
NORTH AYRSHIRE COUNCIL

29 November 2022

Cabinet

Title: **Tackling Climate Change: Public Bodies Climate Change Duties Report and Review of North Ayrshire's Environmental Sustainability & Climate Change Strategy 3 (ESCCS 3)**

Purpose: To update Cabinet on the Council's net zero journey, including highlights from the Public Bodies Climate Change Duties (PBCCD) 2021/22 report and proposed strategic principles to be followed for the review of ESCCS 3.

That Cabinet:

- Recommendation:**
- I. notes the Council's current progress on the journey to net zero;
 - II. notes the highlights from the PBCCD 2021/22 reporting template submission at paragraph 2.11; and
 - III. approves the strategic principles at paragraph 2.19 to guide development of ESCCS 4 as we continue our net zero journey.

1. Executive Summary

- 1.1 As part of the Council's ambition to achieve net zero carbon emissions by 2030, an update on current area-wide and Council estate carbon emissions, mandatory emissions reporting, and proposed future strategy is provided within this report.
- 1.2 The Council declared a climate emergency in June 2019 and has committed to achieve net zero carbon emission by 2030. Since 2005, area-wide emissions have reduced in North Ayrshire by 49% and Council estate-based emissions by 68%.
- 1.3 In order to improve the quality of climate change data and standardise reporting methodology across the public sector, the Scottish Government requires annual completion of the Public Bodies Climate Change Duties reporting template. Additional questions have been included for the 2021/22 reporting year, to accelerate the journey to net zero emissions. Key information from the PBCCD

2021/22 reporting template submission is provided at paragraph 2.11.

- 1.4 The ESCCS 3 is the Council's latest route map to achieve net zero emissions by 2030, and examples of achievements to date are provided within this report. Strategic principles have been developed to assist in the review and setting of priorities and actions for ESCCS 4, due for publication by the end of 2023, taking cognisance of the emissions reduction gap and also community and external stakeholder views, concerns and opportunities.

