Comhairle Contae
Fhine Gall
Fingal County
Council

Fingal County Council

Draft Climate Action Plan

2024
2029

Scan the above QR code to submit your views on the draft Climate Action Plan.

Comhairle Contae Fhine Gall
Fingal County Council

CARO

Codema
Dublin's Energy Agency

This Draft Plan has been prepared by Fingal County Council in partnership with the other Dublin local authorities, Codema – Dublin's Energy Agency and the Dublin Climate Action Regional Office (CARO).

Codema provides a wide range of energy and climate mitigation services to the four Dublin local authorities and other stakeholders in the region, supporting each local authority in leading and influencing the low-carbon transition. Codema's mission is to accelerate Dublin's low-carbon transition towards 2030 and 2050 through innovative, local-level energy and climate change research, planning, engagement and project delivery, in order to mitigate the effects of climate change and improve the lives of citizens.

The Climate Action Regional Offices (CAROs) were established by Government in 2018 to mandate and co-ordinate engagement across the varying levels of government and help build on experience and expertise in the area of climate action. The four regional CARO offices drive climate action at both regional and local levels, working with Local Authorities in their area.

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FOREWORD

MAYOR OF FINGAL, CLLR. ADRIAN HENCHY

This draft Fingal County Council Climate Action Plan 2024 to 2029 charts how Fingal propose to deliver ambitious, measurable and effective climate actions through inclusion and engagement, capacity building, leadership and, importantly, by example.

It sets out how Fingal will actively inform and engage with our residents, businesses within the County and people visiting here, through a range of innovative actions, programmes and partnerships, and how we will facilitate greater community-led climate involvement through our Climate Action Section.

Fingal County Council along with our colleagues in South Dublin County Council, Dún Laoghaire-Rathdown County Council, and Dublin City Council, have developed Draft Climate Action Plans collaboratively with the assistance of the Climate Action Regional Office (CARO) and Codema (Dublin's Energy Agency).

The plan reflects the ongoing efforts and challenges our County faces as the impacts from climate change become more apparent and grow in frequency, severity and impact.

The Council will continue to work to improve the resilience of our County by protecting our coastline and through other adaptive measures. Fingal will also continue to lead by example, introducing ambitious emissions reduction measures in our own operations, such as electrifying our vehicle fleet, and by re-insulating our social housing stock.

Fingal County Council has an important leadership role to play in tackling climate change, and in doing so it needs to positively engage with residents and community organisations. I would urge you to read the Draft Plan and help us to address the many challenges we are facing over the coming years.

CHIEF EXECUTIVE ANNMARIE FARRELLY

This draft Fingal County Council Climate Action Plan 2024 to 2029 outlines our ambitions to create a resilient and prosperous County for all who live, work and visit Fingal.

It sets out how the Council will work to further reduce greenhouse gas emissions and improve energy efficiencies in its own buildings and operations, while making Fingal a more climate resilient County. This Draft Climate Action Plan also focuses on engaging and informing communities on Climate Action.

The actions in this Draft Plan aim to influence how we can move towards a greener future and net-zero carbon emissions across the wider County, in various ways, including through the provision of Active Travel infrastructure. Targeted emission reduction measures and initiatives will also be piloted in a Decarbonising Zone in Balbriggan. The lessons learned here may be applied across our County, and will be shared with other local authorities, and we will learn from others also.

This Draft Plan builds on the successful implementation of the Climate Change Action Plan 2019 to 2024. Progress on this Draft Plan will be continually monitored by a dedicated climate action team working with all Council departments, supported by a steering group at executive management level; and working with the Climate Action, Biodiversity, Environment Strategic Policy Committee and elected members.

In addition, the Council will launch the Community Climate Action Fund which will allow us to work with local groups to help build low carbon communities, focusing on themes such as energy, travel, food & waste, recycling and local climate action.

Whilst Fingal has taken significant strides in progressing its climate actions, it is imperative that we continue to show leadership in the area and build on these actions over the coming years. Being able to turn these commitments into real action requires effort, but together with the people of Fingal we will be able to help drive positive change both now and in the future.

EXECUTIVE SUMMARY

Fingal County Council has prepared this Draft Climate Action Plan 2024-2029, to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level. This is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

This Draft Plan has been prepared by Fingal County Council in partnership with the other Dublin local authorities, Codema – Dublin's Energy Agency and the Dublin Climate Action Regional Office (CARO) and builds on the collaborative approach to the development and implementation of the Dublin Local Authorities Climate Change Action Plans 2019-2024.

Fingal County Council aims to build on the notable achievements under its's Climate Change Action Plan 2019-2024 (CCAP), which included the conversion of 98% of the counties streetlights to energy efficient light emitting diodes and Fingal County Council leading the way nationally on the transition to an electric vehicle fleet with 30% of the Councils fleet now electric. An Active Travel Strategy was developed under the CCAP, and all Council staff received climate action training.

This Draft Plan is Ambitious, Action-Focused, Evidence-Based, Participative and Transparent. As part of the development of this Plan, Fingal County Council has undertaken a Climate Change Risk Assessment and prepared a Baseline Emissions Inventory for the County. The risk assessment has identified the impacts which climate change is currently having on the County and is likely to have into the future. The Baseline Emission Inventory provides an estimate on greenhouse gas emissions for the County and for the Council's own activities. These assessments have provided an evidence base for the development of place-based climate actions.

The targets of the Fingal County Council Draft Climate Action Plan are as follows:

- 50% improvement in the Council's energy efficiency by 2030;
- 51% reduction in the Council's greenhouse gas emissions by 2030;
- To make Dublin a climate resilient region, by reducing the impacts of future climate change-related events; and
- To actively engage and inform our communities on climate action.

This Draft Plan includes a range of climate change mitigation actions aimed at reducing County wide greenhouse gas emissions. It also includes climate adaptation actions aimed at improving the resilience of the County to the impacts of climate change. These actions include those for which the Council is fully accountable across its own buildings, operations, services and functions; and actions for which the Council can influence, co-ordinate and facilitate and advocate for climate action. Actions are divided across six thematic areas including a Community Engagement theme which is a new addition to this Draft Plan and reflects the importance for all citizens and communities in Fingal to be part of the Plan. The other thematic areas are Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions, Circular Economy and Resource Management.

Notable actions include the continued roll out of various Active Travel initiatives under the Council's Active Travel Strategy and the advancement of a high-quality cycling network, the implementation of the Local Authority Electric Vehicle Charging Strategy to support the regions transition to Electric vehicles, the administration of a sizable new Community Climate Action Fund, the construction of a district heating scheme in Blanchardstown within the lifetime of the Plan, the continued improvement in energy efficiencies of the Council's building stock through the use of energy performance contracts; and the continued energy efficiency upgrade of the Council's social housing stock. The Council will also continue to mainstream climate action considerations across all Council activities. The actions have many additional benefits, including health and wellbeing, social, environmental, and economic benefits, which are identified throughout the Draft Plan.

An area in Balbriggan has been identified to become the focus for a range of climate action measures. This area is set to become the County's 1st Decarbonising Zone (DZ). Under the National Climate Action Plan every local authority will identify and deliver a DZ within the local authority area to act as a test bed for a range of climate mitigation, adaptation, and biodiversity measures in a specifically defined area. This Draft Plan contains a chapter dedicated to the DZ and identifies a potential pathway for the effective delivery of a pilot decarbonisation zone within Balbriggan.

A Climate Action Steering Group at Executive Management level will oversee the implementation of the Plan. The Plan will be implemented across all Council Departments, coordinated by a dedicated climate action team within the Environment Climate Action and Active Travel Department. This team will support and monitor the implementation of actions and coordinate the reporting and evaluation of the Plan. Reports will be provided to the Climate Action, Biodiversity, Environment Strategic Policy Committee as required and annual progress reports will also be communicated via the Council's website. The Climate Action Team will work in close collaboration with the Dublin Local Authorities, assisted by CARO and Codema. The Plan will be fully updated every five years.

Photo Source: Fingal County Council

OVERVIEW OF FINGAL

31
COMMUNITY CENTRES

10
LIBRARIES

10
REGIONAL PARKS

POPULATION
330,506

107,846
HOUSEHOLDS

88 km
OF COASTLINE

150
SCHOOLS

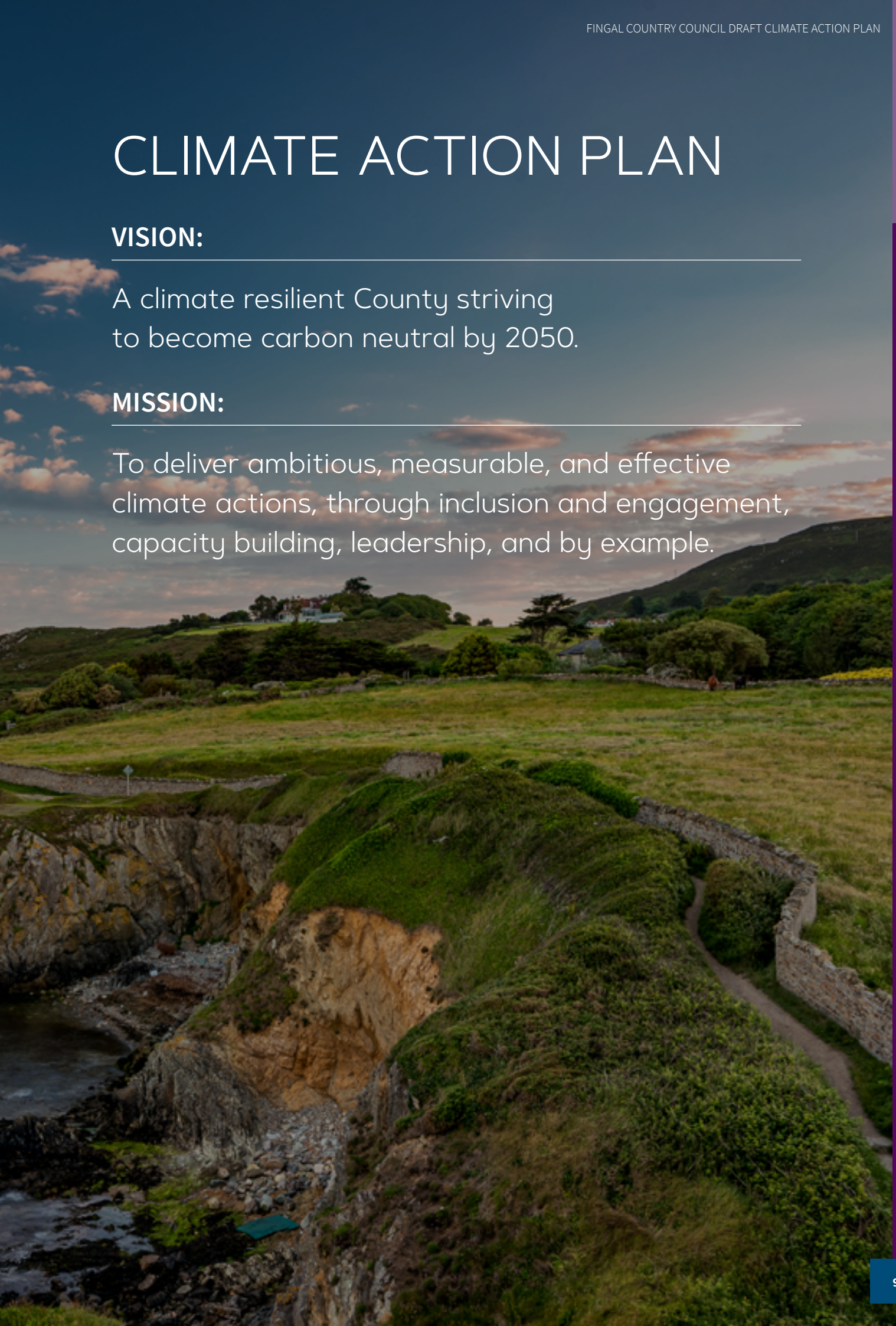
CLIMATE ACTION PLAN

VISION:

A climate resilient County striving
to become carbon neutral by 2050.

MISSION:

To deliver ambitious, measurable, and effective climate actions, through inclusion and engagement, capacity building, leadership, and by example.



1. INTRODUCTION

Fingal County Council has prepared this Draft Climate Action Plan 2024-2029, to create a low carbon and climate resilient County, by delivering and promoting best practice in climate action, at the local level. This is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

This is set out in the Climate Action and Low Carbon Development (Amendment) Act 2021[1], which also frames Ireland's legally binding climate ambition, to delivering a reduction in greenhouse gas emissions of 51% by 2030. This will place the country on a trajectory to achieving climate neutrality by the end of 2050. In preparing the Draft Plan, the Council has also taken account of other relevant climate legislation and policy, a climate change risk assessment and a climate mitigation baseline assessment, at a County scale, which are included as part of this Draft Plan.

The Climate (Amendment) Act 2021[1] specifically requires all local authorities in Ireland to prepare and make a Climate Action Plan, in consideration of wider national climate and energy targets, addressing both mitigation and adaptation measures:

- **Climate Change Mitigation** relates to changing how we live, move, consume and manufacture, so as to reduce and/or eliminate the production of harmful greenhouse gases, it also includes how we best use our land; and
- **Climate Change Adaptation** refers to dealing with the impacts of climate change and involves taking practical actions to manage risks, protect communities and strengthen the resilience of the economy (e.g. from flooding, sea level rise etc).

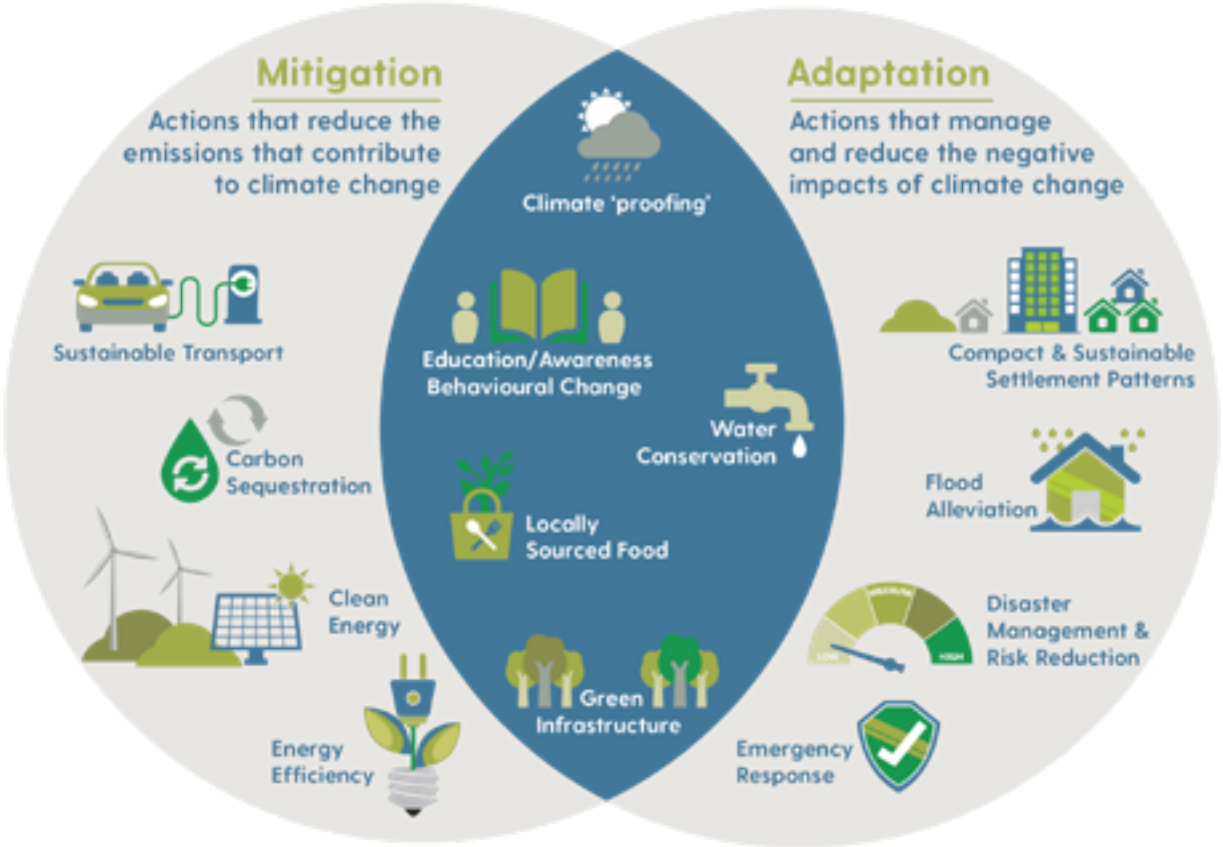


Figure 1.1: Climate Action Mitigation and Adaptation Actions (Source: Climate Action Regional Office).

This Draft Climate Action Plan sets a clear pathway for Fingal to:

- actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- assist in the delivery of the climate neutrality objective at local and community levels; and
- identify and deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area, through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

Set against the backdrop of an evolving and ambitious framework of national climate policy, Fingal County Council maintains a strong commitment to mainstreaming climate action across its own operations and functions, whilst also pursuing a leadership role on climate action, at the local level. The Draft Plan demonstrates a coherent approach to climate action across the administrative and political structure of the local authority. The Draft Plan is subject to approval by the Elected Members of the local authority, following public consultation and engagement. A range of other policies and plans support the Draft CAP including the Council's Corporate Plan, The County Development Plan, the Green Infrastructure Strategy, The Tree Strategy - Forest of Fingal, and the Fingal Biodiversity Action Plan 2022-2030.

The Draft Plan sets out how Fingal County Council will be responsible for enhancing climate resilience, increasing energy efficiency and reducing greenhouse gas emissions, across its own assets, services and infrastructure, to which it is fully accountable for, whilst also demonstrating a broader role of influencing, advocating and facilitating other sectors, to meet their own climate targets and ambitions. This is necessary to ensure that the environmental, social and economic benefits that come with climate action, can be fully realised. The Council will also continue its efforts in rolling out ambitious climate action projects, drawing down available sources of funding, pursuing citizen and stakeholder engagement, all supported by a progressive policy framework. The Council will launch the Climate Action Fund Strand 1 - Building Low Carbon Communities. This is a fund for local authorities across the country, to support and build low carbon communities.

In a changing climate, the aim is to become more resilient to all future possibilities, allowing local communities to thrive and work towards real solutions that are meaningful, inclusive, fair and accessible for all.

OVERVIEW OF CLIMATE CHANGE

Climate change is increasingly understood to be the most critical, long-term global challenge of our time, its impacts continue to be felt both worldwide and at home. The Intergovernmental Panel on Climate Change (IPCC's) Working Group I Sixth Assessment Report[2], confirms overwhelming evidence that the climate has changed since the pre-industrial era and that human activities, through greenhouse gas emissions, are the principal cause of that change. It states the unequivocal cause of global warming has been human activities, with global surface temperatures reaching 1.1°C above 1850-1900, in the 2011-2020 period.

Ireland's climate echoes that statement. Figure 1.2 compares the global temperature rise since 1900 to Irish temperatures. Ireland is in line with the global temperature increases, following 2022, being a year of record-breaking extremes, in both temperature and precipitation (rainfall). Met Éireann stated that 2022 was 'the warmest year on record'. This would see Ireland's temperature be above the long-term average for the 12th consecutive year. Furthermore, 2022 saw record breaking temperatures observed in Ireland during the summer, recording the second highest temperature ever recorded in Ireland at 33°C.

This is reiterated in the precipitation observations from 2022, where rainfall was recorded at below the long-term average at most at stations. There was variability in rainfall throughout 2022, with extremes being felt in each of the seasons, resulting in a drier Summer and Spring, and a wetter Autumn and Winter.

Global mean sea level increased by 20 cm between 1901 and 2018. The trend in global mean sea level rise has been consistently rising since 1901. Ireland has so far seen a similar rise in sea level with an average of 2-3 mm per year. A warming climate has caused a rise in sea level, through the loss of sea ice and thermal expansion (the increase in the volume of water due to heating) resulting from the warming ocean.

Ireland has suffered from adverse climate impacts already and recent extreme weather events have highlighted the vulnerability of individuals, businesses, communities, sectors and infrastructure to climate change, emphasising the need for urgency on climate action across all sectors of society.

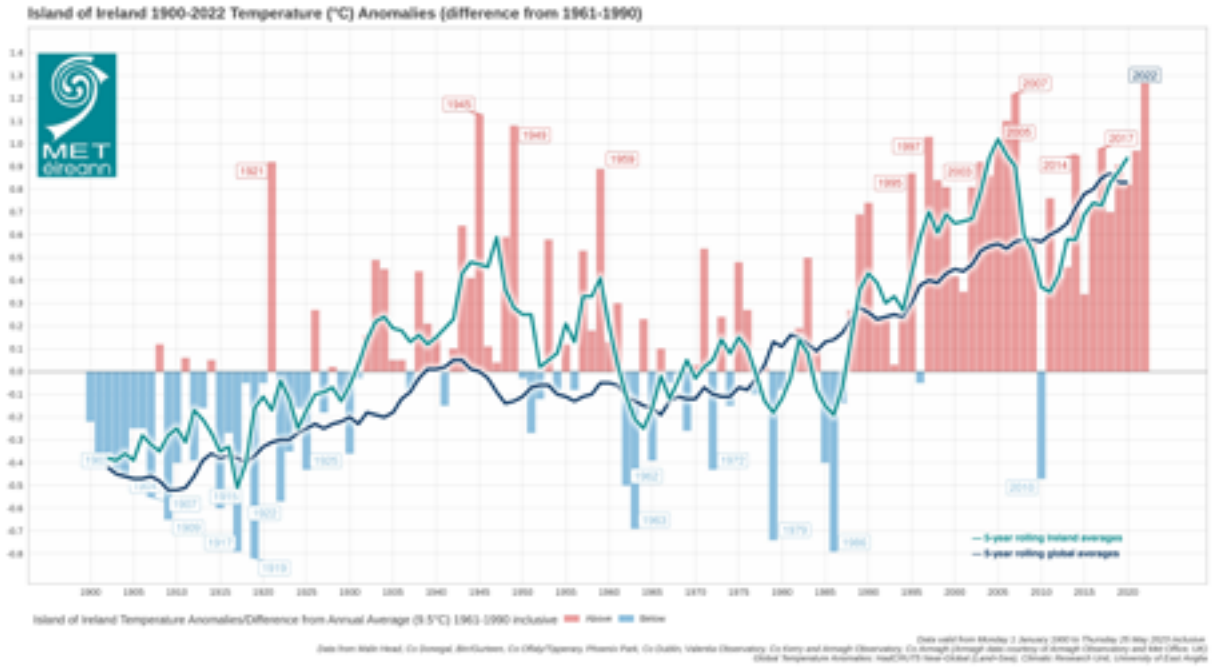


Figure 1.2: Island of Ireland 1900-2022 Temperature (°C) Anomalies (difference from 1961-1990)
(Source: Met Éireann)

For example, storms such as Arwen and Barra in 2021 most notably, left 59,000 homes and businesses without power (Climate Action Plan, 2023)[11]. The adverse impacts of climate change can often compound wider reaching social, environmental and economic challenges. This can increase vulnerability and sensitivity to a changing climate and climate extremes.

Based on observed changes in climate and its impacts, Met Éireann, the Environmental Protection Agency (EPA) and other climate scientists, are able to make robust projections on future climate patterns in Ireland and globally. The Environmental Protection Agency, Marine Institute and Met Éireann published The Status of Ireland's Climate Report[3] in July 2021. Future climate projections for Ireland can be summarised as follows:

- Climate projections indicate that the climate trends observed over the last century will continue and intensify over the coming decades;
- Temperatures are increasing and are expected to continue to increase and across all seasons;
- Significant reductions in levels of average precipitation (rainfall) are expected in Spring and Summer, whilst projections indicate the increased occurrence of extreme precipitation events, particularly during Winter;
- Projections show little change in average wind speed and direction. The frequency of extreme wind conditions are expected to increase, particularly during Winter;
- Based on current trends, Ireland will see an increase in sea level rise, similar to what has been experienced to date. Ireland is vulnerable to sea level rise, due to its expansive coastline and the large number of the population that has settled on the coast;
- Increases in the frequency of fluvial (river) and pluvial (surface water) flooding;
- Increases in the frequency and intensity of coastal flooding and erosion;
- Increases in the frequency and intensity of summer heat waves, extreme temperatures and drought;
- Reductions in the frequency of frost and snowfall; and
- An increase in the duration of the growing season (phenological cycle).

The state of Ireland's climate today and how it may look in the future can be brought together in one simple conclusion. Ireland's climate has changed relative to the 1900's, it has undoubtedly warmed along with global temperatures, bringing about an array of impacts that are associated with a warmer climate and more extreme weather events.

CLIMATE POLICY CONTEXT

Climate action is given impetus by the scientific evidence that supports the findings of human influence on climate change and the most recent legally binding international treaty on climate change, which sets the framework for ambitious and strengthened policy responses, the Paris Agreement 2015. Consequently, this Draft Climate Action Plan is set within a broader context of international, EU, national and sectoral climate policy. This is represented in Figure 1.3.

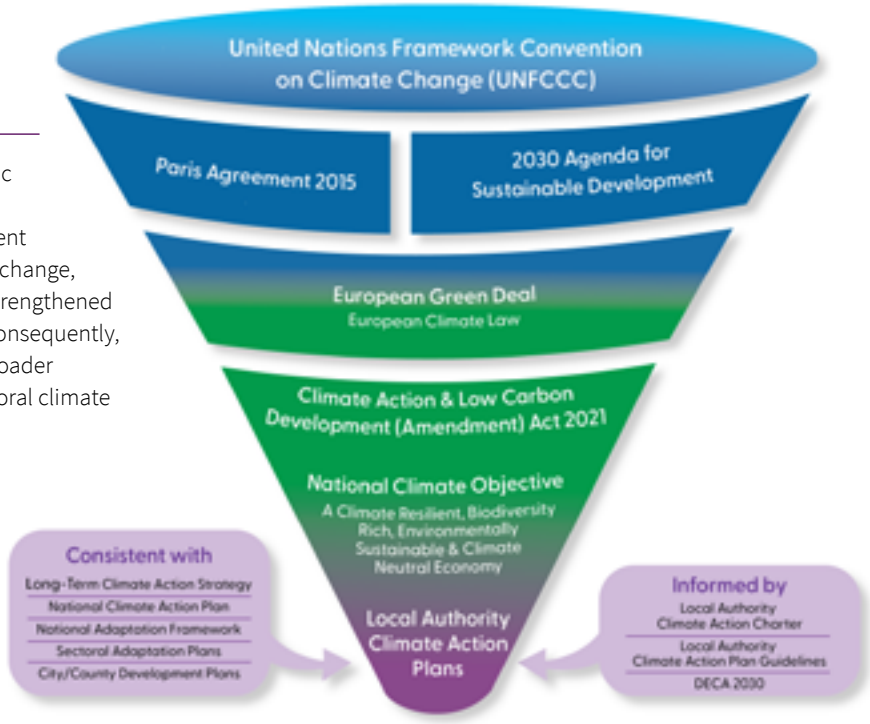


Figure 1.3: Legislation and Policy Context for the Climate Action Plan

(Source: Climate Action Regional Offices)

INTERNATIONAL CLIMATE CHANGE POLICY

It has been recognised that successfully tackling climate change requires cooperation and ambition on an international level. Since the establishment of the United Nations Framework Convention on Climate Change (UNFCCC)[4] in 1994, countries have sought to build international cooperation to limit the increase in the average global temperature and deal with the impacts of climate change, that result from these temperature increases.

These efforts led to the signing of the Paris Agreement 2015 at the Conference of the Parties 21 (COP21)[5]. The Paris Agreement 2015[6] is a legally binding international treaty on climate change which was signed by all 196 member countries, including Ireland, and entered into force on 4th November 2016. Through two clearly defined goals the Paris Agreement strives for progressive and ambitious climate action over time to avoid dangerous climate change by:

i. Holding global average temperature increases to well below 2.0C and pursuing efforts to limit the temperature increase to 1.50C above pre-industrial levels; and

ii. Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience.

Another International agreement closely linked with the Paris Agreement is the 2030 Agenda for Sustainable Development[7] which was adopted by UN Member States in September 2015. At the Agenda's core are 17 Sustainable Development Goals (SDGs)[8]. These goals aim to "end poverty, protect the planet and improve the lives and prospects of everyone, everywhere." The 17 SDGs contain 169 targets to be achieved by 2030. In 2019, World leaders called for a 'decade of action' in order to achieve the Goals within this timeframe. The SDGs are also addressed in Section of this Draft Plan.

In December 2019, as part of the Paris Agreement[6] commitments, the European Commission announced the European Green Deal[9] aimed at making Europe the first climate neutral continent. The Deal seeks to achieve no net emissions of greenhouse gases by 2050, to decouple economic growth from resource use, and to leave no one behind. The EU introduced a set of proposals to align the EUs climate, taxation, energy, and transport policies to support achieving this aim. The European Climate Law[10] made these targets legally binding, which also includes achieving a reduction in net greenhouse gas emissions of at least 55% by 2030.

CLIMATE CHANGE POLICY IN IRELAND

Climate change policy in Ireland now reflects the ambition of the EU and that required to confront the challenges of climate change. The Climate Action & Low Carbon Development (Amendment) Act 2021[1], enacted on 23 July 2021, requires the State to achieve by no later than the end of the year 2050, the transition to a climate

resilient, biodiversity rich, environmentally sustainable and climate neutral economy. This is also known as the National Climate Objective. A Climate Neutral economy means, as stated in the Act, a sustainable economy and society where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases.

Towards achieving this Objective, the Minister for the Environment, Climate and Communications will regularly submit for Government approval, carbon budgets, sectoral emission ceilings, a national Climate Action Plan, a Long-Term Climate Action Strategy, and a National Adaptation Framework. In relation to carbon budgets, which are to be proposed by the Climate Change Advisory Council, the first two carbon budgets are to provide for a reduction in greenhouse gas emissions by 51% by the end of 2030, using 2018 as the baseline year. Through progressive economy-wide carbon budgets, sectoral ceilings, a suite of strategies devised to promote a combination of adaptation and mitigation measures, as well as robust oversight and reporting arrangements, climate policy is working to scale up efforts across all of society and deliver a step change on ambitious and transformative climate action to 2030 and beyond to 2050.

While the local authority sector is not required to operate under a carbon budget or emission ceiling the Climate Action and Low Carbon Development (Amendment) Act 2021[1] requires each local authority to prepare and make a Climate Action Plan. This Plan is to relate to a period of 5 years and is to specify the mitigation and adaptation measures to be adopted by the local authority. In the case of the first Plan, local authorities are required to have it made within 12 months of a request from the Minister to do so. This request was received by local authorities on 24th February 2023. Local authorities are required to adopt their Climate Action Plan by 23rd February 2024. Local Authority Climate Action Plans, in so far as is practicable, are to be consistent with the most recently approved national Climate Action Plan and National Adaptation Framework. They are also to have regard for the most recently approved Long Term Climate Action Strategy, Sectoral Adaptation Plans and any policies of the Minister or the Government on Climate Change.

Local authorities are required to, in respect to the content and preparation of a Local Authority Climate Action Plan, comply with Ministerial Guidelines. These Guidelines were issued to the sector in March 2023. The Draft Plan has been prepared in accordance with these requirements.

The Climate Action Plan 2023[11], launched on 21st December 2022, is the second annual update to the States' Climate Action Plan 2019 and the first to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021, and following the introduction, in 2022, of economy-wide carbon budgets and sectoral emission ceilings. Climate Action Plan 2023 sets out a roadmap to 2025 towards taking decisive action to halve emissions by 2030 and reach net zero, no later than by the end of 2050, as committed to in the Programme for Government.

Ireland published its first National Adaptation Framework (NAF)[12] in 2018, which set out the context to ensure key sectors and local authorities, can assess the key risks and vulnerabilities of climate change, implement climate resilient actions, and ensure climate adaptation considerations are mainstreamed into national, regional and local policy making.

Ireland's current Long-term Strategy on Greenhouse Gas Emissions Reductions[13] sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The Strategy builds upon the decarbonisation pathways set by the carbon budgets, sectoral emissions ceilings and the national Climate Action Plan, to ensure coherent and effective climate policy. It is underpinned by analysis of transition options across each key sector of the economy and provides a crucial link between Ireland's 2030 climate targets and the long-term goal set by Ireland's National Climate Objective and the European Climate Law.

Sectoral Climate Adaptation Plans[14] have been published across Government departments, in response to the National Adaptation Framework. Each Plan identifies the key risks faced across the sector and the approach being taken to address these risks and build climate resilience for the future. They were developed applying a six-step adaptation planning process described in Sectoral Planning Guidelines for Climate Change Adaptation, published by the Department of the Environment, Climate and Communications. The Plans address the following sectors: Agriculture, Forestry and Seafood, Biodiversity, Built and Archaeological Heritage, Transport infrastructure, Electricity and Gas Networks, Communications Networks, Flood Risk Management, Water Quality and Water Services Infrastructure and Health.

The Local Authority Climate Action Charter[15], signed by all local authorities in October 2019, represents a commitment by all local authorities to scale up efforts and play a key role locally and nationally in delivering effective climate action. It tasks local authorities with providing robust leadership in advancing climate action at regional and local levels, with adhering to the UN SDGs, in particular Goal 13 Climate Action, as well as reducing emissions from their own operations and to collaborate and partner with local enterprise, community groups, citizens as well as public, private, and educational sectors on climate action initiatives.

Delivering Effective Climate Action 2030 (DECA 2030)[16] is the local government strategy on climate action published in April 2021. The strategy represents an overarching sectoral commitment to ensuring a coherent approach to climate action across the administrative and political structures of all 31 local authorities. At a sectoral level the strategy communicates a general strategic intent through an envisaged leadership position, to engage the local authority network in effective climate action. Within the sector, the overall strategy represents a top-level consensus on the approach to climate action and a strong commitment to the prescribed leadership role. The strategy is a stated roadmap for local authorities in delivering the required decarbonisation and adaptation responses to climate change.

FINGAL COUNTY COUNCIL DRAFT CLIMATE ACTION PLAN 2024-2029 TARGETS

The targets of the Fingal County Council Draft Climate Action Plan are as follows:

- **50% improvement in the Council's energy efficiency by 2030;**
- **51% reduction in the Council's greenhouse gas emissions by 2030;**
- **To make Dublin a climate resilient region, by reducing the impacts of future climate change-related events; and**
- **To actively engage and inform our communities on climate action.**

The targets of the Draft Plan are framed by the Climate (Amendment) Act 2021 and the national Climate Action Plan 2023. This Draft Plan includes a range of actions for which the Council is 'Fully Accountable'. As such, across its own buildings, operations, services and functions, the Council aims to achieve a 51% reduction in greenhouse gas emissions and a 50% energy efficiency improvement, by 2030. The Draft Plan is also outward focused and includes a range of actions for which the Council can 'Influence', 'Co-ordinate and Facilitate' and 'Advocate' for other sectors, in meeting their own climate and energy targets, thereby reflecting the 'National Climate Objective' and an all of society reduction in greenhouse gas emissions of 51% by 2030.

The implementation of the Climate Action Plan also aims to facilitate a Just Transition across the County. A Just Transition means ensuring that the transition towards meeting the National Climate Objective, happens in a way that leaves no one behind. This is also reiterated in the national Climate Action Plan 2023[11], which states:

> **Delivering a just transition is based on recognising the transformational level of change required to meet these targets and having a shared understanding that the transition is fair, and just, and that the costs are shared equitably. Our climate policies should, therefore, seek to protect the most vulnerable.**
> (Climate Action Plan, 2023)[11].

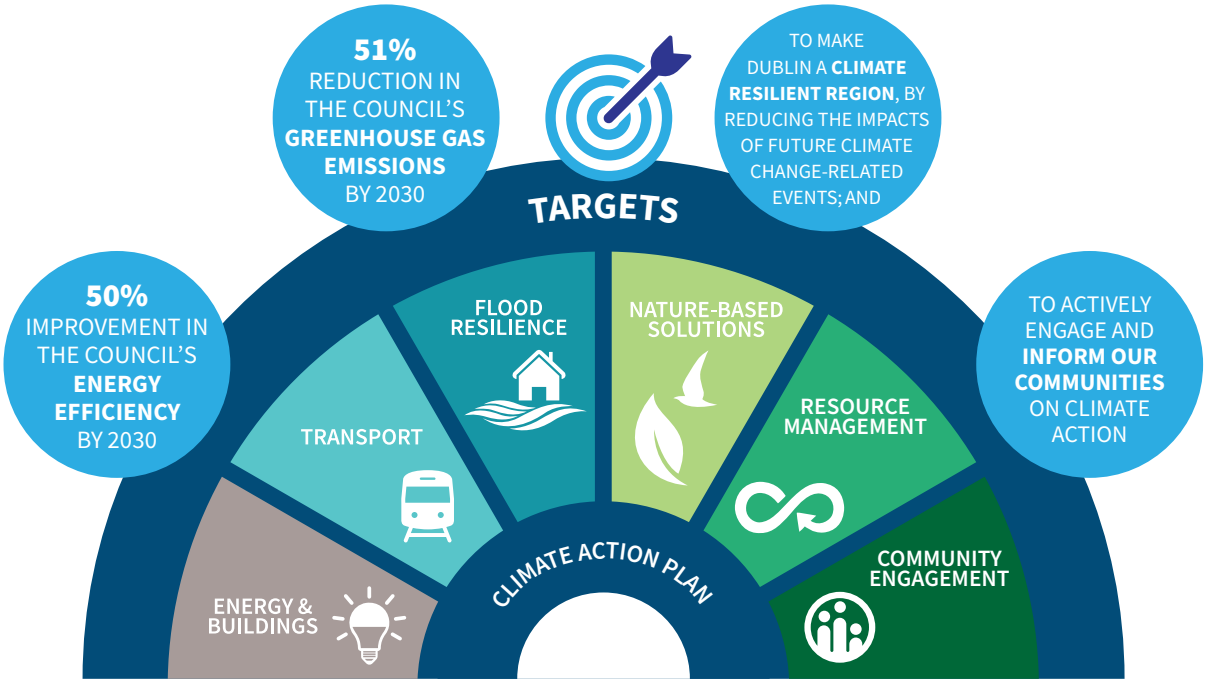


Figure 1.4: The Targets and Action Areas of this Climate Action Plan 2024-2029

LOCAL AUTHORITY CLIMATE ACTION PLANNING

Fingal County Council and other local authorities across Ireland, are already well positioned at the forefront of climate action in Ireland. Local authorities play a significant role in terms of delivering adaptation and mitigation measures at local and community levels. They are entrusted to work through their regulatory and strategic functions to operationalise the ambitious national climate targets and policy at local levels, to assist in the delivery of the National Climate Objective. The Climate Action Plan will be a key instrument that strengthens the links between local and national climate policy and the delivery of effective climate action at local and community levels, through place-based climate action.

The Draft Plan has been prepared in accordance with the Local Authority Climate Action Plan Guidelines[17], The Guidelines were issued by the Department of Environment, Climate, and Communications in March 2023 with the aim of supporting local authorities in both the content and preparation of their Local Authority Climate Action Plans. A key component of the Guidelines involves identifying and understanding the scope of the local authority's responsibility on climate action and the scope of the Climate Action Plan; this is shown in Figure 1.5.

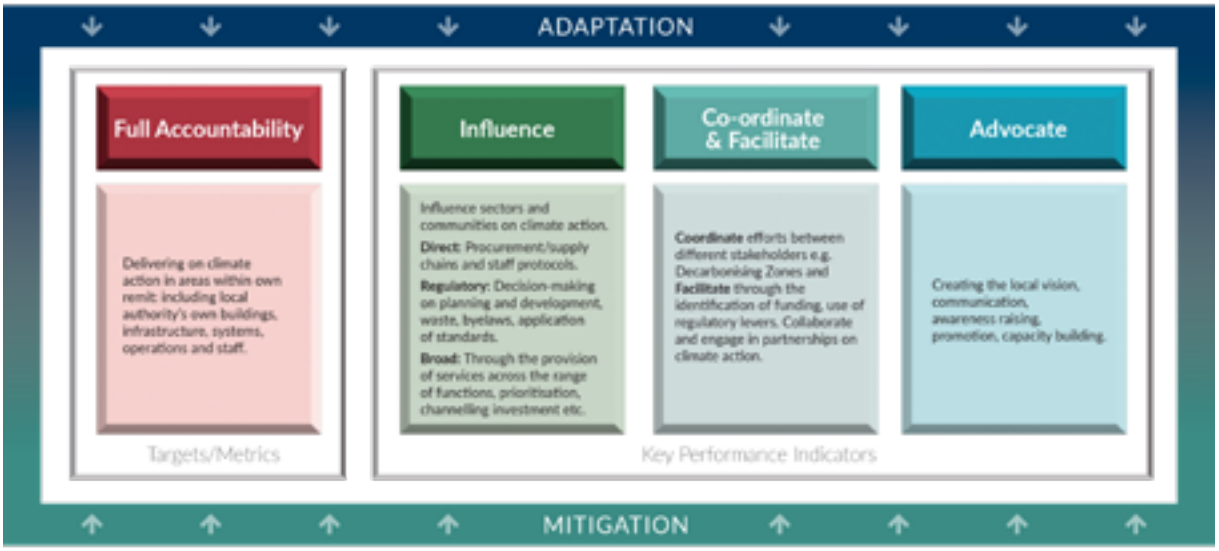


Figure 1.5: Local Authority Scope on Climate Action
(Source: Local Authority Climate Action Plan Guidelines, 2023)

In accordance with the Local Authority Climate Action Plan Guidelines, this Draft Climate Action Plan is Ambitious, Action-Focused, Evidence-Based, Participative and Transparent.

Over its preparation and implementation, the Council's Climate Action Plan offers an opportunity to bring together critical stakeholders across communities and businesses to build a vision for a climate neutral future. This Draft Climate Action Plan is part of longer-term efforts that will require a sustained and planned response to support the delivery of the climate neutrality objective at local and community levels.

POTENTIAL ADDITIONAL BENEFITS AND OPPORTUNITIES

ECONOMIC:

1. By transitioning to a low carbon economy, we will encourage the creation of additional job opportunities across a range of disciplines.
2. By using indigenous, sustainable sources for our energy needs, we can reduce our reliance on imported fossil fuels.
3. By promoting improvements in energy efficiency, we will foster innovation in both the public and private sectors.
4. By using local solutions to mitigate and adapt to climate change, we can upskill our workers and generate employment.
5. By transitioning to a circular economy, we can stimulate innovation and create employment in the reuse and repair sector.
6. By becoming climate leaders, we are attractive to foreign direct investment from companies with a green corporate agenda.

SOCIAL

1. By improving the energy efficiency of our social housing stock, we can reduce tenants' utility bills and lessen fuel poverty.
2. By protecting against climate risks, we can reduce impacts on citizens, their properties, and our services.
3. By informing citizens on the impacts of climate change and possible solutions in their areas, we can create networks of climate-resilient neighbourhoods.
4. By implementing mitigation and adaptation actions, we can provide other opportunities for community benefits in terms of green spaces, and pedestrian and cycle routes.
5. By increasing the number of trees, additional shading and privacy can be provided.
6. By supporting community initiatives and working together we can build a greater sense of social cohesion.

