

# Carbon Management Plan 2019-22

Our plan to address, adapt and act

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## Strategic Alignment

The Carbon Management Plan supports a number of council's priorities

### The Plan for North Lanarkshire:

Improve economic opportunities and outcomes

Support all children and young people to realise their full potential

Improve the health and wellbeing of our communities

Enhance participation, capacity, and empowerment across our communities

Improve North Lanarkshire's resource base

<b>Consultation process</b>	<i>Key stakeholders, including members of the Carbon Management Group, were contacted at various stages of development for input and feedback on select and entire text.</i>	
<b>Stakeholders</b>	Contacts identified for each service	
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<b>Distribution</b>	<i>Carbon Management Group, Senior Management Team</i>	

#### Change record

<b>Date</b>	<i>00/00/00</i>	<b>Author</b>	<i>n/a</i>
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## **Foreword**

Since our last carbon management plan, the council has achieved significant reductions in key emission areas. Meanwhile the climate change and energy agenda in Scotland has gained momentum and has witnessed an increase in policy development and activity for both domestic and non-domestic buildings.

Reducing carbon emissions continues to be a key priority for the council. The Carbon Management Plan is an integral part of the Environment Strategy which brings together separate but related strategies, policies and plans to ensure a one council approach to the environment.

We ASPIRE that North Lanarkshire is the place to Live, Learn, Work, Invest and Visit and a key aspect of this will be to ensure that we have an environment that allows us to deliver on this ambition.

As a council we realise the important role we play including the example we set to our communities. This carbon management plan sets out how we aim to achieve further carbon reductions over the next three years, whilst adapting to a changing climate and looking to sustain the environment around us.

Please support our plan and help play your part in caring for our future generations.

**Robert Steenson**  
**Executive Director (Enterprise & Communities)**

In 2018, I became the Carbon Management Champion for the council and as such fully support the contents of this plan. I welcome the continued commitment from the officers of the council to in their endeavours to positively impact on our environment by targeting savings of main emissions sources.

As the policy agenda continues to evolve, I look forward to the innovative ways that the council will look to meet its carbon commitments. Furthermore, I look forward to the completion of the council's Local Heat and Energy Efficiency Strategy pilot which whilst supporting the council's carbon ambitions will look at opportunities to decarbonise heat.

**Councillor Lynne Anderson**

## Introduction

North Lanarkshire Council, along with other large public bodies such as Scotland's universities and the NHS, plays an important role in achieving the national carbon reduction targets. This carbon management plan focuses on council projects and activities that will be delivered during 2019-2022.

The success of this plan relies on the co-operation and engagement of senior managers, employees and elected members. Everyone within the organisation has a responsibility to reduce carbon emissions in their daily work activities and service delivery. This organisational commitment is reinforced by the targets set within this plan which strive to continuously reduce the council's emissions by focussing on the main emission sources.

Our residents have an important role to play and can contribute to our carbon management approach and the national/international agenda by reducing the amount of waste that goes to landfill by recycling more. They can also benefit financially from being more energy efficient as this will result in reduced energy bills for their homes. The proposed EESSH 2 will further enhance domestic energy efficiency whilst addressing the emerging issue of air quality within homes. The council's capacity to develop heat opportunities will be further strengthened through the pilot Local Heat and Energy Efficiency Strategy project.

This carbon management plan initially looks at the strategic context and drivers, providing a summary of the legislation and policies which help support public bodies such as North Lanarkshire Council in their activities to reduce greenhouse gas emissions. It also provides an overview of the council's governance arrangements i.e. the Improvement and Accountability Framework.

In Section 2, defining the organisation boundaries sets the parameters for calculating the council's footprint. The historical targets provide a summarised timeline of the council's carbon reduction journey resulting in its current footprint. Using the current footprint as the new baseline has informed the revision of the 2019 target.

Section 3 reviews the progress from the 2015/16 baseline in terms of both historic and current projects. Through the council's planned projects and activities further energy efficiencies will be generated enabling a further carbon reduction target.

Section 4 draws on the complimentary actions of other council strategies, plans and policies that will contribute directly or indirectly to the revised carbon reduction target and addressing/adapting to climate change.

Section 5 focuses on the domestic sector as this contributes to the overall emissions of the North Lanarkshire area.

Section 6 provides a high level summary of the current carbon management risk register.

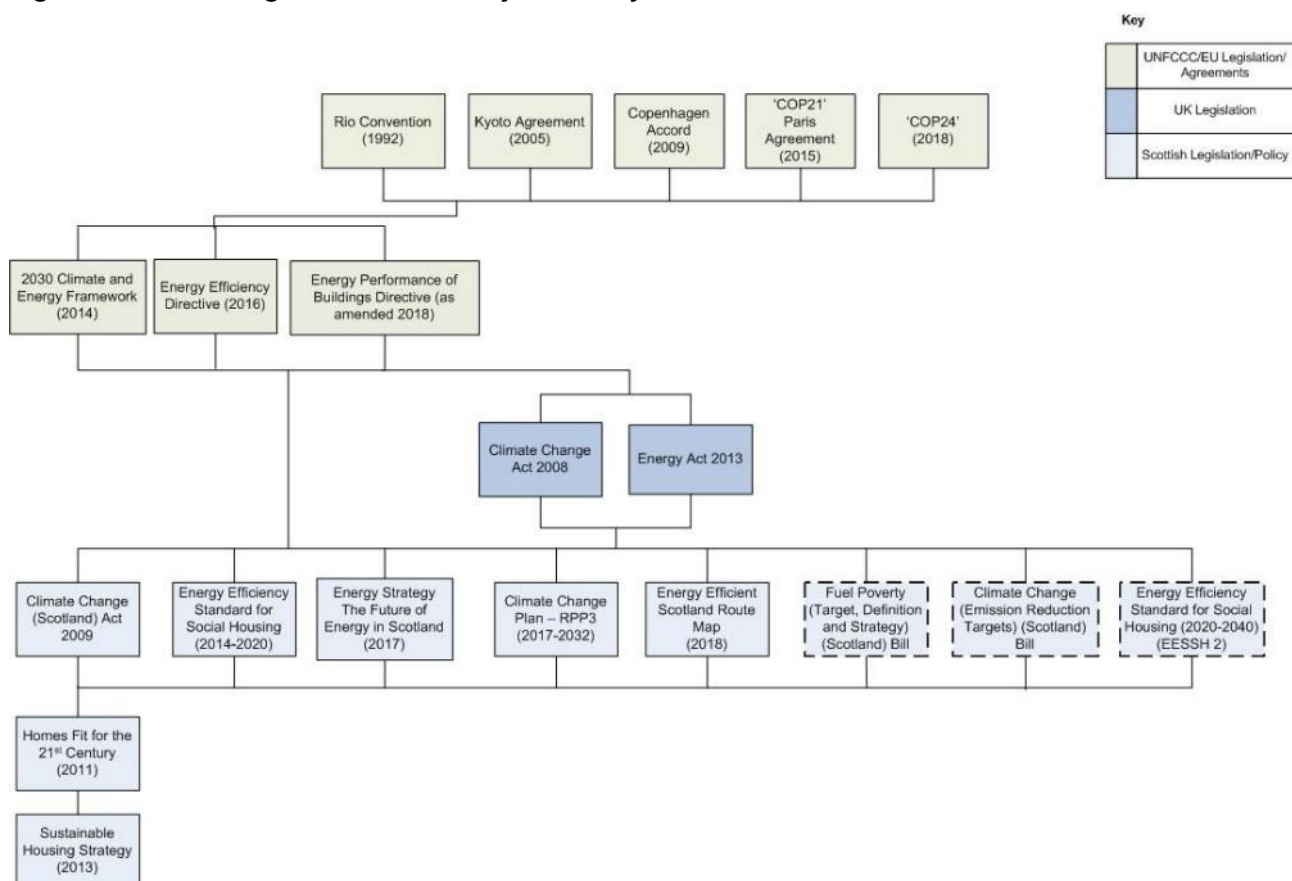
## Section 1 – Strategic Context and Drivers

The United Nations Framework Convention on Climate Change (UNFCCC) was held at the Rio 'Earth Summit' in 1992, and since then there has been an international and national drive, via legislation and policy, to stabilise the levels of greenhouse gases within our atmosphere. The Kyoto Agreement (2005-2012) was the first international agreement where there was recognition of the need, and the commitment, to reduce carbon dioxide and other greenhouse gas emissions. Within Europe, further review of policy and legislation aims to directly combat the causes of climate change. The 2030 Climate and Energy Framework follows on from the Climate and Energy Package and increased its main targets as follows:

- Reduce greenhouse emissions by (at least) 40%<sup>1</sup>;
- To meet (at least) 27% of EU energy needs with Renewables;
- Reduce energy consumption by (at least) 27% by 2030<sup>2</sup>.