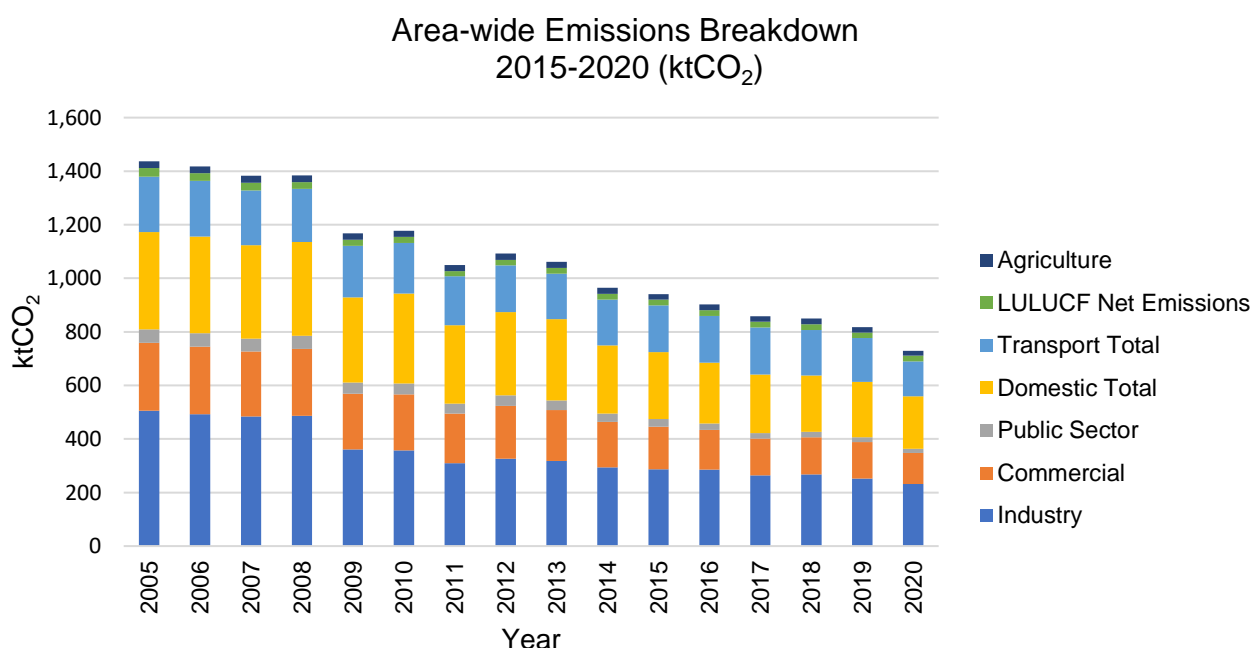
2. Background

- 2.1 In June 2019, North Ayrshire Council declared a climate emergency, committing to achieve net zero carbon emissions by 2030, for both Council estate emissions and area-wide emissions. Council estate emissions are calculated using carbon dioxide equivalent (CO₂e) units to ensure that all greenhouse gases have been included for each activity, and to maintain a transparent overview of the impact of Council activities. The Department for Business, Energy and Industrial Strategy (BEIS) publish emission conversion factors each year, and these are used for national reporting and our internal calculations, to ensure a standardised approach to monitoring and reporting is taken.

North Ayrshire Carbon Emissions

- 2.2 Area-wide emissions are published by BEIS two years in arrears. Figure 1 below shows the change in area-wide emissions since 2005 (the first year of data collection). Total emissions have reduced across North Ayrshire by 49%, from 1,437 kilotonnes of carbon dioxide (ktCO₂) in 2005 to 730 ktCO₂ in 2020.

Figure 1: North Ayrshire area-wide emissions breakdown



(*LULUCF- Land Use, Land Use Change, and Forestry)

2.3 The above graph outlines several important considerations in relation to North Ayrshire emissions, including:

- Public sector emissions (of which the Council's emissions form part) are a small fraction of the overall area-wide total. Nonetheless, we play a key civic leadership role in encouraging and advocating for climate change within communities for area-wide emissions reduction
- Domestic and transport emissions are a significant source of emissions, representing around half of the area-wide total. The Council has direct and indirect influence over these emissions sources through, for example, our Council housing stock, Electric Vehicle Strategy, and the attractiveness of the active travel network
- The remaining major emission sources, industrial and commercial, can be areas of limited local authority influence, however, we can be creative and engage with major emitters in our areas to understand any opportunities to work together to support further reductions

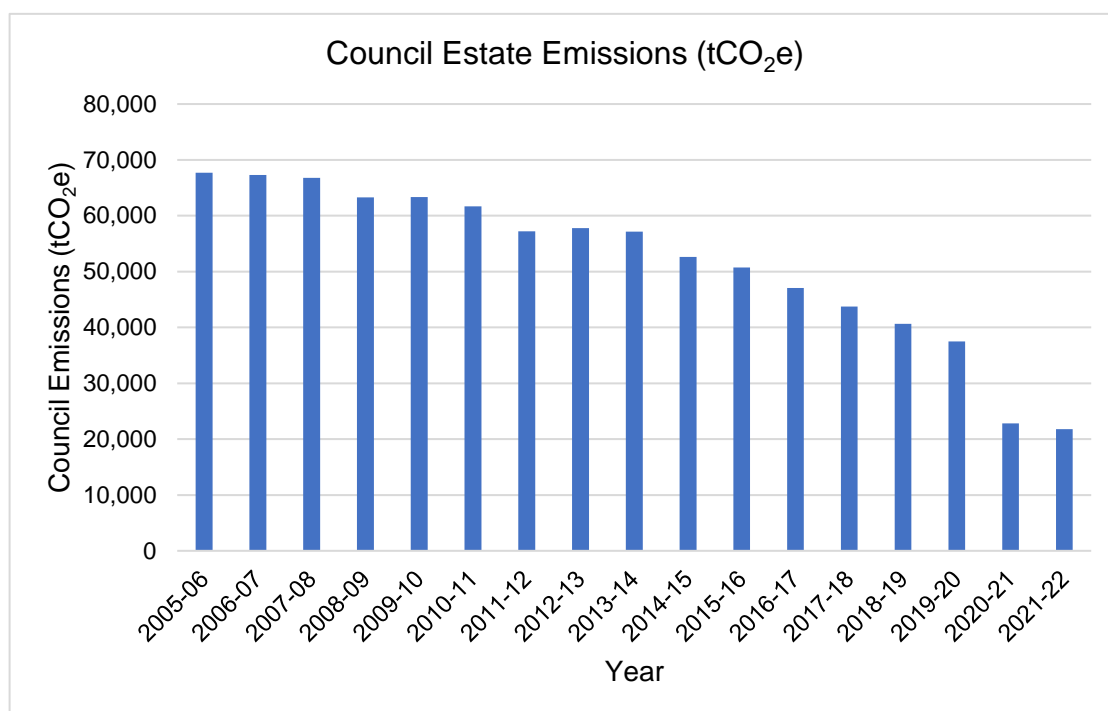
2.4 To ensure North Ayrshire Council can develop a leading, cross-sector and community led approach we established a Climate Change Steering Group (CCSG) in 2021. The CCSG is chaired by the Cabinet Member for Economy and Climate Change and brings together young people, local businesses and community organisations from across North Ayrshire.

