
To: Planning and Climate Change Policy Board

On: 24 January 2023

Report by: Chief Executive

Heading: Net Zero Renfrewshire

1. Summary

- 1.1 Renfrewshire Council declared a climate emergency in June 2019 and approved the Plan for Net Zero in August 2022, which committed to working towards net zero by 2030 for both the Renfrewshire area as a whole and Renfrewshire Council as an organisation.
- 1.2 This target places Renfrewshire 15 years ahead of the national target (as set out in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which commits Scotland to become net zero by 2045); and 20 years ahead of the UK Government target of net zero by 2050.
- 1.3 Renfrewshire's Plan for Net Zero is Council-led but is for the whole of Renfrewshire. In terms of achieving net zero, it must be recognised that the scale of the challenge for Renfrewshire as an area and the Council as an organisation is significant. Renfrewshire Council makes up around 2.5% of the area's total emissions, but around 33% of area-wide emissions are from sectors that can be directly shaped or influenced by council policy or partnerships, including waste and recycling services; land use and planning policies; and transport strategies.
- 1.4 At the Planning and Climate Change Policy Board on 1st November 2022, it was requested that a report be submitted to the January Policy Board detailing the challenges and actions required in terms of the approved Renfrewshire Plan for Net Zero should the local target for net zero be revised from 2030 to 2025.
- 1.5 The purpose of this report is to outline the background of the approach taken to date; the milestones to progress towards net zero; and what might be involved if the net zero target date were to be changed.

- 1.6 Based on the information currently available, it is recommended that the Council continues to work with partners to deliver on the current 2030 target, which remains very ambitious and significantly ahead of the Scottish and UK targets. Whilst there is significant commitment and focus within the Council and across Renfrewshire, the report notes that the resource and financial capacity required to deliver on a 2025 target would not be possible at this time.
- 1.7 As noted within the report, during 2023, officers will bring forward costed delivery plans for key priority areas that must be targeted to reduce carbon emissions, which elected members will be able to assess and make investment decisions in relation to. At all stages throughout the delivery of the Net Zero Plan, officers will look to identify opportunities with partners to accelerate progress wherever possible within the resources and capacity available.

2. Recommendations

- 2.1 Members of the Planning and Climate Change Policy Board are requested to:
- note the background and milestones to Renfrewshire's 2030 net zero target and what might be involved if this target were to be changed;
 - note the recommendation at Section 1.6 from officers that the 2030 target should remain and continue to be progressed as a priority by all partners in Renfrewshire; and
 - note that regular updates will be provided to the Board on the further development of the Plan for Net Zero; its ongoing implementation; and the identification of opportunities to accelerate action across different themes and work programmes.

3. Background: Scottish Local Authorities' Current Position

- 3.1 The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 committed Scotland to become net zero by 2045, with the Public Bodies Climate Change Reporting Duties placing a legal requirement on public bodies to set target dates for zero direct emissions and indirect emission reductions; to report on how spending and resources will contribute to these targets; and to report on the body's contribution to Scotland's Climate Change Adaptation Programme.
- 3.2 26 Scottish councils have net zero targets for their own emissions. 10 councils have set organisational net zero targets ahead of the Scotland-wide target of 2045:
- City of Edinburgh, East Ayrshire, Falkirk, Glasgow City, Midlothian, Moray, North Ayrshire and North Lanarkshire have a 2030 organisational net zero target (in line with Renfrewshire's target of working towards net zero by 2030)
 - Stirling Council has an organisational target of 2035, and Clackmannanshire an organisational target of 2040 for net zero emissions
- 3.3 There are no specific legal requirements for councils to set area-wide net zero targets. Of the 32 Scottish local authorities, 17 have set area-wide net zero emissions targets, with only 6 setting net zero area-wide targets ahead of the Scotland-wide 2045 target:

- Dumfries and Galloway Council has an area-wide net zero target of 2025
 - City of Edinburgh, Glasgow City, North Ayrshire and North Lanarkshire have a 2030 target (in line with Renfrewshire's target of working towards net zero by 2030)
- 3.4 9 councils have set organisational targets only and do not currently have an area-wide emissions target.
- 3.5 Although this progress has been achieved in terms of setting targets, not all Councils have yet established a route map or investment plan for achieving the agreed net zero targets. An evidence based approach to working towards the 2030 target is being progressed in Renfrewshire, with further information on the Renfrewshire approach set out in Section 4.

