next stage is for a full report on the outputs of the Thriving Glasgow City Portrait to be published by University of Glasgow in late 2023.

2.3 Just Transition Working Group - an update on the WG was presented to the Net Zero and Climate Progress Monitoring City Policy Committee in [August 2023](#). The Working Group put forward 18 recommendations which committee referred to the City Administration Committee (CAC), which approved it in [September 2023](#). A further report on the implementation of the Just Transition Working Group's recommendations will be presented to the Net Zero and Climate Progress Monitoring City Policy Committee at a future meeting.

2.4 Climate Finance – The Council has continued to develop its thinking on climate finance and its engagement with the investor community.

2.4.1 In 2023 it benefited from the insights of a Global Risk and Resilience Fellow, a senior seconded officer from the insurance sector, who worked across the organisation to support its thinking on the climate finance agenda. A report on developing a proposed climate finance framework was presented to the Net Zero and Climate Progress Monitoring City Policy Committee in [May 2023](#), with an update on this work to be taken to the same Committee in early 2024. Subsequently, the Council has enhanced its capacity to engage in this agenda through establishing a new climate finance manager post and a corresponding internal Climate Investment Board, chaired by the Leader of the Council.

2.4.2 A proposal has been submitted to 3Ci for support for Net Zero Neighbourhoods project. This will look at how different interventions, such as district heating, building retrofit, renewables, and adaptation measures can be packed into an investable and scalable proposition that, crucially, seeks to protect the homeowner from taking on significant debt to decarbonise buildings in the city. The Council recently approved £125k UK Shared Prosperity Fund (UKSPF) investment to support this Net Zero Neighbourhood project and its stated aims of piloting a new governance and finance model for street-by-street and place-based housing retrofit. This work aligns with the Local Heat and Energy Efficiency Strategy (LHEES).

2.4.3 A further £231k of UKSPF support has also been redirected to the EXTEND programme which supports SMEs to become more sustainable by providing free expert guidance and knowledge of all the pathways available. This project with Strathclyde University aims to deliver 500 carbon baseline reports to businesses across the region, with 308 delivered to Glasgow businesses.

3 Theme 3 - Well Connected and Thriving City

- 3.1 Local Heat and Energy Efficiency Strategy (LHEES)** – Glasgow’s Local Heat and Energy Efficiency Strategy (LHEES) is a City strategy focused on reducing heat-based carbon emissions and lowering fuel poverty. The LHEES takes a strategic approach to both reducing the demand for heat in the city and decarbonising the supply of heat. This is accompanied by a targeted action plan aimed at accelerating the ambitions of the strategy.
- 3.1.1 Analysis has been undertaken to identify those areas of Glasgow where key interventions will provide the greatest benefits. A primary focus for this LHEES is to accelerate the deployment of heat networks in the city, creating the conditions for district-scale heat networks to thrive. Alongside this, the LHEES has a focus on retrofitting properties to help tackle fuel poverty, identifying where there are concentrations of domestic properties that are suitable for heat pump installation, and developing workable solutions to the particular challenges of decarbonising our tenemental properties.
- 3.1.2 A report outlining the LHEES for the City, was presented to the Net Zero and Climate Progress Monitoring City Policy Committee in [May 2023](#). A public Consultation was approved by the City Administration Committee in [August 2023](#) and feedback from this is being incorporated into the final Strategy and will be presented to the Net Zero and Climate Progress Monitoring City Policy Committee in November 2023.
- 3.2 GRREC District Heat Network Feasibility** – GCC have worked with Zero Waste Scotland and Burro Happold, through funding secured from the Heat Network Support Unit, to undertake a review of the feasibility of a district heat network in and around the Glasgow Recycling & Renewable Energy Centre (GRREC). This feasibility work has been based on Energy from Waste from the GRREC as the heat source. Based on the findings of this feasibility a subsequent technical addendum will be created to focus on setting up the Techno-Economic Model (TEM) from a commercial perspective. This further modelling will enable comparison of project options, to identify the most preferable scenario before progressing to a higher level of detail after the feasibility stage. The Council will consider the outcomes of this additional work and ensure links are made into the ongoing delivery of LHEES actions.
- 3.3 Solar PV** – The Council currently operates 33 solar photovoltaic (PV) arrays located on rooftops with varying generation capacity as measured in kilowatt peak (kWp). In 2022 around 616,000 kilowatt hours (kWh) of PV generation was recorded. A plan to develop PV technology on Council buildings was reported to the Net Zero and Climate Progress Monitoring City Policy Committee in [May 2023](#). Phase 1 of the project which includes the installation of PV on 8 buildings which has a combined installed capacity of slightly under 1 MWp per year is currently with procurement at award stage with installation expected to commence Q1 2024.
- 3.4 Deep Geothermal** - a report providing an update on a feasibility study was presented to the Net Zero and Climate Progress Monitoring City Policy

Committee in [August 2023](#). This work will be considered in the Local Heat and Energy Efficiency Strategy that will be presented to the same Committee in November. This work will also be considered in relation to the developing Climate Finance Framework. The Council will work with the SEC to cost next steps and review funding options, as well as review potential placement of a geothermal well and consider potential approaches to investors before returning to committee within 12 months.