2.5 The Council has taken action against climate change since our first Carbon Management Plan in 2006/07, by working to reduce emissions associated with Council services, and using the baseline year of 2005/06 from which to measure progress. For the Council's estate-based emissions, the following sources are currently taken into account:

- Non-domestic buildings (electricity, gas, biomass etc.)
- Waste (municipal waste to landfill and energy from waste treatment)
- Staff business mileage
- Transport (fleet transport usage of diesel, unleaded petrol, and gas fuel)
- Street lighting (electricity)

2.6 Since the baseline year of 2005/06, Council estate emissions have reduced by 67.8%, from 67,719 tCO_{2e} to 21,794 tCO_{2e}. Figure 2 below shows the progress in reducing Council estate emissions:

Figure 2: North Ayrshire Council estate emissions



Public Bodies Climate Change Duties (PBCCD) Reporting

- 2.7 The Climate Change (Duties of Public Bodies Reporting Requirements) (Scotland) Order 2015 requires all public bodies to report annually on compliance with climate change duties outlined in the Climate Change (Scotland) Act 2009. The 2015 Order was amended in 2020 to include additional annual reporting requirements with effect from the reporting year 2021/22. The Sustainable Scotland Network (SSN) administers the submission and analysis of reports on behalf of the Scottish Government, to help guide future strategic reports, support mechanisms and policy. The Council has submitted Public Bodies Climate Change Duties (PBCCD) reports to SSN annually, since the first required reporting year 2015/16.
- 2.8 The PBCCD report seeks a range of information on the reporting body using a standard template for all public bodies to populate, the details of which include:
- Profile of body
 - Governance
 - Emissions and Projects
 - Adaptation
 - Procurement
- 2.9 Greenhouse gas emissions are classified by the impacts according to where and why they arise, and the accepted international standard to report greenhouse gas emissions is to categorise by scope. **Scope 1** are '**direct**' emissions defined as those arising from directly owned or controlled combustion, for example gas combustions in boilers to heat buildings or fuel combustion in fleet vehicles. **Scope 2** are energy related '**indirect**' emissions which arise in the generation of purchased electricity i.e. for the electricity supplied to the grid that the Council

purchases. Finally, **Scope 3** emissions are non-energy indirect emissions and defined as any which arise as the consequence of the activities of the public sector but occur from sources not owned or controlled by it. Examples include emissions from business travel, waste and procurement of goods.

- 2.10 Scope 3 emissions are considered the most complex to monitor and report. We currently report Scope 3 emissions for electricity (transmission and distribution), water (supply and treatment), municipal waste (to landfill and to combustion), and transport. An area of future focus will be on calculating emissions associated with procurement of goods and services, and supply chain emissions. This is a complex area and SSN are working on behalf of the public sector to identify an approach to accurately calculate this emissions source for future reporting.
- 2.11 The PBCCD template for the 2021/22 reporting year has been completed with input from a number of Council services. Our submission will be circulated amongst the Climate Change Steering Group members and the North Ayrshire Community Planning Partnership, as well as being peer reviewed by another local authority. The CCSG will continue to oversee implementation of the ESCCS and will have an increasing focus on emissions reduction performance. The PBCCD return will be published on SSN's website. Some key highlights from the latest PBCCD report are as follows:

Governance

In 2021, the Council established the Climate Change Steering Group to act as a sounding board and critical friend to support and challenge the implementation of the North Ayrshire Environmental Sustainability and Climate Change Strategy. A revision to the Council's Structure was implemented in January 2022, placing Sustainability at the centre of a new Chief Officer remit, along with responsibility for property and fleet, which are two of the largest areas of emissions. Climate change is also now at the heart of democratic decision making on policy, programmes and strategies, with the inclusion of climate change and carbon implications as a standard item within our report templates.

