

CLIMATE CHANGE

STRATEGY







Throughout this strategy you'll see enthusiastic comments from the very people whose determination to "make a difference" spurred us on to produce this strategy. The dedication and commitment of the young people who've worked with us to bring this document to fruition deserves full credit. We now owe it to them to carry forward our ambitious plans to give them a better future in a clean, green and more biodiverse, zero carbon East Ayrshire.



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"The strategy clearly demonstrates the Council has taken on board the concerns of young people and are continuing to involve them in their decision making around the Climate Crisis." caleb Lincoln



INTRODUCTION

In the year when recovery from the global pandemic and the imminent **UN COP26** climate change conference are uppermost in the minds of many, East Ayrshire Council has taken a bold step towards a Clean, Green future with the launch of our new Climate Change Strategy to tackle the challenges of global warming.

The call from our young people...

In October 2019 Councillor Claire Leitch, Cabinet Spokesperson for Children and Young People, Net Zero, Environment and Climate Change, Equalities and Inclusion, was instrumental in working with members of the Young People's Cabinet to set up and run a Children and Young People's Climate Conference, which was held in East Ayrshire's Council Chamber.

One of the major outcomes of that conference was the overwhelming plea from the young delegates. They asked us all to look locally to see what changes we could make, and specified that this should include every function carried out by the Council.

We listened...

And now we've published the results of that call to action with this groundbreaking Climate Change Strategy.



FOREWORD

The commitment from our Councillors...

"We all now recognise that there is a global climate emergency. 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 have agreed to go beyond the already ambitious <u>Scottish Government targets</u>. We're aiming to become a <u>net zero</u> Council by 2030 with our wider communities to be net zero by 2045, ending our contribution to climate change within a generation.

COP 26

"In November this year the world will look to Scotland as the venue for the United Nations COP26 climate summit. This marks the most important moment for international climate challenge since the <u>Paris Agreement in 2015</u>.

"Having this event on our doorstep 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 to meet net zero emission targets.

Action plan

"Our strategy sets out the ambitious actions we will take in our journey towards net zero. It also recognises that the Council alone cannot solve this problem and demonstrates how we will engage with and help our communities to become greener. The difference that each of us can make should not be underestimated.

Everyone can make a difference

"There is a role and a responsibility for everyone in this. We can all contribute to a clean green future simply by changing a few habits."

Councillor Douglas Reid

Janfa Kan)

Leader of East Ayrshire Council

Councillor Claire LeitchCabinet Spokesperson for
Climate Change



"There is a role and a responsibility for everyone in this.We can all contribute to a clean green future simply by changing a few habits."

The United Nations definition of climate change

"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 the face of overwhelming evidence that climate change is already happening, we're following the <u>Scottish Climate Change Declaration</u> as part of our commitment to lead by example and work with our partners and communities to do what we can to minimise the effects of climate change.

The facts



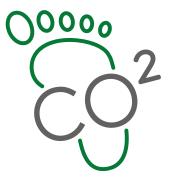
At the moment average temperatures all over the world are rising



It will only take a 1.5 degrees Celsius rise in average surface temperature to push us into a dangerous cycle of catastrophic weather events across the planet



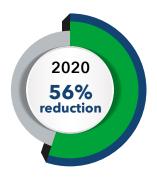
Unless we all change our behaviour, the human race will continue to have a bad effect on the health of the planet



Only by changing our habits can we reduce our carbon footprint and stop the rise in average temperatures

Scotland's targets

The Scottish Government has set a target of 100% reduction in carbon emissions by 2045, with a number of key targets along the way:











Race to Zero

As part of the build up to COP26 and to help us in East Ayrshire to achieve our goals, we've committed to support the United Nations Race to Zero. This brings together cities, regions, investors, businesses and organisations to share in the movement to create a healthy, resilient, zero carbon recovery - one which will prevent future threats to the environment while creating decent jobs and unlocking sustainable, ecofriendly, economic growth.

In the UK, a key partner of the <u>Race to Zero</u> is <u>UK100</u>. It's a network of highly ambitious UK locally elected leaders committed to cleaner, more powerful and empowered communities.

UK100 recognises 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.

Having a clear Climate Change Strategy for East Ayrshire means we can collaborate with them to build consensus for the solutions we need to move to being a net zero society. A society which brings many benefits and is fair, just and works for everyone.

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 the UK100 also means we've pledged to:

- aim to reduce council emissions to net zero by 2030
- 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)

Our vision for 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."



Measuring our emissions

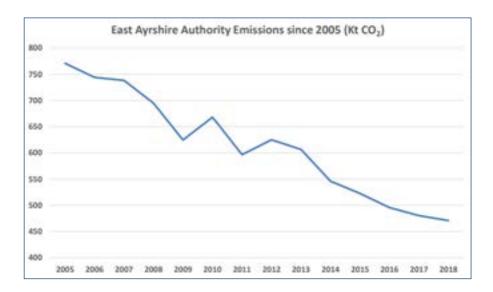
In order to cut our emissions, we've first had to assess our carbon footprints, both as an organisation and in the wider community, so that we can work out where we can make changes to cut our carbon consumption and our emissions.

To achieve this we've had to start by looking at every service, how it's run and how we can do things differently to give us the Clean Green future we need.

Until now our focus has been purely on the Council's own carbon use, however, since 2005 carbon emissions for the whole area have been measured at UK level by the <u>Department for Business, Energy and Industrial Strategy</u>.

Total emissions for the East Ayrshire area

The latest measurements show that emissions in East Ayrshire fell from 770k tonnes of CO2 in 2005 to 469k tonnes by 2018 - a steady and significant reduction of 39%.



While it's encouraging that we have already achieved cuts in emissions, we still have a big challenge on our hands. By looking at the types of emissions that were being produced in 2018, we were able to identify which areas need to be prioritised to make the necessary changes to cut emissions much further.



