

# CLIMATE PLAN



LIVE LEARN WORK INVEST VISIT

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Review date		00/00/0000	00/00/0000			

#### Strategic Alignment

Choose the priority from the Plan for North Lanarkshire with which the strategy most aligns.

- Improve economic opportunities and outcomes:
  - Ambition 1. Ensure a housing mix that supports social inclusion and economic growth.
  - Ambition 2. Refocus our town centres and communities to be multi-functional connected places which maximise social, economic and environmental opportunities.
  - Ambition 4. Market and promote North Lanarkshire as the place to live, learn, work, invest, and visit.
  - Ambition 5. Grow and improve the sustainability and diversity of North Lanarkshire's economy
- Support all children and young people to realise their full potential
- Improve the health and wellbeing of our communities
  - Ambition 11. Increase economic opportunities for adults by understanding, identifying and addressing the causes of poverty and deprivation, and the barriers to financial inclusion
  - Ambition 15. Encourage the health and wellbeing of people through a range of social, cultural, and leisure activities
- Enhance participation, capacity, and empowerment across our communities
  - Ambition 16. Transform our natural environment to support wellbeing and inward investment and enhance it for current and future generations.
  - Ambition 17. Ensure we keep our environment clean, safe and attractive
  - Ambition 19. Improve engagement with communities and develop their capacity to help themselves.
  - Ambition 20. Improve the involvement of communities in the decisions, and development of services and supports, that affect them
- Improve North Lanarkshire's resource base:
  - Ambition 21. Continue to identify and access opportunities to leverage additional resources to support our ambition.
  - Ambition 22. Facilitate a North Lanarkshire-wide approach to asset rationalisation, including with communities and partners.
  - Ambition 23. Build a workforce for the future capable of delivering on our priorities and shared ambition.
  - Ambition 25 Ensure intelligent use of data and information to support fully evidence based decision making and future planning.

Consultation and Distribution Record				
Consultation Process	Insert presentations made, surveys carried out etc			
	Contacts identified for each service			
	<ul><li> Elected members</li><li> All council services</li><li> Contractors/ESCP</li></ul>			
Stakeholders	<ul><li>Peer local authorities</li><li>Sustainable Scotland Network</li><li>Scottish Government</li></ul>	Insert service, organisation		
	<ul><li>North Lanarkshire Partnership</li><li>Climate Ready Clyde</li><li>Community and faith groups</li></ul>			
Distribution	Describe publication and distribution method – e.g. website, stakeholders etc			

Change record			
Date	Note: an update will be made as soon as a national guidance is received.	Author	insert contact details
Change made		insert details of changes made	

# Document summary

Climate Change is an important issue for us all. Changes in our weather and an increase in severe weather events is a symptom of climate change. Greenhouse gases caused by humans have been found to be responsible for these changes. In the future they are likely to become more severe. Climate change will not just affect humans. There is a risk that we may lose native species of animals and plants.

The nations of the world have pledged to continue to reduce their own emissions. The Glasgow Conference of Parties (COP 26) which is a climate meeting for the United Nations will continue the focus on what needs to be done to limit temperature increases.

The council declared a climate emergency in June 2019. It has committed itself and the area of North Lanarkshire to achieving net zero emissions by 2030. For North Lanarkshire the main emissions that need to be tackled are related to energy used in buildings and transport emissions. To achieve net zero, communities, business and industry as well as other organisations will need to help by reducing their own emissions. The council's emissions known as its carbon boundary are slightly different with the main source being mostly due to the buildings it uses. This will be a priority for the council.

Since 2007 the council has worked to target emission reductions. This has been done through actions that:

- Educate
- Planning for a sustainable future including town centre regeneration and community hubs
- Reduce waste
- Reduce the need to use energy and at the same time increase our use of renewables
- Improve the energy efficiency of domestic and nondomestic buildings
- Encourage the uptake of climate friendly technology

- such as electric vehicles as well as active travel (such as walking and wheeling) to reduce transport emissions
- Continue to enhance existing greenspace and biodiversity whilst making improvements to disused pieces of land
- Adapt for future weather events caused by climate change.

The plan contains a series of annual emission reduction targets for the council with a fixed ambitious target of 13.4% for building related emissions. In achieving the targets set the council will have reduced its footprint by 78.58%. This is based on its level of emissions from 2015/16. The council will still have to decide how it will tackle the remaining emissions. North Lanarkshire contains many different types of organisations, businesses and communities and so the purpose of this Plan to is encourage all to be involved in reducing the area's emissions. The council already works in partnership to deliver climate action through:

- The North Lanarkshire Partnership's 'ACT Now' climate group
- Climate Ready Clyde

This draft strategy will continue to be developed and will be informed through consulting with our residents, elected members and other local organisations and business.



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## The Plan

The Plan for North Lanarkshire provides a shared ambition where North Lanarkshire is the place to Live, Learn, Work, Invest and Visit.

The Plan for North Lanarkshire sets out the council and its partners' ambition for the area. It identifies a sustainable North Lanarkshire as a strategic priority with a focus on improving energy efficiency; reducing carbon dioxide emissions; improving the quality and energy efficiency of homes; contributing to meeting the climate change target. The Plan sets out its financial proposals for the next 10 years:

- Community Investment Fund
- General Fund Capital Programme
- Housing Capital Programmes
- Revenue Repairs
- Roads maintenance

and as it matures via the Programme of Work, climate change actions will need to be fully integrated and overt in its detail.

There are number of strategic supports already in place within the council such as the Environment Strategy which the Carbon Management Plan (the predecessor to this plan) sits under, along with other key documents such as:- Biodiversity Action Plan; Core Paths Plan; Open Space Strategy; Single-Use Plastic Action Plan; Transport Strategy; and, the Walking and Cycling Strategy.

The council has committed to the replacement of all pre-1996 schools and establishments including the Strategy and Prioritisation programme for the Community Hubs. This builds on improvements to the estate made through delivery of the Scotland's Schools for the Future programme and will look to continue to provide higher performance energy efficient buildings.

