

Derry City & Strabane District Council Sustainability Briefing Paper

2024





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Introduction

This paper outlines the initiatives currently being delivered by Derry City & Strabane District Council to address climate and environmental issues.

The area serves a population of 150,100. The landscape of the council area includes mountain ranges, rivers, agricultural land, and coast offering vital habitats for species, destinations for tourism and recreation, a rich cultural heritage as well as settlements for local communities. Urban areas include the regional city of Derry connected to a number of vibrant towns and villages including Strabane. In addition, the Council area includes the border with neighbouring Donegal County Council covering some 140km.

Protecting the environment is a key priority identified in the DCSDC Strategic Growth Plan 2017-2032.

Climate Change

Observed Changes

In Northern Ireland, the daily maximum and minimum temperature extremes have increased by over 1°C since the 1950s. Heavy seasonal and annual rainfall events have increased. ²

The most recent decade (2008-2017) saw 8% more annual average UK rainfall than in 1961-1990³ Mean seas level around the UK has risen by about 16cm since the start of the twentieth century.⁴

Projections

Climate projections for the UK are issued by the Met Office Hadley Centre and are based on low, medium and high carbon emission scenarios. The most recent Climate Projections 2018 (CP18) state that there is;

"a greater chance of warmer, wetter winters and hotter, drier summers"
(Met Office 2019)

¹ Brown, S. J., Caesar, J. and Ferro, C. A. T. 2008. 'Global changes in extreme daily temperature since 1950'. J. Geophys. Res., 113.

² Jones, M. R., Fowler, H. J., Kilsby, C. G., and Blenkinsop, S. 2013. 'An assessment of changes in seasonal and annual extreme rainfall in the UK between 1961 and 2009', *Int. J. Climatol.*, 33, 1178–1194.

³ Huth, R. Marengo, J. Matthias, R. McKendry, I. Moron, and V. Zhou, T. 2019. 'State of the UK Climate 2018.' International Journal of Climatology. 39 (1)

⁴ Ibid

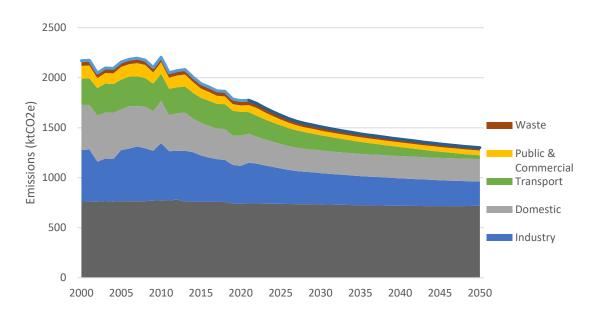
Greenhouse Gas Emission Baseline

In March 2023 the UK Climate Change Committee produced an updated advice report for how Northern Ireland could achieve net zero by 2050. The Committee acknowledges the 'extremely stretching legal target' set down in the NI Climate Change Act and recommends carbon budgets which would see decarbonisation of all sectors including energy, transport, heat, and infrastructure.

Derry and Strabane's direct carbon footprint – coming from its use of fuels such as petrol, diesel and gas (also known as Scope 1 emissions) and from its use of electricity (Scope 2 emissions) and other territorial emissions. Emissions fell by 20% between 2000 and 2022 while total emissions were 1.7 kt CO2e, in 2022 compared to 2.2 kt in 2000.

This substantial reduction stems from a mix of electricity decarbonization, gradual improvements in the efficiency of buildings and vehicles and structural changes in the economy, for example linked to the switch from manufacturing to higher-value production and services.

Figure 1: Derry and Strabane's Carbon Footprint - Past, Present and Projected ⁵ (Direct Emissions - Scope 1 and 2)



Currently, 65% of all emissions from the region come from land-use and industry, with homes accounting for 15%, transport 12%, public and commercial buildings contributing 4%, and the waste sector emitting 3% of emission.

⁵ Your Climate Strategy. A Net Zero Carbon Roadmap Analysis for Derry and Strabane District Area. DCSDC. April 2023

Biodiversity & Land Use

Global Globally, over 1 million species are threatened with extinction and the populations of many animals have declined by at least two-thirds since 1970. Here in the UK, 40% of species are in decline, more than 40 million birds have been lost from our skies over the past 50 years, and a quarter of mammals are threatened with extinction including many once common species, such as the hedgehog. These ongoing declines, on top of earlier losses since the industrial revolution has led to the UK becoming one of the most nature-depleted nations on Earth. ⁶

The main causes of biodiversity and nature loss includes loss of habitats for food, resource extraction, space for buildings, overfishing, pollution, invasive species and climate change. significant habitat loss in the UK has led to future extinction risk species that have become confined to small, vulnerable patches of habitat, it is not enough to stop further habitat loss to halt biodiversity decline – we now need to make more space for nature.

