EAST AYRSHIRE COUNCIL

COUNCIL – 24 JUNE 2021

EAST AYRSHIRE CLIMATE CHANGE STRATEGY

Report by the Depute Chief Executive (Safer Communities)

PURPOSE OF REPORT

1. To seek agreement of ambitious net zero targets for the Council and the wider East Ayrshire authority area; seek approval of the Council's first draft Climate Change Strategy, together with arrangements for engaging with our communities and key stakeholders to finalise the content of this plan and agree proposals in relation to the future governance arrangements to oversee the delivery of the Council's net zero ambitions.

RECOMMENDATIONS

2. Council is asked to:

- i) Note the work of the Member Officer and Young People Working Group (MOWG) on Climate Change in developing the Climate Change Plan and agree to the proposed Climate Change Vision for East Ayrshire;
- ii) Agree to join the UK100 and endorse their Net Zero Local Leadership Pledge, which would commit the Council to the aim of reducing the council's carbon emissions to Net Zero by 2030; and work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible (and by 2045 at the latest);
- iii) Approve the draft Climate Change Strategy and Action Plan, for engagement and consultation with young people, communities, partners and business;
- iv) Building on the Council's existing internal carbon reporting requirements, investigate the best way to measure and report on the wider East Ayrshire area's carbon emissions by 2022:
- v) Agree to appoint an Elected Member spokesperson to lead on Climate Change;
- vi) Agree that all Committee Reports should now include a new section that outlines the impact of the proposals on our Net Zero ambitions;
- vii) Approve the proposals for engagement with our key community and business stakeholders on the draft Climate Change Strategy, as outlined within this report;
- viii) Approve the continuation of the MOWG Climate Change to oversee the consultation and engagement process with a further updated report being presented to Council to coincide with the COP26 event in November 2021; and
- ix) Otherwise, note the contents of this report.

BACKGROUND

3. Members will recall that a Member Officer Working Group on Climate Change was established following the Children and Young People's Climate Conference held in late 2019. Their aim was to build on the successful engagement and to help drive forward the production of a Climate Change Strategy and Action Plan setting out the ambition and

direction of travel for the Council over the next 10 years to support local, national and international action on climate change. This report seeks to provide a progress update on the work of the MOWG and seeks approval of the Council's first draft Climate Change Strategy, which will now be the subject of an extensive community engagement.

- 4. The Council has since 2009 reported on its climate change commitments and progress towards national targets through the Climate Change Declaration Report that is submitted to the Scottish Government each year in November. This report sets the background and context and previous position in delivering towards Net Zero. The most recent report was presented at Cabinet on 3rd December 2021.
- 5. Also in approving the Capital Investment Plan, Building a Future East Ayrshire on 3 March 2021, Cabinet noted the good progress being made to address the implications of climate change and future actions required to achieve Net Zero. This recognised the sector leading activity being developed through capital investment plans and, in particular, the NERD project's role in supporting Net Zero Actions, locally and nationally and to strengthen East Ayrshire's focus on delivering climate change actions. It was also agreed, in order to maximise the opportunities presented by COP26 being held in Glasgow later this year, that the Council should commit to supporting the United Nations Race to Zero Campaign.

OUR VISION AND AMBITION - CLIMATE CHANGE TARGETS - UK100

- 6. The MOWG on Climate Change has met on a number of occasions and at its meeting on 15 June 2021 endorsed the content of the Council's first draft Climate Change Strategy and associated Action Plan. A copy of this draft Strategy has been made available on the Members Portal for information.
- 7. We all now recognise that there is a global climate emergency. Climate change has become the collective action problem of our era. The Strategy sets the following future vision to address Climate Change here in East Ayrshire:

East Ayrshire will be a low carbon place with a thriving and diverse environment. We will have strong, healthy, resilient and vibrant communities that benefit from high quality places, multi-functional green spaces and access to high quality services that are well located to maximise sustainable travel choices. Our economy will have recovered and be fairer, greener and more inclusive, with all East Ayrshire citizens able to benefit from greater economic opportunities.

- 8. In Scotland, we have the most ambitious climate legislation in the world. Despite the unprecedented challenge of Covid-19, we remain firmly committed to a three-quarters cut in emissions by 2030 and net zero emissions by 2045, ending Scotland's contribution to climate change within a generation. We also know that the Council has a key role as a community leader in reaching net zero and the Member Officer Working Group recommends that the Council should commit to the even more ambitious target of ensuring that the Council's activities are net zero by 2030.
- 9. To support this ambition and Cabinet's earlier decision to formally commit to supporting the Race to Zero campaign, it is now recommended that the Council should also agree to join UK100 and to commit to its membership pledge. The UK 100 is a network for highly ambitious UK locally elected leaders committed to cleaner, more powerful communities. A cross-party

network with over 100 members committed to 100% clean energy. Their Net Zero Local Leadership Pledge has been signed by over 50 organisations who are advocating to national government for better powers, funding and collaboration to enable the earlier local delivery of Net Zero. A key benefit of joining UK100 is the opportunity to share learning and knowledge between members and to connect with world-leading business and industry to help develop the solutions that will be needed to reduce emissions in our local area.

10. UK100 recognise that as local leaders, Councils are uniquely placed to help tackle the climate emergency. We are closer to the people who live and work in our communities, so we have a better understanding of their needs. This means we can collaborate with them to build consensus for the solutions we need to transition to a Net Zero society that delivers multiple benefits and is fair, just and works for everyone. In joining UK100, The Council would be pledging to:-

"Do everything within our power and influence to rapidly reduce our greenhouse gas emissions"

"Work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible"

"Lead the UK's response to Net Zero, going ahead of the government goal and taking the first steps with urgency"

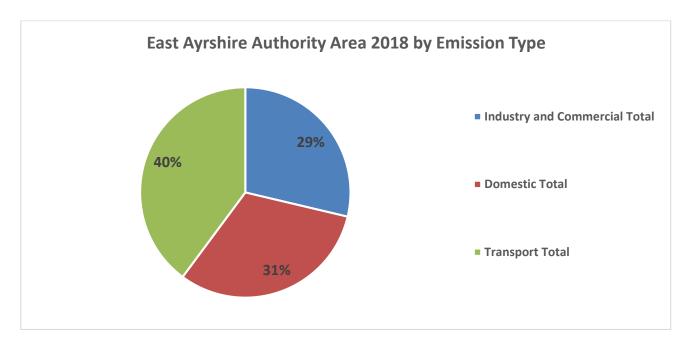
"Be bold and brave, carrying out strong climate action now and building prosperous, secure and more resilient communities that are healthier, cleaner and safer, in ways that follow the science and are practical and achievable".

- 11. Joining would place East Ayrshire Council among a group of the most ambitious Councils in Britain and would commit us to:
 - Aim to reduce council emissions to Net Zero by 2030; and
 - ➤ Work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible (and by 2045* at the latest).
- 12. The 2030 target is significantly ahead of existing Scottish Government targets and indeed the Race to Zero targets and will require the Council to increase the pace of change in implementing action to reduce our carbon emissions. In joining UK100, there is also a mandatory requirement to report on local emissions from 2022 and to aim to reduce our emissions at source, limiting the use of carbon offsets where used, to local initiatives as part of the global effort to avoid the worst impacts of climate change.

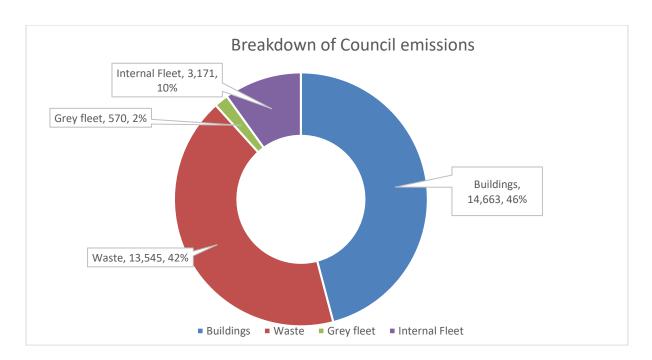
Measuring our Carbon Footprint - Baseline Data and Progress to Date

Our attention to date in terms of measurement of carbon consumption has focused primarily on the Council's own carbon use, however, as the Strategy has much wider aspirations for reducing the carbon footprint of our communities across East Ayrshire, it is useful to understand the baseline position. As an authority, we do not currently measure the carbon footprint of East Ayrshire, but this information is collected at a UK level by the Department for Business, Energy and Business Strategy. This information has been collected since 2005 and the latest information available indicates that the East Ayrshire authority area emitted

471,000 tonnes CO² in 2018 (just 1.6% of Scotland's carbon emissions), this represents a 39% reduction in our area wide carbon consumption from the 770,000 tonnes of CO² consumed in 2005.



- 14. The largest polluter in East Ayrshire is Transport at 40%, followed by Domestic consumption at 31% and Industry and Commerce at 29%. This brings the areas emissions to a total of 623,000 tonnes of C02, however, these emissions are offset by the positive contribution of forestry, crops and grasslands, which provide a reduction of 154,000 tonnes of carbon, to bring the total area emissions down to 471,000 tonnes. Interestingly, these area figures, show that almost a quarter of our emissions are offset, this demonstrates the unique opportunity that our urban/rural setting here in East Ayrshire provides to implement community based initiatives to offset our carbon emissions. The Council's carbon emissions represent around 7% of East Ayrshire's total emissions total.
- 15. In terms of the Council's direct carbon emissions, good progress has been made against the 1990 baseline. In 2019, our emissions had fallen to 31,950 tonnes of CO², a reduction of some 39,049 tonnes (55% of our 1990 baseline) and we remain on track to achieve net zero by the Scottish Government target of 2045. A summary of the Council's main sources of carbon emission is shown in the undernoted diagram.



16. This shows that our buildings and waste are the two largest sources of carbon, accounting for almost 90% of the Council's carbon emissions, with transport accounting for our remaining emissions. If we are to meet the more ambitious target of the Council achieving net zero by 2030 then we need to substantially accelerate the pace of change, doubling our annual rate of reduction from 1,500 to just over 3,000 tonnes of CO² per annum. This is a challenging target and as we draft our strategy we understand that in some areas we do not yet have all the necessary solutions to achieve net zero by 2030. New and emerging technologies will be required to achieve this goal and consequently our approach and actions will require to be constantly reviewed to reflect our growing understanding and knowledge of new breakthrough technologies.

SUPPORTING A GREEN RECOVERY AND JUST TRANSITION TO NET ZERO

- 17. Whilst the Strategy recognises the scale of the challenge of achieving net zero, it also appreciates the opportunities that will be presented by the shift from carbon to renewable cleaner energy sources and includes a range of actions, which are intended to ensure that our people and businesses are appropriately prepared and skilled to take advantage of the economic benefits of our transition.
- 18. Much of this activity is being taken forward on an Ayrshire wide basis through the Economic Growth Strategy for Ayrshire, which includes a workstream dedicated entirely to Clean Growth. East Ayrshire has a wealth of natural resources and has already attracted significant investment in the generation of energy from wind. Our unique urban/rural setting, together with the redevelopment activity around former coal extraction sites also provides an opportunity to develop alternative sources of energy generation and storage. To harness this potential and ensure that energy projects are developed, planned and structured in a way that maximises the benefits for our communities and are used to their full potential across both the public and private sector, a key action will be the preparation of an Energy Masterplan for Ayrshire.
- 19. Sustainable growth is embedded throughout the Ayrshire Growth Deal projects and we will work with existing businesses to decarbonise and support the growth of high potential,

sustainable and low carbon businesses. The investment of almost £150m of public funds will help to leverage private sector investment of more than £300 million, with the potential of creating up to 7,000 new jobs over the next 10 years. Many of the key projects contained within the AGD will be based in East Ayrshire, including HALO Kilmarnock, Ayrshire Engineering Park (Moorfield), Ayrshire Manufacturing Investment Corridor and our flagship National Energy Research Demonstrator (NERD). The overall aims of these projects are to develop key strategic sites and sectors to address the area's economic frailties whilst ensuring that they recognise the impact of climate change and are delivered in a sustainable way.

- 20. The AGD Programme Management Office and project teams are working with Scottish Government to ensure the Deal is aligned with Scotland's transition to net zero carbon emissions by 2045. Scottish Government are developing a carbon management structure for the AGD, as well as other City Region and Growth Deals in Scotland, which will allow the carbon emissions impact of the programme and projects to be assessed then minimised. Once carbon baselines have been established, consideration will be given to what can be done to ensure all AGD projects align with a net zero transition.
- 21. Our commitment to Community Wealth Building, an alternative approach to traditional economic development, which seeks to develop resilient, inclusive local economies, with more local employment and a larger and more diverse business base, also presents us with new opportunities to regenerate our economy. The development of the local green energy sector and local carbon insetting initiatives both provide new way in which to redirect wealth and the benefits of wealth creation back into our communities.
- 22. Food also has a significant role to play in achieving our ambitions of Net Zero and a just transition. The overall food system from food production, growing and food miles, our dietary choices and cooking techniques to food waste and food and drink packaging all require a fundamental shift in how we consume food and understand its impact. Food can account for between 10-30% of a household's carbon footprint and typically higher in lower income households.
- 23. In East Ayrshire we have since 2008 achieved the Soli Association Food for Life Gold award for our school meals service, celebrating good food, local procurement and recognising the environmental impact of our menus. We will continue to build on this reputation as food services expand and engage further with our local communities. The Economic Growth Strategy also has a work stream on food and drink, led by East Ayrshire, and will be a further catalyst to extend and expand our local procurement and build local economic growth across the food and drink supply chain.

Sustainable Procurement

24. As outlined in the Council's Procurement Strategy, we are committed to sustainable procurement by ensuring that the social, environmental and economic regeneration of our communities are considered during all stages of the procurement process. Our Strategy reflects the Sustainable Procurement Duty. Our procurement activity can facilitate involvement of SME's, third sector, charity and voluntary organisations, inclusion of community benefits, promotion of innovative techniques and technologies, environmentally friendly products and carbon reduction initiatives. Our activities should prioritise and extend

every opportunity to strengthen Net Zero, local value and the just transition in all areas of procurement.

National Energy Research Demonstrator (NERD) Project

- 25. With £17m funding earmarked for the NERD, this project is our flagship response to climate change in East Ayrshire. Working closely with both the private sector and our partners at the University of Strathclyde Energy Systems Research Unit, this initiative will place East Ayrshire at the very centre of innovation and development of the new approaches and technologies that are needed to not only facilitate our own transition to net zero but also to support the wider aspirations for Scotland and the UK in terms of climate change action.
- 26. The NERD Project is made up of 12 demonstrator projects that will be undertaken during the lifetime of the project aimed at solving local issues with transitioning to a low carbon future; such as the construction of a Centre of Excellence in Cumnock and various developments linked to energy research and generation at different locations around the local area including post-industrial former mining sites. These 12 projects are all linked to six individual workstreams:-
 - SMART Energy;
 - Low Carbon Transport;
 - Low Carbon Buildings;
 - Hydrogen and Alternative Storage Vectors;
 - Geology, Hydrology, Ecology and Environment;
 - Health and Social Economics:
- 27. Work is ongoing to finalise the NERD business case and we will explore the possibility of accelerating the Council's investment in NERD Demonstrator Projects within the context of the delivery of the Council's Capital Programme or wider investment opportunities in the public or private sector. This will include a pilot project as part of the Mauchline Conservation Area Regeneration Scheme which will trial new building energy efficiency measures on listed buildings. COP26 will provide us with the opportunity to showcase the NERD to a global audience and to learn from other such demonstrators around the world.

HOW WILL WE TACKLE CLIMATE CHANGE

28. The Strategy sets out our approach to combat climate change under the four key themes of Energy, Transport, Waste and Natural Environment. Under each of these themes, it outlines how the Council will show leadership to reduce its own carbon consumption and how we will work with our communities and support business to reduce their emissions. It also identifies opportunities to involve our schools, communities and business in helping to raise awareness and create a local movement which is focused on reducing carbon emissions and/or offseting our carbon emissions through local community based initiatives and sets out our plans for engaging with key stakeholders to further develop our local response to tackle climate change.

ENERGY

29. Energy provides heat for our homes and places of work, powers our transport and keeps our healthcare system running. It is also the Council's largest source of carbon emissions

(46%) and accounts for the lion's share of our regional emissions. Grid generated electricity and gas are by far the largest two elements of our energy consumption. Electricity is increasingly being generated from renewable energy sources and in time will provide a reliable source of green energy, however, to fully decarbonise heat, our use of fossil fuels to provide heat must be all but eliminated. Natural gas can no longer be used in offices and homes. New systems to provide virtually zero-carbon heat must be planned and implemented across our homes, public, commercial and industrial buildings to deliver our net zero ambitions.

The Council's Estate

- 30. The most effective way of reducing our energy consumption is to reduce the size of our estate. This was identified as a priority workstream in the Council's Transformation Strategy, and supported by the implementation of new Smarter Working arrangements. This activity has already delivered a reduction in our office accommodation and was accelerated during the pandemic to allow around 1,500 of our employees to work from home. Our aim is to embed these flexible working practices and it is anticipated that this will allow for further rationalisation of our estate. We also have an excellent track record of co-locating with our partners and will continue to develop shared services within our public buildings to reduce the scale of accommodation needed in each of our communities.
- 31. A retrofitting is, on average 50% more efficient in terms of carbon emissions than new build, our next priority, in terms of the energy management hierarchy for our estate, is to focus on the deep retrofit of existing buildings. We will focus on a 'fabric first' approach to energy efficiency in refurbishment of existing buildings where possible, with the adoption of EnerPHit building standards and principles to drastically reduce energy demands through a focus on building physics. Where possible, our building refurbishments will also prioritise the migration from natural gas heating to zero direct emission heating to mitigate the increased operational energy costs involved with the electrification of heat.
- 32. Within our property estate portfolio we already have a number of sites that have renewable technologies currently installed. These include solar PV and solar thermal PV panels, Ground Source Heat Pumps and biomass boiler plant. Working with and incorporating learning from NERD and emerging technologies, we will continue to pilot renewable technologies to assist the journey to zero in our buildings, We will also consider the locality of public buildings and their surroundings to examine wider decarbonisation opportunities, including possible energy sources from waterways, waste-water, and green-spaces and the development of wider communal and district heating opportunities, utilising our public buildings as 'anchor loads' and catalysts for change within their locality and place. An example of the range of options which will be considered is detailed below:
 - Heat pumps;
 - Solar technologies;
 - Wind power;
 - Green Hydrogen production and storage;
 - Smart technologies such as heat and power storage and load shifting control systems;
 - · Green Heat In Greenspaces;
 - Geothermal power and HotScot Project -geothermal energy storage; and
 - River Source Heat Opportunities.

- 33. Even recognising the embodied carbon reductions associated with retrofit over new-build there will continue to be instances where new buildings are required, either because of the absence of any existing building provision or the unsuitability of existing buildings for conversion. New-build represents an opportunity for an immediate transition to zero carbon in operation, and it will be important to take this opportunity and not simply add more poorly performing buildings to the estate which will then also require future costly conversion in respect of decarbonisation. To deliver this immediate transition, we will focus on operational energy demand reduction in new building design, incorporating Passivhaus and similar standards, which go beyond the minimum requirements of Building Regulation, and will seek to maximise funding opportunities attracted with low carbon design.
- 34. Within the Council, work has been initiated to create a plan across all the buildings in our estate to define the most suitable routes to pursue to achieve carbon neutrality, on a building by building basis. This innovative Estate wide approach has never been done before by a Scottish Local Authority, and a working group including Scottish Futures Trust, Passivhaus Trust, Edinburgh City Council, Glasgow City Council and East Ayrshire Council has been set up to develop a process around this, which intends to define a route map to zero emissions. This plan will be costed to define the scale of investment required and will inform future Asset Management, Capital Expenditure and Component Renewal Actions.