TRANSPORT

was responsible for 40% of emissions with 248k tonnes of CO2



DOMESTIC CONSUMPTION

was responsible for 31% of emissions with 196k tonnes of CO2



INDUSTRY AND COMMERCIAL ACTIVITY

accounted for 29% with 179k tonnes of CO2

This means our total carbon emissions in 2018 stood at 623k tonnes. However our rich rural East Ayrshire landscape and the way it is managed has meant that almost a quarter of that carbon, equivalent to 154k tonnes, is offset by forestry, crops and grasslands, which bring the area's total emissions down to 469k.

The role of our rural habitats in offsetting carbon will play an increasingly important role in our own Race to Zero.

East Ayrshire Council figures

Carbon footprint

- In 1990 East Ayrshire Council's estimated carbon emissions were 71k tonnes. This figure is the baseline used to measure our progress towards the Scottish Government targets.
- Our latest available figures show that in 2019/20 our emissions had more than halved, to 32k tonnes.

Carbon consumption

- We were first able to measure our actual carbon consumption in 2012/13 at that time it was 43k tonnes.
- Our latest figures show that since 1990 we have reduced our consumption of carbon to around 32k tonnes a cut of 55%.
- The Council's carbon emissions represent around 7% of the East Ayrshire area's total emissions.

What is responsible for Council emissions?

In contrast to the East Ayrshire area emissions figures, the highest producer of carbon emissions in the Council is buildings, with waste second and transport third.



account for
14.6k tonnes of CO2

(46%)

MUNICIPAL WASTE produces
13.5k tonnes of CO2

(42%)



TRANSPORT produces 3.7k tonnes of CO2 (12%)





Our progress so far

Since we started working to reduce our carbon footprint, our main aim has been to cut the Council's own carbon consumption and lead by example. Our Transformation Strategy included:

- Transport Review we started replacing the Council's existing vehicle fleet with electric vehicles, installing electric vehicle charging points around the area, and actively reducing the mileage undertaken on Council business
- Waste Review to cut the amount of rubbish going to landfill, we changed the way our waste was managed, upgraded our depots and introduced a new trolley system to encourage recycling. We also changed the way food waste was managed both in our own kitchens and by the public, and shifted food waste disposal from landfill to using energy from waste plants
- Property Review we implemented Smarter
 Working arrangements (pre-pandemic) allowing
 us to reduce our office accommodation. This has
 been enhanced by 1500 employees working
 from home during the pandemic
- Digital Review with the vast majority of our work now being paperless and many of our services being delivered digitally, we have also reduced the need for travel, postage and building occupation
- Energy Review since 2012 our Energy Team has been monitoring our carbon reduction and we can demonstrate tangible improvements in our carbon consumption by:
 - o upgrading our Building Management Systems
 - enhancing building insulation including the Barony Campus which is saving 8% of energy use compared with the previous education sites
 - o installing biomass fuelled boiler plants
 - o increasing Solar PV installations
 - installing air-source heat pumps for heating at the new Early Childhood Centres at Netherthird, Nether Robertland and Kilmaurs
 - upgrading a significant number of our street lighting and traffic signals with low energy LED lamps



Where we need to be

Within the Council we are making steady progress, having already achieved a 55% reduction since 1990, and this puts us on track for meeting the Scottish Government's target of reducing all greenhouse gas emissions to net zero by 2045. However, if we are to meet the UK100 target of becoming a net zero Council by 2030, we now need to double our annual reduction rate from 1.5k tonnes to 3k tonnes a year.

This new strategy

Doubling our reduction in carbon emissions to meet this target will not be an easy process. This is why we've researched and formulated this new strategy.

It means everyone who works both with and for us will be involved in thinking about how we work and where we can make carbon savings. We will be exploring emerging technologies, embracing change and working with our partners and the wider community to help us reach the UK100 target.

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. This is why we're using this strategy to set out how we can work towards this aspirational target. We will be constantly reviewing our actions and refining them to reflect our growing understanding and knowledge of new breakthrough technologies.





A fair transition to net zero

The <u>Scottish Government's Green New Deal</u> includes £1.6 billion to support up to 5000 new jobs, and tackle fuel poverty as the way to drive forward Scotland's green recovery and combat climate change.

By transforming the way we insulate, light and heat our homes and buildings - an area which accounts for a quarter of Scotland's carbon emissions - the funds will provide a huge boost to our economy.

At the same time, £500 million will be invested in the natural economy with £150 million to be spent increasing woodland creation by 50% by 2024 and £150 million for flood risk management to improve resilience.

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 benefits and positive effects on our communities. It is therefore essential that we are well placed to take advantage of all opportunities and available funding streams to reduce inequalities as we build back fairer and greener.

Economic Growth Strategy for Ayrshire

A key priority of the Economic Growth Strategy for Ayrshire is the Clean Growth Workstream which concentrates on:

SUSTAINABILITY

We will create nationally recognised research and development capacity and clean energy infrastructure. And that energy innovation will play a vital role in securing investment

PRODUCTIVITY

We will develop the capability to maximise investment in clean energy technology, and explore opportunities related to the space sector, digital innovation and life sciences to find new cross-sector applications and clean growth opportunities

INCLUSIVENESS

We will work with businesses and partners to promote economic opportunities arising from clean growth to support inward investment and opportunities for our Small and Medium Enterprises (SMEs) and our indigenous and emerging business base





Our energy masterplan

With a wealth of natural resources such as wind, sustainable forestry and biomass production, and the potential for geothermal and hydroelectric heat and power generation from the area's former coal areas, East Ayrshire has a great potential for increasing its already substantial contribution to renewable energy supplies.

To harness this potential, we will develop a regional Ayrshire Energy Masterplan. This will aim to stimulate investment in energy infrastructure, including heat, power and transport as a basis for economic growth and resilience to make sure that we achieve increased prosperity and wellbeing for all on our pathway to net zero.

Ayrshire Growth Deal

The <u>Ayrshire Growth Deal (AGD)</u> 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. It aims to deliver a series of projects to foster economic growth.

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.

These AGD Projects present an opportunity to share best practice and work alongside emerging and existing businesses across Ayrshire to help them to decarbonise while promoting the growth of high potential, sustainable low carbon businesses.