ENVIRONMENTAL

1. By implementing mitigation and adaptation actions now, we lessen the potential impacts on the environment in the future.
2. By using nature-based solutions to combat climate risks, we can increase the green infrastructure of the area and provide additional aesthetic value to our urban spaces.
3. By using nature-based solutions with, or instead of, hard engineering, we can reduce the associated costs of climate action, while enhance habitat for biodiversity.
4. By providing networks of natural wildlife corridors through the urban environment we will help animal and plant species migrate through the changing landscape.
5. By improving our active travel networks and public transport options, we reduce congestion and pollution and improve air quality and reduce noise impacts.
6. By transitioning to a circular economy, we will reduce plastic pollution and use fewer natural resources.

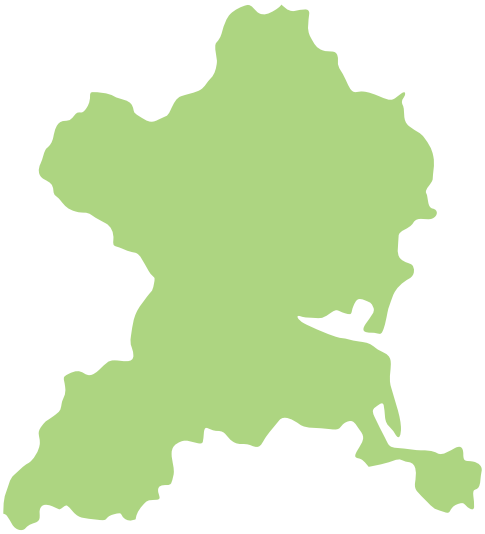
HEALTH AND WELLBEING

Health co-benefits can occur from key climate change actions such as:

1. An uptake in active travel can lead to improved health of citizens.
2. By increasing energy efficiency and reducing the demand for fossil fuels, we will reduce greenhouse gas emissions and improve air quality in our area.
3. By implementing nature-based solutions, we can make the area a healthier and more desirable place to live and work. This can lead to mental health benefits.

Figure 1.6: Opportunities and benefits that can arise from Climate Action

STRUCTURE OF THE CLIMATE ACTION PLAN



This Draft Climate Action Plan has been developed in accordance with the Local Authority Climate Action Plan Guidelines and has taken into full consideration international and national climate change policy and legislation as well as the most up-to-date knowledge on current levels of climate change and its impacts and projections for the future. In showing the outcome of this process, this Draft Climate Action Plan is set out in four parts.

1 Firstly, the evidence base used to inform on climate action within the jurisdictional area of Fingal County Council is presented, including a climate change risk assessment and emissions baseline profile.

2 Secondly, the framework for climate action across six different Action Areas – addressing both mitigation and adaptation, and the Council's emergency response planning.

3 The third part focuses on the Council's Decarbonising Zone (DZ), including the Vision for the DZ and DZ Register of Opportunities.

4 The final Part of this Draft Plan sets out the Council's approach to implementing actions and measuring progress, as well as how the Council will report on actions over the lifetime of the Plan.

2. CLIMATE ACTION PLAN PROCESS

HOW WE DEVELOPED THE PLAN:

This Draft Climate Action Plan 2024 – 2029 (CAP) has been developed in accordance with the Local Authority Climate Action Plan Guidelines and has taken account of international and national climate change policy and legislation.

The Draft CAP is being developed in a number of phases, specifically:

- Advanced Planning
- Statutory Plan Making Stage
- Completion

ADVANCED PLANNING & GETTING STARTED

A Dublin regional approach was agreed by the four Dublin Local Authorities, CARO (Climate Action Regional Office) and CODEMA (City of Dublin Energy Management Agency), whereby they would collaborate closely on the development of their respective Climate Action Plans

The regional team commenced the process of plan development in early 2023, and met regularly to plan for the development of the respective CAP's.

A programme plan was developed which included key tasks to be completed at each stage of advanced planning and the statutory plan making phases.

The Climate Action team within the ECAAT Department engaged internally across departments to plan for climate action review and development under the direction of the Climate Action Steering Group.

External support was procured to establish the County Emissions Baseline, to undertake a County wide Climate Change Risk Assessment, and to undertake the Strategic Environmental Assessment (SEA) and the relevant Appropriate Assessments (AA) for the Plan.

An area in Balbriggan was chosen as the Decarbonising Zone.

STATUTORY PLAN MAKING PHASE

INTERNAL CONSULTATIONS:

With the internal teams engaged within Fingal County Council and the wider supports in place, consultation, exchange of ideas, the drafting of this detailed plan could be initiated.

Stakeholder engagement began with a briefing to the Executive Management Team and Senior Team of the Council outlining the requirement to develop the CAP, the tasks and timelines involved.

The Climate Action Team engaged with the Senior Management team and each Department, through meetings and workshops, to develop ambitious actions across the six thematic areas of the Draft Plan

The requirement to develop a CAP had been highlighted at a meeting of the Climate Action, Biodiversity, Environment Strategic Policy Committee in December 2022 and at a meeting of the Corporate Policy Group in January 2023. Presentations were made at the Climate Action, Biodiversity, Environment Strategic Policy Committee and the Marine & Coastal Management Strategic Policy Committee in June 2023. Updates on the process were provided at various intervals through the Chief Executive Monthly Report. A further councillor engagement session will take place early in the public consultation period.

The Climate Action team took advantage of a number of informal awareness raising opportunities in advance of public consultation including a stand at Flavours of Fingal in early July 2023.

Engagement with internal teams continued and evidence base and challenges facing the County in terms of climate adaptation and mitigation were considered.

Regular collaboration was undertaken with the other three Dublin Local Authorities to ensure regional alignment across the Draft Climate Action Plans. Engagement with other neighbouring local authorities was facilitated by the Dublin CARO.

ACTION REVIEW AND DEVELOPMENT

Action review and development is one of the key building blocks of this Draft Plan. This has been an iterative process, - building on the successful implementation of the Climate Change Action Plan 2019 – 2024, and associated learnings. Teams aimed to develop SMART actions (Specific, Measurable, Achievable, Realistic, Timebound) and considered the full role of the Council, where the Council could influence, facilitate / co-ordinate, and advocate for climate action.

STRATEGIC ENVIRONMENTAL ASSESSMENT & APPROPRIATE ASSESSMENT

The Draft CAP was required to be assessed under specific environmental legislation. Recommendations and mitigation measures made through the assessment processes outlined below are incorporated into this Draft Plan and will be undertaken as part of implementation of the adopted Plan.

STRATEGIC ENVIRONMENTAL ASSESSMENT

Environmental assessment is a procedure that ensures that the environmental implications of decisions are considered before such decisions are made. Strategic Environmental Assessment (SEA) is the term which has been given to the environmental assessment of plans and programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting and evaluating the likely significant environmental effects of implementing a proposed plan or programme, in order to ensure that these effects are adequately addressed at the earliest stages of decision-making, in tandem with economic, social and other considerations. The SEA process was integrated into the preparation of the Fingal County Council Draft Climate Action Plan 2024-2029. This is in accordance with the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004 as amended by S.I. 200 of 2011)[18]. The SEA Environmental Report is contained as a separate document accompanying the Draft Climate Action Plan 2024-2029.

APPROPRIATE ASSESSMENT

In accordance with requirements under EU Habitats Directive (92/43/EEC)[19], the EU Birds Directive (79/409/EEC)[20] the potential effects of the Climate Action Plan on certain sites designated for the protection of nature under European legislation, must be assessed as part of the preparation of the Climate Action Plan. This process, known as Appropriate Assessment, is to determine whether or not the implementation of Draft Climate Action Plan could have negative consequences for the habitats or species for which these sites are designated. Appropriate Assessment was undertaken as part of the plan-making process and a Natural Impact Report is contained as a separate document accompanying the Draft Climate Action Plan 2024-2029.

PUBLIC CONSULTATION

The Draft Plan will be on public display from 20th September 2023 to 3rd November 2023 inclusive, and the final draft Plan will be informed by the Chief Executive's Report on written submissions, and by consultations with Climate Action, Environment and Biodiversity Strategic Policy Committees, and Elected Members. This section will be updated following public consultation.

COMPLETION STAGE

Subsequent to this Statutory Plan Making stage, the Draft Climate Action Plan will enter the completion stage.

This stage will include the output from the public consultation and recommendation for the SEA / AA process as appropriate.

3. EVIDENCE BASED CLIMATE ACTION

BASELINE EMISSIONS INVENTORY

The 2023 Climate Action Plan (CAP 23)[11] reaffirms emissions pathways for Ireland set out in the Climate Action and Low Carbon Development (Amendment) Act 2021 - to halve Ireland's emissions by 2030 and achieve carbon neutrality by 2050. Relevant targets for Local Authorities include:

- Local Authorities must improve their energy efficiency by 50% by 2030, compared with a baseline of 2009 (or earlier).
- Local authorities must also reduce their heating and transport emissions by 51% by 2030, in comparison to a 2018 baseline.
- Nationally we must reduce GHG emissions by 51% by 2030 compared to a 2018 baseline and achieve climate neutrality by 2050 - Local Authorities are obligated by the Climate Action and Low Carbon Development (Amendment) Act 2021 to produce plans consistent with this target.

Table 3.1 below highlights the milestone years used in this analysis:

Key Years	Significance
2009	• Baseline year for public sector energy efficiency targets
2018	• Baseline year for GHG emissions reduction targets • Emissions related to the wider Fingal area are also calculated for this year
2021, 2022	• The latest data from 2021 and 2022 is used in this analysis, where available, to highlight Fingal County Council's current status and progress towards 2030 targets.
2030	• Year of public sector energy efficiency target – reduction of 50% • Year of national emissions reduction target of 51% (in comparison with 2018 baseline year)
2050	• Year of national target of net-zero emissions

Table 3.1: Milestone years used in this analysis

FINGAL COUNTY COUNCIL'S CURRENT ENERGY USE

Fingal County Council is responsible for the energy use and emissions associated with its buildings and facilities, public lighting, and also from the Council's vehicle fleet. This section highlights the Council's current energy use and the progress the Council has made in energy efficiency improvements, using the most recently available data. The information from the Sustainable Energy Authority of Ireland's (SEAI) Monitoring and Reporting (M&R) database shows that Fingal County Council had a total final energy consumption of 28.6 gigawatt hours (GWh) which would represent 46.7 GWh of primary energy.[21]

Table 3.2 below highlights the energy efficiency improvement Fingal County Council has achieved to date:

Energy Efficiency Improvements in Fingal County Council	
Energy Efficiency Improvement in 2022 vs 2009	• **41.8%**

Table 3.2: Fingal County Council's Energy Efficiency Improvements

Figure 3.1 shows that in 2021, Fingal County Council's Public Lighting was the highest energy consumer, accounting for **53%** (24.7GWh) of the Council's Total Primary Energy Requirement (TPER). The municipal fleet accounted for **12%** (5.7GWh) of the total energy use. The remaining energy consumers, mostly buildings and facilities, account for 35% (16.2GWh) of the total energy consumption.

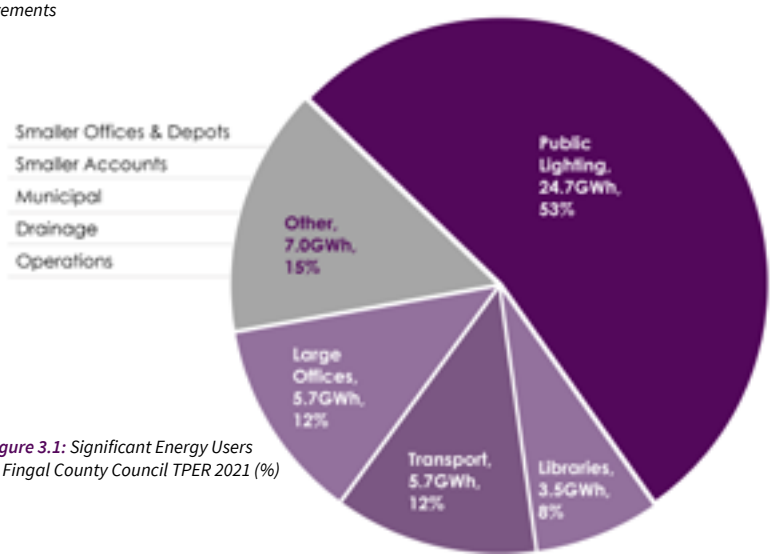


Figure 3.1: Significant Energy Users in Fingal County Council TPER 2021 (%)

For further explanation, the different ways of measuring energy are outlined in Figure 3.2 below

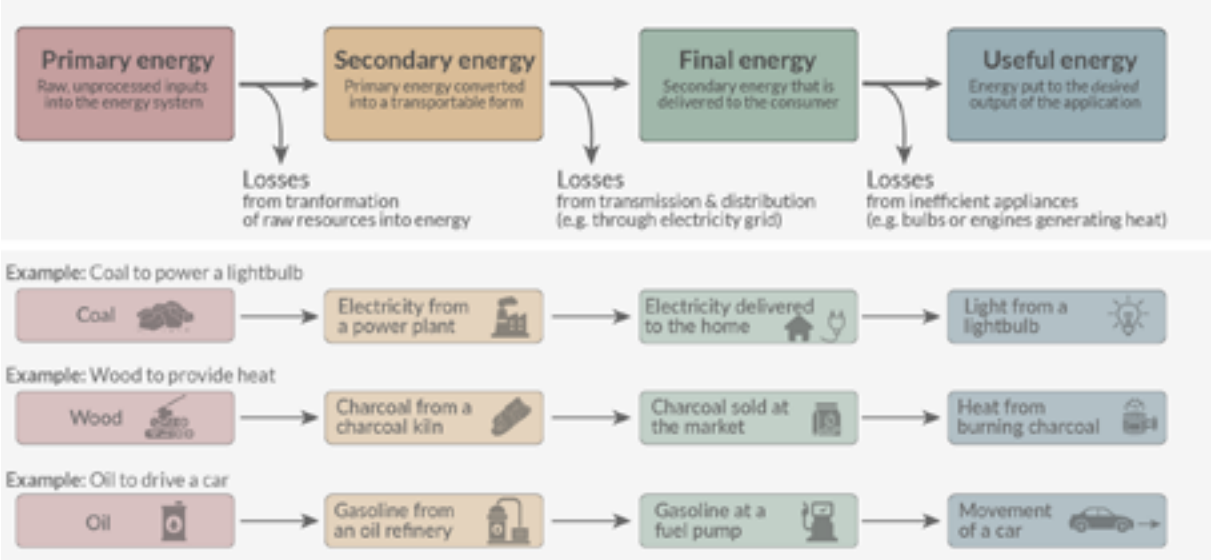


Figure 3.2: The Four Ways of Measuring Energy[22]

FINGAL COUNTY COUNCIL'S CURRENT EMISSIONS

This section uses the most recently available data to highlight Fingal County Council's current emissions. Among the Council's total emissions of 8,912 tonnes of Carbon Dioxide (tCO_2) in 2021, public lighting was the most significant emitter at 51% of total emissions. Buildings and facilities followed this and then the municipal fleet, each contributing 34% and 15% to the Council's emissions, respectively.

Largest Emitters	Public Lighting	Buildings and Facilities	Municipal Fleet
Proportion of emissions	51%	34%	15%

Table 3.3: Main sources of emissions in Fingal County Council in 2021

In 2022, 71.9% of the Council's emissions came from electricity, mainly due to the large amount of electricity used in public lighting and the Council's buildings and facilities. The use of diesel, which made up the majority of the energy used for the vehicle fleet, contributed 15.0% to the total emissions and was the second highest contributor to emissions. The use of natural gas contributed to 11.3%; most of this gas was used for space heating in Council buildings and facilities.

	Electricity	Natural Gas	Diesel	Other
Proportion of emissions by energy source	71.9%	11.3%	15.0%	1.8%

Table 3.4: Proportion of emissions for each source in Fingal County Council 2021

GAP TO TARGET

The gap-to-target model (GTT model) is a spreadsheet model for use by public bodies to evaluate their energy-related Green House Gas (GHG) emissions over time, in accordance with SEAI's public sector energy M&R framework for the period to 2030.

The GTT analysis highlights the future emissions reductions required for Fingal County Council to meet its 2030 targets. The 2022 gap-to-target for thermal and transport emissions is estimated at 48.6%. This means in order to meet its 51% reduction target in thermal (heating and transport) related GHG emissions between 2022 and 2030, Fingal County Council must reduce its non-electricity-related emissions by a further 48.6% compared to the 2018 baseline.[24]

Overall GHG emissions have reduced by 34% since the 2018 baseline; this is mainly due to a reduction from electricity sources.

As seen in Figure 3.3 below Fingal County Council has the potential to exceed its 2030 emissions reduction targets, based on successfully completing the decarbonisation projects identified by Fingal County Council's Energy Management Team and Codema. (These projects are referenced in the Energy & Building Action Table, in Chapter 5)

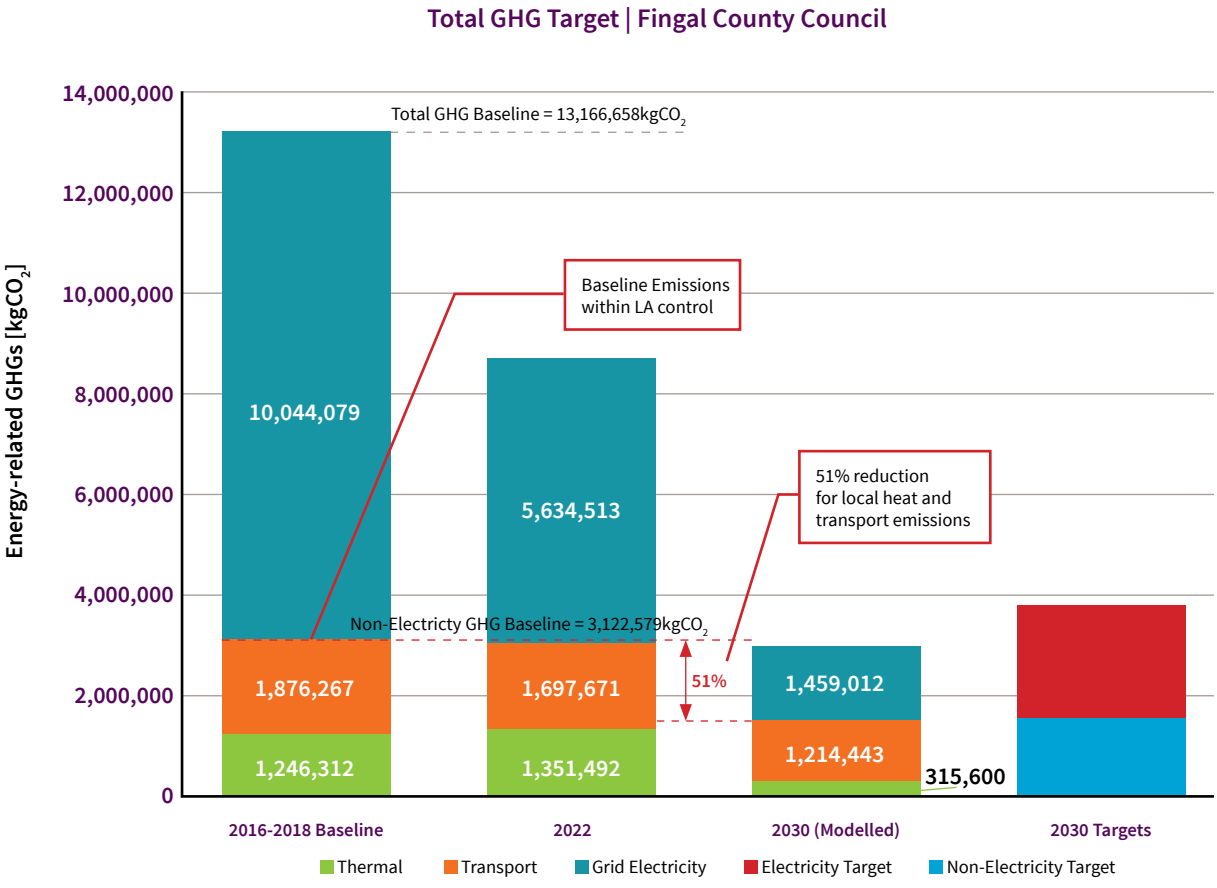


Figure 3.3: Gap-to-Target Tool, Total Fingal County Council Emissions Targets for 2030 and Current Emissions

PRIORITY AREAS FOR FURTHER REDUCTION OF EMISSIONS ASSOCIATED WITH FINGAL COUNTY COUNCIL'S ACTIVITIES

Key areas are as follows:

- Retrofit Fingal County Council's own buildings and facilities to include renewable energy and renewable heating systems.
- Electrification of Fingal County Council's fleet.

RETROFIT AND RENEWABLE HEATING SYSTEMS IN FINGAL COUNTY COUNCIL'S OWN BUILDINGS AND FACILITIES.

Grid decarbonisation is expected to dramatically reduce Fingal County Council's electricity emissions. The remaining focus, therefore, is the direct emissions targets, which include emissions from transport and thermal. Building thermal energy upgrades present better cost-effectiveness of emissions reduction (€/tonne CO_2).

Fingal County Council's buildings are being evaluated and prioritised for action on a range of criteria, including total emissions reduction potential and cost-effectiveness of emissions reduction (€/tonne CO_2).

The types of actions planned for buildings in the pipeline are:

- Suitability evaluation of buildings for upgrades
- Building Energy Rating (BER) assessment
- Photovoltaic Solar Panels
- Lighting upgrades
- Heat Pumps
- Building fabric upgrades
- Building energy management system upgrades

These actions can be viewed in Energy & Building Action Table, in Chapter 5.

ELECTRIFICATION OF FINGAL COUNTY COUNCIL'S FLEET

The electrification of the Council's vehicle fleet is well advanced, with 58 electric vehicles currently in operation. The Council will need to upgrade at least 24% of its fleet by 2030 to meet the direct emissions target. The Council aims to meet and surpass this target.

TOTAL EMISSIONS OF FINGAL COUNTY COUNCIL AREA

Ireland has committed to reducing its emissions by a minimum of 51% by 2030. The 2030 target corresponds to a 51% reduction from 2018 figures, as defined by the Programme for Government[23], which states that Ireland is 'committed to an average 7% per annum reduction in overall greenhouse gas emissions from 2018 to 2030 (a 51% reduction over the decade)'. The significance of the Dublin region in the Irish economy means that it is imperative to plan and commit to energy saving and CO_2 reductions at a local and regional level to meet national level targets.

It is imperative for urban regions to focus on reducing emissions, as activities in urban areas, such as manufacturing, transportation and energy demand cause more than 70% of global emissions.

The overall emissions for the Fingal area have been calculated from the baseline year 2018. This 'Baseline Emissions Inventory' (BEI) uses data from the 2016 census and additional data collected as part of the Dublin Region Energy Master Plan (DREM)[24] project to make an estimation of the BEI for the Fingal area for 2018. Total emissions are estimated to be 1,641,133 tonnes of Carbon Dioxide equivalent (tCO_2e) (Figure 3.4).[26]

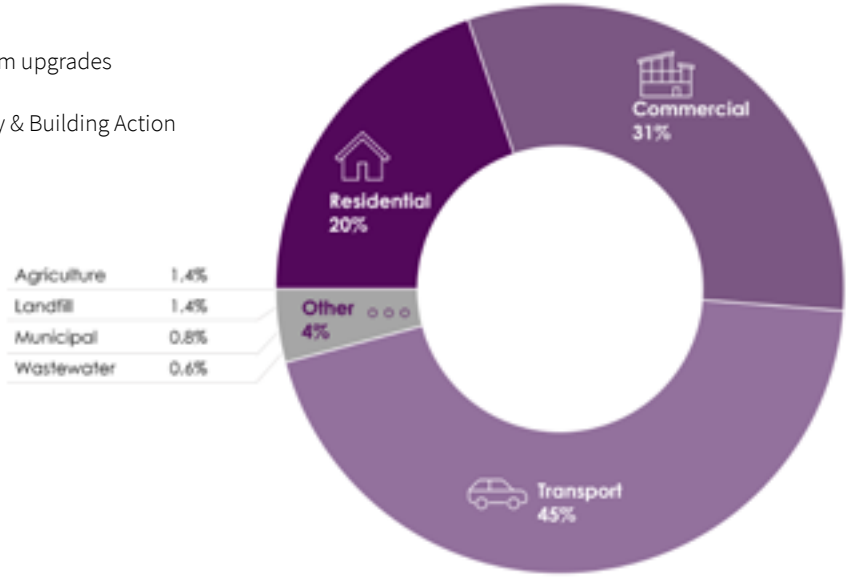


Figure 3.4: Total GHG Emissions for Fingal County Council per Sector 2018 (%)

Figure 3.4 illustrates that the sectors that produced the most emissions were the transport, residential and commercial sectors, accounting for 44.6%, 19.7%, and 31% of the total emissions, respectively. Data centres represent 13.1% of the commercial sector's emissions. Fingal County Council's emissions (municipal emissions) accounted for 0.8% of this total, with social housing contributing another 1% to the residential sector. This highlights the need for collaboration and action from all stakeholders to tackle the remaining 98.2% of emissions from public and private sector sources in the Fingal area.

EMISSIONS REDUCTION PATHWAYS FOR FINGAL COUNTY AREA

The Dublin Region Energy Master Plan is an energy modelling project that provides evidence-based pathways for the Dublin Region (hereinafter Dublin) to achieve its carbon emission reduction targets for 2030 and 2050. For the first time in Ireland, the Dublin Region Energy Master Plan uses spatially-driven energy modelling to identify cost-optimal decarbonisation solutions that consider the socio-economic impact at a local level in Dublin based on the specific energy "characteristics" or profile of a particular area.

Put very simply, this means that the master plan has looked at 'what should go where' for Dublin based on the type of area and the technologies that are best suited to reducing energy-related emissions within that area. The master plan also brings together national government plans and policies to show their impact on Dublin.

To define the pathways for Dublin to meet its 2030 and 2050 targets, the project first had to get a good understanding of the current situation in the county; this was followed by projecting the future business-as-usual energy demand and emissions (for the buildings, heat, electricity and transport sectors), and then identifying the low-carbon potential for these sectors. All this information was then used to determine the net-zero pathway for Dublin.

Strategic priorities for Fingal based on the Dublin Region Energy Master Plan are:

- **Decarbonisation of heat**
  - Heat pumps have the potential to supply significant heat demand in Fingal.
  - District Heating has significant potential in the Fingal area, with the Dublin 15 area having the most potential.
- **Buildings**
  - The average BER in Fingal is C3 - support is needed for building energy retrofits.
  - There is significant potential for building integrated solar provision across the Fingal area.
  - There is an opportunity to develop increased linkages between energy and local-level spatial planning as local-level energy planning can identify solutions not visible at a national level.
- **Renewable electricity**
  - Offshore wind presents the most significant potential for renewable electricity generation in Fingal.
  - Utility-scale solar presents the second most significant opportunity for renewable electricity production in Fingal.
  - Developing enabling electricity infrastructure should be supported to maximise Dublin's potential to generate renewable energy.
  - Significant electricity consumers such as data centres and other large industrial sites should maximise on-site renewable generation and ensure any remaining demand is supplied through renewable Power Purchase Agreements (preferably those that match hourly site demand), which finance renewable electricity projects within Ireland or its territorial waters.
- **Transport**
  - Active travel and public transport solutions should be prioritised, including the reallocation of road space to active travel modes.
  - Support for electric vehicle infrastructure.

The County Fingal Baseline Emissions Inventory can be made available on request.

CLIMATE CHANGE RISK ASSESSMENT

In Fingal, climate change is posing challenges in many ways, from the increased frequency of uncontrolled gorse fires, increased incidents of flooding, and imposition of water restrictions during heatwaves. This section provides an assessment of climate change risks and impacts for Fingal.

Globally, recent decades have seen a change in weather patterns. There has been an increase in the number of extreme weather events occurring throughout the world. In 2023, Ireland recorded the wettest July on record whilst the southern European counties experienced a heatwave. Weather patterns are changing, and it appears the rate of change is accelerating. Ireland and Fingal are no exception to the global trends.

A summary of the key climatic and weather related changes in Dublin are detailed below.

Highlights of Observed Climate Change for Ireland and Fingal

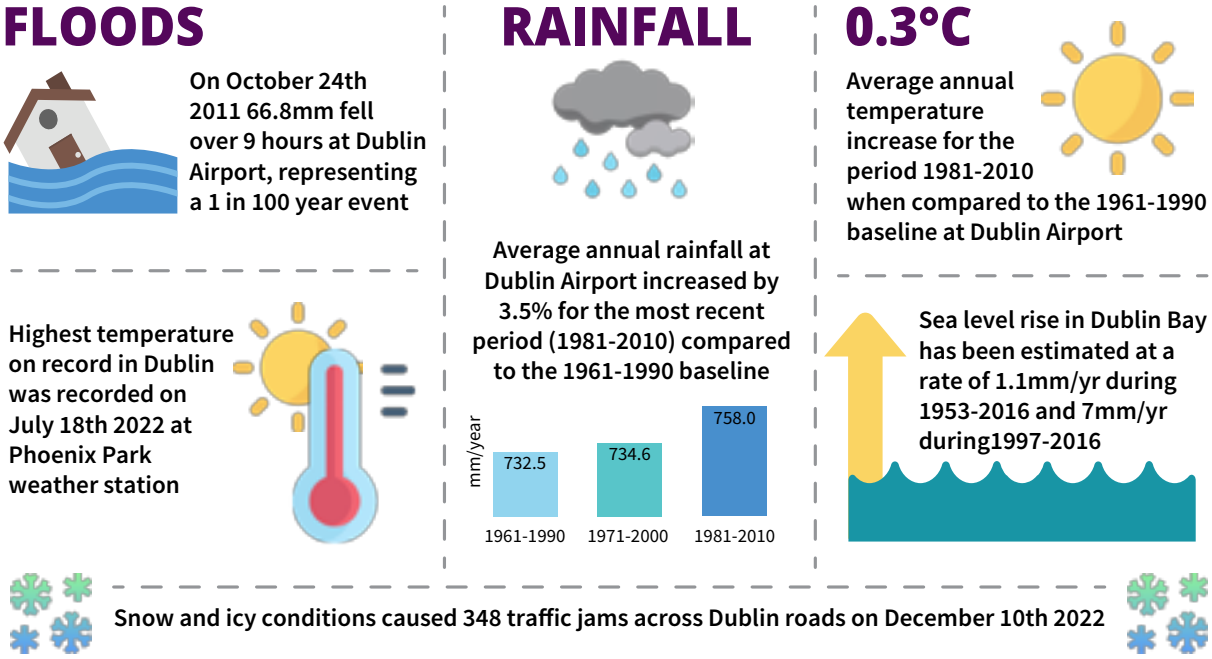


Figure 3.5: Observed climate change for Ireland & Fingal

A Climate Change Risk Assessment (CCRA) is the methodology that was used in this CAP to assess past climatic and extreme weather-related events in Fingal and develop a climate impact baseline from which future impacts can be predicted. The period of past climatic and weather-related events studied was 1982–2023.

A profile of climate hazards was developed and used to consider future risks that may affect Fingal, establishing their frequency, their intensity and identifying specific areas of Fingal that are most vulnerable. This is a qualitative assessment from which adaptation actions were identified which reduce / mitigate and manage these risks.

The Council engaged Consultants KPMG Sustainable Futures to undertake a Climate Change Risk Assessment (CCRA) in accordance with "Technical Annex B - Climate Change Risk Assessment of the Local Authorities Climate Action Planning Guidelines".

DEVELOPING THE CLIMATE HAZARD PROFILE

The profile of climate hazards shown below was developed using data from recent severe weather events in Fingal and data contained within Fingal County Council's Climate Change Action Plan 2019-2024. It provides an overview of the recent climate and weather-related events and the frequency to have impacted Fingal over the recent past.

	1980	1990	2000	2010	2020
Snow & Ice	Heavy Snowfall Jan '82 Heavy Snowfall Jan '87			Heavy Snowfall Dec '10 Heavy Snowfall Dec '10	
Coastal			Coastal Flood, Feb '02	Coastal Flood, Jan '14	Coastal Flood, Jan '20 Coastal Flood, Feb '20 Coastal Erosion, Sep '20
Heat & Cold		Heatwave, June-Aug '95	Heatwave, Summer '06 Cold Spell, Winter '09	Cold Spell, Dec'10 Cold Spell, Feb '18 Heatwave, Summer '18	Heatwave, Aug '22 Cold Spell, Dec '22
Wet & Dry		River Flood, Jun '93 Pluvial Flood, Jun '93 Pluvial Flood, Jun '93	River Flood, Nov '00 River Flood, Nov '02 Drought, Summer '06 Pluvial Flood, Aug '08	Pluvial Flood, Oct '11 River Flood, Oct '11 Drought, Summer '13 River Flood, Nov '17 Pluvial Flood, Jan '18 Drought, Summer '13 Pluvial Flood, Nov '19	Pluvial Flood, Feb '20 Pluvial Flood, Nov '20 Pluvial Flood, Jul '21 Pluvial Flood, Dec '21
Wind	Hurricane Charley, Aug '86	Strong Winds, Feb '90 Severe Windstorm, Dec '97		Storm Darwin, Feb '14 Storm Doris, Feb '17 Storm Ophelia, Oct '17 Storm Eleanor, Jan '18 Storm Georgina, Jan '18 Storm Ali, Sep '18 Storm Callum, Oct '18	Storm Brendan, Jan '20 Storm Ciara, Feb '20 Storm Barra, Dec '20 Storm Eunice, Feb '22

Figure 3.6: Overview of the hazard events which have impacted Fingal 1982-2023

FREQUENCY OF THE CLIMATE HAZARDS

For each of the hazard types that have been identified, an assessment of their current frequency has been conducted. The final assessment of the frequency is shown in the table below.

Hazard Type	Current Frequency
Heatwave	Common
Drought	Occasional
Cold spell	Common
Heavy snowfall	Occasional
Severe windstorm	Very Frequent
Pluvial Flood	Frequent
River Flood	Common
Coastal Flooding	Frequent
Coastal Erosion	Common
Groundwater Flood	Rare

Source: Fingal County Council Climate Change Risk Assessment

CLIMATE CHANGE RISK ASSESSMENT METHODOLOGY

The steps to undertake this qualitative assessment, from which the current risks can be assessed and future risks to 2050, can be predicted are detailed below.

STEP 1: CURRENT CLIMATE RISKS AND IMPACTS	• Develop profile of climate hazards • Characterise climate hazards frequency • Exposure, vulnerability and impacts for Fingal • Impact assessment (service delivery) • Current climate risk matrix
STEP 2: FUTURE CLIMATE RISKS AND IMPACTS	• Assess future changes in climate hazards frequency and intensity • Assess future changes in exposure and vulnerability • Assess emerging hazards and potential future climate risk • Future climate risk matrix • Uncertainty assessment

The baseline information was used to examine the service level impacts on the delivery of services by the Council and a current climate risk matrix was then developed based on the frequency of hazard and the associated level of impact already seen in Fingal.

HOW IS FINGAL PREDICTED TO CHANGE INTO THE FUTURE

The 2022 census[31] recorded a population of 329,218 in Fingal. This represents a 10% increase on the 2016 Census[25] and a 17% increase on the 2011 Census[26]. This trend is expected to continue. In order to support predicted population growth, it is anticipated that there will be subsequent growth in development in the county. These predicted changes in population and development must be considered when predicting future risks and impacts.

Looking to the future, further analysis is required which builds on the assessment of current climate risks and impacts and then expands the analysis to include projected changes in frequency and intensity of climate hazards.

FUTURE CLIMATE RISK MATRIX

The risk matrix shown below (Figure 3.7) shows the future change in risk with the hollow marker showing the current risk and the solid marker the future risk. The dotted line shows the change between the current and future risk.

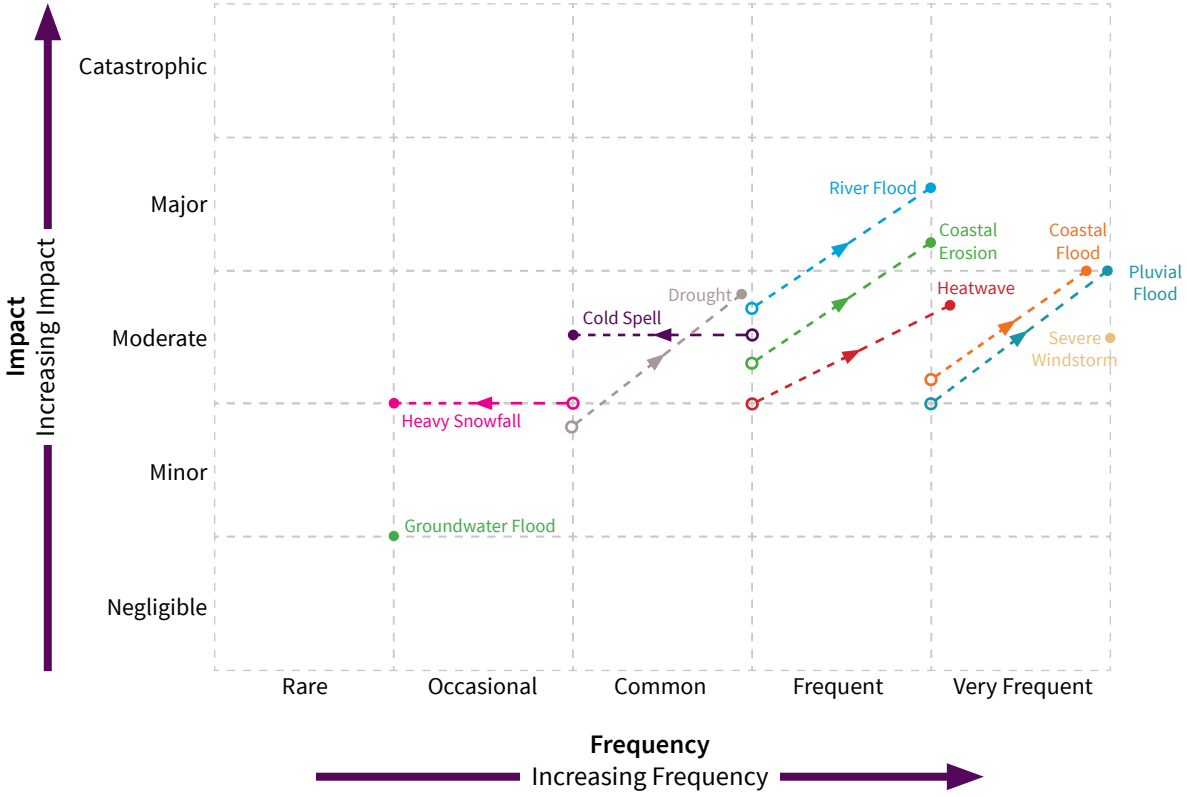


Figure 3.7: Risk matrix showing the future changes in risk for the identified hazards within Fingal

- The risks associated with existing hazards such as river, pluvial, and coastal flooding are projected to increase in the future as a result of projected increases in the frequency of hazard events and also due to an increase in the areas, assets and populations exposed to these hazards.
- Heatwaves and droughts although already experienced in Fingal, are expected to occur more frequently and with a greater impact on Fingal in the future. The impact is exacerbated by not only projected changes in frequency of occurrence of heatwaves but also as a result of projected increases in population and the proportion of population considered vulnerable (those aged 65 years and over). These hazards can therefore be considered as emerging risks for the region.
- Although the frequency and impact of severe windstorms is thought to be unchanged in the future, these events will remain a risk for Fingal.
- The impact of heavy snowfall and cold spells on Fingal remains, however, due to projected decreases in hazard frequency, the overall risk of these hazards is likely to reduce in the future, resulting in a decreased level of risk.
- Groundwater flooding is also thought to be unchanged in the future.

A summary of these changes is shown in Figure 3.8 below:

Hazard	Projected Change	Future Frequency
Heatwaves	• Projections indicate an overall increase in average temperature (bottom left) of between 1.2 and 1.6º for Fingal relative to the 1981-2000 period. • Under a high emission scenario, projections indicate that heatwaves will become more frequent (bottom middle) by mid-century. • Summer rainfall is expected to reduce in the future when compared to the baseline period of 1981-2000, in both the RCP4.5 and RCP8.5 scenario contributing to potential drought conditions.	Frequent ▲
Droughts		Common ▲
Cold Spell	• As a consequence of the increasing temperatures, a decrease in the number of frost days and ice days in the 2041-2060 future period is projected when compared with the baseline period of 1981-2000, for both the RCP4.5 and RCP8.5 scenario. • The annual snowfall in the region is expected to decrease substantially by the middle of the century for the RCP4.5 and RCP8.5 scenarios (bottom right).	Occasional ▼
Heavy Snowfall		Rare ▼
Severe Windstorms	• Projections of storms are subject to a high level of uncertainty. By mid century, projections indicate that average wind speed will remain similar to those currently experienced. There is limited evidence of a potential increase in the frequency of more intense storms which are currently rare events. However, more research is needed to confirm this increase.	Very frequent –
Coastal Flood	• Projections of sea level under a high emissions scenario indicate an increase of up to 0.24m by 2050 which will increase the frequency of coastal inundation (bottom left). • A rising sea level is strongly linked with coastal erosion and an increase in erosion rates and extent.	Very frequent ▲
Coastal Erosion		Frequent ▲
Pluvial Flood	• Projections indicate an increase in the frequency of heavy rainfall days (days with precipitation >30mmm) for Fingal with some areas projected to see an increase of up to 17% (bottom right). This will likely result in an increased frequency of associated river and pluvial flooding.	Very frequent ▲
River Flood		Frequent ▲
Groundwater Flood	• Projections of changes in groundwater flooding are currently not available, therefore there is uncertainty in the change in groundwater flooding frequency that can be expected.	Rare –

Figure 3.8: Summary of climate projections for Fingal

THE IMPACTS OF CLIMATE CHANGE ON FINGAL:

The impacts of climate change hazards on Fingal will have direct and indirect consequences as follows:

Coastal flooding and erosion already pose a significant risk for Fingal and have resulted in the inundation of assets, damage to protected and important species and habitats, and disruption of transport routes. Erosion at the Burrow, Portrane has been a concern for a number of decades. Rising sea levels will increase the frequency and extent of coastal inundation across Fingal. The risk associated with coastal erosion is also projected to increase as a result of sea level rise.

Recent experiences of river and pluvial flooding events in 2020 and 2021 resulted in the inundation of residential properties, damages to commercial buildings and premises, and disruption of transport networks. Projected increases in the frequency of extreme precipitation events will result in increased surface water and riverine flood risk for Fingal.

Severe windstorms are currently experienced very frequently across Fingal and result in wide-ranging impacts, including damage to power and communication infrastructure, disruption to transport networks and damage to trees. Projections indicate no significant change in the level of risk associated with windstorms.

Fingal experienced both a heatwave and drought in 2018, while a heatwave was also recorded in 2022. These events resulted in an increased frequency of uncontrolled fires and associated emergency response, increased demand on water resources and on the provision of services at key recreational sites (e.g. traffic management). Projected increases in the frequency of heatwaves and drought conditions will mean that events currently experienced on an infrequent basis will become more frequent.

Recent experiences of cold spells and heavy snowfall events in 2018 (e.g. Storm Emma) and 2022, demonstrated the wide range of impacts for Fingal. These included, amongst others, road closures, disruption to public transport, power outages, an increase in the frequency of trips and falls, and impacts on water resources (restricted water supply during storm Emma). Projected increases in average temperature and decreases in the frequency of snowfall indicate a decrease in the frequency of cold spells, heavy snowfall, and their associated impacts.

The County Fingal Climate Change Risk Assessment can be made available on request.

4. RESPONDING TO RISKS - EMERGENCY

Fingal County Council has established a Major Emergency Management Unit and developed a Major Emergency Plan to allow the Council to deal with major emergencies, including major emergencies relating to extreme weather events.

The Council's Major Emergency Management Unit was established to meet its obligations as a Local Authority under "A Framework for Major Emergency Management"[28].

