Glasgow Citizens' Assembly

Q&As

Compiled by Ipsos MORI on behalf of members of the Glasgow Citizens' Assembly and addressed by Glasgow City Council and the event speakers

Ipsos MORI

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About this document

As part of the Assembly process, members have the opportunity to ask the speakers questions about their presentations. Some questions are addressed during the session and any remaining questions are collated in this Q&A document which is shared with the relevant speakers and Glasgow City Council for response.

The questions are organised by session and by theme and the document is available to Assembly members and the general public to review.

A list of speakers and links to the presentation recordings can be found under each session heading and on the Council's website: https://www.glasgow.gov.uk/cop26citizensassembly

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Session One: introduction

The speakers and presentations

Introduction - Councillor Susan Aitken, Leader of Glasgow City Council

Introduction to the Climate Emergency - Aoife Hutton, Keep Scotland Beautiful

Glasgow and COP26 - Colin Edgar, Glasgow City Council

Net Zero Glasgow by 2030 - Gavin Slater, Glasgow City Council

Questions raised during session one

Affordability and social justice

- **Is there a guarantee that climate action won't disproportionately affect poorer communities who won't be able to afford it?**

  Response from Glasgow City Council: There isn't a guarantee, but this is acknowledged as a potential risk and a priority of the Scottish Government and Glasgow City Council.

  The council have set this as a priority in their climate plan as part of the Green New Deal for the city and key to achieving a net zero carbon target in 2030 - you can find the plan here.

  The Scottish Government set up a Just Transition Commission which published their recommendations to Scottish Ministers and other actors, including local authorities earlier in 2021, the report can be found here. The Just Transition Commission report – 'A national mission for a fairer, greener Scotland' sets out its 24 recommendations for Scottish Ministers and other agencies to ensure that Scotland delivers a Just Transition to a Zero Carbon Nation. The recommendations are presented through the lens of 5 key sectors aligned with the Scottish Government's Climate plan: Energy; Industry; Housing; Land; Transport. And are grouped under four key messages: -

  - Key message one: Pursue an orderly, managed transition to net-zero that creates benefits and opportunities for people across Scotland.
  - Key message two: Equip people with the skills and education they need to benefit from our transition to net-zero.
  - Key message three: Empower and invigorate our communities and strengthen local economies.
  - Key message four: Share the benefits of climate action widely; ensure costs are distributed on the basis of ability to pay.

- **How do we make greener/carbon-friendly lifestyle changes affordable?**

Response from Glasgow City Council: Not all lifestyle changes required are actually more expensive, they often require more consideration and effort but yield great rewards. The circular economy seeks to install opportunities for people to make lifestyle changes by promoting the

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availability of businesses and facilities, which, as an example, promote reuse and repair approaches, reducing reliance on new products.

With regards to technologies required to minimise our impact on the environment by reducing our individual and collective carbon footprint, these become significantly more affordable through economies of scale, just like when the automobile was first designed, its cost was initially very high but with improved production and increased demand, those costs soon plummeted. This can be seen in technologies such as solar pv panels. Initially these were expensive, with a 50kWp (the maximum electrical output of an array at peak daylight) array (roughly the size we install on primary schools) costing over £100,000. Now, due to technological advances, increased demand, and a period of national subsidy support, the costs have reduced by more than 60%. This reduction has also occurred at the domestic level. When we look at systems, these can be expensive at an individual level, when we come together to develop solutions at a community, or even city scale, the cost to the individual is decreased dramatically.

- **How can we align people's capabilities (including affordability) with what needs to be done?**

  Response from Keep Scotland Beautiful: We need everyone to become Carbon Literate so they can understand the carbon footprint impact of their activities and where they can most effectively take action.

  We also require support from government to make big tasks - like insulating homes and installing renewable heating – both simple and cost effective.

  Response from Glasgow City Council: We can make these low carbon behaviours and lifestyles mainstream by: -

  - Mobilising annual public procurement to support the product and service innovation to respond to the climate emergency;
  - Helping to produce public guidance on sustainable, climate-friendly, healthy diets and create opportunities for sustainable local food production and distribution;
  - Developing Green New Deals for cities and regions;
  - Enhancing building standards to deliver zero-carbon homes and buildings;

  Accelerating Scotland's energy efficiency retrofit scheme, using regulation and public funding to support almost all homes and buildings in Scotland to reach at least EPC Band C by 2030;

  Creating and strengthening national legislation and incentives for District heating and heat pumps, providing clear long-term market signals for the accelerated installation of district heating in Scotland.

- **What is the cost to households of using solar panels vs. on grid energy?**

  Response from Glasgow City Council: Generally speaking, the installation of a domestic solar array will cost in the region of £4 - 8k. Once installed, the energy generated can be consumed in the house, immediately reducing the costs to the house of consuming grid electricity. It is

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reasonable to assume that the savings made from consuming the energy generated by the panels and the revenue generated by selling unused electricity onto the grid will pay off the initial outlay in roughly 7 years, from there on, the electricity consumed in the house from the PV panels is free, preventing the need to buy quite so much grid electricity. The house can continue to sell power to the grid and make a revenue.

Should a small battery storage system be installed in tandem with the solar, the cost savings can be increased by storing the power generated by the PV so that 100% is available to be used in the house. It's worth noting, the tariff you get for selling power onto the grid is as much 20 – 25% of the cost of buying grid electricity, thus it is always worth more to the home owner to consume their energy than sell it. Obviously though, the addition of a battery storage system does increase the initial outlay.

- **What are the most cost-effective ways to reduce CO2 emissions (e.g. is it more efficient to fit filters on cars or to address emissions from certain industries etc)?**

Response from Glasgow City Council: Ultimately, the most cost effective way to reduce CO_2 emissions is to make choices that lead to less emissions being created. This can include, but is not limited to, walking or cycling instead of using a car where possible, using public transport instead of a car where possible, share car journeys where possible to minimise the number of cars on the road, do not leave devices on stand-by in the home or office where possible, turn lights and heating systems off when not required, reduce the temperature setting in your home by 1C, reuse things like bottles to prevent buying plastic and generating more waste, recycle the waste you generate, give device or materials that are no longer in use to be repurposed and reused, and so on.

Transport is currently the highest emitting sector in Scotland because despite efficiencies made to vehicle technology, there are more vehicles on the road - addressing emissions from road transport (making it more attractive to use public transport and active travel) and aviation (reducing the amount of flights) would help reduce transport emissions and lower overall carbon emissions for Scotland;

Heat and Energy is the second highest sector – better incentives for renewable energy generation and changes in building regulations would help decarbonise the sector both by creating low carbon new builds and retrofitting existing ones.

- **Where the money is coming from and what is actually possible to do; who will pay, will it be increased council tax etc?**

Response from Glasgow City Council: The Scottish Government is committed to ground-breaking levels of investment of £1.6 billion over the next five years to help transform the heating and energy efficiency performance of Scotland's buildings. This will rapidly accelerate the installation of energy efficiency measures and zero emissions heating systems to decarbonise an area which currently is responsible for creating one fifth of Scotland's greenhouse gas emissions each year.

The investment, outlined in the current Programme for Government, is anticipated to support up to 5,000 jobs each year by 2025-26, with further growth beyond that date.

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The Green New Deal being developed for the city and Circular economy will look at innovative finance models to fund a just transition to net zero carbon city.

We are also looking to present investment opportunities to investor markets to bring in external investment to help us manage the cost of this transformation. A city prospectus has been produced to help engage these markets and help us identify suitable investors.

Policy and legislation

- **Is there any legislation planned for compelling landlords to reduce home heating costs and improve insulation etc?**

Response from Glasgow City Council: Detailed information for landlords can be found here – including information on regulations https://www.homeenergyscotland.org/energy-efficiency-support-for-landlords/

- **Recycling is very important and so is reusing, but are there any plans in Scotland to regulate this and to account for the loss of consuming?**

Response from Glasgow City Council: Yes. The Scottish Parliament's Circular Economy Bill is expected in due course. However, in the next 18 – 24 months it is also expected that a further bill will be going through Westminster that has the potential to be transposed to Holyrood on the "Right to Repair". This will be designed to control the manner in which products are assembled. How that will be achieved is still unclear, although the EU is working to clarify this and to limit initially, with a view to eradicating the problem of planned obsolescence**.**

Significant policy change is also coming with respect to packaging materials. Extended Producer Responsibility (EPR) for packaging materials will be introduced in 2023. This effectively is putting the onus back onto producers of packaging who will have to pay for the management of all packaging waste – recycling, disposal, communications, and packaging in litter. At the moment most of these costs are met by local authorities. So, it will focus the mind of packaging companies to design packaging that is easier to recycle, minimise the use of material and/or make it more re-usable.

The EPR is a complex proposal and there have been two consultations on the subject by DEFRA, the second one was in Spring this year (please see link below). Final scheme details still tbc.

https://consult.defra.gov.uk/extended-producer-responsibility/extended-producer-responsibility-for-packaging/

Science, technology and actions on climate change

- **What triggered the drop in energy carbon, was its government, legislation, energy businesses or somebody else? What triggered the movement?**

Response from Glasgow City Council: The big drops in carbon emissions recorded are consistent with global financial crashes. These events resulted in many business and industries having to reduce their operations, thus emissions reduced. This can also be evidenced by the emissions increasing in the years immediately following, where the economy recovered. It is probable that we will see a similarly dramatic drop in some emissions as a result of the Covid-19 pandemic, as well as a potential increase in the following year as we come out of lockdown. It is worth noting that the

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increasing emissions following these global events never exceeds the emissions level before that event, illustrating that the measure put in place continue to ensure the overall trend is for reducing emissions.

- **Are there any technologies to deal with drainage in urban areas?**

Response from Glasgow City Council: In Scotland the responsibility for protecting a property from flooding rests with the owner. Source - https://www.gov.scot/publications/living-flooding-action-plan-delivering-property-flood-resilience-scotland/pages/2/

The first step is awareness.

SEPA has used strategic level modelling and GIS technology to produce the national flood maps here - https://www.sepa.org.uk/environment/water/flooding/flood-maps/

Property owners can use these to be informed on flood risk for their general area and prepare accordingly.

At an individual property level, managing flood risk may be achieved through property flood resilience (PFR) technology (sometime also known as property level protection (PLP). PFR includes:-

1. Measures to stop water entering a property – door barriers, floodproof doors, air-brick covers, toilet bungs, etc.

2. Measures to reduce the impact if water does get into a property, and speed the recovery – water resilient plasterboard, raised plug sockets / electrics, metal / hardwood kitchen units, tiled rather than carpet floors, sumps with a pump, etc.

Further information on PFR is available in the CIRIA Code of Practice for Property Flood Resilience (C790) - https://www.ciria.org/Resources/Free_publications/CoP_for_PFR_resource.aspx

However, PFR measures deal with flood water when a flood event is already occurring. Long term, it is much better to reduce the risk of a flood happening in the first place. In order to do this, we must seek to manage rainfall as close as possible to where it lands, to reduce the speed at which it enters the formal drainage network, which gives the drainage network more time to deal with the runoff.