An asset rationalisation programme wider than the educational estate is also underway. In March 2020 a report to committee further strengthened the programme's commitment and alignment to 'move to a carbon neutral operating model by 2030' by proposing further notable refinements and changes to the council's estate.

The responsibility to act and prevent further climate change lies not solely with the council but with other organisations, businesses and individuals too.



## Our Changing Climate

Scotland has always been a wet and windy place, and generally colder than the rest of the UK. Is our weather changing? And is it due to climate change?

Changes in our seasonal weather and an increase in significant weather events is an indicator of climate change. In Scotland, we already have witnessed changes in our climate:

- The ten warmest years on record have taken place since 1997
- There has been an increase in intense rainfall events (heavy downpours) as well as an increase in the average annual rainfall
- As the average seal level rises neighbouring authorities such as Glasgow and South Lanarkshire - and others along the Clyde including North Lanarkshire - will increasingly feel the impact of this i.e. flooding.
- There is also an increasing risk of flooding via ground surface water. This is more likely when there has been an intense rainfall which falls on hard ground with no means for it to soak away. For example, when there has been a period of dry and hot weather.

Climate projections are based on a range of forecasts for greenhouse gas emissions. Using these forecasts, we can plan for the future and become climate ready.

We know that the changes we have already seen will continue, becoming more frequent and intense. Our weather will continue to be variable however the severity of climatic changes is dependent on how quickly we all act to reduce our emissions.

Our summers will become hotter and drier, and our winters will have milder temperatures and will be wetter with less chance of snow. The impact of these changes has already been seen:

- Travel disruption
- Emergency response situations
- Loss of power supply
- Landslides
- Flooding
- Increased risk of fires
- Disruption to service delivery

A summary of changes expected in the next 50 years is provided in Table 1.

Greenhouse gases occur naturally however it is those resulting from human activity that have been scientifically proven to have caused an imbalance in natural systems resulting in climate change. As we continue our day-to-day activities, the level of greenhouse gases continues to increase in the atmosphere, increasing the likelihood of a 2oc global temperature rise and increasing the pace of change.

Table 1 Summary of Projected Range Changes in UK Climate by 2070

	Summer	Winter	
Temperature	0.9°C to 5.4°C	0.7°C to 4.2°C	
Rainfall	-47% to +2%	-1% to +35%	

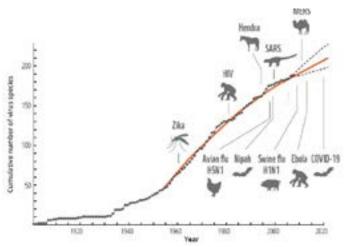
Source 1 UKCP18 Science Overview, Executive Summary (Met Office, 2019)



#### Climate Plan Action on Climate Together 2030 2021

These changes are expected to lead to a loss of some of our native species (such as the Atlantic Puffin, Mountain Hare, Great Yellow Bumblebee and Bluebell) and habitats in Scotland. We will see an increase in invasive species as well as an increase in emerging diseases that have originated from animals that affect humans (SARS, MERS, Ebola, COVID-19).

Figure 1 The timeline of zoonotic diseases



Source 2 Beyond Boundaries: Insights into Emerging Exotic Diseases, Nature and human well-being (WWF, 2020)



## Covid-19

Covid-19 was declared a pandemic on 11 March 2020 by the World Health Organisation (WHO) and by the 16th March the first of a series of restrictions were introduced which escalated to a nationwide 'lockdown' by the 26th March.

Daily emissions across the globe were reduced by 17% however scientists estimated COVID-related reductions to be between 4%-7% for the initial few months. Travel restrictions, an increase in those home working as well as the fact that some sectors were unable to operate would suggest these reductions would be realised and this assumption was supported by declaring Earth Overshoot Day as 22nd August in 2020. Consumer behaviours adapted during the height of the pandemic with an increase in online shopping whilst more households shopped local, most likely due to travel restrictions. Over the past 16 months there has been an increased focus on hygiene related products and so there has been an obvious impact on waste associated with this: disposable gloves; plastic bottle; masks etc, and the transportation of these goods.

Earth Overshoot Day (EOD) is calculated by the length of time it has taken humankind to use up the natural resources it takes a year for the Earth to renew. As restrictions became more relaxed, emissions increased and resulted in a 6% increase in the global footprint. Meanwhile the continued loss of natural carbon sinks and stores such as trees continued to intensify this issue. In 2021 EOD was marked on 29th July and is a stark reminder that deliberate climate action is not a short-term commitment.



## Response to climate change

The United Nations Sustainable Development Goals (2015) provide a focus and the building blocks to achieve a just, resilient transition while taking appropriate climate action.

Figure 2 United Nations Sustainable Development Goals

















Source 3 United Nations, Dept of Economic and Social Affairs

On the recommendation of the Intergovernmental Panel on Climate Change (IPCC), the United Nations at COP21 in Paris agreed to reduce greenhouse gas emissions and limit the global temperature increase to below 2°C by the year 2100. This commitment requires urgent action by 2030.

The focus of the agreement is however to limit increases to below 1.5°C as the impact of temperature rises above this is unsafe to human life, other species and habitats.

The Glasgow Conference of Parties (COP 26) is important as it will resolve outstanding issues from the Paris summit and further enhance the Agreement as nations, including the UK, will ratchet-up their National Determined Contributions (climate action plans).

The Climate Change (Scotland) Act 2009 is the legislative vehicle for Scotland to reduce its greenhouse gas emissions, adapt to climate change and to promote sustainable development. Part 4 of the Act requires the council (in the provision of its core functions):

- To contribute to the delivery of emission reduction targets set within the Act and subsequent Climate Change Plan: Report on Proposals and Policies (RPP);
- To contribute to the delivery of adaption actions; and
- To act sustainably.

In September 2019 the Scottish Government consulted on 'The role of public sector bodies in tackling climate change' and this resulted in an amended public bodies order.