In 2015 the UNFCCC 'Paris Agreement' detailed its aim to reduce emissions as quickly as possible and to aspire to halt global warming, and prevent a rise in temperature of a further 2°C. The agreement came into force on 4 November 2016.

**Figure 1: Related Legislation and Policy Summary**



<sup>1</sup> Compared with 1990

<sup>2</sup> Compared to 2007 scenario

'A Clean Planet for All' is an ambitious strategy linked to the Paris Agreement and sets out a vision for a prosperous, modern, competitive and climate neutral Europe. However, prior to the COP24 held in Poland, the Intergovernmental Panel on Climate Change (IPCC) issued a special report where they stated it was *likely* that global warming would reach 1.5°C by 2030-2052, highlighting the potential impact and risks throughout the world. At COP24 all the countries agreed to implement most of the Paris Agreement, reaching a consensus on the monitoring and reporting of performance. Further discussion will take place in Chile in 2019 to finalise the remaining detail. By 2020 however countries will need to show that they have met their own targets and developed new ones for 2030.

The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) was enabled via Part 3 of the Climate Change Act 2008. It was an incentive to reduce the amount of energy consumed in non-domestic buildings due to the cost of purchasing carbon credits for consumption. Its final year of reporting is July 2019 for the financial year of 2018/19. This will now be replaced by an additional charge within the Climate Change Levy, continuing the aim to reduce consumption and improve energy efficiency.

The Climate Change Plan (2018) is the 3<sup>rd</sup> report on proposals and policies from the Climate Change (Scotland) Act 2009. The report identifies how Scotland intends to deliver a low carbon economy. Aligning with the EU 2030 framework it looks to increase use of low carbon technologies (including heat) and the continued and enhanced improvements to buildings. It also identifies further emission reductions in:

- Transport (37%);
- Industry (21%); and
- Waste (52%).

The EES Route Map has two key policy areas to deliver: fuel poverty and climate change. It sets out a timelines with incremental targets aimed to improving both domestic and non-domestic buildings. For the first time it sets out targets for both the private rented sector and owner occupation as well as setting a specific target for homes with fuel poor households.

As a local authority, there are other key pieces of regulation and legislation that contribute to reducing carbon emissions:

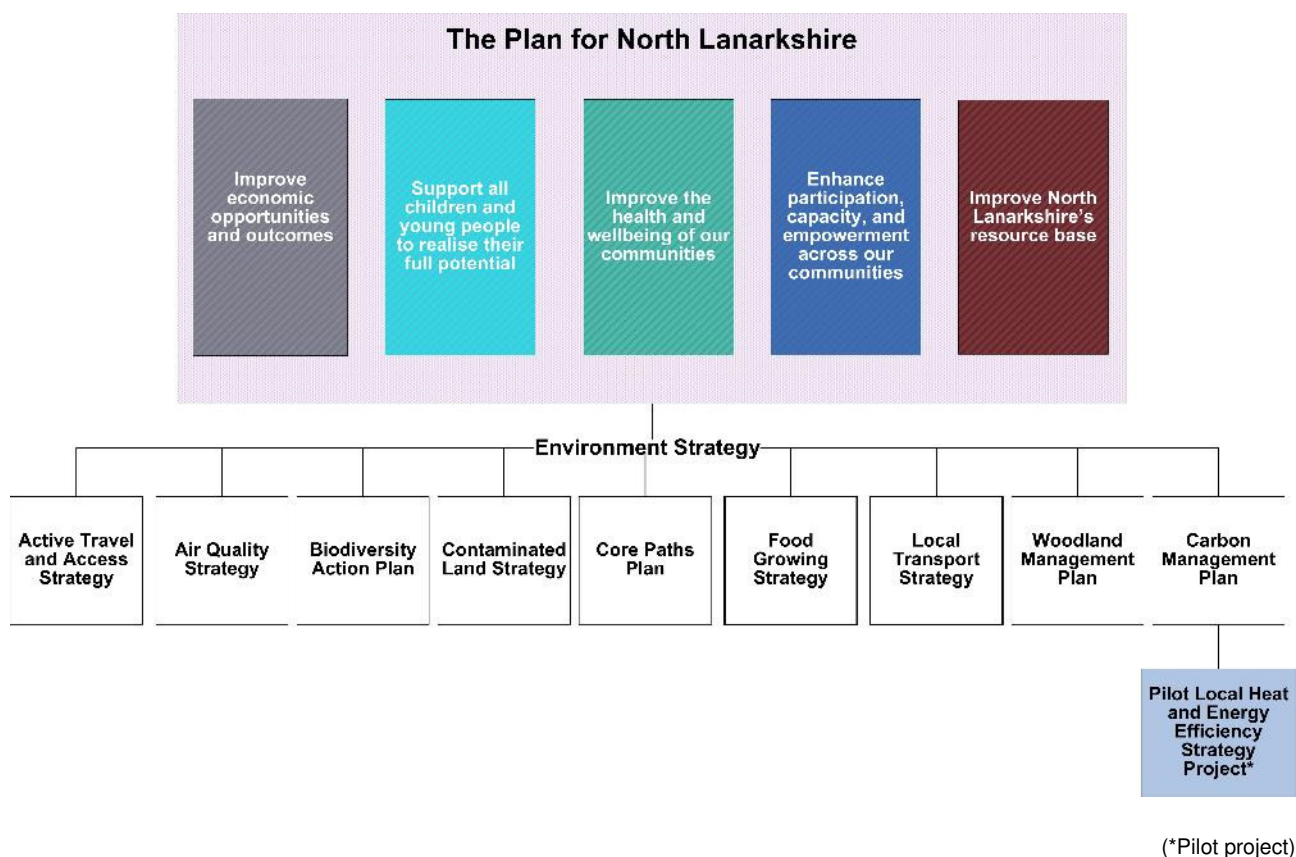
- The Assessment of Energy Performance of Non-Domestic Buildings (Scotland) Regulations 2016;
- Planning (Scotland) Act 2006;
- Waste (Scotland) Regulations 2012.
- Environmental Act 1995;
- Air Quality Standards (Scotland) Regulations.

The Plan for North Lanarkshire is the main strategic document for the council and its partners (see Figure 2) and focuses on 5 priorities with outcomes driven by clear aims and supported by clear actions. The Carbon Management Plan 2019-2022 contributes to the delivery of The Plan for North Lanarkshire and enables the council to act:

- in the way best calculated to contribute to delivery of the Climate Change (Scotland) Act's emissions reduction targets;

- in the way best calculated to deliver any statutory adaptation<sup>3</sup> programme; and
- in a way that it considers most sustainable.

**Figure 2 – Local Strategic Context**



*North Lanarkshire Council is committed to high standards of governance and has an integrated framework that brings together legislative requirements, governance principles, and management processes. Arrangements are based on key aspects of:*

- *Openness in decision making, management arrangements, and in dealing with the public.*
- *Integrity in ensuring high standards of conduct, propriety, and probity in running the council's business and managing public funds.*
- *Accountability in ensuring that the council, its members and officers are responsible for their decisions and actions, and are subject to appropriate external scrutiny.*
- *Inclusiveness in communicating and engaging with all sections of the community and encouraging active participation.*

*The council's corporate governance arrangements are designed to ensure that business is conducted in accordance with the law and that public money is safeguarded, properly accounted for, and used efficiently and effectively. Elected Members and senior officers are responsible for implementing the governance arrangements and the framework is assessed on an annual basis to ensure ongoing effectiveness and compliance.*

<sup>3</sup> climate change



*The council's governance framework comprises the systems, processes, cultures and values by which the council is directed and controlled. It enables the council to monitor the achievement of its objectives and consider whether those objectives have led to the delivery of appropriate and cost-effective services. The council is responsible for reviewing and monitoring each element of the framework and providing evidence of compliance.*

