

#OurFifeMatters

fife.gov.uk/climatechange

Climate Fife: Sustainable Energy and Climate Action Plan

2020-2030



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Convener - Environment and Protective
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I am pleased to present Climate Fife, Fife's new Sustainable Energy and Climate Action Plan. Climate Fife has been created to help us to respond to what is arguably the greatest challenge of our time - the climate emergency. Over the last decade Fife Council has worked proactively to reduce the emission of greenhouse gases which contribute to climate change, and Fife's carbon footprint has fallen by over 55% (compared to 1990 emission levels). This activity has set a good foundation, but the latest climate science¹ suggests that emissions need to be cut even deeper and faster than previously thought to avoid catastrophic impacts. The ambition of international climate change commitments needs to be increased, and rapidly translated into action.

The Intergovernmental Panel on Climate Change called world leaders to account in 2018 warning that climate change has become an emergency because of a collective failure to act. The warnings could not be more serious. Leading scientists now say that unless we change course drastically, within the lifetime of people alive today we are heading for a world which can support significantly fewer people. Such is the climate and ecological emergency².

The younger generation is leading mass calls for real action, and we owe it to them, and to ourselves, to listen. We must actively cut our emissions each year until we achieve net zero greenhouse gas emissions.

Across Fife there has also been progress, such as improvements to our homes and creating new district heating like Glenrothes Energy. The technologies and policy knowledge needed to avoid this catastrophe already exist, but transformations must begin now. We now need to mobilise to accelerate the pace and ambition of our response to the climate crisis. Climate Fife is Fife's response to the climate emergency. Fife Council is aware of how challenging it will be to achieve the actions and targets within this plan; it would be an inadequate response to the climate emergency if they were not so. Whilst the future may be radically different to the present and perhaps very different to how Fifers envisage the future today, if we act decisively and proactively now our actions could help to tackle not just climate change but many other social and economic problems. This can be a time for hope, with a place for all of us in this new future, new skills, new jobs, new ways of doing things, and a part for everyone to play.

Finally, on behalf of everyone in Fife, I want to say 'Thank you' to everyone, who have developed the Climate Fife Strategy and Action Plan and to everyone who contributed to it through the workshops, and consultation process.

¹ IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland, 32 pp. <https://www.ipcc.ch/sr15/>

² <https://www.leti.london/cedg>

³ <https://www.technologyreview.com/s/614801/we-need-to-halve-emissions-by-2030-they-rose-i-again-i-in-2019/>

⁴ WMO Greenhouse Gas Bulletin, 2018 <https://public.wmo.int/en/media/press-release/greenhouse-gas-concentrations-atmosphere-reach-yet-another-high>

⁵ <https://www.washingtonpost.com/weather/2020/01/24/australia-bush-fires-have-nearly-doubled-countrys-annual-greenhouse-gas-emissions/>

The climate emergency

For the last decade climate change has been overshadowed on the international agenda by the financial crisis and its social and electoral repercussions. However, the United Nations' Intergovernmental Panel on Climate Change (IPCC), put climate change back firmly on centre stage when it published its Special Report on Global Warming of 1.5°C, concluding that there is less than 12 years to act to avoid catastrophe. The report describes the enormous harm that global warming of 2°C over preindustrial temperatures is likely to cause compared to a 1.5°C rise, and how rises above 2°C will cause the deaths of billions. The IPCC highlighted that climate change has become an emergency because of a collective failure to act. Despite nearly three decades of climate change negotiations and international commitments such as the Kyoto Protocol, greenhouse gases continue to increase by 1.5% per year.

In May 2019, The UK Committee on Climate Change (CCC) published a landmark report (Net Zero: The UK's contribution to global warming) which recommend that a 100% reduction in greenhouse gas emissions (GHG) should be legislated by the UK Government "as soon as possible". The report states that this net-zero target could be achieved at the same cost that is currently put against achieving the current Climate Change Act, which is between 1-2% of GDP in 2050.