4. The Approach to Developing the Plan for Net Zero

- 4.1 Renfrewshire Council has shown leadership at both a strategic level and operational level to be a driver of change - declaring a climate emergency in June 2019 and approving the Plan for Net Zero in August 2022, committing to working towards net zero by 2030 for both the Renfrewshire area as a whole and Renfrewshire Council as an organisation.
- 4.2 This target places Renfrewshire 15 years ahead of the national target (as set out in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which commits Scotland to become net zero by 2045); and 20 years ahead of the UK Government target of net zero by 2050.
- 4.3 Following the declaration of a climate emergency, strong governance was established to lead by example and take action to tackle climate change - including a cross-Party working group; establishing a Climate Change Sub-Committee, now the Planning and Climate Change Policy Board; and committing £1million to a Climate Change Action Fund to support innovative climate projects and initiatives across Renfrewshire, building on transformative projects that the Council has already delivered across our operations.

Stakeholder Engagement

- 4.4 Renfrewshire's Plan for Net Zero is Council-led but is for the whole Renfrewshire area. Moving towards net zero will transform our communities, our economy and how we deliver our services, therefore it was recognised that engagement is key to ensure all voices are heard. A key element of the development of the Net Zero Plan has been the grassroots approach – gathering different views and ideas across stakeholders to identify and prioritise key areas for action and ensure everyone can participate in the design and delivery of our transition to net zero; and using local knowledge and voices to ensure solutions are tailored to address different needs across different areas and that no one and no place is left behind.
- 4.5 Collaboration and partnership working across all stakeholders will ensure that we maximise the opportunities that arise over time from our transition to net zero,

ensuring benefits are shared equitably to create a greener, fairer, sustainable way of life for all our citizens, communities and local businesses. Through the development of the Plan for Net Zero, we have been expanding networks with community planning partners and local organisations, as well as other local authorities, public bodies and the private sector in order to share knowledge and best practice.

- 4.6 Extensive engagement was undertaken based on the 2030 target (a target already ahead of the majority of our community planning partners' net zero targets). A change to the 2030 target, would require a further extensive programme of engagement with all stakeholders to be undertaken, shifting the focus back from implementation to a development phase.

Evidence Base

- 4.7 A robust evidence base was key for the Plan for Net Zero as a foundation to build on. Officers worked with external technical consultants to baseline emissions for Renfrewshire Council as an organisation as well as the Renfrewshire area as a whole. This showed where we had started from (using 2014/15 as our baseline); where we are now; and a best case and worst case trajectory of our emissions to 2030 for both the Council and the area as a whole.
- 4.8 The development of a local carbon emissions baseline:
- is a valuable engagement tool to discuss with stakeholders to stimulate action and encourage partnership working and collaboration and allowing all stakeholders to understand the scale of the ambition;
 - enables identification and prioritisation of targeted actions and opportunities across key sectors to reduce emissions in order to reach net zero;
 - allows our progress towards net zero emissions to be monitored and reported in an open and transparent way.
- 4.9 The baselining work also produced a modelling tool that can be updated to report progress to net zero – so this work is not just a snapshot in time, but a live monitoring tool that can be updated as projects are proposed; national targets and policies are updated; and/or data sets are improved and updated; and can be used to run scenarios to model emissions impacts of proposed projects and interventions.
- 4.10 The emissions modelling of a best case 'tailwind' scenario trajectory to 2030 outlined 406ktCO₂e¹ emissions remaining, which would need to be offset annually in order to reach net zero (see section 6: Offsetting). If the net zero target was brought forward to 2025 for the Renfrewshire area, the modelling tool shows that around 634ktCO₂e of residual emissions would remain annually under a best case scenario.
- 4.11 For context, 1 hectare of trees is estimated to capture around 430 tonnes of carbon across its lifespan. This means that to offset 634ktCO₂e approximately 1,474 hectares of land would be required to offset emissions in 2025 to reach net zero. 1,474 hectares is around 5.6% of Renfrewshire's total area. Additional land would be required in subsequent years to offset emissions at this level if sufficient emissions reduction activities were not being undertaken towards net zero.