*The council's wider governance arrangements include:*

- identifying and setting out the council's priorities in The Plan for North Lanarkshire and in other policy statements agreed by the council;*
- monitoring of the achievement of objectives by the council and senior officers;*
- a systematic approach to monitoring service performance at both officer and elected member levels including targets against which financial and operational performance can be assessed and regular reporting on performance to council committees;*
- clearly setting out the remits, functions and powers of committees and sub committees in a scheme of administration and allocating delegated powers to officers;*
- Financial Regulations that specify relevant procedures and controls over budgeting, income, expenditure and financial performance;*
- comprehensive budget and expenditure monitoring systems;*
- clearly defined capital expenditure guidelines*
- a Monitoring Officer to ensure compliance with laws and regulations;*
- an Audit and Governance Panel whose activities and core functions comply with relevant CIPFA standards for audit committees; and*
- highlighting expected standards of behaviour in Codes of Conduct for elected members, chief officers and employees.*

*An additional element of the governance framework and a key part of the system of internal control is the council's risk management arrangements which are designed to identify, assess, prioritise and mitigate risks to the achievement of the council's priorities. [Extract from Annual Governance Statement].*

### Carbon Management Group

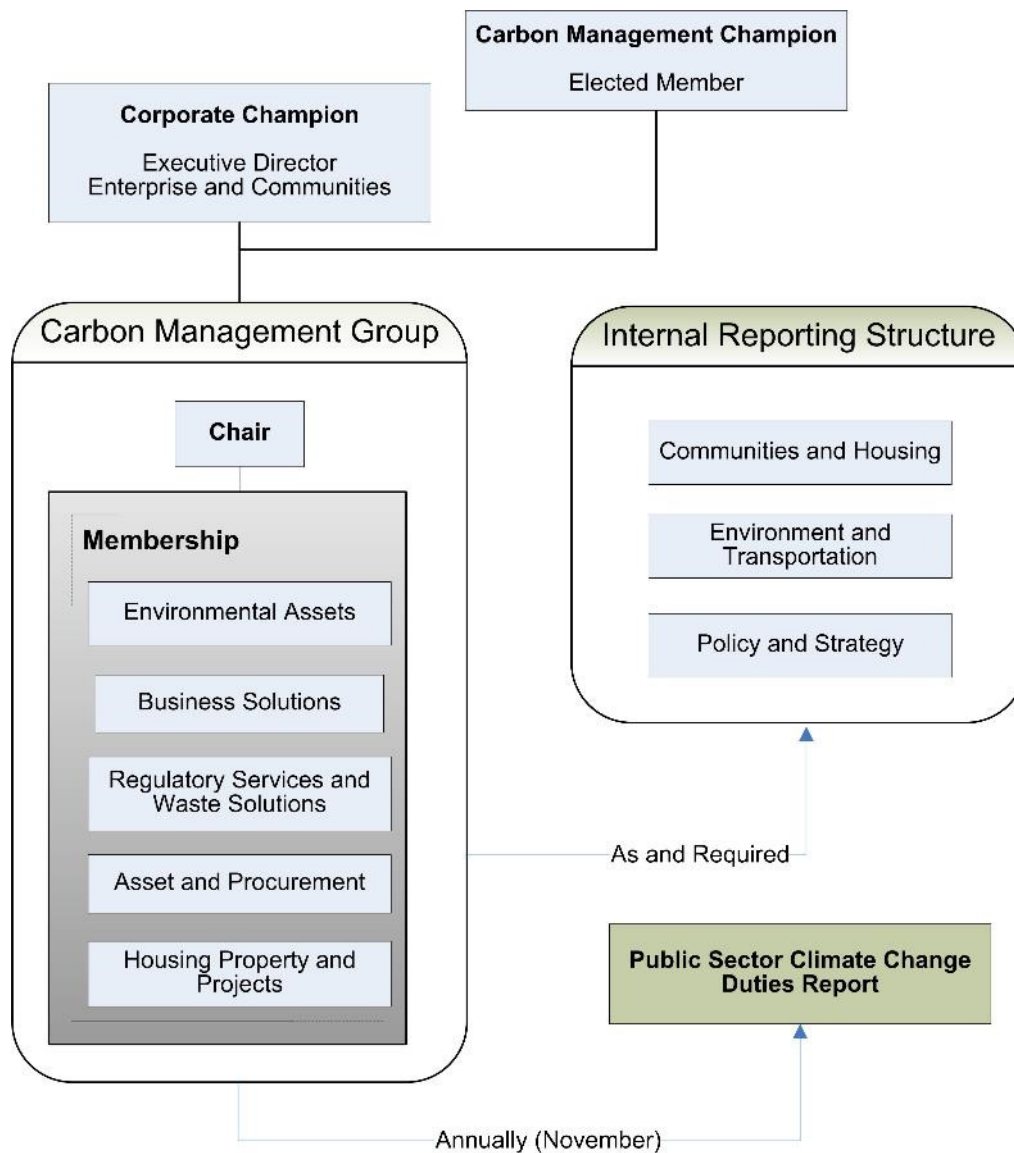
The Carbon Management Group was formed in June 2016 and its role is to co-ordinate the delivery of sustainable actions and reduce the emission of greenhouse gases. The group utilises a multi-service approach to improving the council's response to climate change, operating within the council's governance framework.

The group is comprised of officers from across the council and ensures that the carbon reduction agenda is embedded throughout the organisation. The group mainly has a strategic role, while individual services are responsible for policy and project delivery. Meeting on a quarterly basis, the group's strategy is to ensure that the council's services engage and contribute to the delivery of the Carbon Management Plan.

The group also has the responsibility for the annual Public Sector Climate Change Duties Report submission and this includes:

- data collection from stakeholder services;
- a data audit carried out annually which includes the identification of good practice and recommendations for services to consider for action;
- compilation and submission of the final report.

**Figure 3 – Carbon Management Governance Structure**



## Section 2 – Targets

### Organisational boundaries

For the purposes of this plan, the council's carbon footprint is calculated using information about energy used by corporate buildings from which the council and its trusts i.e. North Lanarkshire Leisure and CultureNL, deliver services from. The footprint also includes the

Carbon Management Plan 2019-2022

corporate fleet and private car use for business travel (grey fleet), all municipal waste (domestic and non-domestic) and water (supply and treatment). The organisational boundary does not include North Lanarkshire Properties commercial and industrial properties customers' consumption.

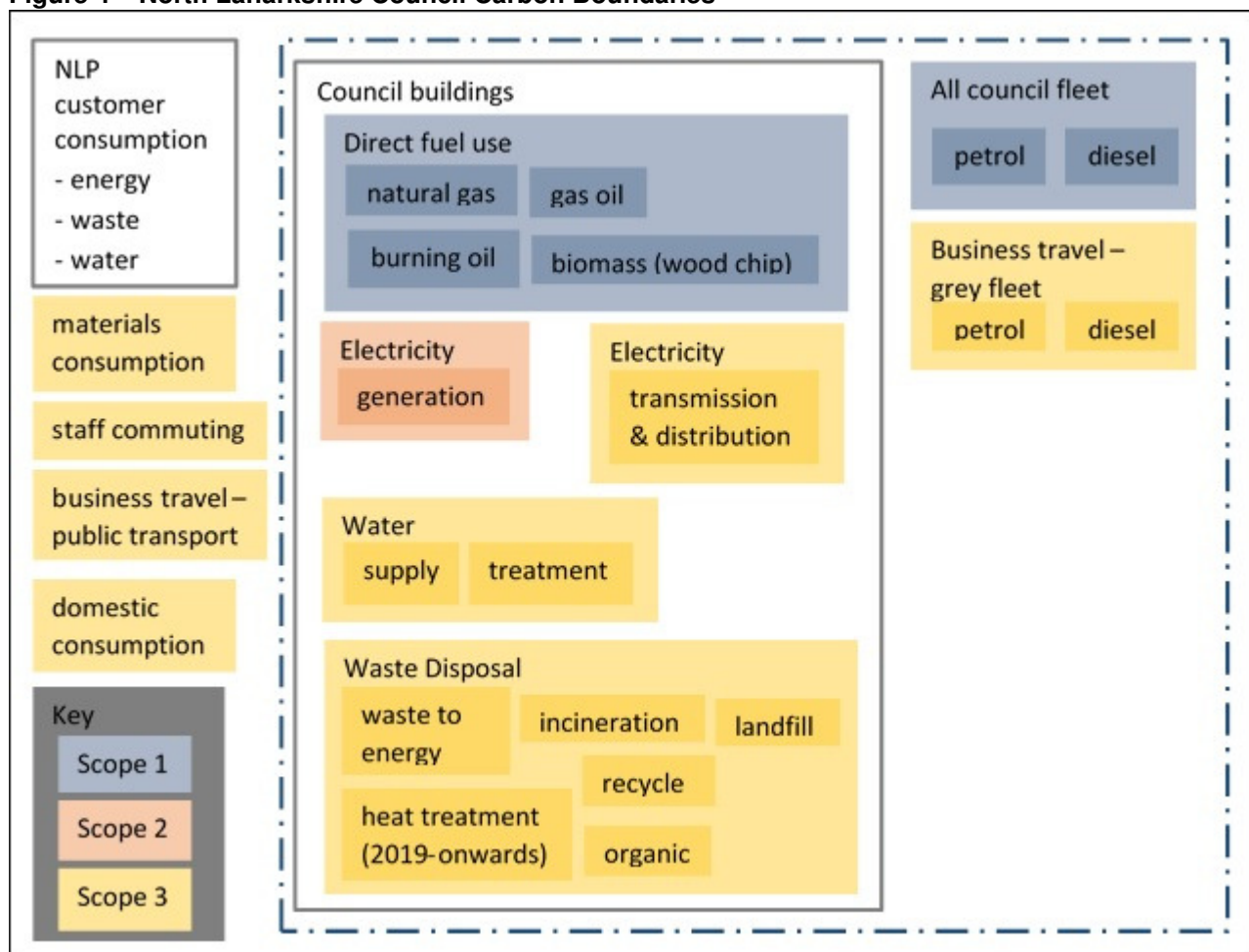
Housing is not considered when calculating the footprint of the council as this is an area where the council does not have direct control on energy usage. Within this plan however you will find a section on housing as it is evident that domestic consumption savings can make a significant contribution to achieving the national carbon reduction targets. The council's participation in the Scottish Governments Local Heat and Energy Efficiency Strategy pilot will enable us to continue to develop a response to addressing aspects of fuel poverty in order to achieve the 2040 target whilst reducing carbon emissions.

