

Draft Cork City Climate Action Plan 2024–2029







#### **Cork City's Climate-neutral Mission!**

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### Foreword

#### Lord Mayor of Cork, Cllr Kieran McCarthy



Cork City is experiencing climate change. The risks and frequency of extreme weather events are increasing and, according to our research, most residents of Cork City say that they have experienced these changes personally. There is a need and strong support for more climate action to be taken in Cork.

We are committed to the national target of reducing greenhouse gas emissions by 51% by 2030, and we will achieve that target. However, in Cork City we have set our ambition higher. Our participation in the EU Mission on Climate Neutral and Smart Cities will support us to transform the way we live and work in the city to massively accelerate our transition to net-zero emissions.

For some time, Cork City Council has been implementing practical action on the ground, for example: expanding our cycling and walking infrastructure, retrofitting our social housing, constructing state-of-the-art energy efficient housing, making progress on flood relief schemes, facilitating the implementation of Bus Connects Cork, and protecting our biodiversity. We are implementing policies that support compact growth and sustainable development, while aiming to celebrate heritage, harness biodiversity and reduce carbon emissions. The Council's work is complemented by that of our local and national partners in the public and private sectors, our very active community groups, and the many businesses who are accelerating their own actions to reduce emissions.

This is not the work of the Council alone. To succeed we must all work together – people, businesses, community and cultural organisations and public institutions in our city. A clear message came out of our Climate Conversations with stakeholders: business as usual will not work. Radical collaboration and new ways of working together are essential.

Join us in meeting the challenge of our lives.

#### **Cork City Chief Executive, Ann Doherty**



Addressing climate change is a huge challenge, but one that offers great benefits and opportunities to all of us who live or work in the city.

Our first *Cork City Climate Action lan* will deliver the changes needed to make our city more sustainable, resilient and to enable us all to thrive. The plan has been developed through a series of vibrant Climate Conversations with Elected Members, communities, young people, businesses and public sector bodies, along with extensive staff engagement. This was supported by research that we commissioned to set baselines for our understanding of where we are at, scientifically and socially as a city. We thank everyone who has already contributed to this plan, and we look forward to further contributions in the public consultation process. The Climate Action Plan will be iterative, and it will change as we learn from implementing the actions. We are all on a new journey and it is vital that we take brave and unprecedented steps to halt climate change.

Our actions outline how we must reimagine a transformed city, making sure that the changes we deliver work for everyone; how our residents and community organisations can play their full role and make their voices heard; how our buildings, the biggest source of greenhouse gas emissions in the city, can be made more comfortable and energy efficient; how improvements to our transportation system can make it easier, quicker and cleaner to get around; and how our natural environment can be protected, restored and enhanced. As a cross-cutting issue, climate action is relevant to everything that Cork City Council does. Its governance and management must be mainstreamed into all the policy and service areas the organisation works in.

Making these changes is not only good for the planet, but also for us. Cleaner air and more nature-rich environments will benefit our physical and mental health. The changes will provide opportunities in the future, creating the infrastructure and environment to help us cope with the risks of climate change, and making our homes more comfortable and more efficient. They will also enhance the attractiveness of Cork City as a place to do business.

As our population and economy grow, Cork City must develop as a compact, greener, and more liveable city. Fully implementing the actions included in this Climate Action Plan will be critical to realising these benefits for all. I support our Lord Mayor's call to action. We are fully committed to working with everyone to meet the challenge of climate change and to realise the potential benefits.

To realise these benefits, and to avoid the worst of climate change, we must act quickly. Cork City Council will be working with communities and businesses to implement climate actions that deliver these benefits, and above all accelerate the reduction of our emissions, ensuring we can play our role in this global crisis.

# Executive Summary

# Executive summary

This is an important and ambitious plan that addresses a global crisis at a local level. While it is underpinned by our statutory requirement to produce a Local Authority Climate Action Plan, our ambitions go beyond our statutory targets.



This Draft Cork City Climate Action Plan 2024-2029 (CAP) is set against the background of ongoing climate and biodiversity breakdown.

Its ambition is informed by the United Nations' Sustainable Development Goals (SDGs) and by the national climate ambition of a 51% emissions reduction by 2030.

However, Cork City's participation in the EU Mission on Climate-Neutral and Smart Cities has given us a more ambitious goal of aiming to reach net-zero emissions by 2030. That transformation requires a dramatic acceleration of our progress, achieved through careful examination of the barriers we face and a systemic approach to overcoming them.

#### **Cork City**

Cork City is a rapidly growing and economically important second city. The city produces nearly one million tonnes of  $CO_2$ eq emissions every year, predominantly from our residential, commercial, and industrial buildings, and from our road transport. The city is increasingly vulnerable to all kinds of flooding, heatwaves and droughts that are projected to become more frequent and intense if not mitigated.

Cork's residents have high awareness of climate change and want action. Cork City Council and other organisations in the city have begun to implement policies and plans that are starting to deliver climate-positive change, but there is a long way to go. Fortunately, within the city there is a strong desire to act, in our community organisations, businesses, academic institutions and public sector institutions, and there is a clear willingness to work together.



#### **Our Pathway to Carbon Neutrality**

In Cork City, the CAP will put us on a path to achieving our vision of a climate neutral, resilient, just, healthy, and thriving community. Our vision will be realised through the achievement of three interlinked goals, which are:

- To achieve net-zero Greenhouse Gas emissions as soon as possible, in line with the EU's Climate-Neutral and Smart Cities Mission's objective, by identifying, testing and implementing approaches to acceleration in all five thematic areas.
- Protect and enhance our natural and built environment.
- Establish an **inclusive and best-practice governance** to lead the city into a sustainable and thriving future.

The CAP is evidence-based and informed by a series of engagements with the city's stakeholders. Cork City Council has undertaken extensive baseline research, the findings of which form the starting point for implementation. This work incorporates:

- A baseline emissions inventory, compiled by UCC.
- A climate-change risk assessment, carried out by KPMG.
- An in-person **household survey**, carried out by Behaviour & Attitudes.
- A series of **Climate Conversations**, consultations with the public sector, community organisations, businesses, elected members of the Council, and council staff, facilitated by Change by Degrees.
- Climate Conversations with children and young people.

We have also worked with our partners in the Climate Action Regional Office (CARO) Atlantic Seaboard South, including local authorities in Cork County, Kerry, Limerick and Clare in the development of the plan.

#### **The Actions**

Our Draft Climate Action Plan sets out over 100 actions, grouped under five themes, though many actions cut across the themes:

- Governance and Leadership.
- Communities and Partnership.
- Built Environment and Energy.
- Transport and Mobility.
- Natural Environment and Resource Management.

The specific climate actions have been informed by the baseline research and stakeholder engagement. While the actions are climate focused, they have many additional social, environmental, economic and health benefits.

The actions are wide ranging and include, for example, under **governance and leadership** and **communities and partnership** actions to instigate systemic change, behavioural change, and community and multi-sectoral engagement. These are vital elements of the plan, as there is a need for all residents and communities to be part of the change. Measures in **the built environment and energy** include the decarbonisation of buildings, a significant escalation of rooftop solar-energy production, and the continuation of the public lighting and socialhousing retrofitting programmes. Flood defence schemes, engineered and nature-based, will play a key role in building the city's resilience and adaptation to climate change.

Notable actions in the **transport and mobility** area include the continued rollout of active-travel and public transport infrastructure and the publication of an EV-charging Infrastructure strategy. **The natural environment and resource management** is a key focal point, with naturebased solutions such as the implementation of our Trees strategy, the enhancement of our biodiversity, and the promotion of a circular economy.



#### Accountability

Cork City Council is fully accountable for the delivery of some actions but, as a citywide plan, its role in other actions is to influence and help create an enabling environment for others to act.

We will co-ordinate and facilitate multiple stakeholders in collective actions and advocate for and support change through communications, promoting climate action and supporting capacity building.

#### Implementation

Where possible, we will utilise the existing structures within Cork City Council to implement the CAP actions. Our established **Climate Action Committee** and **Climate Action Team** will be involved in the implementation. However, two new structures are envisaged.

The **Climate Neutral Cork Leadership Group** will promote and support the appetite for change in the city, help ensure everyone is included in the transition fairly, and steer our transition at a high level. The **Climate Neutral Cork Transition Team** will provide a forum for a wide range of stakeholders to connect, share information and learning, and identify opportunities for collaboration and implementation of climate-positive projects. These two bodies will focus their work on support and encouragement of action.

The CAP will be iterative and will be regularly reviewed and updated, as we learn from implementing our climate actions and from the evolving technologies and understanding of climate science.. It will be supported by an **Implementation Plan** to deliver the actions. The CAP will be complemented and extended by the development of the **Mission City Contract** and **Mission Investment Plan** that will be created as part of our membership in the network of 100 European Cities on a path to net zero as soon as possible.



# We Are Cork : Thinking Globally, Acting Locally

Cork is Ireland's second largest city with a population of 224,004 people, an increase of over 6% since the previous census in 2016.

The River Lee runs through the heart of the city and on to Cork Harbour. The rivers and waterways play an important role in the layout and structure of the city and are an integral element of the city's landscape character. Cork has a vibrant, compact city centre, with engaged communities and businesses. The willingness to co-operate is witnessed throughout the city, with the City Council engaging with community initiatives and businesses in the continuing upgrading of the public realm.

#### **EU Mission on Climate-Neutral and Smart Cities**

Cork City's participation in the EU Mission on Climate-Neutral and Smart Cities is a commitment to significantly accelerate the delivery of the European Green Deal's goal of becoming a 'net zero' continent by 2050.

The Cities Mission will encourage and support systemic transformation, cutting across different GHG emissions sectors, including buildings and transport, to prioritise attention on overcoming whatever the specific local barriers may be to achieving carbon-neutral status well ahead of that current European, and national, target. Cork City has also joined EU Missions on Adaptation to Climate Change and to Restore our Oceans and Waters. Without downplaying the extent of the governance, resourcing and logistical challenges that lie ahead of achieving this goal, and



recognising that Cork is starting from a comparatively low base, the prestigious designation represents a vindication of considerable recent progress in this field by Cork City Council. This includes establishing Ireland's first dedicated local authority **Climate Action Committee** (Elected Representatives), supported by a **Climate Action Team** 



(chaired by the Chief Executive), which operates across the organisation. The challenges of sustainability and climate change also underpin the City Development Plan 2022-2028, which frames the shape and character of how Cork will accommodate very significant population growth over

the next two decades. Accordingly, significant investment in initiatives to improve quality of life has been rolled out, including active-travel measures, retrofit of social housing stock, development of parks, and blue and green amenities in a manner that supports biodiversity.