¹ CO₂e (carbon dioxide equivalent) measures emissions from various greenhouse gases by converting to CO₂ on the basis of global warming potential

5. The Challenges and Opportunities of Net Zero

- 5.1 Renfrewshire's Plan for Net Zero outlines 5 themes, with key outcomes to be achieved against each theme. The core principle at the heart of the Plan, is for the Council to act as a driver or catalyst for change, to lead by example and maximise the opportunities of a just transition to net zero - integrating climate action into the Council's financial planning, decision making and existing activities and embedding climate considerations across all that we do in a way that ensures continued delivery of high quality public services and closely aligns with our ambitions for Renfrewshire.
- 5.2 In terms of achieving net zero, the scale of the challenge for Renfrewshire as an area and the Council as an organisation is significant. Renfrewshire Council makes up around 2.5% of the area's total emissions. However, council leadership is critical as around 33% of area-wide emissions are from sectors that can be directly shaped or influenced by council policy or partnerships, including waste and recycling services; land use and planning policies; and transport strategies.
- 5.3 Many of the levers required to meet this challenge head on are not directly controlled by local authorities and will need to be activated by government, possibly through legislation. The Council would be unable to solely deliver or fund all of the projects and interventions required to reach net zero, and so will require collaboration and commitment from all stakeholders in order to succeed. There are recognised challenges in the next phase of the journey to net zero but, by working collectively with all stakeholders, many of the challenges also bring opportunities through a managed, phased and just transition.
- 5.4 When considering bringing forward the net zero target from 2030 to 2025, elected members are advised that a number of challenges already identified as part of the 2030 Plan, would be exacerbated and would require to be dealt with over a much shorter period, at potentially greater cost to the organisation.

Resourcing and Capacity

- 5.5 Substantial investment at a local and national level will be required alongside the successful rollout of enabling activities within national programmes such as transport infrastructure. The capital investment to support the scale of change required is a significant challenge, particularly just as many organisations are recovering from the pandemic – but this also brings opportunities to design better systems and explore innovative commercial delivery models to optimise benefits, including community ownership; increased partnership working; and signposting residents and businesses to advice and support schemes, including financial support in order to ensure that the benefits from a just transition, such as warm homes and alleviation of fuel poverty are distributed equitably. At a national level some level of investment funding is available, however moving at pace to deliver the Net Zero Plan by 2025, would reduce the scope for the Council to bid for future funding, with much of the investment being required to be met from the Council's own resources.
- 5.6 Developing a carbon budget for Renfrewshire Council will identify emissions by service area and improve our understanding of how our emissions relate to the services we provide and how we need to adapt in order to reduce emissions while

delivering the same high quality local services. Delivering the carbon budget alongside the financial budget annually will align investment and resource deployment to keep us on track as an organisation to meet our net zero target.

- 5.7 The scale of transformation to deliver the required infrastructure brings a need to address identified skills gaps. Investment in upskilling and reskilling of local workers in areas of skills gaps or demand offers sustainable career paths and ensures that local communities and businesses benefit from the opportunities and infrastructure delivery in the transition to net zero, and that capacity is addressed in the local workforce, manufacturing and supply chains. This brings increased sustainable employment opportunities and local job creation; increased local investment; and can result in community wealth building across all aspects of the transition, e.g. installation, manufacturing, construction, engineering, project management, maintenance, tree planting and land management. As highlighted above, the scale and pace of transformation required to deliver on a 2025 target is unlikely to be deliverable, notwithstanding much of the technology required to deliver net zero is emerging and may remain more costly until it can be delivered at scale.
- 5.8 The next phase of the Plan for Net Zero will produce a detailed phased road map, broken down into clear annual phasing and interim targets for each year alongside costed phased delivery plans which quantify multiple outcomes (including those that cannot be monetised, such as fuel poverty alleviation and local job creation). These will aid communication with our stakeholders and identify partnership working opportunities and maximise on-the-shelf projects when large-scale funding opportunities arise.
- 5.9 Producing a long-term, phased pipeline of projects will maximise local benefits through linking with skills transition and local employment opportunities ahead of time and identify skills gaps, shortages and requirements, including local opportunities in supply chain and manufacturing to be identified. Working with colleges, schools, universities and training providers will ensure training opportunities exist for the stable, sustainable quality jobs that will be created and ensure reskilling and upskilling opportunities are supported in Renfrewshire.
- 5.10 Overall a net zero target of 2025 would leave just 3 years to deliver the scale of change and levels of infrastructure required. This timescale would be unable to be met through emissions reductions and local offsetting alone as set out currently in the Plan for Net Zero and would require finances to be diverted to alternative offsetting activities.