The Council uses the Climate Change Assessment Tool (CCAT) to self-assess climate change capability and performance. Stakeholder views and evidence relating to the CCAT headings of Governance, Emissions, Adaptation, Behaviour and Procurement were collated from across various services, with identified areas for continued improvement to be actioned.

Emissions

The Council has reported 21,794tCO₂e for the financial year 2021/22, a reduction of 1,052 tCO₂e from the previous year. This is the collective emissions total from electricity, gas, oil, biomass and water used in Council owned non-domestic buildings, PPP schools and KA Leisure facilities. The total figure also includes emissions arising from fleet transport, business mileage waste (from landfill and combustion) and street lighting.

Adaptation

The Council has assessed current climate related threats as being one of our priority risks as reflected in our Strategic Risk Register. In the return, control

measures for identified risks, such as flood prevention and winter maintenance, have been highlighted along with the relevant strategies.

For future priorities in this area, work is being undertaken through our first Adaptation Capability Assessment using Adaptation Scotland's Capability Framework. This work involves benchmarking the Council's position on adaptation, conducting stakeholder interviews, delivering a workshop in partnership with Sniffer, a national climate change charity, and identifying required actions.

Procurement

Sustainable procurement is embedded within the Council's procurement processes which has been highlighted within this section of the reporting template. The Corporate Procurement Strategy 2021-23 has a strategic aim to create a more sustainable North Ayrshire. This objective is met by continuing to utilise the Scottish Governments sustainable procurement tools and applying relevant and proportionate selection and award criteria to procurement exercises to ensure that environmental impacts are considered appropriately in tender exercises.

- 2.12 Historically, not all emissions sources now reported in our PBCCD return have been taken into account in our internal carbon emissions performance reporting. Going forward, we will align our emissions reporting internally and externally via the PBCCD so that there is a common dataset and emissions baseline.

Review of ESCCS 3

- 2.13 In June 2019, the Council declared a Climate Emergency, committing to achieve net zero emissions by 2030. Environmental Sustainability & Climate Change Strategies (ESCCS) have been developed since 2014 to support the delivery of the Council's priorities and work towards achieving a sustainable environment. The most recent ESCCS is the third iteration and covers the period 2020-23.
- 2.14 ESCCS 3 is the Council's route map to achieve net zero emissions by 2030, and aims to:
- Inspire positive low carbon behaviour, raising awareness of the sustainability and climate change agenda
 - Maximise access to affordable renewable energy technology
 - Support sustainable transport
 - Design and utilise our natural and built assets sustainably
 - Support local businesses to deliver services sustainably through our Community Wealth Building Strategy

Across seven thematic workstreams (Affordable Warmth, A Green Economy, Transport & Travel, Natural Environment, Sustainable Operations, Carbon Absorption and Climate Change Adaptation), 65 actions have been identified and progressed over the course of the ESCCS 3 period. Updates on progress are provided through the Council's performance reporting system, Pentana, on a quarterly basis. These actions are designed to be directly and indirectly responsible for carbon reduction and deliver other socio-economic benefits.