Responding to the climate emergency will require collective action, in every community around the world on an enormous scale. All aspects of day to day life will need to change from:

- How we heat and power our homes;
- Where and how we build;
- Settlement patterns and how we move around;
- Investment decisions and budget-setting;
- The type of industry and businesses that will thrive;
- Jobs and skills;
- Consumption patterns and waste management;
- What we eat; and
- How we use land.

We must reinvent the way we live in the next decade if we are to give ourselves and our children hope for the future. Business as usual must change. What value short term profit if we lose a functioning environment? There are, after all, no pensions or jobs on a dead planet.

The UN's assessment of the situation is blunt:

"Countries collectively failed to stop the growth in global greenhouse gas emissions, meaning that deeper and faster cuts are now required..."

We need quick wins

to reduce emissions as much as possible in 2020.

We need to catch up

on the years we procrastinated.

If we don't,

the 1.5°C goal will be out of reach before 2030."

Inger Anderson,
UNEP Executive Director

Fife's response to the climate emergency

Climate Fife is Fife's response to the climate emergency. The plan sets out the strategy which underpins *Climate Fife*, presenting:

- a vision for **where Fife Council wants to be**, and the themes and programmes to show where actions are needed and how this will be supported;
- **where Fife is now**, with a Baseline Emission Inventory for Greenhouse Gas Emissions, and a Risk and Vulnerability Assessment to show the known and expected risks from unavoidable climate change; and
- **action plans showing how Fife will get to where we want to be**, working in partnership to deliver a robust response to climate change and identifying the first critical steps and plans to take.

Climate Fife is a Fife-wide plan; however, at this stage the action plan largely comprises actions being driven by Fife Council and key public sector partners. While the Council's direct footprint only represents 3% of Fife's total carbon footprint, through policies, projects and service delivery it has an influence over upwards of 40% of Fife's total carbon footprint. Fife Council wants to lead by example in our response to the climate emergency and use our procurement, assets and staff to help deliver a zero carbon and resilient Fife.

Ten years ago, if countries had acted on climate change science, governments would have needed to reduce emissions by

3.3%
each year.

Today, we need to reduce emissions by

7.6%
each year

to limit warming to less than 1.5°C.

By just 2025, if we fail to act, the cut needed will steepen to

15.5%
each year.

Every day we delay, the more

extreme, difficult and expensive the cuts become.

Vision

Climate Fife's vision has been developed in partnership with local stakeholders and is underpinned by three core principles that by 2045, Fife will be:



Climate friendly,

having transformed the economy, infrastructure, land use and energy system to decarbonise how we live;



Climate ready,

with plans and projects to increase the resilience of Fife communities and the economy to help minimise the impacts from unavoidable climate change; and



Climate just,

ensuring that all Fifers and the Fife environment can benefit from this transition.



Fife spends an estimated
€464M*

annually on gas, electricity,
petrol and diesel.

To date much of this expenditure goes straight out of the Fife economy to large multinational companies with little benefit to Fifers.

Think about what we could achieve if some of this money was spent in the local economy (by local energy generation and storage) to benefit our communities.

