

To: Planning and Climate Change Policy Board

On: 29 August 2023

Report by: Director of Environment, Housing and Infrastructure

Heading: Implications of a Separate Carbon Neutral Plan for Renfrewshire

1. Summary

- 1.1 Renfrewshire's Plan for Net Zero was approved 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.
- 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 At the Planning and Climate Change Policy Board on 24th January 2023, it was requested that a report be submitted to this Policy Board relating to a 'Carbon Neutral by 2025' Plan. The Carbon Neutral Plan would be distinct from the approved Plan for Net Zero, focusing on the applicability of external carbon offsetting and how this could be used to offset the emissions produced by Renfrewshire.
- 1.4 The purpose of this report is to outline:
 - the implications associated with external carbon offsetting if applied to the Renfrewshire context; and
 - the appropriate steps should an additional Carbon Neutral Plan (with a target date of 2025) be adopted in addition to the existing Plan for Net Zero (with a target date of 2030).
- 1.5 Whilst there is significant commitment and focus within the Council and across Renfrewshire to tackle the climate emergency, the report notes that the resource and financial capacity required to deliver two distinct Plans with different target dates and different methodologies is unlikely to be feasible or bring best value at this time. In addition to the potentially significant financial impact for the Council on an ongoing annual basis, there is also a risk around confusing the messaging, communications and engagement, which has been a key strength of Renfrewshire's response to date.

- 1.6 Based on the information currently available, it is recommended that the Council focus remains on continuing to work with partners towards the current 2030 targets and actions within the approved Plan for Net Zero. This remains very ambitious and significantly ahead of the Scottish and UK targets and incorporates levels of carbon offsetting within it, alongside the delivery of local initiatives across all 5 themes of the Plan for Net Zero which bring a range of direct benefits to our communities through local investment.
- 1.7 However, within the Plan for Net Zero it is acknowledged that offsetting will have a role to play to deal with residual emissions (those which cannot otherwise be removed). The detailed phased road map and costed delivery plans which are currently being developed will highlight levels of offsetting required in order to reach net zero for both the Council as an organisation and the Renfrewshire area as a whole. The development of an offsetting strategy, looking at both local offsetting and external offsetting, which aligns to the phased road map could be a valuable tool to support Renfrewshire's net zero activities.
- 1.8 As noted previously, at all stages throughout the delivery of Renfrewshire's Plan for Net Zero, officers will look to identify opportunities with partners to accelerate progress wherever possible within the resources and capacity available.

2. Recommendations

Members of the Planning and Climate Change Policy Board are requested to:

- 2.1 note the implications, particularly the financial implications of having a distinct and separate Carbon Neutral Plan which focuses on external carbon offsetting in addition to the approved actions and targets within the existing Plan for Net Zero;
- 2.2 note the existing Plan for Net Zero and the approved targets and actions, including those currently relating to carbon offsetting, should remain the focus and continue to be progressed as a priority by all partners in Renfrewshire; and
- 2.3 following phase 2 of Renfrewshire's Plan for Net Zero, agree the development of an offsetting strategy aligning with the phased road map and costed delivery plans to identify and maximise opportunities associated with offsetting.

3. Background: Carbon Neutral, Net Zero and Carbon Offsetting

- 3.1 The terms 'carbon neutral' and 'net zero' are similar in principle and are sometimes used interchangeably but represent slightly different approaches to emissions reduction:
 - 'carbon neutral' typically accounts for carbon dioxide (CO₂) emissions but not emissions from other greenhouse gases.