2.15 Some examples of the achievements in our journey to net-zero so far are as follows:

- Completion of domestic solar PV installations on over 500 properties, reducing carbon emissions and saving households money on electricity bills
- Utilisation of the Council's investment fund to support the development of two large scale solar PV farms, with the aim, once completed, of utilising sterile land assets, reducing area wide carbon emissions and supporting the increase of renewable energy on the market
- Launch of 'Energy Smart' a new programme of advice, measures and other support to help those most impacted by the current energy crisis
- Completion of district heating schemes at various development sites, most recently for 120 homes at Flatt Road, Largs, providing affordable warmth at scale
- Ongoing programme of insulated render installations in homes across tenures, taking a 'fabric first' approach to lower emissions, reduce fuel poverty, and increase thermal comfort
- Implementation of energy efficiency measures across our non-domestic estate including LED lighting, upgraded heating controls and other measures
- The Clyde Valley Waste Partnership diverts non-recyclable waste from landfill and converts it to energy at an Energy Recovery Facility
- Installation of over 50 publicly accessible charge points across North Ayrshire to help support the uptake of electric vehicles (EV) and participating in a pathfinder project with Scottish Futures Trust and Transport Scotland to identify preferred models of future delivery of EV infrastructure
- Implementation of the Upper Garnock Valley Flood Protection Scheme, to help adapt to the impacts of climate change and more extreme weather events
- Launch of the Council's Tree Planting Strategy, to increase afforestation across North Ayrshire providing a range of benefits including biodiversity, sustainable flood risk management and carbon sequestration
- Creation of the Climate Change Steering Group, bridging the net zero journeys of the Council with various stakeholders for example CPP partners, local businesses and community groups
- Ongoing development of a pan-Ayrshire Energy Masterplan with the support of Scottish Enterprise
- Participation in the Carbon Neutral Islands project, to support community led actions towards net zero emissions, and share lessons learned with other island communities
- Implementation of Adaptation Scotland's Public Bodies Capability Framework to help support North Ayrshire be a climate resilient area, and adapt to climate change

2.16 As the end of the ESCCS 3 period approaches, attention is turning to the review process to prepare the next three-year strategy. The seven workstreams are expected to remain fit for purpose and align with national targets, key emission sources, and the need for adaptation measures, with achieving net zero carbon emissions by 2030 being the overarching priority.

2.17 Figures 3 and 4 below set out the carbon reduction journey to date, across the Council's estate and North Ayrshire wide, respectively. It also outlines a trajectory to 2030. The scale of the emissions gap to net-zero is reflected across Scotland, and it is clear that additional funding and skills development, along with increased collaboration amongst all stakeholders, will be required if we are to meet the target.

Figure 3: Forward Projection of Council Estate Emissions to 2030

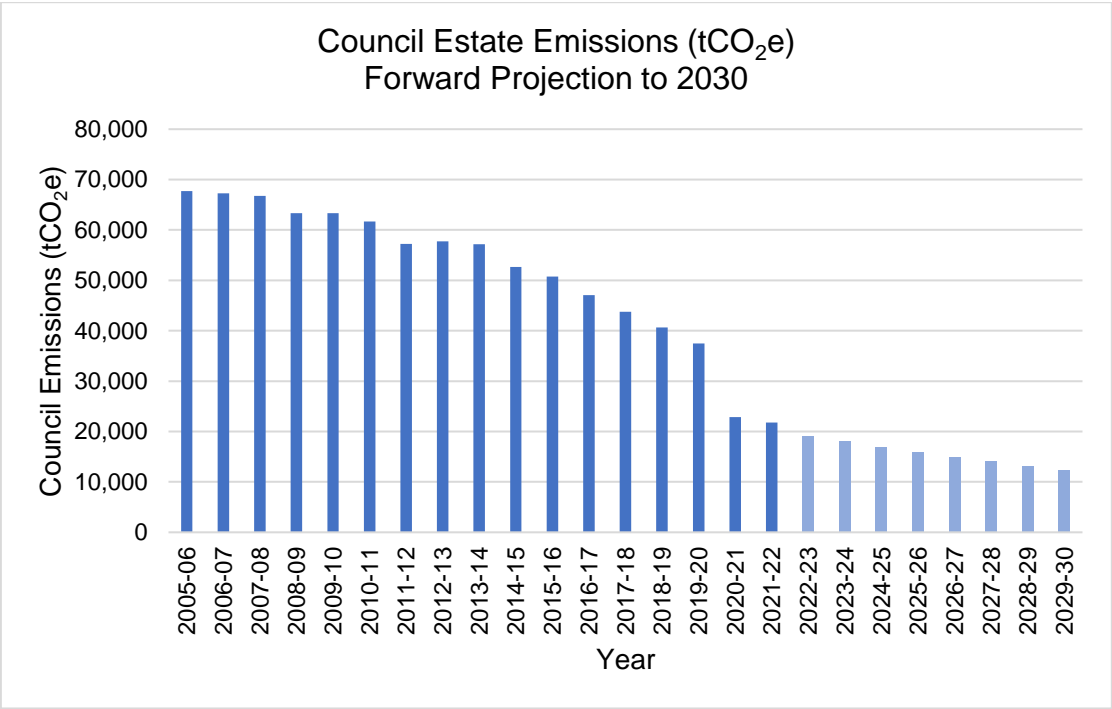
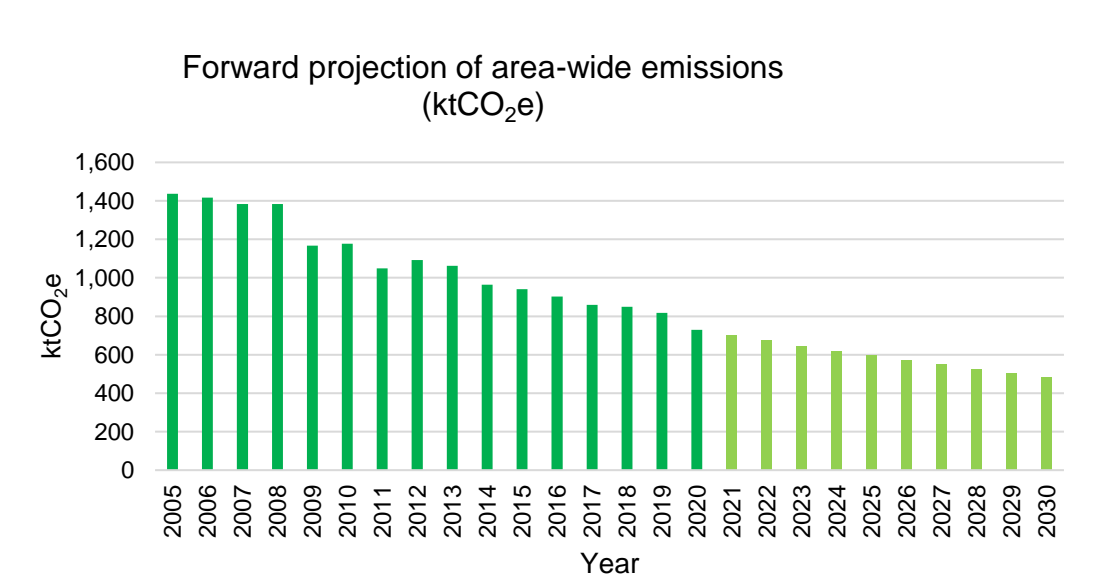