Under the Framework, the Council is one of the three Principal Response Agencies (PRA) and works closely with the two other Principal Response Agencies, An Garda Síochána and the Health Service Executive. Together, the PRA deal with all aspects of emergency management and major emergencies including extreme weather events.

The Dublin Fire Brigade (DFB) is the Principle Emergency Service of Fingal County Council and is the first responder to many, but not all, emergencies in the Fingal Administrative area.

The Major Emergency Management Unit are active participants at local, regional, and national level committees dealing with various aspects of major emergencies and organises and delivers training and exercises on an interagency basis and participates in local training.

The Council is part of the Major Emergency East Region, comprising the counties of Dublin (Including Dublin City, Dún Laoghaire-Rathdown and South Dublin), Kildare and Wicklow.

In the event of a major emergency, the Council will respond to the incident in cooperation with the An Garda Síochána and the Health Service Executive as well as with other state agencies and private sector companies as necessary.

Increasingly in recent years extreme weather events are becoming more frequent. Since 2010, there has been an increase in the frequency of flooding throughout Fingal as well as increased incidents of windstorms, cold spells, and heatwaves.

A weather alert system is in place to advise the Council of predicted extreme weather events. The Council uses these alerts, along with the PRA to determine the response in s and

MAJOR EMERGENCY MANAGEMENT EAST REGION

5. OUR CLIMATE ACTIONS

MITIGATION AND ADAPTATION RESPONSE:

ENERGY & BUILDINGS

TRANSPORT

FLOOD RESILIENCE

NATURE-BASED SOLUTIONS

CIRCULAR ECONOMY & RESOURCE MANAGEMENT

COMMUNITY ENGAGEMENT

ENERGY & BUILDINGS

Photo Source: Fingal County Council

ENERGY & BUILDINGS

Ireland has set ambitious targets for a 51% reduction in greenhouse gas emissions by 2030 (relative to 2018 levels) and net-zero emissions no later than 2050[11]. Strategic pathways in meeting these targets are ambitious $C0_2$ emissions reductions in electricity generation, improvements in residential building energy efficiencies and the way we heat our homes, and a move to electric vehicles. All sectors of society will play a role in this.

Fingal County Council has well established energy management practices and met it's 2020 public sector energy efficiency and emissions reductions targets for Council operations. The Council aims to show leadership in working to meet and surpass its 2030 targets, and to influence emissions reductions in the wider community in line with the national climate objective. The Council is also working to improve the resilience of the built environment to the effects of climate change.

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR ENERGY AND BUILDINGS

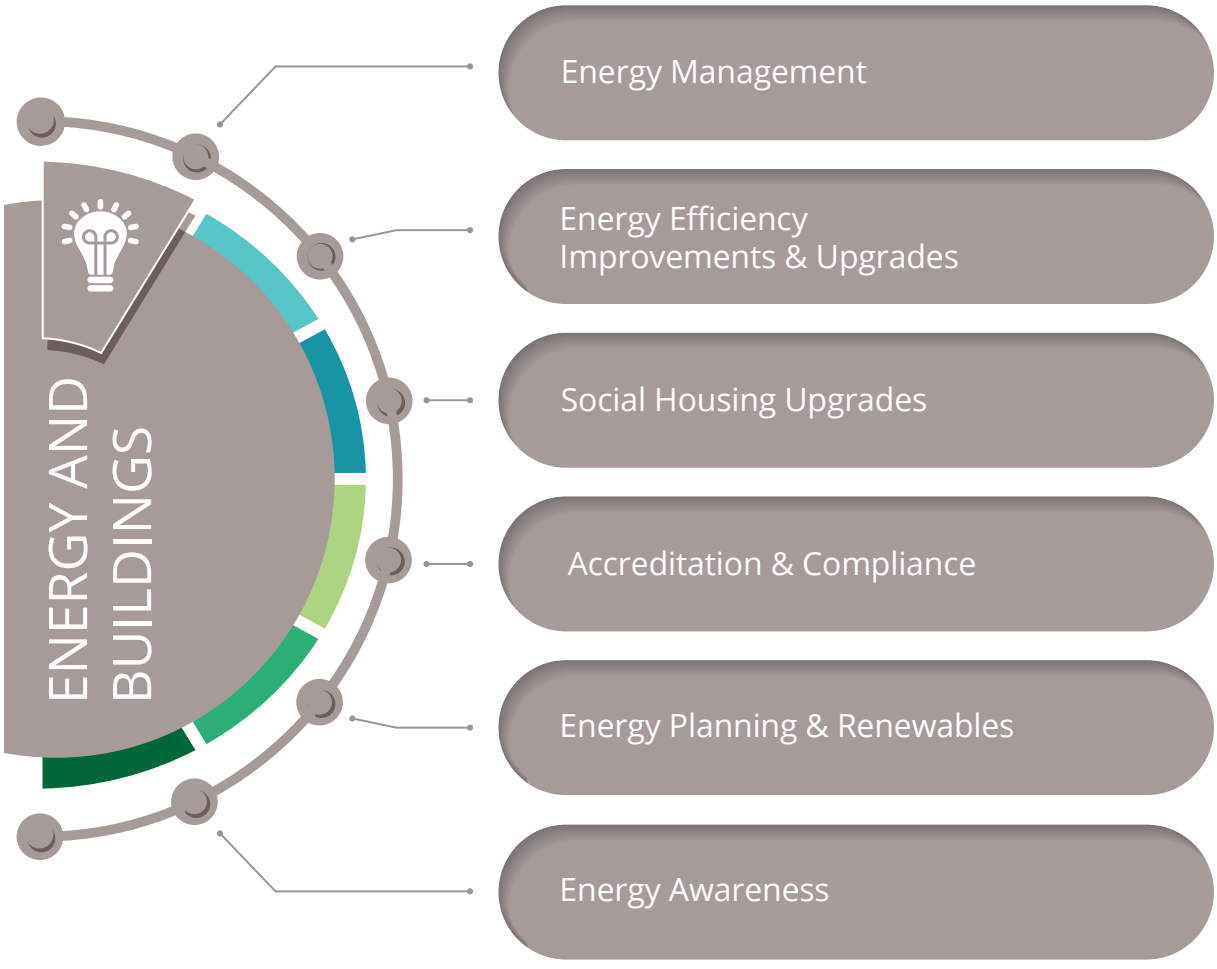


Figure 5.1: Fingal County Council's Key Action Areas for Energy and Buildings

ENERGY MANAGEMENT

Fingal County Council has a dedicated Energy Management Team in place. This multidisciplinary team is led by an Energy Performance Officer and includes a dedicated Energy Manager and a Fleet Manager. The team works to identify and deliver energy efficiencies across Council operations. The Energy Management team has developed an ISO 50001 compliant Energy Management System which was recertified in July 2022. The team monitor and track energy performance, and report on the Councils energy performance annually to the SEAI. The team work with Codema to identify and develop plans for energy efficiency improvements and CO_2 emissions reductions across all energy accounts, with a focus on significant energy users. This work includes the identification of projects and funding streams to bridge the gap to meeting the Councils 2030 energy targets and developing plans to deliver on these. Codema have developed a project implementation unit to assist Councils deliver on this under DeliveREE.

Fingal County Councils
Energy Management Certification

ENERGY EFFICIENCY IMPROVEMENTS & UPGRADES

Fingal County Councils Public Lighting energy efficiency improvement programme is almost complete with 98% of the older lights being replaced with more energy efficient light emitting diode lamps under the CCAP 2019-2024[29].

The Council is working to improve the energy efficiency of building stock and on plans to bring all council building stock to a BER of B2 equivalent by 2030. Efficiencies to date have been achieved through a range of mechanical and electrical equipment upgrades, building management systems upgrades, upgrading lighting heating and controls, refurbishment upgrades including windows and doors, and deeper building fabric upgrades.

The Energy Management Team in partnership with Codema, have developed an Energy Performance Contract as an innovative way of improving the energy efficiency of the main Council offices - Fingal County Hall and Civic Offices in Blanchardstown. An Energy Performance Contract is a contractual agreement by an Energy Service Company to guarantee energy savings over an agreed period of time. A new energy performance contract is in planning stage for the Draíocht Arts Centre & Library, Blanchardstown.

CASE STUDY

ENERGY PERFORMANCE CONTRACT

In partnership with Codema and Lawler Sustainability, the Council has just completed its first Energy Performance Contract (EPC) with the energy upgrades for Fingal County Hall and Civic Offices, Blanchardstown. The contract is for nine years and aims to deliver savings of 1.3 GWh per annum.

The construction and implementation of the EPC presented a number of challenges, especially in retrofitting significant energy works in busy operational offices. The lessons learned now give Fingal and future partners, a more holistic implementation template, to deliver further and more complex EPC projects in the future, offering more ambitious energy savings.

The contract has now successfully moved to the service phase. Early measurement and verification data analysis of the energy performance of both buildings, indicate that the EPC is on course to achieve its savings targets.

The energy upgrades delivered during the EPC in Fingal's two offices include:

- Upgrade of lighting to LED and improved lighting controls
- Optimisation of the Building Management Systems (BMS)
- Solar PV installations
- Retrofit of Air Handling Units
- Pump Upgrades
- Installation of a heat pump

Solar PV installed on Fingal County Hall Rooftop

DELIVEREE & PATHFINDER

The DeliveREE project aims to support the roll out of over €20M worth of energy projects on a range of council facilities such as libraries, offices, and community buildings, across the four Dublin Local Authorities, over the next five years. By creating a structured approach, DeliveREE aims to accelerate the formation of large-scale projects by standardising the project development process, allowing projects of various types and sizes to be aggregated to create scale. This enables the use of energy performance and energy supply contracts.

Codema is working with the Council and the SEAI to secure Pathfinder funding for the proposed projects to be delivered as part of DeliveREE. The SEAI-developed Pathfinder Scheme aims to provide capital support to public bodies and prioritises complete approaches to building retrofit to at least BER 'B' standard, using renewable heating systems.

SOCIAL HOUSING RETROFITS

All new social houses are developed to Near Zero Energy Building Standard, and the upgrade of existing social housing stock in Fingal is well advanced. The Government launched a revised ten-year Energy Efficiency Retrofitting Programme for social housing upgrades in 2021[30]. The revised programme provides significant upscaling in the levels of funding in line with the Programme for Government commitments; and focuses on ensuring that the fabric of the home is upgraded, and an energy efficient heating system is provided. This enables local authorities to move to a 'deeper retrofit' programme. The retrofit works result in significant savings for Council tenants and more comfortable homes. Fingal County Council has availed of maximum levels of funding under the programme. Although the revised programme provides for significant upscaling in the level of funding available; the Council is constrained by Government funding allocations in relation to social housing retrofits. Funding levels under this programme should increase annually to deliver a total of 36,500 social houses nationally, retrofitted to BER B2 or equivalent, by 2030.

The National Climate Action Plan[11] has set extremely ambitious targets of 500,000 dwellings retrofitted to BER B2, and 400,000 existing dwellings to have heat pumps installed by 2030. The Councils recognises that support is needed in achieving these targets and the Housing & Community Development Department are exploring collaborative opportunities with the SEAI to help drive the uptake and delivery of private residential energy efficiency upgrades; and if possible, by coupling certain activities with the delivery of public housing upgrades in mixed estates. The Council is also supporting the SEAI Sustainable Energy Community programme and a range of Energy awareness initiatives.

CASE STUDY

SOCIAL HOUSING ENERGY EFFICIENCY UPGRADES

Greenridge court is a small estate in Dublin 15 comprising of a row of single occupancy, single storey dwellings. Fingal County Council carried out energy efficiency retrofit works ensuring that the fabric of the social homes was upgraded, and an energy efficient heating system is installed. Energy efficiency works included led lighting, attic insulation, external wall insulation, air tightness improvements, heat pump installation and new heating controls. This raised the BER rating from an average D3 rating to a B2 standard. This has resulted in draught free dwellings, with much improved comfort levels, and reduced running costs.

Our tenants were understandably anxious at the start of the project due to the changes in technology along with the disruption during the works. The Councils team worked with tennants throughout the process and during the works and tenants have been delighted with the results.

Fingal County Council are continuing with this social housing upgrade programme throughout the county on a phased basis.

Greenridge court before and after Energy Efficiency upgrades

ENERGY PLANNING & RENEWABLES

There is an overreliance on imported fossil fuels nationally. The electrification of heat and transport has been identified as a key strategic pathway to meet the national climate objective, and the National CAP23[11] includes a commitment that 80% of our electricity needs will come from renewable sources by 2030.

Significant potential exists for the production of electricity from large-scale offshore wind energy facilities off the Fingal coast. The Council will engage with state and semi-state agencies in relation to the development and implementation of wind and utility-scale solar photovoltaics projects. The Council will also facilitate the improvement of transmission grid infrastructure to enable the decarbonisation of the electricity, heat, and transport sectors.

Codema have developed a Dublin Region Energy Master Plan[24]. The master plan considers realistic, costed pathways for the Dublin region to achieve its carbon emission reduction targets to 2030 and 2050. These pathways are based on detailed local-level, spatially driven energy scenario modelling. The masterplan identifies low-carbon technologies specific to the energy characteristics of a particular area at a local level, addressing all energy sectors of electricity, heat and transport. This masterplan will continue to inform Dublin Local Authority strategies and plans.

The National CAP 23[11] includes targets for the supply of up to 2.5 TWh of district heating nationally to decarbonise residential heating. Codema are supporting the Council in the development of a district heating scheme in Blanchardstown. A feasibility study and outline business case has been completed in 2023, and a techno-economic analysis of the preferred pipework route, construction and operational temperatures has also been undertaken. It is intended to commence construction of a viable scheme within the lifetime of this Plan.

NORTH IRISH SEA ARRAY (NISA)

In an exciting new development, large scale renewable energy projects are edging closer, bringing renewable clean energy, jobs, and community benefits to the region.

The NISA was one of seven offshore renewable energy projects issued with Irish Maritime Area Consent in December 2022. Statkraft and its offshore partners Copenhagen Infrastructure Partners secured 500 MW from the State's first offshore wind auction in March 2023, to develop the NISA off the east coast of counties Dublin, Louth, and Meath. This will have the capacity to power approximately half a million Irish homes and businesses with sustainable renewable energy and is a key enabler to meeting the National CAP23 target of 5GW of offshore wind energy being connected to the Irish national electricity grid by 2030.

As part of the project, a community benefit fund will be established to support the local coastal and marine communities in the vicinity of the wind farm. The project will fund €2/MWh for the lifespan of the contract. It is estimated that this would be in the region of €4 million per year or €80 million over the lifetime of the project, depending on the final operating capacity of the project.

Community decision making is set at the heart of how these funds will be managed and it is required that a Community Benefit Fund committee will be put in place by an Independent Fund Administrator. Typically, community benefit funds associated with wind farm projects are used to support various projects, such as recreational facilities, sustainable energy and climate action initiatives, education and skills development, and support existing local clubs, as well as the fishing industry.

ENERGY AWARENESS

The Council in partnership with Codema, regularly engages with staff and citizens on energy awareness initiatives. This includes continued professional development training for staff including sensitive energy efficiency improvements to architectural and heritage assets; and working with the SEAI to encourage energy efficiency learnings amongst SME's. More energy awareness initiatives are listed in the Community Engagement section.

ADDITIONAL BENEFITS TO ENERGY & BUILDING ACTIONS:

- Improved energy independence and energy security (and wealth retention) through improved energy efficiencies and development of large-scale renewable energies in Ireland;
- Solidarity with European partners on the Climate agenda and demonstrating National leadership in the area;
- Improvements in residential building energy efficiencies and the way we heat our homes resulting in better quality, healthier and more comfortable homes, and efficient use of resources;
- Improving the national residential building stock and making solutions more accessible will play a part in the Just Transition for all;
- Improvements in residential and commercial building energy efficiencies resulting in the development of new construction sector jobs and training;
- Improvement in building energy efficiencies and renewable energies will foster Innovation in the public and private sectors.

ENERGY & BUILDINGS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Organisational Energy Management							
E1	Continuous Improvement by maintaining ISO 50001 energy management system	ISO 50001 Compliant	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	SEAI, Codema, NSAI
E2	Annual Monitoring & Reporting to SEAI	FCC's energy use monitored and reported	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema, SEAI
E3	Publish Fingal County Council's Energy Review Periodically	Review published, # of recommendations implemented	Ongoing	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema
Energy Efficiency Improvements & Upgrades							
E4	Continuous Improvement through the Energy Performance Contract for County Hall (Swords) and Civic Offices, during the service stage	Measurement & Verification of energy savings	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	ESCO, Codema
E5	Procure upgrades through an Energy Performance Contract for Draíocht Arts Centre and public library in Blanchardstown with potential of including Balbriggan Town Hall & Library/ Watery Lane Depot/ Ballycoolin Training Centre	EPC Awarded	2025	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema
E6	IES Building Energy Modelling to be completed in County hall and Grove Road offices. Further modelling of digital assets to be included in other EPC projects.	# Number of models completed	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	
E7	Refurbishment programme for Fingal Corporate buildings to include energy reviews and retrofits as standard in line with Public Sector targets for 2030.	# of buildings upgraded	Annually	Mitigation	Full Accountability	Architects	
E8[1]	Engage with independent BREEAM assessor and utilise Building Assessment Methodology throughout delivery of Swords Cultural Quarter flagship project. BREEAM is a leading validation and certification system for sustainable built environment.	Ongoing reviews of design and construction process to target independent certification on completion	Ongoing	Mitigation	Full Accountability	Architects	BREEAM assessor
E9	Undertake a feasibility study on utilising the existing Bore Hole with heat pump technology in County Hall Offices to provide heating, and to provide cooling to IT Comms room.	Feasibility study to be completed	2024	Mitigation	Full Accountability	People, Corporate & Digital Services	

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

ENERGY & BUILDINGS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
E10	BER Audits to be carried out on corporate buildings and libraries to determine BER ratings	# of BER Audits carried out	2024	Mitigation	Full Accountability	People, Corporate & Digital Services	
E11	Roll out of real time check metering and energy monitoring platform across significant energy using buildings to analyse and understand usage.	# of sites metered and monitored	2024	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema
E12	Implementation of identified DeliveREE/ Pathfinder projects across FCC premises to include the decarbonisation of significant energy using buildings.	# of Projects implemented / packages prepared through DeliveREE/ Pathfinder funding; and associated emissions reductions.	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema, SEAI
E13	Feasibility study for retrofit/ fabric upgrades across the 2 Civic Offices	Feasibility study and use of IES Models	2026	Mitigation	Full Accountability	People, Corporate & Digital Services	
E14[2]	Targeted LED upgrades across smaller FCC premises, not suitable for EPC	# of LED upgrades	2026	Mitigation	Full Accountability	People, Corporate & Digital Services	
E15	Targeted M&E upgrades across smaller FCC premises, not suitable for EPC. Identifying projects and packages through Planned Preventative Maintenance	# of M&E Upgrades	2028	Mitigation	Full Accountability	People, Corporate & Digital Services	
E16[3]	Renewal of remaining 1.5% of public lighting stock & pitch lighting	# of units converted to LED	2024 - 2026	Mitigation	Full Accountability	Operations	
Social Housing Upgrades							
E17[4]	Continue to make energy efficiency retrofits to social housing under the DHLGH-supported Energy Retrofit Programme. Ensure that all of FCC's social housing stock has a B2 or cost optimal energy rating by 2030.	# of units upgraded annually	Annually	Mitigation	Full Accountability	Housing and Community Development	DHLGH
E18[5]	Complete Pilot programme in Strandmill Estate, Portmarnock, in conjunction with SEAI and REIL offering retrofit upgrades to private homeowners, availing of economies of scale when coupled with public housing upgrades. Partially funded by SEAI government grants.	# of units completed under pilot project.	2024	Mitigation	Co-ordinate & Facilitate	Housing and Community Development	SEAI, REIL

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

ENERGY & BUILDINGS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
E19	Build on the pilot roll out of EnergyCloud to c. 60 social homes in Swords in 2024 with further roll out to social homes across the county	No. of homes availing of Energy Cloud	2025	Mitigation	Full Accountability	Housing and Community Development	Energy Cloud
E20	IGBC Home Performance Index Assessments carried out and where feasible certification obtained for all new social housing projects developed by the local authority.	# Registered and assessed	Annually	Mitigation & Adaptation	Full Accountability	Architects	IGBC
E21	Pilot study to research and potentially futureproof new build social housing schemes for district heating	Study Complete	2025	Mitigation	Full Accountability	Architects	Codema
Accreditation & Compliance							
E22	Green Procurement - Design Team appointments to include a sustainability specialism capable of informing all stages of the design process and documenting the required evidence to achieve accreditation under a recognised Building Assessment Method such as the IGBC Home Performance Index, BREEAM and LEED	Appointments Made	Annually	Mitigation	Full Accountability	Architects	
E23	In accordance with the incoming embodied carbon amendments to the Construction Products Regulations, the Building Control Authority will encourage compliance and monitor/enforce the display of carbon footprint on all construction products.	Compliance with the annual market surveillance campaign	Annually	Mitigation	Influence	Planning & Strategic Infrastructure	
Energy Planning & Renewables							
E24	Continue to develop a strategic approach to town centre regeneration through Town Centre First: A Policy Approach for Irish Towns and by utilising existing buildings and unused lands for new development, promote residential occupancy in our rural towns and villages and provide for a mix of uses within these areas.	# of existing buildings and sites developed and occupied.	Annually	Mitigation	Influence	Planning & Strategic Infrastructure	
E25[6]	Deliver Blanchardstown District Heating Scheme	On Site completion	2029+	Mitigation	Co-ordinate & Facilitate	Environment, Climate Action and Active Travel	Codema

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

ENERGY & BUILDINGS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
E26	Assess potential for viable renewable energy projects on a temporary/permanent basis, on council controlled lands	Assessment complete	2028	Mitigation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel & Economic, Enterprise, Tourism & Cultural Development	Codema
E27[7]	Install PV panels on suitable Council roofs such as civic offices, libraries and community buildings	# of panels installed	2028	Mitigation	Full Accountability	People, Corporate & Digital Services	Codema
E28[8]	Develop Wind Energy Strategy	Strategy prepared	2028	Mitigation	Influence	Planning & Strategic Infrastructure	
E29	Review Energy Statements for planning applications.	Energy Statements reviewed.	Annually	Mitigation	Influence	Planning & Strategic Infrastructure	
Energy Awareness							
E30	Work with SMEs in partnership with SEAI to promote energy efficient adaptations	# of SMEs availing of funding from SEAI	Annually	Mitigation	Co-ordinate and Facilitate	Economic, Enterprise, Tourism & Cultural Development	SEAI, LEO, LEADER, Chambers Ire
E31	Work with SMEs to promote energy efficient adaptations through the energy efficiency grant from LEO	# of SMEs availing of funding from Energy Efficiency grant	Annually	Mitigation	Co-ordinate and Facilitate	Economic, Enterprise, Tourism & Cultural Development	SEAI, LEO, LEADER, Chambers Ire
E32[9]	Conduct research and develop case studies from the Council's historic building stock that undertake pre- and post-works energy performance assessments and devise of appropriate and sensitive retrofitting/energy upgrading of traditional buildings to inform works to other Council-owned properties and to guide private owners	Case studies completed	Ongoing	Mitigation	Influence	Architects	DCC and Built Heritage Unit of Dept of Housing, Local Government and Heritage
E33[10]	Promote and encourage routine maintenance and good housekeeping to maintain the older building stock of the county in good condition in order to reduce energy consumption and extend the building's life-cycle (e.g. Fingal's Stitch in Time Grant, National Schemes of Built Heritage Investment Scheme, Historic Structures Fund, Community Monument Fund).	# of buildings upgraded	Annually	Mitigation	Influence	Architects	

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

TRANSPORT

Photo Source: Fingal County Council

TRANSPORT

Transportation has a critical role to play in our approach to climate change, as it contributes to a significant amount of Greenhouse Gas (GHG) emissions. In Fingal, the transportation sector is the largest contributor to GHG emissions, with an estimated 45% of total emissions. How we choose to travel for work, education, shopping and leisure has a big impact on Ireland's and Fingal's GHG emissions. This presents numerous opportunities for positive change.

At a national level, CAP23[11] sets out an ambitious target for the transport sector to reduce its emissions by 50% by 2030. CAP23[11] outlines the steps which will enable a radical, equitable transformation in how we travel over the next seven years to move towards the 50% reduction in carbon emissions by 2030 and a fully decarbonised transport sector by 2050.

This is a challenging target. As a society we have become dependent on private cars, both in an urban and rural setting. The 2022 Census[31] outlined that the number of people who drove to work nationally increased by 4% to 1.2 million between 2016 and 2022. The dominant form of transport for school children remained the car, with 55% of primary school and 42% of secondary school children nationally being driven or driving to school.

The National CAP23[11] Transport Section is framed around the Avoid-Shift-Improve approach: reducing or avoiding the need for travel, shifting to public transport, walking and cycling and improving the energy efficiency of vehicles.

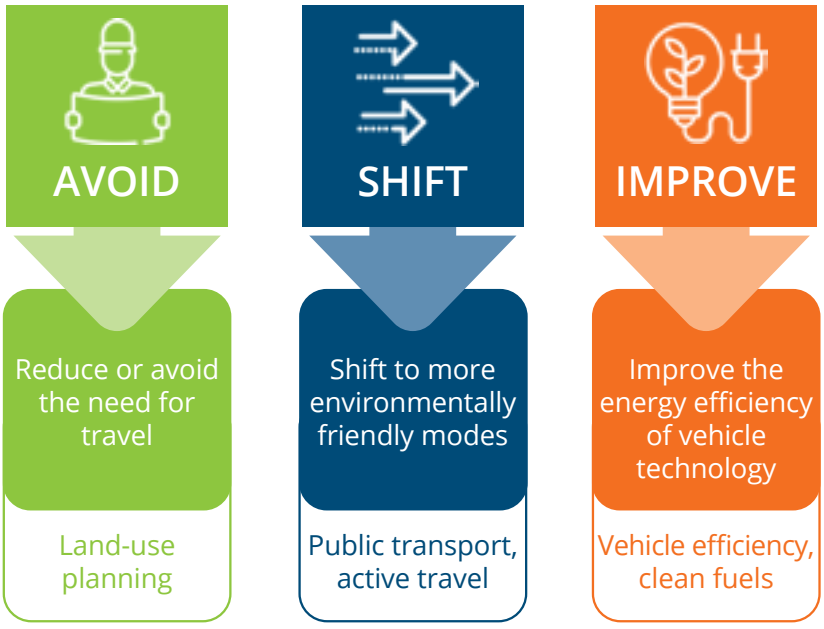


Figure 5.2: Avoid-Shift-Improve approach

Fingal County Council supports the Avoid-Shift-Improve approach through its own Development Plan Policies and Objectives. The Fingal Development Plan 2023- 2029[32] has a focus on Connectivity & Movement in support of Climate Action, and strengthening the integration of land-use and transport planning; with a priority focus on compact growth served by high quality public transport and increased provision of walking and cycling infrastructure. Actions in this Plan further support this approach and will increase the provision of walking and cycling infrastructure, thus promoting and enabling a modal shift to active travel and more sustainable modes of transport. The Council works with a range of stakeholders, including the National Transport Authority (NTA) An Taisce and the other Dublin Local Authorities to improve the sustainable transport options in the Dublin region by implementing the measures in the Greater Dublin Area Transport Strategy 2022-2042[33].

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR TRANSPORT-RELATED EMISSIONS

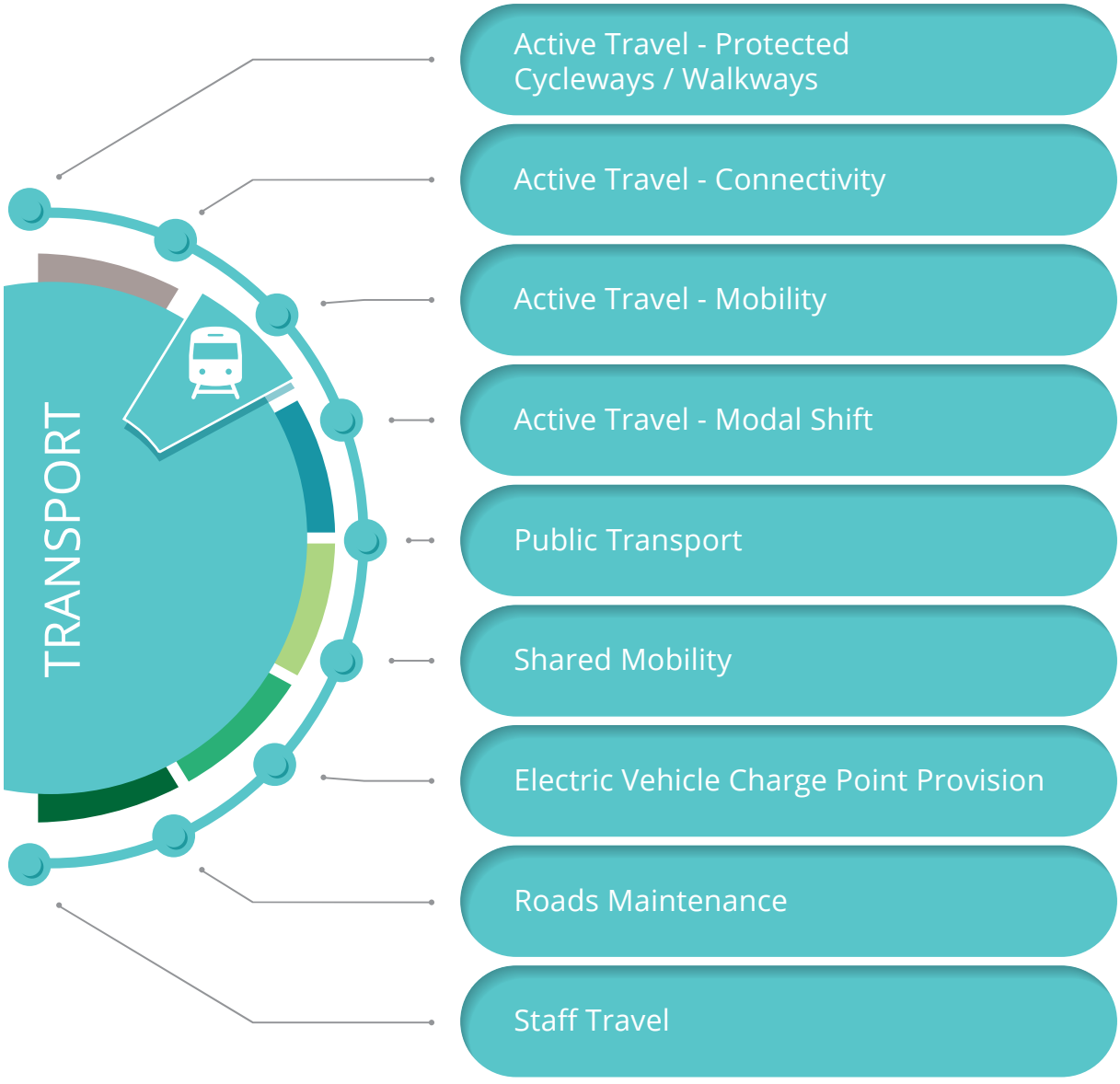


Figure 5.3: Fingal County Council's Key Action Areas to address Transport-related emissions.

ACTIVE TRAVEL

Fingal County Council is working to increase the number of people choosing Active Travel for everyday short journeys, or as part of longer journeys by public transport. The Council has developed an Active Travel Strategy[34] which considers the full range of initiatives the Council can undertake to make Active Travel an attractive and realistic choice for more people. The Strategy[34] can be viewed at: **https://www.fingal.ie/activetravel/strategy**

Active Travel means using your own energy to get where you're going. It includes walking, scooting, running, wheeling, and cycling. It includes all types of trips, with an emphasis on trips under 5km, including going to work, school, shopping, visiting friends and for leisure. Active Travel considers the needs of those who use prams, scooters, wheelchairs, and adapted cycles, as well as new ways of getting around such as electric scooters and bikes.

A significant programme of works has been developed across various active travel pillars including the enhancement and delivery of a protected cycle network across the county, delivering infrastructure improvements which will enhance connectivity, delivering infrastructure in towns and village to make active travel more accessible and safer, delivering a range of safety improvements and tailored safety campaigns, and the support of mobility and behavioural change initiatives including provision of bike parking facilities at key destinations particularly in towns and villages and the reallocating road space.

The Council is supported through National Transport Authority funding to progress the delivery of a network of protected cycle lanes under the five-year programme. These cycle lanes in addition to the network of high-quality Greenways which are under development, will deliver a high-quality cycling network as part of the Greater Dublin Area Cycle Network Plan[53].

Active Travel measures in place at Brackenstown Road Swords and St Philip the Apostle School Zone

CASE STUDY

TIER E BIKE ROLLOUT

In June 2022 TIER were awarded a 12-month contract to operate stationless eBikes across Fingal. The scheme initially targeted five locations with 100 eBikes deployed. The initial operating zone covered Blanchardstown, Swords, Malahide, Baldoyle and Howth but was quickly expanded to include Castleknock, Skerries, Rush, Lusk and Balbriggan. Over the course of the 12 months the number of eBikes was expanded to over 250 across the county.

In the 12-month pilot period there were 23,823 trips covering 96,859km. The average journey length was 4.025km with an average journey time of 18 minutes. The carbon emissions from an average petrol car journey is approx. 157g per km travelled and 149g for a diesel vehicle, this is 10 times that of an eBike which accounts for approx. 15g of carbon per km travelled. If each of these 23,823 trips replaced a car journey of the same distance that would be a carbon reduction of approximately 13,232kg.

There have been 9,451 customers in Fingal between July 2022 and June 2023.

The most popular location for TIER eBikes month on month is the Dublin 15 area, these trips would predominantly be commuter journeys which tells us that Bike Share can play a key part in public transport.

TIER bike stand Malahide

SAFE ROUTES TO SCHOOL

The Safe Routes to School programme was launched to address to road safety concerns in the vicinity of primary and post-primary schools in Ireland. The programme aims to help families choose Active Travel for school trips. Fingal County Council is working to deliver for Fingal schools, with local solutions being designed to encourage the whole school community to walk or cycle to and from school wherever possible, by improving the safety and making these options more attractive.

Grove Road Malahide School Streets – before and after.

These actions in conjunction with other transport related measures will encourage a modal shift across our communities, away from the dependence on private car use to more sustainable alternatives. The aim is to reduce car dependency and result in fewer car journeys particularly for shorter trips; thereby reducing congestion and emissions, improving air quality and the quality of life of residents, and enhance the attractiveness of Fingal for visitors.

PUBLIC TRANSPORT

The Transport Strategy for the Greater Dublin Area 2022-2042[33], developed by the National Transport Authority (NTA), aims to "provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy[33]."

Fingal County Council will continue to work with the relevant transportation bodies (including the NTA, Transport infrastructure Ireland (TII), Dublin Bus, Luas, Irish Rail, Bus Éireann, and Road Safety Authority) to facilitate and provide support in delivering major improvements to the public transport network, and measures to achieve modal shift. Key projects include;

- Delivery of MetroLink to Swords and serving Dublin Airport;
- Implementation of the DART Expansion Programme which proposes the provision of high frequency DART services including the electrification of the northern rail line to Drogheda;
- Implementation of a Core Bus Network under BusConnects for the Dublin Metropolitan area and throughout the GDA based on bus radial, orbital and regional routes in the Greater Dublin Area;
- Delivery of the metropolitan cycle network set out in the Greater Dublin Area Cycle Network Plan inclusive of key commuter routes and urban greenways on canal, and coastal corridors.

VEHICLE FACT FILE 2023

- Average Petrol car produces 157g of CO_2 emissions every km.
- Average diesel car produces 149g of CO_2 emissions every km.
- Average electric vehicle (EV) produces 33g of CO_2 emissions every km (based on current electricity gird supply in Ireland.
- Average electric vehicle (EV) produces 12g of CO_2 emissions every km (based on the projected electricity gird supply in Ireland in 2030).

Rule of thumb - the larger the car, the larger the emissions! SUVs generally use 20% more fuel than equivalently sized traditional cars - this is true for both internal combustion engine and electric SUVs

Looking at the full life cycle of EVs, battery technology is rapidly evolving and becoming less resource and energy intensive in its production. Over the full vehicle lifecycle, EVs generate much less CO_2 emissions than Internal Combustion Engine vehicles. (Figures referenced from the Dublin Region Energy Masterplan)[24]

ELECTRIC VEHICLE CHARGE POINT PROVISION

Where a transition to sustainable active travel modes or public transport is not feasible, Electric Vehicles (EV) can play a part in reducing the carbon emissions and improving the energy efficiency of vehicles on our roads. CAP23[11] recognises EV as a key element in decarbonising the transport sector. Zero Emissions Vehicles Ireland (ZEVI) has been established to support the delivery of a national EV charging network and to further assist citizens, the public sector, and businesses to continue to make the switch to zero emission vehicles. The National target is to have an expected 30% of our private car fleet switched to electric by 2030, in conjunction with Ireland's target to facilitate a large-scale deployment of renewable energy to decarbonise Ireland's power sector with a 75% reduction in emissions by this date.

The Dublin region represents approximately 25% of Ireland's car fleet and so has a significant role to play in the decarbonisation of the country's transport system. Fingal County Council, in conjunction with the three Dublin Local Authorities, CARO and Smart Dublin, have developed the Dublin Local Authority Electric Vehicle Charging Strategy (2022-2030)[35] to support the transition to Electric vehicles. It sets out the Local Authorities roll in facilitating a coordinated approach to the deployment of EV charging infrastructure. Work has begun on implementing the strategy and will continue under this Climate Action Plan.

ZERO EMISSIONS VEHICLES IRELAND

Zero Emission Vehicles Ireland coordinates measures to support the uptake of zero emission vehicles and the rollout of charge point infrastructure to accelerate progress towards Ireland's ambitious electric vehicle targets committed to in the Climate Action Plan 2021.

It has an objective voice on zero emission vehicles, providing advice to both public and private sectors and carrying out significant stakeholder engagement. The Office works across government, industry and society to support the transition to zero emission vehicles.

Its operations include:

- supports for uptake of zero emission vehicles;
- infrastructure delivery through funding and policy guidance;
- strategy and policy lead, including taxation and regulation;
- research and innovation;
- communications and public and stakeholder engagement.

COUNCIL'S FLEET

The Council's transport fleet is made up of 220 vehicles, which consumed 5.7 GWh of primary energy and accounted for 15.4% of the Council's total emissions in 2021. The Council is committed to increasing its electric fleet on a phased basis, and currently has 65 fully electric vehicles in the fleet. These include small and medium commercial vans, 3.5 ton tipper trucks, 7.5 ton tipper truck, utility vehicles, dumpers, woodchippers and ride on mowers. Looking to 2030, it is intended to replace most of the fleet to electric vehicles once suitable vehicles become available on the market.

ADDITIONAL BENEFITS TO TRANSPORT-RELATED ACTIONS:

- Replacing short car trips with walking or cycling can help individuals achieve their weekly minimum recommendation for physical activity.
- Petrol and diesel vehicles release particulate matter and gases such as nitrogen oxides, which are big contributors to air pollution. Replacing private car trips with walking, cycling or public transport can support improvements in the Dublin region's air quality.
- Traffic congestion can be a problem in our town and villages where space is limited. Fewer cars are on the road when more people choose to travel by walking, cycling or public transport helping to alleviate traffic congestion.
- Noise pollution is another by-product of cars that can be reduced by cycling or walking. Noise pollution is usually classified as unwanted or disturbing sounds that can affect humans and animals' health and wellbeing. The honking of horns, revving engines, background din of vehicles travelling on the road surface and screeching tires are all sounds that contribute to noise pollution. This pollution has been linked to various health problems, including high blood pressure, stress, anxiety, and sleep disorders. With cycling, walking and wheeling, there's no noise pollution, which can help improve the quality of life for everyone in an urban area.