Housing

- 35. Domestic carbon consumption accounts for 31% of the East Ayrshire area's emissions and a cross tenure approach to facilitate a shift away from gas heating systems will be required to deliver net zero. The Scottish Government's 'Housing to 2040' published in March this year is Scotland's first long-term national housing strategy. It sets an ambition for everyone to have access to a warm, safe, affordable and energy-efficient home that meets their needs, in a community they feel part of and proud of. It aims to facilitate the delivery of more energy-efficient homes that use zero emissions heating systems, and are adapted to meet the needs of the householder, within the context of climate change actions, place-based approaches and an overall well-functioning housing system. A new Housing Standard will be created for all homes, both new and existing, to meet the same quality standards so as to reduce the climate impact through zero emissions, regardless of tenure. As a consequence, the council's actions around housing will very much be driven by these new standards and the necessary funding that will be required to support implementation.
- 36. In terms of the Council's current housing stock, this is almost 100% compliant with the Scottish Housing Quality Standards and EESSH (Energy Efficient Standard for Social Housing) Standards which were developed in 2014. The Council is now working towards meeting the more challenging EESSH2 standards set by the Scottish Government for implementation post 2020. This sets out a number of key milestones that over time will deliver further reductions in the carbon footprint of our own housing stock as we work towards a target to become carbon neutral by 2040.
 - From 31 December 2025 no social housing should be re-let below EPC Band D;
 - By end of 31 December 2032, all social housing meets, or can be treated as meeting, EPC Band B, or is as energy efficient as practically possible;
 - By 2040 poor energy efficiency has been removed as a driver for fuel poverty and all social housing is carbon-neutral as far as reasonably practical.

37. The Strategic Housing Investment Plan (SHIP) sets out the Council's proposals for new build developments, which will be built to Silver Standard of the Building Regulations 2011 in respect of both Carbon Dioxide Emissions and Energy for Space Heating. Working with the Council's Developer and learning from NERD, Housing Asset Services proposes to develop and pilot a net zero housing model using off-site manufacture and adopting a fabric-first approach to realise more energy efficient Council homes in response to the Council's sustainability, climate change and fuel poverty reduction targets.

Local Heat and Energy Efficiency Strategy (LHEES)

- 38. The recently published Draft Heat in Buildings Strategy outlines how the Scottish Government intend to reduce greenhouse gas emissions from Scotland's homes, workplaces and community buildings and to remove poor energy performance as a driver of fuel poverty. To meet these objectives, the Scottish Government is supporting a place based, locally led and tailored approach to heat decarbonisation and energy efficiency The Local Heat and Energy Efficiency Strategy (LHEES). The aim of an LHEES is to set a framework for the delivery programme of a targeted area-based scheme, led by local authorities, addressing how each local authority in Scotland will reduce their energy demand and decarbonise the heat supply of buildings in their area. This analysis will identify the gap to transition to low emission heating across all buildings in our communities.
- 39. LHEES will provide a long-term framework for taking an area-based approach to planning and delivery of the heat transition, including through zoning linked to regulation. LHEES will also form a basis for local public engagement and will become a statutory requirement for local authorities in 2022, with the expectation that every local authority will be required to have completed a LHEES for their area by the end of 2023. A key action of the Strategy is to build on the early pilot work undertaken in East Ayrshire to finalise our own LHEES. The data derived from the LHEES will subsequently allow us to prioritise future actions which will deliver the greatest benefits on our net zero journey.

TRANSPORT

40. Transport only accounts for some 12% of the Council's own carbon footprint but is the biggest polluter at an East Ayrshire wide level, accounting for 40% of our area's emissions. Over 40% of transport emissions come from car use. We also know that over half of car journeys are relatively short (under 2 km). Accordingly, whilst it is important for the Council to lead by example by decarbonising our own fleet, the need to encourage behaviour change around the way we travel is likely to deliver the greatest benefits in terms of reducing our local carbon footprint. Accordingly, our priority under the Transport theme should be to support and facilitate the shift to electric vehicles, whilst encouraging active travel through walking, cycling and improved public transport.

Active Travel

41. The travel restrictions and lockdowns imposed in response to the pandemic have significantly reduced vehicle miles in the last year and this has had a positive impact on the environment, with improvements in air quality and a dramatic increase in active travel. In the last year, Scotland has seen a 47% surge in the number of people cycling and a key challenge for us now is to retain these positive behaviour changes. To achieve this, a

number of temporary changes to our road network to give priority to pedestrians and cyclists have now been made permanent.

- 42. The Council's Active Travel Hub based in Kilmarnock will continue to encourage and support our communities, through a range of activities across all age groups, to be healthier and greener by promoting active ways of travelling. A key objective of our Active Travel Framework is to partner with local community groups to tackle inequalities and make sure that active travel options are available to everyone.
- 43. The Ayrshire Roads Alliance and East Ayrshire Leisure Trust are working with a number of communities and stakeholder groups to develop local Active Travel Plans that link to placemaking. The most significant of these is the 'Kilmarnock Infinity Loop' a 26km figure of eight network of cycle route and pathways around the town, with a spinal route from North to South, through the town centre, which links to a circular route which will provide connections between different communities on the outskirts of the town. We already have an extensive network of walking and cycling routes across East Ayrshire and our aspirations for developing our green infrastructure go much further than Kilmarnock, with plans for a network of active travel routes across Ayrshire. These will be brought together within a new East Ayrshire Active Travel Strategy, which is anticipated to be completed by the end of 2021.

Improving Public Transport

- 44. Strathclyde Partnership for Transport (SPT) is the public transport authority for the West of Scotland and is currently developing a new Regional Transport Strategy (RTS). This will be informed by responses to their recent 'Case for Change' consultation and engagement activity, which recognises the significant decline in the use of bus services and the corresponding increase in train use as the preferred mode of public transport. The key issues that will be included in the new RTS are outlined below:
 - Transport Emissions
 - Access for All
 - Regional Connectivity
 - Active Living
 - Public Transport Quality & Integration
- 45. A key priority for the Council at a local level is to improve access to public transport in our rural communities and we are working with key partners, such as Coalfield Community Transport to further develop the availability and use of community busses, through the asset transfer of Council busses that are due to be replaced. We will also engage with Stagecoach on the development a Bus Service Improvement Partnership to improve the effectiveness and quality of existing bus services in terms of routes, frequency, acceptable fares and ticketing arrangements.

Council Fleet

46. The Transformational Review of the Council's Fleet Strategy approved by Cabinet in February 2019 endorsed a strategic vehicle replacement programme for cars and vans that focused on shifting to electric vehicles to reduce the environmental impact of our fleet and reduce costs. This will see all fleet cars and small vans electric by 2023 and larger vans

electric by 2026. Zero emission Heavy Goods Vehicles are still very much in the development phase, with both electric and hydrogen variants expected to play a role in the future Council Fleet. Whilst early models are available, without significant grant funding, the excessive costs of electric or hydrogen HGVs render these vehicles unfeasible for inclusion in the Council's fleet at this time. The Council will remain engaged with industry bodies and Transport Scotland to monitor the development of these vehicles until such time that their inclusion can be justified.

47. In tandem with the introduction of a greater number of electric vehicles in the fleet, Council employees will be supported in having available more zero emissions driving options through the introduction of an electric pool fleet and a scheme to encourage car sharing. As a result of the pandemic, our grey fleet mileage has reduced by around 50% during the last year and our aim is to maintain this reduction by encouraging the continued use of online meetings and increased working from home as we recover from the Pandemic and when travel is required, providing access to low carbon alternatives. We will also encourage our employees to move to cycle to work and shift to electric vehicle by offering tax efficient salary sacrifice Cycle to Work and Car Leasing Schemes.

Electric Vehicle Charging Infrastructure

48. The Council also have an important role in leading and supporting our communities to make the transition away from fossil fuel vehicles by providing the necessary electric vehicle charging infrastructure to facilitate the required shift from petrol and diesel to electric vehicles. To enable this shift, the Ayrshire Roads Alliance (ARA) has recently developed an Electric Vehicle Infrastructure Strategy and associated action plan which will develop a comprehensive electric vehicle charging network to support our communities, businesses and visitors in converting to zero emission vehicles.

WASTE

- 49. Waste accounts for around 42% of the Council's carbon footprint and this includes domestic and commercial waste collected and disposed of by the Council. To address this, our strategy will focus on reducing the amount of waste produced by encouraging reuse and repair, whilst increasing the percentage of our waste that is recycled and diverted from landfill, as we work towards the creation of a circular economy.
- 50. The introduction of the recycling trolley here in East Ayrshire places us at the forefront of Scottish Councils in actively promoting recycling. This new system makes it as easy as possible for our residents to recycle and has already had a positive impact on our recycling rates which rose to 53.2% in 2019 as increased participation in recycling, improved the levels of aluminium, glass and plastics which we collected. Despite this progress, it will be challenging to meet the 70% recycling target set out in the Scottish Government's Zero Waste Plan by 2025.
- 51. This is recognised by both the Scottish and Westminster Governments and there are a number of impending legislative changes on the horizon, which have the potential to significantly impact on the Waste Management Service and encourage greater levels of recycling. These include the Scottish Government's Deposit Return Scheme and Biodegradable Waste Ban. The UK Parliament also plans to introduce a Plastic Packaging Tax and Packaging Producer Responsibility Regulations, both of which have the potential to

change the nature and financing of plastic waste as they are based on the polluter pays principle. There is, however, much that we can do at a local level to reduce carbon emissions arising from waste.

Waste Disposal Arrangements - The Biodegradable Waste Ban

52. The Waste (Scotland) Regulations 2012 banned biodegradable municipal waste from landfill in Scotland. Essentially this ban requires all biodegradable waste to be incinerated in Thermal Treatment - Energy from Waste Plants that require significant capital investment and planning time to bring into operation. Following a state of the market survey, which established that just over a third of local authorities had no long-term solution to meet the requirements of the ban, the Scottish Government pushed back the implementation date of the ban to 1 January 2025. This shift in processing our waste from landfill to an energy from waste plant offers the quickest route to significantly reduce our carbon footprint from waste, however, this will come at an additional cost and there is currently no local energy from waste solution. The Council is currently working with other Council's in a similar position to find a cost effective alternative to landfill and ensure compliance with the ban.

The Circular Economy - Promoting re-use

- 53. Four-fifths of Scotland's carbon footprint comes from products and materials. The production, consumption and waste of these products and materials are heating the earth at an alarming rate. To address this issue it is recognised that we need to increase that pace of change and promote the circular economy in Scotland. A circular economy is one in which products, services and systems are designed to maximise their value and minimise waste. Products last longer when they are reused, repaired, remanufactured or recycled. There should be zero waste in a truly circular economy.
- 54. The Council already supports the reuse of waste by working in partnership with the Cumnock and Doon Valley Gift Furniture scheme and Cunninghamme Housing Association to reuse furniture and other goods and a range of contracts are in place to recycle and or reuse electronic and other products, however, this activity is largely driven by the residual value of these waste products and there is much more that we as a Council can do to promote a circular economy here in East Ayrshire. There is a real opportunity to put this into practice within the proposed the new Household Waste Recycling Centre at Caponacre in Cumnock and our existing facility in Western Road Kilmarnock.

Action to Reduce Waste and Encourage Recycling

- 55. The Council has and continues to pursue a range of initiatives to encourage greater levels of recycling, this includes the:-
 - Promotion of digitalisation of services and remote learning as an alternative to reduce our consumption of paper and books;
 - Introduction recycling bins in our own offices and schools as we seek to implement a common approach to recycling across all services;
 - Introduction of a range of initiatives within our catering service to reduce plastics and other disposables;
 - Introduction of Waste Warriors to reduce waste and champion recycling in our schools;

- Reduce, recycle and reuse introduced as a core theme throughout our educational establishments. Linked to initiatives like 'Litter awareness programme', uniform/equipment swaps, playground recycling, reducing and ultimately banning single use plastics.
- Real Nappy Scheme, which working with NHS Ayrshire and Arran, will be promoted to new parents; and
- Expansion of our existing recycling offer to include new opportunities to recycle materials such as plastic film and bed mattresses.
- 56. Whilst much of the media focus has been on the damaging impact of plastics, it is actually food waste that poses a greater threat to climate change. When food waste ends up in landfill, it releases methane gas, which is a significant driver of climate change. As the review of our waste management service highlighted, in some communities up to 50% of our households are not using their food caddies. This is supported by a recent waste composition survey, the findings of which established that around 30% of the weight of the waste in residual waste bins comprised of avoidable or unavoidable food waste. There is not only an environmental but also a financial cost to this behaviour with the additional disposal costs to the Council of around £500k per annum and an estimated additional cost of £470 per annum to each household's food bill as a result of food that could have been eaten but ends up being thrown away.
- 57. This demonstrates that there is clearly a need to educate householders, to highlight the negative impact of food waste and to explain the financial and environmental benefits that can be achieved if food waste is reduced and recycled. New technology installed in our Refuse Collection Vehicles allows our crews to identify which households are recycling and which are not. This data could be used to incentivise recycling by sharing savings in disposal costs with our communities and support investment in local environmental projects.
- 58. Funding to support a food waste campaign has been agreed as part of the 2021/22 budget. Our aim to reduce the levels of food in our residual waste bins by 50% over the next 5 years and through an Environmental Vibrant Voices campaign, we will engage deeply with our communities to support and work with them to encourage greater levels of recycling, with a particular focus on food waste.

NATURAL ENVIRONMENT

The impact of climate change is already evident in the increasing number of adverse weather events across the world, at a local level, a key objective of the Strategy is to ensure that our communities, green networks and infrastructure are adaptable to a changing climate and reduce the risks and vulnerability to unavoidable events.

Flood Prevention

59. East Ayrshire has experienced a number of adverse weather events in recent years and flooding is a particular risk for many of our communities. We recognise the devastating impact that flooding can have on individuals and businesses and working with the Scottish Environmental Protection Agency (SEPA, Scottish Water and other key stakeholders, the Council has produced a Local Flood Risk Management Plan. This is supported by a 6 year cyclic action plan (2016-22) which outlines the wide range of actions that will be implemented to reduce and mitigate against identified flooding risks.

- 60. Work is currently underway to produce the next 6 yearly cyclical Local Flood Risk Management Plan 2022-28 and this is reflected in the flood risk management policy within the new local development plan which is also currently being developed. Our future approach will promote flood avoidance in the first instance. Flood storage and conveying capacity will be protected and development will be directed away from functional flood plains and undeveloped areas of medium to high flood risk. Through our planning policy, the Council will also actively support the development of environmentally friendly flood prevention measures including:
 - Wetland, peatland or green infrastructure creation;
 - Flood protection schemes, restoring natural features, enhancing flood storage capacity and avoiding the construction of new culverts; and
 - Natural Flood Management (NFM) techniques including crop rotation, winter planting and the use of planting, afforestation and reforestation to reduce the risk of flooding.

Green Infrastructure

- 61. Green infrastructure is defined as the use of ecosystems, green spaces and water in strategic land use planning to deliver environmental and quality of life benefits. It includes parks, open spaces, playing fields, woodlands, wetlands, road verges, allotments and private gardens. Green infrastructure can contribute to climate change mitigation and adaptation, natural disaster risk mitigation, protection against flooding and erosion as well as biodiversity conservation. Considering green spaces or connections as infrastructure arises because simple things like trees, greenspaces and watercourses can provide valuable services in an ecological way. Green infrastructure can deliver on functions and services such as shelter, access and travel, sustainable urban drainage, pollution mitigation and food production as part of a wider ecosystem. Moreover this approach has the added benefit of enhancing habitats and creating attractive places.
- 62. Our Open Space Audit and Open Space Strategy was first developed in 2009 and reviewed in 2014 to provide an update on current provision of open space in terms of protected spaces and their function and consider local need and demand. This was used to develop settlement by settlement action plans and prepare a vision for green infrastructure development throughout East Ayrshire. A further audit was carried out in 2020. This will now inform a revised Green Infrastructure Strategy for 2021-2026 which will set out in a strategic context the importance of green networks across a breadth of environmental, social and economic goals, link to cross-cutting themes in both the Community Plan and the Local Development Plan. Equally important, is the need to deliver real and meaningful benefits to communities that address local needs. The new Strategy will offer an innovative and powerful 'tool kit' to improve the green infrastructure and open space management within East Ayrshire and will support the development and implementation of the Community Led Action Plans and placemaking priorities.
- 63. These audits show that at a local authority wide level, East Ayrshire appears to have a surplus of open space. However, only 561 hectares has scored above 50% in the desired quality threshold. The 2021-2026 strategy will focus on recommendations that enhance the quality of open spaces throughout East Ayrshire, improve their accessibility and integrate them into green networks.

Biodiversity

- 64. Biodiversity and nature-based solutions are critical to achieving net-zero actions by 2045. Under the Nature Conservation (Scotland) Act 2004, all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their functions and responsibilities. The work undertaken by East Ayrshire Council to further biodiversity conservation fits into a clear global policy hierarchy with international targets to halt global loss of biodiversity. New global targets were agreed for 2020 and the Scottish Biodiversity Programme 2020 covers all aspects of biodiversity work in Scotland, providing a common understanding of priorities and an agreed approach to delivering them.
- 65. Nature Conservation cannot be delivered in isolation and in East Ayrshire there is significant partnership working to ensure that biodiversity is protected and enhanced. East Ayrshire Council with the support of East Ayrshire Leisure and East Ayrshire Woodlands contribute to a number of partnerships including:
 - The Scottish Wildlife Trust management of 2 nature sites
 - Galloway and South Ayrshire designated as a new style UNESCO Biosphere
 - The East Ayrshire Coalfield Environment Initiative (CEI)
 - The Ayrshire Rivers Trust
 - East Ayrshire Leisure / Ayrshire College horticulture and arboriculture Partnership
 - The Coalfield Communities Landscape Partnership
 - 22 Community Led Action Plans.

Forestry and Tree Planting

66. Within East Ayrshire there is significant opportunity at the former opencast mining sites, for brownfield restoration through tree planting and forestation. Working in partnership with Forestry and Land Scotland (FLS) and the new landowners, the Council has developed a plan to facilitate the restoration of opencast sites. The aim is to identify and prioritise these sites for new tree planting to enable the useful rehabilitation and reintegration of these sites into local economic and social life. Across Scotland, through tree planting initiatives, this plan has identified the potential to create in excess of 1,000 hectares of new woodland. The focus will be on creating productive woodland that combines a matrix of native and conifer species. This will create a wealth of benefits from greening these sites, increasing the productive contribution to the Scottish economy, increasing woodland cover, enhancing biodiversity, providing employment and improving the local landscape. It will also help to achieve our net zero ambitions, with these new forests anticipated to capture around 30 million tonnes of carbon.

CARBON ZERO COMMUNITIES

- 67. Through our Vibrant Communities and our Vibrant Voices approach, we have a wellestablished and highly developed approach to community empowerment, engagement and involvement. The MOWG recognised the value of this approach and reflecting upon the feedback received from our communities from the Vibrant Voices engagement on recovery and renewal, we know that climate change and the environment featured prominently and that a green and sustainable recovery is a priority for our communities.
- 68. We also know that there is great interest across our communities in shaping our climate change response across the wide range of areas covered by our Strategy and that deep

engagement with our communities will be essential to ensure that we harness the enthusiasm and create the momentum required to deliver net zero. Our community action plans have set a local vision and framework to deliver on our communities ambitions, engaging on our Strategy through these well-established groups will provide an ideal opportunity to identify and include local actions within our Climate Change Action Plan.