North Lanarkshire Council's organisational boundary for scoping the extent of its carbon footprint includes:

- energy consumption relating to buildings used by both the council and its trusts for non-domestic purposes, street lighting;
- the council's own fleet and business travel (grey fleet);
- all municipal (household and commercial) waste.

The figure below provides an overview of the organisational boundary and exclusions.

**Figure 4 – North Lanarkshire Council Carbon Boundaries**



## Historic Targets

In February 2010, the council's first carbon management plan was presented to Environmental Services Committee. The plan was delivered until 31 March 2014 and set a reduction target of 25% against the 2006/07 baseline for the duration of the plan. From 2006/07-2015/16 the council reduced its carbon footprint by 26%.

In 2015/16 a new baseline was identified with a targeted reduction of 9,987 carbon tonnes to be achieved by 31 March 2019. Progress against the carbon reduction target has been monitored on an annual basis via the Public Sector Climate Change Duties Report. The final position will be reported via this mechanism and thereafter to committee following its November 2019 submission date.

**Table 1 - Carbon Footprint 2015/16 (Baseline)**

	2015/16
	Carbon Emissions (tCO <sub>2</sub> e)
Stationary	74,509
Waste	35,759
Transport	6,806
<b>Total</b>	<b>117,075</b>
<b>Carbon Indicator: Carbon emissions per FTE employees</b>	<b>9.1</b>

## Current Footprint

The council's estate is under continuous change as the council looks to improve the efficiency and use of its buildings, whilst improving the efficiency of its service delivery. This has led to reductions in emission by specific sites or service areas within the council.

The table below shows that the council's stationary emissions which include electricity and natural gas consumption account for over half (52.5%) of the council's emissions. Over the past two years the emission source has reduced by 9,793 tCO<sub>2</sub>e, achieving 98% of the overall targeted carbon reduction. This has been achieved by energy projects delivered via the Non Domestic Energy Efficiency Framework and improvements to the authority's street lighting infrastructure. Improvements in the council's fleet has also provided a reduction in transport emissions.

**Table 2 - Carbon Footprint 2017/18**

	2017/18
	Carbon Footprint (tCO <sub>2</sub> e)
Stationary	63,955
Waste	51,234
Transport	6,535
<b>Total</b>	<b>121,725</b>
<b>Carbon Indicator: Carbon emissions per FTE employees</b>	<b>9.5</b>

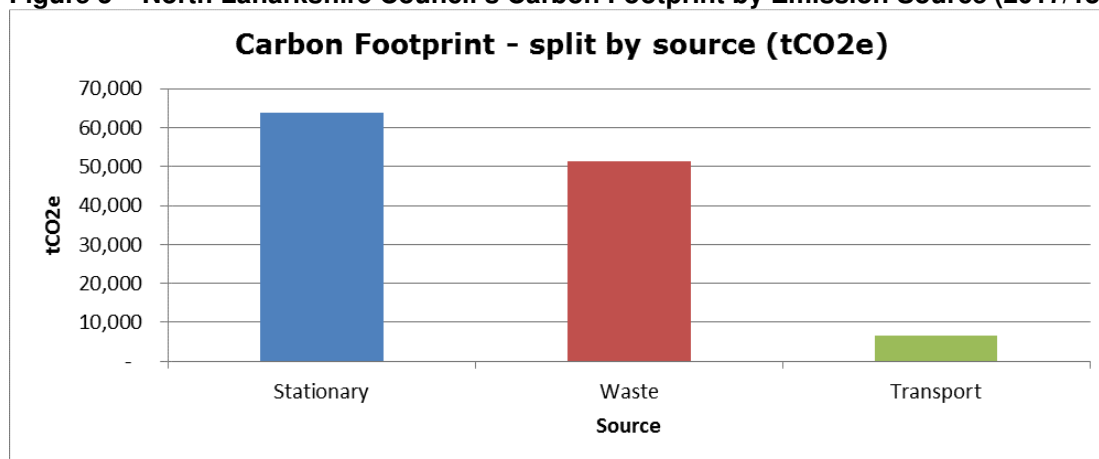
In 2017 the council introduced an improved domestic waste collection regime to facilitate the achievement of the Scottish Government's 2020 (60%) and 2025 (70%) recycling targets whilst achieving the limit of 5% waste to landfill by 2025. It was anticipated that

additional resources at the beginning of the new regime would be required to ensure that households had 'clean bins' i.e. their bins did not contain any materials that they should not. This timed amnesty approach to the domestic waste collection led to a notable increase in waste emissions (15,475 tCO<sub>2</sub>e) from the baseline.

Performance against the council's 2019 carbon reduction target will be reported via the Public Sector Climate Change Duties Report November 2019 submission. Projections to date indicate that the 2019 carbon reduction target will be comfortably achieved. This can be attributed to significant reductions in waste to landfill during the course of the year coupled with reductions achieved through other significant council projects.

Figure 6 provides a summary of the council's emissions. The council's sources of stationary emissions are electricity, natural gas, gas oil, Kerosene burning oil and, the supply and treatment of water. In 2017/18, stationary emissions accounted for 63,955 tonnes of carbon. In planning its future carbon reduction projects, a significant focus will be on those that can reduce the council's use of gas and electricity.

**Figure 5 – North Lanarkshire Council's Carbon Footprint by Emission Source (2017/18)**



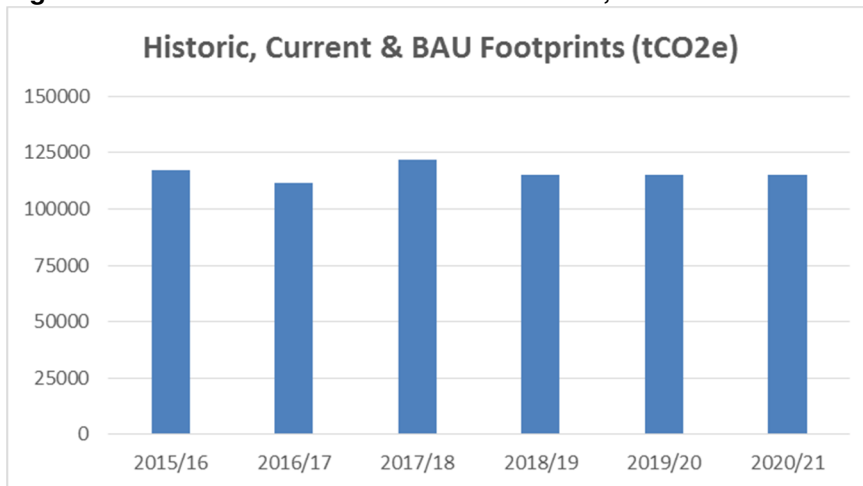
Waste includes all waste to landfill, waste to combustion, composting and recycling. Emissions resulting from waste to landfill are significantly higher than recycled waste, accounting for 97% of total waste emissions.