In urban areas, a significant factor increasing the rate at which runoff gets into the drainage network and adds to flood risk is 'urban creep'. This is when formerly permeable surfaces are replace with impermeable surfaces. Examples of this are property extensions and paving over front gardens (usually to create more parking).

Whilst this doesn't usually increase flood risk for the property building the extension or paving over their front garden, it does increase flood risk for others in the community further downstream.

The primary, sustainable, technology to manage rainfall is blue-green infrastructure (BGI), which seeks to deliver permeable surfaces to mimic the effect of natural ground.

This includes a range of sustainable drainage systems (SuDS) such as:-

1 - highway raingardens
2 - planters
3 - street trees
4 - green roofs / walls
5 - swales
6 - basins / ponds

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BGI is the preferred approach to urban drainage as, in additional to managing flood risk, it also provides a wide range of other benefits including:-
i - improved air quality
ii - combatting noise pollution
iii - urban cooling
iv - a home for biodiversity
v - water quality – by filtering pollutants and stopping them reaching a watercourse, or reducing the risk of combined sewer overflows
vi - mental health benefits

Natural flood management (NFM) approaches apply the same principles of BGI, but are usually applied outwith urban areas, in the upper catchment of a watercourse.
NFM measures seek to manage / attenuate flow prior to it reaching urban settlements.

BGI / NFM is low-tech approach to managing surface water and, as the water is substantially managed above the ground surface, it is generally easier to see if there are any problems that require attention.

Where watercourses run through urban areas and land is available, such as an existing park, it is possible to use embankments to control the rate of flow in the watercourse and utilise the available land as a floodplain, where water is temporarily held during high flows to reduce the risk of flooding downstream. Once the storm event passes, the water is slowly released back down the watercourse.
De-culverting watercourses – creating an open watercourse where previously it was in a pipe – also helps to manage flow and can be linked with additional floodplain storage to reduce flood risk.

Less sustainable options to manage runoff include below ground retention (attenuation) tanks (or large pipes) that collect runoff and have a mechanism at their outlet to control the rate at which they discharge to the drainage network.
Rainfall can also be managed at roof level, via 'blue roofs, where the roof of a building is designed to hold a depth of water.
These help to slow runoff, but do not bring all the additional benefits of BGI noted above.

It is possible to combined retention tanks with pumps, as part of a rainwater harvesting system – where the captured rainfall used within a building, usually flushing toilets or watering grassed areas.

It is also possible to make retention tanks and blue roofs (and waterbutts) 'smart' by linking their outlet control to weather forecast data, to ensure the tanks are emptied ahead of a storm event and the maximum attenuation volume is available when the storm happens.
This does add cost and complexity.

A very low-tech approach to reduce pressure on the drainage network is 'downpipe disconnection'. This is where a property downpipe is disconnected from the drainage network and allowed to drain onto adjacent land. Whilst this has been done in other areas (i.e. Toronto and in the USA), it is not a practice that is generally used in the UK.

The less preferred technology for drainage in urban areas, is the traditional 'grey' approach of bigger pipes / sewers, storage tanks, pumping stations and flood walls alongside watercourses.

These approaches all manage runoff once it is already in the drainage network, often when it is also mixed with foul sewage.
Grey approaches are almost always more carbon intensive, and lack flexibility to cope with climate change or deliver the additional benefits of BGI.
Long term, it is simply too expensive to build bigger and bigger grey systems to adapt to a changing climate.

The final 'technology' that should be noted is the flood alert / warning system operated by SEPA that provides direct messages when flood alerts / warnings are issued for your local area
- https://www.sepa.org.uk/environment/water/flooding/floodline/

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Overall, managing flood risk in urban areas will require a mix of the approaches noted above, with a growing emphasis on BGI approaches.

Further information on taking action to reduce flood risk is available here
- https://www.mgsdp.org/index.aspx?articleid=21083

- **How do we ensure new green technology does not generate more waste/carbon in the future?**

Response from Glasgow City Council: This is a good question. Any new technology goes through several levels of technology readiness, taking it from concept to mass rollout, during this evolution, due diligence is undertaken to examine the impact on the environment. While this does happen, it is impossible to say for sure that new technologies will have no impact at all on the environment, heat pumps, electric cars, solar panels, etc, all have an embedded carbon footprint linked to the materials they are made from and their movement across the world from where their material are sourced, where they are constructed, and where they are delivered to the consumer. Ultimately, what we need to do is to work with the options that have the smallest footprint on the environment and can adequately replace those that have the most significant footprint.

- **What is the 'full story' about some of these mitigation measures – e.g. electric vehicles – there must be some disadvantages to them – what are they?**

Response from Glasgow City Council: Ultimately, the advantages of any of the mitigation measures heavily outweigh the disadvantages. Of course, each of us have our own individual impressions of any kind of policy decision or technology, and none of these are ever universally popular. When we consider any intervention, we weigh up the pros and the cons, and the pros have to outweigh the cons. Unfortunately, I am unable to go through every intervention and detail the advantages and disadvantages, but to respond to the example in the question by way of illustration, I would say that the most significant disadvantage to owning an electric vehicle right now is one of convenience and habit. The country does not yet, with yet being the key word here, have the charging infrastructure in place to make it as easy to travel long distances as in a fossil fuelled vehicle, however this will come. All major car manufacturers are moving their manufacturing towards all electric drivetrains.

- **Has there been any thoughts about packaging materials? People are buying more and more online and everything is going in another plastic bag going through the door. Surely there is a more sustainable way of using that energy and not using those resources?**

Response from Keep Scotland Beautiful: We need to buy less where possible and see if there are options to borrow items we don't have and repair things we do have that don't work. And we should look to buy local where we can (e.g. fruit and veg) to reduce packaging and delivery miles.

Where this isn't possible making supply chains and delivery as green as possible can help – for example by having delivery by electric vehicles and cargo bikes for shorter trips and 'last mile' deliveries in urban areas.

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We need 100% recycled and recyclable packaging linked with clear symbols to readily available household and local recycling facilities.

We are supporting the Zero Waste Scotland Conscientious Consumption campaign at present.

Response from Glasgow City Council: Yes. Significant policy change is coming with respect to packaging materials. Extended Producer Responsibility (EPR) for packaging materials will be introduced in 2023. This effectively is putting the onus back onto producers of packaging who will have to pay for the management of all packaging waste – recycling, disposal, communications, packaging in litter. At the moment most of these costs are met by local authorities. So, it will focus the mind of packaging companies to design packaging that is easier to recycle, minimise the use of material and/or make it more re-usable.

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- **I would like some more information on the heat system, removing heat from the atmosphere. How does that work?**

  Response from Glasgow City Council: Effectively, this works like a refrigerator in reverse. The ambient air is passed over a loop full of a refrigerant liquid that expands and becomes a gas. This gas is passed through a compressor which increases the pressure with heat as an output. This hot gas is passed through a heat exchanger with transfers the heat from the gas to a cool liquid, which is then heated and circulated round a building where the heat is used to heat the space. The cooled gas becomes a liquid again until it once again interacts with the air.

- **Can we have more information on the local biodiversity action plan and district heating networks? What about district heating, how does it work and how is it going to be expanded? Why is it such a useful thing?**

  Response from Glasgow City Council: The Local Biodiversity Action Plan (LBAP) was initially launched in September 2001 with additional habitat and species plans being approved in 2002 and 2005. The aim of the Glasgow LBAP is to conserve and enhance natural habitats in the city, and to address the decline in biodiversity with a focus on species of national and local conservation concern. You can find the plan here. And more information about our Biodiversity team's work, including contact details to find out more here.

  District heating is where heating is provided from a central source and is distributed via a network of pipes to multiple buildings, sometimes including homes. Residents in these homes don't get a choice as to who their supplier is or what price they pay. However, if district heating is well designed and implemented it should lead to lower bills. This report summarises research on consumer experiences of District Heating. And you can visit this Energy Savings Trust blog and also their webpage page.

- **Why has the Council not installed solar panels on new housing stock being built (especially social housing)?**

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Response from Glasgow City Council: It has, housing in the athlete's village has solar pv integrated into the roof of the housing, as well as being connected to DH. New builds are required to meet tough standards to be granted planning permission, this includes a percentage of their power demands being provided by renewables. Not all buildings are suitable for solar PV with their orientation and any overshadowing from other buildings being instrumental in whether or not solar pv is viable.

- **It looks like there has always been some natural fluctuation in CO2 levels. Is there a risk we over-compensate / capture too much CO2 given it might be at a natural peak right now and could start falling due to the cyclical nature at some point?**

Response from Glasgow City Council: The amount of CO2 in the atmosphere reached record levels in 2020, hitting 417 parts per million in May. The last time CO2 levels exceeded 400 parts per million was around four million years ago, during the Pliocene era, when global temperatures were 2-4C warmer and sea levels were 10-25 metres (33-82 feet) higher than they are now. The head of the CO2 programme at the Scripps Institution of Oceanography, which has been tracking CO2 concentrations from the Mauna Loa observatory in Hawaii since 1958, said that record levels were observed again in the last year despite COVID 19 pandemic.

This brief article by the BBC provides a good explanation and visuals for the levels of CO2 in the atmosphere and associated changes in climate.

- **Why are we still thinking about possible energy alternatives (beyond wind) when it's already 2021 and we only have 9 years to 2030 - shouldn't we be implementing/building by now?**

Response from Glasgow City Council: Clearly much more needs to be done and at an accelerated pace, but you can find some statistics here. So far, in Scotland: -

  - Renewable electricity generation in Scotland hit a new record high in the first quarter of 2020, with 11.6 TWh generated between January and March 2020.
  - This is up 28% on the same period in 2019 and is enough to power almost half of Scotland's total electricity consumption for a year.
  - Onshore wind generation is up 25%, hydro generation is up 38% and offshore wind generation increased by 54%.
  - This follows on from 2019, which was a record year for Scotland in terms of renewable electricity generation, with over 30 TWh of generation. This contributed to 90.1% of gross electricity consumption coming from renewable sources, up 13.4 percentage points from 2018.

In addition to the above, we must be aware that the main obstacle to renewable energy providing all the answers are its intermittency, solar only generates during the day, wind when the wind blows. We always need to manage the balance across a variety of technologies; thus we must always be looking to possible options to help us ensure continuity and security of supply.

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- **Is it feasible to retrofit old buildings, particularly Victorian tenements, as there are a lot of these in Glasgow?**

Response from Glasgow City Council: Yes, these can be retrofit with certain measures but they are certainly not without challenge. It's probably fair to say that in these properties, retrofitting to be more thermally efficient is the most challenging, as there is little space in tenements to add wall insulation, largely due to the solid wall construction and listed status usurping traditional insulation measures.