Stakeholder Engagement and Behaviour Change

- 5.11 The Climate Change Committee (CCC) has estimated that over 60% of measures needed to reach net zero emissions will require some degree of behavioural or societal change. Councils have a role as community leaders to encourage shifts in behaviours, but enabling change requires infrastructure and investment. It should also be recognised that residents and organisations within our communities are all at different stages of the journey and we need to bring everyone with us in order to maximise the opportunities and benefits of the transition to net zero.

- 5.12 The Plan for Net Zero acknowledges the Council's leadership role, setting out clear actions the Council would take to lead and enable change under each of the 5 themes of the Plan: clean energy; sustainable transport; circular economy; connected communities; and resilient place. This included actions such as generating the equivalent of 100% of our power requirements by 2030; removing the need for new petrol and diesel light commercial vehicles in the Council fleet by 2025; embedding community wealth building into our procurement practices; and producing a proposed pipeline of our major infrastructure projects in order to link with skills transition and local employment opportunities; encourage investment in local areas; and enable local supply chain and manufacturing opportunities to be identified.
- 5.13 As well as mitigation (reducing emissions), interventions within the Plan for Net Zero aim to address adaptation - resilience of our communities, buildings and critical infrastructure to local impacts of climate change, such as increased flooding; heatwaves; and more frequent severe weather events.
- 5.14 This approach of leading by example and knowledge sharing through partnership working, will enable replication to scale of projects and interventions across sectors to reach the net zero target through collective action that brings wider benefits, including cleaner air; affordable energy; improved health and wellbeing and social outcomes; and local areas being safer, more attractive places to spend time in.

6. Offsetting Residual Emissions

- 6.1 Net zero means reducing our greenhouse gases to as close to zero as possible and locking up the remaining balance through nature and mechanical carbon capture and storage schemes, so the balance of our emissions is zero. In order to reach net zero, residual emissions (i.e. those that we have not been able to remove) would need to be offset for each year that emissions remain above net zero after the target date.
- 6.2 Many organisations globally have identified voluntary carbon offsetting (or purchase of carbon credits) as a means to reach net zero. However, there is a financial cost if a decision was taken to purchase carbon credits to offset residual emissions, e.g. currently Woodland Carbon Code verified carbon credits are between £10 and £20/tonne of carbon. If the net zero target was brought forward to 2025, it is extremely unlikely that the Council and local stakeholders would not be able to commit time, capacity, capability, investment or resourcing to deliver the infrastructure required to reach net zero by 2025. This would potentially leave the purchase of carbon credits as the only option to meet net zero and would require diverting investment from local projects and interventions and the loss of associated local benefits to communities.
- 6.3 The Climate Change Committee (CCC) highlights that the use of carbon credits risks disincentivising emissions reductions. The CCC also notes concerns around the quality and accuracy of carbon credits. As such, the overarching CCC recommendation is that direct emissions reductions and those within our supply chains should be prioritised, with carbon credits having a limited role and being used as a last resort.