- 'net zero' is expanded in scale and refers to all greenhouse gases being emitted into the atmosphere, including methane (CH₄), nitrous oxide (N₂O) and other hydrofluorocarbons, as well as CO₂.
- 3.2 For the purposes of net zero, emissions from the various greenhouse gases are converted to a standard metric, known as carbon dioxide equivalent (CO₂e) on the basis of their global warming potential. This enables different activities to be directly comparable using one standard measurement.
- 3.3 Carbon offsetting is the reduction or removal of emissions of carbon dioxide or other greenhouse gases in order to compensate for emissions which are generated elsewhere:
 - External carbon offsetting requires paying for emissions to be removed from places outwith the Council's operational boundaries for organisational emissions targets, or outwith the Council area for area-wide targets.
 - Local carbon offsetting (also known as insetting) relates to carbon removal projects within the Council's operational boundary for organisational emissions (e.g. Council-owned parks and peatbogs on Council land) and by extension, carbon removal projects within the Council area, such as forestry and woodland, for area-wide emissions targets.
- 3.4 Renfrewshire's Plan for Net Zero, approved in August 2022, specifies the use of local carbon offsetting for residual emissions that cannot be removed (which aligns with Scotland's default national position that targets are to be met through domestic action, without the use of international offset credits). As such, a Carbon Neutral Plan with a focus on external offsetting is not in alignment with Renfrewshire's agreed Plan for Net Zero.
- 3.5 Currently officers are working with external consultants to develop a detailed phased net zero road map to identify opportunities and solutions and to set clear interim targets. This phased road map will include levels of residual emissions (emissions that cannot be removed) each year that would need to be offset in order to reach net zero. Following this current phase of work, the development of an offsetting strategy which identifies opportunities for a focus on local offsetting as well as opportunities for external offsetting would enhance the Plan for Net Zero to ensure that we are taking action to deal with all of our emissions as part of a managed transition.

Carbon Offsetting Guidance

3.5 Audit Scotland produced guidance on 'Scotland's Councils' Approach to Addressing Climate Change'. This outlined the importance of establishing a maximum level of acceptable offsets to minimise the risk of over-relying on carbon offsets.

- 3.6 The UK Climate Change Committee (CCC) is an independent statutory body established under the Climate Change Act 2008, whose purpose is to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change. The CCC report on carbon offsetting, published in October 2022, highlights that the use of carbon credits risks disincentivising emissions reductions. The CCC also notes concerns around the integrity, 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.
- 3.7 The Plan for Net Zero aligns with the best practice and carbon offsetting guidance within both of the above reports. At the 1 November 2022 Planning and Climate Change Policy Board it was noted that in line with Audit Scotland guidance, maximum levels of offsetting would be outlined for Renfrewshire within the road map to net zero (where previously the Plan had stated achievable levels) in order to strengthen the Plan in line with the Audit Scotland guidance.
- 3.8 A Carbon Neutral Plan focused on external carbon offsetting to deal with residual emissions would not align with the UK CCC guidance of carbon credits having only a limited role and to be used as a last resort. This would also increase the risk of disincentivising stakeholders to reduce emissions if the Council would otherwise pay to offset all residual emissions within the area. This approach also increases the risk of over-relying on carbon offsets. In addition, external carbon offsets would not contribute to national net zero targets, if bought from projects outwith Scotland.
- 3.9 High level projected cost indications associated with an approach which has a focus on external offsetting can be found in Section 5.

4. Planning, baselining and road mapping

- 4.1 As previously outlined to this Policy Board, since the declaration of a climate emergency in June 2019, a significant work programme has been undertaken, with engagement at the heart, to develop a road map towards a net zero Renfrewshire. This work has included the development of the agreed 'Plan for Net Zero', a recognisable brand 'Ren Zero', allocating the £1m climate change action fund (including community climate fund aligned to the themes of the Plan for Net Zero) and meetings, talks, training and the establishment of Renfrewshire's Climate Panel all based on the premise of working towards net zero Renfrewshire. This also aligns with the approach of our Community Planning Partners in Renfrewshire, who are also working towards net zero targets, rather than carbon neutral.
- 4.2 Members also approved the commissioning of independent technical support for baselining emissions in Renfrewshire and the subsequent commissioning of a phase 2 road map exercise which is currently underway, again based on working towards net zero Renfrewshire.