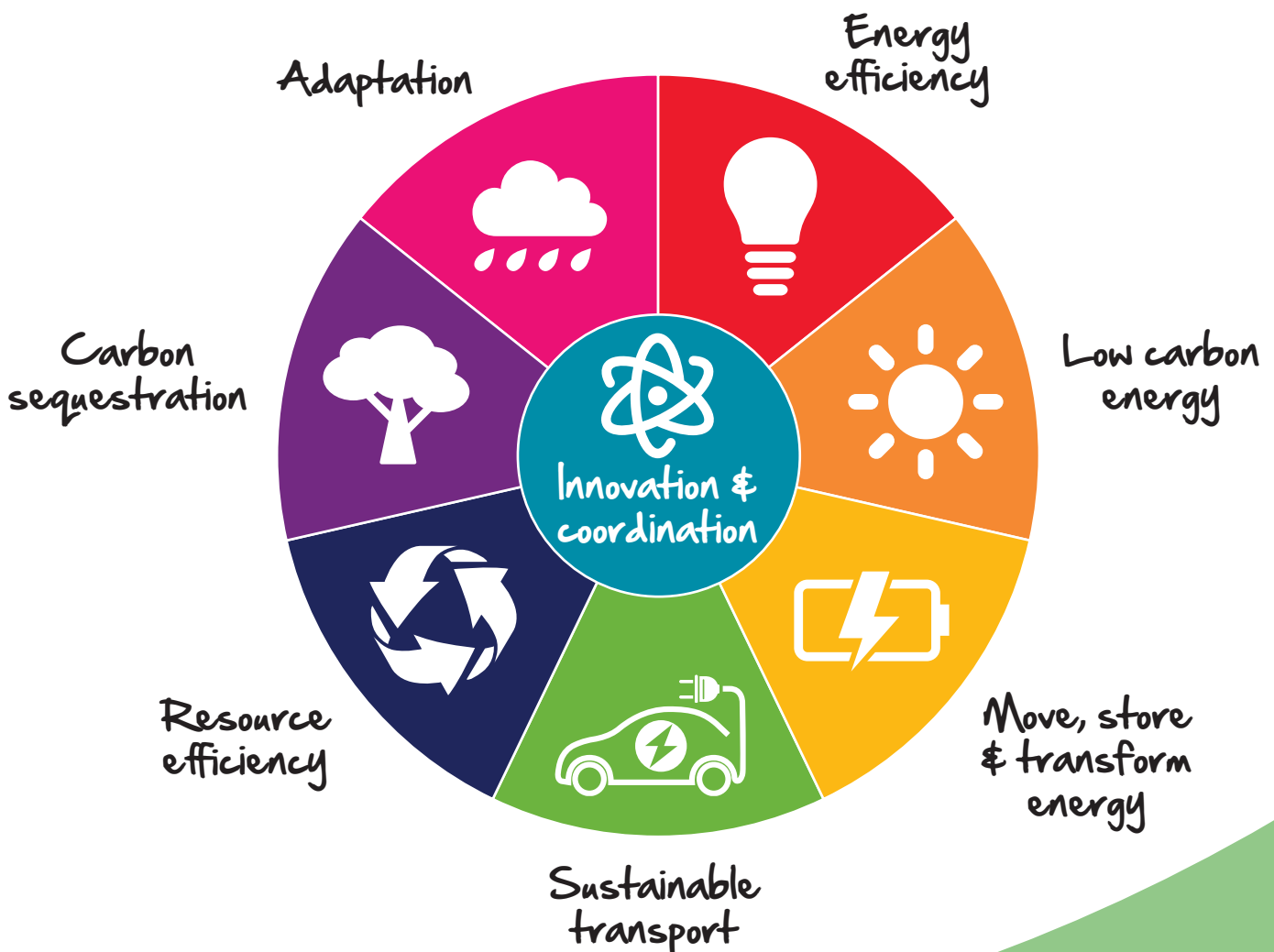
*Source: Based on Fife local energy masterplan methodology. Fuel cost only. Includes mains gas, electricity using sub national data. Includes petrol and diesel for cars and light vans. Does not include purchase, operation and maintenance.

Themes of work

Underneath the vision, there are three core areas of climate action, all of which must be undertaken if runaway warming is to be avoided:

- Cutting emissions / decarbonisation - this is called **climate change mitigation**;
- Adapting to the physical changes of climate change - **climate change adaptation**; and
- Actively removing greenhouse gas emissions from the atmosphere (such as by tree-planting or direct capture of flue gases) - **carbon sequestration**.

Climate Fife will be implemented through eight themes, under which we hope hundreds of projects will be delivered with communities, and public and private sector partners across Fife.





