



To: Climate Change Sub-Committee

On: 1 September 2021

Report by: Head of Policy and Commissioning

Heading: Climate Emergency - Policy Update

1. Summary

- 1.1 This paper updates members on a number of policy developments since the sub-committee last met in June 2021. The paper provides a summary of the latest UN report on the science of climate change, a summary of the findings of the Scottish Government's Climate Change Citizen's Assembly, information on the new 'Let's Do Zero' campaign and the latest developments in relation to COP26.

2. Recommendations

- 2.1 It is recommended that the Climate Change Sub-Committee:

a) Note the policy updates in this paper.

3. Latest UN IPCC Report

- 3.1 In August 2021, the UN published the Intergovernmental Panel on Climate Change's Sixth Assessment Report (AR6)¹ on the physical basis for climate change. The IPCC is the world's leading authority on climate science and the latest report has been compiled by more than 200 scientists worldwide and approved by 195 countries. The report is the first of three due for publication and states:

- Climate change is widespread, rapid, and intensifying
- It is unequivocal that human influence has warmed the planet.

- Scientists are observing changes in the Earth's climate in every region and across the whole climate system
- Many of the changes observed in the climate are unprecedented in thousands, if not hundreds of thousands of years, and some of the changes already set in motion—such as continued sea level rise—are irreversible over hundreds to thousands of years.
- Strong and sustained reductions in emissions of carbon dioxide (CO₂) and other greenhouse gases would limit climate change
- However, even with this action it could take 20-30 years to see global temperatures stabilize but that nations can still prevent the worst impacts.

3.2 The report has three sections, covering the increase in the rate of global warming, the impact on every region of Earth, and on the impact of humans on past, present and future climate change.

3.3 The report provides new estimates of the chances of exceeding the global warming level of 1.5°C in the next decades, and finds that unless there are immediate, rapid and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach. The report shows that emissions of greenhouse gases from human activities are responsible for approximately 1.1°C of warming since 1850-1900. It also finds that averaged over the next 20 years, global temperature is expected to reach or exceed 1.5°C of warming. This assessment is based on improved observational datasets to assess historical warming, as well as progress in scientific understanding of the response of the climate system to human-caused greenhouse gas emissions.

3.4 The second part of the report explains that every region on Earth is facing increasing changes to its climate and also highlights that what people experience is often very different to the global average. For example, warming over land is larger than the global average, and it is more than twice as high in the Arctic. The report projects that in the coming decades climate changes will increase in all regions. For 1.5°C of global warming, there will be increasing heat waves, longer warm seasons and shorter cold seasons. At 2°C of global warming, heat extremes would more often reach critical tolerance thresholds for agriculture and health, the report shows. Climate change is not a single effect but impacts regions differently, for example:

- Climate change is intensifying the water cycle. This brings more intense rainfall and associated flooding, as well as more intense drought in many regions.
- It is affecting rainfall patterns. In high latitudes, precipitation is likely to increase, while it is projected to decrease over large parts of the subtropics. Changes to monsoon precipitation are expected, which will vary by region.
- Coastal areas will see continued sea level rise throughout the 21st century, contributing to more frequent and severe coastal flooding in low-lying areas and coastal erosion. Extreme sea level events that previously occurred once in 100 years could happen every year by the end of this century.
- Further warming will amplify permafrost thawing, and the loss of seasonal snow cover, melting of glaciers and ice sheets, and loss of summer Arctic sea ice.

- Changes to the ocean, including warming, more frequent marine heatwaves, ocean acidification, and reduced oxygen levels have been clearly linked to human influence. These changes affect both ocean ecosystems and the people that rely on them, and they will continue throughout at least the rest of this century.
- For cities, some aspects of climate change may be amplified, including heat (since urban areas are usually warmer than their surroundings), flooding from heavy precipitation events and sea level rise in coastal cities.