Figure 4: Forward Projection of Area-wide Emissions to 2030



(*source: Department for Business, Energy & Industrial Strategy (BEIS) Area-wide Carbon Emissions)

2.18 Figures 3 and 4 above highlight that based on current emission reduction projections, there will be residual emissions by the target year of 2030 for both our estate and North Ayrshire as a whole. Achieving net zero emissions requires a combination of reduction of emissions generated and the removal of emissions from the atmosphere. We have identified opportunities to remove residual emissions from the atmosphere through our Tree Planting Strategy (expected to sequester around 3,000tCO₂ per annum), Renewable Energy Generation Obligation certificates from the developing solar PV farms, and there is potential for other local and national carbon capture and storage initiatives. The approach will be quantified further as part of ESCCS 4.

2.19 Officers have been developing proposed strategic principles to assist in the review process and in setting the priorities and actions for ESCCS 4 which will cover the period 2023-2026. These are:

- We will take a whole system approach to tackling climate change as far as possible, including identification of optimal approaches to achieve social and economic benefits alongside environmental ones
- We will continue to clarify and report transparently on our emissions so that the North Ayrshire emissions baseline is clearly understood
- We will complete a Local Heat and Energy Efficiency Strategy to help understand where efforts to reducing emissions and reducing fuel poverty are best focused
- We will prioritise actions in relation to two of the biggest emissions sources where have the most influence, commonly referred to as 'heat and fleet', including through project pathfinder approaches for decarbonisation of domestic and non-domestic buildings and vehicles to bring scale and pace to emissions reduction
- We will work with stakeholders, including the Scottish Government, to articulate the potential costs and skills requirements to meet our net-zero aspirations
- We will expand on the need for adaptation measures, recognising mitigation alone will not combat the impacts of climate changes on communities
- We will identify opportunities for expansion of carbon sinks and other carbon capture technologies, which are expected to be an essential element of our net-zero strategy to mitigate residual emissions by 2030
- We will seek to expand the remit and membership of the CCSG to enable us to work more closely with communities, taking account of outcomes from recent projects such as Climate Action Towns and Carbon Neutral Islands
- We will explore the potential for carbon accounting, including carbon budgets for Council services, to support our journey to net-zero