- 3.5 Plastics Reduction Strategy** – an update was presented to the Net Zero and Climate Progress Monitoring City Policy Committee in [April 2023](#). Progress to date includes the development of a procurement tracker and a feasibility study looking at the possibility of a river boom on the Clyde to catch plastic waste. Work on this initiative is ongoing and an update will be provided to the same Committee in 2024.
- 3.6 Glasgow Transport Strategy (GTS)** – An update was taken to the City Administration Committee in [August 2023](#) and next steps were approved. This included how the GTS links to other key strategies such as National Planning Framework 4. Several indicators are set out in the Policy Framework and will be monitored subject to data availability in coming years.
- 3.7 Active Travel** – The Final Delivery Plan on the City Network from the Glasgow Active Travel Strategy was presented and approved by the Environment and Liveable Neighbourhoods City Policy Committee in [April 2023](#). A wide variety of projects are ongoing in the City to encourage active travel, including the Avenues Project, on street secure cycle storage, improved urban realm and an expansion of the City's Nextbike scheme. A full report on the progress of all Sustainable Transport and Active Travel projects will be submitted to the Environment and Liveable Neighbourhoods City Policy Committee early 2024 but some updates are below:
- 3.7.1 Byres Road Phase 1 Public Realm Works** - The initial phase of the project focuses on the area from Partick Cross to University Avenue and is aiming for completion by Summer 2024. Key features include the creation of additional pedestrian and cycle space, reducing the width of the carriageway and removal of on street car parking bays, and protected cycle infrastructure that includes a contraflow cycle lane allowing for a continuous route between Great Western Road and Partick Cross. Installation of rain gardens that includes benefits such as pollution control, habitat creation and water conservation.
- 3.7.2 Secure on Street Cycle Parking Project** – This is a theme contained within the Active Travel Strategy that was approved by the City Administration Committee in 2022. Currently there are 205 bicycle storage hangars installed Citywide on residential streets. An individual hangar can accommodate 6 bicycles and the occupancy rate is 95%, with over 1200 bicycles using these facilities daily.
- 3.7.3 Glasgow Nextbike** – From January to August 2023 monthly rental average was over 43,000 (an increase of 6k from 2022) and the average distance of

Kilometres travelled is 95,945 compared to the 2022 monthly average of 83,177.

- 3.7.4 **Car Club** – In 2022 a total of 52 vehicles were available for hire in from the Car Club. The total number of hours of vehicle usage was 137,493 and the number of vehicle bookings was 19,233. The total number of miles travelled was 870,025, and the Carbon emissions totalled 84,902 kg/CO₂. The contract has recently been renewed. The contract has recently been renewed and with Co-Wheels contracted to deliver the service over the next five years, the scheme aims to deliver a 100% increase in the availability of electric and hybrid cars for members to hire. An additional seventeen hire cars are due to be brought in over the course of 2023 to create a 71 strong pool of vehicles for more than 4200 members already signed up to the car club in Glasgow.
- 3.7.5 **Connecting Woodside Project** – This project intends to improve accessibility and increase the use of active and sustainable travel modes throughout the North Woodside area, including new and improved travel routes that incorporate segregated cycling lanes, attractive pedestrian links, and road junction modifications. Funding is secured for the project with a consultation exercise currently in progress.
- 3.7.6 **Holland Street and Pitt Street Public Realm Works** – This infrastructure improvement works began in Spring 2023 and is part of the wider Avenues Project. Works will feature a two-way segregated cycleway on Pitt Street and landscaping features incorporating drainage and raingardens on West Regent Street. Key features of the works include 4,000 square metres of new public realm added to the city centre, 1,035 square metres of new walkway, 535 metres of new cycle track, 327 square metres of new green infrastructure and 11 upgraded road junctions. The improvement works are expected to be completed by Summer 2024.
- 3.8 **Low Emission Zone (LEZ)** – the Glasgow Low Emission Zone aims to improve air quality through restricting access to the city centre by the most polluting vehicles.
 - 3.8.1 The city centre was declared an Air Quality Management Area in respect of exceedances of the annual mean objective for levels of nitrogen dioxide in 2002. However, exceedances of the objective continued to be recorded and in 2018 GCC introduced Scotland's first LEZ with the aim of reducing emissions from road traffic, the main source of air pollution in the area.
 - 3.8.2 Air pollution dispersion modelling, undertaken by the Scottish Environment Protection Agency (SEPA), had demonstrated that emissions from the bus fleet were the largest single contributor in those streets experiencing the highest pollution levels. Therefore phase 1 of the LEZ required progressive improvements in the number of cleaner buses entering the zone. As of the end of 2022, all scheduled service buses entering the LEZ were required to meet the Euro 6 emission standard.