- 69. Our children and young people have been at the forefront of driving the behaviour change that we know will be required to deliver on our climate change ambitions. Each of our educational establishments has an Eco-group and is developing 'Carbon Counters' to support establishments in becoming carbon zero. Bespoke and specific learning and teaching in relation to age/stage is also in place to empower and educate all of our young people on climate change. They have articulated their views through the Young People's Cabinet, the Young People's Climate Change Conference and their School's Eco Committees and their collective voice has already helped to shape our first Climate Change Strategy. They also have an important role as ambassadors and champions of change; embedded within our communities to drive forward the societal change that will be required. We need to capture and harness their passion and creativity and ensure that they continue to be given a prominent role in our future engagement and climate change action planning.
- 70. Our business community will also play an important role in our local response to climate change. Whilst clean economic growth offers opportunities for business, skills development and jobs across East Ayrshire, we will also need to engage with and encourage local businesses to reduce their own carbon emissions if we are to achieve our area wide net zero target by 2045. An appropriate forum will be needed to ensure that local business fully appreciate the benefits and opportunities that will arise from our community wealth building approach and transition to green energy sources but also to exchange learning between the public and private sector on our carbon reduction journey.
- 71. We also need to educate, engage and seek the views of our own workforce, to hear their ideas for tackling climate change under each of the four themes and to ensure that we are all doing everything we can, both at work and at home to reduce our carbon footprint. Working with Organisational Development, we will develop a programme of climate change awareness training to ensure that our employees understand the need to accelerate action and know what changes they can make as individuals to help to reduce their own carbon emissions.
- 72. Once the draft Strategy has been approved, a detailed plan of engagement over the coming months, which reflects and is responsive to the latest guidance on Covid levels, will be developed. This will be tailored around each of the key themes to maximise engagement with communities of interest. Engagement with the key stakeholders outlined above will allow us to further refine and develop actions to support our Climate Change Strategy and it is anticipated that feedback will be used to develop climate change pledges that our young people, individuals, community organisations and local businesses could sign up to. Our intention is to report back to Council with the final plan and details of a supporting programme of local climate change events to maximise the publicity and global prominence that climate change will be given when Glasgow hosts the Cop 26 Climate Change Summit in November this year.
- 73. Branding of our Climate Change Strategy and wider response will be equally important to ensure consistency of messaging. The Council's PR and Design Team have played an active

role in supporting the work of the Member Officer Working Group on Climate Change and have presented some initial thoughts around the creation of a brand to promote our climate change response and actions. Their expertise will also be important in preparing materials and developing social media campaigns to support behaviour change and the engagement activity outlined above.

GOVERNANCE

- 74. It is recognised the significant challenge in delivering the ambition set out in this report, and although the action areas set a direction the need to continually review our approach, continue to engage and redefine and refocus action areas over the next decade will require a comprehensive and well managed approach.
- 75. To raise the profile of climate change in East Ayrshire and champion our new Climate Change Strategy, it is proposed at Elected Member level that a spokesperson should be appointed to lead on Climate Change.
- 76. It is also proposed that the MOWG Climate Change should be continued to oversee the consultation and engagement process with a further updated report being presented to Council to coincide with the COP26 event in November 2021 and that their remit should be extended to develop appropriate reporting and monitoring arrangements to chart our progress against our carbon reduction targets.
- 77. Recognising the need for immediate action, it is also suggested that all Committee Reports should now include a new section that outlines the impact of the proposals on our Net Zero ambitions.

LEGAL / RISK IMPLICATIONS

- 78. The corporate risk register identifies two main risks around Environmental climate change that the recommendations in this report will take action to address the mitigate these risks.
 - a. The Council recognises the implications of its decisions and actions on the environment and takes positive steps to mitigate and offset its climate footprint.
 - b. Climate change is having an impact on global weather patterns with unseasonal extreme events which will become a regular and intense occurrence.

HR / EQUALITY / FINANCIAL IMPLICATIONS

- 79. There are no specific HR Implications arising from this report.
- 80. With regard to Equality Implications, all proposals will be assessed in respect of their impact on equality, as required under the Equality Act 2010. This will involve an initial screening assessment once the Strategy has been finalised and further analysis where proposals impact directly on the nine protected characteristics.
- 81. There are no specific Financial Implications arising from this report.

COMMUNITY PLANNING / TRANSFORMATION IMPLICATIONS

- 82. The outcome of the three yearly review of the Community Plan, details of which also be will considered by Council today identifies sustainability and the environment as one of its key priorities and the accompanying Thematic Delivery Plans and LOIP include a range of actions and measures that support our net zero ambitions. This Draft Climate Change Action Plan was considered by the Community Planning Partnership Board on 10 June 2021 and Board members endorsed our approach to tackle climate change as set out in the Strategy and supporting Climate Change Action Plan. The Board also agreed to adopt the undernoted collective commitment to tackle climate change in East Ayrshire:
 - To embed climate change considerations into everything we do as a partnership it will be embedded into our DNA;
 - To challenge ourselves to deliver as ambitious a Net Zero delivery plan as possible and to deliver the required changes at the earliest opportunity;
 - To take the necessary steps to ensure a just and fair transition to a low carbon future economy;
 - To work with local businesses and entrepreneurs, we will collectively work to yield the greatest benefits from green growth for our local economy and strive towards selfsustaining commercial low carbon models; and
 - To draw upon our local strengths and work with partners within and outside East Ayrshire to deliver on our Net Zero commitment.
- 83. Partners also agreed, where possible, to commit to collectively report details of our carbon emissions on our journey to net zero.
- 84. The Draft Climate Change Strategy and associated Action Plan complements, supports and links with the implementation of many of the Council's Transformation Workstreams, including Property and Estate, Digital and Vibrant and Empowered.

Katie Kelly
Depute Chief Executive (Safer Communities)
8 June 2021

Person to Contact: Andrew Kennedy, Head of Facilities and Property Management, Tel: 01563 576089 Email: Andrew.Kennedy@east-ayrshire.gov.

EAST AYRSHIRE CLIMATE CHANGE STRATEGY 2021 - 2030

"What you do makes a difference.

You have to decide what kind of difference you want to make"

Foreword by the Leader of the Council

We all now recognise that there is a global climate emergency. Global climate change has become the collective action problem of our era. In Scotland, we have the most ambitious climate legislation in the world. Despite the unprecedented challenge of Covid-19, we remain firmly committed to a three-quarters cut in emissions by 2030 and net zero emissions by 2045, ending Scotland's contribution to climate change within a generation. We also know that the Council has a key role as a community leader in reaching net zero and this strategy commits the Council to the even more ambitious target of ensuring that the Council's activities are net zero by 2030.

In November this year the world is looking to Scotland as the United Nations COP26 climate summit takes place in Glasgow. This marks the most important moment for the international climate challenge since the Paris Agreement in 2015. It provides us with the unique opportunity to show what is special and unique about East Ayrshire and to highlight the work that we are doing here in East Ayrshire to meet net zero emission targets.

I am very excited about our National Energy Research Demonstrator (NERD) which will be delivered in partnership with the University of Strathclyde. This groundbreaking project embodies the Councils commitment to meeting net zero emissions targets, creating Scotland's First Zero Carbon Community. Given the significance of this project both nationally and internationally we have submitted an application to COP26 to ensure that it is showcased on the international stage. This will offer an invaluable opportunity for collaboration, networking and knowledge sharing with industry leaders.

These are not normal times. Covid-19 is the single greatest public health crisis of our lifetimes and has had a profound impact on all of us - on our health, economy and society. I have been immensely proud of the way our communities have worked alongside the Council and our Partners to respond to this crisis. We now need to harness this collective community spirit and energy to work together to play our part in helping to safeguard our planet's future.

We are making very good progress in our journey to net zero and have already reduced our carbon footprint by around 55% from our 1990 baseline. We have invested in electrifying our fleet and our Capital Programme is modernising our buildings with renewable energy sources. We have also invested in our waste collection arrangements to make it easy for our residents to recycle their waste. We now need to redouble our efforts to reduce our carbon use and will work tirelessly to ensure that we meet the reduction targets set within this Strategy.

We are committed to a green recovery from Covid-19, which will capture the opportunities of green jobs, business growth, prosperity and wellbeing. This Climate Change Strategy sets out the bold actions that will ensure a just transition and green recovery and help us to build a greener, fairer, and more environmentally sustainable society and local economy.

The Strategy sets out a range of ambitious actions that will continue the Council's journey towards net zero. It also accepts that the Council cannot solve this problem on its own and outlines how we will engage with and help our communities to become greener. The difference that each of us can make should not be underestimated and we want to develop a series of climate change pledges that encourage our residents and businesses to commit to making a number of behaviour changes that will help us to reduce our carbon consumption.

Councillor Douglas Reid, Leader of East Ayrshire Council

About East Ayrshire

East Ayrshire is a diverse area covering some 490 square miles with a population of 122,440 spread over both urban and rural communities. Kilmarnock is the largest urban area with a population of around 44,000. The rest of the population live in smaller communities, ranging from less than a hundred people in some villages and rural areas to around 9,000 in Cumnock, the second largest town. Situated in south west Scotland, East Ayrshire has a varied natural environment, a rich and diverse cultural heritage, a proud industrial history and a range of leisure activities, recreation and hospitality, which attract residents and visitors alike.

Strategically located between Glasgow and the west coast, East Ayrshire benefits from a half-hourly rail service between Kilmarnock and Glasgow, with further enhancements to the rail network planned. These include ambitions to increase services and stations on the Glasgow to Carlisle route through East Ayrshire, which will improve accessibility and build on the good public transport connections which are already available, including local bus services, MyBus, school transport and community transport. In addition, we have a good network of walking and cycling routes and plans to enhance our active travel network.

East Ayrshire has high quality, effective and efficient services and a strong sense of community. The area has outstanding schools and educational establishments, excellent leisure facilities, and a prestigious portfolio of heritage and cultural attractions and events. The housing offer in East Ayrshire caters to all budgets and needs, and the proximity of the area to Glasgow, in recent years, has led to an increase in population as commuters have made it their home.

Historically, East Ayrshire's economy was based around coal mining, textiles and general manufacturing but, like the majority of the West of Scotland, these sectors fell into decline in the 1970s. Some of our communities have failed to fully recover from the impact of these changes and this has led to higher than average levels of unemployment and a decline in the working age population. We do, however, have a wealth of natural resources and a thriving interest in renewables, particularly wind power, with a number of windfarms currently operational across East Ayrshire. The demise of opencast coal production and the subsequent administration of two major coal operators in 2013 has also left East Ayrshire with the most vacant and derelict land (16%) in the whole of Scotland. The Council continues to work towards the restoration of these opencast sites and this could present further opportunity to explore alternative sources of renewable energy.

Whilst the landscape of East Ayrshire is changing dramatically to accommodate the renewable energy industry, the local economy of the area is not experiencing the associated benefits, with only 2.9% of people employed in the energy and water sectors, against 4.0% nationally. Through the Ayrshire Growth Deal and the NERD, and with further green energy developments in the pipeline, we now have an opportunity to unlock East Ayrshire's renewable energy development potential and ensure that the local economy benefits from our just transition to become carbon neutral.

SECTION 1 – CONTEXT

What is Climate Change and why does it matter?

With the overwhelming evidence of Climate Change happening, as a Local Authority and signatory of the Scottish Climate Change Declaration, East Ayrshire Council recognises the impact of Climate Change and is committed to continue to lead by example and work in partnership with our partners and communities to mitigate the effects of Climate Change.

What do we mean by Climate Change? The United Nations have a definition of Climate change as follows:

"a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".

(Source: United Nations Framework Convention on Climate Change (UNFCCC))

In other words, Human Behaviour has and unless we change our behaviour, will continue to have a negative effect on the planet's health. We need to change our behaviour to reduce our carbon footprint.

The best available science continues to show that going beyond a 1.5 °C increase in average surface temperature will lead us to catastrophic disaster and extreme weather events across the globe.

Climate Change - International and National Response

To tackle Climate Change, the global community has agreed to take action to reduce the amount of carbon emissions produced. In December 2015, at the United Nations international climate conference (COP21) held in Paris, 195 countries including the UK signed up to the world's first legally binding global climate deal, known as the Paris Agreement.

This agreement set out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C and to pursue efforts to limit the temperature increase even further to 1.5°C. To achieve this long-term temperature goal, countries agreed to aim to reach a global peaking of greenhouse gas emissions as soon as possible in order to achieve a climate neutral world by mid-century (2050).

Climate Change sits within the wider UN Sustainable Development context. In 2015, the world's governments came together to adopt 17 UN Sustainable Development Goals (SDG) as part of the 2030 Agenda for Sustainable Development. Each goal has targets and indicators that UN member states are expected to use in setting their agendas over the next 15 years.

UN Sustainable Development Goals



Scotland was one of the first nations to sign up to the goals and has a good history of policy as well as action in relation to sustainability issues. In addition to being one of the first nations to sign up to the UN Sustainable Development goals, Scotland, is world leading in setting long-term targets to reduce emissions of greenhouse gases. The Climate Change (Scotland) Act 2009 sets emission reduction targets against Scotland's 1990 baseline emissions. Subsequent legislation, the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, sets emissions reduction targets for the whole of Scotland to be Net Zero (NZ) by 2045 at the latest. Five years ahead of the Paris Agreement deadline.

To help ensure delivery of the long-term targets, The Scottish Government has set out annual targets for every year to be net-zero by 2045. Key interim targets are set out below:

- 2020 56% reduction;
- 2030 75% reduction;
- 2040 90% reduction;
- 2045 100% reduction (net-zero emissions)

Whilst the Council's emission reductions to date are in line with the targets set out above we want to lead by example and believe that as an Organisation, we should aim to achieve net zero much earlier than the 2045 deadline.

In November 2021, the international climate conference (COP26) will be held in Glasgow. In view of the growing evidence of the negative impact of climate change, It is anticipated that additional measures to increase the pace of the global response will need to be agreed in Glasgow. In advance of COP26, the Race to Zero global campaign has been launched. The purpose of this campaign is to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth. It mobilizes a coalition of leading net zero initiatives committed to achieving net zero carbon emissions by 2050 at the latest. The objective is to build momentum around the shift to a decarbonized economy ahead of COP26, where governments must strengthen their contributions to the Paris Agreement.

Climate Change – Our Vision and Local Commitment

We have set the following vision for our Climate Change here in East Ayrshire:

East Ayrshire will be a low carbon place with a thriving and diverse environment. We will have strong, healthy, resilient and vibrant communities that benefit from high quality places, multi-functional green spaces and access to high quality services that are well located to maximise sustainable travel choices. Our economy will have recovered and be fairer, greener and more inclusive, with all East Ayrshire citizens able to benefit from greater economic opportunities.

Cabinet on 3 March 2021 formally committed to supporting the Race to Zero campaign and work is in progress to join this Campaign. A key partner of Race to Zero in the UK is UK100.

The UK 100 is a network for highly ambitious UK locally elected leaders committed to cleaner, more powerful communities. A cross-party network with over 100 members committed to 100% clean energy. Over 50 of our members have signed our Net Zero Local Leadership Pledge and are advocating to national government for better powers, funding and collaboration to enable the earlier local delivery of Net Zero. A key benefit of joining UK100 is the opportunity to share learning and knowledge between members and to connect with world-leading business and industry to help develop the solutions that will be needed to reduce emissions our local area.

UK100 recognise that as local leaders, Councils are uniquely placed to help tackle the climate emergency. We are closer to the people who live and work in our communities, so we have a better understanding of their needs. This means we can collaborate with them to build consensus for the solutions we need to transition to a Net Zero society that delivers multiple benefits and is fair, just and works for everyone. In joining UK100 members pledge to:-

"Do everything within our power and influence to rapidly reduce our greenhouse gas emissions"

"Work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible"

"Lead the UK's response to Net Zero, going ahead of the government goal and taking the first steps with urgency"

"Be bold and brave, carrying out strong climate action now and building prosperous, secure and more resilient communities that are healthier, cleaner and safer, in ways that follow the science and are practical and achievable".

Joining would also require the Council to

- Aim to reduce council emissions to Net Zero by 2030; and
- Work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible (and by 2045* at the latest).

The 2030 target is significantly ahead of existing Scottish Government targets and indeed the Race to Zero targets and will require the Council to increase the pace of change in implementing action to reduce our carbon emissions. In joining UK100, there is also a mandatory requirement to report on local emissions from 2022 and to aim to reduce our emissions at source, limiting

the use of carbon offsets where used, to local initiatives as part of the global effort to avoid the worst impacts of climate change.

Action: Endorse the Council's commitment to join the Race to Zero Campaign and progress the necessary application.

Action: Agree to join UK100 and to commit to its membership pledge and aim to reduce the Council's emissions to net zero by 2030 and our wider communities' emissions to net zero by 2045.

Action: Building on the Council's existing internal carbon reporting requirements, investigate the best way to measure and report on the wider East Ayrshire area's carbon emissions by 2022.

Commitment of our Community Planning Partners

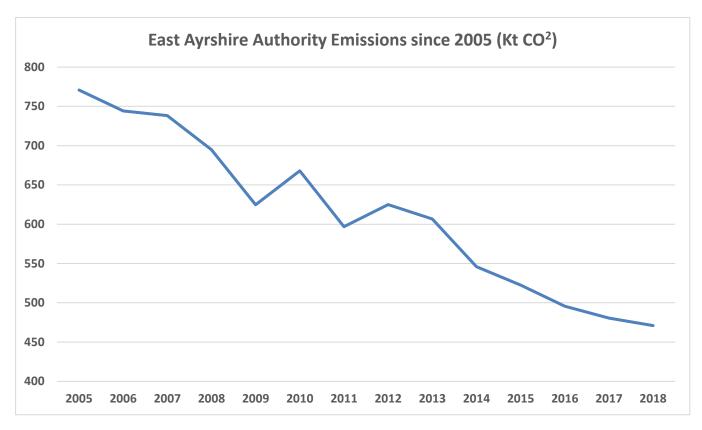
The 3 yearly Review of the East Ayrshire Community Plan and its associated Delivery Plans was undertaken at the same time as this first Climate Change Strategy was being developed. Sustainability and the Environment has been identified as a key priority and the accompanying Thematic Delivery Plans and Local Outcome Improvement Plan include a range of actions and measures that support our net zero ambitions. This Climate Change Action Plan was considered by the Community Planning Partnership Board on 10 June 2021 and Board members endorsed our approach to tackle climate change as set out in this Strategy. The Board also agreed to adopt the undernoted collective commitment to tackle climate change in East Ayrshire:

- To embed climate change considerations into everything we do as a partnership it will be embedded into our DNA.
- To challenge ourselves to deliver as ambitious a Net Zero delivery plan as possible and to deliver the required changes at the earliest opportunity.
- To take the necessary steps to ensure a just and fair transition to a low carbon future economy.
- To work with local businesses and entrepreneurs, we will collectively work to yield the greatest benefits from green growth for our local economy and strive towards selfsustaining commercial low carbon models.
- To draw upon our local strengths and work with partners within and outside East Ayrshire to deliver on our Net Zero commitment.

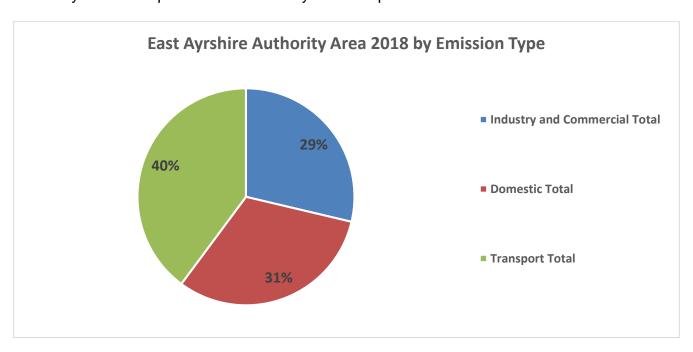
Community Planning Partners also agreed, where possible, to commit to collectively report details of our carbon emissions on our journey to net zero and it was agreed that this should be considered when investigating the best way to measure and report on the wider East Ayrshire area's carbon emissions.