#### **Sustainable Development Goals**

Cork City Council has long used the United Nations' Sustainable Development Goals (SDGs) to align our work with global ambition. The Cork City Development Plan 2022-2028 and the Cork City Council Corporate Plan to 2024 are fully aligned with a range of the SDGs and our focus is on their achievement. Whilst Goal 13 – Climate Action – is a key goal that clearly underpins the CAP, it is not the only one of relevance to the CAP.

The five CAP themes are aligned with several specific SDGs and, at implementation, specific goals and targets will be identified for each action. Similarly, the CAP is well aligned with the European Union's climate law, with a clear target for climate neutrality, a strong focus on the just transition and resilience building. This is a rapidly evolving subject, influenced by changing policy, the availability of resources, the impact of public demand, our learning from experience, and the evolving capacity of the City Council and other organisations in the city. Consequently, this is an evolving plan that will be reviewed and updated on an annual basis.

#### **International Partnerships**

Cork achieved the **UNESCO Learning City Award** in 2015 in recognition of our mobilisation to maximise opportunities for lifelong and inclusive learning for all.

The annual **Cork Lifelong Learning Festival** is now a highly anticipated month-long event with huge engagement from a diverse range of participants, presenting learning opportunities on every imaginable subject.

Cork was designated a **Healthy City** by the World Health Organization in 2012. The designation is awarded to cities that continually create and improve their physical and social environments, acting holistically on the social determinants of health through policy and action.

Both programmes embrace and promote climate action through their projects, education and interactions, and are constructive vehicles for building awareness of climate change and motivating the population to act. They are important examples of how climate action can be mainstreamed in the city.

#### A Creative City that Cares

Cork City is renowned for its rich musical and artistic heritage. The city continues to produce an eclectic range of musicians, artists and comedians, many of whom are increasingly engaged in promoting environmental and climate-related issues. The Kinship Project, for example, is a multi-stakeholder art project supported by Cork City Council that is exploring ways to empower people to interact with their natural environment.

The iconic Kingfisher mural on St Peter's Avenue embodies the damage that we're doing to our natural environment. City Council-organised events have pioneered the move to the circular-economy principal of reduce-reuse-recycle across cultural and sporting events, such as the Cork City Marathon and the city's many festivals.



#### **Planning for the Future**

The Cork City Development Plan 2022-2028 sets out a vision for the city's spatial development to accommodate a rapidly growing population, expected to be approximately 335,000 by 2040.

The core strategy endorses the concept of compact and liveable growth, incorporating the approaches of a **15-minute city** and walkable neighbourhoods.

These approaches will be applied in **regeneration areas** that include the City Centre and Docklands, Hollyhill, Blackpool, Ballyvolane, Wilton, Mahon and Douglas, and the urban towns of Ballincollig, Blarney, and Glanmire. These communities will be better connected by **improved sustainable transport routes** incorporating both public and active-travel options.

Climate change and the environment are cross-cutting themes that are integrated in all strategic principles for growth, helping to deliver **more sustainable and liveable communities**. Mitigation is achieved through **reducing the need to travel**, maximising **brownfield development** opportunities, increasing investment in **green and blue infrastructure**, **biodiversity enhancement, community and recreational facilities, flood protection**, and increasing the use of **renewable and low-carbon energy sources**.

A commitment to a just transition, that puts local people's needs at the heart of challenging actions required to mitigate and adapt to climate change, is mainstreamed throughout the plan.

#### **Climate Risk**

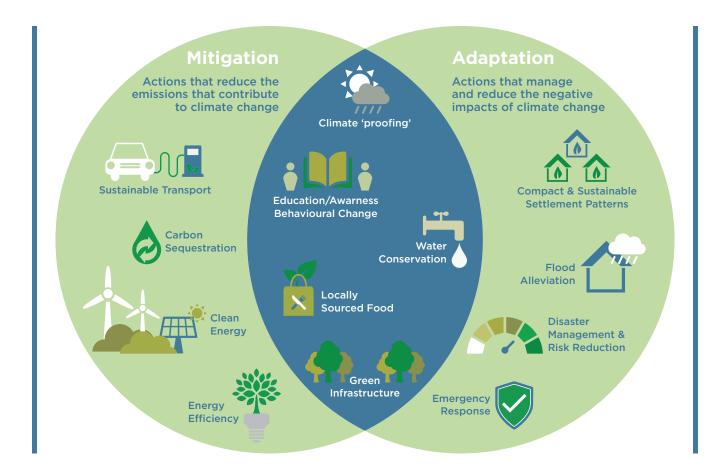
Cork City is vulnerable to a range of natural hazards that are expected to become more severe in future. We are situated at the mouth of the second largest natural harbour in the World.

The River Lee branches to the west of the city into two streams that form substantial rivers through the city. Our **Climate Change Risk Assessment** highlighted the longrecorded history of flooding in the city centre, with over 300 recorded floods since 1841, most recently the particularly damaging event in 2009. The recent flood damage in Glanmire highlights the need for a citywide response to adapt to climate change.

Cork knows about floods, but heatwaves and droughts are also identified in the assessment as among the most severe risks. Overall, it is projected that, without mitigation, flooding from river, tidal and heavy rainfall, will become more frequent and intense. This is likely to have serious negative impacts on our asset base, health and wellbeing, environment, social networks, cultural heritage, finances, and



reputation. To date, flooding has resulted in enormous costs for the public, private and public sectors, all of which can be expected to increase over time.



# Why WeDeveloped TheDraft ClimateAction Plan

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# Why We Developed The Draft Climate Action Plan

We are heading for what the UN Secretary General described in 2021 as a "Code Red for Humanity" [1].

Climate change is accelerating, alarmingly. The most recent Intergovernmental Panel on Climate Change (IPCC) report [1] presents irrefutable evidence of human-induced (anthropogenic) climate change globally. It predicts that without immediate and substantial emissions reductions we will breach the dangerous warming threshold of 1.5°C above pre-industrial levels.

Irish researchers are also recording the emergence of evidence for **anthropogenic climate change** in the long-term meteorological observations in Ireland [3].

The Irish Government enacted its legislative response in the Climate Action and Low Carbon Development (*Amendment*) Act of 2021 [4].

The Climate Change Advisory Council, an independent body that monitors and assesses climate issues and advises government, reported in its 2023 Annual Review that "at the current rate of policy implementation, Ireland will not meet the targets set in the first and second carbon budget periods unless urgent action is taken immediately and emissions begin to fall much more rapidly" [5].

Recent floods in Cork are symptomatic of the climate change that has already occurred and will become more the norm [6]. Every local authority in Ireland is required to produce a plan that sets out how national policy will be implemented at the local level to deliver the national climate ambition of a **51% reduction in Greenhouse Gas (GHG) emissions by 2030**, and the achievement of net-zero emissions by 2050.

The government guidance [7] for the Local Authority Climate Action Plans sets out that individual authorities will be "responsible for reducing GHG emissions from across its own assets and infrastructure, whilst also taking on a broader role of influencing and facilitating others to meet their own targets".

All local authorities must ensure that their plan is "Ambitious, Action-focused, Evidence-based, Participative and Transparent".

As a Mission City, we have elevated our ambition beyond our national targets and we will aim to be carbon-neutral by 2030.



# What Informed Our Draft Climate Action Plan?

Cork City Council undertook extensive baseline research and public consultation in 2022 and 2023 to inform the Climate Action Plan.

- A baseline emissions inventory, compiled by UCC.
- A climate-change risk assessment, carried out by KPMG.
- An in-person **household survey**, carried out by Behaviour & Attitudes.
- A series of **Climate Conversations**, consultations with the public sector, community organisations, businesses, elected members of the Council, and council staff, facilitated by Change by Degrees.
- Climate Conversations with children and young people.
- We have also worked with our partners in the CARO Atlantic Seaboard South, including our local authority neighbours in Cork Country, Kerry, Limerick and Clare.

This research found:

- The climate and biodiversity crises present serious challenges to the future well-being of Cork City and its citizens. In the city, 80% of citizens believe climate change is affecting the weather and a third have experienced its impacts. Consistent and positive support for climate actions in the Cork City area is evident.
- Existing and forthcoming national, regional, and citylevel policies and plans require climate action in diverse areas such as buildings, transport, infrastructure, culture, economic development, and social cohesion. Our climate action plan will incorporate these existing commitments.
- Cork City emits nearly 1 million tonnes of CO<sub>2</sub> eq. annually. The highest share, **34% of emissions, come** from residential properties that use fossil fuels. Road transport contributes 29% of emissions, the second highest share. Making our homes more energy efficient, cosier, and reducing congestion through

better improved public transport and active travel, are important ways to reduce our exposure to the damaging effects of climate change.

- 4. Cork City and its citizens will experience increasing and significant negative impacts on their assets including houses and infrastructure, their health and wellbeing, the environment, their social networks, and cultural heritage from climate-related hazards such as flooding and heatwaves. These hazards will place a greater financial burden on households and the city.
- 5. Most residents of Cork City are very supportive of different kinds of climate action and will benefit from making the city cleaner, healthier, less congested, and greener. Growing numbers of residents are already taking personal action whether in choosing to walk or cycle, or to make their homes more energy efficient. Many more plan to follow suit.
- Residents have shared big ideas to achieve the transition to a sustainable, climate neutral city, such as large-scale public investment in building retrofitting, and installing solar panels on every suitable roof. They want the transition to be fair, making sure that no one is left behind.
- 7. During the Covid 19 pandemic we collaborated in a radically different way to survive, and we need to retain this emergency approach to address the climate and biodiversity crises. We must be willing to take risks and to share responsibility, to accelerate climate action and to involve everyone in the solutions. We must communicate more effectively to connect with our community on an emotional level to build support for change.