Globally the crises of climate change and biodiversity loss are inextricably linked, with many shared causes and shared solutions. Nature recovery has a critical role to play in climate resilience and achieving net zero. Nature based solutions are defined by the International Union for the Conservation of Nature (IUCN) as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

The World Environment Forum estimates that US\$44 trillion of economic value generation – over half of global GDP – is moderately or highly dependent on nature. Analysis by the UK finance sector's Natural Capital Finance Alliance in 2018 found that '74% of the [FTSE All-Share] Index sectors are potentially highly or very highly dependent on natural capital'. While the Office for National Statistics found the UK's natural capital assets were worth £1.2 trillion in 2019.⁷

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⁶ Natural England, JNCC, Natural Resources Wales, NatureScot & Northern Ireland Environment Agency (2021) Nature Positive 2030 – Summary Report. JNCC: Peterborough. ISBN: 978-1-86107-636-6

⁷ Ibid

Biodiversity losses are also bad for our health and well-being with studies reflecting that connection with nature has significant benefits. The Office for National Statistics' 2022 Report on the Health Benefits from Natural Capital found that the value of the health benefits from time in nature were between £6.2 billion and £8.4 billion a year.

The UK has committed to the Leaders' Pledge for Nature, which has so far been signed by leaders from over 85 countries, and the '30by30' commitment to protect 30% of our land and seas for nature by 2030, agreed by more than 60 countries. At the G7 summit in June 2021, the UK also committed to 'halt and reverse biodiversity loss' by 2030, in other words to become Nature Positive by 2030.



Derry & Strabane

Natural Capital Account

Making space for biodiversity includes:

- Integrating green and blue infrastructure into developments on land.
- Planning for integrated environmental and socio-economic outcomes
- Ensuring biodiversity net gain
- Enabling contact with nature, so that it becomes part of everybody's daily experience
- Incorporating nature-based solutions for climate change mitigation and adaptation



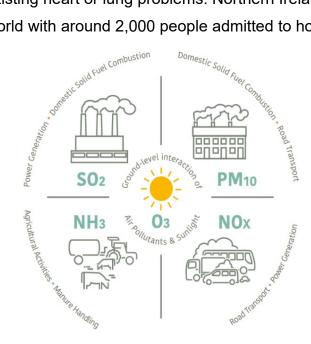
Derry & Strabane Green Infrastructure Plan brings together cross sectoral stakeholders to deliver the vision that :'By 2032 the environmental, economic and social benefits of Green Infrastructure will be valued and maximized by all.'

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Air Quality

Poor air quality, caused by the presence of air pollution, can impact on human health, typically by irritating the lungs and airways or by passing into our blood via our lungs. Those most at risk are children, older people and people with existing heart or lung problems. Northern Ireland has some of the highest rates of asthma in the world with around 2,000 people admitted to hospital

because of their condition each year (Asthma UK Northern Ireland, 2008). The management of air quality in Northern Ireland is based on the Air Quality Standards Regulations (Northern Ireland) 2010, the 2007 UK Air Quality Strategy and the Environment Order (NI) 2002. Local Air Quality Management (LAQM) provides the framework under the Environment Order (NI) 2002, within which air quality is managed by the 11 district councils in Northern Ireland. 8



Main Sources of Air Pollution

Addressing air quality in development includes ensuring a level of ambient air quality in public spaces, removing fossil fuel emissions, and changing travel patterns to reduce traffic.

In the latest Air Quality report "2020 Progress Report, 2021 Updating and Screening Assessment and 2022 Progress Report", Derry City & Strabane District Council has recommended that the Spencer Road Air Quality Management Area (AQMA) should be revoked due to reduced Nitrogen Dioxide pollutant concentrations, well below the limit value, over the previous number of years.

The Department for Agriculture, Environment and Rural Affairs (DAERA) had previously advised that more recent monitoring results be compiled for this AQMA to determine if pollutant concentrations continue to decline: this has been shown to be the case and it is now hoped that this AQMA can be revoked. The remaining AQMAs are considered appropriate and should remain unchanged. Although the Buncrana Road AQMA has not had exceedances of the

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⁸ DAERA Air Pollution in Northern Ireland 2021

Nitrogen Dioxide (NO2) annual mean limit value of 40 ugm3 for the last 2 years, Council will observe trends at this location with the possibility of revocation of the AQMA should NO2 levels remain lower.