Measuring our Carbon Footprint - Baseline Data for the East Ayrshire Area

Our attention to date in term of measurement of carbon consumption has focused primarily on the Council's own carbon use, however, as this Strategy has much wider aspirations for reducing the carbon footprint of our communities across East Ayrshire, it is useful to understand the baseline position. As an authority, we do not currently measure the carbon footprint of East Ayrshire, but this information is collected at a UK level by the Department for Business, Energy and Business Strategy. This information has been collected since 2005 and the latest information available indicates that the East Ayrshire authority area emitted 471,000 tonnes CO² in 2018 and as the graph below shows, there has been a steady and significant reduction (39%) in our area wide carbon consumption from the 770,000 tonnes of CO² consumed in 2005.



To help establish where our biggest challenges will be in delivering our net zero aspirations, a summary of consumption broken down by sector is provided in the chart below.



The largest polluter in East Ayrshire is from Transport which produces 248,000 tonnes of C02, followed by Domestic consumption which produces 196,000 tonnes and Industry and Commerce at 179,000 tonnes. This brings the areas emissions to a total of 623,000 tonnes, however, these emissions are offset by the positive contribution of forestry, crops and grasslands which provide a reduction of 154,000 tonnes of carbon to bring the total area emissions down to 471,000 tonnes. Interestingly, these area figures, show that almost a quarter of our emissions are offset, this demonstrates the unique opportunity that our urban/rural setting here in East Ayrshire provides to implement community based initiatives to offset our carbon emissions.

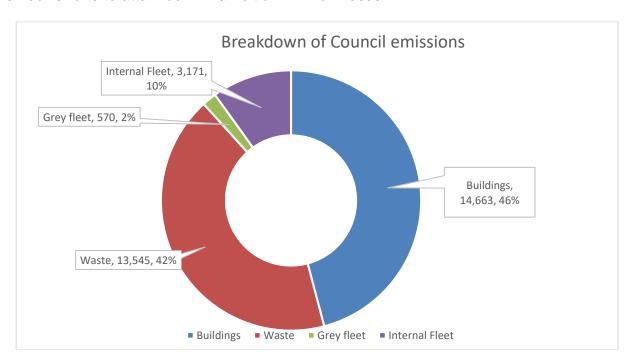
The Council's carbon emissions represent around 7% of East Ayrshire's total emissions total. Which within the wider context account for just 1.6% of Scotland's carbon emissions.

Measuring our Carbon Footprint – The Council's Baseline Data

The Council's carbon emissions in 1990 were estimated to be 70,999 tonnes CO² and this is recognised as the legislative baseline against which our progress against the Scottish Government's targets for carbon emissions are measured. Our latest report for 2019/20 showed that our carbon footprint had fallen to 31,950 tonnes, a reduction of 39,049 tonnes or a 55% reduction from our 1990 baseline.

The first year that the Council was able to report actual carbon consumption was in 2012/13 when we reported our CO² footprint as 43,230 tonnes. Since then, delivering on our commitment to tackle climate change, we have reduced our carbon consumption by just over a quarter, achieving an actual carbon reduction of approximately 11,280 tonnes or 26%.

As the chart below illustrates, the Council's 2019/20 carbon emissions can broadly be categorised into three key themes (Energy, Waste and Transport) and these are the themes on which our efforts to attain our NZ ambition will now focus.



In contrast to the area wide figures, the Council's building estate is the largest emitter at 14,663 tonnes CO² (46%). Waste is our second largest component with 13,545 tonnes CO² (42%).

Transport at 3,741 tonnes equates to 12% and makes up the smallest component of the Council's carbon footprint.

The Council's Journey to Net Zero - Progress to Date

Our journey to date has primarily focused on reducing the Council's carbon consumption as we aim to lead by example to accelerate action across East Ayrshire. Our Transformation Strategy and supporting work streams have already made a positive contribution towards reducing our carbon footprint, with the Review of Transport outlining plans for the electrification of our fleet, charging infrastructure and the reduction of our grey fleet mileage. The recent review of Waste Management also set out plans to encourage more recycling, reduce food waste and implement a shift in our residual waste disposal arrangements from landfill to Energy from Waste Plants.

Our Property and Estate Workstream, supported by implementation of Smarter Working arrangements has already facilitated a reduction in our office accommodation and during the pandemic facilitated around 1,500 of our employees to work from home. Our aim is to embed these flexible working practices and it is anticipated that this will allow for further rationalisation of our estate. Our digital workstream includes a commitment to become a paperless Council and is already allowing more of our services to be delivered electronically, reducing the need for travel and postage.

In 2012, recognising the significance of carbon reduction, the Council overhauled its then Energy Advice Unit to include carbon reduction within the new Energy Team's remit. This overhaul lead to a significant number of workstreams to improve our carbon footprint. One of these workstreams being to improve the accuracy of measuring and monitoring the Council's carbon footprint. This particular workstream resulted in the Council having robust data in terms of our carbon footprint from 2012/13 onwards. We therefore set our baseline year for measuring our carbon emissions as 2012/13.

We have also invested in a number of carbon reduction measures within our building's estate. These include the followings:

- Upgrading our Building Management Systems
- Enhancing building insulation;
- Installing biomass fuelled boiler plant;
- Increasing Solar PV installations;
- Installing air-source heat pumps for heating at the new Early Childhood Centres at Netherthird, Nether Robertland and Kilmaurs.

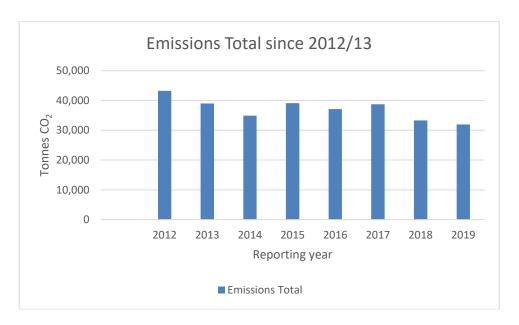
In 2020, The Barony Campus in Cumnock opened. This is, to date the biggest capital project ever undertaken by East Ayrshire Council, with costs in the region of £68m. The Campus incorporates Barshare Primary School, Supported Learning Centre and Early Childhood Centre, Greenmill Primary School and Early Childhood Centre, Hillside ASN School, Auchinleck Academy and Cumnock Academy and Supported Learning Centre.

Conscious of the emissions' footprint of the Barony Campus, very early on in the project design we opted to ensure the primary source of heating would be biomass fuelled. Due to the renewable nature of biomass fuel along with the planned electricity savings, modelling shows the carbon savings for the Campus should be circa 1,087 tCO₂ per annum less than the predecessor sites. This will represent an additional 8% reduction across the entire Council building estate.

In addition to measures undertaken within our operational property estate we have upgraded a significant number of our street lighting and traffic signals with LED lamps which will deliver electricity savings and maintenance savings (including fuel savings) as this technology needs to be replaced less often.

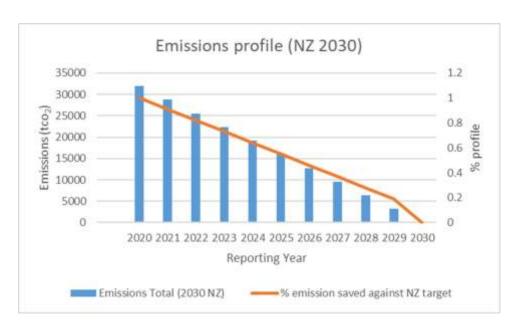
The investment we continue to make in decarbonising and retrofitting the Council Estate will improve energy efficiency and done at scale will have wider benefits for green supply chains, green jobs and a green recovery.

Our progress to date in reducing the Council's carbon consumption is illustrated in the graph below.



Whilst there has been a steady reduction over this reporting period, averaging out at around 1,500 tonnes per annum, progress has not been linear and there are variances over these individual reporting years. These can primarily be explained by changes to the way in which our carbon emissions are calculated with new sources of emissions added and a significant change to the conversion factor used for municipal refuse to landfill in 2015.

Good progress has been made against the 1990 baseline. In 2019, our emissions had fallen to 31,950 tonnes of CO², a reduction of some 39,049 tonnes (55% of our 1990 baseline) and we remain on track to achieve net zero by the Scottish Government target of 2045, however, if we are to meet the more ambitious UK100 target of reducing the Council's carbon emissions to net zero by 2030 then we need to substantially accelerate the pace of change. As the graph below shows, we now need to double our annual rate of reduction from the 1,500 tonnes per annum to just over 3,000 tonnes per annum.



This is a challenging target and as we publish this strategy we understand that in some areas we do not yet have all the necessary solutions to achieve net zero by 2030. In this Strategy we will set out a range of actions to work towards this aspirational target. New and emerging technologies will be required to achieve this goal and consequently our approach and actions will require to be constantly reviewed and refined to reflect our growing understanding and knowledge of new breakthrough technologies. We will also outline how we will work with our wider communities and business base to support them in reducing to net zero by 2045 and highlight the important contribution that individuals can make to tackle climate change.

SUPPORTING A GREEN RECOVERY AND JUST TRANSITION TO NET ZERO

The Scottish Government's Programme for Government 2020/21 include details of an enhanced new green deal. Nearly £1.6 billion has been identified to directly support up to 5,000 jobs and tackle fuel poverty is at the heart of plans to drive Scotland's green recovery and end our contribution to climate change. This investment will transform heat and energy efficiency of buildings and rapidly accelerate the decarbonisation of an area which makes up a quarter of Scotland's greenhouse gas emissions. An additional £500 million is also being invested in Scotland's natural economy including £150 million to help deliver a 50% increase in woodland creation by 2024 and an extra £150 million for flood risk management, vital to increasing climate change resilience. A £100m Green Job Fund has also been announced among a wide range of measures to protect biodiversity, create green jobs and accelerate a just transition to net-zero.

The local economy in East Ayrshire has suffered significantly during the pandemic. We know that our journey to net zero emissions will be challenging, but it also has the potential to deliver wider social, health and economic co-benefits and positively impact communities. It is therefore essential that we are well place to take advantage of all opportunities and available funding streams to reduce inequalities as we build back better and greener.

Within East Ayrshire Council, there is cross party political agreement that a green, community-based recovery needs to focus on the policies, practical solutions and investment that will allow our economy to grow and safeguard the environment, now and into the future.

Economic Growth Strategy for Ayrshire

The Economic Growth Strategy for Ayrshire includes a Clean Growth Workstream as one of the 6 growth themes, the key objectives of which are summarised below:-

- Sustainable: We will create nationally recognised research and development capacity and clean energy infrastructure to offer strategic resilience to the national climate change infrastructure, in a way that means that our strategic growth locations are served by energy innovation that will play a vital role in securing investment.
- <u>Productivity</u>: we will develop strategic capability to maximise investment in clean energy technology, and explore the opportunities related to space sector, digital innovation and life sciences to find new cross-sector applications and clean growth opportunities.
- <u>Inclusiveness</u>: we will work with businesses and partners to promote economic opportunities
 arising from clean growth to support inward investment and opportunities for our SMEs and
 the indigenous business base.

Energy Masterplan

East Ayrshire has a wealth of natural resources and already an attractive area for the generation of energy from wind. Our unique urban/rural setting, together with the redevelopment activity around former coal extraction sites also provides an opportunity to develop alternative sources of energy generation and storage. To harness this potential and ensure that energy projects are developed and planned and structured fashion that ensures energy resources are used to their full potential and possible key opportunities are not lost, the Council, in collaboration with key are embarking on an exercise to prepare an Energy Masterplan for the Ayrshire region. By undertaking this on a regional level we will ensure that these opportunities are maximised across the public and private sector for the benefit of all communities.

Action: Develop an Energy Masterplan for Ayrshire for investment in energy infrastructure (power, heat and transport) that will underpin economic growth and resilience to provide a pathway to net zero.

Ayrshire Growth Deal

The Ayrshire Growth Deal (AGD) which was signed in November 2020 marked the culmination of five years' work by the three Ayrshire councils, partner organisations and Scottish and UK Governments and supports the Growth Strategy through the delivery of a range of projects. The UK and Scottish governments are each investing £103 million in the deal, along with a further £45.5 million from the three Ayrshire Councils. The deal will galvanise efforts to develop key strategic sites and sectors in Ayrshire. It will help leverage private sector investment of more than £300 million, with the potential of creating up to 7,000 new jobs over the next 10 years.

The Ayrshire Economic Joint Committee (EJC) and the Ayrshire Regional Economic Partnership (REP) are responsible for the implementation and management of the AGD. The development of detailed actions and subsequent delivery of themes will be framed through a Community Wealth Building approach that seeks to harness assets, resources, community strength and relationships within Ayrshire to deliver improved outcomes for our communities.

Our commitment to Community Wealth Building, an alternative approach to traditional economic development, which seeks to develop resilient, inclusive local economies, with more local

employment and a larger and more diverse business base, also presents us with new opportunities to regenerate our economy through the development of the energy sector and local carbon insetting initiatives which will redirect wealth and the benefits of wealth creation back into our communities.

Many of the key projects contained within the AGD will be based in East Ayrshire, including HALO Kilmarnock, Ayrshire Engineering Park (Moorfield), Ayrshire Manufacturing Investment Corridor and National Energy Research Demonstrator (NERD), details of which are expanded upon below. While each project has its own detailed implementation plan, the overall aims of these projects are to develop key strategic sites and sectors and to address the area's economic frailties whilst addressing sustainability and climate change. This activity and delivery of the AGD Projects presents an opportunity to share best practice and work alongside existing businesses across Ayrshire to assist them to decarbonise and is intended to promote the growth of high potential, sustainable low carbon businesses.

The AGD Programme Management Office and project teams are working with Scottish Government to ensure the Deal is aligned with Scotland's transition to net zero carbon emissions by 2045. Scottish Government are developing a carbon management structure for the AGD, as well as other City Region and Growth Deals in Scotland, which will allow the carbon emissions impact of the programme and projects to be assessed then minimised.

Once carbon baselines have been established, consideration will be given to what can be done to ensure all AGD projects align with a net zero transition. Thereafter, a carbon management process appropriate for each project will be put in place to ensure any carbon emissions impact is minimised. This will not only ensure that the delivery of all AGD projects is consistent with Scotland's response to the climate emergency, it will also stimulate low-carbon innovation and accelerate the transition to a circular economy.

Action: Through the delivery of the Ayrshire Growth Deal, work with existing businesses to decarbonise and support the growth of high potential, sustainable and low carbon businesses

Action: Embed clean growth objectives into the AGD project business cases and put in place carbon management processes for each of the AGD project to ensure alignment with net zero transition.

Action: Through the appointment of CWB Business Locality Officers, work closely with local businesses and assist them to bid for AGD and other public sector contracts and increase business opportunities within Ayrshire.

National Energy Research Demonstrator (NERD)

Delivered as part of the AGD, the National Energy Research Demonstrator (NERD) project is our flagship response to climate change in East Ayrshire. Working closely with both the private sector and our partners at the University of Strathclyde Energy Systems Research Unit this initiative will place East Ayrshire at the very centre of innovation and development in new approaches and technologies that are needed to not only facilitate our own transition to net zero

but also support the wider aspirations for Scotland and the UK in terms of climate change action. The NERD project therefore represents a unique opportunity for East Ayrshire to act in a leading capacity amongst public service providers as we transition to a low carbon society.

The NERD project is still subject to full business case approval by the UK and Scottish Governments but has been provisionally allocated funding of £17.000m from the UK Government, in addition to the £7.500m already allocated by East Ayrshire Council as part its capital investment programme.

The NERD Project is made up of 12 demonstrator projects that will be undertaken during the lifetime of the project aimed at solving local issues with transitioning to a low carbon future; such as the construction of a Centre of Excellence in Cumnock and various developments linked to energy research and generation at different locations around the local area including post-industrial former mining sites. These 12 projects are all linked to six individual workstreams, namely:

- SMART Energy this workstream will aims to provide integrated energy systems that will ensure all of the energy demands of the local community are met all of the time at the lowest cost. From this baseline researchers will test and develop new energy systems using a range of renewable energy technologies (solar PV, wind, hydro, heat from waste/ground/water) so that the local communities can maximise their energy consumption from locally generated sources.
- Low Carbon Transport this workstream will examine how to decarbonise the transport system within Cumnock and the surrounding area by promoting active travel and identifying opportunities within the town where people can use electric vehicles (cars, buses, trains and bikes). It is also envisaged that a low carbon and active travel system could be established between Cumnock, New Cumnock, Auchinleck, Ochiltree, Sorn, Catrine and some of the off gas grid communities and in the future, beyond to Dumfries and Kilmarnock.
- Low Carbon Buildings this workstream will develop and test new proposals to minimise energy use within buildings. New solutions or combinations of existing technologies will be available for demonstration including examples of sustainable materials, Passivhaus or equivalent building energy efficiency measures, integrated PV cells, heat pumps using geothermal sources, battery storage, vehicle charging integration, smart controls and apps.
- Hydrogen and Alternative Storage Vectors this workstream will explore opportunities
 for 'load shifting' through hydrogen production, storage and use at a community
 scale. Analysis of hydrogen systems as a competitor to thermal and electric battery
 technology for the NERD area can be a useful analysis to inform future smart system
 development.
- Geology, Hydrology, Ecology and Environment this workstream will explore the
 potential of generating energy from former industrial sites, mine waters, waste treatment
 facilities and heat from rock.
- Health and Social Economics this workstream will aim to attract new businesses and economic activity to the area, generating a range of new, high quality employment opportunities which helps to achieve inclusive growth for the region whilst protecting the natural environment. The workstream also aims to develop a comprehensive plan to help reduce fuel poverty in all communities within the Cumnock area.

The first NERD demonstrator project being developed is the Centre of Excellence in Cumnock. The Centre of Excellence will be at the heart of the integration of renewable energy and SMART

technologies; focused on energy systems research. It is proposed that the Centre of Excellence will begin construction late 2022 and will be completed by late 2023.

Whilst work is on-going to finalise the NERD business case for approval by UK and Scottish Governments, the availability of the Councils own capital investment for the project has been crucial in terms of the excellent progress that has been made to date with developing the Centre of Excellence. The flexibility offered by such an approach has been extremely helpful in allowing the NERD project team to maintain effective progress and as such could be adopted to accelerate other demonstrator projects related to the wider NERD programme. This will include a pilot project as part of the Mauchline Conservation Area Regeneration Scheme which will trial new building energy efficiency measures on listed buildings.

Action: Explore the possibility of accelerating the Council's investment in NERD Demonstrator Projects within the context of the delivery of the Council's Capital Programme or wider investment opportunities in the public or private sector.

Developing Skills and Employment Opportunities

Working with our partners at a regional level, we will also need to look further at ways to provide our young people will the skills and experience for work, through for example, training and apprenticeships. Our green recovery will focus on the "Just Transition Principles". We will plan, invest and implement a transition to environmentally and socially sustainable jobs, sectors and economies, building on our economic and workforce strengths and potential to:

- create opportunities to develop resource efficient and sustainable economic approaches, which help address inequality and poverty;
- design and deliver low carbon investment and infrastructure, and make all possible efforts to create decent, fair and high value work, in a way which does not negatively affect the current workforce and overall economy.

Action: Develop an Ayrshire wide Regional Skills Investment Plan to ensure that local people have the necessary skills and experience to take advantage of the opportunities presented by the green transition.