#### **Emissions Breakdown by Sector for Cork City**

Sector	CO <sub>2</sub> -eq (ktonnes)	
Household	332	
Road Transport	290	
Commercial Services & Industry		
	216	
Public Services	65	<b>2%</b> Waste
Agriculture, Land Use & Fishing		6%
	62	Agriculture, Land Use & Fishing
Waste	22	
Total	987	7% / Public Services

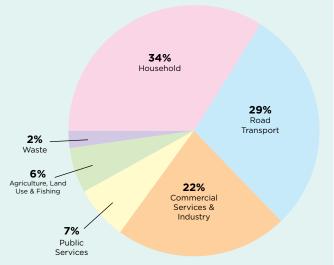


Figure 1: Emissions breakdown by Sector for Cork City

#### **Profile of the Decarbonising Zone**

Government guidance on climate action planning requires each local authority to identify a Decarbonising Zone (DZ). While ultimately the aim is for the whole city to be a decarbonised zone, the DZ area will be used to pilot specific actions.

Cork City's DZ, covers approximately 3% of Cork City's area (5km2) stretching from the west of the city centre at the

Tyndal Institute out towards, and including, the Munster Technological University's Bishopstown campus.

The DZ has a population of 13,927, approximately 11% of the city's population. The DZ area was chosen as it incorporates a broad mix with three Higher Educations Institutions (HEIs), a business and technology park, a hospital and mixed residential buildings.

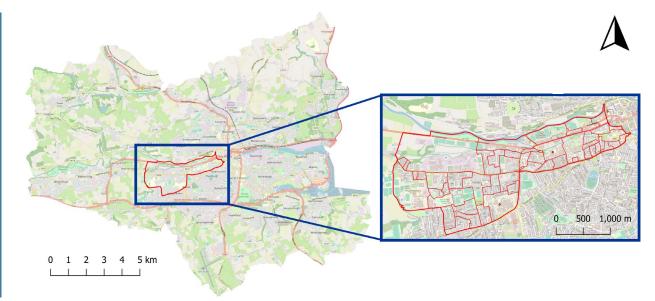


Figure 2: The Decarbonising Zone in Cork City

# What Have We Done Already?

# What Have We Done Already?

In recent years Cork City Council and its partners have started, and in some cases completed, implementation of a broad range of initiatives to reduce emissions and build climate resilience.

These measures include, but are not limited to:

#### **Governance & leadership**

- Establishment of the **Climate Action Committee** and the **Climate Action Team**, who continue to progress climate actions within Cork City Council..
- Building organisational capacity through the expansion of the Climate **Action Unit**.
- Declaration of a **climate and biodiversity emergency** in June 2019.
- Joining **EU Missions** for Climate-Neutrality and Smart Cities; Adaptation to Climate Change; and Restore our Oceans and Waters.

#### **Communities & Partnership**

- Ten local **Community Climate Action Plans** were produced in 2021/22 with the support of Cork Environmental Forum and Cork City Public Participation Network.
- The **Community Climate Action programme** was launched in 2023.

- Support for establishment of 26 **community gardens** across the city.
- There has been continued support and participation in the **Energy Cork Cluster**.
- The Cork City Local Enterprise Office continues to support small and medium enterprises in their decarbonisation journey.

#### **Built Environment & Energy**

- A significant energy efficiency upgrade was carried out on one of Cork City Council's leisure centres, at LeisureWorld Bishopstown in 2022, one of council's top 5 energy users. This resulted in a 44% reduction in gas usage and 50% in electrical usage.
- The tendering of an **Energy Performance Contract** (EPC) for seven Cork City Council Buildings has commenced. This involves using a large energy consuming building, i.e. a leisure centre, and incorporating smaller-consuming buildings into the contract to make it financially viable to complete energy efficiency upgrade works and to help establish best-practice guidance for similar buildings across the city.



- Plans are underway to carry out an Investment Grade Energy Audit of the main Cork City Council campus, with a view to planning a **near-zero carbon campus**.
- A smart-sensor lighting system, to save energy and reduce impact on biodiversity, was installed on the Blackrock/ Mahon Greenway.
- 51% of public lights have been converted to **LED**, as part of an ongoing replacement programme.
- Flood relief work completed in Togher and Douglas. Works begun in Glanmire/Sallybrook and planned flood-relief schemes for the Lower Lee and Morrison's Island.
- **Retrofitting** of the first 25% of Cork City Council's social housing stock to make them more energy efficient and comfortable homes is underway.

#### **Transport & Mobility**

- Cork City Council was the first local authority in Ireland to introduce a significant portion of **electric vehicles** (76) in its fleet.
- In recent years we have extended the **cycling infrastructure and greenway network** to 66 km.
- Construction on a **new platform in Kent Station** to facilitate through running train services from Mallow to Cobh and Midleton began in October 2023.
- Implementation of the Cork Metropolitan Area Transport Strategy (CMATS), adopted by the National Transport Authority and aimed at supporting the move to public transport and active travel, is ongoing.
- Planning for a major restructuring of the city's bus network, **Bus Connects**, is at an advanced stage.
- The public consultation phase of a new **light-rail system** for the city is imminent.
- 17 city centre streets **pedestrianised**.
- Cork City Council achieved NTA active travel mark.

#### Natural Environment & Resource Management

- Completion of **Tramore Valley Park** and **Marina Park** Phase 1.
- Five Council parks have been awarded **Green Flag** status from An Taisce, along with 19 **Green Flag Schools**.
- In 2019, Cork City Council banned single-use plastic cups and utensils from the Council's main campus and introduced segregated waste bins.
- With support from Cork City Council, Relove Paint the Northside Community Enterprise collected 1.7 tonnes of paint from the Kinsale Road and Rafeen Civic Amenity sites in 2022 and sold 1,125 litres back to the community.
- Over **9,000 trees** have been planted by the council in the last two years.
- The council's Parks section has introduced a programme of **pollinator friendly planting** and banned the use of Glyphosate in January 2022.



# Vision, Goals and Objectives

In January 2023, Cork City Council's Climate Action Committee agreed the following **vision** for our work.

Cork City is transforming into a climate neutral and resilient city. We are rapidly becoming a more fair, healthier, more economically vibrant and more sustainable place to live, work and do business.

To achieve this vision, we have established three interlinked **goals**, which are:

- To achieve **net-zero GHG emissions** as soon as possible, in line with the EU's Climate-Neutral and Smart Cities Mission's objective, by identifying and testing approaches to acceleration in all five thematic areas.
- 2. Protect and enhance our **natural and built environment** for future generations.
- 3. Establish **best-practice governance** to lead the city into a sustainable and prosperous future.

The Cork City Climate Action Plan has adopted five themes to organise its actions. Each **theme** has several specific **objectives** that will, taken together, achieve the **goals**. The five themes and their specific objectives are:

#### **Governance & leadership**

- Our community will work together through an inclusive and accountable governance structure to achieve a **fair climate transition** that leaves no one behind.
- A governance structure that engages people living and working in the city and supports them in gaining knowledge and acting, individually and collectively, in ways that protect and enhance our climate and environment.

#### **Communities and Partnerships**

• Climate action will be mainstreamed in all areas of community development, including for youth, gender, poverty and social inclusion, integration, health, arts, and travel among others.



- The diverse community groups in Cork City will play a major role in climate action, **achieving a fair and inclusive transition**.
- The City Council and other institutions will facilitate individuals and community groups to act.

#### **Built Environment and Energy**

- Institutions and building owners in Cork City will work together to accelerate retrofitting and the installation of renewable energy systems.
- Innovation will be de-risked for building owners, and effectively tested in the city and, where successful, is rapidly scaled up.
- The expansion zones and regeneration area are flagship, climate-positive development projects that integrate our policies and good practices set out in the City Development Plan, the Green and Blue Infrastructure Strategy, and the Trees Strategy, among others.

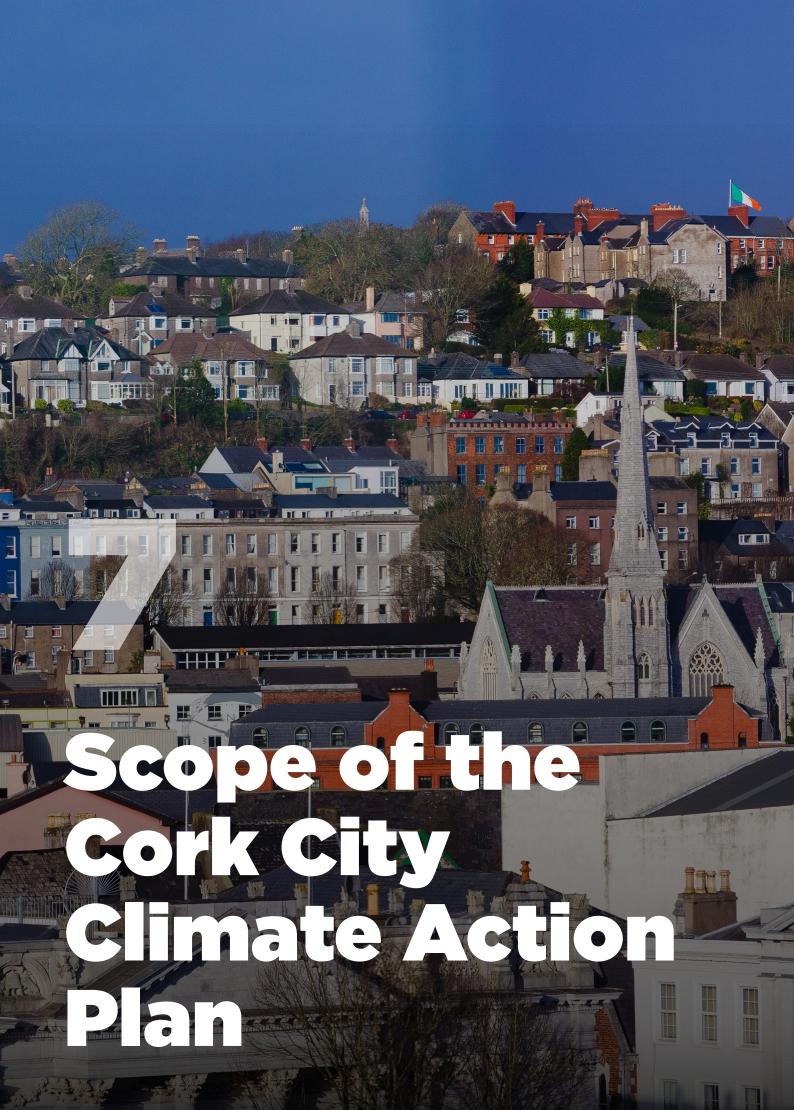
#### **Transport and Mobility**

- People living and working in Cork City will avail of an excellent sustainable public transport system and accessible, safe active-travel routes, using a car as a last resort.
- Provision of multi-modal sustainable transport options for everyone.
- Reduced car ownership and significantly reduced car use in the city.