TRANSPORT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Active Travel - Protected Cycleways/Walkways							
T1[11]	Increase the meterage of high quality walkways in the county and improve the meterage of existing walkways in the county.	m of walkways delivered and improved per year, captured through the pavement management system.	Annually	Mitigation	Influence	ECAAT / P&SI / Ops	NTA
T2[12]	Increase the km of protected cycle lanes and off road cycle lanes and greenways in the county annually; in line with the Greater Dublin Cycling Network Plan, and the FCC Greenway Plan - including Fingal Coastal Way, the Sutton to Malahide Cycleway, the Broadmeadow Way, Church Fields Link Road, and the Royal Canal Urban Greenway, etc.	km of Protected Cycle Lanes and Off Road Cycle Lanes and Greenways delivered per year. # of schemes completed.	Annually	Mitigation	Influence	ECAAT / P&SI	NTA
Active Travel - Connectivity							
T3[13]	Deliver/alter infrastructure to improve connectivity/ permeability in order to promote active travel	Number improved annually	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
T4[14]	Deliver new pedestrian / cycling road crossings, which give priority to pedestrians and cyclists. Develop and implement a work programme for the replacement of pedestrian crossings with ones which give priority to pedestrians & cyclists.	# of crossing delivered	Annually	Mitigation	Influence	ECAAT / P&SI / Ops	
T5[15]	Install junction build outs in accordance with Design Manual for Urban Roads & Streets 2020, increasing safety to users.	no. of upgraded arms of junctions installed	Annually	Mitigation / Adaptation	Influence	ECAAT / P&SI / Ops	NTA
Active Travel - Mobility							
T6	Increase the quantity of bicycle parking and virtual parking bays in the public domain.	No. of bicycles facilitated in the public space	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
T7	Assist in the provision of bicycle stands in private community space, such as community centres, sport clubs etc.	# of bicycles facilitated in private/ community spaces	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
T8	Continued provision of Bike Sharing Schemes across the county	# of bikes provided, # of bike journeys	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Bleeper Bike, TIER
T9	Provision of E scooters across the county	# of scooters provided, # of bike journeys	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Providers

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TRANSPORT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
T10	Implement pilots schemes for mobility/emobility to promote sustainable mobility by encouraging creativity and innovation in the county.	# of pilots implemented per year.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
Active Travel - Modal Shift							
T11[16]	Identify opportunities for reallocation of existing road space to promote active travel and improve public space.	km of road reallocation identified.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
T12[17]	Enhancement / reallocation of roads & street space to promote active travel and improve public space. Implement in all 3 LEAs	km of existing road space reallocated. # of schemes	Annually	Mitigation	Influence	Operations, P&SI, ECAAT	
T13	Implement traffic calming programme. To include provision of infrastructure for encouraging modal shift (Ramps, VAS, Pedestrian Crossings etc)	# of traffic calming measures	Annually	Mitigation	Influence	Operations	
T14	Assess the feasibility of re-allocating existing Pay & Display spaces to bike parking	# of spaces reallocated	2026	Mitigation	Influence	Operations & ECAAT	
T15	Introduction of Pay & Display schemes in accordance with adopted bye-Laws to discourage car use (To decrease car dependency)	# of locations	2026	Mitigation	Influence	Operations	
T16	Provide programmes and initiatives that support community-wide adoption of active travel modes e.g. Learn 2 Cycle with a Disability lessons, Adult Cycling lessons, Walking Buses, Cycling Buses; and opportunities for marginalised groups to engage in Active Travel	# of programmes/ initiatives provided per year	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
T17	Examine the potential for 30 km/h speed limits in towns and villages in line with the Road Safety Plan recommendations.	Increase in kilometres of road network with a 30kmph speed limit	Annually	Mitigation	Influence	Operations	
Active Travel - Modal Shift - Safe Routes To School							
T18[18]	Implement Safe Routes to School programme	# of schools with measures implemented.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	NTA, An Taisce
T19	Implement the School Streets initiative	# of schools participating	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	NTA, An Taisce

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TRANSPORT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Public Transport							
T20[19]	Support the development and expansion of existing public transport services including MetroLink, BusConnects and DART expansion to Balbriggan	Public transport supported	Ongoing	Mitigation	Influence	Planning & Strategic Infrastructure	NTA, TII, Irish Rail
T21[20]	To facilitate the provision of Park and Ride facilities in appropriate locations at transport nodes and along strategic transport corridors in accordance with the NTA Strategy, and encourage the inclusion of EV charge points and bike parking.	Policy developed and sites identified	2028	Mitigation	Influence	Environment, Climate Action and Active Travel	NTA
Shared Mobility							
T22	Promote and facilitate additional car sharing schemes	# of cars provided	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	GoCar
T23	Promote and facilitate additional community car sharing schemes	# of cars provided	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	
EVCP Provision							
T24[21]	Implement the DLA EVCP strategy through delivery of sufficient EVCP's	# of chargers provided	Ongoing	Mitigation	Influence	Environment, Climate Action and Active Travel	ZEVI, Dept. Transport
T25[22]	Expand availability of EV charging points for Council staff and operational vehicles	# of charging points	Ongoing	Mitigation	Full Accountability	Operations	
T26[23]	Provide EV charging infrastructure (in addition to 20% charge points) to development plan standards, for new social housing developed by the Local Authority. Provide Electric vehicle charge points in car parking for new Fingal Corporate buildings.	# of EV charge points provided	Ongoing	Mitigation	Full Accountability	Architects	
T27	Continued electrification of the Council's vehicle fleet as market technology develops	% of total fleet converted to EVs	Ongoing	Mitigation	Full Accountability	Operations	
Roads Construction & Maintenance							
T28	Maintenance and upgrade of public footpath network and regional and local roads to encourage modal shift to walking and cycling	Km of footpaths and roads maintained that facilitates modal shift	Annually	Mitigation	Influence	Operations	
T29	Explore the use of sustainable methods of road surfacing that minimise the use of raw materials.	Study alternatives and # of pilots undertaken.	2025	Mitigation	Influence	Operations, P&SI, ECAAT	

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TRANSPORT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Staff Travel							
T30	Continued implementation of the national public sector remote working strategy	Enabling IT solutions in place. # of staff availing of the scheme	Ongoing	Mitigation	Full Accountability	People, Corporate & Digital Services	
T31	Aim to reduce kilometres travelled by private ICE vehicles within work hours and incentivise modes such as cycling, electric vehicles.	% modal shift from private car.	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	
T32	Prepare and finalise the Smarter Travel Workplace Strategy for staff of Fingal County Council, and engage on the implementation of the strategy	"Strategy prepared # of recommendations enacted per year "	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	
T33	Promotion of Cycle-to-Work Scheme for Council staff	# of staff availing of scheme	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	
T34	Provide eco driving training to Council drivers	# of staff trained	2024	Mitigation	Full Accountability	People, Corporate & Digital Services	
T35	Implement carbon offset programme for official flights and investigate an appropriate offsetting scheme for the Council's other business travel emissions.	Carbon Offset Programme implemented	2028	Mitigation	Full Accountability	People, Corporate & Digital Services	CARO, Codema

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FLOOD RESILIENCE

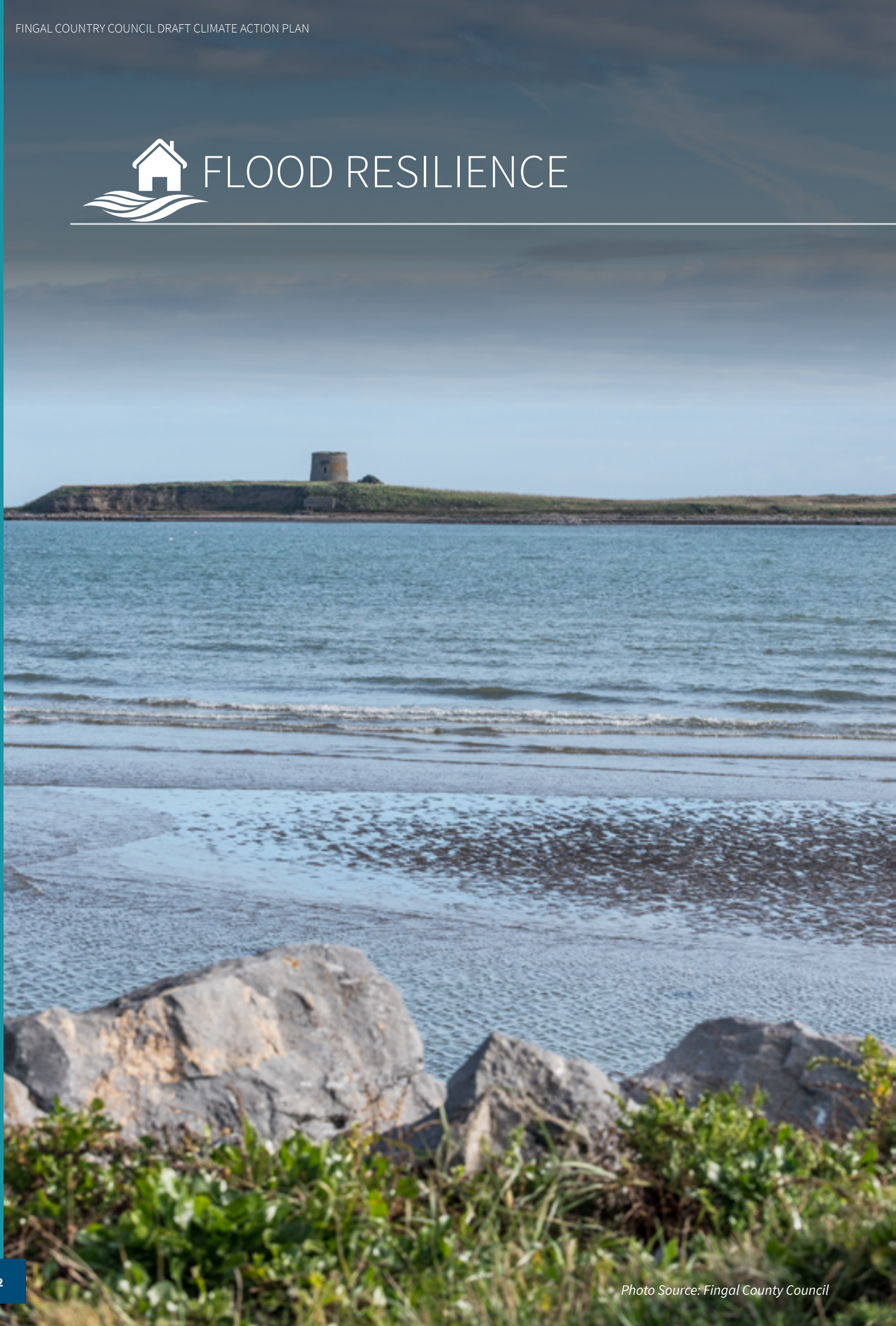

Photo Source: Fingal County Council

FLOOD RESILIENCE

Flooding is a key climate risk facing the Dublin Region. The frequency and intensity of heavy rainfall events is increasing as a result of climate change. This may increase the risk of flooding in vulnerable areas of the County and places additional pressure on urban drainage networks. Sea level rise and storm surges as a result of climate change will have a considerable impact on flooding and flood risk for communities and infrastructure located along rivers, estuaries and the coast with accelerating rates of coastal erosion threatening coastal habitats.

WHAT IS FLOODING?

Flooding is a natural phenomenon defined as a temporary covering by water of land not normally covered by water and is a natural process that can happen at any time in different locations.

Flooding in Fingal can occur from a range of sources, individually or combined, including:

- coastal flooding (from the sea or estuaries),
- fluvial flooding (from rivers or streams),
- pluvial flooding (from intense rainfall events and overland flow),
- other sources, such as from blocked culverts

Met Éireann has predicted that autumns and winters in Ireland may become wetter, with a possible increase in heavy precipitation events of approximately 20%, and that summers may become drier. However, the change in precipitation patterns in Ireland, particularly at a local level and for shorter (sub-seasonal) durations, remains uncertain and is the subject of ongoing research.

Climate change is not only reflected in terms of the average temperature, precipitation, etc., but also in the frequency and intensity of extreme weather conditions. The consensus among different modelling approaches is that extreme rainfall events are likely to increase in frequency in autumn and winter.

An increase in the number of intense storms over the North Atlantic could have a direct impact on storm surges, although there is still uncertainty around the impact of storm surges. Coastal erosion can give rise to flood risk, and erosion rates will be increased in the future as sea levels rise.

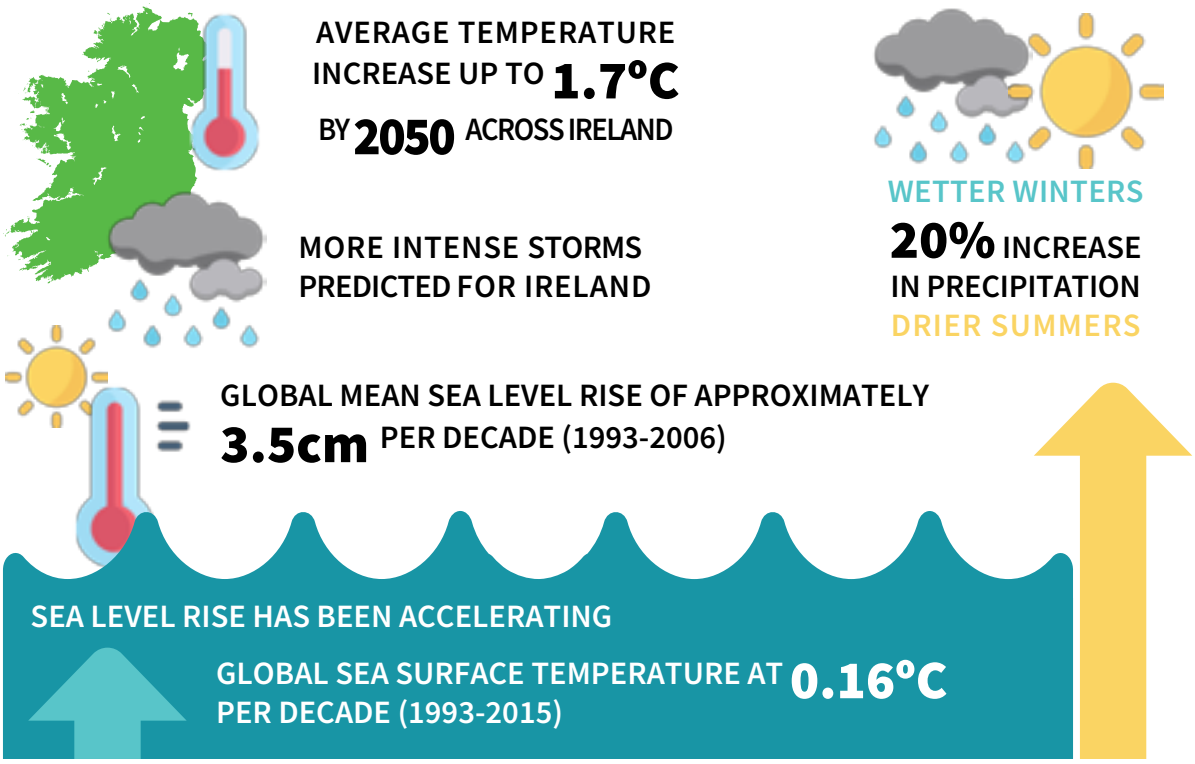

Figure5.4: Anticipated changes in climate, impacting flood risk (Source Met Eireann)

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR FLOOD RESILIENCE

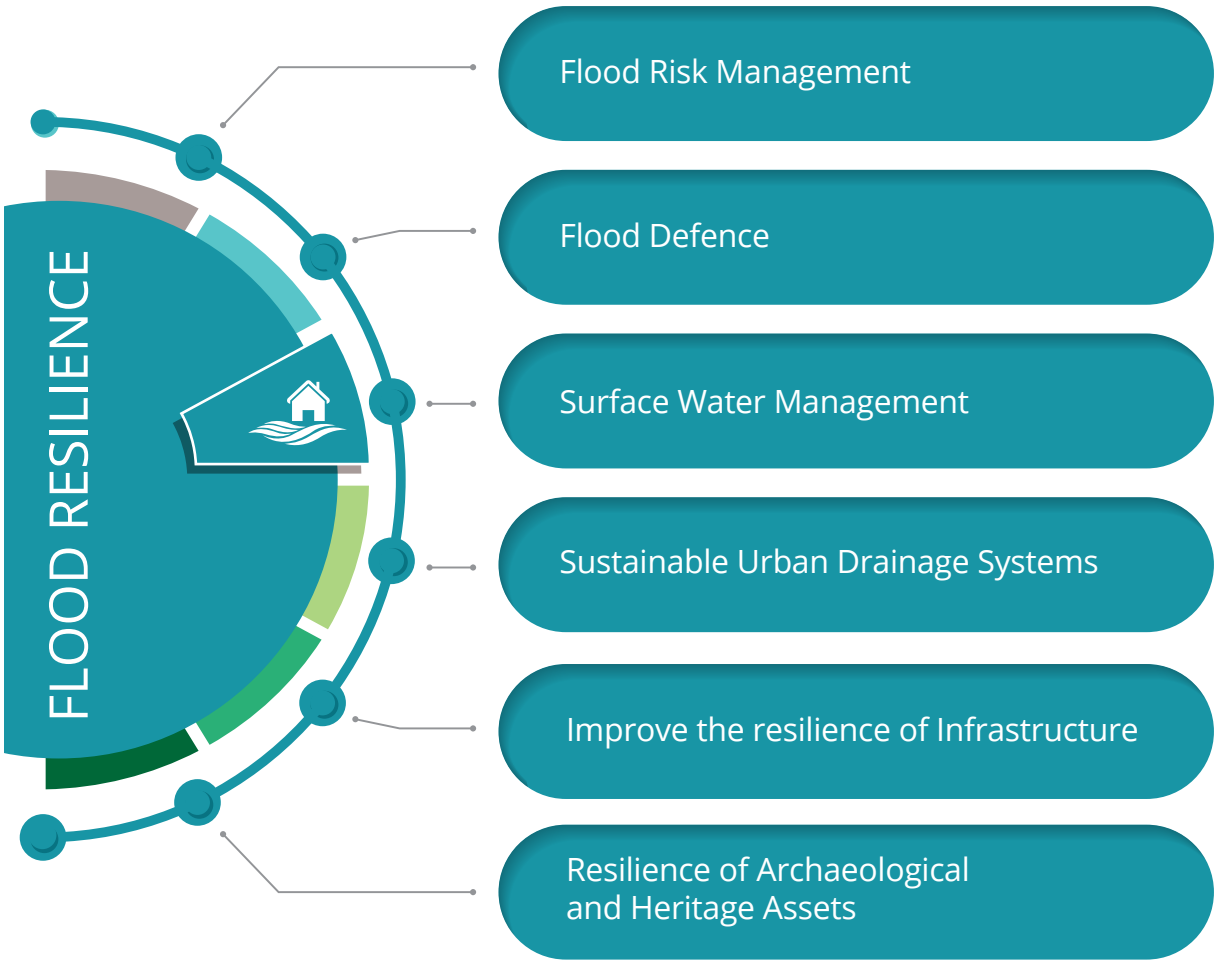

Figure5.5: Fingal County Council's Key Action Areas to improve Flood Resilience

FLOOD RISK MANAGEMENT

Fingal County Council is active across all aspects of flood risk management, from prevention to emergency response, through to infrastructural investment following extreme weather events. This includes actions that consider flood risks arising from climate change through development policies, collaboration with the Office of Public Works (OPW) as the lead state agency in relation to flood risk management in Ireland on flood defence projects, own delivery of minor flood defence projects, use of nature-based solutions to manage flood risks, activation of flood emergency response plans, and rebuilding infrastructure in the aftermath of extreme weather events.

The Council works to minimise the risks posed by flooding in various ways. Flood risk is assessed and considered at all stages of the land use planning process and the county's floodplains are maintained through this process. This ensures that inappropriate development is avoided in areas at risk of flooding and avoids new developments increasing the risk of flooding elsewhere - including that which may arise from surface run off. Nature based solutions are utilised where appropriate to allow space for floodwaters. The Council has completed a county wide Strategic Flood Risk Assessment in 2022[36] and this has informed the County Development Plan 2023 to 2029[32]. In addition, Surface Water Management Plans are undertaken on an ongoing basis for all Local Area Plans. These plans incorporate a Flood Risk Assessments and Sustainable urban Drainage Strategies and are carried out at an early stage of the forward planning process.

Where extreme weather events occur, the Council has an Emergency Response Plan[37] in place to reduce their impact and maintain business continuity across the county.

FLOOD DEFENCE

Fingal County Council is working with the OPW and other state agencies to develop flood protection measures in areas at risk of river and coastal flooding within the county.

Fingal County Council has worked to develop and implement an appropriate Coastal Protection Plan for Portrane, Rush and Rogerstown outer estuary. Council officials meet with the Coastal Liaison group regularly, and this has led to good communication and appreciation of shared interests. A Public Information Process relating to the Rogerstown Outer Estuary Coastal Flood/Erosion management process has been completed. Statutory Planning Process for Coastal Protection Measures is due to commence in Q4 2023.

SURFACE WATER MANAGEMENT AND SUSTAINABLE DRAINAGE SYSTEMS

Increased heavy rainfall events as a result of climate change and increased hard landscape areas makes the management of surface water more challenging for local authorities. Fingal County Council actively encourages the use of green infrastructure and sustainable urban drainage systems such as green and blue roofs, downpipe planters, permeable paving, swales, tree pits, raingardens ponds and wetlands as water attenuation measures.

Sustainable Drainage Systems (SuDS) can reduce the rate and volume of water run off by intercepting it, providing temporary and permanent storage areas, and allowing water to infiltrate into the ground or be conveyed more slowly to the drainage system and ultimately to water courses. These solutions can offer a 'total' solution to rainwater management which closely mimics natural catchment behaviour where rainfall either infiltrates through the soil or runs off slowly over the ground surface to the nearest watercourse. These solutions can provide water quality treatment, benefits for biodiversity, and can provide for amenity and benefits to local communities simultaneously.

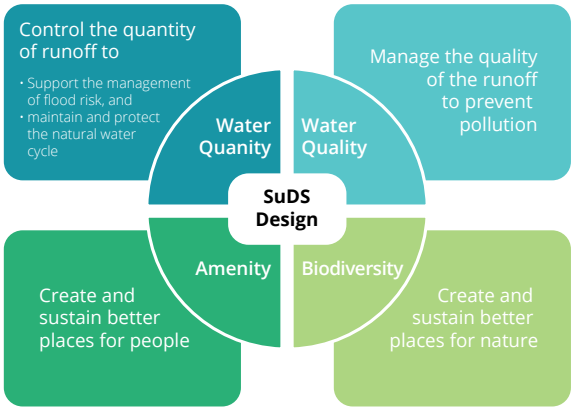

Figure5.6: Multifunctional Benefits of Sustainable Drainage Systems

SuDS must be included in all new developments in Fingal. Fingal County Council has recently prepared a SuDS Guidance Document – Green/Blue Infrastructure for Development[38], which will guide the provision of SuDS for new development through the planning process and will promote and support the strategic planning of surface water management in Fingal. "A Householders Guide to SuDS" is also in development, as an 'easy to use' practical guide for smaller scale domestic SuDS application.

Tree pit under construction

Tree pit on Main Street, Swords

IMPROVE RESILIENCE OF INFRASTRUCTURE

The Council is responsible for maintaining the drainage systems that manage stormwater and surface water run off as required. However, given the likelihood of more extreme rainfall/flooding events and the increased pressure this will put on the existing network, it is critical to ensure that the drainage systems will continue to operate as required. Existing drainage maintenance plans will be reviewed and improved to ensure a comprehensive plan is in place for the network, including gullies and SuDS assets. The plan will look to include the use of any emerging technological solutions.

RESILIENCE OF ARCHAEOLOGICAL AND HERITAGE ASSETS

The Fingal Cultural Heritage & Climate Change Risk Assessment[39] was undertaken with input from CARO, Geological Survey Ireland, and others, under the Climate Change Action Plan 2019-2024[29], and report launched in July 2021. This assessment brought together, for the first time in an Irish context, datasets pertaining to the risk posed to the Counties heritage assets from identified climate change hazards such as flooding and coastal flooding and coastal erosion. These assets include archaeological monuments, built heritage, historic gardens and demesnes and geological heritage sites. This assessment is now informing follow-on actions in this Draft Plan including the development of maintenance and condition survey programmes for Council owned historic buildings and ancient monuments that are informed by climate change impacts. These actions will build climate resilience into these archaeological and heritage assets.

CASE STUDY

HERITAGE X CLIMATE PROJECT

The Fingal Heritage X Climate Project is a citizen-science initiative begun as a means of facilitating ongoing monitoring of changes and impacts to heritage sites. Fingal Heritage X Climate encourages members of the community to visit heritage sites in Fingal, observe their condition and location and fill out an online form recording the condition of the site, any risks it may be facing and any visible damage or deterioration. The data produced will then link with the Fingal Cultural Heritage and Climate Change Risk Assessment GIS database https://www.fingal.ie/fingal-cultural-heritage-climate-change-risk-assessment

The original climate change risk assessment was a desk-based study. The Heritage X Climate Project https://www.fingal.ie/fingal-heritage-x-climate can be considered a positive field-based contribution to the ongoing assessment and monitoring of heritage assets which it began. Information gathered from both will be instrumental in allowing Fingal County Council to assess and prioritise sites for site surveys and mitigation work depending on the level of risk they face.

ADDITIONAL BENEFITS TO FLOOD RESILIENCE ADAPTATION ACTIONS:

- SuDS Water Quality benefits: SuDS can improve water quality by filtering urban pollutants and sediment and so improving the quality of water discharged to watercourses, or groundwater.
- SuDS Biodiversity benefits: SuDS can create and sustain habitats for biodiversity.
- SuDS Amenity benefits: SuDS can create and sustain better places for people. Well-designed SuDS can provide for attractive multi-functional spaces to enhance people's quality of life.
- Flood Relief and Coastal Protection Schemes can provide opportunities for additional community benefits in terms of amenity.
- Recognising and integrating cultural heritage into climate action promotes culturally sensitive and inclusive strategies, fostering sustainability both in environmental and cultural terms.

FLOOD RESILIENCE

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Flood Risk Management							
F1	Update Council Emergency Response Plans to include flood event response	Plans reviewed and updated yearly	Annually	Adaptation	Full Accountability	People, Corporate & Digital Services	
F2	Ensure annual update of the specific risks to service provision in each FCC Department that may be impacted by Climate Change, building on the Climate Change Risk Assessment developed for the CAP.	Annual Risk Review	Annually	Adaptation	Full Accountability	Environment, Climate Action and Active Travel / All	
F3[24]	To engage with the Fingal Coastal Liaison Group with the integration of adaptation strategies into planning policies, etc.	x2 meetings held each year	Annually	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	CCAT, RPS, Fingal Coastal Liaison Group.
Flood Defence							
F4[25]	Develop and implement Coastal Protection Plan for Portrane	Plan produced and actions implemented	2023-2025+	Adaptation	Full Accountability / Co-ordinate and Facilitate	Planning & Strategic Infrastructure	RPS Consultants, OPW
F5[26]	Progress Flood Alleviation schemes in conjunction with the OPW - including Mill Stream Skerries, Bissett Strand and The Green Malahide Village, Portmarnock Bridge,	Projects completed	2029+	Adaptation	Full Accountability / Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	OPW
F6[27]	Continued engagement with the OPW to progress further studies of areas within Fingal at risk of flooding, and development of suitable schemes such as Strand Road Sutton and Santry	Schemes identified	2029+	Adaptation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	OPW
F7[28]	Progress appropriate minor works schemes to resolve recurring flood issues, where possible, ensuring the schemes are designed and implemented to promote SUDs / nature based solutions.	# of schemes progressed	Annually	Adaptation	Full Accountability	Operations	
F8	Develop a coastal monitoring programme to measure coastal erosion along the Fingal coast	Monitoring programme set up	2026	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	OPW
F9	Facilitate the development of a National Coastal Monitoring Survey Programme	Survey programme facilitated and developed	2026	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	

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FLOOD RESILIENCE

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
F10	Identify sites where flood defence features can be removed or relocated to increase flood capacity of rivers and estuaries	# of sites identified	2028	Adaptation	Full Accountability / Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
F11[29]	Restore St Ita's wetlands to maximise water attenuation capacity and nature conservation benefits	Construction haul roads and fill removed from wetland	2024	Adaptation & Mitigation	Full Accountability / Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
Surface Water Management							
F12	Record on a GIS layer the council surface water system and make it available to all relevant staff from Operations & Planning. This must include all SuDS systems and flood embankments	Surface water system recorded on GIS layer	2027	Adaptation	Full Accountability	Operations	
F13	Prepare a maintenance register for the entire surface water system within the county, including SuDS, pipes and culverts to aid proactive maintenance, alleviate flooding and maintain water quality	Maintenance register created & updated annually	Annually	Adaptation	Full Accountability	Operations	
F14	Develop an improved maintenance plan for SuDS assets that are taken in charge by FCC, ensuring their continued operation.	Maintenance plans developed	2025	Adaptation	Full Accountability	Operations	
Sustainable Urban Drainage Systems							
F15	Promote and encourage community involvement in the retrofit of SuDS in existing developments, maintaining community rain gardens, discourage hard paving in gardens and retrofit raingardens / water butt installations	No of promotional initiatives (social media posts, articles etc) and engagement events per year.	Annually	Mitigation & Adaptation	Influence / Advocate	Planning & Strategic Infrastructure	
F16	Develop a Blue/Green Roof Guideline to assist both internal and external stakeholders implement these systems as per the County Development Plan objectives	Guideline Produced	2024	Mitigation & Adaptation	Influence	Planning & Strategic Infrastructure	
F17[30]	Ensure the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-of, improve water quality and contribute to adaptation to climate change through nature based solutions.	Appropriate SuDS incorporated into all developments in the Planning process	Ongoing	Mitigation & Adaptation	Influence	Planning & Strategic Infrastructure	

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FLOOD RESILIENCE

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
F18[31]	Drive the implementation of SuDS in FCC Capital projects, including new builds, retrofits etc, and monitor the level of implementation.	# of schemes progressed	Annually	Mitigation & Adaptation	Influence	Planning & Strategic Infrastructure	
F19	Create a case study of SuDS at Local Area Plan level	Case study complete	2028	Mitigation & Adaptation	Influence	Planning & Strategic Infrastructure	
F20	Ensure new Local Area Plans feature Urban Greening Proposals.	Local Area plans with Urban greening measures.	Annually	Mitigation & Adaptation	Influence	Planning & Strategic Infrastructure	
F21	Assess the feasibility of green roofs on all new Fingal public, operational and social buildings and provide where viable and appropriate. Evaluate date from CARO / UCD project on Green Roof substrates.	Assessments completed and provided	Ongoing	Mitigation & Adaptation	Full Accountability	Architects	CARO, UCD
Improve the Resilience of Infrastructure							
F22	Assess resilience of regional and local roads in line with Climate Adaptation Strategy issued by the Department of Transport	# of assessments	2028	Adaptation	Full Accountability	Operations	LEADER
F23[32]	Assess Resilience of Bridge Infrastructure vulnerable to impact of climate change	# of Inspections carried out	2026	Adaptation	Full Accountability	Operations	Clean Coasts,
Resilience of Archaeological and Heritage Assets							
F24	Develop maintenance and condition survey programmes for Council owned historic buildings and ancient monuments that are informed by climate change impacts.	No of projects complete annually	Ongoing	Adaptation	Full Accountability	Architects	
F25	Archaeological and heritage assets to form part of all climate risk assessments including opportunities for integration of cultural heritage in adaptative mitigations e.g. green infrastructure, cycle ways, nature-based solutions etc.	Assets included in risk assessments as part of the Planning & Development processes	Ongoing	Adaptation	Full Accountability / Influence	Planning & Strategic Infrastructure	All Departments
F26[33]	Use the findings of the Fingal Cultural Heritage & Climate Risk Assessment to prioritise and pilot adaptative and palliative measures for heritage assets in Council ownership	Number of pilot projects identified and delivered	2027	Adaptation	Full Accountability	Planning & Strategic Infrastructure	Heritage Council

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FLOOD RESILIENCE

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
F27	Support and develop citizen science projects such as Fingal X Heritage as a means of monitoring climate change impacts on Fingal's heritage assets and raising public awareness	# of projects developed with community engagement	2027	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	Heritage Council
F28	Identify projects and opportunities for collaboration with relevant stakeholders to assess and prioritise cultural heritage sites vulnerable to climate change	# of projects participated in	Ongoing	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	CARO
F29	Build climate resilience of archaeological and built heritage in public and private ownership through the Community Monuments Fund	Number of sites in Fingal per year funded through CMF	Annually	Adaptation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	National Monuments Service, DHLGH

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NATURE-BASED SOLUTIONS

Photo Source: Fingal County Council

NATURE BASED SOLUTIONS

Nature-based solutions are defined by the European Union as '*Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions*[51].'

Nature-based solutions work with nature rather than against it to provide sustainable, cost-effective solutions to societal challenges such as climate change. These solutions can be highly effective in both adapting to the effects of climate change and as climate mitigation measures. They can play an important role in carbon sequestration, providing and enhancing habitats and ecosystems, soaking up water and providing flood resilience, improving water quality, removing pollutants from the air, and in temperature regulation.

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR NATURE BASED SOLUTIONS

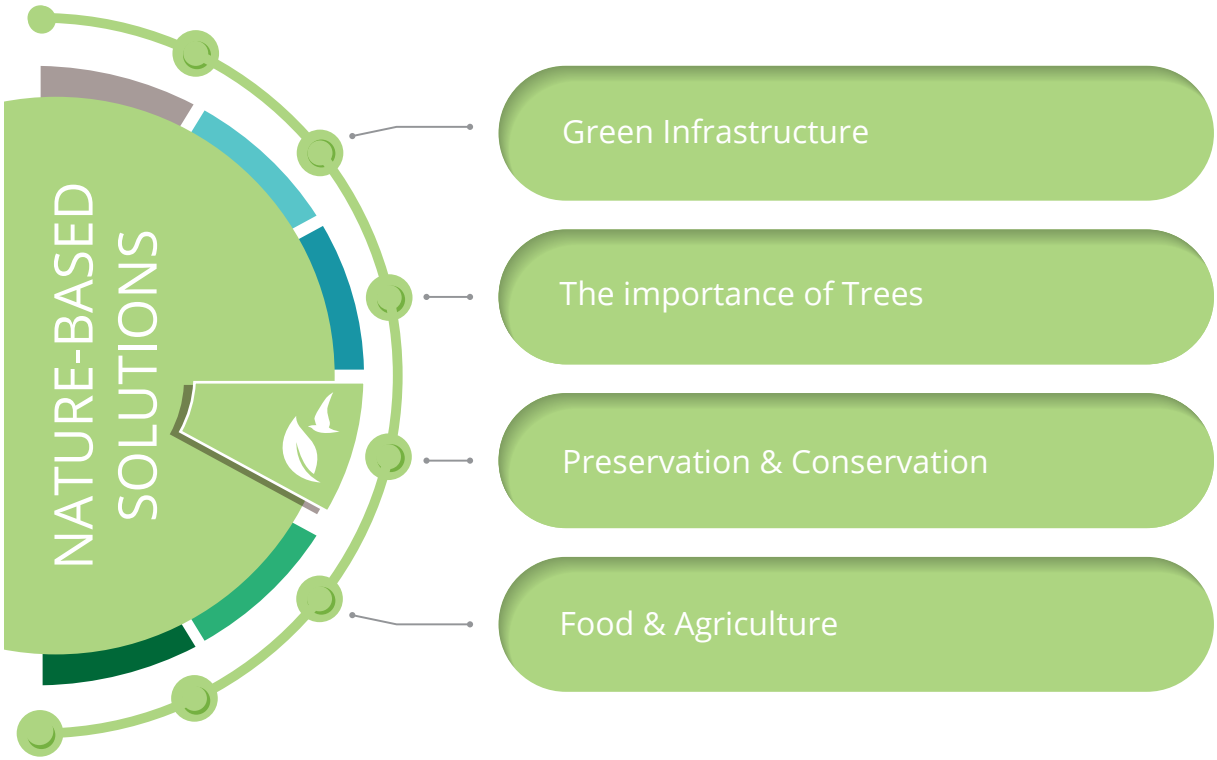

Figure 5.7: Fingal County Council's Key Action Areas to utilise Nature Based Solutions for Climate Action.

GREEN INFRASTRUCTURE

The County Development Plan states,

> **'Green infrastructure can be understood as a planned network of interconnected natural areas such as parks, rivers and open spaces that help to conserve natural ecosystem functions. Green infrastructure planning results in environmental, economic and social benefits by providing nature-based solutions to development objectives. This approach results in resilient urban landscapes adapted for and reducing the negative effects of climate change'.**

The Council is working to protect and enhance existing green infrastructural assets, and develop a network of improved green infrastructure - built around core ecological sites. The Council is also to increasingly green developments through the inclusion of sustainable urban drainage systems and other forms of green infrastructure.

PROMOTING IMPORTANCE OF TREES

The Council recognises the importance of trees and the benefits they provide to our County; and is working to promote the trees as essential elements of the urban environment affording them a similar status to other urban infrastructure. Trees and plants reduce water run-off in extreme rain events, taking pressure off the urban drainage system as well as improving the urban microclimate. Many studies demonstrate the Health & Wellbeing benefits of urban trees. The Council aims to protect existing trees and woodlands and to manage these to ensure trees thrive to their full potential offering all the related benefits through the implementation of the Forest of Fingal, A Tree Strategy for Fingal[40].

CONSERVATION & PRESERVATION

Protecting and restoring ecosystems can help to reduce the impacts of climate change. Healthy ecosystems are also more resilient to climate change. The Fingal Biodiversity Action Plan 2022-2030[41] includes actions which address biodiversity loss and climate change adaptation and/or mitigation in an integrated manner through ecosystems-based approaches. The restoration of carbon rich habitats such as saltmarsh, wetland and woodland will benefit many wildlife species, while these habitats can also sequester carbon, absorb floodwater and improve water quality.

Through the implementation of climate adaptation and mitigation actions in this Plan, supported by various policies and plans, the Council is working to improve the resilience of the County, to increase the carbon sequestration potential within the county, and to protect and enhance valuable ecosystems which will result in benefits to biodiversity and to the health and wellbeing of our population.

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CASE STUDY

THE WARD RIVER REGIONAL PARK DEVELOPMENT PROJECT

Fingal County Council has commissioned the preparation of the "Ward River Regional Park Development Project". The Park Development Project for the Regional Park will be produced by an integrated multidisciplinary team under the direction of Fingal County Council. This project will provide a vision for the 80 Hectare (200 Acre) Park which connects major residential areas in Swords to the town centre. Climate Resilient design based on the principles of Multi-functional Green Infrastructure and incorporating Nature Based Solutions will provide a long-term framework for the creation of places that are healthy, biodiverse, connected, and relevant to the lives of people in the local community. The project will identify the current and projected park user requirements, allowing for development of the park from the present time into the future. The project will showcase how different elements of Green Infrastructure can work in combination so that the whole is greater than the sum of its parts. The inclusion of extensive new active travel infrastructure in the park design will provide increased walking and cycling options for the local community. Convenient access to high quality sports, play facilities and heritage landscape gardens and related features will further boost active travel locally. New wetlands in the park will attenuate and improve the quality of surface water entering the Ward River helping to reduce the downstream impact on the Malahide Estuary Special Area of Conservation (SAC). These new wetlands along with planned woodland management, increased tree canopy cover and river restoration initiatives will improve biodiversity alongside managed public access to an important natural amenity. Extensive statutory and non-statutory public engagement in the preparation of the park development plans will ensure that the needs and concerns of the local community are taken into account

ADDITIONAL BENEFITS TO NATURE BASED SOLUTIONS ACTIONS:

As alluded to in the passage above, - the benefits of Nature Based Solutions are extensive and too numerous to list here. These solutions are unique in the number and value of environmental, social, and economic benefits they can deliver.

In addition to the environmental benefits such as carbon sequestration, water filtration absorption and storage, improved soil health, habitat provision and enhancement, temperature regulation, and improved air quality; these solutions offer invaluable health and wellbeing benefits. Being around trees and nature can reduce stress, improve quality of life, and can speed up recovery times from illness. Urban trees and green infrastructure can remove large amounts of air pollution and dust and improve urban air quality. Trees and nature can also provide for Play & Learning, Shade Cooling & Comfort, Relaxation, and a Sense of Place.

Economic benefits include increased land and property values, increased tourism, increased productivity & creativity, and less financial burden on health & emergency services.

The benefits can also be interconnected: for example, the health benefits associated with contact to nature will in turn provide economic benefits with reduced costs to our healthcare system.

NATURE BASED SOLUTIONS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Green Infrastructure							
N1[34]	Prepare and implement multi-functional management plans for the Rogerstown, Malahide and Baldoyle Estuaries and their surrounding lands	Management plans prepared and # of actions implemented	2026	Adaptation & Mitigation	Full Accountability / Influence	Planning & Strategic Infrastructure	
N2	Map and survey all significant/historic stands of woodland within the county e.g. in excess of 5ha, and review the effectiveness of the protection offered under the Green Infrastructure Network Zoning of woodlands in the County Development Plan	Map & Survey & Review completed	2025	Adaptation & Mitigation	Influence	Planning & Strategic Infrastructure	
N3	Review measures to improve Biodiversity nett gain on all projects, including Biodiversity pilot programme on new build housing. Architects will adhere to Biodiversity officers protocol for nesting boxes.	Carry out exercise on all projects	Annually	Mitigation & Adaptation	Influence	Architects	
N4[35]	Develop SuDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary	# SuDS project implemented	2026	Adaptation & Mitigation	Influence	Planning & Strategic Infrastructure	
N5	Implement wildfire fire management strategy for Howth Head	# of actions implemented	Annually	Adaptation	Influence	Planning & Strategic Infrastructure	
N6	Explore funding models for carbon offsetting to fund wetland and woodland development	Study Complete	2025	Adaptation & Mitigation	Influence	Planning & Strategic Infrastructure	
The Importance of Trees							
N7	Commission a study to report on the ecosystem services/nature-based solutions provided by Fingal's trees with reference to their economic/climate change adaptation benefits	Study Complete	2025	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
N8	Assess and adopt tree valuation methods for compensatory / replacement planting, e.g. iTree	Valuation method adopted	2025	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

NATURE BASED SOLUTIONS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
N9	Initiate a programme of targeted Strategic Annual Tree Planting including identifying and mapping priority locations, to include sites suitable for woodland creation. Reviewed in an annual works programme, presenting what is planned for the coming year. Taking advantage of government funding programmes such as the New Woodland Creation Scheme on Public Lands	Priority locations mapped, Ha of trees planted, € funding obtained.	Annually	Adaptation & Mitigation	Full Accountability / Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
N10	Prepare a list of suitable tree species recommended for differing situations / functions and make available to developers and other stakeholders following the Guiding Principle of 'right tree in the right place'	Right tree in the right place list prepared	2025	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
Preservation & Conservation							
N11	Undertake study to identify the habitats and species at risk of climate change	Study completed	2025	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
N12	Carry out feasibility studies of developing a Marine Protection Area along the Fingal Coast and on the restoration of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands	# of studies undertaken	2026	Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
N13[36]	Restore marine ecosystem along Fingal coast by supporting restoration projects of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands	# of restoration projects undertaken	2026	Mitigation	Influence	Planning & Strategic Infrastructure	
N14[37]	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor	Restoration project implemented	2025	Adaptation & Mitigation	Full Accountability / Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
N15	Increase pollinator areas in public parks and open spaces	Increased acreage in pollinator areas	Annually	Mitigation	Full Accountability / Co-ordinate and Facilitate	Operations	

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NATURE BASED SOLUTIONS

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Food & Agriculture							
N16	Continue supporting the use of public allotments as a way communities can grow their own food, and lower food miles and food waste	Increased awareness on the use of allotments	Annually	Mitigation	Influence	Operations	
N17	Map and protect strategic agricultural land for national food security purposes	Resource mapped	2028	Adaptation	Influence	Planning & Strategic Infrastructure	IFA, Teagasc
N18	Engage with the agri-food sector to gain an understanding of how Fingal might better support more sustainable farming practices	Sector engaged	2028	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	Teagasc
N19	Develop climate change initiatives in partnership with local farmers and other stakeholders	Initiatives developed	2028	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	Teagasc

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CIRCULAR ECONOMY & RESOURCE MANAGEMENT

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Figure 5.8: Fingal County Council's Key Action Areas in relation to Circular Economy and Resource Management

CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Transitioning from traditional linear economic models to a more circular economy, is a priority for the EU and Ireland. Increasing population and prosperity, results in increasing consumption of the earths finite resources and this has environmental and climate impacts. A circular economy maximises the use of resources, products, and assets, and minimises resource consumption and wastage in all forms. This is in contrast to the traditional linear take-make-use-dispose production and consumption approach, which is unsustainable. A transition to a circular economy will not only conserve resources, but also reduces environmental and climate impacts. It will foster innovation and thereby increase competitiveness and create new jobs. Everyone can play a part by choosing how we consume and use resources, and by reusing, recycling and minimising waste in our daily lives.

The Circular Economy and Miscellaneous Provisions Act 2022[42] was signed into Irish law in July 2022 and sets out a statutory framework for Ireland's transition to a circular economy. The Circular Economy Act 2022[42] is supported by a wider circular policy base which establishes the framework for the national transition to a circular economy. The National Waste Plan for a Circular Economy 2023-2029[43] includes targets, policies, and actions to enable the waste and resource sector to accelerate the transition to a circular economy. Targets include:

- Recycle 65% of municipal waste by 2035;
- Recycle 70% of packaging waste by 2030;
- Recycle 55% of plastic packaging waste by 2030;

Key national objectives are to minimise the amount of waste we produce, maximising the value of materials that are already in use, and reuse and repair as much as possible.

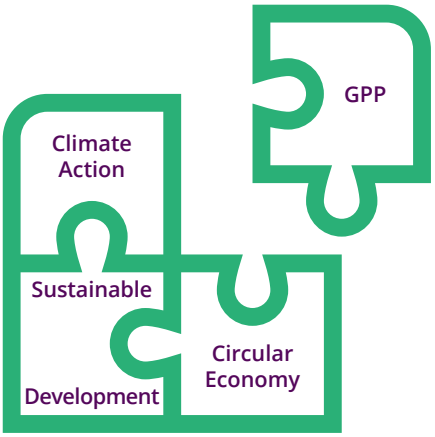
PROMOTE & FACILITATE CIRCULAR ECONOMY

Fingal County Council signed up to the European Circular Cities Declaration[44] in April 2023. The Declaration is a commitment from European cities and regions to enhance efforts to transition from a linear to a circular economy. Signatories are committed to the need to decouple economic growth from resource use, recognise that local and regional governments have a role to play, and share a common vision of a circular economy. By signing the declaration, Fingal County Council has committed to enhancing its efforts to move towards a circular economy and to influence a wider transition across the County.

Mayor Howard Mahony signing the Circular Cities Declaration, pictured with Annmarie Farrelly CE, David Storey Director of Services, Environment Climate Action and Active Travel, John Quinlivan Director of Services, Economic, Enterprise, Tourism & Cultural Development and Councillor John Walsh.