Figure 3 Extract of Order: Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020, SSI 2020/281

#### SCOTTISH STATUTORY INSTRUMENTS

#### 2020 No. 281

#### CLIMATE CHANGE

The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020

Made - - - - 11th September 2020

Laid before the Scottish Parliament 14th September 2020

Coming into force - 9th November 2020

The Scottish Ministers make the following Order in exercise of the powers conferred by sections 46(1) and 96(2) of the Climate Change (Scotland) Act 2009(a) and all other powers enabling them to do so.

#### Citation and commencement

 This Order may be cited as the Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020 and comes into force on 9 November 2020.

#### Source 4 Legislation UK

The new order requires public sector bodies to provide the following information:

- a target date for achieving zero direct emissions of greenhouse gases, or such other targets that demonstrate how the body is contributing to Scotland achieving its emissions reduction targets;
- any targets for reducing indirect emissions of greenhouse gases;
- how the body aligns its spending plans and use of resources to contribute to reducing emissions and delivering its emissions reduction targets;
- how the body will publish, or otherwise make available, its progress towards achieving its emissions reduction targets;
- how the body is contributing to Scotland's Adaptation Programme (the most recent version of which was published in September 2019).

Its main purpose is to ensure that organisations' climate plan targets are not set beyond that of 2045 and therefore help achieve the national target.

Government policy is an important mechanism for driving change. The core principles of most recent Scottish climate and energy policy development reflect the ethos of the UN SDGs: fairness, equality, health and wellbeing, climate action etc.

The Environment Strategy for Scotland makes a commitment that by looking after and restoring nature, and no longer being a contributor to climate change, Scotland will be transformed, benefitting people and the environment.



Figure 4 Environment Strategy for Scotland: Contribution of the Environment Strategy vision and outcomes to National Outcomes and UN Sustainable Development Goals



Source 5 Environment Strategy for Scotland



#### Climate Plan Action on Climate Together 2030 2021

The six outcomes are aligned to the UN SDGs as well the National Performance Framework reflecting the interdependency of environment with other aspects of policy (Children & young people; Communities; Culture; Economy; Education; Environment; Fair work & business; Health; Human rights; International; Poverty).

The Just Transition (A national mission for a fairer, greener Scotland) looks at how the changes in work life, business, travel, energy use, what we buy and what we eat will lead the nation to net zero by 2045. And while it is an opportunity for change, inequalities must be addressed whilst further improving our wellbeing and communities, ensuring that all share in the benefits realised and the people of Scotland are key to this. The pace of the transition must ensure that no-one is left behind, noting it affects aspects of life, business and policy.

The Circular Economy Bill is expected to be introduced in the next Scottish Parliament. Based on the principles of the UN SDG no. 12 'Responsible Consumption and Production', the Bill is expected to:

- reduce waste and reduce litter by targeting unnecessary production of single-use items
- reduce footprint of waste
- increase and improve recycling
- have potential to create additional jobs.

The Green Growth Accelerator, also known as the 'Green City Deal' is an extension of the current Scottish Futures Trust growth accelerator model. It focuses on infrastructure projects that support a transition to a net zero economy and unlocks additional monies of £200m in Scotland. It is a risk sharing, revenue finance model with local authorities making commitments to delivery of outcomes that are supported by investment in infrastructure.

Figure 5 Scottish Energy Strategy Core Principles



Source 6 Scottish Energy Strategy

The Scottish Energy Strategy is the vision for the future energy system in Scotland. Guided by three core values as shown in Figure 6, it focuses on six priorities as shown below:

Figure 6 Scottish Energy Strategy Priorities



Source 7 Scottish Energy Strategy





It is clear from the Strategy that increasing the amount of renewable electricity and heat is key to improving energy security as well as driving down emissions. Engagement with both communities and business will be vital to delivering changes including a renewed focus on heat networks and changes in consumer behaviour such as the uptake of low emission vehicles. It is important to continue to improve the energy efficiency of buildings through insulation and technology as this will also reduce the demand for heat and electricity. This targeted approach will benefit those who are in fuel poverty and frequently must make a choice of whether to 'heat or eat'.

Scotland is an exporter of oil and gas with the sector generating an annual turnover of £25 billion. 'Local' supplies of oil and gas can reduce the net global emissions associated with energy transportation. Without sufficient alternative solutions, fossil fuels will continue to play their part in the Scottish energy system for the immediate and medium-term future.

The Programme for Government (2020) contains a commitment to progress the ambition of 20 minute neighbourhoods. The intention of this place-design is that the area will meet the daily needs of local residents within a 20 minute walk of their home. It includes active travel as well as sustainable travel such as use of existing public transport. The progress of this will impact greatly on transport-related emissions.

The Energy Efficiency (Domestic Private Rented Property) (Scotland) Regulations 2020 targets driving improvements in the energy efficiency levels of properties owned by private landlords. This statutory instrument was enabled through section 55 of the Energy Act 2011. Whilst focussing on improving energy performance ratings it recognises that it is not possible to improve some properties. When a landlord has exhausted all possible solutions, they can register the property with the council so that is included in a list of exemptions. The council has the power to make sure landlords comply with the regulation and can issue financial penalties.

The Scottish Government has carried out a considerable amount of climate and energy related consultation over the past three years with the most significant being the 'Draft Heat in Buildings Strategy: Achieving Net Zero Emissions in Scotland's Buildings' in early 2021. The aim of the Strategy is to make the necessary changes to our buildings (homes, workplaces and community buildings) to ensure Scotland meets both its fuel poverty and climate change targets. Containing over 100 actions, its focus is on accelerated action with improved standards for new build and notable energy efficiency improvements coupled with low or zero emission heating technology, and one-time retrofitting of existing buildings. The draft strategy also commits local authorities to the development of Local Heat and Energy Efficiency Strategies (LHEEs) which will be a local guide for developing affordable, decarbonised heat solutions.

Scotland's Climate Assembly has a membership representative of society from across Scotland. They were tasked to look at what change was needed to tackle the climate emergency and identify actions that were useful and fair. A report 'Recommendations for Action' was laid before Parliament in June 2021 and can be broken down into 16 overarching proposals including building quality, retrofitting of homes and carbon labelling. It now falls to Scottish Ministers to publish a statement within the next 6 months of how it intends to respond to the content of the report.