#### Natural Environment and Resource Management

- Green space will be available in every neighbourhood.
- The potential for carbon sequestration, nature and biodiversity gain, and climate-risk mitigation through green and blue infrastructure will be maximised in every new development and established neighbourhood.
- The city will adopt the reduce-reuse-recycle principle of a circular economy.





# SCOPE OF THE CORK CITY CLIMATE ACTION PLAN

The Cork City Climate Action Plan sets out the actions that will make Cork City sustainable, resilient and reduce the carbon emissions of the city. Our plan reflects the deep concern felt by the residents of Cork City and delivers on their demand for a sustainable future.

Cork City Council and Dublin City Council were selected to join the **EU Mission for Climate-Neutral and Smart Cities**. The Mission challenges us to go further and faster than other cities and counties to reduce our greenhouse gas emissions. The Mission emphasises the need to change the systems that determine our ability to achieve transformational impact. These systems include:

- The way that we govern our city ;
- Our use and dissemination of data;
- The way we finance climate action;
- Who we partner with and our relationships with them;
- How we involve residents in decision-making; and
- How we build and retain capacity within the council.

To address the systemic changes required will involve enhanced **collaboration and inclusive leadership**, more support for **community climate action**, removal of barriers to retrofitting, accelerating the shift to **sustainable transport**, and widespread integration of green and blue infrastructure in future development. Such change is envisioned in all the Climate Action Plan themes.

Cork City Council is also a member of the **EU Mission on Adaptation to Climate Change**, which supports us to build resilience in the city and to put the EU Adaptation Strategy into practice, ensuring that we better understand, prepare for, and manage the risks associated with climate change. Participating in these EU-wide missions provides Cork City with access to the experience and expertise of cities across Europe to reduce emissions and make the city a healthier, more resilient place to live.

Both missions encourage innovation and place importance on inclusion, participation, coordination, learning and knowledge sharing. Cork City Council's buildings and services contribute a relatively small fraction of GHG emissions in the city. Achieving a successful transition to a low-carbon, climate resilient city is, therefore, a joint effort involving our residents, businesses, communities, and public sector institutions. **We need everyone's active participation in meeting the challenge of climate change to share in the benefits that will arise**.

#### The Role of Cork City Council

Cork City Council plays a variety of roles in delivering its climate action objectives, *summarised in Figure 3*. Whether it is fully accountable for an action in this plan, or if it plays a role in influencing, coordinating, and facilitating, or as an advocate, Cork City Council's role is detailed against each action.



Full Accountability	Influence	Co-ordinate & Facilitate	Advocate		
Delivering on climate action in areas within own remit including local authority's own buildings, infrastructure, systems, operations and staff.	<ul> <li>Influence sectors and communities on climate action.</li> <li>Direct: Procurement/Supply chains and staff protocols.</li> <li>Regulatory: Decision-making on planning and development, waste, byelaws,application of standards</li> <li>Broad: Through the provision of services across the range of functions, prioritisation, channelling investment etc.</li> </ul>	<b>Coordinate</b> efforts between different stakeholders e.g. DZ and <b>Facilitate</b> through the identification of funding, use of regulatory levers. Collaborate and engage in partnerships on climate action.	Creating the local vision, communication, awareness raising, promotion, capacity building.		
Targets / Metrics	Key Performance Indicators				

Figure 3: Cork City Council's role in delivering the climate action objectives

The Climate Action Plan is fully aligned with the CARO's Delivering Effective Climate Action (DECA) goals, as follows:

*Strategic Goal 1:* Fostering Governance, Leadership and Partnerships for Climate Action.

*Strategic Goal 2:* Achieve our Carbon Emission and Energy Efficiency Targets.

*Strategic Goal 3:* Deliver on Climate Adaptation and Climate Resilience.

*Strategic Goal 4:* Mobilising Climate Action in Local Communities.

*Strategic Goal 5:* Mobilising Climate Action in Enterprise and Support Transition to an Inclusive, Net-Zero and Circular Economy.

*Strategic Goal 6:* Achieve a 'Just Transition' particularly for Communities that may be Economically Disadvantaged by Decarbonising Projects.

#### A Plan that is Informed by our Engagement

People are at the heart of our climate change planning. The Council has, throughout spring and summer of 2023, engaged with different sections of our society through a series of **Climate Conversations**.

The intention of this engagement was to inspire action and solicit input from a diverse range of stakeholders. Five events have taken place involving **public sector** organisation operating in the city, **community-based organisations** of all kinds, **businesses** large and small, young people, our **elected council members**, and senior and middle-ranking **staff** of the council. Many initiatives were proposed, many of which are reflected in our planned actions. The overarching messages from these conversations were:

- There is a **strong appetite for change** to cope with the climate and biodiversity crises.
- **Radical collaboration** is needed. Business as usual will not be enough.



The CAP includes actions to strengthen governance and inclusion, through the creation of new structures to broaden participation of institutions, community groups, businesses, academia and others, in decision-making, learning and delivery of change. These structures will enhance our collective ability to listen to each other and to identify opportunities for partnership and collective action.

#### **A Principled Plan**

Cork City Council applies a principled approach to all of its work. Its overarching principles were set out in the Climate Action Charter of 2019.

While this plan supersedes some of the specific clauses of the charter, its commitment to a participatory approach that includes residents' voices, strong partnerships including with business and academia, and the mainstreaming of climate action in all our work, such as planning and regulation, and effective monitoring and evaluation, remain highly relevant.

They may be more clearly stated as:

- Cork City residents support climate action. Our proposals will be bold and ambitious. Business as usual will not be enough.
- We will take risks through innovation and learn from our mistakes.
- Our transition to net zero will be fair. It will help the most vulnerable groups in the city so that climate action does not push them further behind.
- We will seek out **creative and high-impact partnerships** with our community organisations, businesses, and academic institutions, among others, to drive and accelerate progress.

#### **An Environmentally Aware Plan**

Cork City Council is aware that some of the actions in this plan have the potential to impact negatively on their receiving environments.

To integrate environmental protection and conservation into the plan, and in compliance with the EU's Strategic Environmental Assessment (SEA) Directive and the Habitats Directive, a **Strategic Environmental Assessment** and **Appropriate Assessment** were carried out. The CAP actions were amended appropriately to reflect the results of the assessments.

#### **Background Research**

This CAP is based on detailed and extensive research and stakeholder consultation that forms the baseline for our future action. Our analysis combined empirical and qualitative evidence, in line with the government's guidance on climate action planning. We consulted with over 800 stakeholders from businesses, the community sector, public services, and among the elected members of Cork City Council. In addition:

- We commissioned research from UCC to identify the source and scale of our **GHG emissions**.
- KPMG conducted a **climate change risk assessment** to project how the changing hazard profile would increase risk to our asset base, finance, society, and heritage, among others.
- B&A conducted a **household survey** that interviewed 509 residents about their views and potential actions to address climate change.

The main insights from our conversations and analysis are summarised in the illustration below in *figure 4*. A full summary report is attached to this report as Annex G . All of the underlying baseline research commissioned by Cork City Council can be found on our website at Cork City Climate Action Plan - Cork City Council.

# Supportive

The majority of residents of Cork City support Climate Action

# Emissions

Most of the city's emissions come from our **residential properties** and **road transport**.





## Ambitious Changes

Residents of Cork City want to see **ambitious climate actions** taken and want any changes to be fair.

## A different approach



We all need to **work differently** to achieve greater sustainability, working in partnership and communicating more clearly.

# Action

Existing policies and plans at the global to local level require the Council to **act**.



# Negative Impact

Residents of Cork City will experience negative impacts from climate change if action is .



# Benefits of action

Climate action will create many **positive and desirable co-benefits** on health, wellbeing, financial savings

and comfort.



# Governance and Leadership

#### Sustainable Development Goals



#### **Key Messages**

#### State of Play

- Climate governance within the Council is well-established in the **Climate Action Committee** and **Climate Action Team**.
- The City Council has a **Climate Action Unit**, to co-ordinate, support, and promote climate actions in Cork City Council and across the city.

#### Actions

- Establish a city wide, climate-action governance structure, a **Leadership Group**, involving representatives from our business, public sector, and community organisations by June 2024.
- Design and test innovative ways to achieve meaningful **citizen participation** in decision making, building on the existing democratic and participative structures in the city.
- Establish an operational group, a **Transition Team**, to improve coherence and collaboration and share good practice in climate action by June 2024.
- Establish a cross-sectoral **Task Force** to guide and review progress on transition for buildings and energy and other areas where appropriate.

#### **Expected Outcomes**

- Cork City Council co-ordinates climate actions in a coherent, cross-departmental, and effective manner that allows us to lead, influence, advocate for and support climate action throughout the city.
- People living and working in Cork City are aware of and implement actions taken to achieve the transition to climate neutrality and that they believe their voices have been heard.
- A measurable change in perceptions and actions being implemented by residents, community groups, public sector and businesses in Cork is validated by a longitudinal survey.

#### **State of Play**

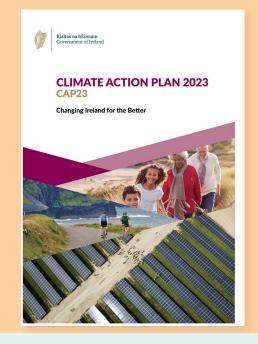
In June 2019, Cork City Council declared a **climate and biodiversity emergency**. It committed the Council to action on climate change, both within our own operations and through co-ordination, advocacy and partnership with public and private institutions and with communities across the city.

Subsequently, a dedicated **Climate Action Committee** (CAC) of Elected Members was established and continues to meet monthly, while Council is sitting. The CAC examines how our climate action objectives can be achieved, recommends policy and monitors the council's progress on climate action. The same year, a **Climate Action Team** (CAT) was formed.

As a cross-Directorate body, chaired by the Chief Executive, the CAT disseminates information and co-ordinates climate action across the organisation. In 2022, Cork City Council joined the **EU's Climate-Neutral and Smart Cities Mission**. This is an ambitious Mission that aims to accelerate our journey to climate neutrality and ensure that we act as an experimentation and innovation hub.