- 4.3 As well as the requirement to undertake a similar work programme described above to develop a Carbon Neutral Plan, there is a risk that introducing a separate Carbon Neutral Plan with different targets may impact local progress on net zero ambitions through:
 - mixed messaging from using two different terminologies and two different Plans with different targets;
 - resources being split between the two Plans (financial and personnel) and the risk this brings to delivery of both;
 - the impact of the Council having to fund the offsetting of all stakeholders' residual emissions on an ongoing annual basis, thereby disincentivising others to take action; and
 - diverting Council funds and resources towards external offsetting with a reduced capacity to deliver projects with wider benefits of a just transition.

5. The Cost Implications of a 2025 Carbon Neutral Plan for Renfrewshire

- 5.1 In order to be carbon neutral, residual emissions (i.e. those emissions that have not been able to be removed) would need to be offset for each and every year that they remain above zero.
- 5.2 There is a financial cost if a decision was taken to purchase carbon credits to offset residual emissions. A commitment to be carbon neutral 2025 would be very challenging and it is suggested that the Council and local stakeholders would not be able to deliver this within the timeframe, which would require the purchase of significant volumes of carbon credits to be progressed to achieve a 2025 target.
- 5.3 Once a carbon credit has been purchased, it is then permanently retired so it cannot be reused, therefore new carbon credits require to be purchased annually in order to keep offsetting residual emissions each year.
- 5.4 The Woodland Carbon Code (WCC) is the quality assurance standard for woodland creation projects in the UK and generates high integrity, independently verified carbon units. Woodland Carbon Code verified carbon credits currently cost between £17 and £24 per tonne of carbon.
- 5.5 The emissions baselining that was undertaken as part of the evidence base used in the development of the Plan for Net Zero included a trajectory to 2030 using two scenarios: a best case (tailwind) scenario and a worst case (business as usual) scenario. This trajectory showed that in 2025 under a tailwind scenario the Renfrewshire area would have 224ktCO₂e residual greenhouse gas emissions which would require to be offset and 416ktCO₂e under a worst-case scenario.

- 5.6 To calculate exactly how much of these residual emissions each year relate to carbon dioxide (and not other greenhouse gas emissions) would require additional consultancy and modelling (with additional time and costs). Working on the assumption that CO₂ accounts for around 76% of total greenhouse gas emissions, then this would leave 170.24ktCO₂ and 316.16ktCO₂ residual emissions under a tailwind and worst-case scenario for the Renfrewshire area respectively.
- 5.7 Taking a midpoint in the Woodland Carbon Code carbon credits price of $\pounds 23.7$ /tonne would result in a cost of between $\pounds 4.03$ m and $\pounds 7.49$ m to use external offsetting to cover residual emissions for just the year 2025 alone.
- 5.8 Similar investment would be required annually for every year after 2025 that residual carbon emissions remain above zero in order for Renfrewshire to remain carbon neutral. With investment in projects which contribute to reducing carbon emissions, the residual emissions would be expected to fall but there are two key risks with the approach of the Council using external carbon offsetting for residual emissions:
 - **Disincentivising action:** if the Council were to commit to invest in external carbon offsetting for the Renfrewshire area as a whole in order to meet a 2025 target, then stakeholders could be disincentivised to take action to reduce their own emissions, and the Council may be left with an annually recurring financial burden for external offsetting in order to remain carbon neutral.
 - **Rising carbon prices:** even if residual emissions were also to fall, within government projections carbon prices are expected to rise significantly to over £100/tonne in the Low scenario and over £200/tonne in the Central scenario by 2050 (the UK Emissions Trading Scheme prices were over £75/tonne in October 2021, which is within the government's High trajectory for future carbon prices). It is difficult to predict future carbon prices and whether these rises will remain in the High trajectory, but with the impacts of climate change becoming greater each year and the difficulty of maintaining global temperatures below a 1.5°C rise, it would seem likely that carbon prices will continue to be high in the future, bringing high levels of risk and annual investment utilising external offsetting to remain carbon neutral.
- 5.9 It is important to note that it is unlikely that large-scale external funding sources (such as from the Scottish or UK Governments) would be made available for external carbon offsetting as the focus of funding streams to date has been on developing green infrastructure for example, with the associated economic and employment benefits.
- 5.10 The financial implications of this approach would require significant Council funds to be diverted outwith the local area, towards investment in external carbon offsetting. Given the Council's resourcing pressures, this would require decisions to be taken regarding disinvestment from work programmes in other areas.