Caring For Ayrshire

The innovative <u>Caring for Ayrshire</u> programme sets ambitious targets for the redesign of our health and social care services to make sure that the right care is available in the right place, as close to home as possible. This investment in the NHS estate, digital access to services and the shift away from hospital based care will bring healthcare services closer to our communities. This will make services more accessible and convenient and will reduce the need to travel, having a positive impact on our climate change ambitions.



Community Renewable Energy Project

While all of these projects will have a net zero focus, the <u>Community Renewable Energy (CoRE)</u> project is our flagship response to climate change.

Working closely with both the private sector and our partners at the University of Strathclyde and centred around the Cumnock area, this initiative will place East Ayrshire at the very centre of innovation and development of new approaches and technologies that are needed locally to make the move to net zero while also supporting the wider climate change aspirations for Scotland and the UK.

Comprising a programme of Demonstrator Projects, CoRE has funding of £17m from the UK Government, together with £7.5m allocated by East Ayrshire Council as part of the Ayrshire Growth Deal.

The projects will combine academic and commercial expertise, local resources and new and emerging technologies to move the area into a low carbon future.

CoRE will include a Centre of Excellence in Cumnock and various developments linked to energy research and generation at different locations around the local area, including former mining sites. The projects are all linked to six individual workstreams:

SMART Energy

We aim to create integrated energy systems to meet all the energy demands of the local community all of the time (even in the dark and when the wind isn't blowing) and at the lowest possible cost.

 Researchers will test and develop new energy systems using a range of renewable energy technologies (solar PV, wind, hydro, heat from waste/ground/water) to help local communities maximise their energy consumption from locally generated sources

Low Carbon Transport

This will focus on how to decarbonise the transport system in and around Cumnock by promoting active travel and identifying opportunities for people to use electric vehicles (cars, buses, trains and bikes).

 The project will create a low carbon and active travel system between Cumnock, New Cumnock, Auchinleck, Ochiltree, Sorn, Catrine and other off-gas grid communities with a view to eventually extending this to Dumfries and Kilmarnock

Geology, Hydrology, Ecology and Environment

This will explore the potential of generating geothermal energy from former industrial sites, mine waters, waste treatment facilities and heat from rock.

Low Carbon Buildings

CoRE will develop and test new proposals to minimise energy use within buildings.

We'll also build two "demonstrator houses" showcasing new solutions or combinations of existing technologies including:

- 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 will look at creating hydrogen from excess wind and thermal energy for storage and use for heating and fuel sources to replace fossil fuels and create hydrogen batteries at times of peak energy production.

 Researchers will analyse hydrogen systems as a competitor to thermal and electric battery technology for the development of a future smart system in the CoRE area

Health and Social Economics

The project aims to attract new businesses and economic activity to the area, with the research centre itself and the related projects generating high quality employment opportunities, including apprenticeships and graduate prospects.

The aim is to create sustainable jobs which protect the natural environment while boosting inclusive growth.

Working on a low cost energy network and supply, CoRE will also develop a comprehensive plan to help reduce fuel poverty in all communities within the Cumnock area.





Employment, procurement and planning

Developing skills and employment opportunities

We're working with our pan-Ayrshire partners to develop a <u>Regional Skills Investment Plan</u>, giving local people the training, skills and experience they need to take advantage of job opportunities created by the green revolution.

By introducing new "green apprenticeships" in a variety of emerging growth sectors, we'll create decent, fair and high value work, helping tackle poverty and inequality, while making sure we have the skilled workforce we need to carry forward our zero carbon ambitions.

These opportunities are recognised and endorsed by our <u>Community Planning Partners</u> 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.

Sustainable procurement

Looking at the way we buy in goods and services as a Council, and scrutinising every purchasing and procurement decision to make sure it is as environmentally friendly as possible, is a crucial step towards achieving our target.

We will prioritise buying local where possible, and working with our Community Planning partners, Small to Medium Enterprises (SMEs), third sector, charity and voluntary organisations, we have a duty to "spend effectively to bring social, environmental and economic regeneration to the communities we serve".

By embedding that culture in our processes, we will actively support local businesses to help them bid for work with the Council and give weight to whether the goods or services procured meet our requirements for sustainability, carbon friendliness and economical and community benefit.



Planning policies to tackle climate change

Our Local Development Plan (LDP) includes three objectives for carbon reduction:

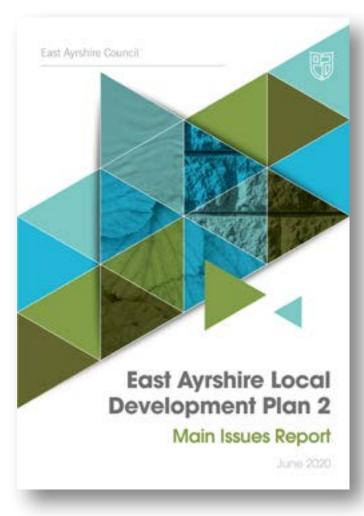
- low and zero carbon technologies are to be installed wherever possible
- wind energy development to achieve the full potential for electricity and heat from renewable sources in line with national climate change targets
- proposals for the generation and use of renewable energy in new build development, infrastructure or retrofit projects will be supported both in:
 - standalone locations
 - o as integral parts of new and existing developments

Our new Local Development Plan (LDP2)

Our LDP2 sets out a spatial strategy, policies and land allocations for land use and development, as a guide to where and how development takes place. A key focus of the plan will be to contribute to reducing carbon emissions and addressing climate change as part of the decision making process.

LDP2 complements each of the themes set out in this climate change strategy and contributes to achieving our climate change targets. These include:

- directing development to locations that reduce the need to travel and allowing for sustainable modes of travel
- supporting renewable energy generation
- supporting the decarbonisation of how we heat our homes and buildings
- supporting the implementation of the CoRE 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
- protecting our carbon-rich peatlands





Our themes

The plan for East Ayrshire

Our strategy for cutting emissions both within the Council and in the wider area will help build a stronger post-carbon, post-COVID economy, with community wealth building, equality of opportunity and improved quality of life for all at its heart.