- 3.5 The IPCC has included a more detailed regional assessment of climate change in this latest report, including a focus on useful information that can inform risk assessment, adaptation, and other decision-making, and a new framework that helps translate physical changes in the climate – heat, cold, rain, drought, snow, wind, coastal flooding and more – into what they mean for society and ecosystems. Under scenarios with increasing CO₂ emissions, the ocean and land carbon sinks are projected to be less effective at slowing the accumulation of CO₂ in the atmosphere. This regional information can be explored in detail in the newly developed Interactive Atlas interactive-atlas.ipcc.ch as well as regional fact sheets, the technical summary, and underlying report.
- 3.6 The new report also reflects major advances in the science of attribution – understanding the role of climate change in intensifying specific weather and climate events such as extreme heat waves and heavy rainfall events. It shows that human actions still have the potential to determine the future course of climate. The evidence is clear that carbon dioxide (CO₂) is the main driver of climate change, even as other greenhouse gases and air pollutants also affect the climate. One of the report authors clearly states that “Stabilizing the climate will require strong, rapid, and sustained reductions in greenhouse gas emissions, and reaching net zero CO₂ emissions. Limiting other greenhouse gases and air pollutants, especially methane, could have benefits both for health and the climate.”
- 3.7 This means transformation is required at every level of society: individuals, employers, institutions and international partners will need to work together to understand the trade-offs, agree compromises and seize opportunities. Just as scientists are pooling insights from diverse fields of expertise, policymakers will need to work in new ways, sharing ideas across disciplines to plot a clear path from here to net zero. This is a whole systems challenge and tackling it will require a systemic approach.
- 3.8 The report states, with high certainty, that to stabilize the climate, carbon-dioxide emissions must reach net zero, and other greenhouse gas emissions must decline significantly. For a given temperature target, there is a finite amount of carbon that can be emitted before reaching net zero emissions. To have a 50:50 chance of halting warming at around 1.5°C, this quantity is about 500 billion tons of carbon dioxide. At current levels of carbon-dioxide emissions this “carbon budget” would be used up within 12 years. Exhausting the budget will take longer if emissions begin to decline.

- 3.9 The IPCC maps out four pathways to achieve 1.5°C, with different combinations of land use and technological change. Reforestation is essential to all of them as are shifts to electric transport systems and greater adoption of carbon capture technology. Carbon pollution would have to be cut by 45% by 2030 – compared with a 20% cut under the 2°C reduction pathway – and come down to zero by 2050, compared with 2075 for 2°C.
- 3.10 Although better than expected progress has been made in the adoption of renewable energy, deforestation for agriculture is turning a natural carbon sink into a source of emissions. Carbon capture and storage projects, which are essential for reducing emissions in the concrete and waste disposal industries, have also ground to a halt. The report concludes that reversing these trends is essential if the world has any chance of reaching 1.5°C without relying on the untried technology of solar radiation modification and other forms of geo-engineering, which could have negative consequences.
- 3.11 As elected members will be aware work is currently underway to establish a robust baseline and evidence base in relation Renfrewshire's level of carbon emissions. As part of this work recommendations will come forward which detail the actions that will need to be taken to achieve net zero carbon emissions by 2030.

4. Scotland's Climate Citizen Assembly Report

- 4.1 On the 25th September 2019 the Climate Change Bill was passed in the Scottish Parliament. This legislation commits Scotland to becoming a net zero emissions society by 2045, five years before the rest of the UK. The legislation required Scottish Ministers to establish a citizens' assembly to consider how to prevent or mitigate the effects of climate change and recommend measure to achieve emission reduction targets.
- 4.2 Scotland's Climate Assembly consisted of over 100 people randomly selected from across the country to represent the adult population in respect of age, gender, socio-economic class, educational qualifications, ethnic groups and political attitudes. The Assembly also engaged with the Children's Parliament to ensure representation from young voices. Assembly members collaborated several times between November 2020 and March 2021. This was conducted online in response to the constraints presented by the Covid-19 pandemic. An Evidence Group presented members with balanced and comprehensive information about the climate emergency and potential ways to address it. Members were split across three workstreams to identify key issues and priorities: diet, land use and lifestyle; homes and communities; and work and travel. Outputs from the Children's Parliament were fed back to the Climate Assembly and helped shape the Assembly outputs, which were laid before the Scottish Parliament on 23rd June 2021.
- 4.3 The report identifies the Scottish Climate Assembly's recommendations for Scotland to tackle the climate emergency. This is summarised by a Statement of Ambition, which identifies the Assembly's overarching views which are threaded through