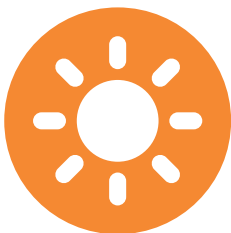
Innovation and co-ordination

Achieving massive innovation across all aspects of society and infrastructure in the next decade will require considerable financial innovation, partnership building, guidance and coordination. Under the innovation and coordination programme, Climate Fife has grouped together projects that will encourage innovative solutions and partnerships. This is a cross-cutting theme and encompasses a wide variety of projects.



Energy efficiency

Energy efficiency is one of the most cost-effective ways of reducing costs and carbon emissions simultaneously. Typical energy efficiency measures include retrofitting properties with better insulation, installing more efficient space and water heating systems. Climate Fife projects will increase the energy efficiency of Fife's buildings, assets and infrastructure to reduce energy consumption, carbon emissions and bills.



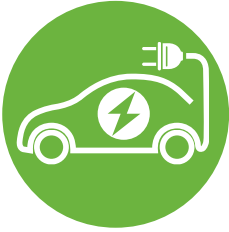
Low carbon energy

Climate Fife projects seek to decarbonise the heat and power generated and used in Fife. Local generation will create jobs and support the local economy. Generating more electricity locally via biomass, wind, wave, hydro and solar power, will reduce transmission and distribution losses. Generating heat locally will allow Fife to make best use of local resources; heat from biomass, (including wood and agricultural waste products); heat from air-source, water-source and ground-source heat pumps or waste heat from industrial processes.



Move, store and transform energy

Climate Fife projects will support an efficient 'whole energy systems' approach to moving, storing and transforming energy into different forms. A whole energy systems approach looks at minimising distribution, transmission and energy transformation losses. This programme of work will support the increased deployment of district heating and other heat networks, smart grids, energy storage systems (such as battery banks, heat stores, seasonal heat stores) and methods for transferring energy into the most useful forms for local needs.



Sustainable travel

Climate Fife projects will focus on decarbonising the Council's own fleet, reducing the need to travel by settlement and development planning and smart technology; promoting active travel, increasing vehicle efficiencies, making public transport more popular and increasing the uptake of ULEV (ultra-low emission vehicles) such as full-electric and hydrogen fuel vehicles.



Resource efficiency

Climate Fife projects will help to deliver the circular economy by encouraging the most sustainable ways of managing, recovering and avoiding waste, including using water, food, land and other resources in the most efficient manner. The Scottish Zero Waste Plan sets the strategic direction for waste policy in Scotland and has a municipal recycling target of 70% by 2025. Fife's own Zero Waste Fife – Resources Strategy and Action Plan will also direct action in this area.



Carbon sequestration

Climate Fife projects will focus on removing carbon dioxide from the atmosphere and storing it in long term carbon sinks so that it will not contribute to global warming in the medium term. This workstream will work in areas such as: flue gas capture, land use including, reforestation projects, grassland, biochar projects and efforts to improve the health of delicate ecosystems such as peatlands which, if degraded, can become net emitters of greenhouse gases. Annually, around 12 million tonnes of carbon dioxide are absorbed by Scotland's forests.



Adaptation

Climate Fife projects will seek to increase Fife's resilience to the changing climate (including today's extremes) and adapting society, economy and infrastructure to cope with the new extremes of temperature, rainfall, sea-level and storms that are projected. Adaptation to climate change can be planned nationally but is mostly delivered locally and to be effective, actions must be tailored to local situations and local vulnerabilities. Local government, as the level of governance that is closest to individual community needs and geographic constraints, has a crucial role in delivering adaptation.