## Carbon Footprint

The council declared a climate emergency in June 2019 and has committed itself and the area of North Lanarkshire to achieving net zero by 2030. There is much related activity and actions (mitigation, adaptation and sustainability) required to help achieve this.

This obligation will continue until there is available technology and it is sufficient in scale to remediate the current levels of carbon dioxide in the atmosphere.

The target commits the council to working towards zero emissions as far as reasonably practicable to do so and thereafter to consider sequestration or carbon offsetting for the residual emissions. To achieve this the council will work closely with its staff, local businesses and local communities.

On 17 June 2021 the council agreed to sign up to the Edinburgh Biodiversity Declaration. As a local government authority it has a role to promote the biodiversity agenda and has a responsibility to protect its local biodiversity.

The council continues to improve its understanding of the action necessary to reduce greenhouse gas emissions and promote nature-based solutions in North Lanarkshire. It is clear though that the council must cut out and cut back its emissions, limit its waste by embracing the circular economy, as well as adapt to the changing climate.

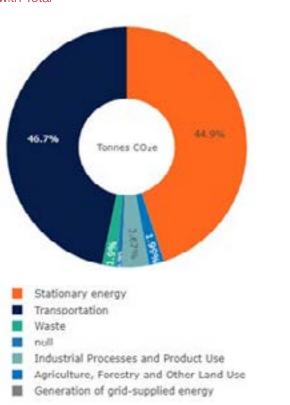
All local authorities will be challenged to deliver significant carbon reductions within their estate, social housing, as well as fleet and waste. In order to have the capacity to plan and progress the actions needed i.e. have the ability to act, there must be sufficient financial resources and support in place. Similarly it will also be challenging for other organisations and businesses to achieve net zero in North Lanarkshire.

## North Lanarkshire

North Lanarkshire has an energy carbon budget of 11.1MtCO2 for the period 2020 to 2100. Like any other budget, the quicker it is 'spent' the less allowance we have for later. The current rate of energy associated emissions will see this budget exhausted by 2027. For North Lanarkshire to make its fair contribution to the Paris Agreement, it would require an annual reduction of 13.4%.

North Lanarkshire is comprised of several towns and settlements which are geographically spread over an area of 470km2. Despite an accessible rail network, the population (341,370) and businesses are predominantly reliant on the local road infrastructure for travelling, commuting and transportation. It is then unsurprising that on-road emissions account for 84% of transportation related emissions.

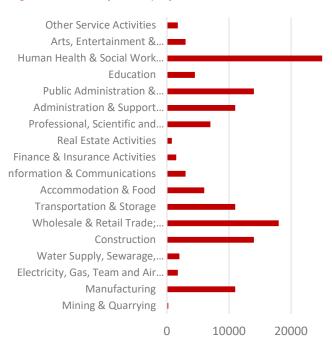
Figure 7 Sector Inventory Summary for North Lanarkshire with Total



Source 8 Setting City Area Targets and Trajectories for Emissions Reduction, 2018 Emissions (2021)



Figure 8 Summary of Employment in North Lanarkshire



#### Source 9 Nomis Official Labour Market Statistics

The workforce profile helps us to understand the relationship between the North Lanarkshire economy and emissions from different business and industry sectors. The main sectors (health and retail) are less likely to have capacity for staff to work from home.

Of the stationary energy emissions, residential buildings account for 22.9% (602,718.24 tco2e). The council has a direct responsibility for reducing the emissions of 24% of North Lanarkshire housing and is the largest single social landlord in Scotland. The private sector accounts for 62% and other social landlords account for 13% of the remaining homes. According to the most recent Scottish House Condition Survey (2017-2019), 84,000 homes have an energy efficiency rating of a B or C. This suggest that there are about 68,000 homes that need energy efficiency improvements in order to meet the Scottish Governments target EPC C rating.

The Energy Efficiency Standard for Social Housing is now in its second edition. All social housing is expected to achieve the standard or be as energy efficient as it possible to achieve by December 2032. Improving the energy efficiency of housing will reduce residential emissions as well as help remove this as a driver of fuel poverty. The standard's timeline has been designed to support the ambitions of the Scottish Government's 2045 net zero target.

The responsibility of improving private sector homes lies with the owner-occupiers and private landlords. There is advice and assistance available to private sector housing via Home Energy Scotland:

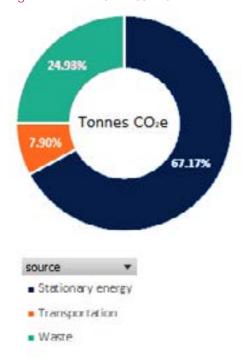
- energy advice
- help to switch energy supplier
- energy carer help for vulnerable
- referral to Warmer Homes Scotland for those that meet the criteria

Warmer Homes Scotland provide an energy efficiency improvement service to eligible private sector households. Following an energy survey, the scheme will deliver energy efficiency improvements such as insulation, heating upgrades, doors and secondary glazing, as well as renewables. The scheme is designed to give help to those that are in most need, targeting those vulnerable to fuel poverty.

Tackling the area wide emissions will require commitment from the council, its partners and businesses operating in North Lanarkshire. The council intend to provide a number of events to help businesses. This will include awareness raising as well as directing them to resources available to them.

## The council's emissions

Figure 9 Council's Emissions 2019/20



Source 10 Public Sector Climate Change Duties Report



#### Climate Plan Action on Climate Together 2030 2021

The greenhouse protocol provides a standard to calculate emissions and is updated regularly, reflecting sectorial changes such as the 'greening of the grid' and increased emission penalties for waste that goes to landfill. The council reports on the emissions that fall within its carbon footprint i.e. corporate buildings related energy use and small-scale site generation, fleet, waste and business mileage.

In 2019/20 the council reported a carbon footprint of 77,113 tco2e. This was a reduction of 34% from its 2015/16 baseline (117,075 tco2e). Whilst there has been good progress in reducing building related emissions (31% compare to baseline), the council has been most successful in reducing its overall waste emissions by 46%.