6. Additional Implications of a 2025 Carbon Neutral Plan for Renfrewshire

- 6.1 In addition to the areas outlined above, there are some additional implications to consider including:
 - Stakeholder engagement considerable engagement has been undertaken as part of Renfrewshire's climate journey to date, including Renfrewshire's Climate Panel and the development of the RenZero identity, and further engagement would be required to shift to a new carbon neutral approach. There is a risk around confusing the messaging; losing elements of stakeholder buy-in where partners' planning is based on a Net Zero approach; and disengagement from the process if we reduce the target timescales.
 - **Resources and capacity** the introduction of a separate 2025 Carbon Neutral Plan would require twin streams of separate work to be undertaken by the Council, with dedicated resources being split between the two Plans (both financial and personnel, including commissioned support).
 - Community benefits external carbon offsetting would involve investing significant financial resources on an ongoing basis outwith Renfrewshire, and therefore risks not delivering additional community benefits and outcomes detailed in the Plan for Net Zero.

7. Next steps

- 7.1 Ambition for tackling the climate emergency in Renfrewshire is welcome, however as highlighted within the paper, the current evidence available to officers indicates that it is unlikely that the Council and local stakeholders would be able to commit time, capacity, capability, investment or resourcing to deliver the infrastructure at the scale and pace required to be carbon neutral by 2025. This would leave the purchase of large volumes of carbon credits at a financial cost as the only option to meet a target of being carbon neutral.
- 7.2 The 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). There are areas relating to carbon offsetting which will be brought to future Planning and Climate Change Policy Boards 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).
- 7.3 The levels of carbon offsetting required in order to work towards net zero by 2030 will be incorporated into modelling and into the phased road map, with maximum levels of offsetting for Renfrewshire as a means to meet our net zero targets being set in line with Audit Scotland guidance. This would highlight any potential shortfall of residual emissions that are unable to be met from local carbon offsetting.

- 7.4 The recommendation from officers is for the focus to remain on the delivery of Renfrewshire's Plan for Net Zero and the approved targets and actions, including those currently relating to carbon offsetting, and accelerating the work that is already in progress as a priority by all partners in Renfrewshire to optimise local benefits.
- 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** the report outlines the significant potential financial implications of a 2025 Carbon Neutral Plan with a focus on external carbon offsetting.
- 2. **HR & Organisational Development** none.
- 3. **Community/Council Planning –** the report outlines potential implications on engagement and collaboration with local businesses, partners and communities on the climate emergency agenda and highlights the potential impacts on activities which support the key priorities set out in the Council and Community Plans to tackle inequality and widen opportunity.
- 4. **Legal** a Carbon Neutral Plan has no significant legal implications, however future actions associated with external carbon offsetting may have some level of implication.
- 5. **Property/Assets** none.
- 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** a Carbon Neutral Plan with a focus on external carbon offsetting would have significant procurement implications given the nature of the work and levels of financial investment involved.

- 10. **Risk** the report details a number of risks associated with a Carbon Neutral Plan which has a focus on carbon offsetting. A key risk is that stakeholders are disincentivised to reduce emissions, leaving the Council with significant financial burden for external offsetting annually in order to remain carbon neutral.
- 11. **Privacy Impact** none.
- 12. **COSLA Policy Position** COSLA has a longstanding position on climate change, supporting Scotland's 2045 target for net zero.
- 13. **Climate Risk** this report details potential implications to work currently being undertaken and progress made by Renfrewshire Council in response to the climate emergency.

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
- Net Zero Renfrewshire, 24 January 2023
- Author: Roz Smith, Climate Emergency Lead Officer Chief Executive's Service