The council's own fleet account for the majority of transport emissions however the 'grey fleet' i.e. business travel accounts for 18% of this emission source and has the potential to be reduced in future years with improved use of public transport and the council's pool cars.

## Target for 2022

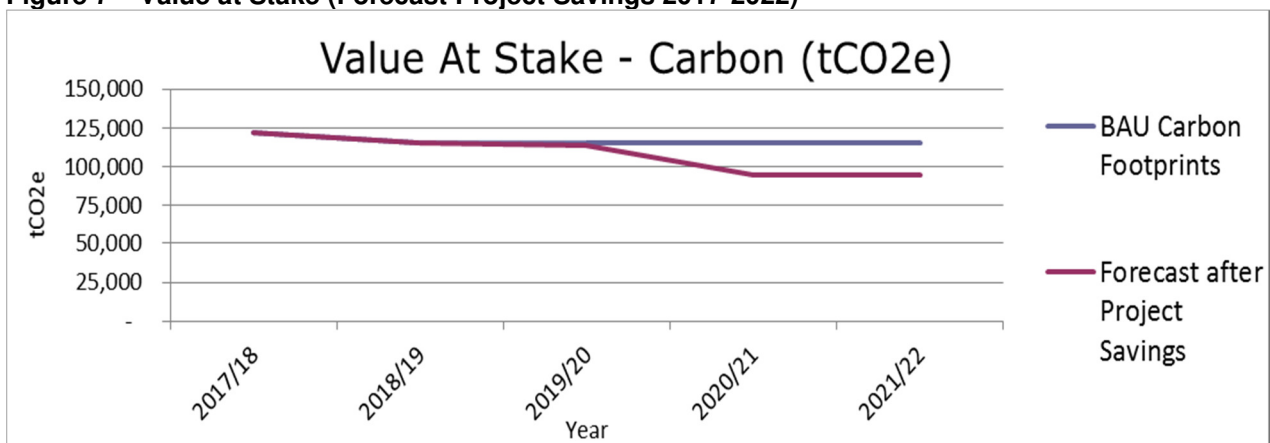
Figure 7 provides a comparison of the baseline year with subsequent and future years. For 2018/19 a projected carbon footprint has been calculated and this is based on the realisation of current project savings. The BAU footprint shows that if the council do not continue to investigate in carbon reduction projects, the most likely outcome is that the footprint will remain the same.

**Figure 6 – North Lanarkshire Council's Historic, Current & Business As Usual Footprints**



The figure below compares the BAU footprints with those where the expected project savings are realised in future years. It should be noted that at time of writing detail of projects for 2020/21 were not available and therefore further anticipated savings may be achieved in the final year of this plan.

**Figure 7 – Value at Stake (Forecast Project Savings 2017-2022)**



Taking into account carbon reduction projects already in progress combined with anticipated further project delivery in 2020/21 has informed target setting resulting in a further targeted carbon footprint of 91,665 tCO2e. This is equivalent to a 21% reduction from the baseline year and 14% reduction from 2019 target of 107,088 tCO2e. Based on current staffing levels, this will also result in a reduced 'carbon tonnes emissions per employee (FTE)' of 7.2.

## Section 3 – Projects and Activities

### Historic energy efficiency projects

With the launch of the Central Energy Efficiency Fund (CEEF) in 2004, the council utilised its award of £929,539 to enable delivery of carbon reduction projects to the value of £2,861,149 in key areas within its estate until 2016 when the fund closed.

Early 2017, the council decided to utilise the Non Domestic Energy Efficiency Framework to assist the delivery of its carbon saving projects. The NDEE framework was developed by the Scottish Government to provide a framework to deliver the retrofit of energy efficiency works to existing non-domestic public buildings or grounds.

Each NDEEF project is eligible for Scottish Government funding (up to £50K) to pay for the assistance provided by the project support unit (PSU), delivered by a singular contractor framework, Mott MacDonald. The PSU brings added value to utilisation of the framework for the council as they identify additional energy saving measures above the council's original project requirements: provide a range of assistance including business case development as well as process and contractor management support.

A rolling fund was set up in 2017/18 utilising £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. Projects are subject to further review by Salix, ensuring they comply with the requirements of the fund i.e. payback no more than 8 years and to a maximum cost of £250 per tonne of carbon dioxide saved.

### Planned and future projects

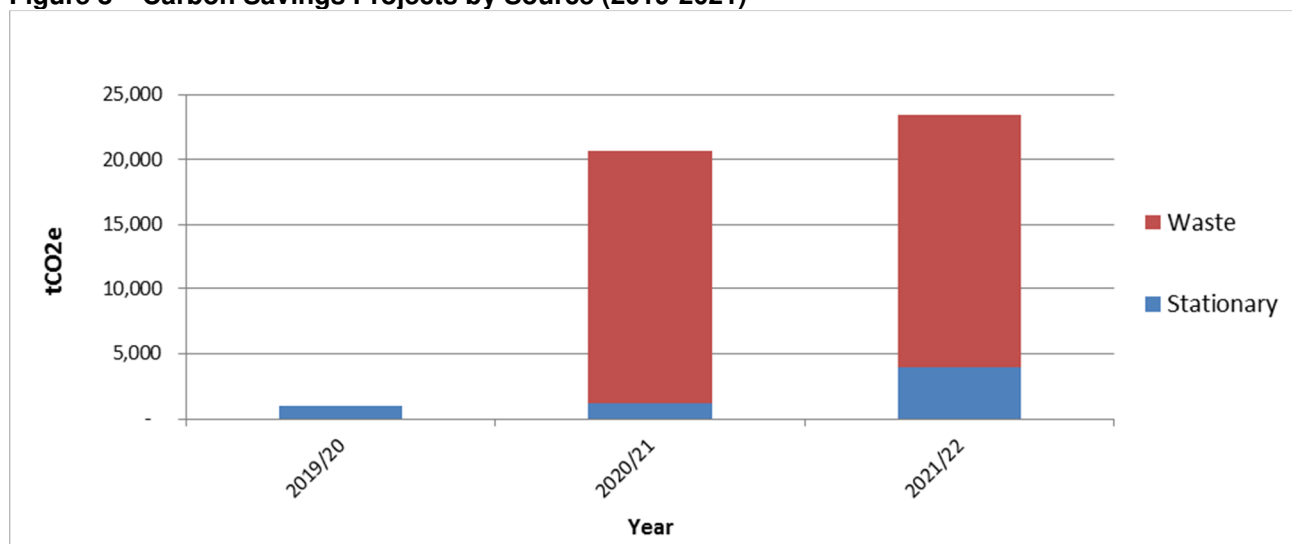
**Table 3 - Carbon Savings Projects 2019-2021**

Project	Amount of Savings (kWh, Tonnes)	Carbon Savings (tCO <sub>2</sub> e)
Clyde Valley Residual Waste Project	33,202	19,474
NDEE Phase 1- boiler upgrades and solar thermal install	604,957	186
NDEE Phase 1- CHP install	497,882	92
NDEE Phase 1- LED lighting upgrades	1,333,508	410
LED (Street Lighting) - other	58,000	18
LED (Street Lighting)	1,117,260	343
NDEE Phase 2 Lighting upgrade	800,973	246
NDEE Phase 2 Boiler upgrade	339,834	61
NDEE Phase 2 CHP Install	476,235	88
Average savings used to project for 2021/22 savings (kWh)	9,014,650	2,769
<b>Total</b>		<b>23,687</b>



The table above provides an overview of the planned projects with their respective source savings and potential first full year carbon savings. Savings will be realised from 2019/20 through to 2020/21, with an estimated savings for 2021/22 based on current and future project expectations. The projects delivered in 2019/20 will achieve a reduction of 1,030 tCO<sub>2</sub>e primarily in electricity savings. Further savings of 122 and 2,769 (tCO<sub>2</sub>e) in the two successive years will be due to realised consumption savings in both gas and electricity.

**Figure 8 – Carbon Savings Projects by Source (2019-2021)**



The project list (table 3) is not exhaustive as it does not include projects where the detail has either not been confirmed or the output result is difficult to quantify. Examples of this would be:

#### **‘FuelGood Driver Training’ and the Council’s Fleet:**

The council participates in the Energy Savings Trusts ‘FuelGood Driver Training’ as it contributes to a reduction in the council’s transport emissions through a reduced fuel consumption within the fleet. Below is some highlights of improvements within the council’s fleet:

- Replaced 24 bin lorries with Euro6 compliant vehicles increasing the council’s compliance to 75%.
- In 2019 there will be an additional 5 new fuel efficient Euro6 bin lorries.
- Switched on Fleets 2017/18 grant funding was used to procure an additional 7 Nissan Leaf electric cars for the pool car fleet and further funding in funding will see 4 fully electric Renault Master vans joining the fleet in 2019. These vehicles will be used to deliver school meals.
- The low emissions vehicle fleet stands at 31 (5 hybrids and 26 fully electric vehicles).