As building-related emissions (stationary energy) accounts for 67.17% of the council's footprint, the focus for carbon reductions must be on its existing buildings to improve energy efficiency, reduce heat demand and decarbonise heat. At the same time, it must consider the design of its new buildings and how to limit the 'embodied' carbon associated with building materials, construction and demolition.

As the climate continues to change, it acts as a catalyst to the loss of natural habitats and species i.e. they are intrinsically linked. The symbiotic relationship between environment, health and wellbeing and the economy has become more evident in the past year (i.e. COVID-19). Nature based solutions (NbS) captures several facets of natural systems management and the use of these as a resource to tackling environment issues. The Greenspace Team through its delivery of the Biodiversity Plan will continue to protect and enhance the blue and green spaces in North Lanarkshire to maximise carbon storage and minimise release. This work is being enhanced by the Growth Team's work in bringing vacant and derelict land back into use to support greening of these sites. The new park development at Ravenscraig and the creation of allotments in some towns are examples of this work.

Figure 10 Ravenscraig Park



Looking towards 2030, the council will need to consider how it will tackle the residual emissions of both its own carbon footprint and that of its housing stock. Acting as a store, existing peatland and woodland helps to tackle historic emissions and therefore cannot be used to sequestrate carbon from the current footprint. If the council were to achieve a positive carbon impact in one area of its footprint, e.g. via renewable generation, it would be feasible to use this to offset its other emissions.



## Climate Action to Date

The council continues to target emission reductions whether this is through communication, behavioural change or direct action. The following highlights a few of the past and current activities.

### **ACT2021**

With COP26 taking place nearby in Glasgow, it is a good opportunity for the council to raise the profile of the climate agenda including its net zero emissions target for North Lanarkshire. For 2021 the council has committed to delivering a series of events Action on Climate Together 2021 (ACT2021) which will target climate change denial, improve awareness and, raise individuals' and organisations climate ambition. The first of these events was held on 18th May and focussed on embedding climate responsibility with staff, partners and other invited guests. As the event and the others in the series are held on online, the associated footprint is considerably lower than if it had been held at a venue. The events are also being used as an opportunity to collect the views of different stakeholders to strengthen this plan's development.

Two further events are planned to target the North Lanarkshire business community and schools. Both groups are key to the successful delivery of this climate plan and associated action.

### **Education**

Learning for sustainability is a theme which is woven throughout the Curriculum for Excellence (CfE). Younger learners explore issues affecting their school and local community and as they progress, how these issues become relevant in wider national and international context. Schools work in partnership, dependent of their local context, with organisations or initiatives that address environmental issues. This could be with local businesses, John Muir Trust, the Duke of Edinburgh Award or Eco Schools.

Figure 11 Learning for Sustainability Word Cloud



Source 11 The General Teaching Council for Scotland

There is much good work in our nurseries, schools and centres. E.g. Staff and pupils have worked to establish systems that help to improve recycling by separating cardboard and paper, and dinner halls have separate bins for the collection of food waste.

## Tree Planting

In February 2021 the council agreed that every ASN and Primary Pupil would be able to plant a tree in recognition of the climate challenges we face in the run up to COP 26. The Greenspace Team are looking at areas of council land where two or three 'Climate emergency' woodlands can be planted. Along with education colleagues they are organising how and where the tree planting will take place.



#### Farth Hour

For the past few years engaging with school children has been the focus of the council's participation in Earth Hour. This year children were invited to submit artwork or poems on any aspect of climate change. With over 400 entries, it proved to be the most successful campaign to date and resulted in the production of a short video which was released in time for Earth Hour. A further video was recorded of two siblings from Clyde Valley High School reading their thought-provoking poem 'There is no Plan-et B'. Both videos were aired at the first ACT2021 event.

### **Town Visions**

The council has developed Visions for each of its eight towns. These set out an aspirational plan for transforming the area's town centres. Low-carbon development and sustainability will be at the heart of each town. Repopulating town centres and ensuring that they have excellent connections with active travel routes and public transport, reducing unnecessary car journeys and improving residents' health and wellbeing, are core elements of each of the Town Visions. Existing town centre buildings will be kept and reused with new low-carbon homes and buildings developed only where required. This approach will limit the amount of emissions created by this work (known as embodied carbon). These Visions have been subject to significant community engagement and will be taken forward for committee approval later in 2021.



## Local Heat & Energy Efficiency Strategy Pilot

Beyond 2023, Local Heat and Energy Efficiency Strategies (LHEES) will inform local development planning. The Scottish Government have made it each council's responsibility to have one in place by this date. This will ensure a single clear approach is taken to changing heat sources for buildings and heat planning across Scotland. The council has taken part in the Scottish Government's phase 2 pilot. The pilot tested and developed a method for creating LHEES. This included identifying appropriate data sources as well as gaps, and the resources and knowledge required to develop a LHEES. A socioeconomic assessment methodology was tested and enabled potential solutions to be identified for different types of areas (urban, suburban and rural). The main reasons for LHEES are:

- to enable emission reductions associated with heat
- for improving local energy security (future proofing against climate change impacts such as severe weather events)
- to deliver more relevant action due to its local focus
- to reduce the level of fuel poverty in areas
- to enable economic growth

The project was led by the Energy Team based within Asset & Procurement, supported by colleagues from other services as well as Zero Waste Scotland and the Scottish Government. A consultancy was engaged to deliver the pilot LHEES document. The draft LHEEs findings provided the insight into the scale of what it might deliver but also the significant level of investment required to do so.



## **Recycling Services**

The council provides one of the most comprehensive recycling services to residents in Scotland. The range of materials collected within a four-bin system provides over 120,000 households the opportunity to recycle at their kerbside. Communal recycling facilities are provided to other households who do not have the capacity to take this volume of bins. There are six household waste recycling centres in North Lanarkshire which provide further opportunity to recycle.

## **Street Lighting Conversions**

Recognising that street lighting is one of the council's largest consumers of electricity a strategy was put in place to replace lanterns with LED ones. This continues to deliver both carbon reductions and cost savings to the council.