Action: Deliver new opportunities for apprenticeships across a range of emerging growth sectors, including 'green apprenticeships', which will help us to deliver on our net zero carbon aspirations.

Food Production and Local Supply

Food has a significant role in achieving our ambitions of Net Zero and a just transition. The overall food system from food production, growing and food miles, our dietary choices and cooking techniques to food waste and food and drink packaging all require a fundamental shift in how we consume food and understand its impact. Food can account for between 10-30% of a households carbon footprint and typically higher in lower income households.

In East Ayrshire we have since 2008 achieved the Soli Association Food for Life Gold award for our school meals service, celebrating good food, local procurement and recognising the environmental impact of our menus. We will continue to build on this reputation as food services expand and engage further with our local communities. The Economic Growth Strategy also has a work stream on food and drink, led by East Ayrshire, and will be a further catalyst to extend and expand our local procurement and build local economic growth across the food and drink supply chain. Opportunities for local community food production will also be encouraged under our natural environment theme and our commitment to Community Wealth Building.

Sustainable Procurement

As outlined in the Council's Procurement Strategy, we are committed to sustainable procurement by ensuring that the social, environmental and economic regeneration of our communities are considered during all stages of the procurement process. Our Strategy reflects the Sustainable Procurement Duty, to ensure compliance with this duty, the Council has given consideration to the environmental, social and economic issues relating to all regulated procurement activity. Commodity strategies are developed for all regulated procurements carried out and sustainable options are deliberated and summarised. This procurement activity can facilitate involvement of SME's, third sector, charity and voluntary organisations, inclusion of community benefits, promotion of innovative techniques and technologies, environmentally friendly products and carbon reduction initiatives.

The Council's Procurement Strategy has an obligation is to manage its' spend effectively to bring social, environmental and economic regeneration to the communities we serve. The local challenge is huge in terms of balancing and promoting open, fair and transparent procurement whilst ensuring that the local communities benefit. The Council will actively support local businesses to help them bid for work with the Council, seeking to ensure that the most appropriate route to market is taken each time. Due consideration will be given to sustainable alternatives, carbon reduction and community benefits during the procurement process to support the Councils priorities in relation to social, environmental and development. Our community Planning Partners have also endorsed this approach and our collective activities should prioritise and extend every opportunity to strengthen Net Zero, local value and the just transition in all areas of procurement.

Action: Support inclusive growth by harnessing Council and Community Planning Partner (anchor organisation) spending power to buy from local and environmentally/ socially progressive businesses.

Support inclusive growth by harnessing CPP (anchor organisation) spending power in terms of buying from local or socially progressive businesses.

These opportunities are recognised and endorsed by our Community Planning Partners and will be enshrined within the new Economy and Skills Delivery Plan which includes the Ayrshire Growth Deal and Community Wealth Building as a new strategic priority.

How our Planning Policy will be used to tackle Climate Change

East Ayrshire's Local Development Plan (LDP) currently includes three objectives related to carbon reduction and renewables:

- Low and zero carbon technologies are to be installed wherever possible;
- Wind energy development will take place to ensure that the potential for electricity and heat from renewable sources is achieved, in line with national climate change targets.
- Proposals for the generation and utilisation of renewable energy in the form of new build development, infrastructure or retrofit projects will be supported in standalone locations and as integral parts of new and existing developments where it can be demonstrated that there will be no unacceptable significant adverse impacts.

The Scottish Government is currently working on Scotland's National Planning Framework 4 (NPF4), which is expected to be published in Autumn 2021, with implementation expected in 2022. Early indications suggest that tackling climate change will be the overarching focus of this new Framework, which will shape our own local planning policy. The current statutory development plans for East Ayrshire are scheduled to be replace by a new Local Development Plan 2 (LDP2), which is currently being drafted and is programmed for adoption in April 2023. This new Plan will set out a spatial strategy, policies and land allocations for land use and development, that will be used to guide where and how development takes place. A key focus of the Plan will be to fulfil its primary purpose, whilst at the same time contributing to reducing carbon emissions and addressing climate change.

It is clear that good quality homes must be delivered in the right places, alongside the services and facilities that communities need. It is essential that planning supports our green economic recovery in the short term, as well as enabling strategic investment in the long term. This review of national and local policy will provide a clearer vision of how planning will be used to addresses climate change and provide a better understanding of how zero carbon living might work.

Our new Development Plan will cut across each of the themes set out in this climate change strategy and there are a number of clear ways in which it will help to reduce our carbon emissions and contribute to the climate change targets set out in this Strategy. These include:-

- Directing development to locations that reduce the need to travel and allowing for sustainable modes of travel; this is fundamental to the spatial strategy of the plan;
- Supporting renewable energy generation;
- Supporting the decarbonisation of how we heat our homes and buildings;
- Supporting the implementation of the NERD project as a key part of the spatial strategy;
- Encouraging the development of low and zero carbon buildings;
- Requiring a sustainable approach to waste management; and
- Protecting our carbon-rich peatlands.

HOW WILL WE TACKLE CLIMATE CHANGE

This Strategy sets out our approach to combat climate change under the four key themes of Energy, Transport, Waste and Natural Environment. Under each of these themes, it outlines how the Council will show leadership to reduce its own carbon consumption and how we will work with our communities and support business to reduce their emissions. It also identifies opportunities to involve our schools, communities and business in helping to raise awareness and create a local movement which is focused on reducing carbon emissions and/or offseting our carbon emissions through local community based initiatives and sets out our plans for engaging with key stakeholders to further develop our local response to tackle climate change.

THEME 1 - ENERGY

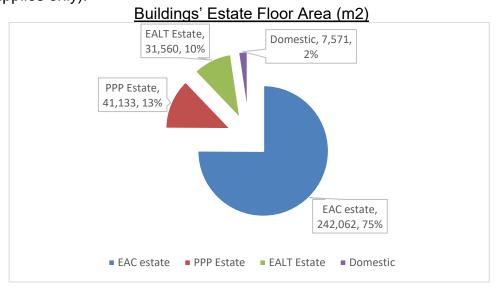
Our Objective - "Reduce the consumption of energy, promote energy efficiency and increase the proportion of power and heat from low and zero carbon technologies"

Energy provides heat for our homes and places of work, powers our transport and keeps our healthcare system running. It is also the Council's largest source of carbon emissions (46%) and accounts for the lion's share of our regional emissions. Grid generated electricity and gas are by far the largest two elements of our energy consumption. Electricity is increasingly being generated from renewable energy sources and in time will provide a reliable source of green energy, however, to fully decarbonise heat, our use of fossil fuels to provide heat must be all but eliminated. Natural gas can no longer be used in offices and homes. New systems to provide virtually zero-carbon heat must be planned and implemented across our homes, public, commercial and industrial buildings to deliver our net zero ambitions.

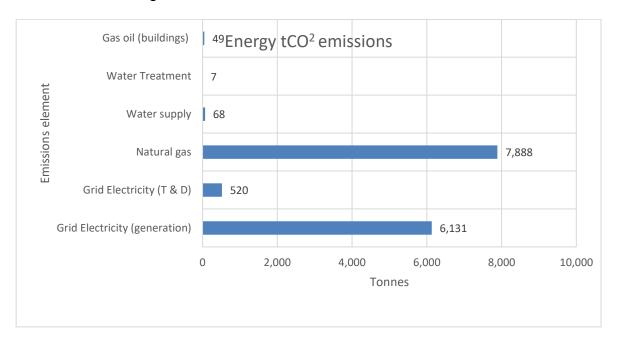
Since 2012/13 our carbon emissions relating specifically to energy use (electricity, gas, water supply and waste water) within our operational buildings' estate have continued to fall. This is due to a number of factors including improved Energy Management practices, the introduction of a Council wide Standard Heating Policy, robust utility bill validation and checking, the decarbonisation of the national grid, investment in more energy efficient technologies and estate rationalisation.

As outlined earlier in this strategy, the Council's total emissions from energy in our operational, non domestic buildings is 46% of our total footprint. In our latest carbon footprint report, 2019/20, this equates to 14,663 tonnes CO². Reducing our energy consumption within our operational building's estate is a key priority.

The floor space of our operational buildings' estate is 322,326m2 with EAC properties having the largest proportion (242,062m2). Whilst this may vary slightly year on year, it is still a large footprint. The following graph highlights the different sector components that make up our operational estate. EAC operated buildings, by far, is the largest carbon emitting section, followed by our PPP estate, East Ayrshire Leisure Trust (EALT) and our Domestic sector (Landlord supplies only).



The breakdown of our energy component within these buildings can be broken down further. This is illustrated in the figure below:



By far our largest two elements are gas and electricity use. Over the past few years, the electricity national grid has been getting cleaner in terms of carbon emitting electricity generation. This decarbonisation is expected to continue at pace with an increasing reliance on renewable and non-carbon heavy technologies in generation.

New regulatory changes that will be coming into effect from 2024 onwards will also require renewable and low carbon heating systems to be phased in for non-domestic buildings. We will prepare for this using a "fabric first" approach to lower the energy demand from our buildings, through both retro- fit works and new builds. Work is already underway in relation to this with our Capital Programme piloting leading edge Passivehaus and Enerfit projects and potential funding from the Learning Estate Investment Programme.

Using a fabric first approach will reduce energy demands and the need for fossil fuel heating plant. We are also exploring new renewable technologies such as biomass boiler plant, district heating and heat pumps to reduce our natural gas footprint. Details of the action we will take to reduce the carbon footprint of our existing estate are outlined in the following section.

Currently, each of our buildings energy consumption is calculated annually and reported as a performance indicator in the form of an Energy Use Intensity (EUI) calculation. This gives us an accurate measure of the source of each part of our total emissions from buildings. It also allows for comparison between building types and accurately shows effect of any decarbonisation measures based on real consumption and billing data. We will continue with this level of granular measurement to prepare our estate for alignment with new legislation and standards for zero emission heating, energy efficiency and decarbonisation targets expected from Scottish Government by 2025.

Council Estate – Our New Approach to deliver Net Zero

Whilst the previous type of energy efficiency actions have produced a significant degree of success in reducing the emissions from our public building estate over the past years a ceiling of diminishing returns is evident, and if emissions are to continue reducing all the way to zero by 2045, it is clear there will need to be some more radical approaches to energy efficiency and heat production with our existing estate.

Estate Rationalisation

The most effective way of reducing our energy consumption is to reduce the size of our estate. This was identified as a priority workstream in the Council's Transformation Strategy, and supported by the implementation of new Smarter Working arrangements. This activity has already delivered a reduction in our office accommodation and was accelerated during the pandemic to allow around 1,500 of our employees to work from home. Our aim is to embed these flexible working practices and it is anticipated that this will allow for further rationalisation of our estate. We also have an excellent track record of co-locating with our partners and will continue to develop shared services within our public buildings to reduce the scale of accommodation needed in each of our communities.

Action: Continue to review and rationalise our existing estate to ensure right-sizing of the public building estate, looking for shared service opportunities to reduce the footprint requirements and subsequent emissions.

Retrofitting our Existing Buildings

Retrofitting an existing building is, on average 50% more efficient in terms of carbon emissions than new build, consequently, our next priority, in terms of the energy management hierarchy for our estate is to focus on the deep retrofit of existing buildings. We will focus on a 'fabric first' approach to energy efficiency where possible, with the adoption of EnerPHit building standards and principles to drastically reduce energy demands through a focus on building physics. Where possible, our building refurbishments will also prioritise the migration from natural gas heating to zero direct emission heating to mitigate the increased operational energy costs involved with the electrification of heat.

A summary of the new approaches to building emission abatement which are being incorporated to produce faster and more radical carbon reductions across our existing estate is provided below:

- We will focus on deep retrofit of buildings rather than new build replacement of buildings by default, which can on average reduce embodied carbon emissions (the emissions from the actual building process) by 50%.
- We will focus on a 'fabric first' approach to energy efficiency in refurbishment of existing buildings where possible, with the adoption of EnerPHit building standards and principles to drastically reduce energy demands through a focus on building physics.
- We will focus on the migration from natural gas heating to zero direct emission heating to heat our buildings, where possible, in conjunction with 'fabric first' actions to mitigate the increased operational energy costs involved with the electrification of heat.
- We will continue to pilot renewable technologies to assist the journey to zero in our buildings, including heat pumps, solar technologies, and Smart technologies such as heat and power storage and load shifting control systems.

 We will continue to develop and utilise building energy modelling tools such as Passivhaus Planning Package and Advanced SBEM modelling to produce a destination model for each existing building with a defined pathway to zero by 2030, and to advise and guide future component renewal works and Capital expenditure to ensure they contribute toward the set zero carbon goals.

Action: Focus on 'fabric first' approach and refurbishment of existing buildings consistent with the principles of EnerPHit, incorporating zero direct emission heating systems and renewable technologies, and develop destination modelling toolkit to advise future Asset Planning, Component Renewal and Capital expenditure.

Emerging Technologies - Renewable and Low Carbon Solutions

Within our property estate portfolio we have a number of sites that have renewable technologies currently installed. These include solar PV and solar thermal panels, ground and air source Heat Pumps, biomass boiler plant and district heating networks. The use of renewable technology, whilst not reducing the need for energy, does at least make sure the energy we do use is generated from non-fossil fuel sources. It is widely accepted that in order to meet the challenging carbon emissions reduction targets and support the Government's decarbonisation agenda that the introduction of green energy will have a key role to play. In introducing and developing these technologies to all relevant sectors across East Ayrshire, consideration is being given to solar, biomass, wind, electrification and other renewable solutions including district heating systems.

The technological advances and guidance around energy and building science continues to develop at pace, and it will be important to continue to reassess our ongoing actions regularly based on the newest developing technologies, tools and thinking to ensure we are utilising every available tool in the most effective ways to achieve our zero carbon ambitions. Some of our historic buildings and buildings with listed status, will be extremely complex and costly to convert by conventional means, and so emerging technologies and practice will be extremely valuable in guiding future possibilities and actions for decarbonisation.

Working with and incorporating learning from NERD and emerging technologies, we will continue to pilot renewable technologies to assist the journey to zero in our buildings, We will also consider the locality of public buildings and their surroundings to examine wider decarbonisation opportunities, including possible energy sources from waterways, waste-water, and green-spaces and the development of wider communal and district heating opportunities, utilising our public buildings as 'anchor loads' and catalysts for change within their locality and place. An example of the range of options which will be considered is detailed below:

Heat Pumps

These devices transfer heat from a colder area to a hotter area by using mechanical energy, in a similar way to a refrigerator. Since they actively extract heat from the air, ground or water they can typically provide 3 to 5 times the amount of energy in heat, than they consume in electricity. **Wind and Solar**

Interest in East Ayrshire for renewables, and particularly wind energy is high; wind energy has become a major land use in East Ayrshire. With 100 of the 215 turbines that make up Whitelee falling within East Ayrshire, along with the 59 turbine development at Harehill windfarm and extension that provides part of the backdrop to New Cumnock, wind turbines have become a notable feature within the landscape. Further windfarm development currently in the pipeline has the potential to bring far greater renewable energy developed into East Ayrshire. Electricity demand within East Ayrshire is around 10% of the local wind energy generation. Due to the high amount of energy being generated by the existing windfarms in East Ayrshire, the electricity grid cannot cope with this renewable energy being transmitted through the grid. Therefore, many windfarms are being paid to turn off their turbines which, in East Ayrshire, is amounting to millions of pounds per year.

To overcome this, the National Energy Research Demonstrator (NERD) project will examine how the excess wind generated in East Ayrshire can be captured and used within our communities such as within EV chargers and to power our homes and buildings. One way in which this can be done is through battery technology; where batteries are installed at windfarms or at central points within the electricity grid and these batteries will take electricity off the grid and store it for when there is high demand for electricity within communities. One of the main objectives of the NERD project is develop the energy system of the future.

Solar PV panels are made out of photovoltaic cells (PV) that convert the sun's energy into electricity. Solar thermal panels absorb the suns energy to heat water or a liquid vector for use elsewhere in a building. The NERD project will also encourage the use of Solar PV in generating power and heat. The Centre of Excellence, which will be located in Cumnock, will be built with solar PV panels on the roof which will add produce renewable energy which will be used within the building or stored in the battery within the site. This will provide a test site for the wider use of solar power.

Smart Technologies

Heat and Power storage in the form of batteries or phase-change materials can be useful for storing energy to bridge gaps between point of generation and point of use, for example electrical energy created from daily sunlight is stored and used for lighting through the night and to charge vehicles, or heat is generated through the night utilising cheap electricity ready for use during the day. This is called 'load-shifting'. Smart electronic controls connected to the power grid can optimise the timing of these actions in a 'smart' way.

Green Hydrogen Production and Storage

Scotland is one of the leading nations in green hydrogen, having developed the world's first hydrogen production system from tidal energy and continues to pilot bio-gas projects from anaerobic digestion, and electrolysis to produce hydrogen from surplus green electricity which could be used to dilute and possibly even displace natural gas to some degree from the gas grid in future, resulting in a potential green gas supply albeit on a much reduced capacity than the current supply.

Within East Ayrshire, conversion of the excess wind energy to hydrogen, which is stored and then reconverted to electricity or used as vehicle fuel, could provide a more cost-effective mechanism at larger storage volumes and for large power uses. As part of the NERD project, researchers from the University of Strathclyde will explore the potential of producing "green

hydrogen" during periods of excess wind energy to be used as a power source for large scale developments or for the transport network. If this were to be developed, the East Ayrshire area could become 100% renewable. The Smart hydrogen and alternative storage research hub within the Centre of Excellence, will investigate the opportunities that hydrogen production, storage and use can provide; these opportunities and the technology to support will be of benefit to other areas of Scotland and the UK.

Green Heat In Greenspaces (GHIGS)

East Ayrshire has recently undertaken a study to identify and assess the most promising greenspace and blue space sites within East Ayrshire that could provide the greatest opportunity to supply low carbon heat from Water Source Heat Pump (WSHP) or Ground Source Heat Pump (GSHP) technologies.

Public buildings with the highest heat demand are likely to be as follows:

- i. Leisure centres, particularly those with swimming pools;
- ii. Hospitals;
- iii. Schools:
- iv. Care homes;
- v. Higher education institutions;
- vi. Offices.

Our study found that many of these building types are closely located to urban greenspaces. Grassed areas such as sports pitches (and, indeed, tarmac areas such as car parks) are frequently located nearby and offer suitable locations for closed loop ground collectors.

Large greenspace sites can supply 100% of the heat demand for a nearby public building with high heat demand and provide potential for supply to other buildings via district heating networks. Over time, the heat network can be expanded to supply additional heat demand in the locality, and ultimately there might be opportunities to connect with neighbouring heat networks, creating large multi-source heat networks over large areas.

Geothermal

A main aim of the NERD project is to utilise the existing natural and industrial assets in the East Ayrshire area to generate and store renewable energy. The geology of East Ayrshire along with historic activity of deep and surface coal mining means that there is potential for heat to be extracted from mine waters, old mine workings (bing material) or from rocks in the area. Within the Centre of Excellence, researchers will investigate the geologic potentials of the area and the reuse of post-industrial sites for trialling boreholes and innovative technologies in which to extract heat.

HotScot

East Ayrshire Council is one of the pilot areas for the University of Strathclyde's HotScot project which has been submitted for funding under the "Strength in Places" fund. The project will build on industry and academic expertise to unlock three active geothermal research sites and retrofit two other sites in the Central Belt of Scotland. Globally, a number of geothermal energy storage projects have proved the concept of geothermal but the wider implementation of this technology

is lacking and this is where the HotScot project will fill the gap. Parallel research and innovation activities in three themes will support and be informed by delivery of the activities on the sites mentioned above. The project is led by the University of Strathclyde along with a partnership of other universities, British Geological Survey, Coal Authority, Scottish Enterprise, Ramboll and others.