Response from Glasgow City Council (Stephen McGowan): We are exploring the feasibility of what improvements can be made in terms of energy efficiency/heat decarbonisation in our pre 1919 stock, particularly tenements. In the past we have carried Internal and External Wall Insulation (to the rear of properties) measures in pre 1919 tenements but internal work can be disruptive. There is a demonstration project nearing completion in the south side of the city which is taking a whole house approach to energy efficiency (to very high levels) and provision of heat pumps. The City Council is also exploring the potential for another demonstration project with Historic Environment Scotland. The challenge is to find a balanced approach which can improve energy efficiency and heat decarbonisation, whilst protecting our built heritage and reduce fuel poverty.

- **Is there a single, immediate thing that an individual can do? What's the biggest impact that we can have?**

Response from Keep Scotland Beautiful: We need everyone to become Carbon Literate so they can understand the carbon footprint impact of their activities and where they can most effectively take positive action.

Overcoming the climate crisis is a collective challenge, one in which we must all play a part. Change can start with simple steps. We can make carbon savings by flying and driving less, using public transport and cycling and walking more and buying fewer items transported over many miles. We can also reduce the amount of energy we use to run our homes. The food and drink we choose impacts our greenhouse gas emissions too. Reducing our demand for raw materials, new products and making things last would also help reduce greenhouse gas emissions. As would cutting the amount of packaging we use - and it would also lead to less waste and litter. The science behind climate change and the steps we should all take to reduce our carbon footprint can be daunting. Yet we must be climate ready, armed with knowledge. Misinformation and the unintended consequences of trying to do the right thing - but getting it wrong - can be dangerous. That's why we offer Climate Emergency training. This helps people to understand more about climate change, the greenhouse gas impact of everyday activities and provides them with the ability and motivation to reduce emissions. The training is available to anyone to help them become climate ready - be that in schools, communities or businesses.

Further thoughts available here in a blog by our Deputy CEO Catherine Gee.

Response from Glasgow City Council: The challenge seems overwhelming, but there are some solutions available to all of us please see here for more information and resources: Friends of the Earth; BBC article and Grantham Institute. Depending on your circumstances, the solutions can be:

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- joining a community climate action group and working at a local level,
- calling on the government (local and central) to invest in green jobs, green energy, low carbon and affordable public transport and sustainable affordable food;
- changing your diet: eating less (and better) meat and dairy from local farms or no meat;
- Driving less or not driving; taking the train instead of flying
- Saving energy in your home or looking at alternative ways to heat your home

- **Most of the issues that were raised were raised in the 1980s when I was at school. Not a lot has changed much. They knew about this 30, 60 years ago. Why has it taken until now for them to do something about it?**

  Response from Glasgow City Council: There are many and complex reasons for this, part of that explanation is that Climate Science is now more sophisticated and we have more information, as well as feeling some of the impacts very strongly already. This video by University of Cambridge provides a clear explanation - https://www.youtube.com/watch?v=LT4f2kXcPsY

- **How will more green spaces be introduced to Glasgow?**

  Response from Glasgow City Council: Protecting and improving Glasgow's natural environment is a major part of mitigating and adapting to the impacts of climate change. To help achieve this, the best opportunities for greening and rewilding, including tree planting and the effective use of Vacant and Derelict Land sites, as recommended by the Ecological Emergency Plan, will be implemented via the Open Space Strategy (OSS) Delivery Plan. The OSS Delivery plan will also to map out opportunities to enhance Glasgow's active travel routes, through improved green network linkages.

  The Open Space Strategy will help re-set the balance between our health, our infrastructure and our natural environment, protecting, enhancing and expanding Local Nature Reserves, and Sites of Importance for Nature Conservation and other biodiverse sites in the city, including peatland restoration and maintenance of existing sites**.** The City Development Plan protects these environmental designations and other open spaces from inappropriate development.

  The Open Space Strategy Delivery Plan will investigate the potential opportunities presented by open spaces across the city for greening and improving access to good quality open spaces, including spaces for nature, spaces for leisure, spaces for sport and relaxation. For more information about the Open Space Strategy, please see a link here.

- **Where can people find out more information about energy sources for car charging ports?**

  Response from Glasgow City Council: Electric vehicles, as well as being better for the environment, are also better cars than their fossil fuelled equivalents. As well as accelerating more quickly, they have nearly no internal moving parts. This reduces both noise and wear and tear, which means lower maintenance costs.

  In terms of maintenance costs, according to GoUltraLow, cleaner vehicles can be anywhere from a third to 90% cheaper to run than their fossil fuelled equivalents. With some energy suppliers starting to offer completely free charging in exchange for using some of their spare battery power at peak times. EV owners will not do all the charging at home and so when charging in public charging points the energy comes for the grid, which means that this is not yet fully from clean sources, but still better for air quality at the point of use and less harmful than vehicles powered by fossil fuels.

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WWF produced a good guide about how to charge electric vehicles with renewable energy - please see here: https://www.wwf.org.uk/updates/how-do-i-charge-my-electric-car-renewable-energy

You can find a map of charging points in the city here: https://chargemap.com/cities/glasgow-GB or here: https://www.zap-map.com/locations/glasgow-charging-points/

- **Thinking about funding and priorities, how will the councils' plans be implemented?**

Response from Glasgow City Council: The City will work with community institutions to establish a baseline of current action, knowledge, data, needs and successes, establishing jointly agreed indicators and monitoring progress annually against those.

The council will create a Climate, Resilience and Sustainability programme to coordinate and manage the work packages resulting from the committed actions stated in the CEIP, deliverables from the Resilient Glasgow programme and the integration with the Sustainable Glasgow partnership. This delivery programme will be supported by a Programme Management Office (PMO) as per the standard council approach used for critical programmes such as the City Deal delivery programme. This programme will be governed by a Climate, Resilience, and Sustainability programme board, led by the executive director of Neighbourhoods, Regeneration, and Sustainability Services, and staffed with senior representatives from across the city council.

The CRS Board will oversee progress and direction of the actions contained within the Climate and Ecological Emergency Plan actions, as well as new actions that will arise as we progress towards Net-Zero Carbon, managing risks and opportunities iteratively. The City Council will report to committee annually, adopting an iterative process to revising our target, inclusion of new projects and actions.

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

Engagement, education and awareness

- **What is the council doing about educating/changing mindsets to more carbon-friendly behaviours?**

Response from Glasgow City Council: The council are working with others in the city to make climate change more relevant to our communities and improve our collective understanding of the climate crisis, as well as solutions and potential barriers. This includes work with local schools and education communities and Climate conversations in the city.

- **How do you persuade 'climate deniers' or engage those who are not aware about the climate emergency?**

Response from Keep Scotland Beautiful: Relating climate change to things that matter to people is the most effective way to start a conversation. We should emphasise hope over despair. It is also important that we effectively communicate the co-benefits of tackling climate change, including:

  - Less air pollution and noise due less car and plane fumes.
  - Better public transport and active travel infrastructure.

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- More green spaces and improved biodiversity.
- Opportunities for green skills and jobs.
- Improved mental and physical health due to more active travel and a diet rich in fresh local fruit and vegetables.
- Less fuel poverty due to better insulated homes and more efficient use of energy.
- Improved repair skills and access to quality second-hand stuff.

Response from Glasgow City Council: Climate Change can be a polarising topic and one of the good ways in which to have conversations with people from different backgrounds and convictions is to appeal to their own values and common beliefs rather than the issues that divide and antagonise. This is a good report with interesting suggestions on how to talk climate with those who may not be aware or convinced of the climate emergency.

- **Can we have more information on what has been achieved in addressing climate change in Glasgow already?**

Response from Glasgow City Council: A number of case studies reflecting on current climate action are contained in the Climate Plan

The wider context

- **If Scotland reaches all our targets and smashes it, great, but where do we sit globally in terms of the impact we have?**

Response from Glasgow City Council: Scotland is a small nation, yet despite its relatively small footprint it has, and always has been a significant influencer across the globe, and a nation that many other nations look to with fondness, admiration, and friendship. By achieving all of our targets we would not only help to reduce global emissions through our own reductions, but also through the sharing of our effort, our innovation, or commitment, and our resolve with other nations across the world.

- **What can we do to support / enable / encourage other countries to play their part? Glasgow can't act alone.**

Response from Glasgow City Council: We can do this by leading the way in our own actions and encouraging others to lead by example. Glasgow's Circular Economy Route map was one of the first across Europe and has attracted a lot of international acclaim due to its approach to putting people at the heart of this change.

Glasgow continues to use its networks and platforms to encourage sustainable and socially just action from our fellow cities via a number if platforms sharing best practice at a national and international level. For example, Glasgow is leading on work to share best practice on the circular economy through all Scottish cities via the Scottish Cities Alliance (SCA). Glasgow is also participating in a number of projects looking at key issues such as circular construction and embedded carbon with the Carbon Neutral Cities Alliance (CNCA) whereby we share best practice with cities across the globe.

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- **What are we doing to ensure we don't achieve net zero by just exporting all our emissions by outsourcing industry etc to other countries?**

  Response from Glasgow City Council: We do not take part in any kind of emissions trading and take full responsibility for our own emissions to the full extent we can. Of course, many multi-national organisations have moved their emissions elsewhere in the world to green-wash their profiles but this is not something we advocate in Glasgow.

- **How can we take the 'just transition' approach and apply it to the whole world, not just Glasgow?**

  Response from Glasgow City Council: We can ensure that through our networks of cities across the globe we share experiences and views on how to effectively achieve a just transition locally and globally.

  Response from Jaime Toney, University of Glasgow: There are goals and more specific targets set for how to make sure that a sustainable transition is a just transition in the United Nations' Sustainable Development Goals (SDGs). While not all SDGs are relevant or achievable when down-scaled to the city-level, most cities and organisations are trying to find ways to down-scale these international goals for synchronicity.

  One example of this at the city level is an accessible review article published in Nature Communications recently using Melbourne, Australia as an example: https://www.nature.com/articles/s41467-021-23968-2.pdf

- **How has COVID affected the climate emergency?**

  Response from Keep Scotland Beautiful: Greenhouse gas emissions went down during COVID lockdowns as there was less industrial output and people worked from home more. And we saw many people enjoying riding a bike again for leisure. Things like working from home can have a big impact on our transport carbon footprint and mean we spend less time commuting. We now see moves by government for green recoveries from COVID to help to embed positive changes like homeworking and active travel into future policy.

  Response from Glasgow City Council: COVID has impacted on all of us over the recent years and disrupted social norms. In terms of communication and engagement, we have continued to work to overcome these challenges by using online platforms to continue discussions.

  There will have also been significant impacts on environmental aspects such as air quality and carbon emissions. These figures are reported in arrears and as yet we do not have the data available to fully assess the impact of the restrictions upon our city.

  Response from Jaime Toney, University of Glasgow: The Global Footprint Network monitors Earth Overshoot Day each year. In 2020, Earth Overshoot Day - or the day by which we use all of resources that the Earth can regenerate in a given year - was pushed back by about a month to August 22nd, however, in 2021 Earth Overshoot Day has already moved back to July 29th, showing that any gains that reduced consumption and CO2 emissions from COVID are only temporary without sustained efforts, policies and behaviour changes.