Climate Fife action plan 12 months to March 2021

Action Area	Description
Fife Council Climate Fife Delivery Group	<p>Support Services through a Climate Fife delivery group. Fife Council will implement a delivery group supported by Fife Resource Solutions. The Climate Fife Delivery Group will:</p> <ul style="list-style-type: none"> • support Services in delivering actions required to meet the targets • review Service Change Plans to identify support and action, including through the 'Opportunity Papers' process • deliver and co-ordinate projects for Services to meet targets • provide internal training and CPD and facilitate expert support and guidance • report progress at appropriate management level
Launch and begin implementing Fife Council Carbon Management Plan	<p>Deliver projects within the revised Carbon Management Plan (2020) to reduce Fife Council's carbon emissions, including decarbonising fleet, energy efficiency, renewables development and updating design approaches. Carbon reduction in line with Scottish Government and Climate Emergency targets of 75% by 2030 net zero emissions by 2045. (against 1990 levels).</p>
Communications and behavioural change campaign	<p>Launch a cross-partner, Climate Change communications and behavioural change campaign within Fife, providing a single message for communities and organisations emphasising the climate emergency and increasing climate literacy.</p>
Financial innovation	<p>Climate change actions do not always make sense using traditional financial metrics and payback calculations. New financial models are needed to support climate action. Fife will investigate and deliver innovative options to financially support Climate Fife actions.</p>
Housing	<p>Deliver energy efficiency measures across housing within Fife. Engage with housing sector to identify opportunities and challenges so optimum technical solutions are applied. Prepare for tightening Building Standards, a future without gas heating and zero carbon buildings.</p>
Local Development Plan	<p>Prepare for revision of the of the Local Development Plan by reviewing existing policies, develop Fife's climate risk and vulnerability evidence base and undertake a Low Carbon Place project.</p>
Partnership Asset Management	<p>Develop partnership approaches to management of public assets including an asset sharing and Land Management plan. Fife Council will develop a coordinated land strategy to manage land assets in a way that will best respond to the climate emergency; recognising the many different and conflicting demands for Fife's limited land resource.</p>

Action Area	Description
Food and diet	Support delivery of local food initiatives; plant-based diets, food waste and food re-distribution projects. Fife Council to support plant-based options within facilities and ensure that land management plan considers local food production and food security.
Support Sustainable Transport	Prepare for the revision of the Local Transport Strategy and support sustainable transport projects through active travel, Fife Council's carbon management plan, Leven Rail Link Blueprint and Levenmouth Connectivity project.
Adaptation	Develop an Adaptation Plan for Fife. This will link to the Land Management Plan to manage Fife Council land assets in a way that will best respond to the climate emergency, including using Fife Council land to adapt to climate change and ensure food and energy security.
Maximise benefit from procurement and Council expenditure	Implement lifecycle assessment approaches to procurement - requiring energy, food, and other procurement options to consider carbon footprint could help to keep money in the local economy and reduce supply chain risks from climate change.
Waste	Deliver Zero Waste Fife - Resources Strategy & Action Plan, including supporting plastic free community projects.
Community Resilience Building	Provide community wealth building and resilience by supporting community groups to deliver climate change projects, supported by Fife Environmental Partnership and facilitated by Fife Resource Solutions.
Lobby Government	Lobby government on national policy areas to support action within Fife.

Next steps

Climate Fife is a big challenge. To make this more achievable the next ten years to 2030 are set out in three stages shown below.

A more detailed ten-year action plan can be found at www.fife.gov.uk/climatechange

Get involved - your climate needs you

There are lots of things we can all do:

- **Home - Greener Scotland** can provide hints and tips on what you can do at home.
- **Community - Fife Communities Climate Action Network** is a network of people in Fife keen to support action in their community, why don't you join or start a group near you.
- **Local business** - can play their part too. Consider joining **Green Business in Fife**. Businesses can also get direct support from **Zero Waste Scotland**.
- **Public sector** - find out which organisations are involved through the **Fife Environmental Partnership**.

We look forward to working with Fifers to develop shared, local solutions to this global problem. Every action taken makes a difference, and time we fail to act will take us closer to runaway warming. **Our Fife matters, please join us in tackling the climate emergency.**

Suggestions for new actions are welcomed and should be submitted to:
www.fife.gov.uk/climatechange

or let us know on **climatefife@fife.gov.uk**