It focuses on four major themes:



FNFRGY



TRANSPORT





NATURAL ENVIRONMENT



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 in our buildings

46% of or our total carbon footprint at East Ayrshire Council comes from energy emissions in our own buildings. We plan to cut those emissions in several ways. We will:

- reduce the number of buildings we run by introducing smarter working practices and encouraging those who can work from home to do so where possible
- adopt a shared services and digital first approach to cut the need for multiple public facing offices
- focus on the electrification of heat or biomass fuels where electrification proves impractical, as part of our capital programme to replace fossil fuel-driven heating systems
- take a "fabric first" approach, maximising insulation and using solar and other technologies to make buildings as energy efficient as possible to cut energy demand
- assess every building we run to find the most suitable route to carbon neutrality for that building: we've joined a working party with Scottish Futures Trust, Passivhaus Trust, Edinburgh City Council and Glasgow City Council to develop this plan
- pilot renewable technologies, including solar and smart storage technologies, heat pumps and load shifting control systems
- look at the areas around our buildings to see whether we can make use of energy from waterways, waste water and green spaces
- explore the emerging potential of "green hydrogen" as an alternative to natural gas
- retrofit older buildings with new energy efficient systems. We're also making sure that all our new buildings use zero carbon heating systems and have a clear pathway to being zero carbon by 2030

Carbon emissions and energy demand

By looking not just at how we heat, light and power our buildings, but also examining how they're built, the materials we use, and the energy systems we install, we will both cut the energy demands and the emissions of those buildings.

Our estate

By changing our work practices and sharing accommodation with other services and organisations, we can refit and repurpose some buildings, making them more thermally efficient, while others may be sold or demolished.

Demolition

If we demolish a building we will look carefully at what materials can be recovered, recycled or re-used to cut waste going to landfill.

Whenever we design or commission a new building or refurbishment, we will consider how to minimise waste during deconstruction at the end of its life.

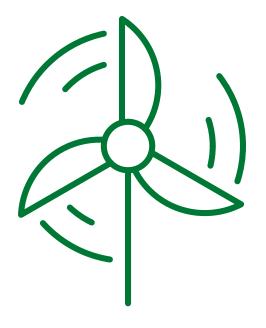
Green Heat in Green Spaces (GHIG)

Green spaces (and even areas such as tarmac car parks) are ideal for the installation of ground or water source heat pumps. Public buildings which demand the most heat include:

- leisure centres, (especially those with swimming pools)
- hospitals
- schools and Early Childhood Centres
- care homes
- higher education institutions
- offices

Many of these are adjacent to suitable spaces including grassed areas (such as sports pitches) or car parks, which offer suitable conditions for installing closed loop ground collectors.

A large greensite space can generate as much as 100% of the heat needed for a nearby public building or supply a local network.



Wind and solar

With windfarms such as Whitelee and Hare Hill windfarms already in the area, and further windfarm development planned, East Ayrshire currently has the capacity to generate a 90% surplus above local demand. However, at times of peak production, with the national grid unable to cope with the amount of energy being transmitted, these turbines are often switched off.

We hope our CoRE project research into battery storage and formation of local supply grids will help us maximise the uptake and efficiency of the rich energy source on our doorstep, to create a more effective match between supply and demand in future.

Through our planning processes, and with our CoRE demonstrator houses, we will also encourage greater uptake of photovoltaic solar panels in construction and retrofit.

Hydrogen

One strand of the CoRE project research will look at using excess wind energy to produce hydrogen, which can be stored and then converted to energy during times of peak demand or for powering vehicles. This would enable East Ayrshire's buildings and vehicles to become totally fuelled by renewable energy.

Geothermal

As an area once powered by the coal industry, the remains of those works will again become productive with the potential for heat extraction from old coal bings, deep mine workings and water filled voids. All of this provides an opportunity to extract clean power from these former industrial sites.

The <u>UK Research</u> and <u>Innovation's Strength</u> in <u>Places Fund</u> supported <u>"HotScot"</u>, run by University of Strathclyde, in partnership with other universities, the <u>British Geological Survey</u>, <u>Coal Authority</u>, <u>Scottish Enterprise</u>, and <u>Ramboll</u>. It is one of 17 major projects being funded throughout the UK to tap into the geothermal energy in disused coal mines. One of those pilot programmes will focus on the former East Ayrshire coalfields.

Housing

Domestic carbon consumption accounts for 31% of the East Ayrshire area's emissions. To help us get to net zero we all need to shift away from gas heating systems.

The Scottish Government's <u>'Housing to 2040'</u> 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 help everyone have more energy efficient homes that use zero emissions heating systems, 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 <u>Housing Standard</u> 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 whether a property is owned or rented. 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.

Our current Council housing stock is almost 100% compliant with the <u>Scottish Housing Quality</u> <u>Standards</u> and <u>Energy Efficient Standard for Social Housing (EESSH)</u> standards. We're now working towards meeting the more challenging <u>EESSH2</u> standards. This contains key milestones to further reduce the carbon footprint of our own housing stock as we work towards a target to become carbon neutral by 2040. The new standards mean:

- 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

Our role as landlords

By making our housing stock and public buildings more energy efficient, we're also cutting our own and our tenants' costs long-term, helping to keep more money available in the local economy for other priorities.

Although retrofitting with better insulation, windows, doors and non-carbon based heating systems also means higher initial costs, in line with the <u>Scottish Futures Trust Whole Life Appraisal</u>, making the right decisions can actually lessen the long-term costs.

The appraisal gives local authorities a consistent tool with which to measure, compare and report the costs of materials and processes involved in both new builds and renovation during the design, construction, operation and disposal phases of any building.

By adopting this tool, and creating a new Housing Standard for all our housing stock, whether older or newbuild properties, we will be able to fulfil our ambition to give everyone:

- a warm, safe, affordable and energy efficient home of which they can be proud
- access to housing that meets all their needs to support comfortable, independent living from cradle to grave

In conjunction with EESSH, for 2020/21 we've been awarded <u>Home Energy Efficiency Programme</u>
<u>Scotland (HEEPS)</u> funding of £1.4m which we're using to help 160 private owners of housing where we're carrying out area-based energy efficiency improvement programmes.