It requires a **'whole-of-city'** approach from public, private and community stakeholders organised in an appropriate governance structure. The accelerated timetable for climate neutrality assumes that governance arrangements must be robust, participatory, sustained, and innovative to achieve the transformative changes needed.

Planning and implementation of the City Council's climate action is advanced through the established internal structures: the Climate Action Committee, the Climate Action Team, and the Climate Action Unit. However, there are significant gaps in the wider governance and leadership structure that need to be addressed. To address these gaps, the following measures will be taken:



'The Department of the Environment, Climate and Communications will coordinate engagement across Departments to bring together an interdepartmental group to oversee the Cities Mission and to ensure that the necessary support is provided to the participating cities – Dublin and Cork.' *(National Climate Action Plan 2023)* 

- Establishment of a city-level climate action **Leadership Group** to bring together leaders from across society. The purpose of the Leadership Group will be to set the strategic direction and to support action to climate neutrality for the whole city. It will amplify information about the climate transition, monitor progress towards our goals, and suggest course corrections and new opportunities as needed.
- Establishment of a climate action **Transition Team** that will establish a city-wide methodology to engage citizens in strategic planning, decision-making, implementation and communication on the climate transition. This will build on the engagement that has been undertaken to prepare this draft plan.
- Stronger links forged with the **national government** for coordinated support to the Climate Neutral and Smart Cities Mission implementation for Cork and Dublin. This may be achieved through the task force at national level envisaged in the national Climate Action Plan 2023.
- More effective participation in EU structures and **city-tocity learning partnerships** to maximise the benefits of the three Missions we are members of.

## **Objectives for Governance and Leadership**

Cork City's Draft Climate Action Plan sets out a vision, informed by EU, national and local policy, for governance

and leadership that prioritises inclusion and accountability to achieve a fair climate transition that leaves no one behind. Inclusion, participation, and accountability will be achieved by ensuring that governance mechanisms listen to citizens and take on board their ideas, concerns, and preferences in climate-action planning and implementation.

It will be supported by communicating climate-change information and by supporting people to act, as individuals and as part of collective enterprises, be those businesses, workplaces, sports clubs, or community organisations of different kinds. Achievement of this vision will unlock action.

## Outcomes of Governance and Leadership

Climate governance and leadership, supported by effective communications, will ensure that positive climate action occurs citywide. More inclusive governance will broaden the nature and reach of the changes and make sure that they are delivered. Ultimately, most people will support climate actions, especially the new norms that will be required in areas such as transportation and energy use, and actively adopt them.

#### **KPIs for Governance and Leadership**

КРІ	Means of Verification	Adaptation / Mitigation	DECA
Number of actions implemented that arise from or are inspired by the outputs of the governance groups.	Meeting records. Annual household survey.	Both	1-6
Percentage of population support for specific climate actions.	Annual household survey.	Both	1-6
Annual climate-change grant income, amount per capita.	Investment in climate action.	Both	1-6

#### **Case Study: Cork City Council Leading by Example**



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# Communities and Partnerships

# Communities and Partnerships

### **Sustainable Development Goals**



### **Key Messages**

### **State of Play**

- Cork City's communities are increasingly aware of the climate and biodiversity crises.
- The number of community organisations already taking climate action is growing.
- There is unmet demand for capacity to be better supported financially and through other means, such as training.

### Actions

- Increase **support** for community climate action.
- Expand the capacity of the Cork City **Public Participation Network** to better support community climate action through regulatory review to remove barriers, improving participation in policy and decision-making fora, and establishing a climate capacity building programme for community organisations.
- Establish a climate marker for all **public sector financing for community organisations** to ensure that climate aspects of any action are considered and incorporated into project design and that positive climate outcomes are achieved.
- Map community climate actions across the city to identify opportunities for further community action.
- Continue to support the business community in its climate action journey.

### **Expected Outcomes**

- Community-based climate action driving the transition to a climate-neutral city.
- Increasing numbers of residents involved in diverse projects to become more climate-literate, more willing and able to adopt climate-friendly attitudes and behaviours, taking action at individual and community level, and realising the co-benefits of better health, stronger social networks, and greater resilience to the effects of climate change.
- A thriving city centre with climate resilient, economically viable businesses.

### **State of Play**

The vast majority (88%) of Cork City residents believe climate change is happening [8] and 86% agree that **the city must transform** into a more sustainable place to live and work that is climate neutral and resilient.

There is strong support (>66%) for more pedestrianisation, more on-street tree planting, greater availability of locally produced food and more parks and biodiversity.

Over 50% of residents also support **higher density housing** in the city centre and commuter towns, reallocation of road space to **bus and cycle lanes** and a reduction in the burning of solid fuels. **Cork City residents support and provide a mandate for climate action**.

### **Cork's Community Organisations**

Cork City has a diverse and vibrant community and voluntary sector, working on a wide range of social, economic, and environmental issues. Long-standing community associations provide community services from established centres across the city.

Youth engagement in community development is supported by, among others, Foróige, Comhairle na nÓg, Young Social Innovators, YMCA, and youth fora across the city. Citywide project networks, facilitated by Cork Learning Neighbourhoods and Green Spaces for Health, have been inspired and supported through the UNESCO Global Network of Learning Cities and the WHO Healthy Cities, respectively.

The **Cork Environmental Forum** and **Cork Nature Network**, among others, are very active in advocacy and environmental action within the city. The **Transport and Mobility Forum** is an umbrella organisation for discussion of future low-carbon transportation within the city that brings together service providers, the City Council and community groups supporting active travel and public transport.

The **Public Participation Network** brings together over 200 community organisations to give a stronger voice to their experience through the Strategic Policy Committees at the City Council level, helping them to engage with elected Council members and the democratic systems of governance.

The **third level institutes** in Cork City are a valuable resource for community organisations to partner with, for research, learning and capacity building, and policy development. There are numerous examples of such creative collaborations in the city. Identifying more applied research and learning opportunities to strengthen the impact of community projects that deliver direct and indirect climate benefits provides a significant opportunity for the community.

There is also a strong training and skills development ecosystem in the city, with actors like the **Cork City Education and Training Board** increasing capacity for retrofitting buildings.

In 2021 and 2022, a pilot community climate-action programme supported the creation of ten **neighbourhood climate action plans**. These plans identified some of the multi-sector investments community groups would like to implement in their areas.

In 2023, the Government launched the **Community Climate Action Programme** and awarded a fund for community climate action in Cork City of €840,000. Applications have been received and appraised. The Council is waiting for the release of funds to roll-out this programme. The fund is a significant opportunity for community organisations to participate in climate action that may be extended through further rounds in future. Community activation for climate action can be further enhanced by:

- Mainstreaming climate action and building climate-action capacity to deliver both direct and co-benefits across the community sector.
- Building capacity in the community sector to "talk climate" with their volunteers, supporters, and wider community, to build support among the public for climate action of all kinds.

### **Objectives for Communities and Partnerships**

Community organisations in the City are already delivering impactful climate action, through direct work on mitigation and adaptation, and through addressing co-benefits in diverse sectors. This can be scaled up through the provision of resources and capacity support to increase the contribution of the community sector to ensure a fair and inclusive transition.

Some changes, such as increasing the funding of community climate action, are in hand. Others, such as broadening the engagement and representation of the community sector in city level decision making, are potentially more complex and will require both will and innovation. Some good examples from the pandemic period, such as the coordination of community support to vulnerable groups and individuals, may be learned from and built upon.

# Outcomes for Communities and Partnerships

Increasing community climate action has the potential to drive Cork City towards positive tipping points in climatefriendly attitudes and behaviour. The more people who participate and experience the benefits of community activity, for themselves, their neighbourhoods and the climate and environment, the closer we come to achieving a critical mass of change to more sustainable, equitable, and climate-friendly ways of living for the individual, household, and community levels.

Building networks and social cohesion through collective climate action in our neighbourhoods will be critical when responding to floods and other climate-related emergencies. Worldwide, neighbours are the critical first responders. Cork is no different.



КРІ	Means of Verification	Adaptation / Mitigation	DECA
Percentage of population who are aware of Cork City Council's climate actions.	Annual household survey.	Both	1-6
Public and private investment in climate action.	Tracked via the Transition Team.	Both	1-6
Funding provided to community organisations for climate actions from public and private sources.	Funding received by community groups.	Both	1-6

### **KPIs for Governance and Leadership**

### **Case Study: Cork City Leading by Example**



**Creating Community Gardens with Green Spaces for Health** 

Picture- Volunteer Clare Hatcher hard at work in the Páirc Eoin Community Garden. Photo Credit Eoin Murphy. Green Spaces for Health is a community-led partnership actively supporting biodiversity by working in tandem with nature. The work reconnects people with the natural world and produces profound social, physical and mental-health benefits to all who participate and enjoy the work of the 26 community gardens around the city.

In support of Cork as a WHO Healthy City, Green Spaces for Health is located in the Social and Health Education Project, funded by the Healthy Ireland Fund and actively partnering with Cork City Council, which provides public spaces for community groups to develop as gardens in which to grow food and increase local biodiversity.

### Strategic Goals this case study meets:





Natural Environment, Biodiversity and Green Blue Infrastructure

# Built Environment and Energy

# Built Environment and Energy

### Sustainable Development Goals



### **Key Messages**

### **State of Play**

- The biggest single source of **GHG emissions** in the city are from **buildings** residential (34%), commercial and industrial buildings (22%), and public services (7%).
- Only 15% of Cork City's residential buildings achieve a **BER of B2** or above.
- The city has a high number of **protected structures** or buildings within conservation areas that require some innovation and may be costlier to retrofit or equip with sources of renewable energy.
- Nearly one third of homeowners are considering an upgrade to their home in the next 12 months, but the **upfront cost of retrofitting** is the biggest barrier to them acting now.
- Cork City Council has a housing stock of about 10,500 units and has commenced a retrofitting/upgrading programme for these homes.

### Actions

- Establish a **Cork City Building Retrofitting and Renewables Task Force** to accelerate retrofitting programmes for residential, commercial, institutional and industrial buildings.
- Assess suitability of all rooftops in the city for renewables or green roofs and implement where viable.
- Complete the current **Energy Performance Contract** [9] programme and extend the model to further publicly owned buildings.
- Implement the South Docklands Drainage and Flood Protection Strategy, and facilitate planned flood-relief works.
- Complete an Investment Grade Audit (IGA) for the City Hall campus.
- Collaborate with the private sector to develop large-scale investment in renewable energy projects.
- Model retrofitting and renewable installations for a selection of heritage buildings.