In 2019, East Ayrshire Council were put forward as a potential pilot location for one of the research sites as part of the Stage 1 submission process. In April 2020, HotScot was successful in their Stage 1 submission and were awarded a grant to develop the project for Stage 2 submission. The outcome of the Stage 2 submission is expected in April 2021.

River Source Heat Opportunities

The Green Heat in Greenspaces (GHIGS) study undertaken in 2020 highlighted extremely promising options for many settlements largely due to the location and mean flow rates within the River Irvine, River Ayr and River Afton, with potential river source heat opportunities, particularly in Kilmarnock. This presents an opportunity to develop low carbon heat demonstrator sites which could initially focus on public buildings such as hospitals, schools and leisure centres to showcase this new green source of energy and encourage wider cross sector replication across industrial and domestic settings. We will with relevant stakeholders to review the lists of promising sites within the ParkPower project with the potential aim of creating 'typical' demonstration projects that could be rolled out to other sites.

Action: Look for opportunities from future technological advances to contribute to our zero carbon ambitions and regularly reassess our actions to ensure every available tool in being utilised.

Whole Life Costing

Energy efficiency is one of the most cost-effective ways of reducing costs and, in the process, emissions. Measures can include retrofitting properties with better insulation or better performing components such as windows (the fabric first approach), installing more energy efficient heating systems etc. Employing these measures will comes at an increased cost therefore it is essential that consideration is given to a Whole Life assessment to support any capital investment; which assesses the total cost of an asset over its whole life. It takes account of the initial capital cost, as well as operational, maintenance, repair, upgrade and eventual disposal costs. Whole life costing can also factor in related income streams, where appropriate

The Scottish Future Trust have designed a Whole Life Appraisal tool to assist the public sector make informed decisions to optimise a built asset's whole life performance. The appraisal tool provides a consistent method of comparing and reporting whole life outcomes for capital investment. It is both a qualitative and quantitative process that looks at the costs and outcomes during the design, construction, operation and disposal stages for a built asset; promoting the analysis of whole life outcomes across three assessment criteria: commercial; performance; and environmental.

Currently, work is being initiated to create a plan across all the buildings in our estate to define the most suitable routes to pursue to achieve carbon neutrality, on a building by building basis. This innovative Estate wide approach has never been done before by a Scottish Local Authority, and a working group including Scottish Futures Trust, Passivhaus Trust, Edinburgh City Council and Glasgow City Council has been set up to develop a process around this, which intends to define a route map to zero emissions. This plan will be costed to define the scale of investment required and will advise future Asset Management, Capital Expenditure and Component Renewal Actions.

Action: Develop an estate wide plan for our existing buildings to define a route map to zero emissions, in conjunction with Scottish Futures Trust and other public sector Partners

New Buildings – New Approach

Even recognising the embodied carbon reductions associated with retrofit over new-build there will continue to be instances where new buildings require to be built, either because of the absence of any existing building provision or the unsuitability of existing buildings for conversion. New-build represents an opportunity for an immediate transition to zero carbon in operation, and it will be important to take this opportunity and not simply add more poorly performing buildings to the estate which will then also require future costly conversion in respect of decarbonisation. New approaches and standards for new-build are being initiated incorporated which promise to produce instant decarbonisation results when compared to the buildings they replace, these include:

Energy Demand Reduction

- We will go beyond the requirements of existing Building Regulation and focus on a 'fabric first' approach to energy efficiency in new builds, with the adoption of Passivhaus building standards which optimise super-insulation and air-tightness to drastically reduce heat energy demands by around 90% through a focus on building physics during design and construction.
- We recognise that new funding streams from Scottish Government are increasingly linking low carbon targets as a funding requirement, such as the Learning Estate Investment Programme (LEIP) which requires new buildings to demonstrate and Energy Usage Intensity (EUI) of 67KWh/m²/annum or lose funding on a sliding scale as EUI increases.

Action: Focus on operational energy demand reduction in new building design, incorporating Passivhaus and similar standards, beyond the minimum requirements of Building Regulation, and seek to maximise funding opportunities attracted with low carbon design.

Zero Emission from Heat

- We will immediately move to zero direct emission heating and cooling technologies for all new-builds, and end the utilisation of carbon intensive natural gas or other fossil fuels for this purpose.
- We will ensure that all our new buildings have a clearly defined Pathway set out to achieve net zero operational carbon by 2045.
- We recognise the planned introduction by Scottish Government of the New Build Heat Standard which will mandate the use of zero direct emission heat sources in new-build domestic housing from 2024, and new-build non-domestic buildings shortly thereafter.

Action: Stop the use of natural gas or fossil fuels for the heating of new buildings and immediately move to zero emission heating solutions, voluntarily, in advance of proposed future legislation.

Indirect Carbon Emissions

- We will take action to measure and mitigate the levels of Embodied Carbon consumed within our new-build processes, and promote the use of sustainable and low carbon materials within new-build construction, and consider reuse and recycling options for building components at the end of their useful life.
- We will analyse and consider Whole Life Carbon aspects to building design to optimise
 decision making which will produce the best carbon outcomes over the whole life of our
 new buildings.
- We will analyse and consider our building design to optimise natural day-lighting, avoidance of over-heating and indoor air quality to provide natural solutions by design rather relying on energy intensive engineering solutions.
- We will voluntarily adopt of the Net Zero Public Sector Building (NZPSB) 2021 standard as introduced by Scottish Government which incorporates a defined a pathway to zero carbon for our buildings by 2045.

Action: Voluntarily adopt the Scottish Governments Net Zero Public Sector Building 2021 standard on all future new-build projects and work to reduce Embodied Carbon and Whole Life Carbon in our designs.

Demolition / Deconstruction

Where buildings have reached the end of their useful life, and are not deemed suitable for retrofit and reuse, or where through rationalisation they are surplus and un-marketable for sale or transfer, they may be considered for demolition. Where demolition of buildings is to occur, this will be done in a way which maximises recognition of the principles of Circular Economy, this includes;

- We will take action to consider pre-demolition audits for larger demolition projects to identify materials that could be recovered and reused or recycled to reduce volumes going to landfill.
- We will try and recover maximum value and reduce waste by applying Circular Economy principles via the reducing benefit hierarchy of reclaim and reuse, process for alternative use, recover and waste recycle, or transport to landfill.
- We will consider deconstruction principles in our new building designs with a focus on improving deconstruction potential at the end of the buildings useful life.

Action: Carry out pre-demolition audits and consider the potential for re-use and recycling of materials to reduce waste levels passing to landfill.

Housing

Domestic carbon consumption accounts for 31% of the East Ayrshire area's emissions and a cross tenure approach to facilitate a shift away from gas heating systems will be required to deliver net zero. The Scottish Government's 'Housing to 2040' published in March this year is Scotland's first long-term national housing strategy. It sets an ambition for everyone to have

access to a warm, safe, affordable and energy-efficient home that meets their needs, in a community they feel part of and proud of. It aims to facilitate the delivery of more energy-efficient homes that use zero emissions heating systems, and are adapted to meet the needs of the householder, within the context of climate change actions, place-based approaches and an overall well-functioning housing system. A new Housing Standard will be created for all homes, both new and existing, to meet the same quality standards so as to reduce the climate impact through zero emissions, regardless of tenure. As a consequence, the council's actions around housing will very much be driven by these new standards and the necessary funding that will be required to support implementation.

Action: Adopt the Scottish Futures Trust Whole Life Appraisal tool to ensure all capital investment achieves greater operational sustainability.

Energy Efficient Standard for Social Housing (EESSH)

In terms of the Council's current housing stock, this is almost 100% compliant with the Scottish Housing Quality Standards and EESSH (Energy Efficient Standard for Social Housing) Standards which were developed in 2014. The Council is now working towards meeting the more challenging EESSH2 standards set by the Scottish Government for implementation post 2020. This sets out a number of key milestones that over time will deliver further reductions in the carbon footprint of our own housing stock as we work towards a target to become carbon neutral by 2040.

- From 31 December 2025 no social housing should be re-let below EPC Band D;
- By end of 31 December 2032, all social housing meets, or can be treated as meeting, EPC Band B, or is as energy efficient as practically possible;
- By 2040 poor energy efficiency has been removed as a driver for fuel poverty and all social housing is carbon-neutral as far as reasonably practical.

Action: Report progress in relation to domestic energy efficiency targets to Cabinet annually.

Action: Continue to improve and decarbonise our existing housing stock and work towards milestones set by EESSH 2.

Home Energy Efficiency Programme Scotland (HEEPS)

East Ayrshire Council continues to explore all potential funding streams to improve energy efficiency, with a particular focus on reducing fuel poverty. The Scottish Government launched the Home Energy Efficiency Programme Scotland: Area Based Schemes (HEEPS: ABS) in 2013 to assist home owners within mixed tenure properties to participate in certain qualifying projects.

In 2020/21, East Ayrshire Council was successful in attracting over £1.4M of HEEPS: ABS funding to assist 160 private owners. This funding has assisted East Ayrshire Council in gaining the participation of adjoining owners within area based improvement programmes where the Council is delivering energy efficiency projects to its housing stock. The amount of HEEPS: ABS

funding available each financial year is announced by the Scottish Government annually. The proposed allocation for capital funding, in principle, for East Ayrshire Council in 2021/22 for area-based schemes was confirmed in April 2021 as £1,45M. This will be used to continue to tackle fuel poverty and improve energy efficiency.

New Housing

The Strategic Housing Investment Plan (SHIP) sets out the Council's proposals for new build developments, which will be built to Silver Standard of the Building Regulations 2011 in respect of both Carbon Dioxide Emissions and Energy for Space Heating. Working with the Council's Developer and learning from NERD, Housing Asset Services proposes to develop and pilot a net zero housing model using off-site manufacture and adopting a fabric-first approach to realise more energy efficient Council homes in response to the Council's sustainability, climate change and fuel poverty reduction targets.

The Scottish Government's New Build Heat Standard Scoping Consultation, December 2020, focuses on the regulation of new buildings and confirms new homes consented from 2024 must use zero direct emissions heating and cooling, and feature high levels of fabric energy efficiency to reduce overall heat demand. The Draft Heat in Buildings Strategy Consultation, February 2021, further advises a new regulatory framework for zero emissions heating and energy efficiency will be in place by 2025 to ensure all buildings are energy efficient by 2035 and will use zero emissions heating and cooling systems by 2045.

Action: Pilot 2 net zero housing models in partnership with the Council's Developer.

Private Rented Sector: Minimum Energy Efficiency Standards

Following a consultation in 2017, the Scottish Government announced minimum energy efficiency standards for private rented sector properties on 2 May 2018.

This forms part of its energy efficiency improvement programme, Energy Efficient Scotland, which will ensure homes and buildings are warmer, greener and more efficient.

The new minimum energy efficiency standards for private rented properties in Scotland will be phased in and will increase over time:

- From 1 April 2020, any new tenancy will require the property to have an EPC of at least band E.
- By 31 March 2022, all properties will need to have at least EPC band E.
- From 1 April 2022, any new tenancy will require the property to have an EPC of at least band D.
- By 31 March 2025, all properties will need to have at least EPC band D.

The Scottish Government will publish further regulations and provide more detail on how the standards will be applied.

Action: Work with landlords in the private rented sector to meet new minimum energy efficiency standards.

Local Heat and Energy Efficiency Strategy (LHEES)

The recently published Draft Heat in Buildings Strategy outlines how the Scottish Government intend to reduce greenhouse gas emissions from Scotland's homes, workplaces and community buildings and to remove poor energy performance as a driver of fuel poverty.

To meet these objectives, the Scottish Government is supporting a place based, locally led and tailored approach to heat decarbonisation and energy efficiency – The Local Heat and Energy Efficiency Strategy (LHEES). The aim of an LHEES is to set a framework for delivery programme of a for targeted area-based scheme, led by local authorities, addressing how each local authority in Scotland will reduce their energy demand and decarbonise the heat supply of buildings in their area.

East Ayrshire Council has recently undertaken a pilot LHEES which was submitted to the Scottish Government in March 2021. East Ayrshire's LHEES pilot project focussed on high heat demand areas (where there is potential for district heating) within the settlement of Kilmarnock. The two focus areas of the pilot project are South Central Kilmarnock, including Shortlees, and North West Kilmarnock. It is also anticipated that the information contained within the pilot project will be used to assess the current condition of Council owned buildings (including Council housing stock) for suitability and compatibility of appropriate renewable energy technologies which would be suitable in East Ayrshire.

LHEES will provide a long-term framework for taking an area-based approach to planning and delivery of the heat transition, including through zoning linked to regulation. LHEES will also form a basis for local public engagement and will be in place for all local authority areas by the end of 2023. LHEES have a wide-ranging scope that can be summarised as:

- Long-term (20 years) including targets covering all buildings (domestic and non-domestic);
- Reflective of, and dovetailing with, national and local targets and policies covering fuel poverty, carbon reduction, energy efficiency and heat at a local level;
- Understanding of current energy performance and heat use of buildings and identifying opportunities for reducing heat demand, increasing energy efficiency, low carbon heat sources and heat storage;
- Designating heat zones that take into consideration area based, local socio-economic assessment;
- Costed and phased planning and zoning for delivery including area-based energy efficiency improvements, installation of low carbon heat supplies and implementation of new low carbon energy supply infrastructure;
- Quantifying short term benefits and longer-term impacts on the local economy and employment.

At the time of writing this Climate Change Action Plan, the Scottish Government has indicated that the LHEES will become a statutory requirement for local authorities in 2022, with the expectation that every local authority will be required to have completed a LHEES for their area by the end of 2023.

We will engage with the guidance and identified opportunities detailed within the Council wide 'Local Heat & Energy Efficiency Strategy (LHESS') to be published by 2023, and the proposed Scottish Government 'Heat in Buildings Strategy' to be published in 2021.

Action: Develop an East Ayrshire Wide LHEES.

Action: Consider the wider concept of place in our actions and incorporate opportunities and guidance from the future Council wide LHEES, and Heat in Buildings Strategy in to future decarbonisation actions recognising the catalyst effect of our larger non-domestic buildings.

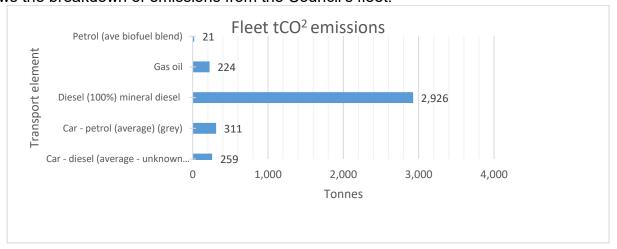
THEME 2 - TRANSPORT

Objective "To decarbonise the Council's fleet and minimise grey fleet mileage, whilst encouraging active travel through walking, cycling and public transport."

Transport only accounts for some 12% of the Council's own carbon footprint but is the biggest polluter at an East Ayrshire wide level, accounting for 40% of our area's emissions. Accordingly, whilst it is important for the Council to lead by example by decarbonising our own fleet, the need to encourage behaviour change around the way we travel, is likely to deliver the greatest benefits in terms of reducing our local carbon footprint. Accordingly, our priority under the Transport theme should be to support and facilitate the shift to electric vehicles, whilst encouraging active travel through walking, cycling and improved public transport.

Our Plans for a Green Fleet

Around 10% of the Council's carbon emissions come from our fleet, with a further 2% coming from our grey fleet, employees who use their own vehicles for council business. The graph below shows the breakdown of emissions from the Council's fleet.



Within the Scottish Government guidelines, as set by the Programme for Government (2019), the Council are required to ensure that all new fleet cars and vans are zero emission from 2025 with all new HGVs zero emission from 2030. The Transformational Review of the Council's Fleet

Strategy approved by Cabinet in February 2019 endorsed a strategic vehicle replacement programme for cars and vans that focused on shifting to electric vehicles to reduce the environmental impact of our fleet and reduce costs. This has been wholly funded via Transport Scotland, who share the Council's ambitions to develop a zero emission fleet as soon as possible.

The Council have 160 small cars and vans as part of the fleet, with 98 of these now electric. By 2023 all cars and small vans will be converted to electric.

Larger vans used for housing stock maintenance are not quite ready yet to be fully converted to electric based on cost and load carrying requirements. Therefore 72 of these vans will be replaced with the most fuel efficient Euro 6 engine standard in 2021/22 further lowering vehicle emissions, before being fully replaced with electric vans from 2026 as part of an optimised 5 year lifecycle.

Zero emission Heavy Goods Vehicles are still very much in the development phase, with both electric and hydrogen variants expected to play a role in the future Council Fleet. Whilst early models are available, without significant grant funding, the excessive costs of electric or hydrogen HGVs render these vehicles unfeasible for inclusion in the Council's fleet at this time. The Council will remain engaged with industry bodies and Transport Scotland to monitor the development of these vehicles until such time that their inclusion can be justified.

In tandem with the introduction of a greater number of electric vehicles in the fleet, Council employees will be supported in having available more zero emissions driving options through the introduction of an electric pool fleet and a scheme to encourage car sharing. As a result of the pandemic, our grey fleet mileage has reduced by around 50% during the last year and our aim is to maintain this reduction by encouraging the continued use of online meetings and increased working from home as we recover from the Pandemic and when travel is required, providing access to electric pool fleet vehicles.

The Council also supports a tax efficient salary sacrifice Cycle to Work Scheme which promotes active travel by providing our employees with access to bicycles and a Car Leasing Scheme, which offers a range of affordable electric vehicles to our employees.

Action: All fleet cars and small vans to be electric by 2023.

Action: All larger vans to be electric by 2026.

Action: Continue to monitor emerging green Bus and HGV technologies and available funding options to reduce the environmental impact of our larger fleet

Action: Introduce an electric vehicle car pool for employees to reduce grey fleet miles and maintain the 50% reduction in grey fleet miles achieved during the pandemic (2020/21).

Active Travel

The National Transport Strategy (NTS2), which was published in 2020 provides the national strategic framework within which we will develop our local ambitions. It sets an ambitious vision for Scotland's transport system over the next 20 years that aims to protect our climate and improve our health and wellbeing by creating a sustainable, inclusive, safe and accessible transport system that reduces inequalities and delivers inclusive economic growth. In recent years, reductions in emissions from the energy sector have led to the proportionate share of Scotland's emissions from transport increasing substantially. Transport is currently Scotland's largest sectoral emitter, and in 2017 was responsible for 37% of Scotland's total greenhouse gases. Since 2013, there has been an increase each year, despite more efficient vehicles. This is due to an increase in vehicle miles driven.

The travel restrictions and lockdowns imposed in response to the pandemic have significantly reduced vehicle miles in the last year and this has had a positive impact on the environment, with improvements in air quality. People have reconnected with local shops and produce and active travel options such as walking and cycling have increased dramatically. In the last year, Scotland has seen a surge in the number of people cycling, according to data from Cycling Scotland, 47% more cycling journeys were recorded between March 2020 and March 2021 and key challenge for us now is to retain these positive behaviour changes. To achieve this, a number of temporary changes to our road network to give priority to pedestrians and cyclists have now been made permanent.

Supported by Sustrans Scotland, the Active Travel Hub based in Kilmarnock encourages and supports our communities to be healthier and greener by promoting active ways of travelling. A key objective of our Active Travel Framework is to partner with local community groups to tackle inequalities and make sure that active travel options are available to everyone. The Active Travel team provides instructor-led walks and cycle rides, can help with personal travel planning, cycle maintenance, cycle confidence skills and can provide walking and cycling buddies to increase confidence and encourage active travel. A variety of digital engagement resources have been developed to encourage behaviour change and our team of Active Travel Officers and locally recruited volunteers work with local employers, places of education, NHS Ayrshire and Arran and other community partners to increase people's knowledge of and participation in active travel. Encouraging behaviour change at an early age is also a priority and our Active Travel Officers work with our places of education to promote cycling, scooting and walking to school by developing safer active routes to our schools and paths for all.