For 2021/22 we've been allocated £1.45m from the HEEPS fund which we'll use to continue to combat fuel poverty through energy saving measures.





New builds

Our <u>Strategic Housing Investment Plan (SHIP)</u> for new build developments specifies that new housing will be built to Silver Standard of the Building Regulations 2011 for Carbon Dioxide Emissions and Energy for Space Heating.

Working with the Council's Developer and learning from CoRE, our Housing Asset Services will develop and pilot a net zero housing model using off-site manufacture and adopting a fabric-first approach to create more energy efficient Council homes in response to our sustainability, climate change and fuel poverty reduction targets.

We're also running a pilot <u>Local Heat and Energy</u> <u>Efficiency Strategy (LHEES)</u> which will focus on South Central Kilmarnock and North West Kilmarnock. The information gathered from this pilot will help us create a long-term framework for planning and changing heating methods from carbon to non-carbon based technologies in areas with high demand.

Local Heat and Energy Efficiency Strategy (LHEES)

The Scottish Government's Local Heat and Energy Efficiency Strategy (LHEES) supports a place-based, locally led and tailored approach to heat decarbonisation and energy efficiency using a framework to address how each local authority in Scotland will reduce their energy demand and decarbonise the heat supply of buildings in their area. This analysis will help what needs to happen to move towards low emission heating across all buildings in our communities.

LHEES will also form a basis for local public engagement and will become a statutory requirement for local authorities in 2022. Every local authority must complete a LHEES for their area by the end of 2023.

In East Ayrshire we're building on our early pilot work undertaken in this area to finalise our own LHEES. The data we gather through our LHEES will help us prioritise our future actions on the path to net zero.

Theme 2: TRANSPORT

Our objective

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

Fleet cars

The Scottish Government stipulates that all our new fleet cars and vans should be zero emission from 2025, with all new HGVs reaching the same target by 2030.

Under our Transformation Strategy, we started our replacement programme in February 2019. As a result, thanks to funding from Transport Scotland 98 of our 160 cars and small vans are now electric and we are on track for having a fully electric fleet by 2023.

Larger vans

High cost and load carrying requirements mean that our larger van fleet is not yet ready to be replaced by entirely electric vehicles. However we will replace 72 of these vans with the most efficient Euro 6 engine standard before being fully replaced by electric vans from 2026.

Employee "grey" mileage

To encourage our employees to reduce their dependence on fossil fuelled cars, we've also introduced an electric pool fleet and made electric bicycles available through the <u>Active Travel Hub</u>. Having these available, increasing working from home and encouraging online meetings should reduce the "grey mileage" and the Council's carbon footprint.

For employees' own transport we also offer salary sacrifice Cycle to Work and Car Leasing Schemes which can provide affordable bikes and electric vehicles.

HGVS and buses

Zero emission HGVs are still developing. We are monitoring progress and costs and expect both electric and hydrogen variants to play a role in the future Council fleet.

Transport in the community

Locally we're developing our plans based on <u>Transport Scotland's National Transport Strategy</u> which was published in 2020.

As Scotland's largest source of carbon emissions (37% in 2017), the figures for emissions have risen every year despite technological advances in engines. This is because traffic levels have continued to climb. 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.

We also know that over half of car journeys are relatively short (under 2 km). Whilst it is important for the Council to lead by example by decarbonising our own fleet, we all need to change the way we travel if we are to cut our carbon footprint successfully.



Electric vehicle charging

To realise our ambitions to have all new vehicles on East Ayrshire roads emission free by 2030, it's vital that we make sure these can be recharged quickly, easily and conveniently. To meet this challenge, Ayrshire Roads Alliance (ARA) has produced an Electric Vehicle Infrastructure Strategy and action plan. It aims to:

- develop a widespread electric vehicle charging network to support communities, businesses and visitors using electric vehicles
- identify and provide solutions where no off-road parking exists
- work on solutions to improve air quality

Changing the way we travel

Since March 2020, with lockdowns and travel restrictions, air quality has improved significantly. People have reconnected with their local shops, and many more people are now walking and cycling than in previous years. Keeping up these positive benefits as restrictions are lifted now presents a major challenge.

Active Travel Plans

Sustrans and ARA have been working with us to improve existing walking and cycling routes and build new multi-use routes, connecting communities and making commuting, going to school, leisure and tourism, much safer and more enjoyable for people of all abilities and ages who walk, run, cycle or ride horses.

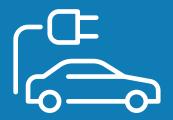


In Kilmarnock this includes the Kilmarnock Green Infinity Loop which will encompass 26km of active travel routes, green infrastructure and signage across the town by 2025. All of these projects are being brought together in a new East Ayrshire Active Travel Plan to encourage active travel throughout the area.



Over half of car journeys are less than 2km.

Next time you need to take a short journey think about using a bus if available, or cycling or walking. It's healthier for us and the planet!



If we're making it easier for you to charge an electric car, is it time to consider making the move to a zero carbon vehicle when it's time for a trade in? Help us all meet those targets!



Before you hop on a plane for your next holiday, consider staying closer to home, or taking the train, bus or ferry where possible.



When you're shopping, check out where your food comes from - if it's travelled a shorter distance, try and choose it to support local suppliers and keep food miles low.



Improving Public Transport

Strathclyde Partnership for Transport (SPT), the public transport authority for the West of Scotland, is currently developing a new Regional Transport Strategy (RTS). This will be informed by responses to their recent 'Case for Change' consultation, 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 and integration

Locally, we're working to improve access to public transport in our rural communities. Working with key partners, such as Coalfield Community Transport, we're aiming to extend the availability and use of community buses through the asset transfer of Council buses that are due to be replaced.

We will also engage with Stagecoach to develop a Bus Service Improvement Partnership which will improve the effectiveness and quality of existing bus services including looking at routes, frequency, acceptable fares and ticketing arrangements.



"The strategy makes clear the plans of the Council and how we will all benefit from becoming net zero to protect those who need this earth as much in the future as we do now." Ryan K Bartolo

Theme 3: WASTE

Our objective

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

The Scottish Government aim, to make Scotland a zero waste society with a circular economy, means minimising the population's demand on primary resources and maximising reuse, recycling and recovery of resources instead of treating them as waste.