### **Expected Outcomes**

- Hands-on support for technical decision making and financing options is offered to building owners to simplify the choices involved in retrofitting.
- The Docklands is a model for energy efficient development.
- Accelerated retrofitting programme for residential, commercial, institutional, and industrial buildings.
- Successful innovation and supports in place, and widely communicated experience, contribute to making Cork City's building stock the most energy efficient in Ireland by 2030.

### **State of Play**

Buildings that are energy inefficient and that use fossil fuels to heat them are the biggest single source of greenhouse gas (GHG) emissions in Cork City. Cork city's private, public and commercial buildings are the biggest producer of GHGs (63%), emitted from electricity, heat and other energy use.

In 2018, our homes emitted 34% of all GHGs in Cork City, and commercial and industrial buildings contributed a further 22% of total emissions. **Our buildings are energy inefficient**. Most rely on fossil-fuelled heating and are poorly insulated, and some have additional problems relating to the building fabric. SEAI data shows that only 15.2% of the city's residential buildings met or exceeded the B2 Building Energy Rating (BER). While, according to our Residential Household Survey, around **one third of homeowners are considering an upgrade** to their home in the coming 12 months, 74% of respondents stated that the upfront cost was the biggest barrier to action.

Approximately 9,000 residential and mixed-use buildings in the city lie within **Architectural Conservation** Areas (ACA). In these areas, a specific regulatory regime exists that must be considered when planning for improvements to the building. To make such buildings perform optimally, from an energy perspective, the standard upgrades that might be suitable in more contemporary buildings may not work. Providing support and guidance to owners of such buildings to make the right technical choices, in addition to advice on financial support, is particularly important.

Cork City Council owns approximately **10,500 socialhousing units**. We are already engaged in a retrofitting programme to bring these properties up to at least a B2 BER or the Cost Optimal Equivalent (COE) [10], with 889 units already upgraded. The Council is also constructing



new houses in several developments citywide. To date, **668 new homes have been delivered with an A-rated BER**. City Council planning policy is to align new-build specifications with best-practice building regulations. The City Council owns many large buildings that consume a huge amount of energy. These include the City Hall, the Civic Offices and the central Fire Station, several swimming pools and leisure centres, depots, and the network of libraries. Cork City Council is currently piloting the use of an Energy Performance Contract (EPC) to reduce emissions and energy use and will scale this approach up if it proves to deliver results.

To address the biggest source of our GHG emissions, we will establish a **Cork City Building Retrofitting and Renewables Task Force**. This task force will bring together the main national and local stakeholders from government, business and consumer groups, to identify barriers to more rapid and cost-effective retrofitting, and to take action to address them.

### **Objectives for the Built Environment & Energy**

It is evident that there is a need to accelerate the retrofitting of both residential and commercial buildings across the city. The cost of retrofitting buildings and introducing renewable energy systems to buildings can, among other things, be a barrier to action.

Cork City Council will introduce **collaborative efforts** across the city to overcome these barriers, examining and testing new technologies and innovative approaches to accelerate progress on the decarbonisation of buildings.

The City Development Plan 2022-2028 identifies expansion zones in Blarney, South Ballincollig, Hollyhill, Blackpool, Ballyvolane, South Glanmire and Douglas, and in the Docklands Regeneration Area. Design and delivery of our land-use priorities will include compact growth for a 15-minute city, including in the city centre, where the service needs for residents are within easy reach on foot or by sustainable travel. These projects will be exemplars of how to integrate the full range of climate-relevant policy into the built environment.

Key actions of the **City Centre Economic and Revitalisation Strategy** are the regeneration of the city centre, enhanced cultural activities, enhanced educational activities, further



enhancement of active travel and public transport in and to the city centre, more services and green spaces for people living in the city centre.

Integrating nature-based solutions, such as **Sustainable Urban Drainage Systems** (SuDS) and protected spaces for biodiversity into the built environment, are objectives of the Cork City Development Plan (2022-2028). Some progress has been made towards these objectives, such as in the **Marina Park Phase 1**, which embodies the principles of SuDS by combining a high-quality public realm with flood storage infrastructure.

Further east along the Marina, Holland Park has improved public access to an existing wetland, sensitively offering interaction with nature and a high-quality recreational amenity, in an area made safe for biodiversity to flourish. Throughout the city, nature-based solutions and investment in biodiversity, alongside improvements in flood mitigation infrastructure, will contribute to flood resilience of the city.

Cork City Council will identify and develop opportunities for collaboration with the private sector for large-scale investment in renewable energy projects, such as district heating and rooftop solar projects.

### Outcomes for the Built Environment & Energy

A critical mass of building owners in the city, including the City Council, will retrofit their buildings and introduce renewable energy where possible, supported by the information, finance, and technical assistance made available by the State. The city's building stock will become the most energy efficient, comfortable and resilient in the country.

### **KPIs for the Built Environment and Energy**

КРІ	Means of Verification	Adaptation / Mitigation	DECA
• Number/percentage of buildings in the city that meet or exceed B2 BER/cost optimal equivalent.	SEAI data. Cork City Council data.	Mitigation	2
• Number of flood-protection/prevention schemes installed.	Cork City Council data.	Adaptation	1, 3, 6
<ul> <li>Number of renewable energy projects operational.</li> </ul>	SEAI data.	Mitigation	2

Number of areas/properties that are protected/vulnerable to flooding.	GIS analysis. OPW.	Adaptation	1, 3, 6
Number of Sustainable Urban Drainage Schemes (SuDS) in place, and environmental performance:			
• Dereliction removed.	GBI survey.	Both	1, 3, 6
• Framework plans completed.			
• Investment in regeneration areas.			

### **Case Study: Cork City Leading by Example**

### Solar PV and Energy Efficiency projects at the Old Oak, Oliver Plunkett Street



Picture 3 – Solar panels on the rooftop of the Old Oak pub. Kevin Cotteral (L) & Eoin Ahern (R)

The Old Oak pub's (Oliver Plunkett Street) installation of 96 solar panels has gone beyond their expectations. The expected payback period of 9 years was slashed to 3 due to higher energy costs since 2022.

The Old Oak is now exploring further sustainability initiatives such as rainwater harvesting.

### Strategic Goals this case study meets:









# Transport and Mobility

### Sustainable Development Goals











### **Key Messages**

### **State of Play**

- Road transport contributes 29% of the city's overall GHG emissions.
- Transport planning for the Cork metropolitan area is well advanced with Cork Metropolitan Area Transport Strategy (CMATS). Investment is either underway or in the pipeline. Together they provide realistic opportunities to reduce car use through **improved public transport and active travel**.
- According to our Household Residential Survey, public transport users report very **positive improvements** to the city-wide service in the past 12 months.
- There is strong public support for **pedestrianisation** in the city centre and suburban centres.
- Only 12% of respondents to the survey report cycle weekly, and very few women cycle regularly.
- Significant expansion of cycle routes has occurred over the past 3 years.
- Cork City Council is finalising strategies for Electric Vehicle (EV) charging infrastructure and Shared E-Mobility Schemes.

### Actions

- Continue to support **bus and rail** investment in the roll-out of Bus Connects, investment in suburban rail and plans for light rail.
- Continue to extend **active-travel routes and infrastructure**, including dedicated / separated cycle routes in all parts of the city.
- Implement the EV-Infrastructure Charging Strategy by 2030.
- Support the implementation of an active-travel policy for all Cork City schools.
- Increase secure **bike parking** across the city.
- Implement the city's Wayfinding Scheme.

### **Expected Outcomes**

- Car journeys of less than 2km are reduced significantly.
- Significant increase in residents availing of public transport and active travel.
- Air quality improves in all areas of the city, with subsequent health benefits for all.

### **State of Play**

Road transport is the second largest source of GHG emissions in the city, contributing 29% of the total. Car use dominates all journeys made in the city each week. Our Residential Household Survey showed that nearly **70% of respondents drove their car weekly**, 49% were a passenger in a car. An encouraging 40% used public transport at least once a week, but only 12% of respondents reported cycling at least once a week. Cork City Council, working with partners such as the National Trasport Authority (NTA), Transport Infrastructure Ireland (TII), Bus Éireann and Irish Rail, is working to achieve a shift from car-based journeys to public transport and active and sustainable travel modes.



The **Cork Metropolitan Area Transport Strategy** (CMATS) sets out a framework for the delivery of transport infrastructure and services. CMATS aims to reduce dependency on the private car by increasing the use of sustainable transport options, including improved cycle and walking infrastructure, improvements in the bus fleet and routes, and the introduction of light rail across the city. CMATS projects that the morning peak travel-mode share will reduce car use from 66% in 2011, to 49%, even with a significant population growth in the region over the same period. Although CMATS predates the 2021 Low Carbon Development and Climate Change Act and its legally binding targets for emissions reduction, it plans for significant GHG emissions reductions and improvement to air quality, among other climate-relevant benefits. CMATS is fully integrated in the *Cork City Development Plan 2022-2028* and implementation of its various elements are ongoing.

The promotion and facilitation of increased active travel through walking and cycling is a significant CMATS focus. The strategy envisages **90 million annual walking trips**, achieved through new and improved footpaths, signage and permeability, among other investments. Cork City Council is in the process of developing a new **wayfinding system** in the city centre. Bespoke signage and maps will also include walking time metrics to help influence behaviour change and encourage people to choose to walk or cycle.

CMATS projects **19.5 million journeys a year will be by bike**, with 13,000 cycling trips made in the morning commuting periods, easing traffic congestion. Expansion of the dedicated network of cycle routes and improved end-of-trip facilities, including secure bike parking, will help to achieve these projected goals.

The Council's 2022 annual report showed some of the recent progress in rolling out active-travel initiatives, with **70 active-travel projects underway, 17 city centre streets pedestrianised**, improving pedestrian demand facilities at traffic lights, and installation of cycle detection sensors.

The Cork rail network is being transformed by the **Cork Area Commuter Rail Programme**. This is the largest ever investment in the network and will deliver increased train capacity and frequency, providing for more connected communities and a more sustainable transport network. The programme involves enhancements to the rail network from Cork to Mallow, Cobh and Midleton and will include new rail infrastructure, electrification and re-signalling across the three main lines.