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The role of the Assembly and COP26

- **Is there any scope to discuss biodiversity in this Assembly?**

  Response from Glasgow City Council: Yes.

  Ipsos MORI response: The Assembly has been tasked with considering actions in four key areas – circular economy, green economy - jobs & skills, home energy and food & diet. However, being part of the Assembly also provides an opportunity for members to raise further issues they feel will be important to consider as part of the transition to net zero by 2030.

- **Is there actually any money in the pot to action recommendations the Citizen's Assembly come up with?**

  Response from Glasgow City Council: We are currently building a case for financing through the Green New Deal for Glasgow. Recommendations made through this process that can be delivered to contribute to our 2030 target, will be included in the financing package constructed.

- **What emissions will COP26 lead to and what (if anything) is being done to minimise these (e.g. making people walk not drive in the city, take commercial flights not private jets etc)?**

  Response from Glasgow City Council: We are unable to say what the exact impact on emissions of COP will be. Measures are being put in place to make the event as sustainable as possible, such as locally sourced plant-based food, as well as plans to radically improve the infrastructure powering and heating the event campus, though this will be a legacy of the event, as opposed to being in place for the event.

- **Where's the money coming from to fund COP26?**

  Response from Glasgow City Council: The UK Government will meet the core costs of the event.

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Session Two: circular economy and the green economy, jobs & skills

The speakers and presentations

Circular Economy - Cheryl Robb, Zero Waste Scotland

Glasgow's work on the Circular Economy - Julie Robertson, Glasgow City Council

Climate Change, the Economy and Jobs - Kit England, Glasgow City Council

Green Economy and Jobs – Professor Mike Danson, Just Transition Commission

Questions raised during session two

Affordability and social justice

- **How do we judge whether there has been a just transition? And will that be Glasgow wide or will you look by district?**

  Response from Mike Danson (Just Transition Commission): A just transition will not be about one change or simply measured, it will involve many different actions, investments, changes in behaviours and attitudes. So we are all involved in moving towards a Glasgow and Scotland of net zero emissions with some affected more than others in terms of jobs, housing, training etc. We all have a part to play – whether in our neighbourhood, city or country.

  Response from Glasgow City Council (Julie Robertson): We are working hard to ensure we create a Just Transition for Glaswegians whilst both dealing with the challenges and making the most of opportunities that will be presented on our journey to Net Zero. Our Climate Plan details a number of actions that we will take to ensure people are included, consulted, enabled and encouraged to participate in the future of our city. Action 11 specifically mentions the creation of Glasgow's own Just Transition commission for the City so that we can consider these issues on a more local scale.

  This will also include measuring the success of our city in mew ways. We have recently kicked off the Thriving Cities Initiative with C40 cities which will enable us to assess Glasgow's social, economic and environmental performance in a more comprehensive way.

  We are also involved in the URBACT Global Goals for Cities project, where we will assess Glasgow's performance against all 17 UN Sustainable Development Goals which reflect key goals for a sustainable, and socially just city to achieve.

Science, technology and actions on climate change

- **Feels like a lot of what we're hearing is very positive and it would be good to hear more balanced information about the technologies. What are the downsides of the new technologies (electric cars etc)?**

  Response from Mike Danson (Just Transition Commission): We have reached the point of a climate emergency because our economic system allows technologies, goods and services to be

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brought onto the market without anyone considering their impacts on our finite global resources, the climate, pollution, etc., so a good question. Rather than looking at particular proposals or inventions, we need better ways of gauging what new or changed products might mean – can they be built and maintained sustainably without harming the planet, climate and people now and in the future? All new technologies will have impacts and each will entail difficult choices and will undoubtedly need energy and use of materials: so asking do we need this; how will it affect the climate and carbon emissions in being built and used; can the product be reused, repurposed, recycled; do we need to own it or can it be shared across the community; etc. So we need to think differently about many aspects of our everyday lives and so we need to be able to imagine what a different neighbourhood, job, spending would be like. And that is the purpose of this Citizens' Assembly: to imagine a more balanced Glasgow.

Response from Glasgow City Council: There are many exciting and innovative technologies that exist to allow us to reduce our carbon footprint. In a number of cases they can come with challenges, including financial incentives to make the change, knowledge and understanding of how to work new technologies and also the availability (or not) of suitably qualified individuals to design, install, implement and maintain these new technologies. This area is moving at pace. It is important to consider the advantages and disadvantages of each technology carefully before implementing this at a macro scale. Whilst there are so many technologies it is impossible to detail these at this moment some common issues also occur around the logistics of installation – digging up roads or retrofitting buildings, the costs of installation and long term maintenance.

- **Are there examples of good practice / good community activities that can be shared to inspire us to do more ourselves?**

Response from Keep Scotland Beautiful: Keep Scotland Beautiful managed the Climate Challenge Fund on behalf of the Scottish Government between 2008 – 2021, in that time over 1,150 projects across all 32 local authorities were awarded grants for projects focussed on energy, travel, food and waste. To find out more and to view some inspirational case studies, access our Celebration of CCF report here.

Further to this, people from across Scotland have been taking action on climate change in their communities. We call them Climate Heroes. The Climate Hero Awards recognise the achievements of these heroes who have been volunteering at projects supported by the Scottish Government's Climate Challenge Fund. The voluntary time given by these Climate Heroes has had a host of positive impacts. They've supported their communities to grow food locally, tackle waste, travel sustainably and develop many new skills. They've also passed on learning about climate change and inspired others to take positive action. Find out more at www.keepscotlandbeautiful.org/climateheroes

In September we launched Scotland's Climate Festival, with funding from the Scottish Government, there will be more learning, inspiration and good practice over the coming year which will be shared widely.

For those who have been inspired by the action of others, one of the most powerful things that you can do to play our part in combatting climate change is to participate in our climate emergency training .

Response from Mike Danson (Just Transition Commission): Indeed, sharing good examples from within and outwith the city is very important and helps to build confidence in what is

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possible. There are good practices and stories from across Scotland Europe of the power of local communities to make real changes. Allotments, buying local, neighbourhood tree planting and cycle path networks are just some of the ways that communities can come together to make small changes that can have big impacts. We saw some of these during 2020 in lockdown, examples were given from parts of the city in the 1990s and 2000s of local folk taking initiatives creating jobs, incomes and community spirit. Lessons from the Highlands and Islands where communities have bought the land and created new housing, businesses, jobs for young people and the unemployed can all be transferred to Glasgow.

Response from Glasgow City Council: To create a more climate-resilient city, we will use the local biodiversity action plan, and open space strategy delivery plan and City Development Plan, as the means to investigate opportunities to increase and protect biodiversity. This will include the creation of new Local Nature Reserves which will complement the enhanced network of open spaces across the city in helping to mitigate urban heat island effect.

Alongside this, the city council alongside other organisations in the city and region, supports the delivery of a Clyde Climate Forest (please see here a link to the project's brochure) aiming to plant **18 million trees** in both urban and rural parts of Glasgow City Region over the next decade.

The city are also working on a number of tiny forest initiatives (for more information about tiny forests, please see here) and are working with Green Action Trust to create an area of woodland in the Cart and Kittoch area of the city. The city are also developing an Urban Woodland Strategy looking at protecting existing trees and planting new trees as appropriate and where required.

By increasing green space in the city and introducing hedgerows and wildflower strips, Glasgow can create and enhance biodiverse green corridors, and help to protect and enhance our environment. Native species hedgerows provide food and shelter for a wide variety of invertebrates, small birds, mammals and amphibians in Glasgow. Small birds use hedgerows for nesting. Mammals (e.g. hedgehogs, field mouse, voles) and amphibians (common frog, common toad, palmate and smooth newt) use the shelter of the base of hedgerows to move about between habitats. Pollinators find nectar sources in the hedgerow trees/shrubs and from the wildflowers which will grow at the hedgerow base. Thus, hedgerows provide green, biodiversity-rich corridors for wildlife to move along and within. Additionally, the trees and shrub species making up the hedgerow will have benefits for carbon capture, air quality and water retention. The city will endeavour to survey and monitor the hedgerows in the city, spatially mapping existing hedgerows, monitoring their retention and investigating potential for creating new sites in line with the local biodiversity action plan, Glasgow pollinator strategy and Open Space Strategy Delivery Plan

- **Could larger businesses provide shuttle buses for their workers?**

Response from Mike Danson (Just Transition Commission): In the past of course businesses often did provide dedicated buses for picking up workers and we had a better integrated transport system publicly owned. In France, all businesses must fund the public trams and light rail schemes as they are the main beneficiaries of investment in better public infrastructure. Similarly across Europe it is recognised that putting resources into transport, education, health, culture paid for through taxes on those who can afford it – especially businesses – benefits all, which is why the Nordic countries are the wealthiest, happiest, most equal economies on the planet.

Response from Glasgow City Council: Transport is a key sector that the city must address in order to reduce our carbon emissions. We should be looking to consider ways in which we can consider modal shift – that is coming out of cars into more sustainable forms of transport as well

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as Active travel – walking, wheeling and cycling as often as possible. The forthcoming Glasgow Transport Strategy has consulted extensively on this issue and currently in development.

- **Are there any plans for tree planting schemes in Glasgow?**

Response from Mike Danson (Just Transition Commission): There are and the Council members will be able to share details. Also there is a project being developed by the City Council and Strathclyde University "Every Tree Tells a Story", based on an idea by the actor Tam Burn, and an existing concept popular around the world. The project is simple, and concerns communities mapping trees in their neighbourhood, and recording their stories around Glasgow. Appreciating trees and encouraging more gardening, allotments and planting trees to encourage biodiversity, local circular economies and so to address climate change are all interlinked, these all have positive health benefits too.

Response from Glasgow City Council: Glasgow City Council is a partner in the Clyde Climate Forest. Over the next decade, ten trees for every man, woman and child in Glasgow City Region will be planted as part of a new urban 'forest' to tackle climate change.

The economy

- **The economy presentations mentioned crowd-funding and there were some concerns that the platforms take a lot of money and it doesn't all go to the desired cause. Are there any assurances that the money would be spent as intended?**

Response from Mike Danson (Just Transition Commission): Social and community enterprises and the City Council itself can have an important role to play in delivering jobs, incomes and services and be accountable to their members and local people. Such businesses seldom use crowdfunding apart from special opportunities e.g. the Govanhill Baths project. Community based credit unions were recognised by the Just Transition Commission as an excellent way of investing in local projects without risk of money being diverted elsewhere. Glasgow and Scotland are world leaders in social enterprise and making it work, we have many examples of how to protect the environment, people and integrity with public bodies overseeing their work and accounts.