- 3.8.3 Extensive modelling of LEZ options highlighted that bus fleet improvements would not be sufficient on their own to achieve compliance with the air quality objectives everywhere within the city centre. Therefore a timeline for extension of the LEZ to all other vehicle types was announced in 2018. Phase 2 of the LEZ came into effect on 31st May 2022, beginning a one-year grace period before enforcement began on 1st June 2023. A further year grace period applies to vehicles registered to a residential address within the LEZ and enforcement for these vehicle types will begin on 1st June 2024. Full details of the Glasgow LEZ can be found at <https://www.glasgow.gov.uk/LEZ>.
- 3.9 **Electric Vehicle Charging Infrastructure** – a tariff for consumption of electricity was introduced on the Council's public EV charging infrastructure in April 2023. It is expected that this will support the stability of the network as well as encourage market growth. It should be noted that Transport Scotland has published a [Vision](#) for the future of public EVCI which places the private sector at the heart of growth. Two reports will be taken to the Environment and Liveable Neighbourhoods City Policy Committee in November on tariff review and EV Strategy.
- 3.10 **Transition of Council Fleet to Electric Vehicles** - The [Fleet Strategy 2020-2030](#) was updated at the Environment and Liveable Neighbourhoods City Policy Committee in [August 2023](#) to reinforce Glasgow City Council's commitment to delivery of a zero emissions fleet with further projects planned to increase the number of electric vehicles in the fleet. Currently there are over 300 electric vehicles within the Council fleet including cars, vans, and a refuse collection vehicle.

4 Theme 4 - Health and Wellbeing

- 4.1 **Local Biodiversity Action Plan (LBAP)** – A report on the [Glasgow LBAP](#) was taken to the Net Zero and Climate Progress Monitoring City Policy Committee in [February 2023](#) and workshops were held in May 2023 to agree on actions going forward.
- 4.2 **Tree Planting** – The City and partners have planted approximately 5,400 trees during 2022/23.
- 4.3 **Glasgow Tree Nursery** – This project aims to develop a vacant site into a tree nursery in the north-east of the City with the intention of it being operated as a social enterprise. The nursery will supply trees for various Council greening projects across the city and provide upskilling and engagement opportunities for local people in the area.
- 4.4 **Guidance for Events** – a report was provided to the Net Zero and Climate Progress Monitoring City Policy Committee in [April 2023](#) regarding Sustainability and Biodiversity guidance for Events.

5 Theme 5 - Green Recovery

- 5.1 Circular Economy** – The Council continues to work with our academic partners, Chamber of Commerce, Zero Waste Scotland, C40 cities and local partners to transition the City's local economy from linear to circular, supporting policy makers and local business community in this. Further progress is expected following a recent recruitment exercise.
- 5.1.2 In 2023 the Council worked with the Chamber of Commerce to provide £600k of support to the development of the Circular Economy through the Step up to Net Zero programme which provided 39 businesses with circularity assessments and 40 placement opportunities for young people or those changing careers to support businesses to implement them.
- 5.1.3 The Scottish Government consulted on [proposals for a Circular Economy Bill](#) and a [draft Circular Economy Routemap](#) in 2022. The [Circular Economy \(Scotland\) Bill](#) was brought forward in June 2023 and is being looked at by the Net Zero, Energy and Transport Committee. GCC submission to the Net Zero, Energy and Transport Committee's call for evidence on the Circular Economy (Scotland) Bill can be found [here](#). The Circular Economy Action Plan will help achieve climate actions that help mitigate emissions, build resilience, and a thriving city.
- 5.2 Just Transition Skills Action Plan** - The Council in collaboration with Skills Development Scotland, has developed a draft Just Transition Skills Action Plan, working with Universities, Further Education, Colleges, and climate planners from across the region. The Just Transition Skills Action Plan will be presented to the Net Zero and Climate Progress Monitoring City Policy Committee in November 2023. It will be recommended that Members refer the plan to the following City Administration Committee for approval. This will allow for the Action Plan to be formally launched at the 25th State of the City Economy on the 18th November before being shared internationally at COP28.
- 5.3 Climate Ready Modern Apprenticeships** – This initiative led by the Council's Parks section is in the process of recruiting 20 school leavers to complete a 3-year Modern Apprenticeship that will focus on biodiversity protection and improvement and climate adaptation in the city's parks.