## **Energy Efficiency Fund & NDEEF**

Since 2017 the council has used the Non-Domestic Energy Efficiency Framework to assist the delivery of its carbon saving projects within its corporate estate. Developed by the Scottish Government it provides a framework to deliver the retrofit of energy efficiency works to existing non-domestic public buildings or grounds. With the added value of the project support unit (PSU), the framework helps the council identify additional energy saving measures. At the same time the council set up its own rolling fund using £500k of Salix funding which was matched with the council's capital monies. The rolling fund is used to deliver carbon saving energy efficiency projects which are mainly delivered via the NDEEF. It is anticipated that through the reinvestment of project savings, the fund will become self-sustaining.

### Vacant and Derelict Land

The council has a strong track record of bringing vacant and derelict land back into use to support greening, biodiversity and community growing. This includes the development of Ravenscraig Park. The park opened in July 2021 and provides open space, outdoor play facilities and a wildflower meadow on brownfield land at the site of the former steelworks. Community allotments have also been developed in Bellshill, Viewpark and Wattston. Working with communities, funders and partners, the council will continue to bring vacant and derelict land back into sustainable use. It will focus on creating:

- · community woodlands/growing opportunities
- flood management solutions
- urban green spaces.

## **Energy Efficiency in Housing**

The Scottish Housing Quality Standard and more recently EESSH has been the benchmark for Housing Property and Projects to improve the energy efficiency of the council's housing stock. This has seen significant spend on insulation e.g. loft and cavity wall insulation as well as heating upgrades through boiler replacements and pipework.

The Home Energy Efficiency Programme for Scotland like LHEES is part of the Scottish Government's Energy Efficient Scotland Programme. The main focus is to reduce the amount of energy used to heat homes by installing additional energy efficiency measures such as insulation. In North Lanarkshire the scheme has delivered more than £9.5 million of energy efficient measures over the past 5 years. The scheme contributes to a reduction in fuel poor households. These are households who find it difficult or cannot afford to heat their homes.

Spending £4,245,441.60 in 2019/20, the Housing Property and Projects Investment Team delivered:

- All tenure Home Energy Efficiency Programme to 316 homes
- External Wall Insulation to 108 council homes
- Air Source Heat Pumps to 119 council homes (change to table)

The anticipated carbon savings was 913 tco2e however through targeting poor energy efficiency in buildings, the works contributed to reducing fuel poverty levels in North Lanarkshire.



## **Project PACE**

Funded by the Scottish Government, Transport Scotland and SP Energy Networks, the project delivered in both North and South Lanarkshire Council, will provide new public electric vehicle chargers. This will increase the amount available in Lanarkshire by 200% and hubs will be located over a number of sites.

Figure 12 List of PACES (Lanarkshire) Sites

North Lanarkshire	South Lanarkshire
Broadwood Stadium, Broadwood	Ally McCoist Complex, East Kilbride
Cairnhill Road Car Park, Airdrie	Belstane Avenue Car Park, Crawford
Caledonian Road car park, Wishaw	Bridge Street Car Park, Cambuslang
Chryston Cultural Centre, Muirhead	Calderglen Country Park, East Kilbride
Drumgelloch Park and Ride, Airdrie	Calderwood Community Hall, East Kilbride
Drumpellier Country Park, Coatbridge	Carlisle Road Car Park, Abington
Glebe Street Car Park, Bellshill	Carnwath Road Car Park, Carluke
Hallcraig Street car park, Coatbridge	Carstairs Park & Ride, Carstairs
High Street library/sports centre, Shotts	Chatelherault, Ferniegair, Hamilton
Hope Street (Aquatec), Motherwell	John Mann Park, Carnwath
Kilsyth Library, Kilsyth	John Wright Sports Centre, East Kilbride
King Street Carpark, Coatbridge	Kildare Road car park, Lanark
Pivot Centre, Moodiesburn	Lanark Loch, Hynford Road, Lanark
Sir Matt Busby Sports Complex, Bellshill	Low Parks Museum, Hamilton
Strathclyde Park (North side), Motherwell	Main Street Car Park, Main Street, Forth
The Wynd car park, Cumbernauld	McNeill Street Car Park, , Larkhall
Time Capsule Car Park, Coatbridge	Regent Drive car park, Rutherglen
Viewpark Library, Viewpark	Smugglers Brig Road Car Park, Crossford
Watersports Centre, Strathclyde Park, Motherwell	Station Road car park, Strathaven
Wishaw Sports Centre, Wishaw	Strathaven Park, Strathaven

## Strathclyde Park and Park Power

Following an extensive consultation in 2019, a masterplan has been developed reflecting the views of local communities, groups and other stakeholders. It has the ambition to make the best use of Strathclyde Park blue and green space, supported by several core and flagship principles. Energy is one of the core principles and has been explored via Greenspace Scotland's Park Power Programme (Green Heat in Greenspaces project).

Focused on heat pumps and solar photovoltaics, should the council choose to progress the project proposals, it will positively contribute to the North Lanarkshire footprint by reducing energy-related emissions. The project has potential to provide heating to nearby housing, public buildings and local business too. The planning for these proposals will link into the development of the council's Local Heat and Energy Efficiency Strategy.





## **Biodiversity Action**

The Dumbreck and Garrell project is a partnership between North Lanarkshire Council and the Scottish Environmental Protection Agency (SEPA). It is supported by funding from both the Water Environment Fund and North Lanarkshire Council.

The project, an example of biodiversity restoration as well as climate adaptation, focuses on improving Dumbreck Local Nature Reserve and the adjacent Garrell Burn for the local community and wildlife. This will be achieved through restoring the natural river channel, providing improved paths with improved protection from flooding. The project provides opportunities for health and wellbeing benefits, and cultural and natural heritage conservation and education.

The council has created several wildflower meadows as well as some pollinator habitats along routes such as cycleways. This is important as it not only protects pollinators, it helps their populations expand.

## Climate Ready Clyde: Regional Adaptation Strategy

As a member of Climate Ready Clyde (CRC) Board and subgroup, the council has contributed over the past three years to the development of a Regional Adaptation Strategy and Action Plan. With a good understanding of the climate challenges and opportunities facing the region, the strategy focuses on becoming climate ready through sixteen Flagship Actions. These actions include the Clyde Climate Forest and a retrofit housing energy efficiency project. Along with other members of CRC the council will contribute to the strategy's delivery through continued participation and resourcing.