- **If Scotland changes its economy drastically by making it circular, what is done to prevent economic damage to developing countries that currently cater to Scottish industries and consumers?**

Response from Mike Danson (Just Transition Commission): We will never be creating an economy cut off from the rest of the world and so trade will always be going on between us and developing countries. There is a lot of evidence that the economies of these countries are not 'developing' but actually 'under-developing' that is their resources, workers and futures are being exploited with very little trickle down of incomes, wealth and hope through much of the existing trade. A just transition for all the world, for it cannot be just in one place, will mean us investing in their futures as such as our own by becoming more self-reliant here and less greedy and driven by wanting cheap clothes, food and other goods. If we do not address the climate emergency the poorest in the world will suffer ever more drought, heat, famine, storms and flooding with mass migrations far greater than we have seen before, It is in our own best interests to reset the economy and trade of the world, and so to re-evaluate our own values, behaviours and attitudes to the people and planet.

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- **What is being done to disincentivise throwaway culture for a) businesses and b) individuals?**

  Response from Cheryl Robb, Zero Waste Scotland: Examples such as the carrier bag tax and plans to effectively ban some single-use plastics (see: Single-use plastics: the law is changing | Zero Waste Scotland) are designed to disincentivise throwaway culture.

  Scotland will also introduce a Deposit Return Scheme in 2022 (see Scotland's Deposit Return Scheme passed by Parliament | Zero Waste Scotland) which will see a 20p deposit placed on single-use drinks containers.

  Other action could be seen as incentivising change through providing advice and support for individuals and businesses to move away from throwaway culture. See for example businesses that have received grant funding to make positive changes to reduce waste and carbon emissions: Circular Economy Investment Fund Past Projects | Zero Waste Scotland

- **How does the circular economy address carbon emissions at the point of production?**

  Response from Mike Danson (Just Transition Commission): By analysing where materials and how much energy is being used to build and deliver a product, we are able to check whether a circular economy is better than buying from elsewhere and throwing away at the end. The circular economy builds in less transport of materials, less unnecessary building and production, fewer trips to buy from out of town shopping malls, and more of considering where do materials come from and do we need this, how will we reuse, repurpose, recycle and share. So the circular builds in reduced carbon emissions at the point of production – and the more we make here the more renewable and zero emission electricity is being used rather than other harmful sources elsewhere where we have not control.

  Response from Cheryl Robb, Zero Waste Scotland: A circular economy should be 'powered' by renewable energy and energy efficient production which will reduce emissions at point of production. More efficient use of raw materials will also reduce emissions at point of production. For example, in clothing production, using zero waste pattern cutting techniques; in food production, using residual heat from ovens to dry grain from brewing which can then be milled and used in production of bread etc.

- **Are there any plans to encourage or require businesses to report on their carbon footprint?**

  Response from Mike Danson (Just Transition Commission): It can often be very difficult for businesses to be able to measure their carbon footprint – do we include all the goods and services they use and how would they be able to find out what these involve, does it cover the fuel used by their workers and distributors to get to the office or factory and to customers, etc? So encouraging businesses to change their behaviours and decisions as always will often be done indirectly through planning and building regulations which will need tightened to demand ever increasing levels of insulation and efficiency, through encouraging working from home where possible but without disadvantaging those who must be on site, by having more car free zones and workplace parking levies – all these have been proposed and several implemented recently.

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Response from Cheryl Robb, Zero Waste Scotland: There are requirements for businesses to report on carbon footprint, see: Measuring and reporting environmental impacts: guidance for businesses - GOV.UK (www.gov.uk) and Small business user guide: Guidance on how to measure and report your greenhouse gas emissions - GOV.UK (www.gov.uk)

There is a lot of support for businesses to reduce carbon emissions, for example Energy Efficiency Business Support: Energy Efficiency Business Support | Welcome (zerowastescotland.org.uk).

- **How would retraining schemes for oil and gas engineers etc. be funded?**

Response from Mike Danson (Just Transition Commission): In the Just Transition Commission recommendations, supported by Scottish Government and locally by the UK Government in the North East of Scotland, there is agreement that retraining and other changes are needed to encourage workers to move into new occupations and industries. A just transition must fund these changes or it will not be just and so not acceptable.

Response from Cheryl Robb, Zero Waste Scotland: There are various options. See Skills Development Scotland, Climate Emergency Skills Action Plan for a good overview of national plans in this area: climate-emergency-skills-action-plan-2020-2025.pdf (skillsdevelopmentscotland.co.uk).

Engagement, education and awareness

- **How do we make sure young people aren't scared about the future but instead feel optimistic and feel like they can play their part?**

Response from Keep Scotland Beautiful: Young people have already played an important part in climate action through the Climate Strikes influencing government declarations of a Climate Emergency.

With relation to communication to young people we must emphasise hope over despair, and we must communicate the co-benefits of tackling climate change.

We believe that getting Carbon Literate is a great first step to taking positive action to help you understand the science of climate change, understand how you and your community will be impacted by climate change, appreciate the significant changes we need to make and identify practical actions you can take. Alongside this, there are a variety of programmes and activities delivered by Keep Scotland Beautiful that young people can become involved with such as Young Reporters for the Environment, Eco-Schools and Climate Ready Classrooms.

Response from Mike Danson (Just Transition Commission): An important question. There will be real opportunities opening up for new and exciting careers for young people but also for current workers going through retraining. Trainees young and older in some occupations will need to new skills and understanding to be able to meet the demands of a just transition, for example gas engineers will be employed in fitting new heating systems based on hydrogen and heat pumps. Teachers and parents will be telling their children of these new careers, of new challenges and opportunities; Skills Development Scotland, colleges and universities will be giving information and putting on new courses at all levels to meet the needs for skilled workers.

Response from Glasgow City Council: The Climate Plan includes a number of key actions to engage with the city on the issue of climate change. This includes extensive work with Education so that young people can understand better the challenges ahead of us.

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One recent project, the "Democracy pioneers", aims to engage young people in democratic processes showing them how they can engage and help shape our city in a positive way. This allows young people to be empowered to engage in these conversations and have their say.

- **Why do the council not bombard people with communications on this like during elections?**

Response from Glasgow City Council: The material councils produce during elections is designed to effect two small changes in behaviour – register to vote and then use your vote. The discussion around the climate emergency is far more complex and asks people to make far longer term changes to their behaviour. It might not feel like it, but when we ask you to use your recycling bins or to look at ways of reducing bulk waste; to stop parking near schools; to stay out of bus lanes or find other ways to get into the city centre these are all communications aimed at reducing our impact on the environment.

The Council also needs to adhere to "Purdah". 'Purdah' describes the period of time immediately before elections or referendums when specific restrictions on communications activity are in place.

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Session Three: home energy and food & diet

The speakers and presentations

Home Energy - Stephen McGowan, Glasgow City Council

Decarbonising Heat in sandstone tenements - Lucy Gillie, South Seeds

Food system, greenhouse gas emissions, environment, biodiversity and health - Abi Mordin, Glasgow Community Food Network & Propagate

Food and diet in Glasgow - Sandy Paterson, Glasgow City Council

Questions raised during session three

Home energy

- **What about improving windows in homes to keep the heat in. Is there a scheme for that?**

  Response from South Seeds (Lucy Gillie): Warmworks say they will give grants to improve windows for those eligible but we have never seen them give out money for windows on Glasgow's southside. It may be worth contacting them to see if they have given out grants for window improvements in Glasgow.

  It would be really useful for the local authority to conduct an investigation in to options for Glasgow windows in particular pre-1919 tenement windows which are particularly large. Arguably, Glasgow has the largest amount of large windows in the whole of Scotland. Making windows more efficient can bring immediate comfort and a chance to reduce the amount of time heating is on for, therefore cutting carbon.

  Response from Glasgow City Council (Stephen McGowan): Currently, there is no specific Government funded scheme for owners to replace their windows. However, Home Energy Scotland can provide advice and information about measures to improve energy efficiency and financial options for funding measures - https://www.homeenergyscotland.org/

- **Can the public go to see the retrofitting project that is happening in Glasgow to see what it's like?**

  Response from South Seeds (Lucy Gillie): Good question, we would like to see a retrofitting project too.

  Response from Glasgow City Council (Stephen McGowan): At the moment this is not possible because work is still ongoing. But we can raise this with the Housing Association who owns the building to see if it would be possible following completion before the building is occupied.

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- **What needs to happen to make green hydrogen a realistic option and who needs to do that?**

Response from South Seeds (Lucy Gillie): Hydrogen is at a very early stage in Scotland. This is the last statement put out by the Scottish Government on hydrogen and you should note it was pre-election: https://www.gov.scot/publications/ministerial-statement-developing-scotlands-hydrogen-economy/

A Scottish Government policy on hydrogen is due soon.

Response from Ipsos MORI: Click here for a recent article on Holyrood Magazine's website about the UK Government's plans for hydrogen.

Response from Glasgow City Council (Stephen McGowan): Green hydrogen is produced by electrolysis of water (separating hydrogen from oxygen in water) requiring large production plants. To produce large enough quantities of hydrogen requires a lot of electricity. Green hydrogen is produced when only electricity from renewable sources (wind, solar or hydro).

The challenge at present is the lack of large scale hydrolysers and renewable energy is still relatively expensive. The UK Government has published its Hydrogen Strategy which can be found at https://www.gov.uk/government/publications/uk-hydrogen-strategy

Can the [EPC] standards be made easily available so that the public can access these standards so that they can choose to make home alterations compliant with these standards from now onwards?

Response from South Seeds (Lucy Gillie): If all tenures of homes met the Scottish Housing Regulator's energy efficiency standards for social housing, that would make a huge difference: https://www.gov.scot/policies/home-energy-and-fuel-poverty/energy-efficiency-in-social-housing/

It would be useful if Glasgow City Council published achievable energy efficiency standards for Glasgow housing stock.

Response from Glasgow City Council (Stephen McGowan): Scottish Government's Energy Policy sets out general advice in relation to long-term domestic standards and the requirement for all homes to achieve a rating of EPC Band C by 2040. (see: https://www.gov.scot/policies/energy-efficiency/energy-efficiency-in-homes)

Home Energy Scotland provide advice and information on home energy improvements, including getting an EPC assessment and recommended measures for improving a home's EPC rating. See: https://www.homeenergyscotland.org/

- **Would it be possible for the council to supply the requirements that houses will need to meet, so that any improvements that are undertaken by homeowners/landlords in the meantime are done to the right standards?**

Response from South Seeds (Lucy Gillie): Good question for Glasgow City Council, why can't Glasgow home owners access a list of actions they could easily follow to make their home more energy efficient?

Response from Glasgow City Council (Stephen McGowan): At present the Council cannot supply requirements as it does not have sufficient information to provide this advice. We would

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recommend homeowners to contact Home Energy Scotland: https://www.homeenergyscotland.org/

- **How can private landlords be encouraged/incentivised to take up home energy improvements, and how can they be stopped from passing that cost on to tenants?**

Response from South Seeds (Lucy Gillie): Glasgow City Council has a list of people it has allowed to act as private landlords. Home energy improvements could be added as a step people wanting to be private landlords have to take before they become are added to the list and allowed to rent out property. This may not only improve the efficiency of the house stock but discourage those who only rent properties without investment in improvements and repairs from becoming landlords.