- 6.4 The CCC guidance also outlines actions relevant to mainstream business that should 'definitely be done' before considering carbon credits in the 2020s and that should almost always be done before considering carbon credits (see appendix 1).
- 6.5 The Plan for Net Zero states that local carbon offsetting will be used to compensate for residual emissions and that we will maximise the carbon absorption potential of our natural environment through activities such as peatbog restoration; tree planting; and improved land practices; and that as a Council we will carry out an inventory of all Council land and assets to explore how we can store more carbon on our land than we produce. This aligns with Scottish Government's default position that targets are to be met through domestic action, without the use of international offset credits. It is worth noting that carbon removal from offset projects outwith Scotland do not count towards Scotland's national targets.
- 6.6 Renfrewshire's Plan for Net Zero acknowledges that there will always be some residual emissions which cannot be eliminated (e.g. those associated with anaesthetics and medicine). The Plan for Net Zero currently aligns with the CCC recommendations to reduce emissions as low as possible as a priority, with local offsetting as a last resort. At the November 2022 Planning and Climate Change Policy Board, it was agreed that maximum levels of offsetting for Renfrewshire would be set out in order to not over-rely on offsetting as a means to meet our net zero targets, in line with Audit Scotland guidance.

7. Next steps

- 7.1 The next phase of the plan and associated programme of work as it is currently set out has a focus on delivery – accelerating the work that is already in progress and ensuring that net zero carbon ambitions are a core part of everything that we and partners do in Renfrewshire to optimise local benefits. As outlined within the paper, although there is an ongoing need to be as ambitious as possible in relation to local net zero ambitions, the current evidence available to officers indicates that a 2025 target would not be possible to deliver at a local level.
- 7.2 Officers will continue to cross-reference national guidance and best practice to identify areas that could potentially be strengthened to enhance progress and support decision-making which will help us in our goal of working towards net zero emissions in an open and transparent way.
- 7.3 The tools that we have developed during Phase 1 of the Plan for Net Zero, combined with increased partnership working and ongoing stakeholder engagement, and the outcomes from the phased road map and quantified delivery plans from Phase 2, would enable identification of areas and work programmes where targets can be accelerated as funding, technology and collaborative opportunities allow.
- 7.4 Officers will continue to develop the phased road map and costed delivery plans while continuing to deliver projects and identify funding opportunities. The emissions modelling tool will be used to run scenarios ahead of project implementation to

identify opportunities to accelerate action and will be updated as projects are implemented by all stakeholders and reported annually in order to track progress.

- 7.5 Updates will be provided to the Board on the ongoing implementation and progress of the Plan for Net Zero, including the identification of opportunities to accelerate action across different themes and work programmes.

Implications of the Report

1. **Financial** – delivering the Plan for Net Zero will have resource implications for the Council and includes a commitment to working collaboratively to ensure best value for our approach. The full extent of the resource implications will be established during Phase 2 of the Plan.
2. **HR & Organisational Development** – the Plan for Net Zero links closely with our OD and workforce planning to ensure our people have the skills and tools required to do their job in the best possible way.
3. **Community/Council Planning** – the Plan for Net Zero includes updates and further proposals to support engagement and collaboration with local businesses, partners and communities on the climate emergency agenda and highlights the continued activities which support the key priorities set out in the Council and Community Plans to tackle inequality and widen opportunity.
4. **Legal** - the Plan for Net Zero has no significant legal implications, however future actions may have some level of implication.
5. **Property/Assets** - the Plan for Net Zero may have significant implications for property and assets given the nature of the work involved.
6. **Information Technology** – none.
7. **Equality and 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 because it is for noting only. If required following implementation, the actual impact of the recommendations and the mitigating actions will be reviewed and monitored, and the results of the assessment will be published on the Council's website. In addition, social justice and reducing inequalities is at the core of the Plan for Net Zero and one of its overarching outcomes.
8. **Health and Safety** – none.
9. **Procurement** – the Plan for Net Zero has significant procurement implications given the nature of the work involved.
10. **Risk** – The climate emergency brings a risk to Council and its communities in relation to increased extreme weather as well as food insecurity. The Plan for Net Zero has a focus on both mitigation and adaptation and has social justice at its core to ensure a just transition so no one is left behind and no one is disadvantaged in the transition to net zero. The Plan for Net Zero has key focus areas outlining actions the Council can take to support and enable those most disadvantaged. A key risk is that the Council is not in control of all of the levers, and cannot deliver everything required in isolation, so there is a risk that others do not contribute to meet the net zero target.
11. **Privacy Impact** – none.
12. **COSLA Policy Position** – this work aligns with COSLA's current work alongside the Scottish Government in response to the climate emergency.