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

This scheme, delivered locally by the council, aims to assist 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.



## Waste:

In 2017, 3.83 million tonnes of waste in Scotland went to landfill, of which 32% was household and similar type waste. The national recycle rate for household waste in the same year was 45.6%. In 2017 North Lanarkshire:

- generated 156,813 tonnes of household rubbish;
- 39.6% of rubbish was recycled;
- had a **whole-life** carbon impact of 406,737 tCO<sub>2</sub>e (household waste).

The Clyde Valley Residual Waste Project is a multi-authority (East Renfrewshire Council, East Dunbartonshire Council, North Ayrshire Council, North Lanarkshire Council and Renfrewshire Council) initiative for the treatment and disposal of residual waste where the council's participation will realise an initial saving of 19,474 tCO<sub>2</sub>e in 2020/21. The project is for 25 years and will commence December 2019. The project will be delivered by Viridor Clyde Valley Limited and significantly contribute to the councils reduction in waste to landfill.

## Biodiversity:

The Nature Conservation (Scotland) Act 2004 requires the council to advance the conservation of biodiversity. The Act states '*It is the duty of every public body and office holder in exercising any functions, to further the conservation of biodiversity so far as it is consistent with the Property exercise of those functions*'. In complying with the Act the council also looks to promote the survival of species that have been impacted by climate change.

Healthy peatlands can absorb carbon and trap and store it, thus preventing it going into the atmosphere. Bogs that are degraded emit carbon dioxide and other greenhouse gases. Restoring peatlands ensures that they will continue to contribute to the reduction of Scotland's carbon emissions. There are a significant number of peatlands/bogs in North Lanarkshire of which:

- 6 are Sites of Special Scientific interests (SSIs) of which 3 are special areas of conservations (SACs);
- 70 are designated, at least in part, as Sites of Importance for Nature Conservation (SINCs);
- 3 are Local Nature Reserves.

In line with the Wildlife and Natural Environment (Scotland) Act 2011, the council produces a report every 3 years evidencing its application of the 2004 Act and subsequent regulations (1994 and 2010). The Biodiversity Duty Report 2015-18 highlighted the following:

- Woodland In and Around Towns (WIAT) project (Thornwood Woods, Tannochside and Newarthill Woods, Motherwell);
- Improvements or community events at the 9 Local Nature Reserves:-
  - Water vole improvements (Brownsburn Community Nature Park);
  - Wildflower meadow planting (Braedale Hill and Kingshill);
  - Bog restoration (Greenhead Moss);
  - Woodland management (Cambusnethan);

- New great crested newt habitat (Gartcosh);
- Improved entrance features (Ravenswood);
- Community event (Mosswater); and
- River restoration (Drumbeck).

## **BS EN ISO 14001 : 2015 - Environmental Management Systems**

A number key services within the council are independently certified to this standard. It covers the following operational areas:-

- Environmental Health
- Fleet Operations
- Trading Standards
- Waste solutions
- Environmental Facility Management
- Environmental Asset Maintenance

The standard encourages organisations such as the council to:

- minimise the negative impact on the environment caused by its activities;
- comply with legislation and regulation and other environmental standards;
- continuously improve to achieve the above.

## **Culture NL and NL Leisure:**

The council's arm's length organisations, CultureNL and NL Leisure both benefit from energy efficiency improvements such as lighting upgrades delivered by the corporate energy team (NDEE phase 1 and phase 2 projects). There is also a great deal of other positive activity that contributes to the reduction in carbon emissions:

- Council food and drink outlets have changed drinking straws from plastic to paper. They also encourage the use of reusable cups rather than disposable through a price incentive.
- All water fountains are now mains fed.
- Plastic dog waste bags and also food waste bags are available at local libraries.
- Both the libraries and museums donate items no longer safe or suitable to use to a charity who train ex-offenders in woodwork and metalwork.
- Via NL Industries, furniture such as computer chairs are recovered, rather than buying replacements.
- Summerlee removed 'personal' wastepaper baskets and replaced these with 'bin stations' to encourage less waste, correct waste disposal
- Curatorial Services reuses and recycles exhibition materials where possible and tries to limit what is sent to landfill.
- Lunch clubs operated within community facilities are provided with food waste bins.
- CultureNL operate 68 community facilities and their use is continually reviewed to ensure their operation matches demand.

## Communication and Campaigns:



Earth Hour occurs each year on the last Saturday in March. This is a global event which North Lanarkshire participates in through the 'switch off' event and awareness raising via 'Pass the Panda'.

In 2018 the council was awarded 'Super Local Authority' status by the World Wildlife Fund (WWF) Scotland for demonstrating its commitment to action on climate change.

The council also takes part in the Scottish Government's Climate

Week. The council's campaign promotes individual behavioural change such as domestic energy use and personal travel to show how carbon savings and changing the way we do things can help our planet.



## Climate Ready Clyde:

The council participates in the Climate Ready Clyde initiative which looks to develop a Climate Adaptation Strategy with supporting action plan for Glasgow City Region. In November 2018, 'Towards a Climate Ready Clyde: Climate Risks and Opportunities for Glasgow City Region' was published. It follows a collaboration of partners and stakeholders, and identified key priorities and areas that need to be progress whilst sustaining existing levels of activity in areas such as flood risk prevention and air quality.

### Other council activity

The council has introduced an environmental impact section within its committee reports to evidence that both carbon and environmental effects of decision making have been considered.

### Resources

The council through using its own monies, and maximising its use of external funding, will continue to improve the sustainability and energy efficiency of its assets to the benefit of its carbon footprint.

## Section 4 – Action Plan & The Plan for North Lanarkshire

The following table summarises the council's 'address, adapt and act' areas of work. This section will be updated with revisions during the course of this plan.

**Table 4 - Climate Related Actions 2019-2023**

Action	Timescale	Action Origin	Responsibility
Investigate different communication tools with a view to designing and implementing a council wide engaging communication plan to target and encourage potential areas of carbon savings.	2019-2022	Carbon Management Plan	Carbon Management Group
To continue to develop the councils asset information to inform and underpin future project development and carbon savings.			
To continue to evaluate further use of technologies to continually improve the council's energy efficiency, resulting in the reduction of the council's carbon footprint and improvement in source data.			
To support the pilot Local Heat and Energy Efficiency Strategy project.			
To support the review of the use of 'grey fleet' for business travel.			
'Sites of Special Scientific Interest' sites to be in a local bogs management scheme	2020	North Lanarkshire Biodiversity Action Plan	Head of Integrated Street and Community Services
Refuse new applications for extraction consents on all European, national and locally designated peatlands.			
Promote awareness of the biological and cultural importance of mosses to local communities adjacent to lowland raised/intermediate bogs			
Undertake favourable management works to improve council owned bog sites			
Collate information on council owned bogs regarding their condition and management			
The Council will strive to reduce car journeys for work purposes e.g. by teleconferencing. For instances where work travel is necessary the Council's pool car fleet will be utilised with electric/hybrid vehicles provided where possible.	2021	Air Quality Action Plan 2018-2021	Head of Regulatory Services & Waste Solutions

Action	Timescale	Action Origin	Responsibility
Further consideration will be given to reducing the number of private vehicles used for Council business, introducing bus/sustainable transport where possible.			
Tracking devices will continue to be fitted to NLC fleet vehicles in order to provide information on managing idling/speeding and unnecessary journeys.			
Driver Certificate of Professional Competence training will be provided for all Council drivers, including modules on safe and efficient driving.			
The Council will continue to increase the provision of electric vehicle (EV) charging points, where possible ensuring these are accessible to both council staff and the general public. The Council will engage with other public sector agencies (e.g. NHS Lanarkshire) to encourage similar provision to ensure adequate coverage of EV charge points across NLC area.			Head of Integrated Street and Community Services
The Council will abide by their statutory duty of sustainable procurement and include vehicle standards in the sustainability section of the sourcing methodology documentation, which will consequently feed through into the specification/award criteria where appropriate.			Head of Assets and Procurement
The Council will continue to progress their Workplace Travel Plan especially in view of other relevant NLC policies, such as property rationalisation, home working policy etc.			Head of Environmental Assets
Implementation of new Clyde Valley Residual Waste Project - waste management facility shared with peer councils by 2019.	2020 / ongoing	Risk Register	Executive Director, (Enterprise and Communities)
Maximising external funding opportunities and other resources to facilitate energy savings projects through teams across the Council.			
LED street lighting investment programme completion			Head of Integrated Street and Community Services
Implementation of Monitoring & Targeting software – Energy Management			Head of Assets and Procurement
Development of Local Heat and Energy Efficiency Strategy			
Enhance reporting process (both internal and external) as identified at the “Gaps in Assurances” section	2019		

Action	Timescale	Action Origin	Responsibility
Energy Efficiency project delivery via the Non Domestic Energy Efficiency Framework.	2023		
Ensuring that most appropriate stakeholders participate at relevant stage of initiatives and projects using Corporate Project Management methodology and through Carbon Management Working Group	Ongoing		

The Programme of Work which supports The Plan for North Lanarkshire contains activities that will impact on the council's climate and carbon agenda. The following table contains a high level extract of this programme of work activity.