By 2025 Scotland will:

- 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

Legislation

Both the Scottish and UK Governments plan to implement new legislation which will push all councils, businesses and manufacturers towards greater recycling rates. These are:

- Scottish Government
 - o Deposit Return Scheme
 - o Biodegradable Waste Ban
- UK Government
 - o Plastic Packaging Tax
 - o Packaging Producer Responsibility Regulations

These measures should all help to embed a recycling and minimal waste culture all down the line from producer to consumer and disposer.

By 1 January 2025 the Scottish Government will impose a complete ban on all biodegradable waste entering landfill. The quickest route to accommodating this change will be switching our biodegradable waste to "energy from waste" plants.



In East Ayrshire

Municipal and commercial waste currently collected by the Council accounts for 42% of our carbon footprint. A large proportion of this is due to nonrecycled waste being disposed of via landfill.



What we've done so far to encourage recycling

Introducing recycling trolleys put us at the forefront of Scottish councils in actively promoting recycling. By making it easier for residents to recycle, we've already increased the proportion of aluminium, glass and plastics collected.

In 2019 we collected 55k tonnes of household waste. Of this we were able to recycle 29k tonnes (53.2%) and divert a further 5k tonnes through pre-treatment. This meant we sent 21k tonnes to landfill.

We don't currently have a local energy from waste plant capable of processing our waste, so we're working with other local authorities and the private sector to find a cost-effective solution which complies with legislation and zero carbon targets.

We're also actively encouraging greater levels of recycling by:

- promoting digitalisation of services and remote learning as an alternative to reduce our consumption of paper and books
- introducing recycling bins in our own offices and schools as we seek to implement a common approach to recycling across all services
- working with our catering service to reduce use of plastics
- introducing "Waste Warriors" to reduce waste and champion recycling in our schools
- introducing reduce, recycle and reuse as a core theme throughout our schools and early years centres
- using initiatives like litter awareness programmes, uniform/equipment swaps, playground recycling, reducing and ultimately banning single use plastics in our educational centres
- promoting the <u>Real Nappy Scheme</u> to new parents in conjunction with <u>NHS Ayrshire and Arran</u>
- expanding our existing recycling offer to include new opportunities to recycle materials such as plastic film and bed mattresses



As young people, we want a future that we feel confident in as we get older - and the only way to divert further damage to the climate to have such a future is to work collaboratively to save the climate like this strategy suggests." Ewan Carmichael

What we're doing about food waste



In East Ayrshire we currently recycle about 3.5k tonnes of household food waste per year.

We've identified this as an area where we can significantly improve our recycling rates.

We're:

- encouraging people to reduce the amount of food they don't eat and throw away (avoidable food waste)
- using education and campaigns to raise awareness
- providing recipes for leftovers
- making it easier for everyone to recycle unavoidable food waste (such as vegetable peelings) with the provision of food waste bins and garden composters

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.

Waste management review

When we reviewed our waste management service, we found that in some communities up to 50% of our households are not using their food caddies.

We recently analysed the composition of our waste which found that 30% of the weight of the waste in residual (green) waste bins comprised avoidable or unavoidable food waste.

This behaviour represents both an environmental and a financial cost with an extra £500k disposal cost per year to the Council 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 was instead thrown away.

New technology in the cabs of our waste collection vehicles allows us to identify households that are not recycling food waste and we are keen to work with our communities to encourage everyone to recycle or dispose of their food waste properly and safely.

Our target



We are aiming to reduce food waste in our residual waste by 10% (780 tonnes per annum) in each of the next five years to achieve a 50% reduction on current levels.

The Circular Economy - promoting reuse

THEFACTS



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 products and materials, 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

Zero Waste Scotland is promoting a circular economy in response to the problem of waste

What is a circular economy?

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 no waste in a truly circular economy. Reuse and repair are essential in the development of Scotland's circular economy. Although often confused, reuse and recycling are not the same.

Reuse 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.

We already support the reuse of waste in partnership with the <u>Cumnock and Doon Valley</u> <u>Gift Furniture scheme</u> and <u>Cunninghame Housing</u> <u>Association</u> which both reuse furniture and other goods. We also have a variety of contracts to recycle and/or reuse electronic and other products.

What else are we doing?

The next step will be to explore the introduction of reuse centres at the proposed new Household Waste Recycling Centre at Caponacre in Cumnock and at our existing facility in Western Road, Kilmarnock.

Theme 4: NATURAL ENVIRONMENT

Our objective

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

We all know that global evidence of climate change is now all around us, with more frequent and extreme adverse weather - storms, fires, heatwaves, droughts and flooding - becoming commonplace on our news reports.

Flooding

In East Ayrshire, flooding is our greatest risk. We all know the devastating effects floods can have on people in their homes, communities and businesses, which is why we're working with our partners in the Scottish Water and others to produce and action our Local Flood Risk Management Plan.

We're currently working on our Local Flood Risk Management Plan for 2022-28 which will also inform our new Local Development Plan, making sure that any planning decisions made take into account <u>flood risk planning</u>.

In future we'll plan to avoid flooding occurring in the first place. Our planning decisions will protect flood storage and conveying capacity by directing development away from flood plains and areas with medium to high flood risk.

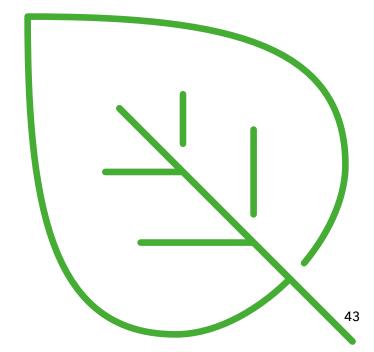
Through our planning policy, we will actively support the development of environmentally friendly flood prevention measures including:

- wetland, peatland or green infrastructure creation
- flood protection schemes, restoring natural features, enhancing flood storage capacity and avoiding the construction of new culverts
- <u>Natural Flood Management (NFM)</u> techniques including crop rotation, winter planting and the use of planting, afforestation and reforestation to reduce the risk of flooding

Green infrastructure

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 gives us 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.