The Ayrshire Roads Alliance and East Ayrshire Leisure Trust are working with a number of communities and stakeholder groups to develop local Active Travel Plans that link to placemaking. The most significant of these is the 'Kilmarnock Infinity Loop' – a 26km figure of eight network of cycle route and pathways around the town, with a spinal route from North to South, through the town centre, which links to a circular route which will provide connections between different communities on the outskirts of the town. The overarching vision is to promote active travel by developing Kilmarnock into a town with a strong green infrastructure, with safe cycling and walking connections between communities and places of interest. This route will also provide connections to the wider path network including the Core Path Network and the National Cycle Network.

We already have an extensive network of walking and cycling routes across East Ayrshire and our aspirations for developing our green infrastructure go much further than Kilmarnock. Our

wider plans are currently being brought together within a new East Ayrshire Active Travel Strategy, which is currently being developed and is anticipated to be completed by the end of 2021. Supported by a detailed action plan, this Strategy will pull together all of our active travel plans and aspirations across East Ayrshire and set out a longer term delivery plan for a network of active travel routes across Ayrshire.

Action: Develop a new East Ayrshire Active Travel Plan to deliver a network of active travel routes across East Ayrshire.

Action: Develop and implement plans for the Kilmarnock Green Infinity Loop to deliver 26km of active travel routes, signage and enhanced green infrastructure and green spaces across Kilmarnock by 2025.

Improving Public Transport

Strathclyde Partnership for Transport (SPT) is the public transport authority for the West of Scotland and is currently developing a new Regional Transport Strategy (RTS). This will be informed by responses to their recent 'Case for Change' consultation and engagement activity, which recognises the significant decline in the use of bus services and the corresponding increase in train use as the preferred mode of public transport. The key issues that will be included in the new RTS are outlined below:

- Transport Emissions
- Access for All
- Regional Connectivity
- Active Living
- Public Transport Quality & Integration

A key priority for the Council at a local level is to improve access to public transport in our rural communities and we are working with key partners, such as Coalfield Community Transport to further develop the availability and use of community busses, through the asset transfer of Council busses that are due to be replaced. We will also engage with Stagecoach on the development a Bus Service Improvement Partnership to improve the effectiveness and quality of existing bus services in terms of routes, frequency, acceptable fares and ticketing arrangements.

Action: Engage with Stagecoach to improve existing bus services, using a Bus Service Improvement Partnership if necessary.

Electric Vehicle Charging Infrastructure

Due to the role that vehicle emissions play in contributing to climate change and poor air quality, challenging targets were set by the Scottish Government for to move to zero emissions from all new vehicles on the road by 2030. The Council also have an important role in leading and supporting our communities to make the transition away from fossil fuel vehicles to alternative zero emissions means through developing policies and strategies that provide the necessary electric vehicle charging infrastructure to facilitate this shift from petrol and diesel to electric.

As discussed earlier, the Council has made good progress in decarbonising our fleet, however, to meet the Scottish Government's challenging targets an electric vehicle strategy, the Ayrshire Roads Authority (ARA) have recently developed an Electric Vehicle Infrastructure Strategy and associated action plan which:

- Sets out a policy supported through targeted actions to meet the Scottish Government's requirements for decarbonisation of the Council's fleet;
- Develops a comprehensive electric vehicle charging network to support our communities, businesses and visitors in converting to zero emission vehicles;
- Identifies solutions for electric vehicle charging for communities where limited or no offstreet parking exists and for our employees who operate fleet vehicles from home;
- Implements solutions that will improve air quality, help decarbonise transport on our roads and help towards meeting the Council's climate change objectives.

Action: Develop and implement an Electric Vehicle Infrastructure Strategy for East Ayrshire to enable the transition from fossil fuel to electric vehicles.

THEME 3 - WASTE

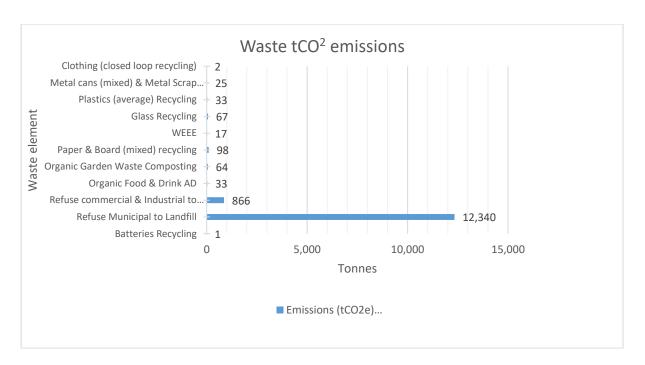
Objective "Manage waste sustainability by reducing, reusing, recycling and recovering waste to improve resource efficiency whilst working towards a circular economy"

The Scottish Government aims to make Scotland a zero waste society with a circular economy. This means minimising the population's demand on primary resources and maximising the reuse, recycling and recovery of resources, rather than treating them as waste. Challenging targets have been set by Government on our journey to become a zero waste society. By 2025 we aim to:

- reduce total waste arising in Scotland by 15% against 2011 levels
- reduce food waste by 33% against 2013 levels
- recycle 70% of remaining waste
- send no more than 5% of remaining waste to landfill

What will the Council do?

Waste accounts for around 42% of the Council's carbon footprint and this includes domestic and commercial waste collected and disposed of by the Council. To address this, our strategy will focus on reducing the amount of waste produced by encouraging reuse and repair, whilst increasing the percentage of our waste that is recycled and diverted from landfill, as we work towards the creation of a circular economy. As the graph below shows, the vast majority of our CO² emissions arise from the municipal waste currently being disposed of via landfill.



The introduction of the recycling trolley here in East Ayrshire places us at the forefront of Scottish Councils in actively promoting recycling. This new system makes it as easy as possible for our residents to recycle and has already had a positive impact on our recycling rates which rose to 53.2% in 2019 as increased participation in recycling, improved the levels of aluminium, glass and plastics which we collected.

In 2019, 55,000 tonnes of household waste was generated, of which just over 29,000 (53.2%) was recycled. Around 5,000 tonnes of this was diverted from landfill through pre-treatment with 21,000 tonnes of our waste sent to landfill. Despite the good progress made, it will be challenging to meet the 70% recycling target set out in the Zero Waste Plan by 2025.

This is recognised by both the Scottish and Westminster Governments and there are a number of impending legislative changes on the horizon, which have the potential to significantly impact on the Waste Management Service and encourage greater levels of recycling. These include the Scottish Government's Deposit Return Scheme and Biodegradable Waste Ban. The UK Parliament also plans to introduce a Plastic Packaging Tax and Packaging Producer Responsibility Regulations, both of which have the potential to change the nature and financing of plastic waste as they are based on the polluter pays principle. There is, however, much that we can do at a local level to reduce carbon emissions arising from waste.

Waste Disposal Arrangements - The Biodegradable Waste Ban

The Waste (Scotland) Regulations 2012 banned biodegradable municipal waste from landfill in Scotland. Essentially this ban requires all biodegradable waste to be incinerated in Thermal Treatment - Energy from Waste Plants that require significant capital investment and planning time to bring into operation.

Initially the ban was scheduled to come in to effect on 1 January 2021, however, following a state of the market survey, which indicated that just over a third of local authorities had no long-term solution to meet the requirements of the ban, the Scottish Government extended the original implementation date will now be pushed back until 1 January 2025.

This shift in processing our waste from landfill to energy from waste plants offers the quickest route to significantly reduce our carbon footprint from waste, however, there is currently no local energy from waste solution capable of processing our waste. The Council is currently working with other Council's in a similar position and private sector partners to find a cost effective alternative to landfill and ensure compliance with the ban.

Action: Ensure compliance with the biodegradable waste ban by finding an alternative to landfill which will allow our residual waste to be processed at an energy from waste plant.

Action to Reduce Waste and Encourage Recycling

We are aware that our own offices and schools contribute to our waste and where possible have introduced internal recycling facilities to increase recycling and reduce the levels of waste going to landfill. Our young people are aware of the damaging impact of waste in our schools and play an active role to reduce waste and encourage recycling in our schools. The Council has and continues to pursue a range of initiatives to encourage greater levels of recycling, this includes the:-

- Promotion of further digitalisation of services and remote learning as an alternative to reduce our consumption of paper and books;
- Introduction recycling bins in our own offices and schools as we seek to implement a common approach to recycling across all services;
- Introduction of a range of initiatives within our catering service to reduce plastics and other disposables;
- Introduction of Waste Warriors to reduce waste and champion recycling in our schools; and
- Real Nappy Scheme, which working with NHS Ayrshire and Arran, will be promoted to new parents; and
- Reduce, recycle and reuse introduced as a core theme throughout our educational establishments. Linked to initiatives like 'Litter awareness programme', uniform/equipment swaps, playground recycling, reducing and ultimately banning single use plastics.

Action on Food Waste

We have identified food waste as the most significant opportunity to increase our recycling rates here in East Ayrshire. As the graph below shows, we currently recycle around 3,500 tonnes of household food waste and this is an area in which it is vital to make progress by encouraging people to reduce the food that they do not eat and throw away (avoidable food waste) and encouraging people to recycle their unavoidable food waste such as vegetable peelings.



Whilst much of the media focus has been on the damaging impact of plastics, it is actually food waste that poses a greater threat to climate change. When food waste ends up in landfill, it releases methane gas, which is a significant driver of climate change. As the review of our waste management service highlighted, in some communities up to 50% of our households are not using their food caddies. This is supported by a recent waste composition survey, the findings of which established that around 30% of the weight of the waste in residual waste bins comprised of avoidable or unavoidable food waste. Annually, this equates to around 7,800 Tonnes of food waste that could be used to produce energy instead of going to landfill. There is not only an environmental but also a financial cost to this behaviour with the additional disposal costs to the Council of around £500k per annum and an estimated additional cost of £470 per annum to each household's food bill as a result of food that could have been eaten but ends up being thrown away.

This demonstrates that there is clearly a need to educate householders, to highlight the negative impact of food waste and to explain the financial and environmental benefits that can be achieved if food waste is reduced and recycled. New technology installed in our Refuse Collection Vehicles allows our crews to identify which households are recycling and which are not. This data could be used to incentivise recycling by sharing savings in disposal costs with our communities and support investment in local environmental projects.

Funding to support a food waste campaign has been agreed as part of the 2021/22 budget. Our aim to reduce the levels of food in our residual waste bins by 50% over the next 5 years and through an Environmental Vibrant Voices campaign, we will engage deeply with our communities to support and work with them to encourage greater levels of recycling, with a particular focus on food waste.

In view of the damaging impact of food waste on the climate, it is proposed that we should aim to reduce food waste in our residual waste by 10% (780 tonnes per annum) in each of the next 5 years to achieve a 50% reduction on current levels over that period.

Action: Working with our communities we aim to reduce food waste in our residual waste by 10% (780 tonnes per annum) in each of the next 5 years to achieve a 50% reduction by 2026.

Action: To work towards achieving the 70% recycling target by 2025, ww will promote an East Ayrshire wide Vibrant Voices campaign to encourage recycling, with a particular focus on food waste and work with communities to incentivise increased levels of recycling.

New Recyclate Markets

Whilst East Ayrshire already has an extensive list of materials that we collect and recycle, there is more that we can do at a local level to extend the range of materials that we collect and recycle. This will be necessary if we are to continue to reduce waste and increase on current levels of household recycling. The market for recycling continues to evolve, with new opportunities to recycle materials such as plastic film and bed mattresses. This will help the Council to reach the challenging recycling targets.

Action: To increase recycling rates, the Council will continue to explore new opportunities for removing recyclates from the waste stream, including plastic film and mattresses.

The Circular Economy - Promoting re-use

There is a growing consensus that global emissions are destroying our planet and that if we carry on as we are, it's set to get worse. Four-fifths of Scotland's carbon footprint comes from products and materials. The production, consumption and waste of these products and materials are heating the earth at an alarming rate. This includes the energy required to grow, make, process and transport them, whether they are made here in Scotland or elsewhere. Climate change doesn't respect borders. It affects everyone. Roughly three planets would be required if everyone lived the way people live in Scotland, and we only have one.

To support the Scottish Government's response to the global climate change emergency, Zero Waste Scotland, in their latest Corporate Plan, have outlined their intention to increase that pace of change and promote the circular economy in Scotland. A circular economy is one in which products, services and systems are designed to maximise their value and minimise waste. Products last longer when they are reused, repaired, remanufactured or recycled. There should be zero waste in a truly circular economy.

Re-use and repair is essential in the development of Scotland's circular economy. Although often confused, re-use and recycling are not the same. Re-use of products and materials is more beneficial as it retains a product's inherent value by keeping it in use for longer. This minimises waste, creates jobs, has a positive social impact and reduces consumption and associated carbon impacts. The Council already supports the reuse of waste by working in partnership with the Cumnock and Doon Valley Gift Furniture scheme and Cunninghamme Housing Association to reuse furniture and other goods and a range of contracts are in place to recycle and or reuse electronic and other products, however, this activity is largely driven by the residual value of

these waste products and there is much more that we as a Council can do to promote a circular economy here in East Ayrshire.

There is a real opportunity to put this into practice within the proposed the new Household Waste Recycling Centre at Caponacre in Cumnock and our existing facility in Western Road Kilmarnock.

Action: Explore opportunities to fund the introduction of Re-Use Centres at the Council's Household Waste Recycling Centre in Western Road and the new facility planned at Caponacre in Cumnock

Council Waste

In our day to day operations, school pupils, employees and service users generate waste. A number of services such as housing also dispose of waste arising from house clearances and it is essential that we have a common approach across the Council that maximises recycling of our waste. In addition, there is potential to encourage services to reuse rather than replace equipment and office/school furniture.

Action: Develop and implement a whole council approach to waste, which encourages recycling and promotes reuse.

THEME 4 – NATURAL ENVIRONMENT

Objective "Ensure our communities, green networks and infrastructure are adaptable to a changing climate and reduce the risks and vulnerability to unavoidable impacts"

Flood Prevention

The impact of climate change is evident in the increasing number of adverse weather events across the world and flooding is a particular risk identified in East Ayrshire. We recognise the devastating impact that flooding can have on individuals and businesses in our communities and working with the Scottish Environmental Protection Agency (SEPA, Scottish Water and other key stakeholders, the Council has produced a Local Flood Risk Management Plan. This is supported by a 6 year cyclic action plan (2016-22) which outlines the wide range of actions that will be implemented to reduce and mitigate against identified flooding risks.

Work is currently underway to produce the next 6 yearly cyclical Local Flood Risk Management Plan 2022-28 and this is reflected in the flood risk management policy within the new local development plan which is also currently being developed. Our future approach will promote flood avoidance in the first instance. Flood storage and conveying capacity will be protected and development will be directed away from functional flood plains and undeveloped areas of medium to high flood risk. Through our planning policy, the Council will also actively support the development of environmentally friendly flood prevention measures including:

• Wetland, peatland or green infrastructure creation;

- Flood protection schemes, restoring natural features, enhancing flood storage capacity and avoiding the construction of new culverts; and
- Natural Flood Management (NFM) techniques including crop rotation, winter planting and the use of planting, afforestation and reforestation to reduce the risk of flooding.

Action: Develop and implement the new cyclical Local Flood Risk Management Plan 2022-28.

Green Infrastructure

The European Commission defines green infrastructure as "the use of ecosystems, green spaces and water in strategic land use planning to deliver environmental and quality of life benefits. It includes parks, open spaces, playing fields, woodlands, wetlands, road verges, allotments and private gardens. Green infrastructure can contribute to climate change mitigation and adaptation, natural disaster risk mitigation, protection against flooding and erosion as well as biodiversity conservation." So green infrastructure is not just about greenspaces like parks and open spaces, it also incorporates blue infrastructure including sustainable urban drainage, swales, wetlands, rivers and canals and their banks, and other water courses.

Considering green spaces or connections as infrastructure arises because simple things like trees, greenspaces and watercourses can provide valuable services in an ecological way. Green infrastructure can deliver on functions and services such as shelter, access and travel, sustainable urban drainage, pollution mitigation and food production – as part of a wider ecosystem. Moreover this approach has the added benefit of enhancing habitats and creating attractive places. This multifunctional nature of green infrastructure is one of its intrinsic benefits and can operate at differing levels.

East Ayrshire Council, addressing the Scottish Government guidance in PAN 65 Planning and Open Space, commissioned an Open Space Audit and Open Space Strategy in 2009. The Strategy provided a strategic vision for provision, development, regeneration and management of Open Space within East Ayrshire. The Open Space Audit included a comprehensive audit of all open spaces within the East Ayrshire settlements based on the PAN65 typologies. In addition other larger spaces outside the settlement boundaries were audited, predominantly Green Corridors and Semi Natural Green Space based on information from East Ayrshire Council.

This 2009 strategy and audit was reviewed in 2014 to provide an update on current provision of open space in terms of protected spaces and their function and then consider local need and demand. This was used to develop settlement by settlement action plans and prepare a vision for green infrastructure development throughout East Ayrshire as part of placemaking and community led action plans. A further audit was carried out in 2020. This will inform a revised Green Infrastructure Strategy for 2021-2026 which will set out in a strategic context the importance of green networks across a breadth of environmental, social and economic goals, link to cross-cutting themes in both the Community Plan and the Local Development Plan. Equally important, is the need to deliver real and meaningful benefits to communities that address local needs in a manner that offers 'best value'. The 2021-2026 Strategy, supported by a detailed Open Space Audit, will offer an innovative and powerful 'tool kit' to improve the green infrastructure and open space management

within East Ayrshire and will support the development and implementation of the Community Led Action Plans and placemaking priorities.

In 2014, the audit demonstrated that on a local authority wide level, East Ayrshire appears to have a surplus of open space. However, only 561 hectares has scored above 50% in the quality assessment. Based on the quality open space as a percentage of recommended open space per capita, only 68.3% of the open space across East Ayrshire meets the desired quality threshold. The 2020 audit shows a slight reduction in useable open space but the quality assessment increasing to 71.6%. The 2021-2026 strategy will focus on recommendations that enhance the quality of open spaces throughout East Ayrshire, improve their accessibility and integrate them into green networks.

Action: Develop a revised Green Infrastructure Strategy which is supported by 'Greening Champions' to ensure the open space audit is carried out on an annual basis to monitor trends in local areas and contribute to the improved quality and accessibility of greenspaces.

Biodiversity

Biodiversity and nature-based solutions are critical to achieving net-zero actions by 2045. Under the Nature Conservation (Scotland) Act 2004, all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their functions and responsibilities. The work undertaken by East Ayrshire Council to further biodiversity conservation fits into a clear global policy hierarchy with international targets to halt global loss of biodiversity. The 1992 Convention on Biological Diversity provides the original overarching target to halt global biodiversity loss. Through the 'Aichi targets' in 2010, new global targets were agreed for 2020. The Scottish Biodiversity Programme 2020 covers all aspects of biodiversity work in Scotland: policy, strategy, reporting, international work, evidence base, communications and public engagement, mainstreaming and funding. It also provides a common understanding of priorities and an agreed approach to delivering them.

Within our Outdoor Services, we will consider appropriate planting strategies for shrubs and trees, conserving and expanding natural habitats and eco-systems and controlling invasive species. We will also look at reducing grass cutting and creating wild flower areas for land not in constant use and seek to reduce reliance on herbicide applications explore ecofriendly alternatives.