**Table 5 – Programme of Work (The Plan for North Lanarkshire)**

Ref	Description	Ambition Statement Reference <sup>4</sup>
P002	Asset review and rationalisation	22,24
P005	Inclusive growth (tackling poverty)	11
P007	Communication Strategy	4
P009	Strategic Policy Framework	24,25
P011	Three year revenue budget strategy	21
P013	New Supply Programme	1
P014	Tower Strategy	1
P015	Housing Investment Programme	1
P017	Fuel Poverty	11,12
P019	Finalise updated Local Development Plan	3
P020	Town centre and community regeneration	2,3
P021	City Deal / infrastructure	3
P023	Marketing and tourism	4
P025	Parks master planning	16,17, 22
P026	Co-ordination of environmental assets	16,17, 22
P028	Shared services	22
P029	Energy and carbon management	22
P047	Schools new build programme	22, 24

<sup>4</sup> The North Lanarkshire Ambition Statements can be found at the end of this document

Ref	Description	Ambition Statement Reference <sup>4</sup>
P055	Community asset mapping	19, 20, 21
P059	Improve procurement capability	5
P061	Employee learning and development programmes – Learn NL	23

## Section 5 – Housing & Energy Efficiency

As the council does not control individual households' energy consumption and resulting carbon emissions, it does not include this when calculating its own carbon footprint. Carbon emissions from domestic energy use however accounts for 30.9%<sup>5</sup> of all emissions reported by the Department for Business, Energy & Industrial Strategy within North Lanarkshire.

Although our population is predicted to marginally increase over the next 10 years<sup>6</sup>, there will be a significant increase in the number of single person households resulting in more dwellings. Many of these households will be older people who require a warmer heating regime than younger households, and as they are at home more frequently they use more energy. It therefore can be assumed that domestic carbon emissions in North Lanarkshire will continue to increase if energy efficient solutions are not implemented.

The targeted reduction of domestic emissions is a national priority which is achieved through the delivery of more energy efficient homes as well as tackling household behaviour. The council, as a local authority and a social landlord, has a strategic responsibility to domestic energy efficiency, fuel poverty and climate change.

### New Build Council Housing

All council housing developments through the Affordable Housing Supply Programme meet the Building Standards Sustainability Level of Silver (Aspects 1 & 2) in order to maximise on available Scottish Government funding.

As part of the site planning/brief development process, renewable energy sources are assessed in terms of site suitability, costs and benefits. The council new build to date have achieved on average a 'B' rating (SAP rating 80+). Since March 2016 EPC documents have indicated SAP ratings between 86(B) and 91(B) being achieved for council developments with corresponding Environmental (CO2) ratings ranging from 89(B) and 95(A). This high level of energy efficiency should result in lower fuel bills than experienced by residents in their former homes.

The council is seeking to develop wider opportunities for sustainable housing by examining, piloting and introducing innovative approaches to:

- renewable energy provision
- consideration of district heating systems for future larger developments
- options for properties where they are currently off the mains gas network.

### Council's Historic Stock

North Lanarkshire Council, like other social landlords, is required to continue to ensure their housing stock meets the Scottish Housing Quality Standard (SHQS) beyond 31 March 2015, requiring further investment in maintenance and improvements. The Energy Efficiency Standard for Social Housing (ESSH) replaced one of the five energy efficiency

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<sup>5</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2016 (2018)

<sup>6</sup> 1% from 2016-2026 (National Records of Scotland Population Projections for Scottish Areas (2016-based))



elements within SHQS. It introduced a minimum energy rating for stock and is informed by stock type and heating.

**Table 6 - Summary of Energy Rating Targets for EESSH**

<i>House Type</i>	<b>SAP 2009</b>				<b>SAP 2012</b>			
	<i>Gas</i>		<i>Electric</i>		<i>Gas</i>		<i>Electric</i>	
Detached	60	D	60	D	60	D	57	D
Terraced, semi-detached	69	C	65	D	69	C	62	D
Four-in-a-block flat	65	D	65	D	65	D	62	D
All other flats	69	C	65	D	69	C	63	D

Excluding housing stock built in the last ten years, the council's historic stock accounts for 35,799 dwellings with a number of areas with no natural gas supply. A considerable amount of money has been spent on improvements including: insulation, heating and window replacement. In areas with no natural gas, it is the council's intention to upgrade the heating system using air source heat pumps. The focus on EESSH will positively impact on the carbon emissions of social housing (34%<sup>7</sup> of the homes) in North Lanarkshire.

The RPP3 led to an unprecedented level of consultation on key areas within the climate change agenda in Scotland. Two of these areas are EESSH beyond 2020 and fuel poverty.

EESSH 2 follows the EES route map and looks to deliver key targets by 2040 with all Scottish homes to achieve C rating where possible. It goes however a step further in terms of homes where the household is fuel poor i.e. requiring a B rating by 2040.

**Table 3 - Summary of Energy Rating Targets for EESSH 2 (EPC Banding)**

<i>House Type</i>	<i>Gas</i>	<i>Electric</i>	<i>Biomass</i>	<i>Other Fuel</i>
Detached	C	C	C	C
Terraced, semi-detached	B	B	B	C
Four-in-a-block flat	B	B	B	C
All other flats	B	B	B	C

## **Home Energy Efficiency Programmes Scotland – Area Based Schemes (HEEPS ABS):**

This funding is primarily targeted at fuel poverty (see below). Local authorities are expected to devise their schemes based on a number of factors such as deprivation, child

<sup>7</sup>Scottish House Condition Survey 2014-16 (2018)

poverty, stock condition and heat mapping. Local authority projects are expected to be all tenure and deliver subsidised measures to private owners. The funding is to be used solely to assist privately owned homes.

The funding allocation is comprised of two elements – the Core Allocation Programme (CAP) and Proposals for Additional Funding (PAF). The scheme has a number of specific criteria which must be met in terms of the targeting and delivery of the council's projects and is expected to be complemented by the use of Energy Company Obligation monies. The council has successfully accessed this and other funding over past few years however as the private sector accounts for 65%<sup>8</sup> of all housing in North Lanarkshire, further investment is required in order to significantly reduce carbon emissions.

**Table 3 - Summary of Domestic Energy Funding in North Lanarkshire (2013-19)**

Year	Grant Funding Element (£)				
	Scottish Government			Energy Company Obligation (ECO)	Total
	Home Energy Efficiency Programmes for Scotland: Area Based Schemes (HEEPS: ABS)	Green Homes Cashback (GHCB)	Capital Acceleration Programme		
2013/14	3,298,730	513,750		2,569,153	6,381,633
2014/15	2,907,100			372,582	3,279,682
2015/16	2,986,443			221,200	3,207,643
2016/17	3,105,042		51,000		3,156,042
2017/18	2,136,824				2,136,824
2018/19	2,214,082				2,214,082
					20,372,906

## Fuel Poverty

The current definition of fuel poverty is: *A household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income, including Housing Benefit and Income Support for Mortgage Interest, on household fuel use.*

There are 3 main causes of fuel poverty and these are:

- Energy inefficiency (housing and/or household behaviour)
- The cost of energy
- Household income.

It is estimated that 36,000 households are in some form of fuel poverty in North Lanarkshire and with 23,200 workless households, the increasing challenges faced by many within our communities is evident.