What we're doing

We carried out our first Open Space Audit and developed an Open Space Strategy in 2009.

In 2014 we reviewed this to get an update on our open space, looking at protected spaces and how they worked, as well as considering local need and demand.

We used this to develop settlement by settlement action plans and prepare a vision for green infrastructure development throughout East Ayrshire.

We then carried out a further audit in 2020. This will now inform a revised Green Infrastructure Strategy for 2021-2026 which will examine the importance of green networks across a breadth of environmental, social and economic goals, linked to cross-cutting themes in both our Community Plan and the Local Development Plan.

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.

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.

ParkPower

In 2020 East Ayrshire Council worked with East Ayrshire Leisure to contribute to a <u>Greenspace Scotland ParkPower</u> project to identify the most promising green and blue space sites to provide the best opportunities for supplying low carbon heat.

The project highlighted extremely promising options for using green space around public buildings and identified suitable river source heat sites on the Irvine, Ayr and Afton rivers. It suggested there is great potential to develop low carbon heat demonstration sites for public buildings such as hospitals, schools, leisure centres and industrial settings.

What we will do:

- develop a revised Green Infrastructure Strategy supported by "Greening Champions"
- work with stakeholders to create demonstration projects in the areas identified in the ParkPower project

What we're all doing together 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 must further the conservation of biodiversity when carrying out their functions and responsibilities.

Our work to further biodiversity conservation fits clearly into a 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.

Nature conservation cannot be delivered in isolation, so here in East Ayrshire we work with all our partners to protect and enhance biodiversity. Together with East Ayrshire Leisure and East Ayrshire Woodlands we contribute to a number of partnerships including:

- <u>The Scottish Wildlife Trust</u> management of two nature sites
- Galloway and Southern Ayrshire Biospheredesignated as a new style <u>UNESCO Biosphere</u>
- East Ayrshire Coalfield Environment Initiative (CEI)

- The Ayrshire Rivers Trust
- East Ayrshire Leisure/Ayrshire College horticulture and arboriculture partnership
- The Coalfield Communities Landscape Partnership
- 23 Community Led Action Plans

What is a biosphere?

The biosphere designation was awarded because of the area's unique combination of special landscapes and wildlife areas, rich cultural heritage and communities that care about their environment and culture and want to develop it sustainably.

As an internationally recognised marketing brand for superb natural environments, UNESCO Biosphere designation offers new opportunities for individuals, businesses and communities to demonstrate how to live, work and play in a world-class environment.

Forestry and Tree Planting

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, we have developed a plan for the restoration of opencast sites.

Together we are identifying and prioritising these sites for new tree planting to rehabilitate and reintegrate 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, creating productive woodland that combines both native and commercial conifer species.

Greening these sites will create a wealth of benefits, contributing 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.







Delivering our plan

To meet our targets and help all of East Ayrshire have a **Clean Green Future**, we'll be working with everyone to...

Build community resilience

- encourage businesses, third sector organisations and charities to join us in adopting sustainable procurement policies
- develop more community gardens, allotments and support schemes to encourage people to "grow their own"
- continue to promote the eco schools ethos, teaching children and young people about their environment and encouraging them to take responsibility for their own carbon footprints
- foster and promote the development of carbon offset projects
- encourage the public to shop local and support local producers to cut food miles

Promote behavioural change

- work with partner organisations, businesses and third sector to encourage reuse and recycling
- promote the benefits of smarter working, paperless systems and working from home
- raise awareness of and access to means of saving energy through home and building improvements, moving away from fossil fuels and providing incentives to change

Build greener communities

We'll build greener communities and improve the carbon offset capacities of our green spaces by:

- considering appropriate planting strategies for plants and trees, conserving and expanding natural habitats and eco-systems, controlling invasive non-native species
- investing in sustainable drainage systems and flood prevention
- linking into Local Biodiversity Action Plans to work with landowners and partners
- considering and developing strategies to move away from petrol and diesel based machinery and move to more cost-effective and environmentally friendly machine options
- reducing grass cutting and creating wild flower areas for land not in constant use
- encouraging communities and landowners to look at using rainwater collection systems
- reducing reliance on herbicide applications, reducing their use and employing alternative methods of weed and pest control
- linking with partners to explore and discuss industry best practice and work with them to implement this jointly to maximise our contribution to climate change



Future development

- link with business and industry our <u>Economic Development Service</u> will work with <u>Ayrshire Chamber of Commerce</u>, identify big carbon emitters and work with them to help reduce their output
- planning processes for housing, business, agriculture and industry will all take account of targets, with zero carbon technologies and methods taking priority

Educational establishments

All of our educational establishments from early years to college level already support our four core themes of Energy, Transport, Waste and Resilience and will build on this ethos.

What our educational establishments will do

Our young people will have:

- an Eco-group and 'Carbon Counters' to support their journey to carbon zero
- annual Young People's Climate Conference led by young people
- bespoke and specific learning and teaching in relation to age/stage to empower and educate all young people
- engagement with partners, local businesses and communities to enhance communication and knowledge
- promotion of further digitalisation building on the pandemic experience of remote learning as an alternative to books/paper resources
- promotion of cycling, scooting and walking, Safer Routes to School and Paths for All
- a "reduce, recycle and reuse" core theme throughout their establishment linked with initiatives such as:
 - o litter awareness programmes
 - o uniform/equipment swaps
 - o playground recycling
 - o reducing and ultimately banning Single Use Plastic (SUP)

 Developing Young Workforce, supporting potential careers and developing understanding of careers in a zero carbon economy

Our key aim is to empower young people to be the drivers of change and lead change in their own establishments, local communities and beyond.

What Vibrant Communities will do

<u>Vibrant Communities</u> is a key service in our race to 2030 and beyond. They will support our services and communities by enabling and promoting carbon free aspirations and lifestyles. They will work with all age groups, sectors and networks to target specific areas for improvement.

Young people

As the instigators of our Youth Climate Change Conference, which led to the formation of our cross-service Climate Change Committee (the producers of our <u>Climate Change Strategy Report</u>), we will continue to put young people and their ideas at the forefront of everything we do.