GREEN PUBLIC PROCUREMENT

Green Public Procurement (GPP) is a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle. Under the National Climate Action Plan[11], all procurement using public funds must include green criteria. By undertaking GPP Local Authorities and public bodies will harness their significant buying power to help shape Ireland's transition to a sustainable and carbon-neutral economy and society. Council budget holders and decision makers have undertaken GPP training and ensure environmental aspects of sustainable procurement is embedded in Council procurements.



REDUCE WASTE & INCREASE RECYCLING IN FINGAL COUNTY COUNCIL

Fingal County Council continues to examine how waste is generated and managed in Council offices and works to reduce waste. Office bin stations have been improved and paper use has been reduced using managed print. County Hall and Civic offices main staff canteens have reduced single-use items and three-bin systems are in place and monitored.

Thirty-two community centres all around Fingal have signed up to 'Keen to be Green'. This is an initiative between Community Department and the Fingal Community Facilities Network and aims to make improvements in efficiency and sustainability of community centres. It's a 5-phase journey starting with Waste, then Water, Energy, Transport and Biodiversity. The centres move forward together and receive awards for each phase. The aim of the initiative is to create excellent environmental standards in these public-facing centres.

WASTE REDUCTION, RECYCLING AND CIRCULAR ECONOMY

The Council will work to support targets in The National Waste Plan for a Circular Economy 2023-2029[43] by promoting, encouraging, and facilitating high levels of recycling and reuse, and by providing Civic Amenity sites and a network of bring banks across the County. The Council will also continue to support various waste reduction / repair & reuse / circular economy initiatives in partnership with stakeholders and will continue to collaborate with the Eastern Midlands Regional Waste Planning Office, The Environmental Protection Agency, The Department of Environment, Climate and Communications and other national bodies to promote waste prevention and circular economy related campaigns and to implement key circular economy and resource management policy tools and regulations at a local level.

CASE STUDY

PROVISION OF BRING BANKS IN FINGAL

There are 60 Bring Banks throughout Fingal which makes it easy to recycle. Bring Banks have up to three types of recycling containers: glass banks for recycling clear, green, and brown glass bottles and jars; can banks for recycling aluminium drinks cans, and textile banks for recycling clothes in good condition. In 2022, 5,720 tonnes of glass and 31 tonnes of aluminium cans were collected in Fingal. On average 220 tonnes of textiles are recovered annually from Fingal textile banks.

Anti-Graffiti artwork at bottle bank site

CASE STUDY

FINGAL COUNTY COUNCIL REUSE AND REPAIR

Fingal County Council supports various waste reduction / repair & reuse / circular economy initiatives in partnership with Rediscovery Centre Ballymun. Throughout 2022 Rediscover Cycling sourced 134 bikes from the Estuary Civic Amenity site. These were repaired and serviced by Rediscover Cycling staff. Forty two of these bikes were donated to residents in the Balseskin Migrant Reception Centre.

Rediscover Paint collected 5,564 kgs of paint for ReUse from the Estuary Civic Amenity site, which was otherwise destined for hazardous waste collection and treatment. The paint was re-processed and re-packaged by trained specialists at the Rediscovery Centre. Fingal County Council made 1646 litres of this paint available, free of charge, to Tidy Towns and community groups across the county for use in public spaces, schools, and buildings.

The Fingal musical instruments project has grown with a regular supply of instruments being presented at the Civic Amenity Sites. Instruments are cleaned, repaired, and re-distributed into the community for ReUse. Recipients include schools, migrant centres, centres for autism and rehabilitation, and individuals. These initiatives prolong the life of existing products and materials and avoid the creation of emissions in the production of new products. The success of the instrument project has led it to being scaled up by several local authorities.

Musical Instrument donations to Fingal Schools

Rush Tidy Towns painted Public Toilets using Recycled Paint

CASE STUDY

BROWN BIN APARTMENT PROJECT 2023

A recent EPA study[46] showed that most household organic waste nationally (60%) continues to end up in the residual and recycling bins. Key objectives of the Food Waste Regulations[45] are to reduce the amount of organic waste going into residual bins and to increase the levels going into dedicated brown bins that can then be recycled; and also to make sure that Brown Bin services are available to all householders.

To assess compliance with the Food Waste Regulations[45], Fingal County Councils Waste Enforcement Section have commenced a project by gathering information on the number of Brown Bin services currently in use at apartment complexes within Fingal. Information was sought from the ten waste collection companies operating in Fingal through the use of Regulation 10 Notices to confirm if brown bin service provision at apartment complexes was currently in place. Contact was made with the waste collection companies in September 2022 whereby a list of over fifty property management companies was compiled for follow on investigations.

Management companies have been asked to submit a waste management plan for brown bin implementation and to have the service in place within an agreed timeframe. Engagement with the property management companies is ongoing.

This project will reduce the amount of organic waste being disposed of through residual waste bins and increase the amount food waste that can be recycled for other uses such as compost.

WASTE PREVENTION & ENFORCEMENT

The Council in its role as a Waste Regulator works to improve compliance with waste legislation and develop better waste prevention and waste management strategies.

The Annual Inspection and Compliance Plan under the EU / EPA Recommended Minimum Criteria for Environmental Inspections[47] ensures the efficient delivery of targets for environmental inspections. Under the Plan, monitoring of authorised and unauthorised waste activities and enforcement of waste legislation is ongoing.

Construction and Demolition waste represents the largest waste stream in Ireland. Food waste is a global problem with environmental, social, and economic consequences. Fingal County Council is working increase compliance in these areas, including the segregation of domestic and commercial waste and the management of construction & demolition waste.

ADDITIONAL BENEFITS TO CIRCULAR ECONOMY AND RESOURCE MANAGEMENT ACTIONS:

A move towards a more circular economy should:

- Increase competitiveness, stimulate innovation, boost economic growth, and create jobs in Ireland.
- Stimulate local employment through the repair and reuse sectors in the short term.
- Result in savings for consumers through better quality and longer lasting products which can be repaired and reused.
- Result in increased resilience of Irish businesses who will be less dependent on imports and supply chain shocks.
- Improve social justice and enable a 'Just Transition' through a more sharing economic model.
- Reduce waste generation.

The success of Circular Economy and Resource Management Policies and Plans relies on behavioural change. As a society and individually, we need to become more aware of the links between our own daily choices and activities, and the impact on the environment.

CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Green Public Procurement							
R1	Develop a Green Public Procurement (GPP) strategy	Strategy developed and adopted by Steering Group	2023	Mitigation	Influence	People, Corporate & Digital Services	
R2	Develop a monitoring and reporting tool to ensure GPP is embedded into all Procurements	Tool Developed and Approved by Steering Group	2024	Mitigation	Influence	People, Corporate & Digital Services	
R3	Ensure GPP Monitoring & Reporting is undertaken to ensure Green Criteria is included in contracts.	# of contracts assessed for GPP inclusion	Ongoing	Mitigation	Influence	All	
Reduce Waste & Increase Recycling in FCC							
R4	Implement Environmental Management System for Council buildings including reduction in waste and water usage, and increased recycling	EMS implemented	Annually	Mitigation	Full Accountability	People, Corporate & Digital Services	
R5	31 Community centres to participate in FCC Keen to be Green initiative over 5 stages	Implementation of sustainable initiatives identified in each stage	2028	Mitigation	Full Accountability / Co-ordinate and Facilitate	Housing & Community	Community Facilities Network
Waste Reduction / Circular Economy							
R6	Support and promote the implementation of the targets of the National Waste Management Plan for a Circular Economy 2023-2029	# of initiatives supported	Annually	Mitigation	Influence / Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	
R7	Establish a network of public drinking water fountains to help reduce plastic waste in partnership with Uisce Eireann	# of new points installed	2026	Mitigation	Influence	Operations, P&SI, ECAAT	Uisce Eireann
Waste Prevention							
R8[38]	Assessment of Construction & Demolition Waste Management Plans for proposed developments to ensure all potential waste streams are identified at an early stage and appropriate measures put in place to promote prevention, reuse, recycling and recovery of waste in line with the waste hierarchy. The segregation and management of different waste streams is also assessed.	# of assessments undertaken yearly and compliance with best practice guidance for Construction & Demolition waste management.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Developers, Consulting Engineering Companies, Architectural Firms.

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CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
R9	Assessment of all apartment complexes within Fingal on the management of food waste and use of brown bins. Engagement with apartment management companies to ensure compliance with legislation and to encourage segregation of food waste by residents and subsequent collection by authorised collectors.	# of apartment complexes engaged with and the # apartment complexes with brown bin collection service in place.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Management Companies, Waste Collectors,
R10	Waste Collection Permit and Waste Facility Permit holders desktop annual return (AR) validation and on site verification audits to improve traceability of the various waste streams	# of compliant Annual Return validations/ verifications completed	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Waste Collectors, Waste Facilities, National Waste Collection Permit Office (NWCPO).
R11	Waste Presentation Bye-Law Project - identify households who currently don't have a standard waste collection service in place, investigate and determine how they are managing their waste; encourage compliance with FCC Waste Presentation Bye-Laws and take legal action if required to ensure compliance	# of households engaged with and # of engagements resulting in bin service put in place	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Households residing in Fingal, Data Management Company,
R12	Assessment of commercial premises within Fingal to ensure compliance with the Waste Presentation Bye-Laws and the Waste Management (Food Waste) Regulations 2009 in terms of waste segregation and in particular food waste.	# of commercial premises engaged with and the # of commercial premises with 3 bin system in place with an emphasis on management of food waste.	Annually	Mitigation	Influence	Environment, Climate Action and Active Travel	Commercial Premises,
Promote & Facilitate Circular Economy							
R13[39]	Prepare Circular Cities Action Plan	Circular Cities Action Plan Complete	2024	Mitigation	Full Accountability / Influence	Economic, Enterprise, Tourism & Cultural Development	
R14[40]	Implement measures under the Circular Cities Action Plan	"Measures Implemented Review completed"	Annually	Mitigation	Full Accountability / Influence	Economic, Enterprise, Tourism & Cultural Development	

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CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
R15	Incorporate circular economy principles in FCC Economic Development Strategy	Circular Economy principles incorporated in Economic Development Strategy	2024	Mitigation	Influence	Economic, Enterprise, Tourism & Cultural Development	
R16	Reduce carbon footprint of Council supported events.	Carbon footprint reduced at events	Annually	Mitigation	Full Accountability / Influence	Economic, Enterprise, Tourism & Cultural Development	
Recycling / Circular Economy							
R17[41]	Extending opening hours in Coolmine in line with Estuary Recycle Centre	Opening Hours extended	2024	Mitigation	Influence	Operations	
R18[42]	Expand the bring bank network (bottles, cans & textiles) throughout Fingal by a minimum of 3 sites annually, giving consideration to new areas of populations and development.	# of new bring bank sites	2028	Mitigation	Influence	Environment, Climate Action and Active Travel	Glassco
R19	Provide paints, musical instruments and bicycles from Estuary & Coolmine civic amenity centres to community groups for re-use. Identify other used items that could be collected at the Civic Amenity Centres and re-purposed, re-imagined or repaired for re-use.	# of items re-used	Annually	Adaptation	Influence / Coordinate and Facilitate	Environment, Climate Action and Active Travel	
Land Use & Acquisition							
R20[43]	Assess Council lands & buildings for potential for renewable energy, biodiversity; green infrastructure, sustainable agriculture & other sustainable projects.	Land & building assessment complete	2024	Mitigation & Adaptation	Full Accountability	Economic, Enterprise, Tourism & Cultural Development	
R21[44]	Develop renewable energy, green infrastructure, biodiversity, sustainable agriculture & other sustainable projects on Council lands & buildings.	No. of projects/ measures implemented annually	2028	Mitigation & Adaptation	Full Accountability	Economic, Enterprise, Tourism & Cultural Development	
R22	Identify opportunities for the acquisition of land and buildings by agreement/ CPO for renewable energy/ regeneration/active travel/greenway/green infrastructure projects etc	Area of land (Ha) or no. of buildings acquired for Climate Action Projects	Ongoing	Mitigation & Adaptation	Full Accountability / Influence	Economic, Enterprise, Tourism & Cultural Development	

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COMMUNITY ENGAGEMENT

Photo Source: Fingal County Council

COMMUNITY ENGAGEMENT

The national Climate Action Plan 2023[11] states that delivering on our climate ambition requires the Government and citizens of Ireland, to come together in a strengthened 'social contract' for climate action and the co-creation of real solutions to climate change, that are meaningful, inclusive, fair, and accessible for all.

In developing, implementing, and monitoring its existing Climate Change Action Plan 2019-2024[29], Fingal County Council has established a track record of engaging with citizens and stakeholders on climate action; and aims to build on this, through the development and implementation of this Draft Climate Action Plan.

FINGAL COUNTY COUNCIL'S KEY ACTION AREAS FOR COMMUNITY ENGAGEMENT

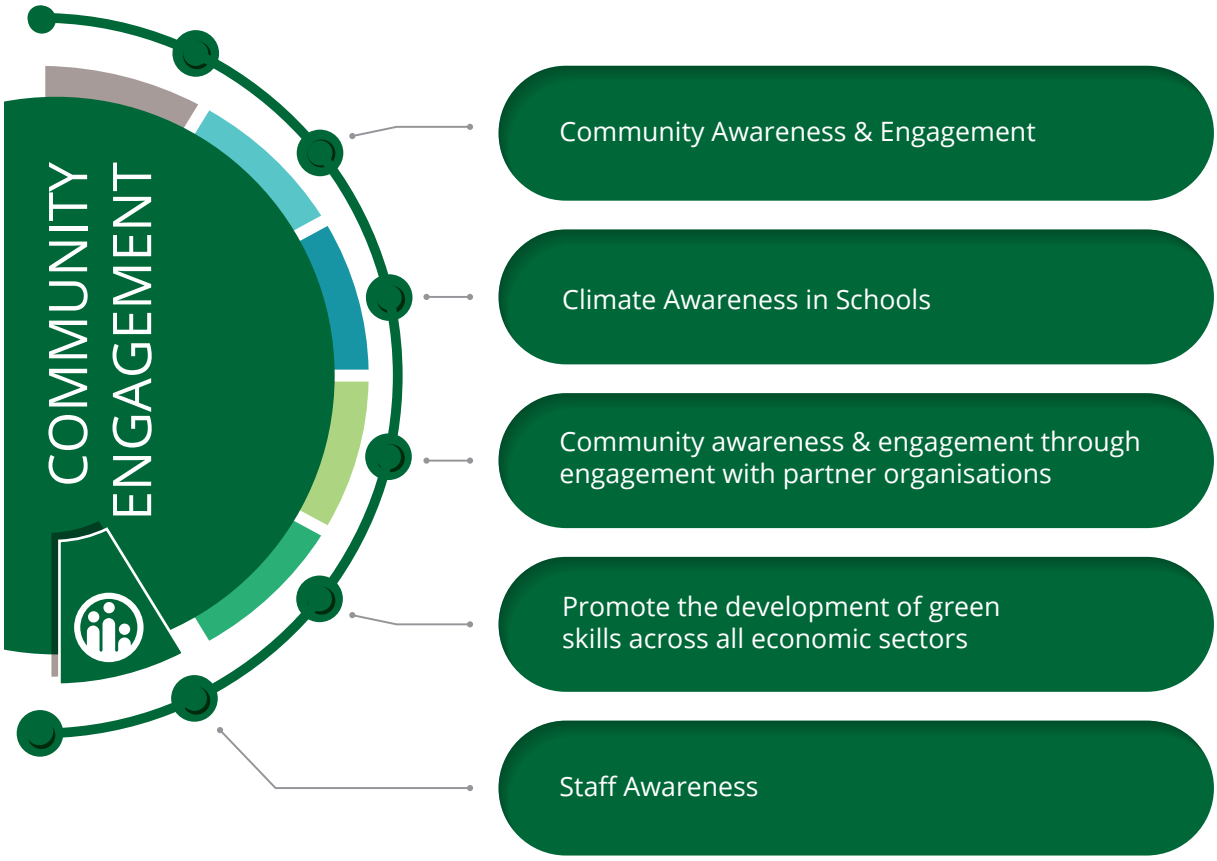

Figure 5.9: Fingal County Council's Key Objectives to engage with Communities on Climate Action

COMMUNITY AWARENESS & ENGAGEMENT

In 2021 and 2022 Fingal County Council, in partnership with the Dublin Local Authorities, Codema – Dublin's Energy Agency and the Dublin Climate Action Regional Office (CARO), organised a full schedule of public engagement events on climate action across Dublin, covering the thematic areas of the existing Climate Change Action Plans. **www.dublinclimateactionweek.ie**

DUBLIN CLIMATE ACTION WEEK

www.dublinclimateactionweek.ie

This partnership aimed to demonstrate progress on the implementation of the four Dublin local authority Climate Change Action Plans, to make climate action a 'reality' allowing citizens to see what climate action can look like; and to share knowledge with partners. In total, over 110 in-person and on-line events were delivered across the CCAP[29] thematic areas in 2021 & 2022. The website www.dublinclimateactionweek.ie continues to be a repository for information containing recordings of events and links to local authority work in the area of climate action.

CASE STUDY

MINI CLIMATE ACTION FESTIVAL, MILLENNIUM PARK BLANCHARDSTOWN

As part of Dublin Climate Action Week 2022, Fingal County Council's Environment Climate Action and Active Travel Department hosted a Mini Climate Action Festival in Millennium Park in Blanchardstown. The festivals circular economy theme had a focus on promoting sustainable living through reuse and repair.

The festival was an immersive experience, with members of the community enjoying practical sustainability workshops covering active travel, bike repair, food waste and composting, community gardening, fast fashion/swap shop and alternatives to everyday single use household items. The Fingal Instruments Project, which repairs musical instruments collected in the recycling centres and redistributes them in the community, gave away twenty instruments throughout the day. Musicians entertained the crowd playing instruments which had come through the recycling centres.

Attendees were provided with an opportunity to calculate their carbon footprint using the Environmental Protection Agency's carbon calculator, and people had opportunities to learn how to reduce carbon emissions individually, at home, as a family, and as a community.

Mini Climate Festival at Millennium Park for DCAW22

In addition to Dublin Climate Action Week, the Council has engaged in Climate Action Awareness & Engagement activities across various functions and services, through the implementation of the CCAP, and through its strong network of community groups, businesses, sports clubs, schools, and residents' associations and examples are given below. The Council has also provided and funded numerous Climate Action and Environmental Awareness workshops and training courses for schools, community groups, tidy towns groups and youth and age friendly groups. The Council commits to build on this effort and aims to show leadership in this area through the implementation of this Plan.

CASE STUDY

WORLD SAND DUNE DAY, FCC CITIZEN AND STAKEHOLDER AWARENESS AND ENGAGEMENT EVENT.

World Sand Dune Day, designed to highlight the importance of sand dunes, fell on Saturday 24th June 2023 and Fingal County Council hosted a well-received sand dune awareness event at Rush South Beach. Sand dunes are a natural defence against coastal erosion and flooding. As fragile ecosystems, they are at risk of being damaged by intense storms which are predicted to increase into the future as a direct result of climate change.

The Council's Climate Action Section partnered with An Taisce's Clean Coasts, representatives from Trinity College's Geography Department, the Dublin CARO and Rush Tidy Towns, to deliver a walk and talk to the dunes. The event raised awareness of the importance of sand dunes, how dune systems should be managed and what members of the public can do to help protect sand dunes.

The Council erected a 1km cordon of rope and wooden posts along the dunes to discourage the public from walking on the dunes and causing further erosion.

1km of recently erected rope and wooden post cordon with bi-lingual signage to encourage people to stay off the dunes in order to protect them.

COMMUNITY CLIMATE ACTION FUND

The Minister for the Environment, Climate and Communications, has recently launched a new Climate Action Fund (Strand 1 - Building Low Carbon Communities). This is a fund of €24 million for local authorities to administer across their functional areas, to help support and build low carbon communities. This funding is part of the Community Climate Action Programme, which aims to support projects and initiatives that facilitate community climate action through education, capacity building and learning by doing.

Community projects eligible for this potential funding will address the following five themes:

- Community and Energy Projects
- Travel
- Food and waste
- Shopping and recycling
- Local climate and environmental action

Fingal County Council has appointed a dedicated Community Climate Action Officer to guide and support communities to develop projects and initiative. For information and guidance contact: **CommClimateActionOfficer@fingal.ie**

CLIMATE AWARENESS IN SCHOOLS

At a school level, the Council's Environmental Awareness officer works closely with the An Taisce Green Schools programme, to continue awareness activities and Green Flag awards in both primary and post-primary schools. An Taisce has also developed new resources for teachers on climate action, to overlap with teaching curriculums. Numerous workshops, facilitated by experts from the Rediscovery Centre, VOICE and Global Action Plan, are funded on an ongoing basis for Fingal schools. Funds are also available for schools for eliminating single use items and introducing segregated recycling systems. The Composting for Schools Programme which was co-created in Fingal in partnership with the Dublin Local Authorities and Composting Ireland, has introduced composting in over 60 Fingal schools. Students, caretakers and teachers learn to compost food waste, wormeries, and landscape and gardening waste.

Fingal County Council funded a community 'leaf mould' initiative in 2022 and will roll it out each year in the autumn. One hundred and forty Community Leaf-Mould Cages have been set up in high leaf-fall areas involving almost thirty community groups and schools. Groups fill the cages with leaves and manage the process to produce compost for gardening projects locally.

COMMUNITY AWARENESS & ENGAGEMENT THROUGH ENGAGEMENT WITH PARTNER ORGANISATIONS

Fingal Country Council has worked to actively promote and support the SEAI Sustainable Energy Communities (SEC) programme, which is a funding and support programme aimed at helping communities to work together to become energy-smart and more sustainable. Codema is the regional co-ordinator for the SEC network in the Dublin & Mid-East Region. Fingal County Council currently has twenty-two Sustainable Energy Communities. As an ongoing commitment to the programme, a Memorandum of Understanding was signed in 2022 between Fingal County Council and SEAI. A local mentor guides the SEC through a three-step process of 'Learn-Plan-Do.' This process is aimed at assisting SEC become more energy-efficient, use renewable energy, and consider smart energy solutions. A Fingal information webinar can be viewed at **https://www.youtube.com/watch?v=GfeUgjP7YB4**

Another ongoing programme is the CARO led, GAA Green Clubs Programme, which sees Local Authorities work with local clubs by offering advice and guidance in helping clubs to complete sustainability and climate action projects under the Programme.

CASE STUDY

GLOBAL ACTION PLAN CLIMATE HERO'S CHALLENGE

In early 2023, the environmental education organisation, Global Action Plan organised a "Climate Heroes" challenge. The national competition, funded by Irish Aid, was designed to illustrate the immediate impact that small lifestyle changes can have on reducing our carbon footprint. The challenge raised awareness of individual greenhouse gas emissions in the areas of transport, food, consumption, and energy and aimed to inspire others to make changes and create a more sustainable future for all. Sixty-eight community groups and organisations from all around Ireland took part in the challenge including twenty-one community groups from the Fingal area. Each group logged everyday climate impact activities in a bid to save the greatest amount of greenhouse-gas emissions. Fingal's groups came out on top, saving 14,744 kgs of carbon dioxide. The National Climate Action Hero Awards ceremony was held at Fingal's County Hall headquarters in June 2023, and awards designed by The Rediscovery Centre were presented to the Ukranian Volunteers of Ireland, Castleknock Tidy Towns, Myrtle The Coast Residents Association and Prosper Group by the Mayor of Fingal, Councillor Adrian Henchy and Hans Zomer, CEO with Global Action Plan.

CASE STUDY

COMMUNITY TREE PLANTING

The Council's Environment Climate Action and Active Travel Department in partnership with Operations Department have facilitated Community Tree Planting during the Winter months in green spaces around Fingal. A mix of native trees, with native providence, such as Oak, Birch, Rowan, Holly, Scots Pine, Hazel and Alder are planted by members of the public. The events have become popular with groups of students from local schools and with individuals wishing to mark an occasion. Local Community groups and Tidy Towns members attend the events and Climate Action information is provided.

New trees planted in Malahide Castle grounds by local community

CASE STUDY

REUSABLE CUP CAMPAIGN

A Reusable Cup Campaign was organised in Skerries in April 2022 in collaboration with The Conscious Cup Campaign, Skerries Tidy Towns and local fourteen local businesses in the area. Reusable cups were promoted in the local cafés and businesses and promotional material supplied by Fingal County Council and The Conscious Cup Campaign. The Council supported a competition, and fourteen local businesses came together to make a #wechoosereuse video encouraging reusables. Disposable coffee cups are a significant waste problem, not just in Ireland but globally. Takeaway cups are not recyclable in Ireland and many other countries. 22,000 single use coffee cups are disposed of in Ireland every hour.

The Conscious Cup Campaign has prepared a Café Map where people can search for cafés in local areas which welcome reusable cups **https://www.consciouscup.ie/cafe-map.php.**

STAFF AWARENESS & TRAINING

In partnership with the CAROs and the Local Authority Services National Training Group (LASTNG), climate action training continues to be rolled out for the entire local authority sector, including elected representatives, to empower and upskill staff to act as leaders on climate action. In addition to this, there is regular climate action awareness messaging through internal Council communication channels.

Engaging and empowering communities can make it possible to realise the multiple opportunities that a transition to a carbon-neutral society and economy presents, such as new sustainable careers, warmer more energy-efficient homes, better travel options, more sustainable consumer choice, integrated spatial planning, cleaner air and water and a better environment for future generations.

By continuing to demonstrate leadership on Climate Action, and actively engaging with communities on climate action, the Council hopes to increase collaboration with communities for positive change in various aspects of community life.

COMMUNITY ENGAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
Community Awareness & Engagement							
C1	Promote & Administer Community Climate Action grants for 2023 - 2026. Approve grants to communities to deliver climate action projects across the thematic areas as per Grant guidelines.	# of grants for climate action projects across each thematic area	2026	Mitigation & Adaptation	Influence / Coordinate and Facilitate	Environment, Climate Action and Active Travel	
C2	Deliver Climate Action Week program of events in conjunction with DLA	# of events held, # of citizens engaged	Annually	Mitigation & Adaptation	Coordinate and Facilitate / Advocate	Environment, Climate Action and Active Travel	DLA, CARO, Codema
C3	Develop an annual calendar of climate action & environmental awareness days of significance which will include international and national days, such as the World Earth Day, World Sand Dune day, National Reuse Month, National Bike Week, Dublin Climate Action Week, All Dublin Clean up week. Targeted campaigns to promote activities as per calendar timeline.	Annual calendar of activities developed from January to December each year. # of activities promoted.	Annually	Mitigation & Adaptation	Coordinate and Facilitate / Advocate	Environment, Climate Action and Active Travel	
C4	Utilise various forms of media including FCC social media, FCC website, newsletters, & cinema campaigns to promote climate action awareness.	# of campaigns	Annually	Mitigation & Adaptation	Advocate	Environment, Climate Action and Active Travel	
C5	Develop a library of climate material including webinars, books, articles and digital training resources covering Climate Science, Climate Action, Just Transition, the LACAP, National and Local Climate Action Plans and make available to the public through the Fingal's social media channels and Fingal Libraries.	# of supports for public, # of citizens engaged	Annually	Mitigation & Adaptation	Advocate	ECAAT / EETD	Libraries
Climate Awareness in Schools							
C6	Engage with DLA to scope requirement for delivering Climate Action Awareness in Schools, through training providers, in advance of Climate Action Awareness being mainstreamed within school curriculum.	Agreed programme scoped and delivered accordingly	2024	Mitigation & Adaptation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	An Taisce, Comhairle na nÓg
C7	Engage with schools and An Taisce and provide resources & funding to deliver green flags and achieve green schools status.	# of schools engaged, # of students participating	2028	Mitigation & Adaptation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	An Taisce

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

COMMUNITY ENGAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
C8	Provide resources including funding to schools in Fingal as support to engage in resource management projects. Projects may include composting for schools, gardening and vegetable growing projects, resources packs and installation of water butts.	# of schools engaged, # of gardening projects, # of composting projects, # of resource packs provided, # of water butts installed	Annually	Mitigation & Adaptation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	
Community awareness & engagement through engagement with partner organisations							
C9	Provide an annual energy awareness event in partnership with Codema, SEAI and other stakeholders	Annual event held	Annually	Mitigation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	Codema, SEAI, CARO
C10[45]	Promote and support SEAI's Better Energy Communities and Sustainable Energy Communities	# of communities supported	Annually	Mitigation	Co-ordinate and Facilitate / Advocate	Environment, Climate Action and Active Travel	Codema, SEAI, CARO
C11	Pilot Climate Action workshops with Tidy Town committees to promote awareness of climate action at a local level.	# of workshops	Annually	Mitigation & Adaptation	Co-ordinate and Facilitate / Advocate	Environment, Climate Action and Active Travel	Tidy Towns, Workshop Providers
C12[46]	Involve residents and community groups, e.g. Tidy Towns/community garden groups, in the establishment of newly planted trees in their area, e.g. watering	Number of people involved	Annually	Adaptation & Mitigation	Co-ordinate and Facilitate	Planning & Strategic Infrastructure	
C13	Guided by the Memorandum of Understanding signed between the GAA and CCMA, towards working together on sustainability and climate action projects, engage with the Green Club Programme through a nominated lead, working with the CARO and GAA, in the promotion and support of projects by participating clubs, to meet the objectives, and during key phases, of the programme to 2029	# of clubs engaged, # of students participating	Annually	Mitigation & Adaptation	Co-ordinate and Facilitate	Environment, Climate Action and Active Travel	GAA, CARO
C14	Keen to be Green Communities: supporting community groups to develop climate awareness projects such as bike repair workshops, clothes swaps, community gardens, green festivals.	# of initiatives / projects supported and examples	Annually	Mitigation	Co-ordinate and Facilitate	Housing & Community	Community Facilities Network

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

COMMUNITY ENGAGEMENT

Ref	Action	Tracking Measure	Timeframe	Mitigation / Adaptation	LA Role	Lead Department(s)	Partner(s)
C15	Work with Global Action Plan on the further development of Climate Action Heroes programme across communities	Programme Supported Annually	Annually	Mitigation	Co-ordinate and Facilitate	Housing & Community	Global Action Plan
C16	Promote LEADER Projects on sustainability	No. of LEADER Projects on sustainability	Ongoing	Mitigation & Adaptation	Co-ordinate and Facilitate / Advocate	Economic, Enterprise, Tourism & Cultural Development	LEADER
C17	Provide resources including equipment and funding for marine clean-up and awareness events. Deliver an annual coastal event in the community such as awareness of and protection measures for sand dunes.	# of initiatives supported by the Council each year, One event per year delivered	Annually	Mitigation & Adaptation	Co-ordinate and Facilitate / Advocate	Environment, Climate Action and Active Travel	Clean Coasts,
C18	Sport Grants - Clubs must provide evidence of 'circular economy' and other sustainable initiatives as appropriate.	# of applications approved with evidence of sustainable initiatives	Annually	Mitigation	Influence / Advocate	Housing & Community	Sports Clubs
Promote the development of green skills across all economic sectors							
C19	Review Fingal Skills Strategy which includes the development of green skills across all economic sectors	Skills strategy review completed	2024	Mitigation & Adaptation	Influence	Economic, Enterprise, Tourism & Cultural Development	
C20	Expand participation in Green Skills Sub-Group under Fingal Skills Strategy	Group membership expanded	Annually	Mitigation & Adaptation	Influence	Economic, Enterprise, Tourism & Cultural Development	
C21	Establish an Agri-Food Skills Sub-Group under Fingal Skills Strategy to promote diversification within the Agri-Food Sector	Membership of group & number of initiatives promoted	2024	Mitigation & Adaptation	Influence	Economic, Enterprise, Tourism & Cultural Development	
Staff Awareness							
C22	Provide Climate Awareness training for all staff and elected members and identify opportunities to embed climate awareness across all departments	# of staff trained, # of councillors trained	Annually	Mitigation & Adaptation	Co-ordinate and Facilitate / Advocate	People, Corporate & Digital Services	Codema, CARO, LASNTG
C23	Develop climate action induction pack for all new staff.	Pack developed	2024	Mitigation & Adaptation	Advocate	People, Corporate & Digital Services	CARO

Actions with a note are summary actions. Integrated Environmental Considerations following Strategic Environmental Assessment and Appropriate Assessment of the actions in this Draft Plan can be viewed in appendix 1.

6. DECARBONISING ZONE

INTRODUCTION

WHAT IS A DECARBONISING ZONE?

A Decarbonising Zone (DZ) is a chosen area where local authorities and communities work together to reduce the amount of carbon produced by their everyday activities. By looking within the community for ways to live and work more sustainably, these zones can find local solutions to global problems, such as reducing greenhouse gas emissions, improving air quality, saving energy and reducing waste.

The main objective of a Decarbonising Zone is to find innovative but achievable ways to reduce greenhouse gas emissions from the area by 51% by 2030, based on 2018 levels, in line with the National Climate Objective[11]. Each zone's plan will be based on the characteristics of the area, what is of benefit to the local community, and how these elements can work together to reduce or remove carbon and other greenhouse gases from the zone.

By creating these zones nationwide, different approaches and projects can be tested and perfected, allowing other communities to apply these ideas based on their own needs.

WHY IS THE 'DECARBONISING ZONE' PROJECT HAPPENING?

Under the National Climate Action Plan 2019[48], every local authority in the country is required to plan a Decarbonising Zone. Further to this, as part of the Climate Action and Low Carbon Development (Amendment) Act 2021[1], every local authority is also required to produce a detailed Climate Action Plan. The Guidelines for Local Authority Climate Action Plans[17] published by the Department of the Environment, Climate and Communication (DECC) in 2023, clarified that Decarbonising Zones must now be included in all local authority Climate Action Plans.

WHY WAS BALBRIGGAN CHOSEN?

To qualify as Decarbonising Zones, the chosen areas need to have certain characteristics that have potential for climate action across a variety of sectors. Balbriggan was chosen as a Decarbonising Zone as it was considered; 1) to be ready to support climate action, 2) to have a strong sense of community, 3) to be the right size in terms of population (at least 5,000 people for urban decarbonising zones).

As a Decarbonising Zone, Balbriggan also has a lot of potential for developing new and existing climate projects, with opportunities for tackling a host of issues. For example, air quality could be improved by looking at increasing use of public transport, active travel, and mobility hubs. Energy sustainability could be addressed with new energy infrastructure, like electricity network upgrades and district heating, and by improving efficiency and renewable heat in residential, public, and commercial sector buildings. There are opportunities for greening projects that support biodiversity in both public and privately held areas of land.

Additionally, the Our Balbriggan project which aims to transform and rejuvenate Balbriggan by 2027 is currently underway with government funding of over €50m. Together, the Our Balbriggan project and decarbonising zone have the potential to be developed hand in hand, and make a greater positive impact for the area.

VISION FOR DZ

The Council has developed a draft vision for the Balbriggan Decarbonising Zone as follows:

THE DECARBONISING ZONE OF BALBRIGGAN WILL SHOWCASE THE OPPORTUNITIES FOR DECARBONISATION AND SUSTAINABLE LIVING IN OUR COUNTY.

THE BALBRIGGAN DECARBONISING ZONE TODAY

INTRODUCTION

In order to achieve the target of a 51% reduction in carbon emissions by 2030, we first need to know; 1) the current emissions in the decarbonising zone, 2) what activities are producing them, and 3) the purpose of these activities.

In this section we look at everything from the population breakdown and travel patterns, to the types of buildings and heating systems within the area. This gives us a detailed overview in terms of knowing existing behaviours, activities and infrastructure so that we can decide how best to develop solutions together that are tailored to Balbriggan and everyone living and working here.

SIZE, ZONING AND INFRASTRUCTURE

Balbriggan is a coastal town, about 34 km north of Dublin city. The Balbriggan decarbonising zone (DZ) is shown in Figure 6.1 & Figure 6.2 below. It encompasses the core town centre of Balbriggan, and residential areas lying largely north of the river Bracken. The zone is mainly used for residential purposes, which cover 33% of the total area. The town centre covers the second biggest area (around 19%). Open space (parks etc) and roads both also have significant areas with 17% of the total space each.

The total area is 1.3 km2, including approximately 3,680 households, and 80 commercial and industrial buildings.

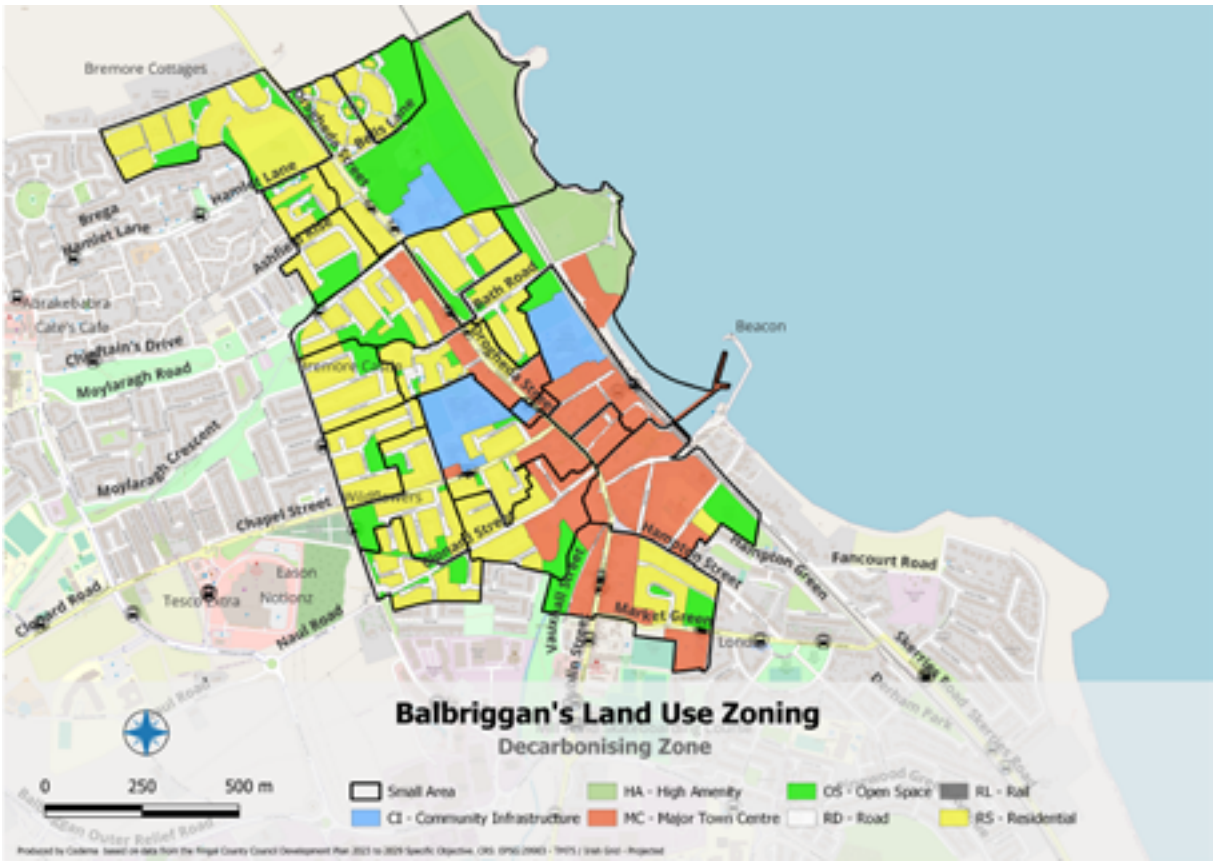

Figure 6.1: *Location of Balbriggan DZ and land use zoning within the DZ*

POPULATION

The population of Balbriggan DZ is approximately 5,900 inhabitants. The age profile is made up of 12.6% of people older than 60 years of age, 32.8% younger than 20 years of age, and the remaining 54.6% are between 20 and 60 years old.

PUBLIC INFRASTRUCTURE

In addition to the town centre, residential and open space areas, Balbriggan DZ includes the following amenities and public places shown in Figure 2.

- **Balbriggan harbour**
- **Balbriggan beach**
- **Courthouse**
- **Health centre**
- **Community centre**
- **Garda station**
- **Schools**
- **Sports and community organisations**

TRANSPORT LINKS

Balbriggan is served by the Belfast–Dublin rail line which is the main and busiest railway route on the island of Ireland that connects Dublin Connolly station in the Republic of Ireland and Belfast Lanyon Place station in Northern Ireland. Balbriggan is also accessed by the M1 motorway, approximately 2 km west of the town. Dublin Bus routes 33 and the 33n Nitelink also serve Balbriggan.

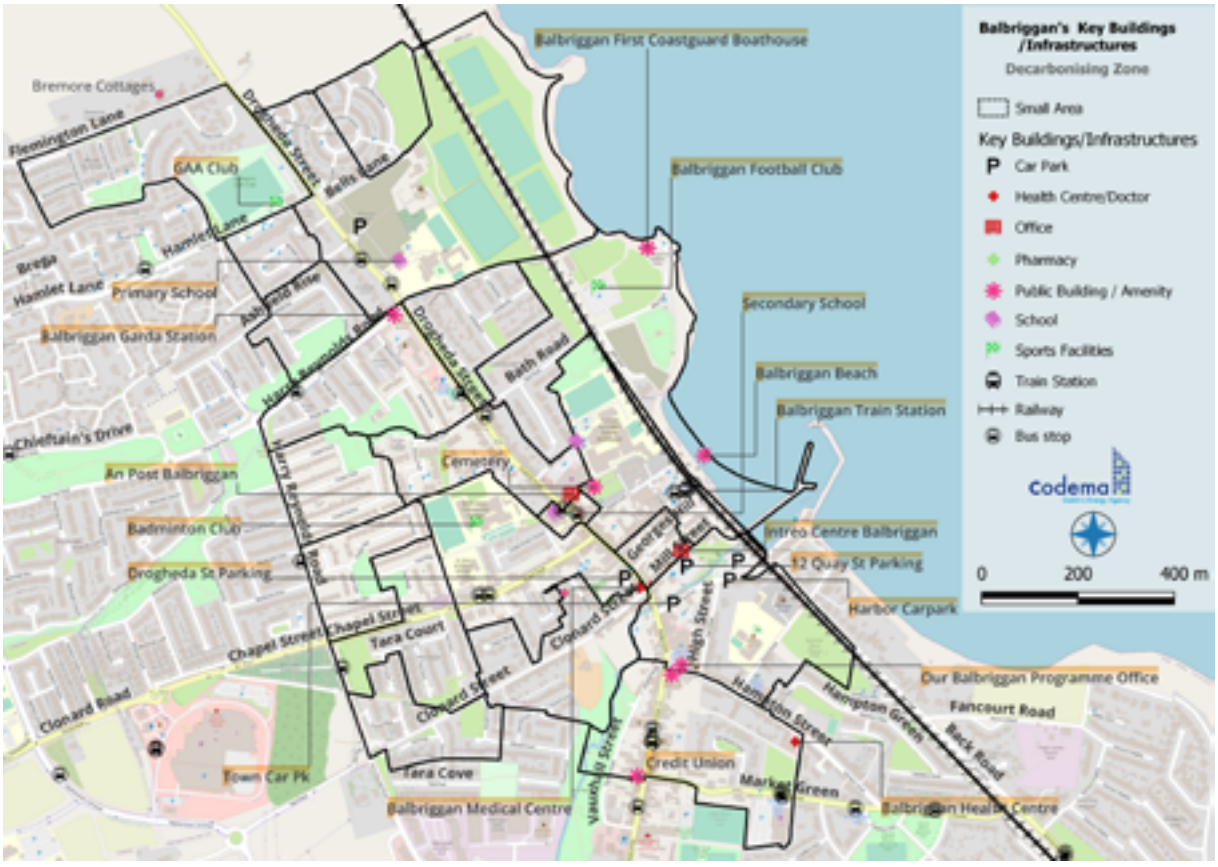

Figure 6.2: *Amenities and public spaces in Balbriggan DZ*

EXISTING KEY CONTACTS AND STAKEHOLDERS

Stakeholder engagement is essential to the development of the Decarbonising Zone plans. For example, the National Guidelines of the Local Authority Climate Action Plans[17] recommends early and continued engagement of stakeholders throughout the project. Additionally, the guidance highlights that the Local Authority does not possess "the control or power to directly influence all of the energy and emission reductions within the boundaries of the DZ area". Therefore, it is crucial to engage a wide range of sectors and stakeholders in the DZ process to identify actions and progress the development and implementation of the plan[27].