DCSDC continues to monitor PM10 and PM2.5 across a number of sites and monitored levels continue to meet Air Quality Strategy Objectives but on occasions, elevated levels of PM10/PM2.5 are experienced during periods of cold weather due to the burning of solid fuels.

The above mentioned report which includes all monitoring results for all pollutants monitored in the district over recent years and an update on Action Plan measures can be found at:

https://www.airqualityni.co.uk/assets/documents/dc-reports/63b4381a89559
DCSDC 2020 Progress Report 2021 Updating and Screening Assessment and 2022 Progress Report.pdf

Strategic Context

The most significant global climate target to date, is the Paris Agreement with a goal to prevent global average temperature rising above 1.5°C of pre-industrial levels. The UK legal framework is set down in the Climate Change Act 2008 for England, Wales and NI. This mechanism works by introducing 5 yearly carbon budgets and established the independent Committee on Climate Change. The first NI Climate Change Bill and subsequent Act was passed in 2022 establishing a Net Zero emissions target by 2050 and 46% methane reduction target by 2050. NI Departments are required to publish sectoral plans to meet targets with public bodies required to report on climate action, mitigation, risk, adaptation, policies and plans.

In addition, the need to consider climate and environmental considerations are included in a number of national and local policies and plans including the NI Green Growth Strategy, Northern Ireland Environment Strategy, Nature Positive 2030 and NI Energy Strategy.

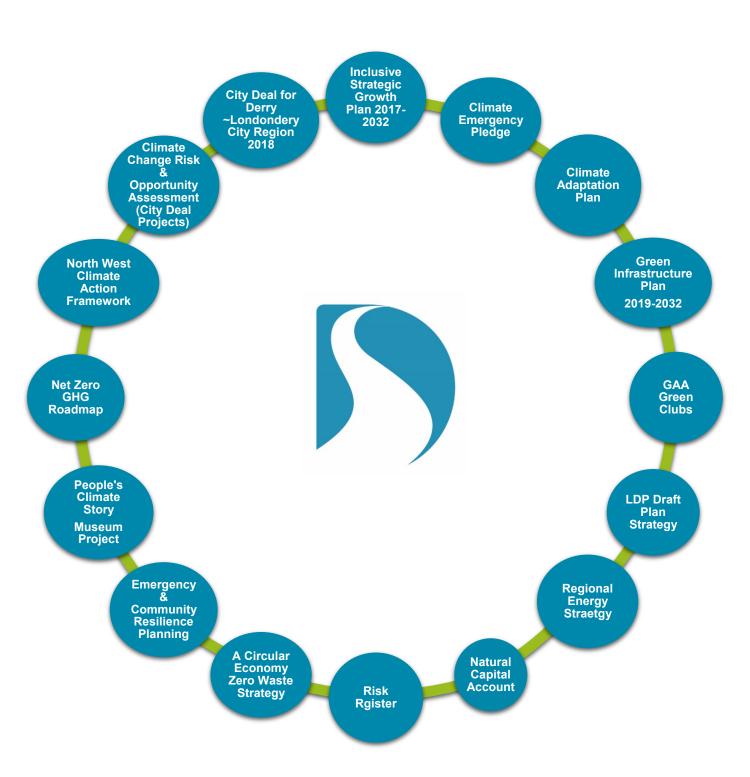
Sustainability and environmental protection are strategically embedded within the City and District's Strategic Growth Plan and City Deal proposition with an emphasis on environmental wellbeing, circular economy and sustainability and inclusivity.

The Inclusive Strategic Growth Plan vision is to achieve;

A thriving, prosperous and sustainable City and District with equality of opportunity for all.

Inclusive Strategic Growth Plan (Nov. 2017)

Derry City & Strabane District Council Strategic Alignment



Climate Emergency Pledge & Commitments

Council declared a climate emergency in **July 2019** followed by the Climate Emergency Pledge:

Council undertakes to:

Ensure that all strategic and policy decisions and budgets will immediately fall are in line with the shift to net zero greenhouse gas emissions by 2045 while also ensuring that the Derry City and Strabane District Council area as far as practically possible is prepared for and resilient to the effects of climate change.

DCSDC Climate Pledge 2020

Climate Screening – all policy and committee decisions are subject to climate change screening process which considers both adaptation and mitigation.

Commitments

Council have committed to the following national and international declarations:

- Global Covenant of Mayors for Climate & Energy
- Glasgow Food & Climate Change Declaration
- United Nations Race to Zero & Race to Resilience
- Council currently report to the Global Covenant of Mayors, CDP and ICLEI EU climate change platforms and NI National Adaptation Programme in an annual basis.