The involvement of our reps from the Children and Young People's Cabinet is a central part of our strategy and they'll be involved in designing a Climate Change Campaign to be led by their Climate Change Champion.

Community and the strategy

Vibrant Communities will work with communities to encourage them to engage with the strategy. Its main themes will link into future Community Led Action Plans and Placemaking Plans. They will also:

- make sure the 'Community Voice' is threaded throughout the strategy
- work on partnership campaigns for communities (all age groups) on recycling etc
- add the strategy themes into the guidance for our <u>Community Asset Transfer</u> groups and managers of facilities to remind them to think green in tackling climate change responsibilities



How we will fund our strategy

East Ayrshire Council will establish a framework to identify and harness the funding sources we will need to implement the actions of this Climate Change Strategy.

We'll work with the Scottish Government and other partners to explore and maximise available funding streams and resources.

At the same time, we'll work with our communities and the third sector to maximise opportunities to gain funding and resources for specific projects to tackle the climate emergency at a local level.

How we monitor and report on our strategy

Each year, in conjunction with all public bodies in Scotland, we report our annual carbon emissions to the Scottish Government as part of its <u>Public Bodies Climate Change Duties</u>.

Our annual report sets out our carbon reduction projects for the year with an estimated value in tonnes of CO2 apportioned to each project. Managing and delivering these projects is the responsibility of the relevant service. Devolving the responsibility to each Council service promotes understanding and ownership of our overall carbon reduction ambitions.

By empowering our experts in each field we are already seeing behavioural changes, and both carbon and financial savings. Each year our services report our progress in relation to the Council's climate change aims to Cabinet.

Our annual report to Cabinet constitutes a formal annual review of data forming each year's Climate Change Report submission. We use it to compare data to highlight past successes and identify future opportunities for carbon abatement across the authority.

How we will communicate our strategy

We're formulating a comprehensive Communications Strategy to run alongside our Climate Change Strategy. It will inform, educate and promote our efforts to help engage everyone in East Ayrshire to help us all reach our goal of a zero carbon economy.

How to find out more

Follow our Climate Change Strategy webpage for our latest news.

Subscribe to our <u>StayConnected</u> Climate Change Strategy bulletins for regular email updates (you can unsubscribe at any time).

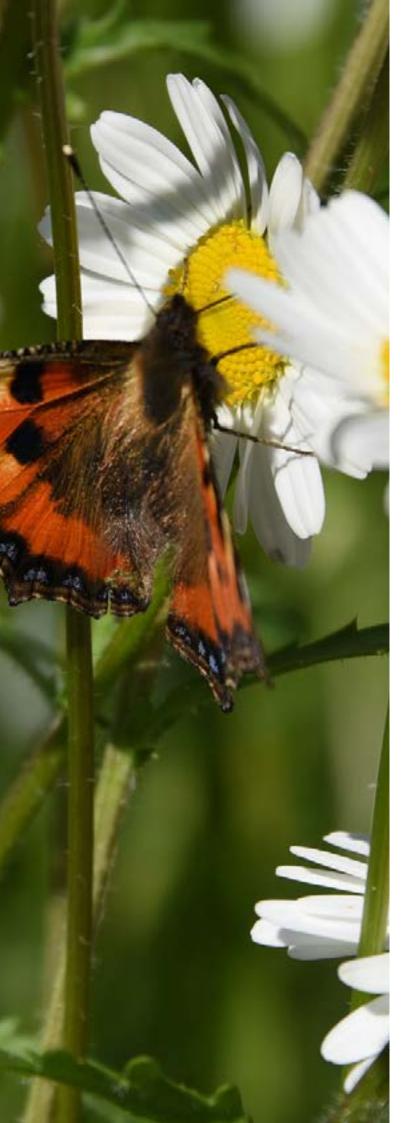
Climate change strategy links

Clean Green East Ayrshire

East Ayrshire Climate Change Strategy







Photographs

The photographs used in this document have been taken by a professional photographer and members of East Ayrshire Council's Communications Team who took them in their local areas in and around East Ayrshire during the lockdown periods of the pandemic.

Cover	Loch Doon and nasturtiums, Rhona, Paisley
Pg 2	Bee on flower, Suzie, Stewarton
Pg 4/5	Lillie and friends who attended the EA Children and Young People's 2019 Climate Conference, Council HQ, Kilmarnock
Pg 6/7	Lawn with buttercups, Dawn-Marie, Symington
P9	Whitelees wind farm
Pg 11	Wildflower meadow, Jonny, Kilmarnock
Pg 13	EAC HQ bike shed, Kilmarnock
Pg 16	Opera House, Kilmarnock The Barony Campus, Cumnock
Pg 17	The road to Loch Doon, Dalmellington
Pg 19	Howard Park, Kilmarnock
Pg 20/21	Coal, Cumnock
Pg 23	Cycle lane, Grassyards Road, Kilmarnock Whitelees wind farm
Pg 24	Cow in field, Catriona, Fenwick
Pg 27	Bee on flower, Rhona, Paisley
Pg 28	Solar panels, Barony Campus, Cumnock Cycle lane, Grassyards Road, Kilmarnock East Ayrshire recycling Kay Park, Kilmarnock
Pg 32/33	New build houses, Fraser Walk, Kilmarnock
Pg 36	EAC electric fleet van, Council HQ, Kilmarnock Coalfield Community Transport
Pg 37	Electric charging point, Ayrshire Athletics Arena, Kilmarnock
Pg 39	East Ayrshire food caddy East Ayrshire trolley box system Mr Milne's rain water troughs, Mauchline
Pg 40	The Barony Campus, Cumnock
Pg 44	Eucalyptus, Rhona, Paisley
Pg 45	Kay Park, Kilmarnock
Pg 47	Annanhill allotments, Julie, Kilmarnock
Pg 48	Mr Milne, Mauchline
Pg 49	Alliums, Rhona, Paisley
Pg 51	Poppies, Lynne, Busby
Pg 53	Butterfly, Kilmaurs



East Ayrshire Council
Comhairle Siorrachd Àir an Ear