To ensure a fair and just process in developing and implementing the Balbriggan DZ, Fingal County Council plans to engage stakeholders from the local area such as community groups, educational facilities, health centres, childcare and youth groups, faith bodies and the creative arts.

It will be crucial to identify and engage "key intermediaries" such as those with wide community following and influence in the area. These trusted groups and individuals can act as "connectors" between the community and the Council, leveraging existing projects, raising awareness of the DZ plans and engaging the wider community.

One example of a key intermediary group that should be engaged in the DZ process are the Sustainable Energy Communities (SEC) in the area. An SEC is a group of people who have come together to improve how energy is used within the community and develop energy efficiency improvements for the benefit of their community. SEC often look at projects in homes, transport and local business. They aim to:

- be energy-efficient
- use renewable energy
- consider smart energy solutions

An SEC can include a range of different energy users in the community such as houses, sports clubs, community centres, churches and businesses. In this way, an SEC connects sustainable energy, local economic development and public wellbeing. There are two SEAI[28] SEC in Balbriggan - 'Fingal Renewable', and 'Balbriggan Sustainable Energy Community'.

EMISSIONS WITHIN THE BALBRIGGAN DECARBONISING ZONE

A Baseline Emissions Inventory (BEI) is a way of taking a snapshot of how much greenhouse gases are currently being released in a specific area. It looks at sources of emissions, such as factories, cars, homes, and other activities as well as electricity usage and waste management. The Baseline Emissions Inventory helps guide the actions taken in the decarbonising zones.

The Baseline Emissions Inventory was developed using methodologies from several Codema reports[29], national guidelines for local authority climate action plans[30] and supporting datasets[31] . The series of maps outlined in the following section have been created using the same methodologies, sources and datasets.

BEI for Decarbonising Zones Nationally will use a baseline of 2018. Using this baseline data, it's possible to see where the biggest potential for carbon savings can be made, and how to consider approaches to reach the goal of 51% reduction by 2030 (Figure 6.3). The results show that the Balbriggan DZ produced 15,890 tCO_2 equivalent in 2018. By comparing 2030 emissions data to the 2018 baseline, it will be possible to see the progress made and measure the success of climate actions across the zone.

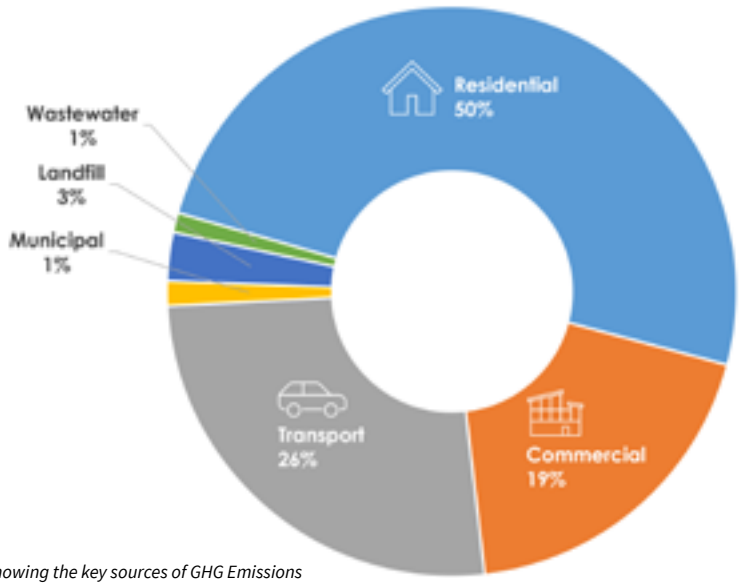

Figure 6.3: Baseline Emissions Inventory for Balbriggan DZ showing the key sources of GHG Emissions

RESIDENTIAL EMISSIONS

The following series of maps[32] - residential emissions, building energy rating, and heating system (Figures 6.4 – 6.6) - help us to understand the type of homes and heating systems in the Balbriggan Decarbonising Zone. Together they help us to understand the areas where home energy upgrades or retrofits can have the greatest impact on emissions and air quality, and the type of work that will be required.

Figure 6.4 below shows the spatial breakdown of residential emissions in the Balbriggan Decarbonising Zone, per 'small area[33]' highlighting the areas of highest and lowest emissions from the residential sector. The darker colours on the map help to show the areas where home energy upgrades can have the greatest impact on reducing emissions.

A Building Energy Rating (BER) certificate rates a home's energy performance on a scale between A and G. A-rated homes are the most energy efficient while G-rated homes are the least energy efficient. Figure 6.5 below shows the average Building Energy Rating (BER) of the houses in each small area in the Balbriggan DZ. The BERs are largely in the mid to lower ranges of C3, D1, D2 ratings reflecting the ageing building stock in this area, and highlighting the considerable work required to meet the national aims of improving the BER of our building stock.

Figure 6.6 below shows the areas where the primary heating fuels – gas, oil, and electricity are used in the decarbonising zone. Natural gas is the main fuel source for residential heating (50%), followed by oil (29%) and electricity (14%). Other fuels include coal, wood, peat, and Liquefied Petroleum Gas (LPG).

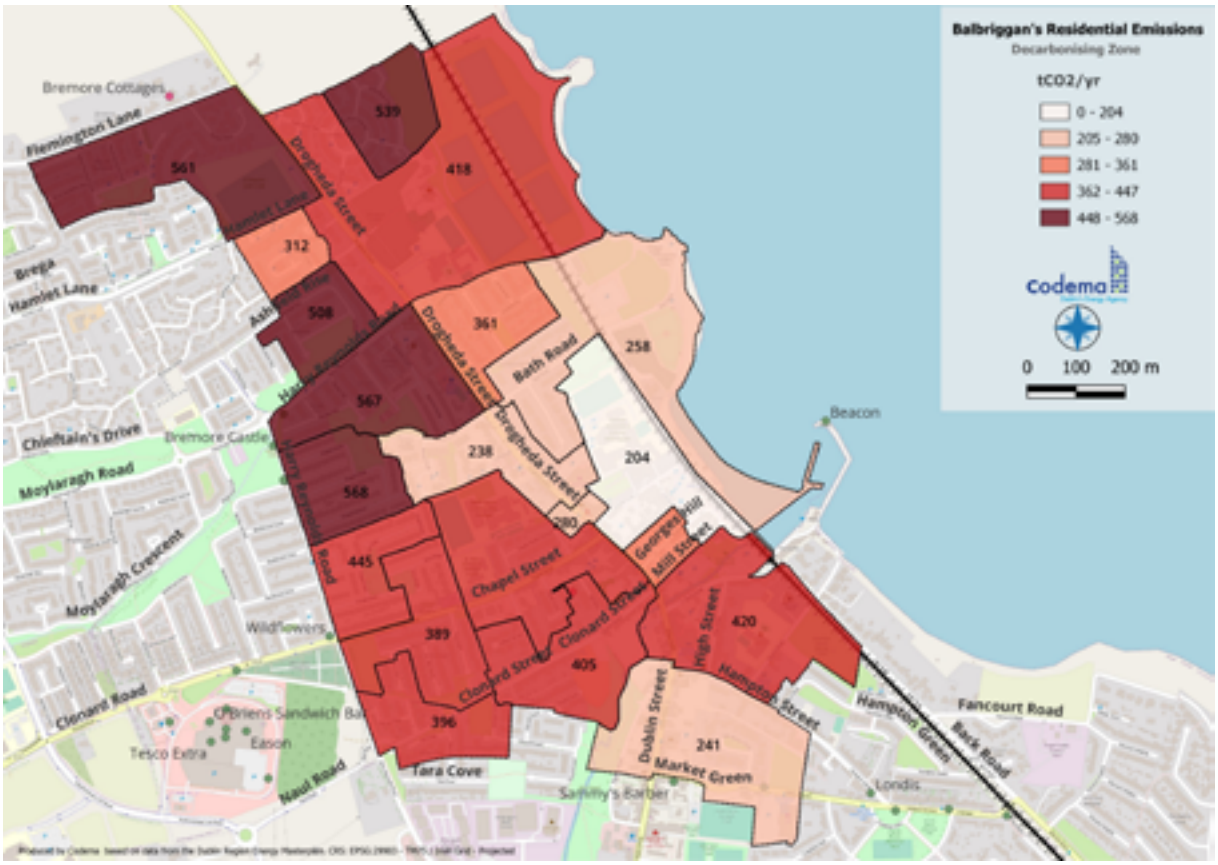

Figure 6.4: Residential Emissions (tCO_2) per Small Area in Balbriggan DZ

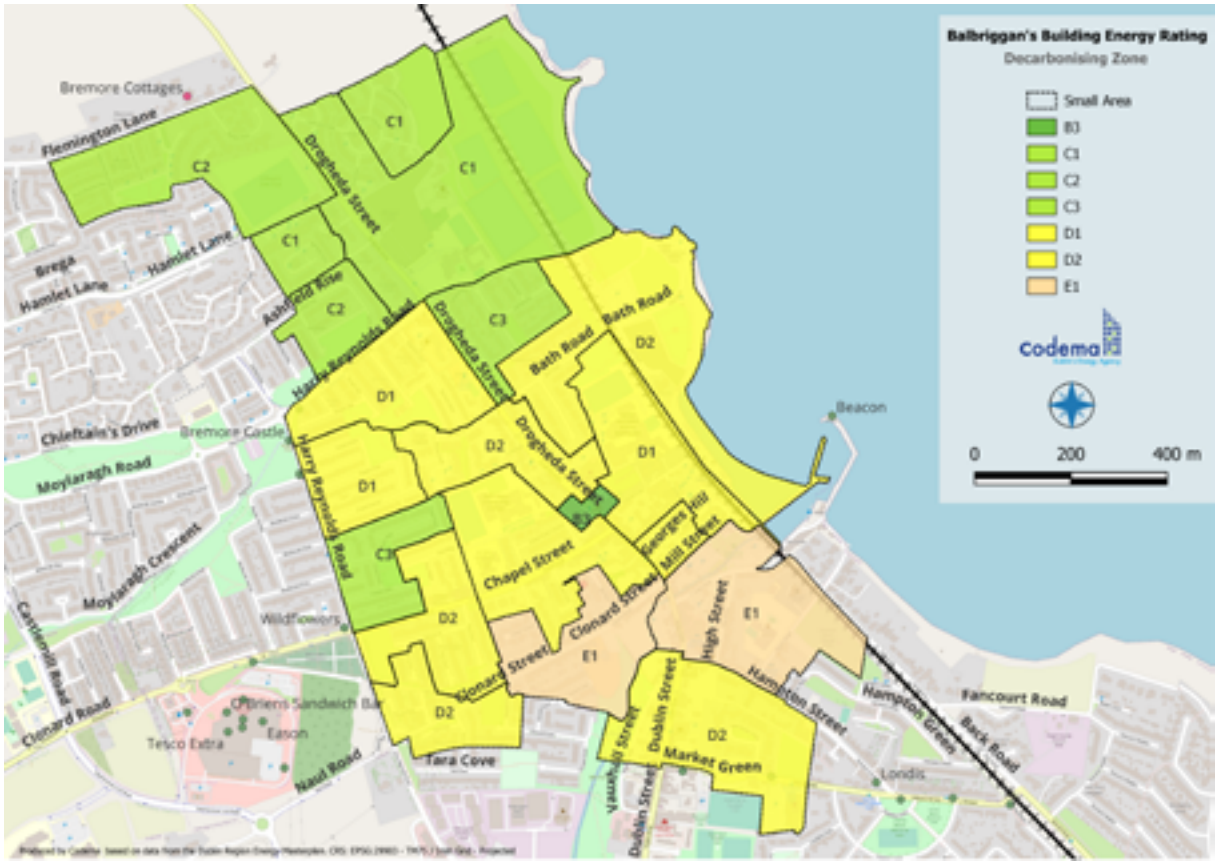

Figure 6.5: Average Building Energy Rating (BER) of the houses in each Small Area in the Balbriggan DZ

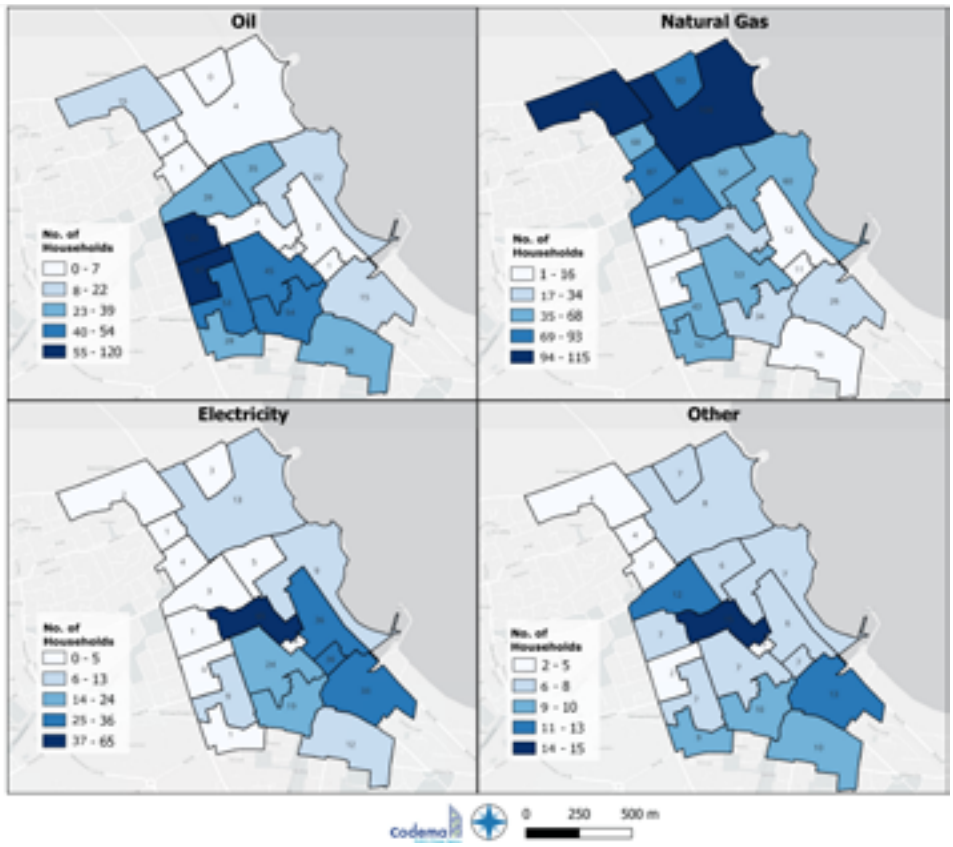

Figure 6.6: Heating fuels used per Small Area in Balbriggan DZ, as per the 2016 census data

COMMERCIAL AND PUBLIC EMISSIONS

The greenhouse gas emissions from the wider commercial sector within the Balbriggan Decarbonising Zone are reflected in Figure 6.7 below. This includes small, medium and large businesses, from high street retail shops and supermarkets, to office buildings, and industrial activities like factories. It also includes public sector buildings. Understanding the areas of highest and lowest emissions from this sector, helps us to understand where future emission reduction and renewable energy projects can have the greatest impact[34].

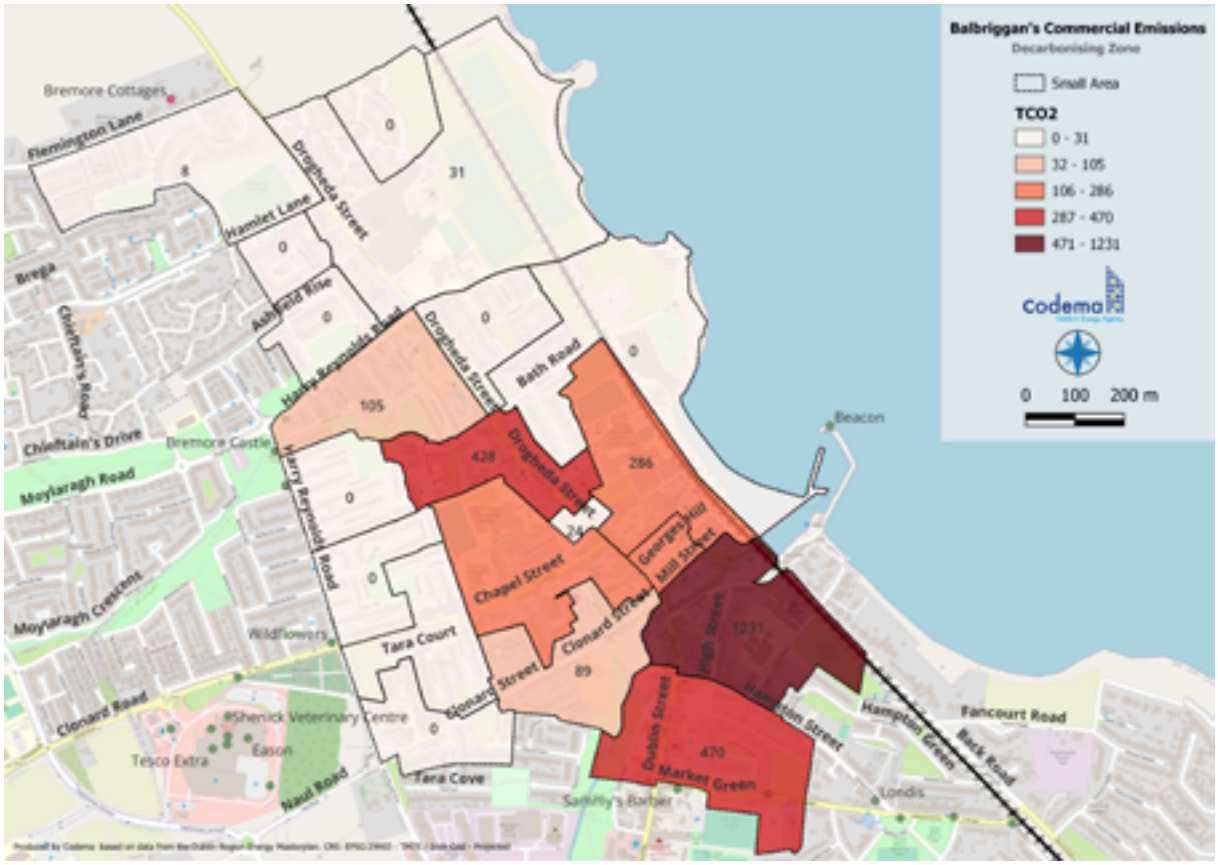

Figure 6.7: Commercial Emissions (tCO_2) per Small Area in Balbriggan DZ

TRANSPORT EMISSIONS & PROFILE

In the Balbriggan Decarbonising Zone about 53% of transport emissions come from road trips, and 47% from rail transport. Figure 6.8 below shows the roads within the decarbonising zone which have the highest emissions associated with them and Figure 6.9 shows the ways that people within the decarbonising zone travel to work, school or college. In order to reduce emissions in transport significantly, a shift to active travel is needed, in addition to greater uptake of electric vehicles. This chart shows that there may be a large opportunity to reduce car journeys in favour of active travel, as 46% of all journeys within the decarbonising zone were in a car. This information can be used to support new plans for more sustainable travel options within the zone.

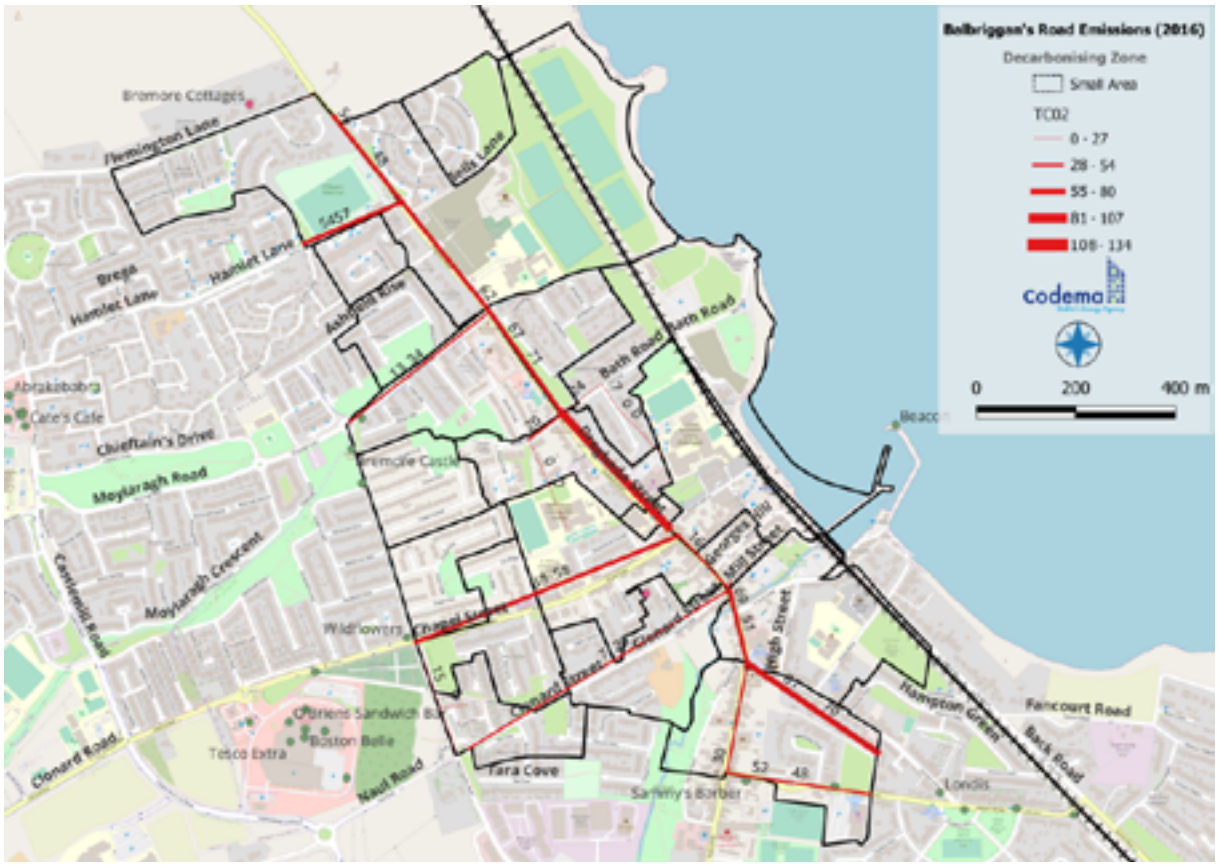

Figure 6.8: Road Emissions (tCO_2) – developed based on modelling data supplied by the National Transport Authority

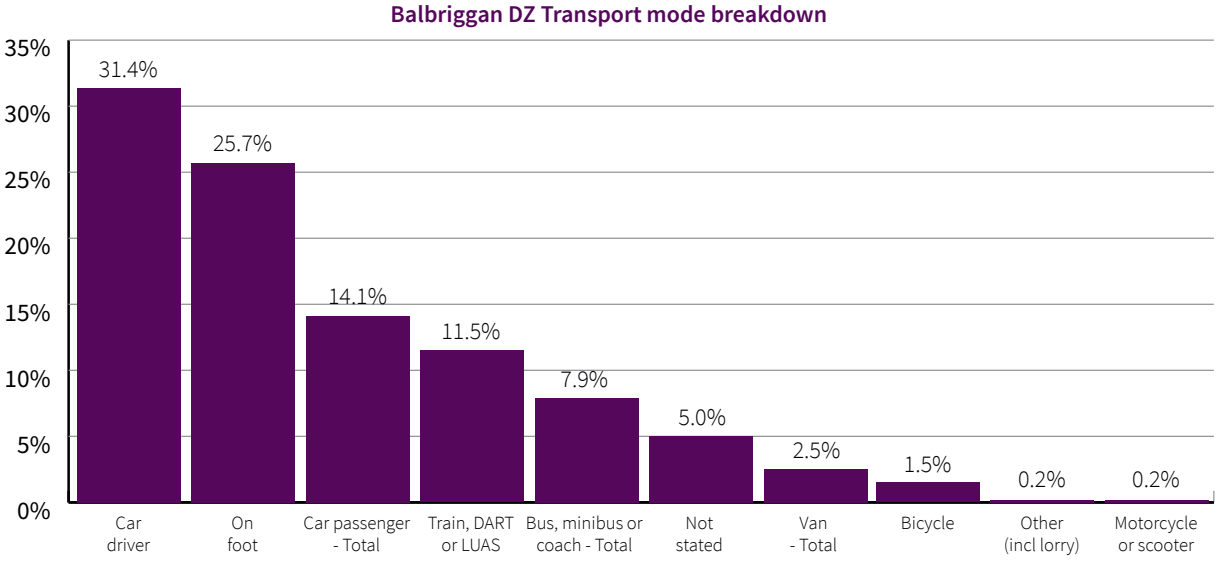

Figure 6.9: Journeys to works, school or college within the Balbriggan DZ (CSO 2016)

ROLE OF FINGAL COUNTY COUNCIL

The core role of Fingal County Council in the Balbriggan Decarbonising Zone is as a facilitator. To support and deliver the Decarbonising Zone plan, action will be needed by Fingal County Council, but also other public sector organisations, local business and industry, social and community groups, and the wider public.

Recognising this, Fingal County Council will play several roles while supporting climate action in Balbriggan. These roles are:

- **Direct action**
  delivering on climate action in areas within the local authority's direct control including own buildings, infrastructure, systems, operations, and staff.
- **Facilitation**
  delivering on climate action by coordinating, connecting, and linking others. This can include stakeholder engagement, capacity-building, developing partnerships, funding, and policy support, among other enabling activities.
- **Advocacy**
  communicating, influencing, and building on a shared vision of the DZ, as well as raising awareness of the DZ plan and developing recommended and new actions with a wide network of local stakeholders to achieve support from the local community.

CLIMATE PATHWAYS AND KEY OPPORTUNITIES

Climate pathways could be described as choices or routes that could significantly reduce emissions within the Decarbonising Zone. These pathways highlight key ways to reduce emissions, and show how potentially effective these might be. This analysis supports the creation of a DZ plan that best suits the unique circumstances and resources within the zone, while also aligning with Ireland's national climate goals[11] (i.e., 51% reduction in emissions by 2030). By exploring these climate pathways, the zone can make significant progress in combating climate change and creating a cleaner, more sustainable future for Balbriggan.

In this section, we look at the Climate Pathways that could be explored within the residential, commercial and transport sectors.

RESIDENTIAL CLIMATE PATHWAY TO 2030

A potential emissions pathway for the residential sector of the Balbriggan DZ is presented below in Figure 6.10. Emission reduction measures are presented in orange, and are ranked in terms of cost effectiveness from left to right. These measures are: 1) Electricity Supply, 2) Solar PV and Home Energy Upgrades. A 5% increase in emissions is expected in a BAU scenario[35].

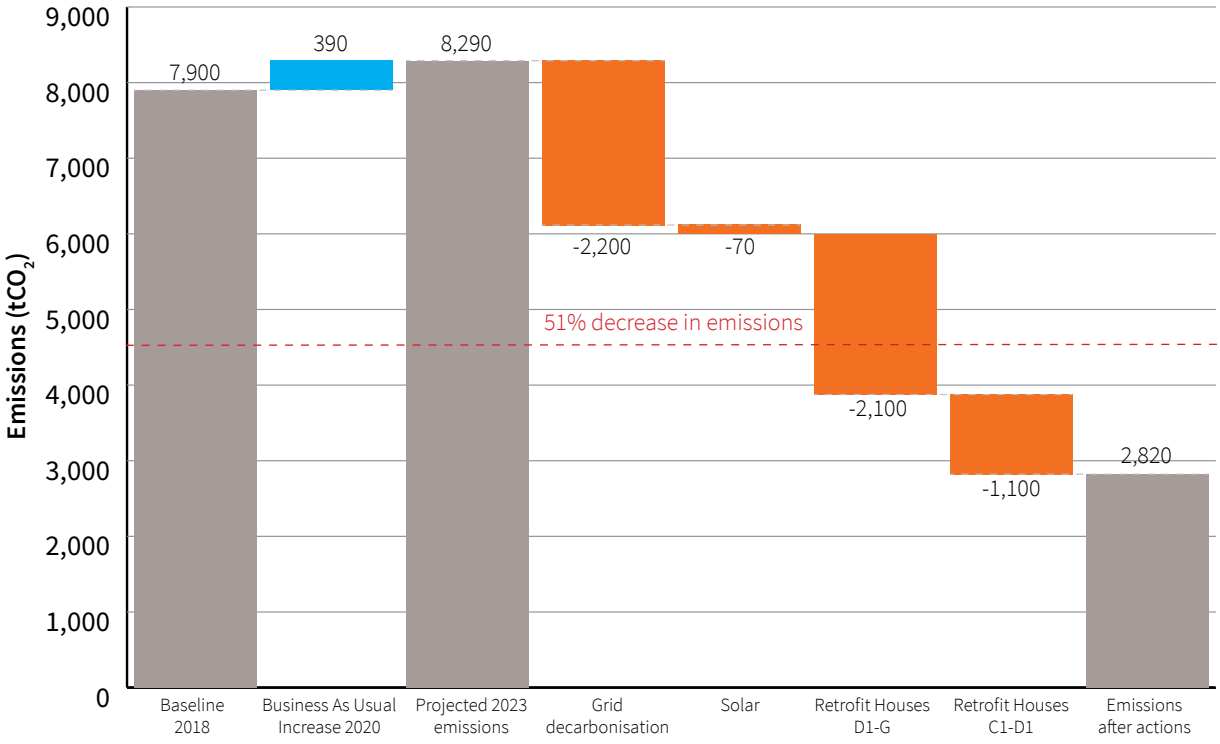

Figure 6.10: Balbriggan DZ Residential Climate Pathway

1. ELECTRICITY SUPPLY

Electricity grid decarbonisation means using cleaner sources such as wind and solar to generate electricity that in turn powers our homes and businesses. Future electricity grid decarbonisation will reduce emissions by an estimated 28%[36] (2,200 t CO_2) in the Balbriggan DZ. This leaves an additional 2,190 t CO_2 to tackle in order to reach the target of 51% emissions reduction by 2030.

2. SOLAR PV & HOME ENERGY UPGRADES

This remaining 2,190t CO_2 target could be reached through a combination of rooftop Solar PV panels and also Home Energy Upgrades for about 1,035 homes currently between BER D1 and G, as shown below[37]. Home energy upgrades on the remaining 937 homes currently between BER C and D1 provide potential for reducing emissions in the zone beyond the 51% target. Home energy upgrades (or retrofits) may involve attic and wall insulation, ventilation, airtightness measures, and installation of renewable heating systems.

COMMERCIAL AND PUBLIC CLIMATE PATHWAY TO 2030

A potential emissions pathway for commercial and public emissions within the DZ is presented in Figure 6.11 below. The measures are presented in order of cost per tonne of CO_2 saved, meaning the measures on the left will likely provide more value for money. This commercial sector refers to commercial buildings and public buildings (including street lighting). The main areas for reducing emissions in the commercial sector are: 1) Electricity Supply and 2) the Decarbonisation of Heat.

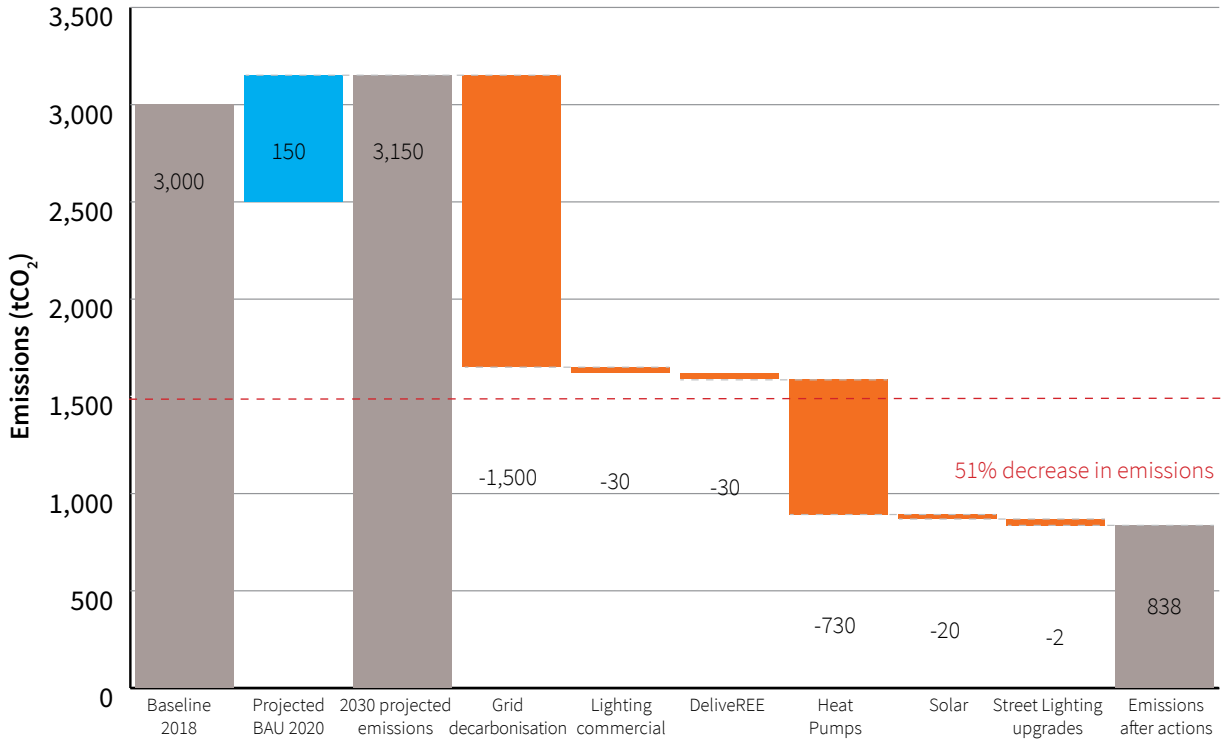

Figure 6.11: Balbriggan DZ Commercial Climate Pathway

ELECTRICITY SUPPLY

Similarly to the residential sector, the decarbonisation of the electricity grid will contribute significantly towards the 51% reduction in the commercial sector.

KEY DECARBONISATION MEASURES

In the commercial sector, completion of the following projects could allow the DZ to meet its targets:

- Lighting upgrades within the top 80% of commercial users
- Prioritising decarbonisation of Fingal County Council buildings within the zone (DeliveREE project)
- Decarbonisation of heat consumption and fabric upgrade of the top commercial user, which is a hotel

Further or alternative emission reductions are possible in the wider commercial sector:

- Upgrade the top 80% of commercial heat consumption to renewable heat systems. This includes the next 12 largest commercial consumers; a large supermarket, 2 medium supermarkets, a garda station, 5 pubs, an office, an amusement centre and a creche
- Solar PV on commercial buildings with available roof space
- Street lighting upgrades

TRANSPORT CLIMATE PATHWAY TO 2030

Figure 6.12 below presents a potential emissions pathway for transport emissions within the Balbriggan DZ. The measures are presented from the most cost effective (€/tonne CO_2) on the left, to the most expensive on the right and include; 1) Light Good Vehicles, 2) Bus Electrification, 3) Heavy goods Vehicles and 4) Car use and active travel. More detail on what is included in these measures is included below:

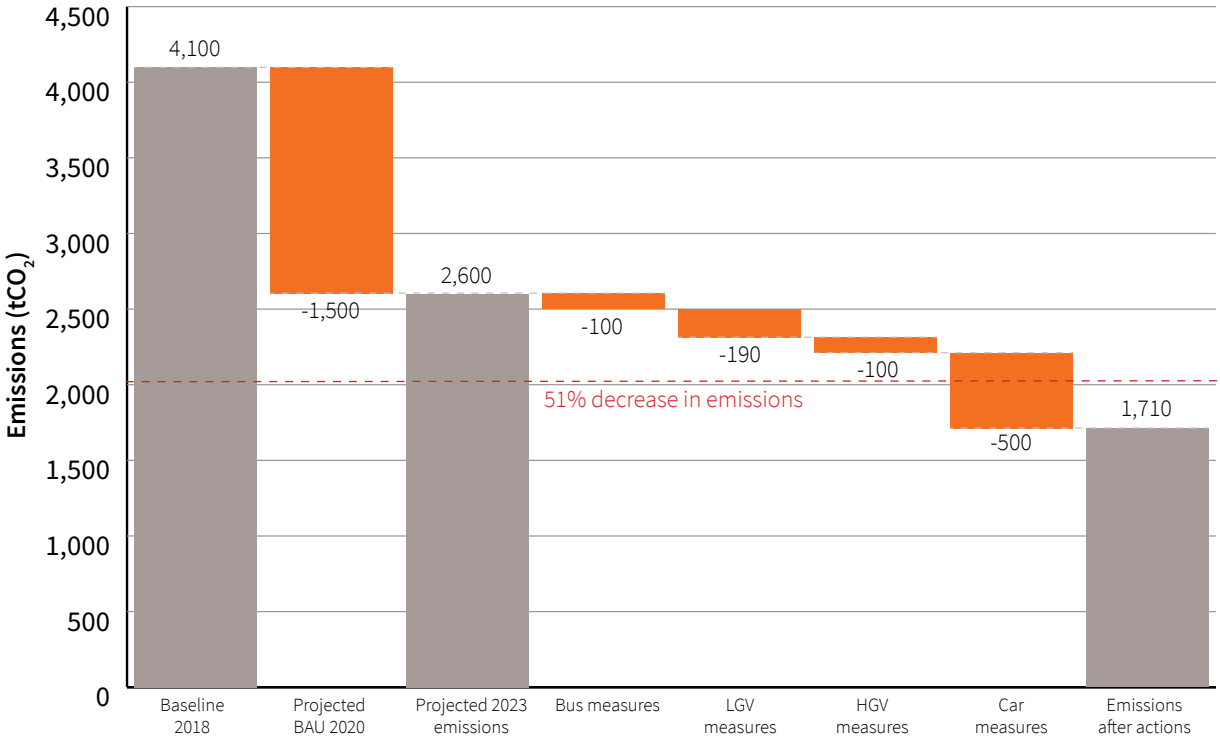

Figure 6.12: Balbriggan DZ Transport Climate Pathway

BUSINESS AS USUAL / CURRENT TRAJECTORY

Current modelling suggests that there may be an 11% decrease in road emissions and a 62% decrease in rail emissions, drawn from National Transport Authority modelling. This modelling includes public transport projects planned this decade including the DART+ programme through Fingal and into Louth (non-tunnel elements), and Radial Core Bus Corridors and revised routes and service under the BusConnects programme. Roads projects considered include the R132 reconfiguration at Swords, the N3 Castaheany interchange upgrade, the R126 Donabate Distributor Link Road, the Oldtown-Mooretown Western Distributor Link Road, and the Swords Relief Road at Lord Mayors. The modelling does not include the impacts of Metrolink, a fully completed Greater Dublin Area Cycle Network, Finglas LUAS, or potential demand management measures on the M50, none of which are now expected to be completed prior to 2030.

BUS ELECTRIFICATION

In relation to buses in the DZ, it will be necessary for 70% to be electrified (public and private). It is the intention of the NTA to deliver a fully low-emission public urban bus fleet by 2030, consisting of battery electric, diesel hybrid and hydrogen fuel cell vehicles, with a fully zero-emissions fleet by 2035. This is likely to provide the greatest contribution towards the 70% target, as regional and private bus services will be more difficult to decarbonise.

LIGHT GOODS VEHICLES (LGV)

Vehicles considered an LGV include commercial jeeps, vans and smaller trucks. For the Balbriggan DZ to meet 2030 targets there would need to be a 5% reduction in vehicle kilometres due to freight logistics planning improvements, 10% switch to e-cargo bikes and 40% switch to Electric Vehicles. This is one potential pathway.

HEAVY GOODS VEHICLES (HGV)

Vehicles considered a HGV include large vans and articulated trucks. For Balbriggan DZ to reduce emissions in line with national targets a reduction of 5% in vehicle kilometres will be necessary as well as a shift of 20% of HGVs to Electric Vehicles and 5% to rail freight.

CAR TRAVEL AND ACTIVE TRAVEL

It will be important to prioritise active travel (walking, cycling) and public transport throughout Balbriggan DZ to encourage a 29% reduction in car usage or number of kilometres travelled by car within the DZ. Furthermore, switching 34% of cars in the DZ to EVs will be necessary to meet 2030 targets.

WHERE COULD SOLAR PV BE INSTALLED?

An initial analysis in Figure 6.13 below highlights the rooftop solar electricity opportunity in the Balbriggan Decarbonising Zone, showing that many buildings have potential to consider solar panels for electricity. This map is an initial indicator of the potential of solar panels[38]. Further building-specific consideration is needed to determine the true potential for solar panels. Additional factors for consideration include: shading, roof pitch, and access.

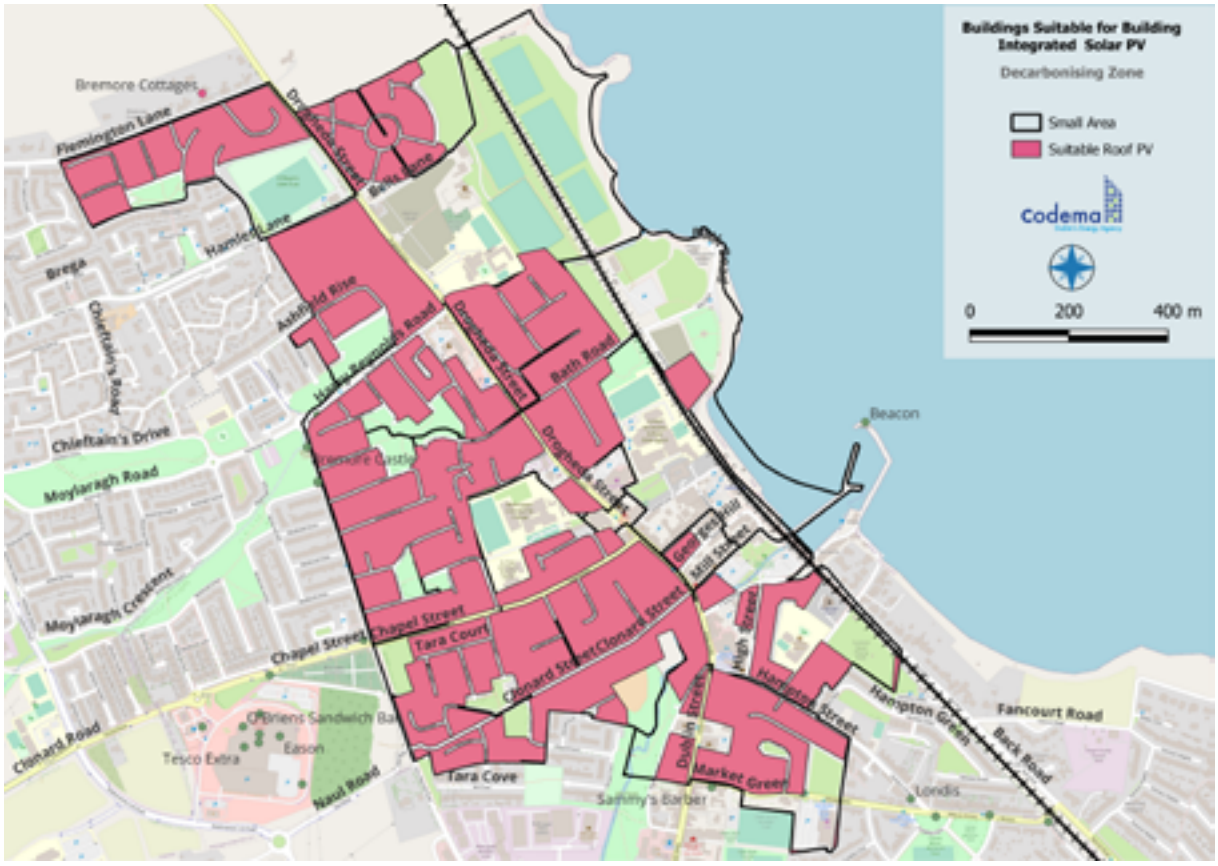

Figure 6.13: Potential Rooftop solar electricity opportunity in Balbriggan DZ

WHERE COULD HEAT PUMPS BE INSTALLED?