Response from Glasgow City Council (Stephen McGowan): The Scottish Government 9SG) is introducing regulations setting out when private landlords should meet EPC targets: EPC E by 2022, EPC by 2025 and EPC C by 2030. SG is also making low cost finance available for landlords to carry out measures to meet these standards. The Rent Service Scotland can adjudicate on rent increases for tenants with a private residential tenancy (https://www.gov.scot/publications/about-rent-service-scotland/)

- **What can tenants do to get these changes made, considering they are the ones paying the energy bills and living in the property?**

Response from South Seeds (Lucy Gillie): Very little. They can ask their landlord for an energy performance certificate (it is the duty of all landlords to provide this) which will show how energy efficient the home is. Then they can ask their landlord in writing to make energy improvements. If the landlord fails to make energy efficiency improvements is there any where tenants can go to check if their landlord is being unreasonable.

Response from Glasgow City Council (Stephen McGowan): Tenants should speak to their landlords in the first instance and then seek advice if these changes are not made.

- **Will there be help for those who could do it themselves but can't afford it, will there be support for those less fortunate?**

Response from South Seeds (Lucy Gillie): At South Seeds, we ran an energy saving handyman service and were able to make free installs for those who could not afford to do so themselves. Sadly due to cuts in funding we are unable to continue running this service. We have also created factsheets and videos about how people can make homes more energy efficient. The real barriers are permissions and investment from private landlords plus know-how and confidence for making installations at home. South Seeds runs the Southside Tool Library, which enables residents to borrow from an inventory of over 500 tools for free.

Response from Glasgow City Council (Stephen McGowan): We support homeowners through the Scottish Government Energy Efficient Scotland Area Based Schemes (EES-ABS) Grant who meet the criteria so that they can participate in our programmes. Energy Company Obligation (ECO) funding also helps fuel poor households so that energy efficiency measures are affordable

- **How do people pay for these measures?**

Response from Glasgow City Council (Stephen McGowan): Home Energy Scotland (https://www.homeenergyscotland.org/) provide interest free loans for owners. As currently in our

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programmes much of the cost of each measure is covered by grant and other funding, owners' contributions are kept to a minimum (usually about £1,000 for External Wall Insulation).

- **What % of Glasgow's housing stock CAN be decarbonised, and how?**

Response from Glasgow City Council (Stephen McGowan): Decarbonisation requires investment to improve the fabric, insultation and energy efficiency of buildings as well as converting the energy and heat supply to a zero-carbon source. Hopefully all stock can be de-carbonised either through district heating systems or heat networks, heat pumps or other forms of electric heating (with high levels of insulation and electricity provided from renewable sources). Hydrogen might be possible as a route to decarbonisation – there is a demonstration project in Fife at present – but this solution will be further down the line.

Through Glasgow's Housing Strategy, the Council has developed a proposed 'Pre-1919 Strategy for tenement buildings', which sets out the issues and priorities for investing to preserve Glasgow's iconic tenement buildings so they can continue to be effective, sustainable housing options to meet the long-term needs of Glasgow's people.

- **What's a heat pump? Can we have links to a bit more info about how they work, and what type of energy they generate?**

Response from Ipsos MORI: Renewable heating systems use energy from biomass or the sun, or use electricity to draw heat from the ground, water or air to heat your home.

They include solar water heating systems, air source heat pumps, ground source heat pumps and biomass boilers.

For more information, click here: Generating renewable energy - Energy Saving Trust

- **Progressing home energy improvements up until 2030 - what are the Council's plans for this?**

Response from Glasgow City Council (Stephen McGowan): As the Council has an enabling role with respect to home energy improvements our focus is on the delivery of our Affordable Warmth Programme using Scottish Government Energy Efficient Scotland funding. We will continue to work with households, communities and partners (including Housing Associations) in the delivery of energy efficiency measures. We also look to access other potential funding to support households and communities to carry out improvements

From 2022, the Scottish Government has indicated they will provide a medium-term grant commitment (over three years) to support planning for a multi-year investment programme. Glasgow's registered social landlords (RSL) provide over 106,000 homes, approximately 34% of all housing in Glasgow. All of them have long-term plans for investing in existing homes to meet the required energy standards set by Scottish Government.

In addition through our programmes we provide energy advice and information for residents which can point them in the direction of support for individual households to carry out improvements.

- **Are the timeframes for retrofitting housing in Glasgow feasible to be in line with carbon emissions targets?**

Response from Glasgow City Council (Stephen McGowan): Timeframes for meeting targets are challenging. The City Council with & neighbouring Local Authorities in the Glasgow City Region have commissioned a feasibility study into how retrofit programmes can be 'upscaled'

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from current levels i.e. how can we increase the number of measures each year in order to meet targets? The findings from the study will be available in the Autumn.

It will require significant commitment of resources and a step change in investment as we move from an energy efficiency and fabric approach to a greater focus on decarbonising energy supply.

- **How will decanting happen in practice when properties are being retrofitted?**

Response from Glasgow City Council (Stephen McGowan): When any measure is carried out there will be some degree of disruption particularly with replacement of heating systems. The goal, however, is likely to be to keep decants to a minimum and plan how this can be achieved. There are likely to be situations where households' circumstances mean that decanting is the best approach both for the household and carrying out the improvements. This can only be assessed in the planning stage for individual projects.

- **When would further details for the retrofitting plans be available?**

Response from Glasgow City Council (Stephen McGowan): The results of the Feasibility Study will feed into the preparation of our Local Heat and Energy Efficiency Strategy (LHEES) (currently under preparation). LHEES will be consulted on before being finalised and approved by Council. We would anticipate that a consultative draft LHEES will be published in the coming months.

Food and diet

- **Are there ways to improve soil quality nearer the city?**

Glasgow City Council response (Sandy Paterson): Yes, there are ways to regenerate soils almost anywhere, however in City's particularly post-industrial cities such as Glasgow there can often be a legacy of soil contamination. I would recommend the first steps is examining the history of the land in question and determining if there is a requirement for soil analysis prior to commencing any work to improve the soil. The specific contaminants would determine the approach. Some hydrocarbons can be removed by specific fungi, other contaminations such as heavy metals can be bio-remediated through planting of specific plants. Another option but very costly is to have the soil removed, washed free of contaminants and returned to site. Not exactly practical though.

Where sites have no contamination the addition of organic matter such as composts, manures, leaf litter can increase microbial action in the soil. This in turn facilitates more nutrient/sugar/water/ oxygen exchange between the plant and soil via mycorrhiza (fungus basically). Less intrusive horticultural practices can also improve soils, i.e. not turning the soil. Cover crops such as green manures can greatly reduce soil erosion and provide additional organic matter being returned to the soil. Such practice can increase carbon sequestration as it increase the soils capacity to hold Soil Organic Carbon locking it down in perpetuity (or until someone turns the soil).

- **Nurseries and schools should have waste food and garden waste bins. Why don't they?**

Glasgow City Council response (Sandy Paterson): I am checking this question with our Waste Management Team however my current understanding is that there are some schools and nurseries currently who have existing food waste bins. I will provide a more detailed response when I have received information from the Waste Management Team.

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As the school grounds are normally maintained by GCC, the garden waste arising from such maintenance is processed through our normal arrangements. That is, all garden waste is lifted and removed as part of the maintenance program.

I would also offer that as highlighted in last night's presentation that we are keen to work with educational establishments from early years to further education to encourage growing in school grounds which would increase opportunities for garden and some food waste to be composted and returned to such growing spaces to improve the soil.

- **Where can we buy the produce from city growing schemes, such as the Washhouse garden in Parkhead?**

Response from Abi Mordin (Glasgow Community Food Partnership): As part of the Food & Climate Action Project we at GCFN are pulling together a directory for this, along with all things community food.

In the meantime, you can access Wash House Garden produce via their website and find out more on their Facebook page. Other produce such as that grown by Tenement Veg is typically available via Locavore.

- **Can we have a bit more info on what GCC are doing now to identify more potential sites for city growing (including indoor growing)?**

Response from Glasgow City Council (Sandy Paterson): Glad to, as mentioned we embarked on a series of engagement events throughout 2017-2019, part of a wider engagement package which commenced in 2015. Further details on this and specific reports relating to the engagement can be found here: https://www.glasgow.gov.uk/index.aspx?articleid=23744 We also work in collaboration with Glasgow Community Food Network to identify other sites within the City that could be considered for Food Growing along with colleagues in the People Make Glasgow Communities team, further info on their work can be found here: https://www.glasgow.gov.uk/index.aspx?articleid=26738

We also have site nomination form that can be completed at any time and returned with additional sites for consideration. Through reporting to Area Partnerships we link with Community Councils and other active partner organisations to raise awareness and seek input from grassroots on sites for consideration also.

This has led to the publication of the Growing Map storyboard, info on this available here: https://glasgowgis.maps.arcgis.com/apps/MapSeries/index.html?appid=d277ea6d8d7c4e07b4fbed01ff05a3f0

This provides information on the following:

- How to get started
- How to find out about community growing in my area.
- Food growing legislation
- The Food Growing Strategy
- Help and Resources

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There is currently an organisation that is growing indoors at the moment in Glasgow that I am aware of. I would note that we are keen to consider and support where possible all types of growing.

- **Abi's presentation mentioned 10-16% of what farmers produce is wasted – how is it wasted? Is it because supermarkets aren't buying wonky veg etc?**

Response from Abi Mordin (Glasgow Community Food Partnership): Yes, primarily produce is wasted because it's deemed unsalable by supply chain management (what would they know!!). It is all to do with market and economics, plus customer expectations. There's also limits as to what we can currently do with food waste, since foot and mouth it can't be fed to pigs (for example) without processing, and there's little infrastructure for that.

- **What provisions are in place to make low carbon food planning inclusive and accessible for all e.g. does it reflect cultural and religious diversity, inclusive for older and disabled people.**

Response from Glasgow City Council (Sandy Paterson): When developing new site we design and construct in line with the guidance associated with the Disability Discrimination Act. Our new sites include accessible growing areas. On existing sites we are currently reviewing areas for expansion and where such areas are identified will include provision for accessible growing. Our most recent expansion at Mansewood includes an accessible growing area and installation of wheelchair user friendly gates.

- **Are there any plans to provide education on low carbon cooking (alongside the low carbon food production plan)?**

- **Response from Abi Mordin (Glasgow Community Food Partnership):** Yes! This is already happening and indeed has been happening for a long time – Urban Roots in the Southside have a programme called Great Grub, developed back in 2010. Propagate run a programme called Veg Power with a focus on local seasonal produce and plant based diets.

As discussed, there are plans underway to increase the pace and scale of better food education, and roll out/increase access to it. This is happening through the Food Education Working Group, and the Food & Climate Action Project.

Response from Glasgow City Council (Sandy Paterson): This question may be better answered by the City Food Plan Team. I would understand that the low carbon cooking would be predicated by low carbon energy supply.

- **How can the food growing strategy compete with globalised food production and distribution?**

Response from Glasgow City Council (Sandy Paterson): I would note that the aim of the Food Growing Strategy is not to compete with the globalised food production systems but rather to increase opportunities for food growing within the City.