Appendix 3

Key Challenges

1 Resources & Funding

- 1.1 The Council has undergone a period of staff transition with loss of existing staff and recruitment and development of new staff. 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 including access to external funding for key projects.
- 1.2 Mitigating action includes the following:
 - 1.2.1 Ongoing support through continued and strengthened partnership work. The Sustainable Glasgow Partnership supports the ongoing efforts and plans are in development to gain further benefit from this arrangement.
 - 1.2.2 The council has recently filled the gaps in its Sustainability and Sustainability PMO teams and more focus can now be provided to supporting colleagues across the Council in delivery of their own projects.
 - 1.2.3 There is ongoing activity to identify opportunities to leverage external investment in climate infrastructure in partnership ongoing activity to identify opportunities to leverage external investment in climate infrastructure in partnership with colleagues in Economic Development, utilising Climate & Sustainability projects, such as district heating networks, as targets for financial investment.

2 Governance and progress tracking

- 2.1 Key to achieving our bold targets and vision for a more sustainable, low carbon and equitable city are effective governance mechanisms which will support implementation but also effective progress tracking and meaningful collaboration.
- 2.2 The following has been implemented to mitigate this challenge:
 - 2.2.1 The Council's Sustainability PMO was fully resourced in July 2023.
 - 2.2.2 There is a plan for a wholesale review of the Climate Plan. This is set out further in Section 8 of the Report.
 - 2.2.3 Establishment of the Climate & Sustainability Board and associated governance and monitoring processes.
 - 2.2.4 Council officers are involved with the development of a national Climate Intelligence Service which will support local authorities to target, implement and improve delivery of actions for area-wide emissions reduction. It is envisaged that this will drive consistency of approach for monitoring progress across various activities and strategies.

3 National Policy

- 3.1** There is a need for additional work to take into consideration national policy as detailed below. There are ongoing challenges in interpreting and interfacing these policies.
- 3.2** The Scottish Government's [Climate Change Monitoring Report 2023](#) is the second annual statutory monitoring report against the updated 2018 Climate Change Plan, as per the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. Scotland's 2018-2032 [Climate Change Plan](#) sets out our national climate change policies. These include:
- the [Heat in Buildings Strategy](#),
 - the [route map](#) to achieve a 20% reduction in car kilometres by 2030.
 - The [Vision for Agriculture](#) and the [National Test Programme](#), aiming to transform agriculture, ensuring Scotland become a global leader in sustainable and regenerative agriculture and a consultation on a [new Agriculture Bill](#).
- 3.2.1** The Heat in Buildings Strategy presents a challenging timeframe and as yet under-developed regulatory framework which presents challenges to the development and implementation of the Council's own LHEES.
- 3.3** Further measures include: the [Circular Economy Bill](#), the [Waste Route Map](#) and Land Reform Bill in a Net Zero Nation. Supporting the Circular Economy Bill is new packaging legislation [The Packaging Waste \(Data Reporting\) \(Scotland\) Regulations 2023](#) and the delayed [Deposit and Return Scheme for Scotland Amendment Regulations 2022](#).
- 3.4** The revised [National Planning Framework 4](#), the [Joint Budget Review](#), the [draft Energy Strategy and Just Transition Plan](#) and the [Biodiversity Strategy](#) have also been published and will also need to be considered.

4 External involvement

- 4.1** The Climate Plan sets out a target for the City and therefore relies on significant behaviour change from residents, visitors and organisations in Glasgow. Not all of these are within the purview of the Council. Activities seeking to mitigate this include:
- 4.1.1** Engagement across stakeholders – the development of the Climate Engagement Framework will assist in focussing this activity. Ongoing liaison via the Sustainable Glasgow Partnership; membership of the Ellen MacArthur Foundation which will assist in providing mechanisms to better engage stakeholders; policy development such as the introduction of the LEZ; strategy development such as the Glasgow Transport Strategy.

4.1.2 In addition, new legislation will support changes required – such as Planning regulations.

5 Accelerating Climate change

5.1 While many activities are now underway, the rate of change of climate change is accelerating and so the pace of transformation will need to increase. To support this, the Climate Plan will be reviewed and actions prioritised to ensure there is more focus on those that can bring about the greatest improvement.