A heat pump provides heat to a building, by capturing heat from outside and moving it inside. It uses electricity to do this, however the quantity of heat delivered into your home is about three times greater than the quantity of electricity used to power the system. Heat pumps are recognised as an important way to increase renewable energy in heating.

About 400 homes in the Balbriggan Decarbonising Zone may be suitable for heat pumps without further insulation and energy efficiency measures. The remaining 1,600 homes are likely to require further insulation and energy efficiency measures before they are suitable for heat pump installations. Figure 6.15 below shows the percentage of houses potentially suitable for heat pumps in each small area – the darker colours on the map help to show the areas where greater numbers of suitable houses are located.

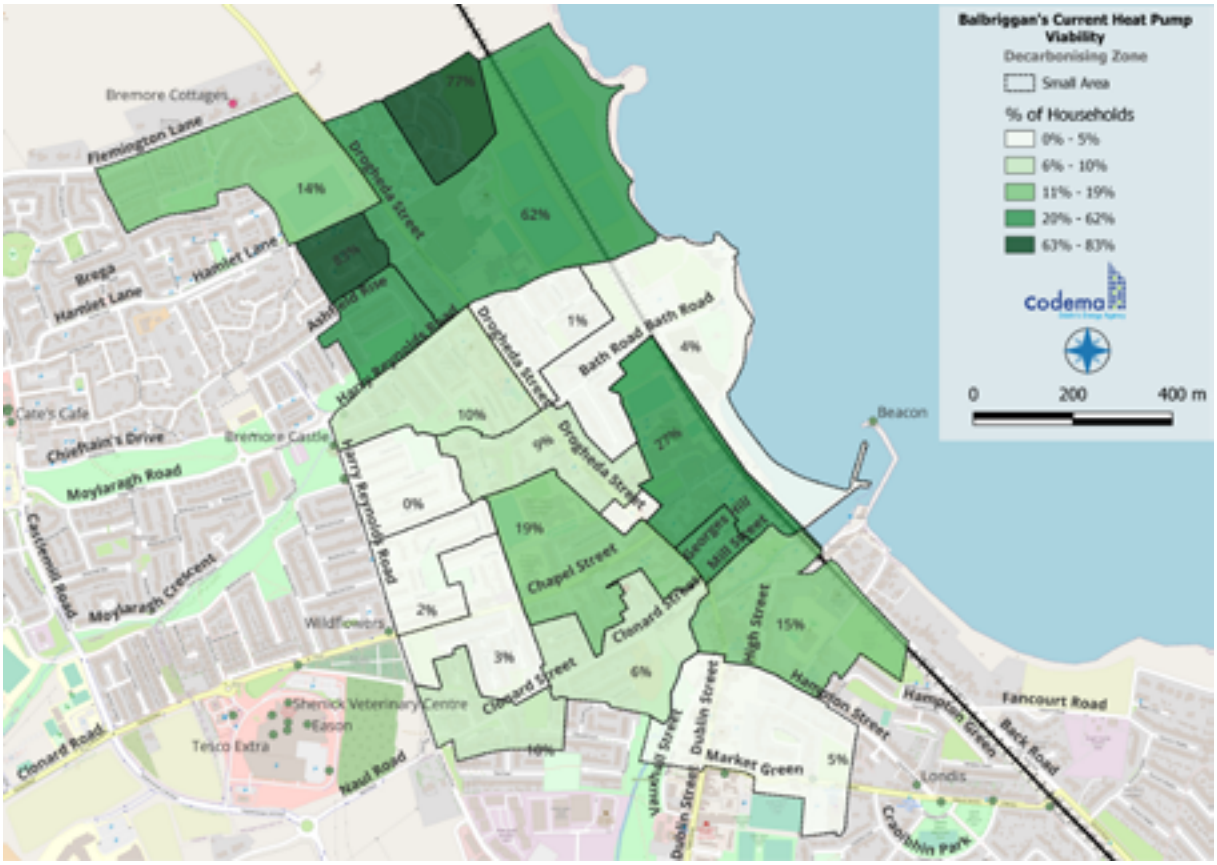

Figure 6.14: Heat pump suitability potential in Balbriggan DZ

WHERE COULD DISTRICT HEATING BE USED?

District heating is a tried and tested system made up of a network of underground pipes, serving an entire community or beyond. Instead of each building having its own separate heating system, they all connect to a shared network, much like the electrical grid.

The first step in creating a district heating system is to look within the area and identify existing and potential sources of heat. This heat could come from many sources: waste heat from sources such as data centres, power plants and waste incineration; environmental sources like river and sea water; geothermal energy, and also large heat pumps, among others.

Hot water is then pumped through a network of well-insulated underground pipes. These pipes carry the heat throughout the area to each individual building. Although relatively new to Ireland, these systems have been in use in Europe for decades. District heating is recognised in Ireland and by the EU as an important way to increase renewable energy in heating.

The map below in Figure 6.14, from Codema's Dublin Region Energy Masterplan[24], compares the costs of heat pumps and district heating in the decarbonising zone. The areas coloured blue are most suited to heat pumps and the areas coloured red are most suited to district heating. This indicates that district heating may be a viable option in the Balbriggan Decarbonising Zone, and that this heating solution merits further consideration. Additionally, SEAI's National Heat Study[49] has identified the Balbriggan area as an important 'candidate area' for district heating. Potential heat sources for further investigation include geothermal energy, energy recovery from river or sea water, air source heat pumps. Further investigation of local waste heat sources may add to the potential heat sources suitable for district heating in Balbriggan.

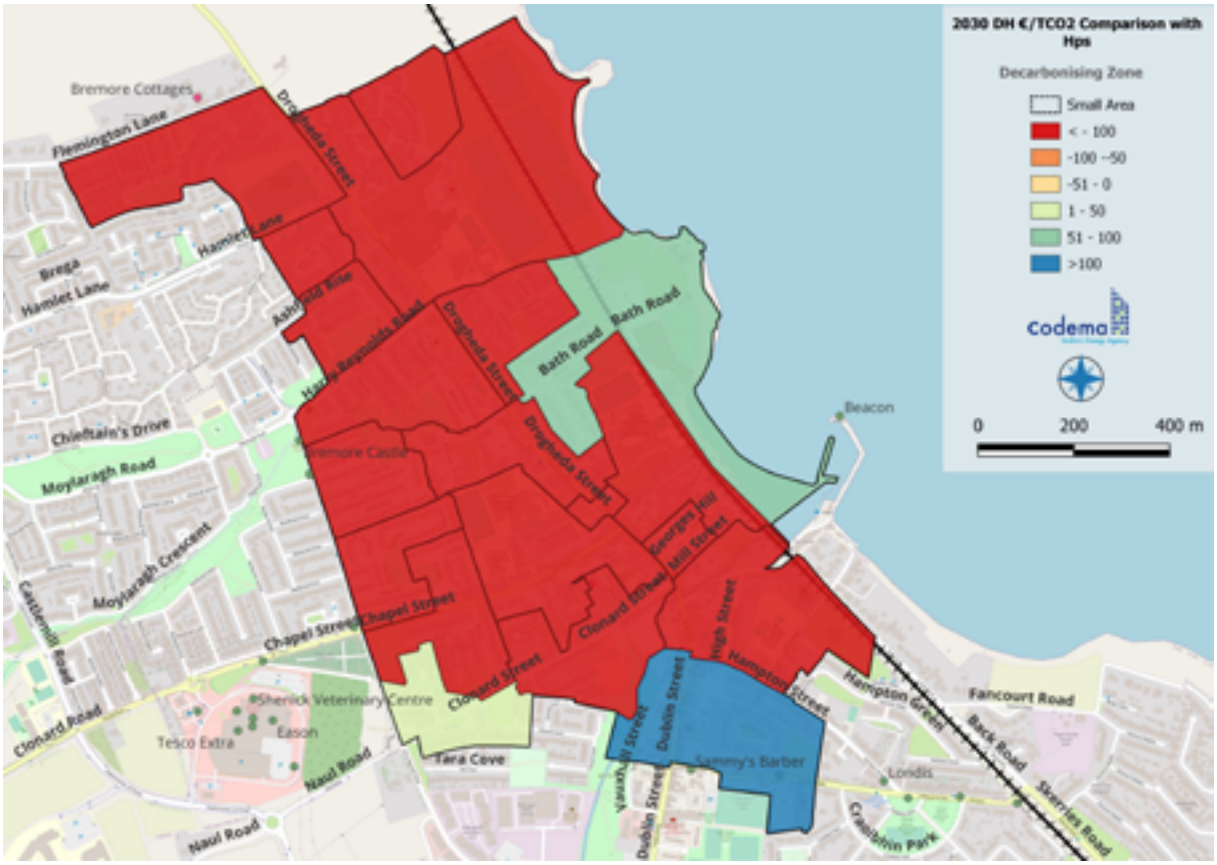

Figure 6.15: Heat pumps and district heating suitability potential in Balbriggan DZ

District heating has many benefits, including;

- **Climate-friendly**
  modern district heat networks run on renewable energy reducing emissions and improving air quality.
- **Energy Efficiency**
  district heating is typically more efficient than individual heating systems.
- **Less Maintenance**
  district heating means the responsibility for maintaining the heating system is on the centralised facility operators, saving residents from the burden of maintaining their own heating equipment.
- **Future proof**
  there's no need to change technology in homes in the future as this happens at the district heating energy centre.
- **Energy storage**
  District heating can provide 'grid services' to the electricity grid. It can help increase the amount of renewable energy in the electricity grid by providing flexibility of heat use. For example, the district heating system could use additional renewable energy when it's available, and store it in hot water tanks for later use in the district heat network.

OPPORTUNITIES FOR CLIMATE ACTION IN BALBRIGGAN

OPPORTUNITY TYPES

Building on the potential climate pathways outlined above, this section catalogues climate action opportunities within the Balbriggan Decarbonising Zone in more detail. Table 6.1 below outlines a range of potential climate action opportunities to be considered as part of the Balbriggan Decarbonising Zone.

Many types of action are needed to work together in a complementary way to deliver the vision for the Balbriggan Decarbonising Zone. These actions need to span scientific analysis, project delivery, engagement, social and community realms, and governance structures to achieve the systems change needed for a thriving, and climate friendly Balbriggan.

REGISTER OF OPPORTUNITIES

TABLE 6.1 – REGISTER OF OPPORTUNITIES IN BALBRIGGAN DZ

Strategic area	Opportunity	LA Role(s)	Co-benefits[39]
Residential Emissions	Upgrade of residential building stock for energy efficiency & renewable heat systems	Direct action, Facilitation, Advocacy	Clean air, energy poverty, health, employment, energy security
Residential Emissions	Upgrade of social housing stock for energy efficiency & renewable heat systems	Direct action, Facilitation, Advocacy	Clean air, energy poverty, health, employment, energy security
Residential Emissions	Residential rooftop solar PV	Direct action, Facilitation, Advocacy	Clean air, energy poverty, health, employment, energy security
Residential Emissions	District heating for residential building stock	Direct action	Clean air, energy poverty, health, employment, energy security
Residential Emissions	Support development of group or neighbourhood approaches for residential retrofit, renewable heating, and solar installation	Facilitation	Clean air, energy poverty, health, employment, energy security
Residential Emissions	Tackling the split incentive - raise awareness of tax incentives for retrofit of rented properties, and future requirements for minimum BER for rented properties	Advocacy	Clean air, energy poverty, health, employment, energy security
Commercial & Public Emissions	Energy upgrade of priority Fingal County Council buildings in the decarbonising zone	Direct action	Clean air, health, employment, energy security
Commercial & Public Emissions	Upgrade of commercial and public building stock for energy efficiency & renewable heat systems	Direct action, Facilitation, Advocacy	Clean air, health, employment, energy security
Commercial & Public Emissions	Commercial rooftop solar PV	Direct action, Facilitation, Advocacy	Clean air, health, employment, energy security
Commercial & Public Emissions	Lighting upgrades for commercial buildings	Direct action, Facilitation, Advocacy	Employment, energy security
Commercial & Public Emissions	District heating for commercial & public sectors	Direct action	Clean air, energy poverty, health, employment, energy security
Commercial & Public Emissions	Explore opportunities for waste heat recovery and utilisation	Direct Action, Facilitation, Advocacy	Clean air, energy security, circular economy
Commercial & Public Emissions	Support development of group energy performance contracting for the commercial and public sectors to deliver retrofit and renewable heating	Facilitation	Clean air, health, employment, energy security
Commercial & Public Emissions	Explore opportunities for engagement with commercial sector - improving efficiency of building energy management systems	Facilitation	Clean air, employment, energy security

Strategic area	Opportunity	LA Role(s)	Co-benefits[39]
Commercial & Public Emissions	Create special action group including local 'significant energy users' to explore opportunities for collaboration and synergies on decarbonisation projects	Facilitation	Clean air, employment, energy security
Commercial & Public Emissions	Explore opportunities for enhanced green procurement for local authority and public sector bodies within the decarbonising zone	Direct Action, Facilitation, Advocacy	Embodied carbon
Transport Emissions	Conversion to electric vehicles – private car, LGV, HGV	Direct action, Facilitation, Advocacy	Clean air, health, energy security, noise
Transport Emissions	Explore opportunities for expansion of electric car-sharing schemes within the decarbonising zone	Facilitation, Advocacy	Clean air
Transport Emissions	Electrification of buses, and supporting development of charging opportunities	Facilitation, Advocacy	Clean air, health, energy security, noise
Transport Emissions	Supporting increase in use of public transport	Facilitation, Advocacy	Clean air, health, energy security, noise
Transport Emissions	Explore opportunities for new public transport and active travel linkages to nearby rail services	Facilitation	Clean air, health
Transport Emissions	Explore opportunities for pedestrianising a street or streets within the town centre area	Direct action	Clean air, health, employment
Transport Emissions	Active travel - programmes for schools such as walking bus, school streets, green schools, local air quality monitors	Facilitation	Clean air, health, inclusivity, public participation
Transport Emissions	Active travel - explore opportunities for 'bike libraries' or 'try-a-bike' schemes	Direct action	Clean air, health, inclusivity, public participation
Transport Emissions	Explore opportunities to repurpose car parks for use as 'last mile' delivery hubs	Facilitation	Clean air
Transport Emissions	Review opportunities to reallocate public parking spaces to alternative public amenity uses	Direct action	Clean air, health
Transport Emissions	Explore opportunities to collaborate with the 'Cycle Right' programme within the decarbonising zone, and opportunities to expand this to forms of e-mobility.	Facilitation	Clean air, health
Electricity Sector	Facilitating new electricity network infrastructure where required by electricity network operators	Facilitation, Advocacy	Clean air, health, employment, energy security

Strategic area	Opportunity	LA Role(s)	Co-benefits[39]
Electricity Sector	Engage with demand response companies and key stakeholders within the decarbonising zone, to support the development of demand response and energy storage in residential, commercial and public sectors.	Direct Action, Facilitation, Advocacy	Clean air, employment, energy security
Engagement	Engage with SEAI Sustainable Energy Community (SEC) programme and mentors to support development of SECs, engagement and project delivery within the decarbonising zone	Direct action	Clean air, energy poverty, health, employment, energy security, inclusivity
Engagement	Engage with public sector bodies located in the decarbonising zone to understand their decarbonisation plans and find synergies and opportunities	Direct action	Clean air, health, employment, energy security
Engagement	Create a regular drop-in 'energy clinic' where the public can receive advice on how they can take climate action. Explore possible links with Sustainable Energy Communities mentors.	Direct action	Inclusivity, public participation
Engagement	Establish local 'climate champions' who embody and support climate action. Explore possible links with sustainable Energy Communities mentors.	Direct action	Inclusivity, public participation
Engagement	Create information supports or a 'toolkit' for local businesses on how they can reduce their emissions, encompassing existing programmes and support in Ireland and guidance on Scope 1, 2, and 3 emissions	Direct action	Inclusivity, public participation
Engagement	Promote upskilling and educational opportunities for facilities managers in the commercial sector.	Advocacy	Clean air, health, energy security
Engagement	Explore potential to use local authority buildings as community spaces for groups participating in decarbonising zone projects	Direct action	Inclusivity, public participation
Engagement	Engage with local credit unions and banks to explore opportunities for low interest loans for residential sector climate action projects	Facilitation	Clean air, energy poverty, health, employment, energy security
Engagement	Explore opportunities for collaboration with 'Green Schools' programme, and wider engagement with schools about the decarbonising zone projects	Facilitation	Clean air, health, employment, energy security, inclusivity, public participation, water quality, biodiversity, ecosystem health, circular economy

Strategic area	Opportunity	LA Role(s)	Co-benefits[39]
Engagement	Explore opportunities for enhanced roll-out and engagement programme for 'Home Energy Savings Kits'	Direct action	Clean air, energy poverty, health, employment, inclusivity, public participation
Governance & System Support	Develop a DZ data gathering & monitoring project to explore additional and complementary ways to track emissions and communicate progress	Direct action	Inclusivity
Governance & System Support	Set up 'Balbriggan decarbonising zone' project webpage	Direct action	Inclusivity, public participation
Governance & System Support	Engage with data providers to explore access to transport analytics to inform data gathering and monitoring for the project. Engage with data providers to explore activity metrics for retail zones to evaluate the impact of transport measures	Direct action	-
Governance & System Support	Explore opportunities for enhanced modal shift monitoring on key routes	Direct action	-
Biodiversity, Circular, Economy, & Nature Based Solutions	Explore opportunities nature-based solutions in the decarbonising zone	Direct action, Facilitation, Advocacy	Clean air, water quality, biodiversity, ecosystem health, circular economy
Biodiversity, Circular, Economy, & Nature Based Solutions	Explore opportunities for circular economy in the decarbonising zone	Direct action, Facilitation, Advocacy	Clean air, water quality, biodiversity, ecosystem health, circular economy
Biodiversity, Circular, Economy, & Nature Based Solutions	Enhanced tree planting initiatives in the public realm	Direct action	Clean air, water quality, biodiversity, ecosystem health, circular economy
Biodiversity, Circular, Economy, & Nature Based Solutions	Explore opportunities for rain gardens, garden ponds, green and blue roofs on private lands	Facilitation	Clean air, water quality, biodiversity, ecosystem health, circular economy
Biodiversity, Circular, Economy, & Nature Based Solutions	Advocate and support reduction in food waste - awareness of existing programmes and apps	Advocacy	Circular economy
Just Transition	Explore and develop opportunities for a more just transition in the DZ such as skills training, and a focus on energy poverty.	Direct action, Facilitation	Inclusivity, Public participation

NEXT STEPS:

The next step for the Balbriggan Decarbonising Zone, is to co-create a localised decarbonisation zone implementation plan, in consultation with the local community, and local stakeholders. This may include:

- Developing a local community and public engagement plan.
- Establishing a local stakeholder group made up of representatives from the local community, business, transport, energy sector, and others.
- Co-creating a list of prioritised actions, expanding on the register of opportunities outlined in this chapter.
- Developing a governance framework for the decarbonising zone.
- Supporting the delivery of the implementation plan to achieve the decarbonising zone vision for 2030.

ENVIRONMENTAL CONSIDERATIONS:

A Register of Opportunities has been prepared for the Decarbonising zone. These changes are broad, high-level and non-specific in nature and define potential strategic interventions to be investigated to achieve GHG emissions reductions within the Decarbonising zone. Following a period of stakeholder and community engagement these opportunities will be developed into a set of specific, implementable actions under a plan for the Decarbonising zone which will be subject to its own SEA and AA processes.

The opportunities progressed shall accord with the following integrated environmental protection and enhancement considerations:

- The opportunities progressed, and any associated activities and development, such as energy, heating or active travel related development, shall have due regard to the need to protect sensitive aspects of the receiving environment, including local human receptors; European sites and biodiversity; heritage features, protected structures and the context in which such features sit; and the receiving water, soils and local air quality environment.
- Any opportunities progressed that result in the development of renewable energy development, such as wind turbine development or solar panel development, shall specifically have due regard to the need to protect sensitive aspects of the environment from the typical effects of such development, including avifauna effects or landscape and visual related effects, including glint and glare.
- The local authority will advocate and exert influence to ensure that opportunities progressed that lead to the development of additional electricity network infrastructure, including linear cable infrastructure development, by electricity network operators, does not contravene relevant planning and environmental protection criteria or cause significant negative environmental effects.
- Any opportunities progressed that support the upgrade of public lighting, shall have due regard to the need to ensure the lumen levels and spectral range of such lighting are maintained or reduced/controlled to avoid effects on biodiversity.

7. IMPLEMENTATION AND REPORTING

IMPLEMENTATION AND REPORTING

As with the Climate Change Action Plan 2019-2024[29], the Climate Action Plan 2024-2029 (CAP) will be implemented across all Departments of Fingal County Council, coordinated by the Environment Climate Action and Active Travel Department (ECAAT).

At the time of print, Fingal County Council was expanding the core Climate Action team within the ECAAT Department to include a Climate Action Coordinator, a Climate Action Officer, and a Community Climate Action Officer as provided for through the Department of the Environment Climate and Communications funding. The role of this team is to help drive climate action within the Council, to deliver specific actions (including the new Community Climate Action Fund), to support and monitor the implementation of the actions, and to coordinate the reporting and evaluation of the Plan following its approval by the Elected Members. The Climate Action Team is supported by each action holding Department and lead representatives across Departments.

Climate change is a transboundary challenge; it does not stop at political and geographical borders. Fingal County Council will continue to work collaboratively and in partnership with a range of key stakeholders to support the delivery of this plan, including neighbouring local authorities, the Dublin Metropolitan Climate Action Regional Office (CARO), Codema (Dublin's Energy Agency), regional partners, and local organisations. In particular, a Dublin regional approach has been agreed by the four Dublin Local Authorities, whereby they can collaborate closely in the implementation of their respective Climate Action Plans. These partnerships can provide opportunities for collaboration on projects, shared learnings, technical support and leveraging of funding opportunities during the plan's implementation.

Fingal County Council, along with the other Dublin Local Authorities, will continue to actively pursue projects eligible for funding from the national Climate Action Fund, European funding and other sources. Codema and CARO will continue to research potential funding opportunities and partnerships with third-level institutions. Private sector partnerships are also important to realise low carbon solutions for the sector and this will be encouraged and facilitated where possible.

TRACKING PROGRESS THROUGH KEY PERFORMANCE INDICATORS (KPIS)

The County and City Management Association (CCMA) published strategy on behalf of local government entitled Delivering Effective Climate Action 2030[16] (DECA 2021) sets out the sectors commitment to climate action.

A key consideration for the local government sector on its strengthened role on climate action is accountability, and in particular the ability to track, measure and report on progress in delivering effective climate action at both local authority and sectoral levels. In this regard, KPIs will continue to play a significant role.

Performance by Fingal County Council on the delivery of energy efficiency improvements and emissions reductions relating to the Council's infrastructure and assets will continue to be tracked through the Monitoring and Reporting (M&R) system managed by the Sustainable Authority of Ireland (SEAI). For actions outside of this, one of the reporting avenues that Fingal County Council engages with to communicate progress on the delivery of actions is through Sectoral Key Performance Indicators (KPIs)[14]. This informs the performance of the local government sector on climate action.

The CAROs, along with the Local Government Management Agency (LGMA), collect data on an annual basis relating to a range of themes including:

- Climate action resources
- Climate action training for local authority staff and elected members
- Actions delivered
- Enterprise support
- Energy efficiency
- Emissions reductions
- Active travel measures
- Severe weather response

KPIs will continue to be added as necessary by the sector and the Council will contribute relevant information as required, to assist in highlighting the progress of the local government sector on climate action.

REPORTING REQUIREMENTS AND ARRANGEMENTS

Climate action is mandated for Local Authorities as part of broader concerted efforts and response measures nationally to meet the 2030 targets[11] and to strive towards a climate resilient and net zero society by 2050. Strengthened reporting and monitoring frameworks are now part of the mechanism to account for how local authorities are achieving and supporting local level climate action in the context of delivering on the national climate objective. To communicate progress on the delivery of actions in this draft CAP, the Council will engage with the following reporting avenues.

INTERNAL GOVERNANCE, MONITORING AND REPORTING

A Climate Action Steering Group at Executive Management level has been in operation in Fingal County Council since 2019. The role of the steering group is multifunctional, including but not limited to, ensuring alignment with legislation, mainstreaming climate action across the Council, ensuring appropriate staffing training, and resourcing, and ensuring the climate reporting and evaluation requirements of the local authority are met. The Steering Group will agree a project management assessment tool and ensure climate action considerations form part of the decision-making process for all capital projects. This will include project assessments for the incorporation of Nature Based Solutions, enhancing and retaining Green Infrastructure, and for Sustainable Transport solutions and EV charging. The Steering Group will also ensure all Fingal County Council policies and strategies are climate-proofed on an ongoing basis in line with the National objective.

The Council will update and report progress on the implementation of the actions across all six action areas of the CAP through its relevant governance and reporting structures and communication channels.

The Council will provide reports to the Climate Action, Biodiversity, Environment Strategic Policy Committee as required, and an end of year report will be made available to Councillors annually. Annual progress reports will also be communicated via the Councils website.

NATIONAL CLIMATE ACTION PLAN

Fingal County Council will, in accordance with part 3(w) of the Local Authority Climate Action Charter[15], report to the Department of the Environment, Climate and Communications on progress on climate action at local level as part of the delivery of the national climate objective. Progress on all actions will be reported via a reporting tool developed by CARO.

SECTORAL PERFORMANCE

Fingal County Council will report annually on its performance on climate action by way of KPIs to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy[16].

MONITORING AND REPORTING SYSTEM (M&R)

Fingal County Council will continue to report on its emission targets and energy performance annually to the Sustainable Authority of Ireland (SEAI) through the Monitoring and Reporting (M&R) system.

ENVIRONMENTAL GOVERNANCE

The intension of the draft Climate Action Plan is to promote, develop and implement climate actions through process improvements, community engagement, progressive development and integrated learning processes; which will be refined throughout the lifetime of the plan. It is important to note that it is an integral part of the draft Climate Action Plan to facilitate co-benefits for climate and other environmental factors.

In order to be realised, projects included in or supported by the draft Climate Action Plan will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Plan is not part and does not contribute towards.

These considerations include the Water Framework Directive[50], a European Union framework that sets standards for water protection and management. River basin management plans are instrumental in implementing the Water Framework Directive's[50] goals, as they provide detailed strategies for achieving good water status and preventing pollution across an entire river basin. These plans help coordinate efforts among various stakeholders, such as governments, communities, and industries, to achieve integrated water management and environmental protection, thereby ensuring compliance with the Directive's objectives.

An integrated approach identifying sustainable land use practices, improved water management, and ecosystem preservation, the plan seeks to mitigate climate change's impact on water resources, safeguarding both the environment and public health. This integrated approach demonstrates Ireland's commitment to achieving climate goals while concurrently promoting a healthier and more resilient natural environment.

As well as the climate focused measures detailed throughout the plan with environmental co-benefits and environmental notes to provide the context within which the action will be progressed, there are several environmental governance principles which will steer future works (see below).

Table 7.1: Environmental governance principles to be integrated into all actions/activities which result due to the implementation of the draft Climate Action Plan

EG1	Promote climate action 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, to ensure win-win benefits are gained.
EG2	Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon which 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.
EG3	Ensure all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co- benefits, potential environmental impacts and environmental protection requirements. No climate action related development project that is likely to have a significant negative effects on the receiving environment shall be supported.
EG4	Flood and coastal defense projects, or related maintenance works, shall be carried out in a manner that promotes climate action biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.
EG5	Ensure climate action related projects are carried out in a manner that promotes climate action cultural heritage co-benefits, and do not result in unauthorised physical damage to cultural, archaeological or architectural features, or unauthorised or inappropriate alteration of the context of sensitive cultural heritage features.
EG6	Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits, and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.

SUSTAINABLE DEVELOPMENT GOALS

The actions and objectives set out in this Draft CAP also contribute to the progression of Ireland's commitment to achieving the 2030 Agenda for Sustainable Development[7] which is a "plan of action for people, planet and prosperity" and provides an internationally agreed framework made up of 17 Sustainable Development Goals (SDGs)[8] to balance the economic, social and environmental aspects of sustainable development.

Ireland's Second National Implementation Plan for the Sustainable Development Goals 2022-2024[54], intends to build on the role of local government in Ireland and incorporates specific actions to do so which include:

i. Showcasing, sharing and building on existing initiatives
ii. Capacity building and awareness raising
iii. Embedding the SDGs in Governance and reporting frameworks
iv. Incorporating the SDGs within local planning frameworks
v. Community Engagement

Furthermore, local authorities are recognised as one of Agenda 2030's nine "Major Groups", which play a crucial role in sustainable development 31 and Agenda 2030 also highlights the particular role of local authorities and communities in sustainable urban development.

In fulfilment of SDG target 17.14, to achieve greater Policy Coherence for Sustainable Development, each action in this CAP has been aligned with SDGs. This alignment is demonstrated in more detail in the Appendices to this plan.


Comhairle Contae
Fhine Gall
Fingal County
Council

APPENDIX I:

INTEGRATED ENVIRONMENTAL CONSIDERATIONS FOLLOWING STRATEGIC ENVIRONMENTAL ASSESSMENT AND APPROPRIATE ASSESSMENT

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
1	**E8**	Engage with independent BREEAM assessor and utilise Building Assessment Methodology throughout delivery of Swords Cultural Quarter flagship project. BREEAM is a leading validation and certification system for sustainable built environment.	Ongoing reviews of design and construction process to target independent certification on completion	Ongoing	Engage with independent BREEAM assessor and utilise Building Assessment Methodology throughout delivery of Swords Cultural Quarter flagship project, having appropriate regard to environmental sensitivities such as amenity value, cultural heritage and archaeology that may be impacted by any built development at the Swords Cultural Quarter which is supported by the BREAMM process. BREEAM is a leading validation and certification system for sustainable built environment.	
2	**E14**	Targeted LED upgrades across smaller FCC premises, not suitable for EPC	# of LED upgrades	2026	Targeted LED upgrades across smaller FCC premises, not suitable for EPC; while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.	Targeted LED upgrades across smaller FCC premises, not suitable for EPC; ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.
3	**E16**	Renewal of remaining 1.5% of public lighting stock & pitch lighting	# of units converted to LED	2024 - 2026	Renewal of remaining 1.5% of public lighting stock & pitch lighting, while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.	
4	**E17**	Continue to make energy efficiency retrofits to social housing under the DHLGH-supported Energy Retrofit Programme. Ensure that all of FCC's social housing stock has a B2 or cost optimal energy rating by 2030.	# of units upgraded annually	Annually	Continue to make energy efficiency retrofits to social housing under the DHLGH-supported Energy Retrofit Programme. Ensure that all of FCC's social housing stock has a B2 or cost optimal energy rating by 2030; having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.	Continue to make energy efficiency retrofits to social housing under the DHLGH-supported Energy Retrofit Programme. Ensure that all of FCC's social housing stock has a B2 or cost optimal energy rating by 2030; having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.
5	**E18**	Complete Pilot programme in Strandmill Estate, Portmarnock, in conjunction with SEAI and REIL offering retrofit upgrades to private homeowners, availing of economies of scale when coupled with public housing upgrades. Partially funded by SEAI government grants.	# of units completed under pilot project.	2024	Complete Pilot programme in Strandmill Estate, Portmarnock, in conjunction with SEAI and REIL offering retrofit upgrades to private homeowners, availing of economies of scale when coupled with public housing upgrades; having due regard to the need to appropriately conserve and maintain any protected structures subject to upgrades in accordance with relevant protected structures regulations, and environmental sensitivities such as local human receptors, European sites and biodiversity. Partially funded by SEAI government grants	Complete Pilot programme in Strandmill Estate, Portmarnock, in conjunction with SEAI and REIL offering retrofit upgrades to private homeowners, availing of economies of scale when coupled with public housing upgrades; having due regard to the need to appropriately conserve and maintain any protected structures subject to upgrades in accordance with relevant protected structures regulations, and environmental sensitivities such as local human receptors, European sites and biodiversity. Partially funded by SEAI government grants
6	**E25**	Deliver Blanchardstown District Heating Scheme	On Site completion	2029+	Deliver Blanchardstown District Heating Scheme; having due regard to the need to protect sensitive aspects of the receiving environment, such as water bodies, biodiversity, flora and fauna, European sites and local population, from potential negative effects of development, including linear development associated with the project.	Deliver Blanchardstown District Heating Scheme; having due regard to the need to protect sensitive aspects of the receiving environment, such as water bodies, biodiversity, flora and fauna, European sites and local population, from potential negative effects of development, including linear development associated with the project.

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
7	**E27**	Install PV panels on suitable Council roofs such as civic offices, libraries and community buildings	# of panels installed	2028	Install PV panels on suitable Council roofs such as civic offices, libraries and community buildings; where it is confirmed through a glint and glare assesment that such solar development will not have any potential glint and glare impact on sensitive receptors, or otherwise, where it is confirmed that such solar development constitutes exempted development under the Planning and Development Regulations by virtue of its size or location outside a Solar Safeguarding Zone, and having due regard to all other environmetnal sensitivities that could be impacted by such development.	Install PV panels on suitable Council roofs such as civic offices, libraries and community buildings; having due regard to environmental sensitivities such as European sites and biodiversity.
8	**E28**	Develop Wind Energy Strategy	Strategy prepared	2028	Develop a Wind Energy Strategy; having due regard to environmental sensitivities such as archaeology, European sites, biodiversity, the noise environment, landscape character, visual amenity etc.	
9	**E32**	Conduct research and develop case studies from the Council's historic building stock that undertake pre- and post- works energy performance assessments and devise of appropriate and sensitive retrofitting/ energy upgrading of traditional buildings to inform works to other Council-owned properties and to guide private owners	Case studies completed	Ongoing	Conduct research and develop case studies from the Council's historic building stock that undertake pre- and post- works energy performance assessments and devise of appropriate and sensitive retrofitting/energy upgrading of traditional buildings to inform works to other Council-owned properties and to guide private owners; having appropriate regard to the need to protect and conserve the architectural or cultural heritage value that may be associated with such buildings, and protected species that may be present in such buildings.	
10	**E33**	Promote and encourage routine maintenance and good housekeeping to maintain the older building stock of the county in good condition in order to reduce energy consumption and extend the building's life-cycle (e.g. Fingal's Stitch in Time Grant, National Schemes of Built Heritage Investment Scheme, Historic Structures Fund, Community Monument Fund).	# of buildings upgraded	Annually	Promote and encourage routine maintenance and good housekeeping to maintain the older building stock of the county in good condition in order to reduce energy consumption and extend the building's life-cycle (e.g. Fingal's Stitch in Time Grant, National Schemes of Built Heritage Investment Scheme, Historic Structures Fund, Community Monument Fund), having appropriate regard to the need to protect and conserve the architectural or cultural heritage value that may be associated with such buildings, and protected species that may be present in such buildings, and all other environmental sensitivities that may be affected by such works such as European sites and biodiversity.	Promote and encourage routine maintenance and good housekeeping to maintain the older building stock of the county in good condition in order to reduce energy consumption and extend the building's life-cycle (e.g. Fingal's Stitch in Time Grant, National Schemes of Built Heritage Investment Scheme, Historic Structures Fund, Community Monument Fund), having appropriate regard to the need to protect and conserve the architectural or cultural heritage value that may be associated with such buildings, and protected species that may be present in such buildings, and all other environmental sensitivities that may be affected by such works such as European sites and biodiversity.
11	**T1**	Increase the meterage of high quality walkways in the county and improve the meterage of existing walkways in the county.	m of walkways delivered and improved per year, captured through the pavement management system.	Annually	Increase the meterage of high quality walkways in the county and improve the meterage of existing walkways in the county, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.	Increase the meterage of high quality walkways in the county and improve the meterage of existing walkways in the county; having due regard to environmental sensitivities such as European sites and biodiversity.
12	**T2**	Increase the km of protected cycle lanes and off road cycle lanes and greenways in the county annually; in line with the Greater Dublin Cycling Network Plan, and the FCC Greenway Plan - including Fingal Coastal Way, the Sutton to Malahide Cycleway, the Broadmeadow Way, Church Fields Link Road, and the Royal Canal Urban Greenway, etc.	km of Protected Cycle Lanes and Off Road Cycle Lanes and Greenways delivered per year. # of schemes completed.	Annually	Increase the km of protected cycle lanes and off road cycle lanes and greenways in the county annually; in line with the Greater Dublin Cycling Network Plan, and the FCC Greenway Plan - including Fingal Coastal Way, the Sutton to Malahide Cycleway, the Broadmeadow Way, Church Fields Link Road, and the Royal Canal Urban Greenway, etc., having due regard to environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites, cultural heritage etc.	Increase the km of protected cycle lanes and off road cycle lanes and greenways in the county annually; in line with the Greater Dublin Cycling Network Plan, and the FCC Greenway Plan - including Fingal Coastal Way, the Sutton to Malahide Cycleway, the Broadmeadow Way, Church Fields Link Road, and the Royal Canal Urban Greenway, etc., having due regard to environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites, cultural heritage etc.
13	**T3**	Deliver/alter infrastructure to improve connectivity/permeability in order to promote active travel	Number improved annually	Annually	Deliver/alter infrastructure to improve connectivity/permeability in order to promote active travel; having due regard to environmental sensitivities such as European sites and biodiversity.	Deliver/alter infrastructure to improve connectivity/permeability in order to promote active travel ; having due regard to environmental sensitivities such as European sites and biodiversity.

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
14	T4	Deliver new pedestrian / cycling road crossings, which give priority to pedestrians and cyclists. Develop and implement a work programme for the replacement of pedestrian crossings with ones which give priority to pedestrians & cyclists.	# of crossing delivered	Annually	Deliver new pedestrian / cycling road crossings, which give priority to pedestrians and cyclists. Develop and implement a work programme for the replacement of pedestrian crossings with ones which give priority to pedestrians & cyclists; having due regard to environmental sensitivities such as European sites and biodiversity.	Deliver new pedestrian / cycling road crossings, which give priority to pedestrians and cyclists. Develop and implement a work programme for the replacement of pedestrian crossings with ones which give priority to pedestrians & cyclists; having due regard to environmental sensitivities such as European sites and biodiversity.
15	T5	Install junction build outs in accordance with Design Manual for Urban Roads & Streets 2020, increasing safety to users.	no. of upgraded arms of junctions installed	Annually	Install junction build outs in accordance with Design Manual for Urban Roads & Streets 2020, increasing safety to users, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Install junction build outs in accordance with Design Manual for Urban Roads & Streets 2020, increasing safety to users, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.
16	T11	Identify opportunities for reallocation of existing road space to promote active travel and improve public space.	km of road reallocation identified.	Annually	Reallocate road space to provide for sustainable travel alternatives, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	
17	T12	Enhancement / reallocation of roads & street space to promote active travel and improve public space. Implement in all 3 LEAs	km of existing road space reallocated. # of schemes	Annually	Reallocate road space to provide for sustainable travel alternatives, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Enhancement / reallocation of roads & street space to promote active travel and improve public space. Implement in all 3 LEAs; having due regard to environmental sensitivities such as European sites and biodiversity.
18	T18	Implement Safe Routes to School programme	# of schools with measures implemented.	Annually	Implement Safe Routes to School programme, having due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, and amenity value etc.	Implement Safe Routes to School programme, having due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, and amenity value etc.
19	T20	Support the development and expansion of existing public transport services including MetroLink, BusConnects and DART expansion to Balbriggan	Public transport supported	Ongoing	Support the development and expansion of existing public transport services including MetroLink, BusConnects and DART expansion to Balbriggan, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause signficant engative environmental effects.	Support the development and expansion of existing public transport services including MetroLink, BusConnects and DART expansion to Balbriggan, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause signficant engative environmental effects.
20	T21	To facilitate the provision of Park and Ride facilities in appropriate locations at transport nodes and along strategic transport corridors in accordance with the NTA Strategy, and encourage the inclusion of EV charge points and bike parking.	Policy developed and sites identified	2028	To facilitate the provision of Park and Ride facilities in appropriate locations at transport nodes and along strategic transport corridors in accordance with the NTA Strategy, and encourage the inclusion of EV charge points and bike parking, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause signficant engative environmental effects.	To facilitate the provision of Park and Ride facilities in appropriate locations at transport nodes and along strategic transport corridors in accordance with the NTA Strategy, and encourage the inclusion of EV charge points and bike parking, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause signficant engative environmental effects.
21	T24	Implement the DLA EVCP strategy through delivery of sufficient EVCP's	# of chargers provided	Ongoing	Implement the DLA EVCP strategy through delivery of sufficient EVCP's, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Implement the DLA EVCP strategy through delivery of sufficient EVCP's, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.
22	T25	Expand availability of EV charging points for Council staff and operational vehicles	# of charging points	Ongoing	Expand availability of EV charging points for Council staff and operational vehicles, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.	Expand availability of EV charging points for Council staff and operational vehicles, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
23	T26	Provide EV charging infrastructure (in addition to 20% charge points) to development plan standards, for new social housing developed by the Local Authority. Provide Electric vehicle charge points in car parking for new Fingal Corporate buildings.	# of EV charge points provided	Ongoing	Provide EV charging infrastructure (in addition to 20% charge points) to development plan standards, for new social housing developed by the Local Authority. Provide Electric vehicle charge points in car parking for new Fingal Corporate buildings. When delivering this action, have due regard toenvironmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc. when carrying out charging point infrastructure development.	Provide EV charging infrastructure (in addition to 20% charge points) to development plan standards, for new social housing developed by the Local Authority. Provide Electric vehicle charge points in car parking for new Fingal Corporate buildings. When delivering this action, have due regard toenvironmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc. when carrying out charging point infrastructure development.
24	F3	To engage with the Fingal Coastal Liaison Group with the integration of adaptation strategies into planning policies, etc.	x2 meetings held each year	Annually	To engage with the Fingal Coastal Liaison Group with the integration of adaptation strategies into planning policies, etc., provided such strategies are unlikely to cause significant negative environmental effects.	
25	F4	Develop and implement Coastal Protection Plan for Portrane	Plan produced and actions implemented	2023-2025+	Develop and implement Coastal Protection Plan for Portrane; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities associated with coastal areas such as the receiving marine environment, biodiversity, European sites, recreation and amenity value etc.	Develop and implement Coastal Protection Plan for Portrane; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities associated with coastal areas such as the receiving marine environment, biodiversity, European sites, recreation and amenity value etc.
26	F5	Progress Flood Alleviation schemes in conjunction with the OPW - including Mill Stream Skerries, Bissett Strand and The Green Malahide Village, Portmarnock Bridge.	Projects completed	2029+	Progress Flood Alleviation schemes in conjunction with the OPW - including Mill Stream Skerries, Bissett Strand and The Green Malahide Village, Portmarnock Bridge; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value etc.	Progress Flood Alleviation schemes in conjunction with the OPW - including Mill Stream Skerries, Bissett Strand and The Green Malahide Village, Portmarnock Bridge; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value etc.
27	F6	Continued engagement with the OPW to progress further studies of areas within Fingal at risk of flooding, and development of suitable schemes such as Strand Road Sutton and Santry	Schemes identified	2029+	Continued engagement with the OPW to progress further studies of areas within Fingal at risk of flooding, and development of suitable schemes such as Strand Road Sutton and Santry; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value etc.	Continued engagement with the OPW to progress further studies of areas within Fingal at risk of flooding, and development of suitable schemes such as Strand Road Sutton and Santry; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value etc.
28	F7	Progress appropriate minor works schemes to resolve recurring flood issues, where possible, ensuring the schemes are designed and implemented to promote SUDs / nature based solutions.	# of schemes progressed	Annually	Progress appropriate minor works schemes to resolve recurring flood issues, where possible, ensuring the schemes are designed and implemented to promote SUDs/nature based solutions/protection of biodiversity and European sites and avoidance of habitat fragmentation.	Progress appropriate minor works schemes to resolve recurring flood issues, where possible, ensuring the schemes are designed and implemented to promote SUDs/nature based solutions/protection of biodiversity and European sites and avoidance of habitat fragmentation.
29	F11	Restore St Ita's wetlands to maximise water attenuation capacity and nature conservation benefits	Construction haul roads and fill removed from wetland	2024	Restore St Ita's wetlands to maximise water attenuation capacity and nature conservation benefits, having due regard to the need to protect other environmental sensitivities. Ensure the works are designed and implemented in a manner that: 1. Does not result in the occurence of significant adverse environmental effects and, 2. Promotes SUDs/nature based solutions/ protection of biodiversity and avoidance of habitat fragmentation. 3. Ensures all excavated material defined as a waste is properly managed in accordance with the provisions of the Waste Management Act.	Restore St Ita's wetlands to maximise water attenuation capacity and nature conservation benefits, having due regard to the need to protect other environmental sensitivities. Ensure the works are designed and implemented in a manner that: 1. Does not result in the occurence of significant adverse environmental effects and, 2. Promotes SUDs/nature based solutions/ protection of biodiversity and avoidance of habitat fragmentation. 3. Ensures all excavated material defined as a waste is properly managed in accordance with the provisions of the Waste Management Act.