Nature Conservation cannot be delivered in isolation and in East Ayrshire there is significant partnership working to ensure that biodiversity is protected and enhanced. East Ayrshire Council with the support of East Ayrshire Leisure and East Ayrshire Woodlands contribute to a number of partnerships including:

- The Scottish Wildlife Trust manage 2 nature sites in East Ayrshire and sit on the steering group of East Ayrshire Woodlands and the Coalfield Environment Initiative
- Galloway and South Ayrshire has been designated as a new style UNESCO Biosphere because of its unique combination of special landscapes and wildlife areas, rich cultural, heritage as well as communities that care about their environment and culture and want to develop it sustainably. Biosphere designation will help understand, define, sustain

and enhance those special qualities. As an internationally recognised marketing brand for superb natural environments Biosphere designation will offer new opportunities for individuals, businesses and communities to demonstrate how to live, work and play in a world class environment. Galloway and Southern Ayrshire is the first 'new style' Biosphere in Scotland and one of 6 Biosphere Reserves in the UK. Biospheres are managed by a framework which divides the area into three complementary management zones; Core Area, Buffer Zone and Transition Area and have three main functions; conservation, learning /research, and sustainable development.

- The East Ayrshire Coalfield Environment Initiative (CEI) is a successful partnership between East Ayrshire Council and conservation bodies, working with the community over the last 10 years to enhance, conserve, and promote the environment in East Ayrshire. The aims of the project are: Environment to enhance the natural environment and landscape within the CEI project area. Understanding to increase understanding and appreciation of East Ayrshire's wildlife and its value, providing and developing opportunities for learning about and experiencing wildlife. Engagement to increase community participation in wildlife conservation, enabling local people to contribute to environmental improvements and develop new skills.
- The Ayrshire Rivers Trust within East Ayrshire works to promote and support initiatives
 designed to conserve, enhance and develop fisheries and rivers including the River Ayr,
 River Irvine and River Doon and their associated watercourses. They provide advice,
 research and practical skills to protect and enhance the freshwater river systems and
 their surrounding habitats.
- East Ayrshire Leisure has a formal arrangement with Ayrshire College to deliver their horticulture and arboriculture courses from Dean Castle Country Park. This partnership has led to the inclusion of rural skills training into the college curriculum and for sustainable projects to be delivered as part of the Country Park management plan.
- The Coalfield Communities Landscape Partnership (CCLP) is a five-year project led by East Ayrshire Council and working with communities and organisations to deliver projects in the coalfield area of East Ayrshire that address the threats to the natural, built and cultural heritage through conservation, enhancement and promotion, capitalising on the area's assets for the benefit of local people; and to create opportunities for learning, recreation and wellbeing for local people with a range of abilities and backgrounds
- East Ayrshire Council has led the way in supporting local communities in developing their own action plans for their own area. There are currently 22 Community Led Action Plans throughout the local authority area with another 6 updates from specific communities currently being developed. Each of these action plans include a number of priorities to improve the local environment including improved sustainable transport, community gardens, green networks, flood management and a range of actions to contribute to the environmental improvement of the area.

Action: Implement the Coalfield Communities Landscape Partnership Project ensuring links to strategic nature conservation projects within the Biosphere Reserve, Galloway Forest Park and community action plans

Action: Develop a Biodiversity Strategy for East Ayrshire which reflects the priorities of the Scottish Biodiversity Strategy and emphasises the importance of nature based solutions in tackling climate change, the role that biodiversity plays in wider agendas and how nature conservation should be integrated into projects, systems, plans and policies.

Action: Sign up to the Edinburgh Agreement which is about local, national and international collaboration to protect biodiversity loss.

Forestry and Tree Planting

Scotland's forests cover 18.8% of the total land mass area and the ambition, contained in the Scottish Government's forestry strategy, is to increase this to 21% by 2032. As part of their climate change commitments, the Scottish Government has also increased their tree planting targets for the future to 15,000 hectares a year from 2024/25.

Within East Ayrshire there is significant opportunity at the former opencast mining sites, including Ponesk & Spireslack, Powharnell & Dalfad, Duncanziemere for brownfield restoration through tree planting and forestation. Working in partnership with Forestry and Land Scotland (FLS) and the new landowners, the Council has developed a plan to facilitate the restoration of these opencast sites. The aim is to identify and prioritise these former opencast sites for new tree planting to enable the useful rehabilitation and reintegration of these sites into local economic and social life. Across Scotland, through tree planting initiatives, this plan has identified the potential to create in excess of 1,000 ha of new woodland. The focus will be on creating productive woodland that combines a matrix of native and conifer species. This will create a wealth of benefits from greening these sites, increasing the productive contribution to the Scottish economy, increasing woodland cover, enhancing biodiversity, providing employment and improving the local landscape. It will also help to achieve our net zero ambitions, with these new forests anticipated to capture around 30 million tonnes of carbon.

Action: Work with Forestry and Land Scotland and the new landowners to implement the Scottish Coalfield Restoration Programme to reforest the opencast sites within East Ayrshire that have been identified as suitable for tree planting.

CARBON ZERO COMMUNITIES

This draft Climate Change Strategy and its supporting Action Plan has been developed by the Member Officer Working Group (MOWG) on Climate Change which was established following the Children and Young People's Climate Conference held in late 2019. Bringing together a range of community representatives and young people, their remit was to help drive forward the production of a Climate Action Plan which would set out the ambition and direction of the Council for the next 10 years to support local, national and international action on climate change. Approved by Council on 24 June 2021, this draft Strategy will now be the subject of an extensive community engagement.

Through our Vibrant Communities and our Vibrant Voices approach, we have a well-established and highly developed approach to community empowerment, engagement and involvement. The MOWG recognised the value of this approach and reflecting upon the feedback received from our communities from the Vibrant Voices engagement on recovery and renewal, we know that climate change and the environment featured prominently and that a green and sustainable recovery is a priority for our communities.

We also know that there is great interest across our communities in shaping our climate change response across the wide range of areas covered by our Strategy and that deep engagement with our communities will be essential to ensure that we harness the enthusiasm and create the momentum required to deliver net zero. Our community action plans have set a local vision and framework to deliver on our communities ambitions, engaging on our Strategy through these well-established groups will provide an ideal opportunity to identify and include local actions within our Climate Change Action Plan.

Our children and young people have been at the forefront of driving the behaviour change that we know will be required to deliver on our climate change ambitions. Each of our educational establishments has an Eco-group and is developing 'Carbon Counters' to support establishments in becoming carbon zero. Bespoke and specific learning and teaching in relation to age/stage is also in place to empower and educate all of our young people on climate change. They have articulated their views through the Young People's Cabinet, the Young People's Climate Change Conference and their School's Eco Committees and their collective voice has already helped to shape our first Climate Change Strategy. They also have an important role as ambassadors and champions of change; embedded within our communities to drive forward the societal change that will be required. We need to capture and harness their passion and creativity and ensure that they continue to be given a prominent role in our future engagement and climate change action planning.

Our business community will also play an important role in our local response to climate change. Whilst clean economic growth offers opportunities for business, skills development and jobs across East Ayrshire, we will also need to engage with and encourage local businesses to reduce their own carbon emissions if we are to achieve our area wide net zero target by 2045. An appropriate forum will be needed to ensure that local business fully appreciate the benefits and opportunities that will arise from our community wealth building approach and transition to green energy sources but also to exchange learning between the public and private sector on our carbon reduction journey.

The vast majority of our employees are also residents of East Ayrshire. We need to educate, engage and seek the views of our own workforce, to hear their ideas for tackling climate change under each of the four themes and to ensure that we are all doing everything we can, both at work and at home to reduce our carbon footprint. Working with Organisational Development, we will develop a programme of climate change awareness training to ensure that our employees understand the need to accelerate action and know what changes they can make as individuals to help to reduce their own carbon emissions.

Once the draft Strategy has been approved, a detailed plan of engagement over the coming months, which reflects and is responsive to the latest guidance on Covid levels will be developed. This will be tailored around each of the key themes to maximise engagement with communities of interest. Engagement with the key stakeholders outlined above will allow us to further refine and develop actions to support our Climate Change Strategy and it is anticipated that feedback will be used to develop climate change pledges that our young people, individuals, community organisations and local businesses could sign up to. Our intention is to report back to Council with the final plan and details of a supporting programme of local climate change events to maximise the publicity and global prominence that climate change will be given when Glasgow hosts the Cop 26 Climate Change Summit in November this year.

Branding of our Climate Change Strategy and wider response will be equally important to ensure consistency of messaging. The Council's PR and Design Team have played an active role in supporting the work of the MOWG and have presented some initial thoughts around the creation of a brand to promote our climate change response and actions. Their expertise will also be important in preparing materials and developing social media campaigns to support behaviour change and the engagement activity outlined above.

Action: Develop proposals for engagement with key community and business stakeholders on this draft Climate Change Strategy.

Action: Develop Branding for the Climate Change Strategy and develop a communications plan, incorporating publicity and social media campaigns to support engagement plans and encourage the behaviour changes that will be required to deliver on our Climate Change ambitions.

Action: Work with Organisational Development to develop a programme of climate change awareness training for the Council's employees.

Action: Use feedback from this engagement activity to develop Climate Change Pledges for inclusion in the final Strategy which our young people, individuals, community organisations and local businesses can sign up to help us achieve our net zero goal.

Action: Finalise the Climate Change Strategy and develop a programme of local climate change events to maximise the publicity and global prominence that climate change will be given when Glasgow hosts the Cop 26 Climate Change Summit in November this year.

GOVERNANCE AND REPORTING

Each year, like all Public Bodies in Scotland, we report our annual carbon emissions to the Scottish Government as part of its Public Bodies Climate Change Duties. Within our annual report, carbon reduction projects for the year are set out with an estimated value in tonnes of CO² apportioned to each project. Managing and delivering these projects is the responsibility of the relevant lead Directorate. Devolving the responsibility to each Directorate within the Council enables cross cutting understanding and ownership of our overall carbon reduction ambitions.

This empowerment is expected to lead to behavioural changes, return financial savings in addition to carbon savings. Each year our progress in relation to the Council's climate change aims and objectives is reported to Cabinet. In preparation for this report, a formal annual review of data forming each year's Climate Change Report submission, analysing comparison data to highlight past successes and identify future opportunities for carbon abatement across the authority is undertaken.

It is recognised the significant challenge in delivering the ambition set out in this report, and although the action areas set a direction the need to continually review our approach, continue to engage and redefine and refocus action areas over the next decade will require a comprehensive and well managed approach.

To raise the profile of climate change in East Ayrshire and champion our new Climate Change Strategy, it is proposed at Elected Member level that a spokesperson should be appointed to lead on Climate Change.

It is also proposed that the MOWG Climate Change should be continued to oversee the consultation and engagement process with a further updated report being presented to Council to coincide with the COP26 event in November 2021 and that their remit should be extended to develop appropriate reporting and monitoring arrangements to chart our progress against our carbon reduction targets.

Recognising the need for immediate action, it is also suggested that all Committee Reports should now include a new section that outlines the impact of the proposals on our Net Zero ambitions.

Action: Appoint an Elected Member spokesperson to lead on Climate Change.

Action: All Committee Reports should now include a new section that outlines the impact of the proposals on our Net Zero ambitions.

Action: Member/Officer Working Group on Climate Change to oversee the consultation and engagement process and present the final version of the Climate Change Strategy to Council in November 2021 to coincide with the COP26 in Glasgow.

Action: Continue to produce annual EUI performance indicators for all buildings to track future progress in decarbonisation, and align these with future legislation and targets set by Scottish Government and report thereon to Cabinet.

FUNDING AND RESOURCES

The Council will establish a framework to identify the necessary funding sources to implement the actions of the Climate Change Strategy.

This will include working with the Scottish Government and other partners to explore and maximise available funding streams and resources to support the achievement and aspirations of the Strategy. In addition, the Council will work in partnership with communities and the third sector to maximise opportunities to gain access to resources for specific projects to tackle the climate emergency at a local level.

CLIMATE CHANGE STRATEGY- ACTION PLAN

Action

Net Zero Ambition

Endorse the Council's commitment to join the Race to Zero Campaign and progress the necessary application.

Agree to join UK100 and to commit to its membership pledge and aim to reduce the Council's emissions to net zero by 2030 and our wider communities' emissions to net zero by 2045.

Building on the Council's existing internal carbon reporting requirements, investigate the best way to measure and report on the wider East Ayrshire area's carbon emissions by 2022.

Supporting a Green Recovery and Just Transition to Net Zero

Develop an Energy Masterplan for Ayrshire for investment in energy infrastructure (power, heat and transport) that will underpin economic growth and resilience to provide a pathway to net zero.

Through the delivery of the Ayrshire Growth Deal, work with existing businesses to decarbonise and support the growth of high potential, sustainable and low carbon businesses

Embed clean growth objectives into the AGD project business cases and put in place carbon management processes for each of the AGD project to ensure alignment with net zero transition.

Through the appointment of CWB Business Locality Officers, work closely with local businesses and assist them to bid for AGD and other public sector contracts and increase business opportunities within Ayrshire.

Explore the possibility of accelerating the Council's investment in NERD Demonstrator Projects within the context of the delivery of the Council's Capital Programme or wider investment opportunities in the public or private sector.

Develop an Ayrshire wide Regional Skills Investment Plan to ensure that local people have the necessary skills and experience to take advantage of the opportunities presented by the green transition.

Deliver new opportunities for apprenticeships across a range of emerging growth sectors, including 'green apprenticeships', which will help us to deliver on our net zero carbon aspirations.

Support inclusive growth by harnessing Community Planning Partner (anchor organisation) spending power to buy from local and environmentally/ socially progressive businesses.

Energy

Continue to review and rationalise our existing estate to ensure right-sizing of the public building estate, looking for shared service opportunities to reduce the footprint requirements and subsequent emissions.

Develop an estate wide plan for our existing buildings to define a route map to zero emissions, in conjunction with Scottish Futures Trust and other public sector Partners.

Focus on 'fabric first' approach and refurbishment of existing buildings consistent with the principles of EnerPHit, incorporating zero direct emission heating systems and renewable technologies, and develop destination modelling toolkit to advise future Asset Planning, Component Renewal and Capital expenditure. Look for opportunities from future technological advances to contribute to our zero carbon ambitions and regularly reassess our actions to ensure every available tool in being utilised.

Focus on operational energy demand reduction in new building design, incorporating Passivhaus and similar standards, beyond the minimum requirements of Building Regulation, and seek to maximise funding opportunities attracted with low carbon design.

Stop the use of natural gas or fossil fuels for the heating of new buildings and immediately move to zero emission heating solutions, voluntarily, in advance of proposed future legislation.

Voluntarily adopt the Scottish Governments Net Zero Public Sector Building 2021 standard on all future new-build projects and work to reduce Embodied Carbon and Whole Life Carbon in our designs.

Carry out pre-demolition audits and consider the potential for re-use and recycling of materials to reduce waste levels passing to landfill.

Adopt the Scottish Futures Trust Whole Life Appraisal tool to ensure all capital investment achieves greater operational sustainability.

Report progress in relation to domestic energy efficiency targets to Cabinet annually.

Continue to improve and decarbonise our existing housing stock and work towards milestones set by EESSH 2

Pilot 2 net zero housing models in partnership with the Council's Developer

Work with landlords in the private rented sector to meet new minimum energy efficiency standards.

Develop an East Ayrshire Wide LHEES.

Consider the wider concept of place in our actions and incorporate opportunities and guidance from the future Council wide LHEES, and Heat in Buildings Strategy in to future decarbonisation actions recognising the catalyst effect of our larger non-domestic buildings.

Transport

All fleet cars and small vans to be electric by 2023.

All larger vans to be electric by 2026.

Continue to monitor emerging green Bus and HGV technologies and available funding options to reduce the environmental impact of our larger fleet Introduce an electric vehicle car pool for employees to reduce grey fleet miles and maintain the 50% reduction in grey fleet miles achieved during the pandemic (2020/21).

Develop a new East Ayrshire Active Travel Plan to deliver a network of active travel routes across East Ayrshire.

Develop and implement plans for the Kilmarnock Green Infinity Loop to deliver 26km of active travel routes, signage and enhanced green infrastructure and green spaces across Kilmarnock by 2025.

Engage with Stagecoach to improve existing bus services, using a Bus Service Improvement Partnership if necessary.

Develop and implement an Electric Vehicle Infrastructure Strategy for East Ayrshire to enable the transition from fossil fuel to electric vehicles.

Waste

Ensure compliance with the biodegradable waste ban by finding an alternative to landfill which will allow our residual waste to be processed at an energy from waste plant.

Working with our communities we aim to reduce food waste in our residual waste by 10% (780 tonnes per annum) in each of the next 5 years to achieve a 50% reduction by 2026.

To work towards achieving the 70% recycling target by 2025, ww will promote an East Ayrshire wide Vibrant Voices campaign to encourage recycling, with a particular focus on food waste and work with communities to incentivise increased levels of recycling.

To increase recycling rates, the Council will continue to explore new opportunities for removing recyclates from the waste stream, including plastic film and mattresses.

Explore opportunities to fund the introduction of Re-Use Centres at the Council's Household Waste Recycling Centre in Western Road and the new facility planned at Caponacre in Cumnock.

Develop and implement a whole council approach to waste, which encourages recycling and promotes reuse.

Natural Environment

Develop and implement the new cyclical Local Flood Risk Management Plan 2022-28.

Develop a revised Green Infrastructure Strategy which is supported by 'Greening Champions' to ensure the open space audit is carried out on an annual basis to monitor trends in local areas and contribute to the improved quality and accessibility of greenspaces.

Implement the Coalfield Communities Landscape Partnership Project ensuring links to strategic nature conservation projects within the Biosphere Reserve, Galloway Forest Park and community action plans

Develop a Biodiversity Strategy for East Ayrshire which reflects the priorities of the Scottish Biodiversity Strategy and emphasises the importance of nature based solutions in tackling climate change, the role that biodiversity plays in wider agendas and how nature conservation should be integrated into projects, systems, plans and policies.

Sign up to the Edinburgh Agreement which is about local, national and international collaboration to protect biodiversity loss.

Work with Forestry and Land Scotland and the new landowners to implement the Scottish Coalfield Restoration Programme to reforest the opencast sites within East Ayrshire that have been identified as suitable for tree planting.

Carbon Zero Communities

Develop proposals for engagement with key community and business stakeholders on this draft Climate Change Strategy.

Develop Branding for the Climate Change Strategy and develop a communications plan, incorporating publicity and social media campaigns to support engagement plans and encourage the behaviour changes that will be required to deliver on our Climate Change ambitions.

Work with Organisational Development to develop a programme of climate change awareness training for the Council's employees.

Use feedback from this engagement activity to develop Climate Change Pledges for inclusion in the final Strategy which our young people, individuals, community organisations and local businesses can sign up to help us achieve our net zero goal.

Finalise the Climate Change Strategy and develop a programme of local climate change events to maximise the publicity and global prominence that climate change will be given when Glasgow hosts the Cop 26 Climate Change Summit in November this year.

Governance and Reporting

Appoint an Elected Member spokesperson to lead on Climate Change.

All Committee Reports should now include a new section that outlines the impact of the proposals on our Net Zero ambitions.

Member/Officer Working Group on Climate Change to oversee the consultation and engagement process and present the final version of the Climate Change Strategy to Council in November 2021 to coincide with the COP26 in Glasgow.

Continue to produce annual EUI performance indicators for all buildings to track future progress in decarbonisation, and align these with future legislation and targets set by Scottish Government and report thereon to Cabinet.