related goals and recommendations. The Statement calls for a united drive for immediate action across government, business, communities, and individuals to encourage and subsequently embed sustainable behaviour across society.

4.4 Beneath the Statement sits a total of 16 goals and 81 recommendations, each agreed upon by consensus of Assembly members. Goals are high level and represent key areas or themes. These are:

1. **Resources** – reduce consumption and waste by embracing society wide resource management and reuse practices
2. **Building Quality** – adopt and implement clear and future-proofed quality standards for assessing carbon impact of buildings
3. **Retrofit Homes** – retrofit the majority of existing homes in Scotland to be net zero by 2030
4. **Standards and Regulation** – lead by example through government and public sector implementing mandatory standards, regulations and business practices that meet the urgency and scale of the climate emergency
5. **Public Transport** – implement an integrated, accessible and affordable public transport system and improved local infrastructure throughout Scotland that reduces the need for private cars and supports active travel
6. **Travel Emissions** – lead the way in minimising the carbon emissions caused by necessary travel and transport
7. **Carbon Labelling** – provide clear and consistent carbon content labelling on produce, products and services to enable people to make informed choices
8. **Education** – provide everyone with accurate information, education and lifelong learning to support behavioural, vocational and societal change to tackle the climate emergency
9. **Land Use** – balance the needs of the environment, landowners, and communities across Scotland for sustainable land use
10. **Communities** – empower communities to be able to develop localised solutions to tackle climate change
11. **Circular Economy** – strive to be as self-sufficient as possible, with a competitive Scots circular economy that meets everyone's needs in a fair way
12. **Work and Volunteering** – develop work, training and volunteering opportunities to support net zero targets
13. **Business** – support long term, sustainable business models where people and the environment are considered before profit
14. **20 Minute Communities** – realise the principles of a '20 minute community' in flexible ways across Scotland by reducing the needs to travel for work, shopping, services and recreation
15. **Taxation** – develop and implement a fair, equitable and transparent tax system that drives carbon emission reductions
16. **Measuring Success** – reframe the national focus and vision of Scotland's future away from growth and Gross Domestic Product in order to reflect climate change goals towards a more person and community centred vision

4.5 The 81 recommendations that sit under these goals identify the specific aims of Assembly members. Each recommendation identifies a discrete activity area and a

focussed call for change. Recommendations are supplemented with supporting statements which detail the reasons for their inclusion. They provide important insight into the thoughts, feelings and views of Assembly members in an accessible and easily understandable way.

- 4.6 A Children's Parliament Report is provided as an annex to the main report. The Children's Parliament Report summarises the activity undertaken with child contributors, and details their specific thoughts, opinions, and aspirations for tackling climate change, and how these have been reflected in final report outputs.
- 4.7 The Scottish Government is required to respond to the recommendations in the report within six months of its presentation in parliament. During summer 2021 Assembly members will have the opportunity to meet with people and organisations working in those areas covered by the Assembly's recommendations to discuss their proposals with stakeholders. Scotland's Climate Assembly members will also meet again after Ministers publish their response, expected December 2021.
- 4.8 The breadth and depth of the Assembly's report illustrates the success that can be achieved through this model of engagement. The Assembly's broad representation, extensive information sharing and effective facilitation has led to report outputs that are balanced, informed and relatable. Recommendations are written in an accessible manner and reflect ordinary experiences. This provides a clear route for change and creates an initial framework for monitoring and evaluation. The specific inclusion of children's views, presented through the Children's Parliament Report, is particularly successful in identifying the drivers for change amongst this age group.
- 4.9 The findings of the Assembly are helpful in terms of informing local work to establish Renfrewshire's Climate Panel to hear the views of Renfrewshire's citizen's and establish what action they would like to see at a more local level. As outlined within papers provided to the sub-committee, work is underway to establish the Panel in Renfrewshire and to involve this Panel in the development of our local net zero plan.