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
30	F17	Ensure the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-of, improve water quality and contribute to adaptation to climate change through nature based solutions.	Appropriate SuDS incorporated into all developments in the Planning process	Ongoing	Ensure the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-of, improve water quality and contribute to adaptation to climate change through nature based solutions. Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurence of significant adverse environmental effects and does not result in adverse effects to European sites and biodiversity	Ensure the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-of, improve water quality and contribute to adaptation to climate change through nature based solutions. Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurence of significant adverse environmental effects and does not result in adverse effects to European sites and biodiversity
31	F18	Drive the implementation of SuDS in FCC Capital projects, including new builds, retrofits etc, and monitor the level of implementation.	# of schemes progressed	Annually	Drive the implementation of SuDS in FCC Capital projects, including new builds, retrofits etc, and monitor the level of implementation. Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurence of significant adverse environmental effects and does not result in adverse effects to European sites and biodiversity	
32	F23	Assess Resilience of Bridge Infrastructure vulnerable to impact of climate change	# of Inspections carried out	2026	Assess Resilience of Bridge Infrastructure vulnerable to impact of climate change, having appropriate regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.	
33	F26	Use the findings of the Fingal Cultural Heritage & Climate Risk Assessment to prioritise and pilot adaptative and palliative measures for heritage assets in Council ownership	Number of pilot projects identified and delivered	2027	Use the findings of the Fingal Cultural Heritage & Climate Risk Assessment to prioritise and pilot adaptative and palliative measures for heritage assets in Council ownership, having due regard to need to protect and enhance heritage assets, and prevent negative impacts on protected species, including bats.	Use the findings of the Fingal Cultural Heritage & Climate Risk Assessment to prioritise and pilot adaptative and palliative measures for heritage assets in Council ownership, having due regard to need to protect and enhance heritage assets, and prevent negative impacts on protected species, including bats.
34	N1	Prepare and implement multi-functional management plans for the Rogerstown, Malahide and Baldoyle Estuaries and their surrounding lands	Management plans prepared and # of actions implemented	2026	Prepare and implement multi-functional management plans for the Rogerstown, Malahide and Baldoyle Estuaries and their surrounding lands; having due regard to environmental sensitivities at these locations, including water quality, biodiversity, European sites, wetland habitat, aquatic ecology, visual amenity and recreation and amenity value etc.	
35	N4	Develop SUDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary	# SUDS project implemented	2026	Develop SUDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary. Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurence of significant adverse environmental effects.	Develop SUDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary. Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurence of significant adverse environmental effects.
36	N13	Restore marine ecosystem along Fingal coast by supporting restoration projects of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands	# of restoration projects undertaken	2026	Restore marine ecosystem along Fingal coast by supporting restoration projects - designed, led and implemented by appropriately competent, trained ecologists - of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands; having due regard to environmental sensitivities such as European sites and biodiversity.	Restore marine ecosystem along Fingal coast by supporting restoration projects - designed, led and implemented by appropriately competent, trained ecologists - of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands; having due regard to environmental sensitivities such as European sites and biodiversity.
37	N14	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor	Restoration project implemented	2025	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor, having due regard to the need to protect other environmental sensitivities, and the need to ensure the works are designed and implemented in a manner that: 1. Does not result in the occurence of significant adverse environmental effects and, 2. Promotes the protection and enhancement of biodiversity.	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor, having due regard to the need to protect other environmental sensitivities, and the need to ensure the works are designed and implemented in a manner that: 1. Does not result in the occurence of significant adverse environmental effects and, 2. Promotes the protection and enhancement of biodiversity.

Note	Ref	Summary Action	Tracking Measure	Timeframe	Integrated Environmental Considerations following Strategic Environmental Assessment	Integrated Environmental Considerations following Appropriate Assessment
38	**R8**	Assessment of Construction & Demolition Waste Management Plans for proposed developments to ensure all potential waste streams are identified at an early stage and appropriate measures put in place to promote prevention, reuse, recycling and recovery of waste in line with the waste hierarchy. The segregation and management of different waste streams is also assessed.	# of assessments undertaken yearly and compliance with best practice guidance for C & D waste management.	Annually	Assessment of Construction & Demolition Waste Management Plans for proposed developments to ensure all potential waste streams are identified at an early stage and appropriate measures put in place to promote prevention, reuse, recycling and recovery of waste in line with the waste hierarchy and relevant waste management legislation. The segregation and management of different waste streams is also assessed ; having due regard to environmental sensitivities such as European sites and biodiversity, and water and soil quality.	Assessment of Construction & Demolition Waste Management Plans for proposed developments to ensure all potential waste streams are identified at an early stage and appropriate measures put in place to promote prevention, reuse, recycling and recovery of waste in line with the waste hierarchy and relevant waste management legislation. The segregation and management of different waste streams is also assessed ; having due regard to environmental sensitivities such as European sites and biodiversity, and water and soil quality.
39	**R13**	Prepare Circular Cities Action Plan	Circular Cities Action Plan Complete	2024	Prepare Circular Cities Action Plan; having due regard to need to ensure all waste collection and management activities are carried out in accordance with waste management legsislation and in a manner that does not cause significant negative environmental effects or nuisance.	
40	**R14**	Implement measures under the Circular Cities Action Plan,	"Measures Implemented Review completed"	Annually	Implement measures under the Circular Cities Action Plan, having due regard to need to ensure all waste collection and management activities are carried out in accordance with waste management legsislation and in a manner that does not cause significant negative environmental effects or nuisance.	
41	**R17**	Extending opening hours in Coolmine in line with Estuary Recycle Centre	Opening Hours extended	2024	Extending opening hours in Coolmine in line with Estuary Recycle Centre, whilst ensuring waste management activities at the facility continue to be carried out in accordance with the requirements of waste management legislation and in a manner that does not cause significant negative environmental effects or nuisance.	
42	**R18**	Expand the bring bank network (bottles, cans & textiles) throughout Fingal by a minimum of 3 sites annually, giving consideration to new areas of populations and development.	# of new bring bank sites	2028	Expand the bring bank network (bottles, cans & textiles) throughout Fingal by a minimum of 3 sites annually, giving consideration to new areas of populations and development, whilst ensuring these sites are appropriately located, designed and managed so as not to cause significant adverse environmental effects.	
43	**R20**	Assess Council lands & buildings for potential for renewable energy, biodiversity; green infrastructure, sustainable agriculture & other sustainable projects.	Land & building assessment complete	2024	Assess Council lands & buildings for potential for renewable energy, biodiversity; green infrastructure, sustainable agriculture & other sustainable projects, having appropriate regard to relevant planning and environmental protection criteria.	Assess Council lands & buildings for potential for renewable energy, biodiversity; green infrastructure, sustainable agriculture & other sustainable projects, having appropriate regard to relevant planning and environmental protection criteria.
44	**R21**	Develop renewable energy, green infrastructure, biodiversity, sustainable agriculture & other sustainable projects on Council lands & buildings.	No. of projects/ measures implemented annually	2028	Develop renewable energy, green infrastructure, biodiversity, sustainable agriculture & other sustainable projects on Council lands & buildings, having due regard to all environmental sensititives that may be impact by significant development projects, including renewable energy projects, such landscape character and visual amenity, population and human health, biodiversity, European sites, noise, water and soil related sensitivities.	
45	**C10**	Promote and support SEAI's Better Energy Communities and Sustainable Energy Communities	# of communities supported	Annually	Promote and support SEAI's Better Energy Communities and Sustainable Energy Communities, where specific supported energy efficiency and renewable energy projects will not lead to unintended negative environmental effects in a local community.	Promote and support SEAI's Better Energy Communities and Sustainable Energy Communities, where specific supported energy efficiency and renewable energy projects will not lead to unintended negative environmental effects in a local community.
46	**C12**	Involve residents and community groups, e.g. Tidy Towns/community garden groups, in the establishment of newly planted trees in their area, e.g. watering	Number of people involved	Annually	Involve residents and community groups, e.g. Tidy Towns/community garden groups, in the establishment of newly planted native trees in their area, e.g. watering; having due regards to environmental sensitivities such as European sites and biodiversity	Involve residents and community groups, e.g. Tidy Towns/community garden groups, in the establishment of newly planted native trees in their area, e.g. watering; having due regards to environmental sensitivities such as European sites and biodiversity

APPENDIX II: SUSTAINABLE DEVELOPMENT GOALS

ENERGY & BUILDINGS

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Energy Management				
E1	Continuous Improvement by maintaining ISO 50001 energy management system	ISO 50001 Compliant	Annually	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
E2	Annual Monitoring & Reporting to SEAI	FCC's energy use monitored and reported	Annually	SDG 7: Affordable and Clean Energy SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E3	Publish Fingal County Council's Energy Review Periodically	Review published, # of recommendations implemented	Ongoing	SDG 7: Affordable and Clean Energy SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
Energy Efficiency Improvements & Upgrades				
E4	Continuous Improvement through the Energy Performance Contract for County Hall (Swords) and Civic Offices, during the service stage	Measurement & Verification of energy savings	Annually	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
E5	Procure upgrades through an Energy Performance Contract for Draíocht Arts Centre and public library in Blanchardstown with potential of including Balbriggan Town Hall & Library/ Watery Lane Depot/ Ballycoolin Training Centre	EPC Awarded	2025	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
E6	IES Building Energy Modelling to be completed in County hall and Grove Road offices. Further modelling of digital assets to be included in other EPC projects.	# Number of models completed	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
E7	Refurbishment programme for Fingal Corporate buildings to include energy reviews and retrofits as standard in line with Public Sector targets for 2030.	# of buildings upgraded	Annually	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E8	Engage with independent BREEAM assessor and utilise Building Assessment Methodology throughout delivery of Swords Cultural Quarter flagship project. BREEAM is a leading validation and certification system for sustainable built environment.	Ongoing reviews of design and construction process to target independent certification on completion	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E9	Undertake a feasibility study on utilising the existing Bore Hole with heat pump technology in County Hall Offices to provide heating, and to provide cooling to IT Comms room.	Feasibility study to be completed	2024	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E10	BER Audits to be carried out on corporate buildings and libraries to determine BER ratings	# of BER Audits carried out	2024	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E11	Roll out of real time check metering and energy monitoring platform across significant energy using buildings to analyse and understand usage.	# of sites metered and monitored	2024	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E12	Implementation of identified DeliveREE/ Pathfinder projects across FCC premises to include the decarbonisation of significant energy using buildings.	# of Projects implemented / packages prepared through DeliveREE/Pathfinder funding; and associated emissions reductions.	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals

ENERGY & BUILDINGS

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
E13	Feasibility study for retrofit/ fabric upgrades across the 2 Civic Offices	Feasibility study and use of IES Models	2026	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E14	Targeted LED upgrades across smaller FCC premises, not suitable for EPC	# of LED upgrades	2026	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E15	Targeted M&E upgrades across smaller FCC premises, not suitable for EPC. Identifying projects and packages through Planned Preventative Maintenance	# of M&E Upgrades	2028	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E16	Renewal of remaining 1.5% of public lighting stock & pitch lighting	# of units converted to LED	2024 - 2026	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
Social Housing Upgrades				
E17	Continue to make energy efficiency retrofits to social housing under the DHLGH-supported Energy Retrofit Programme. Ensure that all of FCC's social housing stock has a B2 or cost optimal energy rating by 2030.	# of units upgraded annually	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E18	Complete Pilot programme in Strandmill Estate, Portmarnock, in conjunction with SEAI and REIL offering retrofit upgrades to private homeowners, availing of economies of scale when coupled with public housing upgrades. Partially funded by SEAI government grants.	# of units completed under pilot project.	2024	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E19	Build on the pilot roll out of EnergyCloud to c. 60 social homes in Swords in 2024 with further roll out to social homes across the county	No. of homes availing of Energy Cloud	2025	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
E20	IGBC Home Performance Index Assessments carried out and where feasible certification obtained for all new social housing projects developed by the local authority.	# Registered and assessed	Annually	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 3: Good Health & Wellbeing SDG 6: Clean Water & Sanitation SDG 15: Life on Land
E21	Pilot study to research and potentially futureproof new build social housing schemes for district heating	Study Complete	2025	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action

ENERGY & BUILDINGS

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Energy Planning & Renewables				
E24	Continue to develop a strategic approach to town centre regeneration through Town Centre First: A Policy Approach for Irish Towns and by utilising existing buildings and unused lands for new development, promote residential occupancy in our rural towns and villages and provide for a mix of uses within these areas.	# of existing buildings and sites developed and occupied.	Annually	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E25	Deliver Blanchardstown District Heating Scheme	On Site completion	2029+	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E26	Assess potential for viable renewable energy projects on a temporary/permanent basis, on council controlled lands	Assessment complete	2028	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E27	Install PV panels on suitable Council roofs such as civic offices, libraries and community buildings	# of panels installed	2028	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E28	Develop Wind Energy Strategy	Strategy prepared	2028	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
E29	Review Energy Statements for planning applications.	Energy Statements reviewed.	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
	Energy Awareness			
E30	Work with SMEs in partnership with SEAI to promote energy efficient adaptations	# of SMEs availing of funding from SEAI	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E31	Work with SMEs to promote energy efficient adaptations through the energy efficiency grant from LEO	# of SMEs availing of funding from Energy Efficiency grant	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E32	Conduct research and develop case studies from the Council's historic building stock that undertake pre- and post- works energy performance assessments and devise of appropriate and sensitive retrofitting/energy upgrading of traditional buildings to inform works to other Council-owned properties and to guide private owners	Case studies completed	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
E33	Promote and encourage routine maintenance and good housekeeping to maintain the older building stock of the county in good condition in order to reduce energy consumption and extend the building's life-cycle (e.g. Fingal's Stitch in Time Grant, National Schemes of Built Heritage Investment Scheme, Historic Structures Fund, Community Monument Fund).	# of buildings upgraded	Annually	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action

TRANSPORT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Active Travel - Protected Cycleways/Walkways				
T1	Increase the meterage of high quality walkways in the county and improve the meterage of existing walkways in the county.	m of walkways delivered and improved per year, captured through the pavement management system.	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T2	Increase the km of protected cycle lanes and off road cycle lanes and greenways in the county annually; in line with the Greater Dublin Cycling Network Plan, and the FCC Greenway Plan - including Fingal Coastal Way, the Sutton to Malahide Cycleway, the Broadmeadow Way, Church Fields Link Road, and the Royal Canal Urban Greenway, etc.	km of Protected Cycle Lanes and Off Road Cycle Lanes and Greenways delivered per year. # of schemes completed.	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Active Travel - Connectivity				
T3	Deliver/alter infrastructure to improve connectivity/ permeability in order to promote active travel	Number improved annually	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T4	Deliver new pedestrian / cycling road crossings, which give priority to pedestrians and cyclists. Develop and implement a work programme for the replacement of pedestrian crossings with ones which give priority to pedestrians & cyclists.	# of crossing delivered	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T5	Install junction build outs in accordance with Design Manual for Urban Roads & Streets 2020, increasing safety to users.	no. of upgraded arms of junctions installed	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Active Travel - Mobility				
T6	Increase the quantity of bicycle parking and virtual parking bays in the public domain.	No. of bicycles facilitated in the public space	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T7	Assist in the provision of bicycle stands in private community space, such as community centres, sport clubs etc.	# of bicycles facilitated in private/community spaces	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T8	Continued provision of Bike Sharing Schemes across the county	# of bikes provided, # of bike journeys	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
T9	Provision of E scooters across the county	# of scooters provided, # of bike journeys	Annually	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T10	Implement pilots schemes for mobility/emobility to promote sustainable mobility by encouraging creativity and innovation in the county.	# of pilots implemented per year.	Annually	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Active Travel - Modal Shift				
T11	Identify opportunities for reallocation of existing road space to promote active travel and improve public space.	km of road reallocation identified.	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T12	Enhancement / reallocation of roads & street space to promote active travel and improve public space. Implement in all 3 LEAs	km of existing road space reallocated. # of schemes	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T13	Implement traffic calming programme. To include provision of infrastructure for encouraging modal shift (Ramps, VAS, Pedestrian Crossings etc)	# of traffic calming measures	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T14	Assess the feasibility of re-allocating existing Pay & Display spaces to bike parking	# of spaces reallocated	2026	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T15	Introduction of Pay & Display schemes in accordance with adopted bye-Laws to discourage car use (To decrease car dependency)	# of locations	2026	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T16	Provide programmes and initiatives that support community-wide adoption of active travel modes e.g. Learn 2 Cycle with a Disability lessons, Adult Cycling lessons, Walking Buses, Cycling Buses; and opportunities for marginalised groups to engage in Active Travel	# of programmes/initiatives provided per year	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T17	Examine the potential for 30 km/h speed limits in towns and villages in line with the Road Safety Plan recommendations.	Increase in kilometres of road network with a 30kmph speed limit	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action

TRANSPORT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Active Travel - Modal Shift - Safe Routes To School				
T18	Implement Safe Routes to School programme	# of schools with measures implemented.	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T19	Implement the School Streets initiative	# of schools participating	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Public Transport				
T20	Support the development and expansion of existing public transport services including MetroLink, BusConnects and DART expansion to Balbriggan	Public transport supported	Ongoing	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
T21	To facilitate the provision of Park and Ride facilities in appropriate locations at transport nodes and along strategic transport corridors in accordance with the NTA Strategy, and encourage the inclusion of EV charge points and bike parking.	Policy developed and sites identified	2028	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
Shared Mobility				
T22	Promote and facilitate additional car sharing schemes	# of cars provided	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T23	Promote and facilitate additional community car sharing schemes	# of cars provided	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
EVCP Provision				
T24	Implement the DLA EVCP strategy through delivery of sufficient EVCP's	# of chargers provided	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T25	Expand availability of EV charging points for Council staff and operational vehicles	# of charging points	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T26	Provide EV charging infrastructure (in addition to 20% charge points) to development plan standards, for new social housing developed by the Local Authority. Provide Electric vehicle charge points in car parking for new Fingal Corporate buildings.	# of EV charge points provided	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T27	Continued electrification of the Council's vehicle fleet as market technology develops	% of total fleet converted to EVs	Ongoing	SDG 7: Affordable and Clean Energy SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Roads Construction & Maintenance				
T28	Maintenance and upgrade of public footpath network and regional and local roads to encourage modal shift to walking and cycling	Km of footpaths and roads maintained that facilitates modal shift	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T29	Explore the use of sustainable methods of road surfacing that minimise the use of raw materials.	Study alternatives and # of pilots undertaken.	2025	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
Staff Travel				
T30	Continued implementation of the national public sector remote working strategy	Enabling IT solutions in place. # of staff availing of the scheme	Ongoing	SDG 13: Climate Action
T31	Aim to reduce kilometres travelled by private ICE vehicles within work hours and incentivise modes such as cycling, electric vehicles.	% modal shift from private car.	Annually	SDG 13: Climate Action
T32	Prepare and finalise the Smarter Travel Workplace Strategy for staff of Fingal County Council, and engage on the implementation of the strategy	Strategy prepared # of recommendations enacted per year	Annually	SDG 13: Climate Action
T33	Promotion of Cycle-to-Work Scheme for Council staff	# of staff availing of scheme	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
T34	Provide eco driving training to Council drivers	# of staff trained	2024	SDG 13: Climate Action
T35	Implement carbon offset programme for official flights and investigate an appropriate offsetting scheme for the Council's other business travel emissions.	Carbon Offset Programme implemented	2028	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action

FLOOD RESILIENCE

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Flood Risk Management				
F1	Update Council Emergency Response Plans to include flood event response	Plans reviewed and updated yearly	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
F2	Ensure annual update of the specific risks to service provision in each FCC Department that may be impacted by Climate Change, building on the Climate Change Risk Assessment developed for the CAP.	Annual Risk Review	Annually	SDG 13: Climate Action
F3	To engage with the Fingal Coastal Liaison Group with the integration of adaptation strategies into planning policies, etc.	x2 meetings held each year	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 14: Life below Water SDG 17: Partnership for Goals
Flood Defence				
F4	Develop and implement Coastal Protection Plan for Portrane	Plan produced and actions implemented	2023-2025+	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 14: Life below Water SDG 17: Partnership for Goals
F5	Progress Flood Alleviation schemes in conjunction with the OPW - including Mill Stream Skerries, Bissett Strand and The Green Malahide Village, Portmarnock Bridge,	Projects completed	2029+	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F6	Continued engagement with the OPW to progress further studies of areas within Fingal at risk of flooding, and development of suitable schemes such as Strand Road Sutton and Santry	Schemes identified	2029+	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F7	Progress appropriate minor works schemes to resolve recurring flood issues, where possible, ensuring the schemes are designed and implemented to promote SUDs / nature based solutions.	# of schemes progressed	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F8	Develop a coastal monitoring programme to measure coastal erosion along the Fingal coast	Monitoring programme set up	2026	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 14: Life below Water SDG 17: Partnership for Goals
F9	Facilitate the development of a National Coastal Monitoring Survey Programme	Survey programme facilitated and developed	2026	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 14: Life below Water
F10	Identify sites where flood defence features can be removed or relocated to increase flood capacity of rivers and estuaries	# of sites identified	2028	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
F11	Restore St Ita's wetlands to maximise water attenuation capacity and nature conservation benefits	Construction haul roads and fill removed from wetland	2024	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
Surface Water Management				
F12	Record on a GIS layer the council surface water system and make it available to all relevant staff from Operations & Planning. This must include all SuDS systems and flood embankments	Surface water system recorded on GIS layer	2027	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F13	Prepare a maintenance register for the entire surface water system within the county, including SuDS, pipes and culverts to aid proactive maintenance, alleviate flooding and maintain water quality	Maintenance register created & updated annually	Annually	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F14	Develop an improved maintenance plan for SuDS assets that are taken in charge by FCC, ensuring their continued operation.	Maintenance plans developed	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
Sustainable Urban Drainage Systems				
F15	Promote and encourage community involvement in the retrofit of SuDS in existing developments, maintaining community rain gardens, discourage hard paving in gardens and retrofit raingardens / water butt installations	No of promotional initiatives (social media posts, articles etc) and engagement events per year.	Annually	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action

FLOOD RESILIENCE

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
F16	Develop a Blue/Green Roof Guideline to assist both internal and external stakeholders implement these systems as per the County Development Plan objectives	Guideline Produced	2024	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F17	Ensure the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-of, improve water quality and contribute to adaptation to climate change through nature based solutions.	Appropriate SuDS incorporated into all developments in the Planning process	Ongoing	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 15: Life on Land
F18	Drive the implementation of SuDS in FCC Capital projects, including new builds, retrofits etc, and monitor the level of implementation.	# of schemes progressed	Annually	"DG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
F19	Create a case study of SuDS at Local Area Plan level	Case study complete	2028	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F20	Ensure new Local Area Plans feature Urban Greening Proposals.	Local Area plans with Urban greening measures.	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
F21	Assess the feasibility of green roofs on all new Fingal public, operational and social buildings and provide where viable and appropriate. Evaluate date from CARO / UCD project on Green Roof substrates.	Assessments completed and provided	Ongoing	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
Improve resilience of Infrastructure				
F22	Assess resilience of regional and local roads in line with Climate Adaptation Strategy issued by the Department of Transport	# of assessments	2028	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
F23	Assess Resilience of Bridge Infrastructure vulnerable to impact of climate change	# of Inspections carried out	2026	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Resilience of Archaeological and Heritage Assets				
F24	Develop maintenance and condition survey programmes for Council owned historic buildings and ancient monuments that are informed by climate change impacts.	No of projects complete annually	Ongoing	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
F25	Archaeological and heritage assets to form part of all climate risk assessments including opportunities for integration of cultural heritage in adaptative mitigations e.g. green infrastructure, cycle ways, nature-based solutions etc.	Assets included in risk assessments as part of the Planning & Development processes	Ongoing	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F26	Use the findings of the Fingal Cultural Heritage & Climate Risk Assessment to prioritise and pilot adaptative and palliative measures for heritage assets in Council ownership	Number of pilot projects identified and delivered	2027	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F27	Support and develop citizen science projects such as Fingal X Heritage as a means of monitoring climate change impacts on Fingal's heritage assets and raising public awareness	# of projects developed with community engagement	2027	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F28	Identify projects and opportunities for collaboration with relevant stakeholders to assess and prioritise cultural heritage sites vulnerable to climate change	# of projects participated in	Ongoing	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
F29	Build climate resilience of archaeological and built heritage in public and private ownership through the Community Monuments Fund	Number of sites in Fingal per year funded through CMF	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals

NATURE BASED SOLUTIONS

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Green Infrastructure				
N1	Prepare and implement multi-functional management plans for the Rogerstown, Malahide and Baldoyle Estuaries and their surrounding lands	Management plans prepared and # of actions implemented	2026	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 14: Life below Water SDG 15: Life on Land
N2	Map and survey all significant/historic stands of woodland within the county e.g. in excess of 5ha, and review the effectiveness of the protection offered under the Green Infrastructure Network Zoning of woodlands in the County Development Plan	Map & Survey & Review completed	2025	SDG 15: Life on Land
N3	Review measures to improve Biodiversity nett gain on all projects, including Biodiversity pilot programme on new build housing. Architects will adhere to Biodiversity officers protocol for nesting boxes.	Carry out exercise on all projects	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N4	Develop SUDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary	# SUDS project implemented	2026	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N5	Implement wildfire fire management strategy for Howth Head	# of actions implemented	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N6	Explore funding models for carbon offsetting to fund wetland and woodland development	Study Complete	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
Importance of Trees				
N7	Commission a study to report on the ecosystem services/ nature-based solutions provided by Fingal's trees with reference to their economic/climate change adaptation benefits	Study Complete	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N8	Assess and adopt tree valuation methods for compensatory / replacement planting, e.g. CAVAT, iTree	Valuation method adopted	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N9	Initiate a programme of targeted Strategic Annual Tree Planting including identifying and mapping priority locations, to include sites suitable for woodland creation. Reviewed in an annual works programme, presenting what is planned for the coming year. Taking advantage of government funding programmes such as the New Woodland Creation Scheme on Public Lands	Priority locations mapped, Ha of trees planted, € funding obtained.	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N10	Prepare a list of suitable tree species recommended for differing situations / functions and make available to developers and other stakeholders following the Guiding Principle of 'right tree in the right place'	Right tree in the right place list prepared	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land

NATURE BASED SOLUTIONS

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Preservation & Conservation				
N11	Undertake study to identify the habitats and species at risk of climate change	Study completed	2025	SDG 13: Climate Action SDG 14: Life below Water SDG 15: Life on Land
N12	Carry out feasibility studies of developing a Marine Protection Area along the Fingal Coast and on the restoration of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands	# of studies undertaken	2026	"DG 13: Climate Action SDG 14: Life below Water
N13	Restore marine ecosystem along Fingal coast by supporting restoration projects of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands	# of restoration projects undertaken	2026	SDG 13: Climate Action SDG 14: Life below Water
N14	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor	Restoration project implemented	2025	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
N15	Increase pollinator areas in public parks and open spaces	Increased acreage in pollinator areas	Annually	SDG 13: Climate Action SDG 15: Life on Land
Food & Agriculture				
N16	Continue supporting the use of public allotments as a way communities can grow their own food, and lower food miles and food waste	Increased awareness on the use of allotments	Annually	SDG 3: Good Health and Well-Being SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 15: Life on Land
N17	Map and protect strategic agricultural land for national food security purposes	Resource mapped	2028	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 15: Life on Land
N18	Engage with the agri-food sector to gain an understanding of how Fingal might better support more sustainable farming practices	Sector engaged	2028	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals
N19	Develop climate change initiatives in partnership with local farmers and other stakeholders	Initiatives developed	2028	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 15: Life on Land SDG 17: Partnership for Goals

CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Green Public Procurement				
R1	Develop a Green Public Procurement (GPP) strategy	Strategy developed and adopted by Steering Group	2023	SDG 9: Industry, Innovation and Infrastructure SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R2	Develop a monitoring and reporting tool to ensure GPP is embedded into all Procurements	Tool Developed and Approved by Steering Group	2024	SDG 9: Industry, Innovation and Infrastructure SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R3	Ensure GPP Monitoring & Reporting is undertaken to ensure Green Criteria is included in contracts.	# of contracts assessed for GPP inclusion	Ongoing	SDG 9: Industry, Innovation and Infrastructure SDG 12: Responsible Consumption and Production SDG 13: Climate Action
Reduce Waste & Increase Recycling in FCC				
R4	Implement Environmental Management System for Council buildings including reduction in waste and water usage, and increased recycling	EMS implemented	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R5	31 Community centres to participate in FCC Keen to be Green initiative over 5 stages	Implementation of sustainable initiatives identified in each stage	2028	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
Waste Reduction / Circular Economy				
R6	Support and promote the implementation of the targets of the National Waste Management Plan for a Circular Economy 2023-2029	# of initiatives supported	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R7	Establish a network of public drinking water fountains to help reduce plastic waste in partnership with Uisce Eireann	# of new points installed	2026	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
Waste Prevention				
R8	Assessment of Construction & Demolition Waste Management Plans for proposed developments to ensure all potential waste streams are identified at an early stage and appropriate measures put in place to promote prevention, reuse, recycling and recovery of waste in line with the waste hierarchy. The segregation and management of different waste streams is also assessed.	# of assessments undertaken yearly and compliance with best practice guidance for C & D waste management.	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
R9	Assessment of all apartment complexes within Fingal on the management of food waste and use of brown bins. Engagement with apartment management companies to ensure compliance with legislation and to encourage segregation of food waste by residents and subsequent collection by authorised collectors.	# of apartment complexes engaged with and the # apartment complexes with brown bin collection service in place.	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
R10	Waste Collection Permit and Waste Facility Permit holders desktop annual return (AR) validation and on site verification audits to improve traceability of the various waste streams	# of compliant Annual Return validations/verifications completed	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
R11	Waste Presentation Bye-Law Project - identify households who currently don't have a standard waste collection service in place, investigate and determine how they are managing their waste; encourage compliance with FCC Waste Presentation Bye-Laws and take legal action if required to ensure compliance	# of households engaged with and # of engagements resulting in bin service put in place	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals

CIRCULAR ECONOMY & RESOURCE MANAGEMENT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
R12	Assessment of commercial premises within Fingal to ensure compliance with the Waste Presentation Bye-Laws and the Waste Management (Food Waste) Regulations 2009 in terms of waste segregation and in particular food waste.	# of commercial premises engaged with and the # of commercial premises with 3 bin system in place with an emphasis on management of food waste.	Annually	SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action SDG 17: Partnership for Goals
Promote & Facilitate Circular Economy				
R13	Prepare Circular Cities Action Plan	Circular Cities Action Plan Complete	2024	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R14	Implement measures under the Circular Cities Action Plan	"Measures Implemented Review completed"	Annually	SDG 8: Decent Work and Economic Growth SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R15	Incorporate circular economy principles in FCC Economic Development Strategy	Circular Economy principles incorporated in Economic Development Strategy	2024	SDG 9: Industry, Innovation and Infrastructure SDG 11: Sustainable Cities and Communities SDG 12: Responsible Consumption and Production SDG 13: Climate Action
R16	Reduce carbon footprint of Council supported events.	Carbon footprint reduced at events	Annually	SDG 13: Climate Action
Recycling / Circular Economy				
R17	Extending opening hours in Coolmine in line with Estuary Recycle Centre	Opening Hours extended	2024	SDG 13: Climate Action
R18	Expand the bring bank network (bottles, cans & textiles) throughout Fingal by a minimum of 3 sites annually, giving consideration to new areas of populations and development.	# of new bring bank sites	2028	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
R19	Provide paints, musical instruments and bicycles from Estuary & Coolmine civic amenity centres to community groups for re-use. Identify other used items that could be collected at the Civic Amenity Centres and re-purposed, re-imagined or repaired for re-use.	# of items re-used	Annually	SDG 13: Climate Action
Land Use & Acquisition				
R20	Assess Council lands & buildings for potential for renewable energy, biodiversity; green infrastructure, sustainable agriculture & other sustainable projects.	Land & building assessment complete	2024	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
R21	Develop renewable energy, green infrastructure, biodiversity, sustainable agriculture & other sustainable projects on Council lands & buildings.	No. of projects/measures implemented annually	2028	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land
R22	Identify opportunities for the acquisition of land and buildings by agreement/CPO for renewable energy/ regeneration/active travel/greenway / green infrastructure projects etc	Area of land (Ha) or no. of buildings acquired for Climate Action Projects	Ongoing	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land

COMMUNITY ENGAGEMENT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
Community Awareness & Engagement				
C1	Promote & Administer Community Climate Action grants for 2023 - 2026. Approve grants to communities to deliver climate action projects across the thematic areas as [er Grant guidelines.	# of grants for climate action projects across each thematic areas,	2026	SDG 13: Climate Action
C2	Deliver Climate Action Week program of events in conjunction with DLA	# of events held, # of citizens engaged	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C3	Develop an annual calendar of climate action & environmental awareness days of significance which will include international and national days, such as the World Earth Day, World Sand Dune day, National Reuse Month, National Bike Week, Dublin Climate Action Week, All Dublin Clean up week. Targeted campaigns to promote activities as per calendar timeline.	Annual calendar of activities developed from January to December each year. # of activities promoted.	Annually	SDG 13: Climate Action
C4	Utilise various forms of media including FCC social media, FCC website, newsletters, & cinema campaigns to promote climate action awareness.	# of campaigns	Annually	SDG 13: Climate Action
C5	Develop a library of climate material including webinars, books, articles and digital training resources covering Climate Science, Climate Action, Just Transition, the LACAP, National and Local on climate action and make available to the public through the Fingal's social media channels and Fingal Libraries.	# of supports for public, # of citizens engaged	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
Climate Awareness in Schools				
C6	Engage with DLA to scope requirement for delivering Climate Action Awareness in Schools, through training providers, in advance of Climate Action Awareness being mainstreamed within school curriculum.	Agreed programme scoped and delivered accordingly	2024	SDG 4: Quality Education SDG 13: Climate Action
C7	Engage with schools and An Taisce and provide resources & funding to deliver green flags and achieve green schools status.	# of schools engaged, # of students participating	2028	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
C8	Provide resources including funding to schools in Fingal as support to engage in resource management projects. Projects may include composting for schools, gardening and vegetable growing projects, resources packs and installation of water butts.	# of schools engaged, # of gardening projects, # of composting projects, # of resource packs provided, # of water butts installed	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action
Community awareness & engagement through engagement with partner organisations				
C9	Provide an annual energy awareness event in partnership with Codema, SEAI and other stakeholders	Annual event held	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C10	Promote and support SEAI's Better Energy Communities and Sustainable Energy Communities	# of communities supported	Annually	SDG 7: Affordable and Clean Energy SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
C11	Pilot Climate Action workshops with Tidy Town committees to promote awareness of climate action at a local level.	# of workshops	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C12	Involve residents and community groups, e.g. Tidy Towns/ community garden groups, in the establishment of newly planted trees in their area, e.g. watering	Number of people involved	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 15: Life on Land

COMMUNITY ENGAGEMENT

Ref.	Action	Tracking Measure	Timeframe	Sustainble Development Goals
C13	Guided by the Memorandum of Understanding signed between the GAA and CCMA, towards working together on sustainability and climate action projects, engage with the Green Club Programme through a nominated lead, working with the CARO and GAA, in the promotion and support of projects by participating clubs, to meet the objectives, and during key phases, of the programme to 2029	# of clubs engaged, # of students participating	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C14	Keen to be Green Communities: supporting community groups to develop climate awareness projects such as Bike repair workshops, clothes swaps, community gardens, green festivals..	# of initiatives / projects supported and examples	Annually	SDG 11: Sustainable Cities and Communities SDG 13: Climate Action SDG 17: Partnership for Goals
C15	Work with Global Action Plan on the further development of Climate Action Heroes programme across communities	Programme Supported Annually	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C16	Promote LEADER Projects on sustainability	No. of LEADER Projects on sustainability	Ongoing	SDG 13: Climate Action SDG 17: Partnership for Goals
C17	Provide resources including equipment and funding for marine clean-up and awareness events. Deliver an annual coastal event in the community such as awareness of and protection measures for sand dunes.	# of initiatives supported by the Council each year, One events per year delivered	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C18	Sport Grants - Clubs must provide evidence of 'circular economy' and other sustainable initiatives as appropriate.	# of applications approved with evidence of sustainable initiatives	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
Promote the development of green skills across all economic sectors				
C19	Review Fingal Skills Strategy which includes the development of green skills across all economic sectors	Skills strategy review completed	2024	SDG 13: Climate Action
C20	Expand participation in Green Skills Sub-Group under Fingal Skills Strategy	Group membership expanded	Annually	SDG 13: Climate Action
C21	Establish an Agri-Food Skills Sub-Group under Fingal Skills Strategy to promote diversification within the Agri-Food Sector	Membership of group & number of initiatives promoted	2024	SDG 13: Climate Action
	Staff Awareness			
C22	Provide Climate Awareness training for all staff and elected members and identify opportunities to embed climate awareness across all departments	# of staff trained, # of councillors trained	Annually	SDG 13: Climate Action SDG 17: Partnership for Goals
C23	Develop climate action induction pack for all new staff.	Pack developed	2024	SDG 13: Climate Action

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LIST OF FIGURES

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ABBREVIATIONS

AA	Appropriate Assessment
AR	Annual Return
BAU	Business as Usual
BEI	Baseline emissions inventory
BER	Building Energy Rating
BMS	Building Management Systems
BREEAM Assessor	Building Research Establishment Environmental Assessment Method
C&D WASTE	Construction and Demolition Waste
CPO	Compulsory Purchase Order
CAP	Climate Action Plan
CARO	Climate Action Regional Office
CAVAT	Capital Asset Value for Amenity Trees
CCAP	Climate Change Action Plan
CCAT	Coastal Communities Adapting Together
CCMA	The County and City Management Association
CCRA	Climate Change Risk Assessment
CMF	Community Monuments Fund
CO_2	Carbon Dioxide
CODEMA	City of Dublin Energy Management Agency
DART	Dublin Area Rapid Transport
DCAW	Dublin Climate Action Week
DCC	Dublin City Council
DECA	Delivering Effective Climate Action
DECC	Department of Environment, Climate and Communications
DFB	Dublin Fire Brigade
DHLGH	Department of Housing, Local Government and Heritage
DLA	Dublin Local Authorities
DREM	Dublin Region Energy Master Plan
DZ	Decarbonising Zone
EBIKE	Electric Bike
ECAAT	Department Environment, Climate Action and Active Travel Department
EETD	Economic, Enterprise and Tourism Development
EMS	Energy Management System
EPA	Environmental Protection Agency
EPC	Energy Performance Contract
ESCO	Energy Service Company
EVCP	Electric Vehicle Charge Points
EVs	Electric Vehicles
FCC	Fingal County Council
GAA	Gaelic Athletic Association
GAP	Global Action Plan
GDA	Greater Dublin Area
GHG Emissions	Green House Gas Emissions
GIS	Geographical Information Systems
GPP	Green Public Procurement
GTT Model	Gap to Target Model
GWh	Gigawatts per hour
HGV	Heavy Goods Vehicle
ICE	Internal Combustion Engine
IFA	Irish Farming Association
IGBC	Irish Green Building Control
ISO	International Organisation for Standardisation
KPI	Key Performance Indicator
LACAP	Local Authority Climate Action Plan
LASTNG	Local Authority Nation Training Group
LEAs	Local Electoral Areas
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LEO	Local Enterprise Office
LGMA	Local Government Management Agency
LGV	Large Goods Vehicle
LPG	Liquefied Petroleum Gas
M&E	Mechanical and Electrical
M&R	Monitoring and Reporting
MW	Mega Watts
NISA	North Irish Sea Array
NSAI	National Standards Authority of Ireland
NTA	National Transport Association
NWCPO	National Waste Collection Permit Office
Ops	Operations
OPW	Office of Public Works
P&SI	Planning and Strategic Infrastructure Department
PRA	Principle Response Agencies
PV	Photovoltaics
RCP	Representative Concentration Pathway
REIL	Retrofit Energy Ireland
SAC	Special Area of Conservation
SDG	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SEAI	Sustainable Energy Authority of Ireland
SEC	Sustainable Energy Community
SMART	Specific, Measurable, Achievable, Realistic and Timely
SME's	Small Medium Enterprise
SuDS	Sustainable Urban Drainage System
SUVs	Sports Utility Vehicle
$tCO_2$2e	Tonnes of Carbon Dioxide Equivalent
tCO_2	Tonnes of Carbon Dioxide
TII	Transport Infrastructure Ireland
TPER	Total Primary Energy Requirement
TWh	Terawatt-hour
UCD	University College Dublin
VAS	Value Added Services
ZEVI	Zero Emissions Vehicles Ireland

Comhairle Contae
Fhine Gall
Fingal County
Council

Codema
Dublin's Energy Agency

CARO