2.20 ESCCS 4, as with previous iterations, will contain project specific actions to reduce carbon emissions across a range of sources along with climate change adaptation measures. Some examples of the pipeline projects which will address the carbon gap articulated in Figure 3 in terms of the Council's estate, and our need for climate change adaptation, are:

- Installation of energy efficiency and heat decarbonisation measures in our non-domestic buildings and Council homes
- Implementation of a decarbonisation plan for the Council's fleet of vehicles
- Improvements to our active travel infrastructure
- Waste reduction and recycling programmes
- Implementation of flood protection schemes on Cumbrae

Further projects will be developed as part of our preparation of ESCCS 4.

- 2.21 The strategic principles at paragraph 2.19, subject to Cabinet approval, will be used to inform the review of ESCCS 3 and the development of ESCCS 4 to ensure that we have a robust and fit for purpose strategy and actions to tackle the significant challenge that lies ahead. Extensive consultation will be a key component of the updated approach, taking into account the views of communities, local businesses, external stakeholders and internal services to ensure these are reflected in the new strategy. Views will specifically be sought from young people through North Ayrshire schools and from participants in the Annual Youth Conference.

3. Proposals

- 3.1 It is proposed that Cabinet: (i) notes the Council's current progress on the journey to net zero; (ii) notes the highlights from the PBCCD 2021/22 reporting template submission at paragraph 2.11; and (iii) approves the strategic principles at paragraph 2.19 to guide development of ESCCS 4 as we continue our net zero journey.

4. Implications/Socio-economic Duty

Financial

- 4.1 The Council is investing significantly in the journey to net zero, taking action on climate change and addressing the Climate Emergency. A total of £9.7 million has been allocated from the Council's Investment Fund to support our climate change aspirations to deliver two solar pv farm projects. In addition, £1.69 million from the Investment Fund has also been assigned to progress a range of low carbon projects, for example a programme of works to install energy efficiency improvements across the non-domestic estate, a sustainability project for Children's Houses incorporating solar and EV infrastructure, and the expansion of EV charging infrastructure across North Ayrshire. The Investment Fund allocation also supports feasibility studies to realise the Council's renewable energy generation potential, specifically in solar and wind, and innovative applications of battery storage technology.

Human Resources

- 4.2 None.

Legal

- 4.3 The Council, as a public sector organisation, has an obligation to report on its emissions through the Public Bodies Climate Change Reporting Duty.

Equality/Socio-economic

- 4.4 By utilising capital investments to support a green economic recovery, the Council is tackling climate change, whilst supporting fair green jobs, tackling inequality and creating a fairer economy. It is essential that our green economic recovery continues to play a key part of our collective net zero aspirations. The recommendations provide an opportunity to develop an approach for decarbonisation and to achieve net zero emissions targets in a way which builds upon the principles of Community Wealth Building, focussing on using our land and assets and supporting local and sustainable supply chains.

Climate Change and Carbon

- 4.5 The proposal aims to:
- make a positive contribution to national carbon reduction targets
 - contribute to the North Ayrshire Council Climate Emergency declaration commitment to be carbon neutral by 2030

Key Priorities

- 4.6 The proposals contained within the report support the North Ayrshire Council Plan priorities:
- Active and strong communities
 - Inclusive, growing and enterprising local economy
 - A sustainable environment; and
 - People enjoy good life-long health and wellbeing

Community Wealth Building

- 4.7 The ESCCS 4 (2023-26) will be developed to support Community Wealth Building aims of creating a fairer local economy central to our aims of tackling climate change, poverty and inequality.

5. Consultation

- 5.1 Extensive consultation will take place as part of the development of the ESCCS 4 (2023-26), ensuring the views of communities, local businesses, external stakeholders and internal services are reflected in the new strategy. Stakeholders will be consulted using the online platform CONSUL, and views will specifically be sought from young people through North Ayrshire schools and from participants in the Annual Youth Conference. Development of the ESCCS 4 (2023-26) will be discussed with a range of stakeholders engaged in the Climate Change Steering Group, including community groups, local businesses, NHS, Police and Scottish Fire & Rescue Service.

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For further information please contact **David Hammond, Head of Sustainability, Corporate Property & Transport**, on 01294 324514.

Background Papers

N/A