Construction on a new platform in Kent station to facilitate trains from Mallow to Cobh and Midleton began in October 2023. The new bus network, part of **BusConnects Cork**, is intended to transform the public transport network across the city and its hinterland. The new network will involve the creation of new bus routes and improved bus frequencies to meet anticipated growth and future demand in the region.

In early 2024, Cork City Council will publish an **Electric Vehicle Charging Infrastructure Strategy**. The national Climate Action Plan has set targets for 30% of the private car fleet to be electrified by 2030. Cork City's EV Strategy will focus on the delivery of publicly accessible charging infrastructure to allow for the targeted uptake in electric vehicles in the city.

The strategy will make recommendations with respect to the different types of charging infrastructure required and its spatial distribution across the city. A strategy for shared e-bike and e-scooter provision in the city is also being developed.

# **Objective for transport and mobility**

Cork City is a place where people use the car as a last resort, due to the ready availability of more convenient, efficient, cleaner, more cost-effective, healthier, and more enjoyable public transport and active-travel options.

## Outcomes for transport and mobility

A significant reduction in car usage, especially for short journeys of less than 2 km, resulting in cleaner air, safer active travel, and improved mental and physical health of our citizens.

KPI	Means of Verification	Adaptation / Mitigation	DECA
Progress of Bus Connects.	NTA reports.	Mitigation	
Progress of Cork Area Commuter Rail Programme.	Irish Rail reports.	Mitigation	
Percentage of travel by different travel modes (walking, cycling, public transport, private vehicle).	Sensor network. Annual household survey.	Mitigation	1, 2, 4, 6
Kilometres of permanent segregated and integrated cycling network.	Cork City Council data	Mitigation	1, 2, 4, 6
<ul> <li>Wayfinding scheme implemented.</li> <li>Progress on EV-charging infrastructure.</li> </ul>	No. of stations installed.	Mitigation	

### **KPIs for Transport and Mobility**

Extent (km²), cost (€) and grade of damage to roads because of			
climate hazards (pluvial, flu-vial	Cork City Council data.	Adaptation	1, 3, 6
and tidal flooding, heat, and			
drought).			

### **Case Study: Cork City Council Leading by Example**



Picture - Aerial Shot of Phase 1

Marina Park is a new contemporary city park situated within the South Docklands and extending from Shandon Boat Club to Blackrock Harbour with an approximate area of 32ha.

The park is central to the redevelopment of the Cork City Docklands Area, as it will form the primary parkland area in a high-density mixed use residential and business area. The redeveloped Pairc Uí Chaoimh stadium is incorporated as an integral element of the park.

Phase 1 was completed in 2022. Aside from its function as a regional park, it is also a key climate adaptation

intervention. Acting as a flood storage basin for the south docklands during periods of pluvial flooding (heavy rainfall) and is the gateway to the Blackrock Greenway, connecting the Southeastern suburbs with the city centre for walkers and cyclists.

Work will commence on Phase 2 in early 2024.

### Strategic Goals this case study meets:









# Natural Environment and Resource Management

**Sustainable Development Goals** 







### **Key Messages**

### **State of Play**

• The importance of **protecting and nurturing the natural environment and biodiversity** are important tenets of the Cork City Development Plan 2022–2028, the Cork City Heritage and Biodiversity Plan (2021–2026), the Green and Blue Infrastructure Strategy and the forthcoming Trees Strategy, among others.

6 CLEAN WATER AND SANITATION

- Cork City Council has appointed a Tree Officer, two Biodiversity Officers and a Landscape Architect.
- There is strong public support for expanding **green spaces** in response to climate change and the biodiversity crisis, including the expansion of **local food production**.
- There has been an upsurge in support for **community gardens**, with at least 26 projects arising across the city, and an increasing number of **green-flag schools and parks**.
- Cork City Council promotes **good-practice waste management** and support for **circular economy initiatives** throughout the organisation and the city.

### Objectives

- The city's natural environment is protected to **allow biodiversity to thrive**.
- Public green space in every neighbourhood.
- The potential for **carbon sequestration, nature and biodiversity gain, and climate-risk mitigation** through green and blue infrastructure is considered and maximised in every new development and established neighbourhood.
- The city significantly reduces its waste and becomes more self-sufficient with locally produced produce.

### Actions

- Develop a citywide baseline for the state of the environment and biodiversity to inform ongoing trend analysis.
- Establish a cross-departmental Trees and SuDS working group.
- Publish and implement the city's Tree Strategy.
- · Continue to implement Cork City Air Quality Strategy.
- Increase public support for circular economy startups and enterprises.
- Promote the reduce-reuse-recycle principal, to reduce waste.

### **Expected Outcomes**

• Cork City is a more self-sufficient and climate resilient urban oasis, with flourishing plant, animal and insect biodiversity.

### **State of Play**

Ireland has experienced a catastrophic decline in biodiversity, plant and animal habitats in recent decades [11]. Biodiversity Ireland [12] report that approximately 20% of our 31,000 species are at risk of extinction due to habitat loss and general environmental degradation. Plant, animal, and insect species at greatest risk include the curlew, the Atlantic salmon, and the Wall butterfly.

The **Citizen's Assembly on Biodiversity Loss** in 2023 recommended "prompt, decisive and urgent action to address biodiversity loss and restoration". Cork City Council itself declared a biodiversity emergency in 2019.

Green and Blue Infrastructure (GBI) is a key asset in addressing the causes of climate change and adapting to the changes to our climate that are already locked in due to emissions released to date. GBI is at the heart of our Cork *City Development Plan 2022-2028.* Cork City's **biodiversity, green spaces and waterways** play a very important role in helping the city to reduce its carbon footprint and cope with climate change.

For example, tree planting performs a role in locking away carbon (sequestration), whilst providing opportunities to slow storm water flows, absorb water and provide shade during hot periods. The *Cork City Heritage and Biodiversity* 



*plan (2021–2026)* and forthcoming *Trees Strategy* include a range of actions, including the expansion of planting native tree species in appropriate locations in the city, protection and promotion of designated habitats and species, restoration of rivers and wetlands, and the management and control of alien invasive species.

Cork City Council has recently increased its capacity to support nature through the appointment of two **biodiversity officers**, a **landscape architect**, and a **trees officer**. They are strengthening our policies and implementation actions and strengthening our community action. The importance of the city's parks was highlighted throughout the Covid-19 lockdowns, when people needed safe, healthy spaces to relax in and play. Five of these parks are now **Green Flag Parks**, and the council continues to improve its planting programmes and amenities in all its parks. The first phase of **Marina Park** was opened in 2023 with work on the second phase to begin in early 2024. Plans are also being developed for a **Northwest Regional Park**.

Cork City Council supports and promotes good-practice **waste management** and the **reduce-reuse-recycle** principle across the organisation and citywide, through support for circular economy initiatives and enforcement of waste regulations. Single-use cups and cutlery were banned from the main campus in 2019, all waste is appropriated separated, and council-run events are increasingly moving towards zero-waste status.

### Objectives for Natural Environment and Resource Management

We aim to stop the loss of green infrastructure and biodiversity in the city, where possible, and to increase its restoration. This will enhance our efforts to absorb some GHG emissions and reduce climate-related risks, for example through the absorption of flood water and rainwater runoff. People living in the city should be no more than five minutes walk from an accessible green space, providing a healthier environment for all. The city will continue its journey to a low-waste and circular economy.

### **Outcome for Natural Environment and Resource Management**

Cork City will become a greener, more self-sufficient and more biodiverse community. Economic development and growth will be delivered in ways that, at minimum, cause no further biodiversity losses, and where possible, create a netgain for nature. Our city will become an urban oasis where residents are aware of and sensitive to the presence and needs of nature. Our residents will reap the many social and economic benefits of a cleaner, greener, and more biodiverse environment.

КРІ	Means of Verification	Adaptation / Mitigation	DECA
Percentage of Cork City residents living within 400m and 800m of publicly accessible green areas.	GIS analysis	Both	1, 3, 4
Proportion of water bodies that meet the environmental quality standards for ecological status.	Irish Water / EPA / CCC Environ- mental Monitor-ing data	Adaptation	1, 3
Number of days Cork City exceeds European air quality standards for ozone, NO <sub>2</sub> , SO <sub>2</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> , per annum	Automatic AQ monitoring.	Mitigation	2, 4, 5, 6

### **KPIs for Natural Environment and Resource Management**

### **Case Study: Cork City Leading by Example**

### Managing Invasive Species with Goats in Beaumont Quarry, Cork City



Picture – Gill Weyman (Cork Nature Network), William Walsh (Billy's Rent a Goat) and goats at Beaumont Quarry, Cork where eight goats were tasked with removing invasive plants during Summer 2023.

A novel partnership between Cork Nature Network and Cork City Council employed the goats to sustainably manage problematic non-native vegetation such as Old Man's Beard.

The goats munched through vegetation in preidentified areas that were fenced off to focus the animals' efforts under the supervision of William Walsh.

Goats will eat what most animals can't and are more able to work in steep terrain and along riverbanks with minimal damage to the natural environment, leaving nothing but fertiliser and sterilising 99% of seeds consumed.

### Strategic Goals this case study meets:







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# Implementation and Reporting

### Implementation

On an ongoing basis, Cork City Council delivers a wide and increasing range of climate actions across many of our service areas. **The actions are delivered by staff working in all directorates**. The CAP supports and builds on the work carried out by those already working on climate action and making a positive contribution to the resilience and sustainability of our city. It sets out the concrete actions, some of which are ongoing, to accelerate reduction of emissions.

The CAP will be supported by an **Implementation Plan** to deliver the actions. It will be complemented and extended by the development of the **Mission City Contract**, which will include a **Mission investment plan**, as part of our membership in the network of 100 European Cities on a path to net-zero as soon as possible. Cork City's participation in the **EU Mission on Climate-Neutral and Smart Cities** is pushing us to do more, to step up to the challenge of transformative climate action. Our CAP objectives will be delivered by existing structures but will be augmented and tailored to squarely meet the climate action needs of the city.