## Driving Best Practice and the Council's Fleet

The council participates in the Energy Savings Trusts 'Fuel Good Driver Training' as it contributes to a reduction in the council's transport emissions through a reduced fuel consumption within the fleet.

The council has 637 vehicles of which 64 are electric. By 2025 a further 61 diesel vehicles will be withdrawn and replaced by electric vehicles with approximately 269 larger vehicles replaced by 2030. This will help the council to reduce emissions related to the use of diesel.

## Efficient and Cleaner Operations (ECO) Stars – Fleet Recognition Scheme

This scheme, delivered locally by the council, aims to assist businesses and organisations who are making changes to their fleet (buses, coaches and goods vehicles) in order to improve their efficiency and emissions by reducing fuel consumption. Scheme members' participation contributes to improvements in air quality, a reduction in overall emissions and to the climate change agenda.



### **Active Travel**

The council has recently completed an Active Travel Strategy for North Lanarkshire which sets out our approach to active travel policy in our area for the next 10 years. A key aspiration of the Active Travel Strategy is to help provide safe, attractive and high-quality active travel infrastructure which helps encourage people across North Lanarkshire to make everyday journeys by walking, wheeling or cycling. The key to achieving this strategy is creating and improving links not only within our towns but between our towns and beyond to the wider region. Providing these strategic connections will help ensure that our whole region is fully connected and help encourage people to travel by more active and sustainable means.

The strategy complements extensive work undertaken by the Council between 2018 and 2020 which focussed on identifying specific transport interventions in Airdrie, Bellshill, Coatbridge, Croy, Cumbernauld, Harthill, Kilsyth, Motherwell, Salsburgh, Shotts and Wishaw. The progression of these sustainable transport studies has helped identification of common active travel related problems, issues, constraints and opportunities across North Lanarkshire. These are shown below:

The strategy seeks to redress some of the historic transport network imbalance across North Lanarkshire away from the private car and towards active travel. Data from Transport Scotland's Transport and Travel in Scotland Report 2019 shows that many of the journeys undertaken within North Lanarkshire are under 5km. This high percentage of trips under 5km indicates a great potential for increasing modal shift to travel by walking, wheeling or cycling. Currently, 31% of households across North Lanarkshire have no access to a car for private use. It is essential that active travel options are accessible, attractive and affordable to reach services, employment, education and training opportunities across our area.

Figure 13 Problems, Issues, Constraints and Opportunities

### **Problems**

- 7% of our local communities are among the top 5% most deprived in Scotland and 13%
- Lack of safe crossing facilities
- Connectivity issues for non-motorised users
- Limited or inconsistent wayfinding/signage
- Safety issues concerning underpasses

#### Issues

- Low uptake of active travel for
- everyday journeys Only 25% of households in North Lanarkshire have access to a bike for personal use compared to an average of 34.4% for Scotland
- Lack of suitable maintenance of existing underpasses/footpaths
- Lack of appropriate tactile paving at crossing locations across our local area

#### Constraints

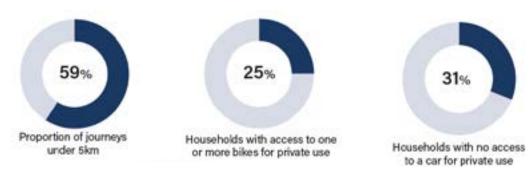
- Motorway and rail networks can create barriers to active travel journeys and permeability Protected sites of ecological importance or heritage sites can create limitations on where active travel infrastructure can be introduced
- Certain geographical features such as rivers, hills etc. can create barriers to active travel across our local area

## **Opportunities**

- Active travel improvements provide opportunity to reduce Scottish Index of Multiple Deprivation Indicators and combat transport poverty
- Opportunity to create consistent active travel networks and link existing path networks
- Opportunity to link with and improve the National Cycle Network
- Opportunity to increase the number of multi-model journeys across our local area



Figure 14 Transport and Travel in Scotland Report 2019 (Transport Scotland)

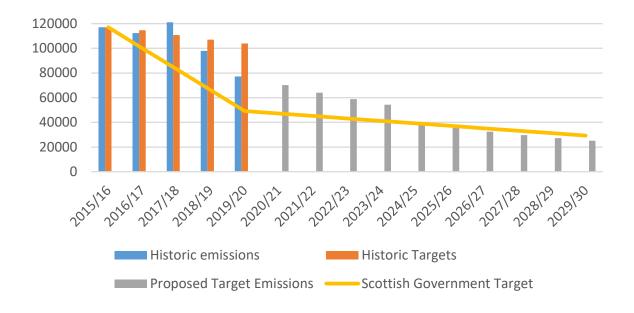


The strategy provides a framework for the Council to prioritise and bring forward active travel interventions across North Lanarkshire which will improve links not only within our towns but between our towns and beyond to the wider region.

By adopting this strategy, the Council is making a statement of intent that we will have in place a framework for active travel that supports integration in our transport network. This will help to deliver improved health and well-being and environmental, social inclusion and public access benefits.

## Targets and Action Plan

Figure 15 Historic and Proposed Emissions





#### Climate Plan Action on Climate Together 2030 2021

Achieving the council's ambitious 2030 target will rely on other sectors such as business, transport and energy taking deliberate action to reduce and offset their emissions.

The target will be difficult to achieve however it is clear that it is the right thing to do. It will require different types of organisations and business, as well as communities working towards this common goal.

The council's own route map to 2030 will continue to evolve and where feasible accelerated action will need to be considered e.g. the delivery of EESSH.

The above emission forecasts in figure 15, are based on current project information including the electrification of the council's fleet, the 2025 landfill waste target and an annual reduction to stationary energy use incorporating

savings from the asset rationalisation programme. It is expected that there will be a level of residual emissions and for the purposes of this plan, it is estimated to be roundabout 20% of the baseline year's emissions.