5. Net Zero Scotland

- 5.1 The Scottish Government's new climate change communications campaign, "Let's Do Net Zero" was launched in June 2021 to raise public awareness about climate issues ahead of COP26 in November 2021. The multi-media campaign has two phases. The first, which is currently running, is a national campaign to inform the population across Scotland about the climate emergency and the need to reach net zero. The second phase will be targeted at both domestic and international audiences and will focus on what Scotland is doing to tackle climate change.
- 5.2 The campaign has some simple key messages, with a particular focus on the urgency with which action is needed. It highlights environmentally friendly behaviours which have already become mainstream (such as recycling) and identifies some of the bigger changes required to deal with the climate emergency. The campaign has some clear and distinctive branding and a toolkit of resources is available on the Net Zero Nation website for partners and supporters to download

and add to their own social media profiles, emails, and other communications materials.

6. COP26 Update

- 6.1 The 26th Annual Climate Change Conference of the Parties, rescheduled from last year, will take place as an 'in person' event in Glasgow from 31 October to 12 November 2021. Event arrangements will reflect the current context and have additional measures in place to manage the Covid-19 risk but also to ensure delegates are able to attend from all over the world. Technological solutions will also be in place to allow those unable to travel to participate. The annual preparatory meeting will take place in Milan from 30 September to 2 October 2021.
- 6.2 An informal two-day meeting of more than 50 ministers and high-level representatives, including the UN Deputy Secretary-General, took place in July 2021 and delegates discussed expectations for the conference and deal with outstanding negotiations issues. The sessions covered five topics – scaling up of adaption, mobilising finance, keeping the target of 1.5°C alive, loss and damage, and finalising the Paris Rulebook.
- 6.3 In terms of the hoped-for outcomes of COP26, delegates expressed a wish for a roadmap to accelerate the Global Goals for Adaption and for a package of finance to support that, with an improved balance between funding for mitigation and funding for adaption.
- 6.4 Delegates also stated that they would hope for all parties to have developed Nationally Determined Contributions to aligned to 1.5°C ahead of the conference alongside long-term strategies demonstrating how net zero would be reached by 2050.
- 6.5 Further discussions will take place before the conference on scaling up funding and on dealing with loss and damage. Separate meetings will also take place on the Paris Rulebook, with informal consultations planned on common timeframes and enhanced transparency.
- 6.6 Further detail is beginning to emerge around COP26 and its implications for Renfrewshire, as a key access point for those travelling to COP26. In addition, it is likely that there will be a range of citizen engagement opportunities, as a key feature of COP26.

Implications of the Report

1. Financial –None

2. HR & Organisational Development –None

3. Community/Council Planning – None

4. Legal – None

5. Property/Assets – None

6. Information Technology – None

7. Equality & Human Rights - The Recommendations contained within this report have been assessed in relation to their impact on equalities and human rights. No negative impacts on equality groups or potential for infringement of individuals' human rights have been identified arising from the recommendations contained in the report, as it is a policy update for noting only.

8. Health & Safety – None

9. Procurement – None

10.Risk – None

11.Privacy Impact - None

12.COSLA Policy Position – Not applicable

13.Climate Change – This report provides an update on recent policy developments in relation to climate change.