To facilitate the delivery of the first local-level CAP, the robust internal governance and management process for oversight and delivery of climate action will be maintained. A clear line of accountability will be continued to our **Elected Members**, who are responsible for the adoption of the CAP and approval of any subsequent amendments. The management structure for implementing the CAP is as follows:

- The **Climate Action Committee** (CAC) of Cork City Council ensures that Elected Members participate meaningfully in the preparation of climate-related policy, including this CAP, and are up to date on the implementation of the Cork City Council Climate Change Adaptation Strategy 2019– 2024 and the CAP.
- The Council's **Senior Management Team** (SMT) is responsible for climate-action delivery. Climate action is a function of all directorates, and Directors of Services will lead implementation through their functional teams.

- The Climate Action Team (CAT) is an internal, multidisciplinary, cross-directorate team responsible for co-ordination of tasks, analysis of monitoring data and sharing of information across the council. The CAT may recommend the establishment, resourcing and management of specific project teams and task forces, including both council staff and external stakeholders.
- The **Climate Action Unit** (CAU), within the Strategic and Economic Development Directorate, supports the organisation's work on climate action.

In the context of the Cities Mission, however, there is a need for a broader stakeholder coalition to help both steer local transition and to actively participate in the co-design of appropriate and impactful actions to reduce emissions (mitigation) and ensure resilient adaptation. Two new bodies are envisaged as part of the implementation structure.

*Climate Neutral Cork's* **Leadership Group** will be an advisory body comprising dynamic thinkers and doers from across our city, including representatives of our business, community, academic, and creative among others. The Leadership Group will meet quarterly at a minimum and may also offer periodic feedback and advice to the CAC. Its main aims will be to:

- Ensure that the climate transition leaves no one behind.
- Perform a regular high-level review of progress of our climate actions.
- Advise all partners on ways to accelerate impact, emerging priorities and opportunities, potential synergies, and gaps in reach.
- Commission relevant independent research.
- Amplify our city-wide call to action.

*Climate Neutral Cork's* **Transition Team** will be a participatory team for climate-action stakeholders across the city. It will be established to facilitate communication, engagement, connection and enabling of collaborative action of all kinds among all the City's climate actors.

The Transition Team will have an online platform and a real-world presence through events, act as the conduit for climate-change information and consultation with the wider public in the city. It will showcase the work of the multisector members, invite participation, contribute to the city's effort to build support for and participation in climate action, and encourage the development of climate-friendly habits throughout the community. The Climate Action Unit will support the Transition Team until dedicated resources are identified. It will also maintain the link with and participation of the City Council in this wider body.

The implementation structure for the Cork City CAP is shown below.

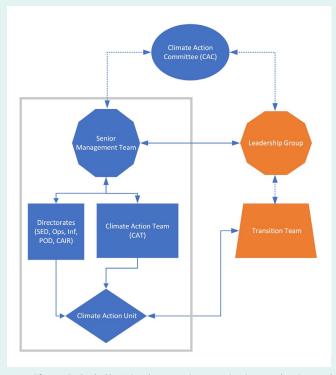


Figure 5: Cork City's implementation, monitoring, evaluation and learning structure for the climate action plan.

### Environmental Governance of the Climate Action Plan

Cork City Council is actively shifting to more environmentally friendly practices with respect to the environment and climate. Informed by best practice and the SEA/AA carried out for this plan, the following environmental governance principles have been established.

These will ensure that the implementation of the CAP generates the **minimum level of negative environmental effects** and the **maximum level of positive environmental effects**. The principles will underpin and guide implementation of the plan. Cork City Council will ensure that the climate actions/activities that result due to the implementation of the plan will, where appropriate:

- Promote projects that support and maximise environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value.
- Support or facilitate projects and initiatives that seek to make **improvements in soil structure, management and health** by increasing soil organic carbon. This will create the environmental co-benefits of improving flood resilience by enhancing water-holding capacity of soils and increasing the level of GHG sequestration associated with land-use functions.
- Ensure Cork City Council development underpinned or supported by plan actions is approved and implemented in a manner that appropriately considers the potential for **environmental co-benefits**, **potential environmental impacts and environmental protection requirements**.
- Promote the carrying out of flood-resilience measures underpinned by plan actions in a manner that supports climate action/biodiversity related co-benefits, and which has due regard for the protection and enhancement of rare, protected or important habitats and species.
- Promote the carrying out of the actions in a manner that supports climate action/cultural heritage co-benefits, and which has due regard to cultural, archaeological or architectural features and sensitivities.
- Promote the carrying out of the actions in a manner that supports climate action/water quality co-benefits, and the achievement of Water Framework Directive objectives.
- Promote projects that **support trees, hedgerows and other habitats** such as wetlands and flood zones.
- Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the City.
- Take the necessary precautions to identify and manage **invasives species**, particularly with regard to Schedule III species. Cork City Council will not support any climate-action related project that is likely to cause the spread of invasives species listed in Schedule III.

### Monitoring, Evaluating and Learning

Within Cork City Council, the **Senior Management Team** (SMT) has oversight of climate actions, monitoring, evaluation and learning outputs. They provide guidance and recommendations to the organisation on successes, lessons learned and course corrections, as needed. The SMT provide updates to the Climate Action Committee.

The **Climate Action Team** is responsible for the analysis of monitoring and evaluation data and for the formulation of lessons derived from experience.

There are many established performance indicators associated with the ongoing work undertaken by Cork City Council. Some of these indicators are mandated in national policies and plans. Others are established by state bodies such as SEAI. Cork City Council will draw on established performance indicators, such as those recommended by the LGMA Local Government Climate Action Key Performance Indicators in an Irish Context report of 2022, that may be adapted to our specific context if needed.

Relevant data will be integrated and presented in a dashboard for review by the SMT on a regular basis. KPIs for monitoring and evaluation of CAP actions will be integrated into Directorate-level reporting mechanisms to ensure data collection is mainstreamed within operational work processes. The **Climate Action Unit** (CAU) will support data collection and analysis processes. The CAU will support and encourage ambition in the actions taken by each part of the organisation.

### Reporting

Climate action in Cork City Council is a mainstreamed area of work. Internally, **Directors of Service** are responsible, through their functional teams, for formulating, delivering, measuring the impact of and reporting back on the actions listed in the CAP. Reports and data will be collated by the **Climate Action Unit**.

Coordination and information sharing for implementation of the CAP will be a function of the **Climate Action Team** (CAT), supported by the **Climate Action Unit**. The CAT is currently chaired by the Chief Executive. The CAT may, in the future, establish cross-directorate project teams and task forces for the delivery of specific actions that require joint contributions.

These groupings may involve and may be led by external partners in the wider community. Each project team or task force will work to establish terms of reference that will set out expected outputs, reporting lines, source of funds and resources, KPI and data collection, among other details. CAT members are responsible for disseminating decisions and updates appropriately to their respective teams.

External coordination and information sharing will be undertaken in the project teams and task forces established by the CAT. More widely this will occur through the work of the Transition Team.

Cork City Council will continue to report annually to the SEAI on our energy performance and emissions targets. As part of our **CAP Implementation Plan** and in line with requirements, we will report on the progress of the KPIs to inform the local government sector and national climate objectives.

# **References and Endnotes**

- IPCC (2023): Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34. Available online at: IPCC\_AR6\_ SYR\_SPM.pdf
- United Nations (2021) 'Secretary-General calls latest IPCC Climate Report 'Cord Red for Humanity', stressing 'irrefutable' evidence of Human Influence.' Available online at: https://press.un.org/en/2021/sgsm20847.doc.htm
- **3.** Murphy et al. (2023) 'The emergence of a climate change signal in long-term Irish meteorological observations.' Science Direct. Available online at: The emergence of a climate change signal in long-term Irish meteorological observations ScienceDirect
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- 6. Lee, G. (2023) 'Report shows that climate change firmly upon us in Ireland.' RTE Online report. Available at: Report shows that climate change is here in Ireland (rte.ie)
- 7. Government guidelines for Local Authority Climate Action Plans.
- 8. Residential Household Survey (Annex D)
- 9. An Energy Performance Contract (EPC) is a performance-based financing mechanism that enables a client organisation, in this case Cork City Council, to leverage the technical and financial capacity of an Energy Service Company (ESCO) to design, build, and secure financing to improve energy management practices and/or retrofits within a facility. Cost savings on energy bills create a revenue stream for the ESCO.
- Cost-optimal level is defined by the SEAI as either: a primary energy performance of less than 125 kWh/m2/yr (B2 BER) when calculated using DEAP; or an upgrade of the ceiling insulation and heating system.
- Citizens Assembly (2023) 'Final Report of the Citizens' Assembly on Biodiversity Loss Launches.' Available online at: Final Report of the Citizens' Assembly on Biodiversity Loss Launches | Citizens' Assembly (citizensassembly.ie)
- 12. National Biodiversity Data Centre. '10 Species at Risk of Losing'. Available online at: https://biodiversityireland.ie/top10/10-species-at-risk-of-losing/

# **Abbreviations**

BER	Building Energy Rating
CAC	Climate Action Committee
САР	Cork City Climate Action Plan 2024-2029
CARO	Climate Action Regional Office
CAT	Climate Action Team
CAU	Climate Action Unit
ССМА	County and City Management Association
CO2	Carbon Dioxide
CO2eq.	Carbon Dioxide Equivalent
COE	Cost Optimal Equivalent
DZ	Decarbonising Zone
DECA	Delivering Effective Climate Action
DECC	Department of the Environment, Climate and Communications
EPA	Environmental Protection Agency
EV	Electric Vehicle
GHG	Greenhouse Gas
GPP	Green Public Procurement
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardization
КРІ	Key Performance Indicator
LECP	Local Economic and Community Plan
LGMA	Local Government Management Agency
MaREI	Marine and Renewal Energy Ireland
PPN	Public Participation Network
SDGs	Sustainable Development Goals
SEAI	Sustainable Energy Authority of Ireland
SMT	Senior Management Team
UNESCO	United Nations Educational, Scientific and Cultural Organization
wно	World Health Organisation

# Annexes

Annex A:	Actions
Annex B:	Baseline Emissions Report
Annex C:	Climate Change Risk Assessment
Annex D:	Residential Household Survey
Annex E:	Climate Conversations Report
Annex F:	Youth Engagement Report
Annex G:	Summary Report on Preparatory Baselines & Engagement
Annex H:	Strategic Environmental Assessment - Environmental Report
Annex I:	Natura Impact Report



Comhairle Cathrach Chorcaí Cork City Council