Structures & Capacity Building



In 2024 Derry City & Strabane District Council have led on the establishment of the Derry & Strabane Sustainability & Climate Commission – a multi stakeholder group which will prepare and deliver an action plan for the City & District.

Projects & Plans

Local Development Plan 2032

General Development Principles; Development should demonstrate how they

"mitigate against the effects of climate change, adapt to its impacts, and to ensure resilience."

Climate Adaptation Plan

Council is the first local authority in NI to develop a climate adaptation plan passed by Council in July 2020.

Vision

"Derry City & Strabane District Council is prepared for and resilient to the effects of climate change, creating a safe and sustainable region for all"

Progress is underway to deliver the 5 year Adaptation Action Plan with 69% actions either complete or ongoing for the 2021/22 period.

Green Infrastructure Plan

Council have launched a Green Infrastructure Plan providing a framework for a new approach within the North West.

GI Plan Vision

"By 2032 the environmental, economic and social benefits of Green Infrastructure are valued and maximised by all"

The GI Plan provides a framework for nature-based solutions to climate change.

Infrastructure & Regeneration - Climate Smart Development

Council are the first NI local authority to develop a Climate Change Risk & Opportunities

Assessment for infrastructure projects. This will inform a template for climate proofing capital
projects within the City Deal and wider developments. Work is underway to develop a checklist
and guidelines for Climate Smart development across Council.

Innovate UK – Net Zero Living Fast Followers Programme Funding - Net Zero - Derry & Strabane - From Ambition to Action

Derry City & Strabane District Council have successfully secured £300,000 of funding from Innovate UK to deliver the Net Zero Derry & Strabane project.

The project will be delivered from July 2023-July 2025 with the following partners:

- Sustainable Northern Ireland
- Northern Ireland Environment Link Climate NI
- Your Climate Strategy
- Place Based Climate Action Network (University of Leeds)

Programme Vision

"Realise the ambition of a net zero climate resilient City & District by 2045 through transformational systems including SMART climate action plans underpinned by place based insights, collaboration and capacity building."

Objectives

- Enable effective collaboration through appropriate governance structures & policy frameworks
- Provide FAIR place based system insights ensuring knowledge based climate action.
- Increase stakeholder climate change awareness and capacity for action
- Provide effective delivery frameworks through development of a SMART climate action
 plan and project pipeline
- Identify the economic & finance models necessary to deliver a climate resilient and net zero city & district
- Innovatively address non technical barriers within the Derry & Strabane City Deal programme to inlock potential adoption at scale solutions for heat, power and green infrastructure

Net Zero - Derry & Strabane - From Ambition to Action Project Summary



Council is responsible for delivery a number of projects relating to circular economy, zero waste, energy, green infrastructure and biodiversity. Council teams are currently developing the first Climate Mitigation Plan for council to reduce emissions through operations, waste, services and estate, in addition the Council is developing a Sustainable Procurement Strategy and Screening checklist for all plans and projects. The checklist will ensure council aligns with the UN Sustainable Development Goals.

Derry and Strabane Sustainability and Climate Commission

The **Derry and Strabane Sustainability and Climate Commission** was established in January 2024 with funding support from **UK Innovate**. As the second Commission of its kind in Northern Ireland, it is a pioneering initiative aimed at driving collaborative action on sustainability and climate resilience across the city, district, and the wider region.

The Commission brings together a diverse membership of **26 organisations** and over **35 individual members**, representing key sectors such as government, community groups, education, and business. This collective effort aims to leverage cross-sector expertise and resources to address climate challenges and promote sustainable development.

Key Objectives of the Commission

Achieving Net Zero Targets:

The primary goal of the Commission is to facilitate collaboration among its members to meet ambitious **net zero carbon targets** across Derry, Strabane, and the surrounding region. This includes reducing greenhouse gas emissions, enhancing energy efficiency, and promoting the use of renewable energy sources.

Cross-Sector Collaboration:

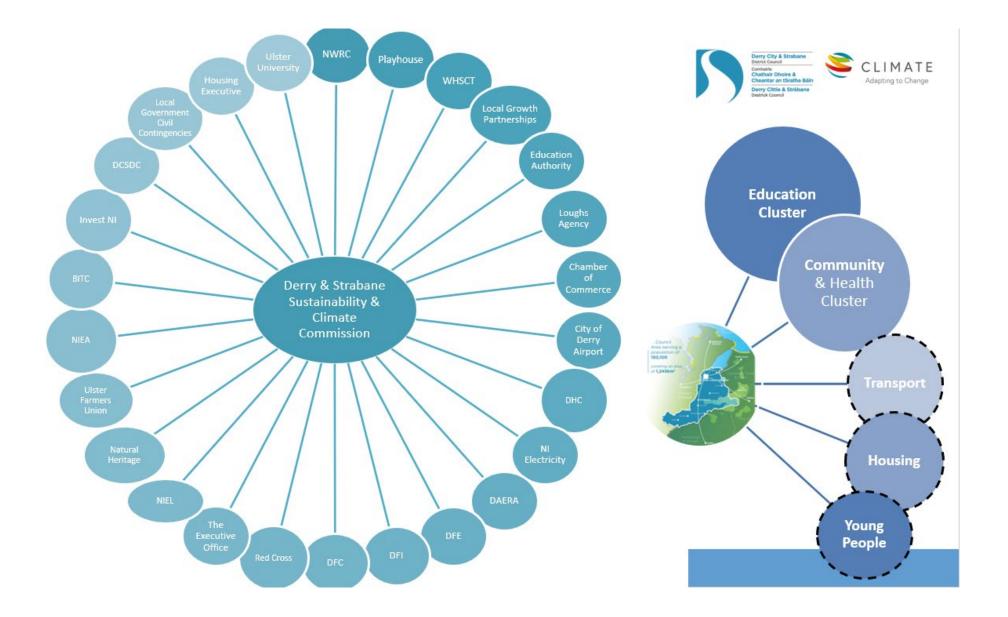
The Commission aims to foster a cooperative environment where diverse organisations can share knowledge, align strategies, and implement joint initiatives that contribute to the region's sustainability goals. By working together, members can amplify their impact on climate action

• Thematic Clusters for Focused Action:

To address specific areas of concern, the Commission has established two thematic clusters:

- Education and Climate Cluster: Focused on integrating climate education into schools, universities, and community learning programs, empowering local schools and the next generation with the knowledge and skills needed for a sustainable future.
- Community/Health and Climate Cluster: Dedicated to enhancing community well-being by addressing the intersection of health and climate, particularly through initiatives that improve air quality, promote green spaces, and support vulnerable populations.

The Derry and Strabane Sustainability and Climate Commission is a transformative initiative, aiming to harness the collective power of its members to build a resilient, sustainable, and prosperous future for the region.



Active & Sustainable Travel

Council has developed with partners 100km of traffic free routes across the city and district. An additional 45km are under development with a further 120km of routes identified.

Sustainable Food System

Council is working across a portfolio of projects to deliver a sustainable food system for the city and district. These include:

Acorn Farm I Can Grow Project

The 'I Can Grow' Project is funded by the National Lottery and led by the Community Foundation for Northern Ireland, delivered in partnership with DCSDC. The project will increase the capacity of local people to grow and cook their own food alongside research into our local food systems, resilience and climate change.

Sustainable Food Place

Council is currently working towards designation of the city and district as a SustainableFood Place and has established Acorn Food Network working across a range of stakeholders to deliver change.

Growing Food, Growing Communities

Working in partnership with Hollywood Transition Towns Council have delivered a food democracy programme including a local Food Summit to help inform the emerging Sustainable Food Plan for the city and district.

Acorn Farm Hub

Council has been awarded £5.6m from the UK Government Levelling Up Fund to develop the Acorn Farm Sustainable Food Hub (£6.2m) which will see the development of Geodesic Domes, growing spaces and learning centres within St Columb's Park. The sustainable food hub will embrace innovative climate smart technology for local food production while progressing new culinary practices and food systems. It will be an iconic eco-tourism and visitor destination as well as a focal point for local community climate action and food growing.



Regional Networks

Council officers are involved in a number of climate and sustainability networks and working groups across Northern Ireland including the Local Government Climate Action Network, Regional Community Resilience Group, Living with Water Programme, NI Coastal Forum and Sustainable NI.

Cross Border & North West Region Climate Action

DCSDC recognises that climate change transcends local boundaries and borders and is working in partnership with Donegal County Council to address the climate emergency.

This includes the development of the Regional Energy Strategy, Green Transformation Statement and North West Climate Action Framework.

North West Climate Action Framework



To create a Net Zero emissions, climate ready North West region where climate action benefits are maximized for local communities, environment and economy.



The North West Region will:

Deliver climate action on a cross sectoral multi agency basis to achieve greater



NWCAF will deliver climate action based on core principles of:

- Commitment & collaboration
- Transparency & accountability
- Tuet Tenneities

Cross Cutting



Develop partnership structures facilitating collaboration and policies to deliver North West Climate Action.





Climate Action



Deliver co-ordinated adaptation action across the North West to ensure resilience to climate impacts.



Deliver coordinated mitigation actions across the North West to achieve net zero greenhouse gas emissions (Targets