By taking individual steps to increase growing provision within the City, this increases opportunities for more people to access opportunities to grow their own food and engage in food education. It is almost inevitable that people involved in growing their own and food education increase their awareness of the Globalised food production and distribution systems which can

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influence their choices around food. This can impact on the globalised food production systems when a critical mass is reached.

- **Is the allotment plan enough to support Glasgow's food growing strategy?**

  Response from Glasgow City Council (Sandy Paterson): I am a little unclear what is meant by the allotment plan, however increasing allotment provision is a key part of supporting the delivery of the aims of the Food Growing Strategy.

Other issues

- **What has the Council already done on reducing waste / recycling?**

  Response from Glasgow City Council (Sandy Paterson): I will forward this question to colleagues in the Waste Strategy Team to provide an update and return to you with said update when received.

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Session Four: the power of cities and ideas for Glasgow

The speakers and presentations

Thriving, Healthy Clean Cities – Andy Kerr, Climate-KIC

The role of city partners – Professor Jaime Toney, University of Glasgow

Questions raised during session four

Technical questions

What is a smart city?

Response from Andy Kerr, Climate-KIC: A smart city is a term used to describe a city that is using extensive information/communication technologies (from WIFI to broadband and smart phones) to manage and harness data to help cities, business and individuals make better decisions that improve quality of life. For example, using real time data on people waiting at road crossings to change the lights and enable better pedestrian flow or redirecting buses/cars around traffic congestion.

Response from Jaime Toney, University of Glasgow: The term "smart city" can be used in a lot of different contexts. Often it is used in the reference to cities that are using sensor and electronic technology to monitor different aspects of how the city runs and use the collected data to make informed decisions. This can include any area of focus for the city from transport, the environment, and security to waste management.

Which countries are in C40?

Response from Andy Kerr, Climate-KIC: The C40 is a network of the largest ('mega') cities in the world. Originally there were 40 cities, but now expanded to 97 cities, ranging from London in UK to Rio de Janeiro (Brazil), Shanghai (China) and New York.

Response from Jaime Toney, University of Glasgow: Glasgow does meet the size requirements of a mega-city (population of 10 million or more) but has been invited as a pilot city in C40's Thriving Cities Initiative, because of its progressive action in moving toward a Circular Economy.

Can we see the donut diagram bigger? Is it still relevant 4 years later?

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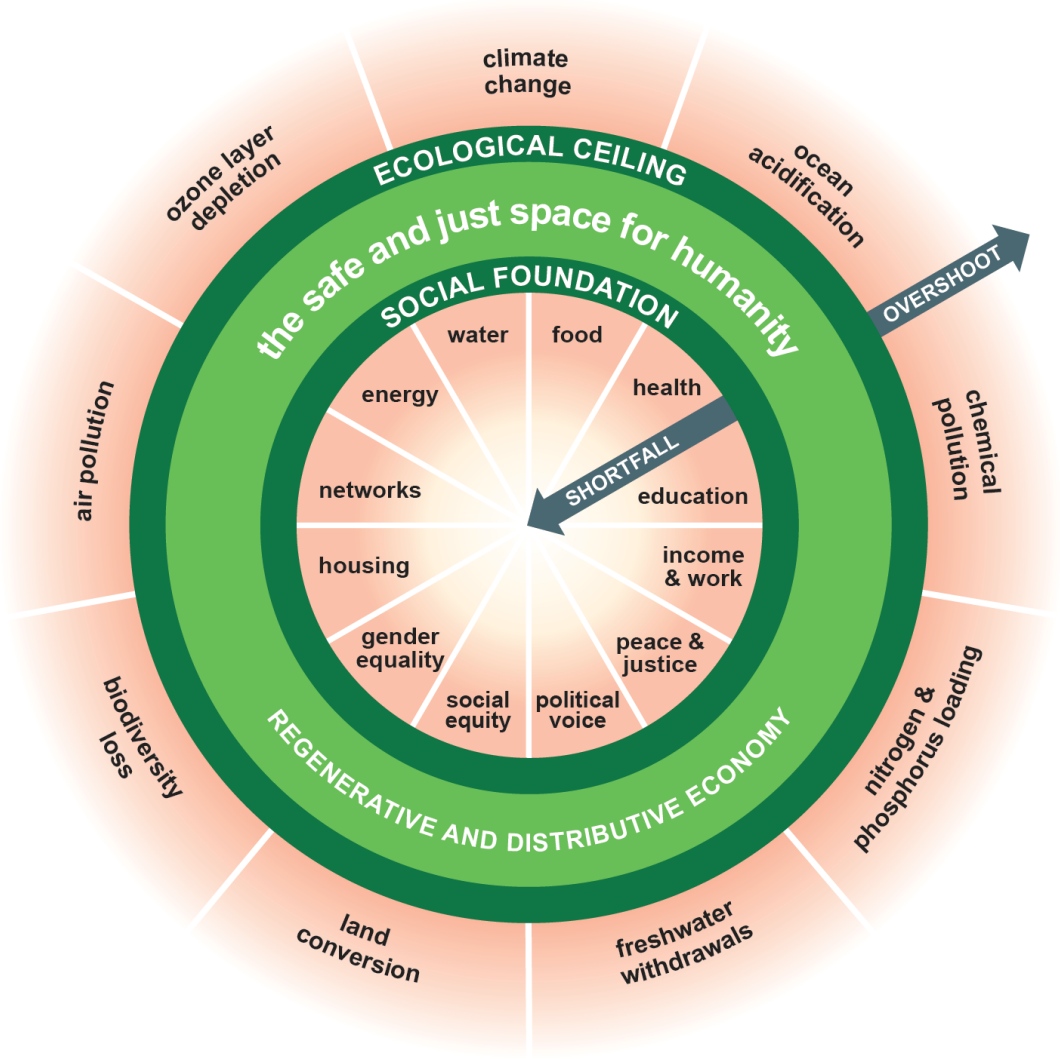

Response from Jaime Toney, University of Glasgow: The donut is simply a concept and tool to use in decision-making within the city that includes a process and method for input and dialogues with local residents. By using the donut to make decisions and set a vision, it provides a way to set just and sustainable targets and check that those targets are being met. So, the donut provides a means to not only set a vision (which could be for 4-year or 10-years or longer), but it is an iterative process. It is used to make sure that decisions that are made provide benefits not only to the elements of social progress (centre of the donut), but also are within ecological boundaries (outer circle). Targets are set for an individual city at the local and global level for both social and ecological changes - recognising that local actions can have global impacts.

An example from Amsterdam, during their vision setting was deciding on how global impacts are relevant at the city level. The Netherlands rely on chocolate in their local economy, for jobs, and their culture; however, if it is not sourced sustainably and consideration for just production in other countries is not considered, then they will be having detrimental effects on the global environment and society. Their targets had to include global impacts related to the supply chain.

Examples from other cities

What specifically are communities in Bristol or Birmingham doing to deliver changes?

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Response from Andy Kerr, Climate-KIC: Example 1 - Bristol worked with their local communities to co-design energy investments - which involved engaging with community to bring forward ideas of what could be achieved and what benefits would come to the local community (e.g. investing in local energy generation to support income coming back to local communities).

This is the Birmingham example we are working with (called 'Civic Square) - https://civicsquare.cc/2020/03/09/civic-square-2020-2030/

Is there a back-up plan or model if communities reject or not uphold change?

Response from Andy Kerr, Climate-KIC: What we tend to find is that communities sometime reject change...but after a while (a few years maybe), the world has moved on and it changes the dynamic of the debate. In some cases, e.g. national government will incentivise through tax or a subsidy a particular pathway which also changes the mind of the community. And the community also changes in time. So these things are never static.

Response from Jaime Toney, University of Glasgow: Also to say that bringing communities in at the very early stages of any initiatives is a good way to get buy in and their voices heard in terms of how the changes are implemented. In an academic project that we are hoping to get funded in the new year, we are specifically looking at how the council, practitioners and policymakers can communicate more effectively to co-create solutions and initiatives.

Does the C40 group (or other cities generally) have any answers about how to retrofit in the most cost effective and sustainable way? Came out of concern that a lot of the tech is unproven and we still seem to be experimenting with this, but surely other cities must have cracked this, so how do we make sure we're not reinventing the wheel?

Response from Andy Kerr, Climate-KIC: There is broad agreement in cities' networks (including the ones we run across Europe) about many of the technologies needed for retrofit, though new ones are still emerging. And widespread recognition that it is not just about technologies, also about the culture and nature of the city and country and the business models being used (types of buildings, centralised vs individualistic solutions, financial models available etc.). But NO city has fully worked out how to retrofit '00,000s homes cost-effectively (in terms of paying back within 4-5 years). While we can do lots of cost-effective solutions for the easy homes (wall/floor insulation), it is much harder for 'hard to heat' homes, including solid-wall tenements. Some of this is simply down to timescales – most retrofit is cost-effective over 15-20 years, but then we need to find a way of ensuring the costs 'stay with the home' when people move to a new house.

Response from Jaime Toney, University of Glasgow: The process that are starting with C40 is in its early stages, but home energy solutions will likely be one of the key areas to explore through the donut concept. Work on the Thriving Cities Initiative is currently focused on what is the current state of play in Glasgow and as we move to workshops and vision/target setting in the new year, we will be consulting heavily with other cities, such as Amsterdam, Barcelona and Portland, who are also pilot cities, but also via conversations with the other 97 cities in C40.

Have there been examples of people providing vouchers for giving out fruit and veg?

Response from Andy Kerr, Climate-KIC: Yes – in Scotland, the Best Start Foods is a government payment that helps towards the costs of being pregnant or looking after a child and is used online or in shops to buy food like milk or fruit.

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Response from Glasgow City Council: We are piloting work with the Alexandra Rose charity to roll out fruit and veg vouchers. More information is available here: https://www.alexandrarose.org.uk/location/glasgow/

Glasgow city

Andy talked about the importance of having warm and affordable home in Glasgow. Will these affordable homes have solar panels etc?

Response from Andy Kerr, Climate-KIC: The 'warm' bit comes from improving the fabric of our buildings – including better insulation (walls, floors, roof), double/triple glazing, etc. The 'affordable' bit comes from a range of policies / regulations but having solar panels that generate an income (or reduce the cost of electricity bills) to residents can, in the right circumstances, help the affordability of running a home (or many homes if it is a community scheme).

Can the council start the ball rolling to set up new markets for the new technologies, so that the locale develops these skills to make a greener future better accessible for everyone? Or if not the Council – who?

Response from Glasgow City Council: The Council, Skills Development Scotland, Colleges and Universities all have a role to play in this process. The Scottish Government and Skills Development Scotland have recently published a Strategy for climate emergency jobs - please see it here.

The Climate Emergency Skills Action Plan was published last year, and a direct response to Scotland's declaration of a Climate Emergency and increased legislative targets to meet net zero emissions.