Savings in corporate building related emissions will be supported by the introduction of a corporate energy policy, improved inventories of non-metered supplies and consumption software for the corporate estate billing. An ambitious annual target of 13.4% reduction from the previous year's relative emissions has therefore been set to incentivise project delivery. An increased use of renewables to generate electricity for the national grid will continue to contribute to the decrease in electricity related emissions. The following is a breakdown of the annual and overall targeted carbon budget.

Figure 16 Proposed Annual Emission Reductions (Year/Source)

Annual Reduction Targets	Buildings	Transport	Waste	Annual Target	Reduction from baseline year
2020/21	13.4%	0.4%		9.0%	40.08%
2021/22	13.4%	0.4%		8.6%	45.24%
2022/23	13.4%	0.4%		8.2%	49.70%
2023/24	13.4%	0.4%		7.7%	53.58%
2024/25	13.4%	0.4%	58.81%	28.0%	66.59%
2025/26	13.4%	3.7%		9.2%	69.66%
2026/27	13.4%	3.8%		8.9%	72.35%
2027/28	13.4%	4.0%		8.5%	74.71%
2028/29	13.4%	4.2%		8.2%	76.77%
2029/30	13.4%	4.3%		7.8%	78.58%

There are a variety of solutions available to reduce emissions however they will need to be evaluated in terms of appropriateness and cost, given the scale of the corporate estate. The proposed annual targets will ensure the council meets the Scottish Government's 75% reduction target for 2030 as well as allow time for the council to consider its approach to offset the residual emissions.



### **Short/Medium Term Actions**

In the short to medium term there are actions the council is already committed to as well as actions that are achievable should there be adequate resources to support their delivery:

- Services to contribute to the development of a climate action plan
- Investigate solutions and develop pathway to net zero
- Implement Energy Policy
- Review corporate strategies and policy to ensure all align with Net Zero commitment
- Develop a community climate engagement strategy
- Develop climate literacy training for all council staff
- Explore alternative funding opportunities (such as Community Municipal Investments)
- Develop projects aimed at attracting external funding such as the Green Growth Accelerator
- All fleet (cars and vehicles) up to 3.5t GVW have to be converted to electric by 2025
- 5% or less of NL waste goes to landfill by 2025
- Continue to improve active travel infrastructure
- Continue to reduce building related emissions of existing stock through upgrading with higher efficiency appliances
- Continue to deliver targeted building related energy efficient projects through the NDEE Framework
- Continue to progress the council's asset rationalisation programme of its public buildings and offices
- Continue to adopt home working as the new 'norm'
- Continue to increase the energy efficiency of residential properties through improvements carried out through the council's EESSH programme and the HEEPS scheme
- Produce a Local Heat and Energy Efficiency Strategy in line with the Scottish Government guidelines by 2023
- Investigate the feasibility of using certified schemes to offset emissions
- Contribute to the delivery of the Glasgow City Region's Adaptation Strategy and Action Plan
- Contribute to the delivery of the North Lanarkshire

Partnership's ACT Now Plan

- Complete Adaptation Scotland's Framework for the council
- Continue to improve active travel infrastructure
- Continue to develop the council's telepresence capacity
- Continue its flood prevention activity:
  - Maintaining and repairing watercourses, emergency response planning, focussing on particularly vulnerable areas
  - Using Site Protection Plans to reduce the risk of river flooding to non-residential properties i.e. at Bothwellhaugh
  - Sustainable Drainage. The council continues to follow the regulations under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 to ensure that reasonable protection is provided to the water environment, and have a memorandum of understanding with Scottish Water in terms of adoption
  - Continue to update Flood protection studies
  - Continue to enhance Surface Water Management Plans/Studies
- Co-ordinate the council's environmental assets (e.g. trees, flower beds, open spaces, bridges, lighting columns, and carparks) to enable a holistic overview of the management and maintenance of environmental assets
- Develop a five-year parks master plan (with timetabling and resources), initially focussing on Strathclyde,
   Drumpellier and Palacerigg Country Parks. Ensuring further development of the use of greenspace to improve health, wellbeing, and social outcomes as the council recognises the value of both green and blue space in the future health outcomes of its residents
- Share services and develop Auchinlea as a dedicated waste transfer facility and investigating extension of shared Clyde Valley waste arrangements
- Undertake and develop community asset mapping (e.g. on human, social, environmental, place, financial, and physical assets), and ensure this contributes to town centre regeneration and wider vision plans. This work will contribute to future adaptation planning.



### Potential solutions

The technology does not exist at present to remove carbon emissions from the atmosphere and store them safely. There are however solutions that by themselves or combined with other measures can achieve significant carbon reductions and possibly achieve net positive carbon. This short section provides a sample of the technology and opportunities that are available that the council, other organisations, businesses and industry may want to consider in planning their route to net zero.

- Revise internal job descriptions to include the climate agenda
- Develop a local accreditation scheme for business
- Increase use of building energy management systems to reduce emissions. This would be achieved through improved control of heating, cooling and lighting.
- Energy policy to prohibit use of personal appliances such as heaters and fans.
- Retrofit of existing corporate assets to high efficiency standard (insulation, lighting, heating and controls, windows etc). This would reduce the amount of energy needed to operate the building.
- The use of district heating and cooling systems to reduce onsite emissions. The use of non-gas alternatives such as geothermal would enhance emission reductions.
- The use of heat pumps to provide heating or cooling.
- The use of site-based renewables for electricity generation and heat; heat from sewage; rainwater recovery.

- All council new build to be carbon neutral or net positive carbon beyond 2025
- The use of distributed energy storage to support emission reductions via the use of renewables i.e. microgrids
- Reduce need for transport, targeting mileage
- Encourage car pooling and car clubs within the organisation
- Promote the use of public transport
- Explore the use of alternative material/technology such as cement and refrigerants
- Development of a large-scale renewable site such as an energy park or solar meadow
- Work closely with the business and industry sector on climate change action to deliver a net zero for North Lanarkshire.

## Next Steps

This draft plan will be consulted on by identified stakeholders and thereafter the finalised plan will be brought forward before the Policy and Strategy Committee.



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