<sup>8</sup> Scottish House Condition Survey 2015-17 (Feb 2019)

The Fuel Poverty (Target, Definition and Strategy) (Scotland) Bill when enacted will amend the definition to: *Households should be able to afford the heating and electricity needed for a decent quality of life. Once a household has paid for its housing, it is in fuel poverty if it needs more than 10% of its remaining income to pay for its energy needs, and if this then leaves the household in poverty*<sup>9</sup>.

With the 2016 target to eradicate fuel poverty in Scotland missed, a new ambition has been set to reduce fuel poverty in Scotland by 2040 so that no more than 5% of households are fuel poor.

The council continues to try to address fuel poverty through a number of projects and campaigns beyond its responsibilities as a social landlord.

### **Pilot Local Heat and Energy Efficiency Strategy Project:**

The council received funding to participate in a pilot Local Heat and Energy Strategy project. Phase 1 of the project has been completed, with the second phase to commence in 2019 which will be in the form of a socio-economic study.

### **It Pays to Switch:**

The aim of the campaign is to contribute to reducing fuel poverty within North Lanarkshire by saving residents money, enabling them to heat their homes to a comfortable level. It looks to encourage and empower householders to switch energy provider to access cheaper energy rates. A refreshed relaunch of the campaign is expected in 2019 with a wider ambition to contribute to the council's Tackling Poverty Strategy.

### **Saving Energy, Saving Money:**

This section of the council's website provides information on current energy-related projects and assistance that is available to North Lanarkshire residents. It also provides energy advice to help residents to heat their home at a reasonable cost.

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<sup>9</sup> Simplified definition

## Section 6 – Green Risk Register

The full detail of the 'green risks' is held within the corporate and individual services risk registers.

Risk Statement	Inherent risk	Key Controls	Residual risk	Key Further Actions
<p>L9 - Carbon Management</p> <p>As a public body we do not comply with our legal obligations under the duties Climate Change (Scotland) Act 2009 and related regulatory and legislative requirements.</p> <p>We fail to identify and access other opportunities including grants that can maximise the benefit for the council and people of North Lanarkshire.</p>	12	<ul style="list-style-type: none"> <li>Carbon Management Working Group with <b>evolving scope and plan</b>, engaging relevant stakeholders and co-ordinating activities</li> <li>Oversight and sponsorship by responsible Executive Director</li> <li>Carbon Management agenda is an integral part in key strategic and operational activities: Asset &amp; Procurement Solutions activities; Education and SC21; Waste management; Clyde Valley Residual Waste Project; Housing Property &amp; Projects; Council owned electric vehicles; Street Lighting LED programme.</li> <li>Liaison with other local authorities and external bodies through Scottish Energy Officers Network and SSN, includes benchmarking opportunities. Scottish Government through LHEES</li> <li>Dedicated budget for Energy Management projects that will reduce consumption and improve the council's ability to manage its energy consumption going forward</li> <li>LED project - the contractor will have a dedicated project manager and monthly progress updates will be provided to maximise energy and carbon savings. Fortnightly operational and monthly</li> </ul>	9	<ul style="list-style-type: none"> <li>Enhance reporting process (both internal and external)</li> <li>Implementation of new Clyde Valley Residual Waste Project – waste management facility shared with peer councils by 2019.</li> <li>LED street lighting investment programme completion</li> <li>Energy Efficiency programme delivery via the Non Domestic Energy Efficiency Framework – Ongoing annual programme</li> <li>Ensuring that most appropriate stakeholders participate at relevant stage of initiatives and projects using Corporate Project Management methodology and through Carbon Management Working Group</li> <li>Maximising external funding opportunities and other resources to facilitate energy savings projects through teams across the Council.</li> <li>Implementation of Monitoring &amp; Targeting software – Energy Management</li> <li>Development of Local Heat and Energy Efficiency Strategy</li> </ul>

Risk Statement	Inherent risk	Key Controls	Residual risk	Key Further Actions
		<p>performance meetings are held as part of the existing contract arrangements. KPIs are applied through the Contract and can lead to financial deductions being imposed and / or performance failure points being imposed which may result in contractor default. The contractor has provided a programme for completing phase one however should they fail to meet the forecast productivity this will have an impact of carbon savings identified against the project. This will be monitored and mitigated by having robust contract and supplier management arrangements in place that will work alongside embedded Project Management activities. The first phase of the project has been ongoing for 3 months and the contractor is working to programme with in excess of 5000 lanterns already in place.</p> <ul style="list-style-type: none"> <li>• In addition to the waste stream covered by the Clyde Valley Residual Waste Project, the Council will ensure, through procurement of suitable contracts, that smaller waste streams, such as those from the recycling centres, are treated in such a manner as to provide for the provisions of the proposed biodegradable municipal waste landfill ban from January 2020</li> <li>• Through the continued review of the Council's Fleet, we will ensure that all vehicles purchased are in compliance with the most efficient vehicle emission standards and will also continue to increase the number of electric vehicles.</li> </ul>		

## Glossary

Adaptation	A planned or implemented change which looks to lower the arising risks of climate change
Atmosphere	Surrounds the earth and is made up of a number of gases
Biomass	Materials that originate from living or dead organisms such as trees, animal waste
Carbon dioxide	A naturally occurring gas however can be produced by the burning of fossil fuels and biomass, and other activities. It is CO <sub>2</sub> generated by human activities that is the main driver for climate change
Carbon footprint	The total of the greenhouse gases emitted into the atmosphere. For the purposes of this document, the carbon footprint referred to is solely that of North Lanarkshire Council
Climate change	Any notable change in the measures of climate such as temperature, rainfall, wind patterns that occur over a period of time
Emissions	For the purpose of this document, this refers to gases that are released into the atmosphere
Energy efficiency	To use less energy to do the same thing such as using heating controls to reduce your energy consumption
Global warming	The global increase in the temperature near the earth's surface
Greenhouse gas	A gas that absorbs infrared radiation in the atmosphere
Landfill	A site where waste is taken to be disposed, and thereafter is covered by soil
Mitigation	A deliberate act taken to reduce the human impact on the climate (To do no further harm to our planet)
Natural gas	Gases that occur underground such as methane, propane and butane
Recycling	The collection and reprocessing of a resource to enable it to be reused
Renewable Energy	Energy resources that by their nature reoccur such as wind, solar, hydro, geothermal etc.
Statutory	Something that is required by regulation or law and can be subject to a penalty

Whole-life Carbon Impact      This is the emission journey of waste: from the extraction of the raw materials, manufacturing of the product through to its disposal.

## North Lanarkshire Ambition Statements

1. Ensure a housing mix that supports social inclusion and economic growth.
2. Refocus our town centres and communities to be multi-functional connected places which maximise social, economic, and environmental opportunities.
3. Maximise the use of our marketable land and assets through improved development in business and industrial infrastructure.
4. Market and promote North Lanarkshire as the place to live, learn, work, invest, and visit.
5. Grow and improve the sustainability and diversity of North Lanarkshire's economy.
6. Raise attainment and skills for learning, life, and work to enhance opportunities and choices.
7. Enhance collaborative working to maximise support and ensure all our children and young people are included, supported, and safe.
8. Engage children and families in early learning and childcare programmes and making positive transitions to school.
9. Invest in early interventions, positive transitions, and preventative approaches to improve outcomes for children and young people.
10. Engage with children, young people, parents, carers, and families to help all children and young people reach their full potential.
11. Increase economic opportunities for adults by understanding, identifying, and addressing the causes of poverty and deprivation and barriers to financial inclusion.
12. Ensure our residents are able to achieve, maintain, and recover their independence through appropriate supports at home and in their communities.
13. Improve preventative approaches including self-management and giving people information and choice over supports and services.
14. Ensure the highest standards of public protection.
15. Encourage the health and wellbeing of people through a range of social, cultural, and leisure activities.
16. Transform our natural environment to support wellbeing and inward investment and enhance it for current and future generations.
17. Ensure we keep our environment clean, safe, and attractive.
18. Ensure our digital transformation is responsive to all people's needs and enables access to the services they need.
19. Improve engagement with communities and develop their capacity to help themselves.
20. Improve the involvement of communities in the decisions, and development of services and supports, that affect them.



21. Continue to identify and access opportunities to leverage additional resources to support our ambitions.
22. Facilitate a North Lanarkshire wide approach to asset rationalisation, including with communities and partners.
23. Build a workforce for the future capable of delivering on our priorities and shared ambition.
24. Review and design services around people, communities, and shared resources.
25. Ensure intelligent use of data and information to support fully evidence based decision making and future planning.

If you require any further information on the content of this document or the work of the Team, then please contact us:

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