This transition will transform the economy and society, including the kinds of jobs we do and skills we need to thrive in a net zero economy. This is particularly relevant for a Green Recovery following the economic downturn from COVID-19, the plan focus on supporting people into good, fair, green jobs. Enhancing access to skills training is critical for successful decarbonisation and will help create new, high-quality green jobs, enhanced regional growth, and improved access to growing 'green markets' across the globe for Scotland's diverse businesses.

The Council and its partners in delivering the climate plan will support the delivery of the climate emergency skills action plan, supporting young people in the city to access and succeed in new job opportunities, while also supporting others in carbon intensive sectors to transition to low carbon jobs successfully.

The Scottish Government have committed to green jobs in their programme for government (2020/21) having a number of employability and skill support measures, such as:

- Significant support for apprenticeships
- A new Youth Guarantee (£60 million)
- A new National Transition Training Fund (£25 million)
- A £100 million Green Jobs Fund
- Funding for employers to access flexible workforce development training opportunities and support inclusive economic growth through up-skilling or re-skilling of employees
- Fair Start Scotland to help those facing the greatest barriers find work
- Our No One Left Behind funding stream aimed at helping those who face challenging barriers to finding and maintaining employment reach their potential
- Support for those affected by redundancy through our Partnership Action for Continuing Employment (PACE) initiative, including additional funding to reflect the current increase in people facing or experiencing redundancy
- Investment in Individual Training Accounts
- Funding to support community jobs

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Please see a link here to the programme for Government 2020/21.

Green jobs can be in Science Technology and Maths, but also in the circular economy, looking at care & repair, marketing, management and retail in circular businesses.

The City Council, particularly Education Services are working with Skills Development Scotland to further understand, develop and support green job opportunities and profiles in the city. For example, Education Services are working with Apparel XChange on some 'fast fashion' resources they are producing for education purposes and they currently employ 3 women (all over 18) in green jobs. Please see clip from their website here.

Another example of the emergence of green jobs can be found in the initial assessment of the baseline of "nature-based" jobs in Scotland. This identified just under 200,000 nature-based jobs, approximately 7.5% of the total workforce. Over the last five years, nature-based jobs have grown five times faster than the Scottish economy as a whole and are expected to continue to grow. Significant growth in nature-based jobs, for example in peatland restoration and woodland creation, is anticipated on the back of expansion in activities to meet net zero targets.

Does the Council do much in terms of influencing supermarkets in the area at the moment to persuade them to sell more local produce?

Response from Glasgow City Council: *The Glasgow City Food Plan* was approved in June 2021 and provides a framework to achieve a framework for Glasgow that is fair, resilient and environmentally sustainable. Priorities include increasing provision of locally sourced food at affordable prices and engaging with businesses in Glasgow and the Scottish Government to prioritise this. To make that possible we also need to do more to increase the production and availability of food that is produced locally.

Glasgow City Council seeks to use those levers which are available to us to push forward on our climate agenda. Whilst influencing retail at this scale requires a national approach at a Scottish and UK level, the Council works with local retailers to raise awareness and encourage best practice.

Response from Jaime Toney, University of Glasgow: I know that when Waitrose was looking for planning permission in Milngavie, the communities stressed to the local authority the need for cycle routes to the shop - and part of the planning permission required Waitrose to build the cycle friendly route to the shop. Communities, when they pool together can have a lot of power to make change happen.

How can we persuade businesses to meet the earlier climate targets in Glasgow and make changes if it's not in their interests to do so? When the rest of the country doesn't require changes so quickly.

Response from Andy Kerr, Climate-KIC: Businesses will deliver targets where it is in their interest to do so, so we need to help shape the market to support them to change – this is in part about having joined up regulatory frameworks (from UK, Scottish Governments), but also about using other levers available e.g. public procurement from Glasgow City Council, and building a market opportunity for business to be ahead of the curve (we have seen good examples elsewhere), so their financial interest is aligned with reaching net zero.

Response from Jaime Toney, University of Glasgow: More and more businesses are seeing that becoming sustainable affects their profits, because more and more consumers are making decisions to buy or use sustainable products and services. Partnerships, dialogues and understanding business

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needs in the changing economy are key to making sure we all move forward together. Communication is key here to get new insights to the challenges and create appropriate solutions.

Response from Glasgow City Council: Glasgow are working with Sustainable Glasgow Partners to enable public and private sector collaboration, using public sector funds more strategically and attracting private funds and investment for low carbon projects in the city. The City are currently working to develop a Green New Deal for Glasgow and have recently developed an inward investment prospectus in order to attract investment and promote innovation in our transition to a low carbon, fairer and climate resilient city. Please see the prospectus here.

Is Glasgow working towards 20 minute neighbourhoods or something similar at the moment?

Response from Jaime Toney, University of Glasgow: Glasgow has a 10-year programme for 'Liveable Neighbourhoods' that is based on similar principles to 20-minute neighbourhoods. More info can be found here: https://www.glasgow.gov.uk/index.aspx?articleid=27062

Response from Glasgow City Council: The city has a number of challenges, including decarbonising the transport networks and improve infrastructure for walking, wheeling, and cycling, as well as reducing the need to travel through effective remote working and implementation of 20-minute neighbourhoods.

To help solve this, the council aims to develop : -

- The Glasgow Transport Strategy which will present an overarching city transport strategy,
- The City Centre Transformation plan focusing solely on the city centre of Glasgow,
- A Liveable Neighbourhoods Plan, looking to implement 20 minutes neighbourhoods in the city and embed sustainable practices throughout.
- Active Travel Strategy setting the ambition and workplan,that will also deliver on the city and neighbourhood networks.

The new transport strategy and Liveable neighbourhoods plan will be integral to the success not only in achieving the city's net zero carbon targets, but also improving infrastructure for walking, wheeling and cycling, reducing the number of private vehicles on the road, as well as access to equitable, affordable, clean and reliable public transport.

The Liveable Neighbourhoods Plan will set out policy regarding transport infrastructure to support a well-connected and low carbon city, this will be supported by the City Development Plan 2 (CDP2) which will also help to facilitate action proposed by the Regional Transport Strategy, Glasgow Transport Strategy once completed. Embedding this in city-wide policy will help to bring about a modal shift in transport while also ensuring that housing sites are within locations supported by sustainable design and reducing the need to travel.

Gothenburg has had District Heating for years, why haven't we done this already in Glasgow?

Response from Glasgow City Council: There are many challenges in implementing District Heating schemes. In addition some of Glasgow's housing stock doesn't lend itself easily to District Heating schemes. Information on the Heat Networks (Scotland) Bill can be found here:

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https://www.gov.scot/news/heat-networks-bill/ this aims to support and accelerate the implementation of district heating in Scotland.

Given that COVID has led to more home working, should government be encouraging people to continue with this and possibly also to have a shorter working week to reduce carbon from commuting etc?

Response from Jaime Toney, University of Glasgow: At the national level, the Scottish Government has been considering a 4-day work week and some Glasgow businesses are individually making this change already, e.g., UPAC and YWCA.

Response from Glasgow City Council: There are multiple ongoing studies about the value of homeworking for supporting the transition to achieving a net zero carbon nation and looking at whether the savings from travel are potentially offset by home energy consumption. Research by Zero Waste Scotland in 2020 suggested that continuing with homeworking after lockdown would cut its carbon footprint by nearly 75 per cent because most of its emissions are caused by staff travel.

The council are committed to both reduce our carbon footprint and provide an inclusive working environment, the city will explore continued home working and the use of video-conferencing as part of a standard working practice. Due to the Covid-19 pandemic, the Council had to rapidly adopt new ways of working to ensure people stayed safe while being able to continue serving the city. This adoption of new and more agile working practices strengthens the case for a further rationalised Council estate, reducing our carbon impact through the reduced requirement for operational buildings and lower consumption of utilities. There will also be a proportionate reduction in transport thus vehicle emissions and congestion will be lessened. We do note however, that we must be careful not to transfer emissions generation from the council estate to the domestic sector, thus we will carefully consider how we best realise the benefits and impacts of changing working practices.

How much CO2 is created by the process of retrofitting itself – e.g. disposing of old boilers and building materials? Are we sure it's better to replace things as part of this process rather than extend their lives?

Response from Glasgow City Council: A report can be viewed here: https://www.gov.scot/publications/energy-efficient-scotland-strategic-outline-case-proposed-development-national-delivery-mechanism/pages/16/ . This explores how best to oversee the delivery of the EES programme to improve energy efficiency and promote low carbon heating in Scotland's homes and buildings.

The Assembly's roles and next steps

What is the Council's implementation plan after the Assembly agrees its recommendations? (e.g. timescales for putting recommendations into place). Will the council act on the recommendations of the Assembly?

Response from Ipsos MORI: A report will be published on Glasgow City Council's website. It will also be used internally by the Council to help identify ways in which Glasgow can transition towards net zero by 2030 in an inclusive and fair way as part of the COP26 legacy.

How does the Council plan to get people behind their Climate Emergency plans?

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Response from Glasgow City Council: The council are working with partners in the city and city region as part of Sustainable Glasgow Partnership to deliver on the ambition set in the climate plan. This also requires engaging with communities across the city to raise their awareness of climate change issues and highlight action that they can take locally to potentially improve or provide benefit to themselves, their communities and the city. See a link to the website for more information here.

Why hasn't transport been mentioned as much in this Assembly? What is the Council's strategy for transport?

Response from Ipsos MORI: The Council gave this statement which the Assembly chair presented in session 2:

The Council and Glasgow residents will need to look at a range of areas to help address the climate emergency. So far, the Council has consulted extensively with residents and business around the issues of transport, waste and recycling. In recent years the Council has developed various plans and strategies to tackle these areas and will continue to work with stakeholders to ensure we can take forward the actions we have already developed. Although these are not the focus of the Assembly, we would still welcome your views on these issues and we will use them as part of any future work in these areas

Glasgow's updated Transport Strategy for 2021-31 can be found on the Council's website: www.glasgow.gov.uk/index.aspx?articleid=25934 Relevant Council plans, policies and strategies can all be found on the Citizens Assembly webpages: COP26 Citizens Assembly - Glasgow City Council

When will there be electric buses in Glasgow?

Response from Glasgow City Council: We already have a couple for the Riverside 100 Route and the service that links Central and Queen St

https://www.glasgow.gov.uk/article/23454/No-break-in-electric-bus-service-for-Riverside-Museum

First Bus have already new buses and equipping their depot for electric buses

https://www.sustainable-bus.com/news/first-bus-glasgow-electric-buses-caledonia/

How many electric buses do you need to cover the whole of Glasgow?

Response from Glasgow City Council: 800 buses would be required and we there currently around 175 currently on order to be replaced in the next 12 - 18months.

Where are the facilities for washing after cycling to work?

Response from Glasgow City Council: This is would be the responsibility of individual employers. Cycle to work is an increasingly popular scheme supported by the UK Government which provides employees with a cost effective way to buy a bike. The *UK Government guidance* highlights the importance of employers also putting appropriate facilities in place such as secure bike parking and shower/washing facilities.

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