13. **Climate Risk** – this report details work being undertaken and progress made by Renfrewshire Council in response to the climate emergency.
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List of Background Papers:

Renfrewshire's Plan for Net Zero, 23 August 2022, Planning and Climate Change Policy Board
Scotland's Councils' Approach to Addressing Climate Change: Audit Scotland Briefing, 1 November 2022

Author: Roz Smith, Climate Emergency Lead Officer
Chief Executive's Service

Appendix 1 – CCC Recommended Actions for Mainstream Businesses to Prioritise Before Considering Voluntary Purchase of Carbon Credits

| Actions that should definitely be prioritised (2020s) | Actions that should be considered (2020s), unless compelling technical/financial constraints |
|--|---|
| Switching car fleets to electric vehicles | Switch van fleets to electric vehicles (where there is off-street parking available) |
| Incentivise employee travel towards walking, cycling and public transport | Use green delivery and haulage services, like rail freight and green services like e-cargo bikes and electric delivery vans. Use logistics/consolidation to reduce volume |
| Encourage reduction of lamb, beef and dairy from employee diets, and set example through canteen provision and hospitality | Provide charge points for EVs for business fleets and citizens |
| Replace all air travel with alternatives (e.g. trains or video conferencing) where alternatives are available | Short-term: use sustainable biofuels in HGVs |
| Ensure all electricity consumption is low carbon, either on-site or directly procured to create new low carbon generation | Choose shipping solutions/ports with high fuel efficiency and ambitious plans/investments in electrification, low-carbon ammonia and/or hydrogen |
| For building owners: Invest in building energy efficiency measures e.g. energy systems management, behaviour change and building fabric insulation to reduce energy consumption. EPC B should be achieved wherever it is cost effective and practical to do so | Where owns land: support increased afforestation and peatland restoration |
| For buildings off the gas grid: replace fossil fuel heating systems with a low carbon alternative, from 2024 | Procure waste management services which provide separate collections for recycling and food waste, with no waste to landfill and focus on recycling plastics |
| When commissioning new buildings, ensure they are built to be ultra-energy efficient and to rely on low carbon heating only from 2025 | Incentivise / enable consumers to share and use products for longer and to avoid disposable items |
| Increasingly move away from fossil fuel use and production, and towards low carbon energy | For larger businesses: consider using procurement models or tariffs which specify creation of new electricity generation, e.g. power purchase agreements. (100% renewable tariffs do not have additionality so are not a substitute for PPAs) |
| Encourage more efficient end-user consumption and disposal of manufactured products. For example, increase product durability and longevity, and encourage customers to recycle and re-use goods, including through making products and packaging easier to recycle and repair | Audit electricity use and reduce electricity consumption through investment in efficient appliance, energy systems management and building occupant behaviour change |
| Make more efficient use of resources in production, including through light-weighting products and packaging, reducing material inputs, and material substitution for more efficient materials | Businesses who produce/sell products or are in construction: Adopt circular economy strategies to prevent waste by reducing excess use of materials (e.g. packaging), and designing in repair, recyclability, and extended use |
| For building renters/leasers: Invest in energy systems management and promote behaviour change to reduce energy demand. Engage with the landlord to advocate for investment in building fabric insulation to bring building up to EPC B wherever it is cost effective and practical to do so | Replace gas boiler at end of lifetime to a low-carbon alternative, e.g. heat pump, low carbon heat network, or hydrogen boiler. (Exception: this may be challenging when it is not yet clear if the area will be prioritised for district heating or hydrogen or if leasing the property) |
| Actions that should definitely be prioritised (2030s) | |
| Finalise any outstanding energy efficiency measures in buildings by early 2030s | |
| For buildings with gas boilers: replace the boiler at end of lifetime with a low carbon alternative | |