

CLIMATE ACTION



DRAFT PLAN FEBRUARY 2022

FINGAL DEVELOPMENT PLAN 2023-2029

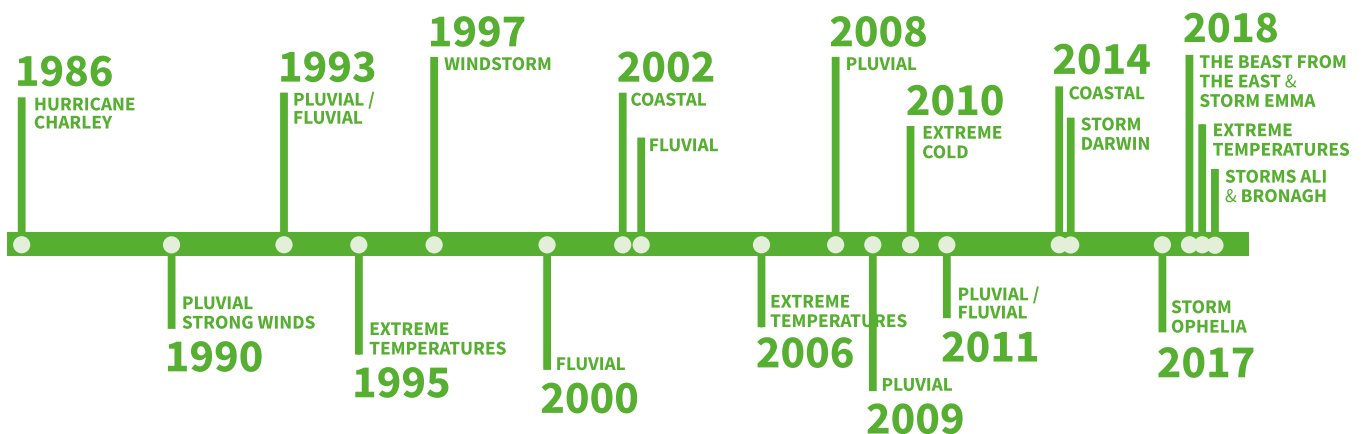
5.1 Introduction

Our climate is changing rapidly and the effects on the Country and on our lives is becoming more evident. Greenhouse gases (GHGs), which includes carbon dioxide (CO₂), methane (CH₄) and nitrogen oxide (NOx), accumulate in the Earth's atmosphere and trap heat, resulting in what is referred to as the greenhouse effect. The effects of increased concentrations of GHGs are experienced as changes in average weather or climate change impacts. These include a rise to the average air and ocean temperature which results in extreme weather events, rising sea levels, occurrences of drought and increased rainfall. None of these events occur in isolation, but rather as compound events with cascading impacts that are wide ranging and have economic, environmental and social costs associated with them.

The “business as usual” model cannot continue, as levels of atmospheric carbon dioxide will continue to increase, average temperatures will continue to rise and the climate will become more volatile. With the above in mind, there is a need to reconsider the approach to the way we live our daily lives in terms of reducing the impacts of climate change, human activities are increasingly influencing the climate and the earth's temperature. If we continue to do nothing, levels of atmospheric carbon dioxide will continue to increase, average temperatures will continue to rise and the climate will become more volatile.

This Plan has an important role to play in helping Fingal realise its potential to be a low carbon society and mitigating the impacts of climate change. In terms of climate change and land-use planning, this Plan plays an important role by guiding the sustainable growth of the County, encouraging more compact mixed-use development and greater use of sustainable transport options such as cycling, walking and public transport, the use of construction materials with low environmental impact and which store carbon, restricting development in areas that are at risk of flooding or coastal erosion and protecting the natural landscape and biodiversity.

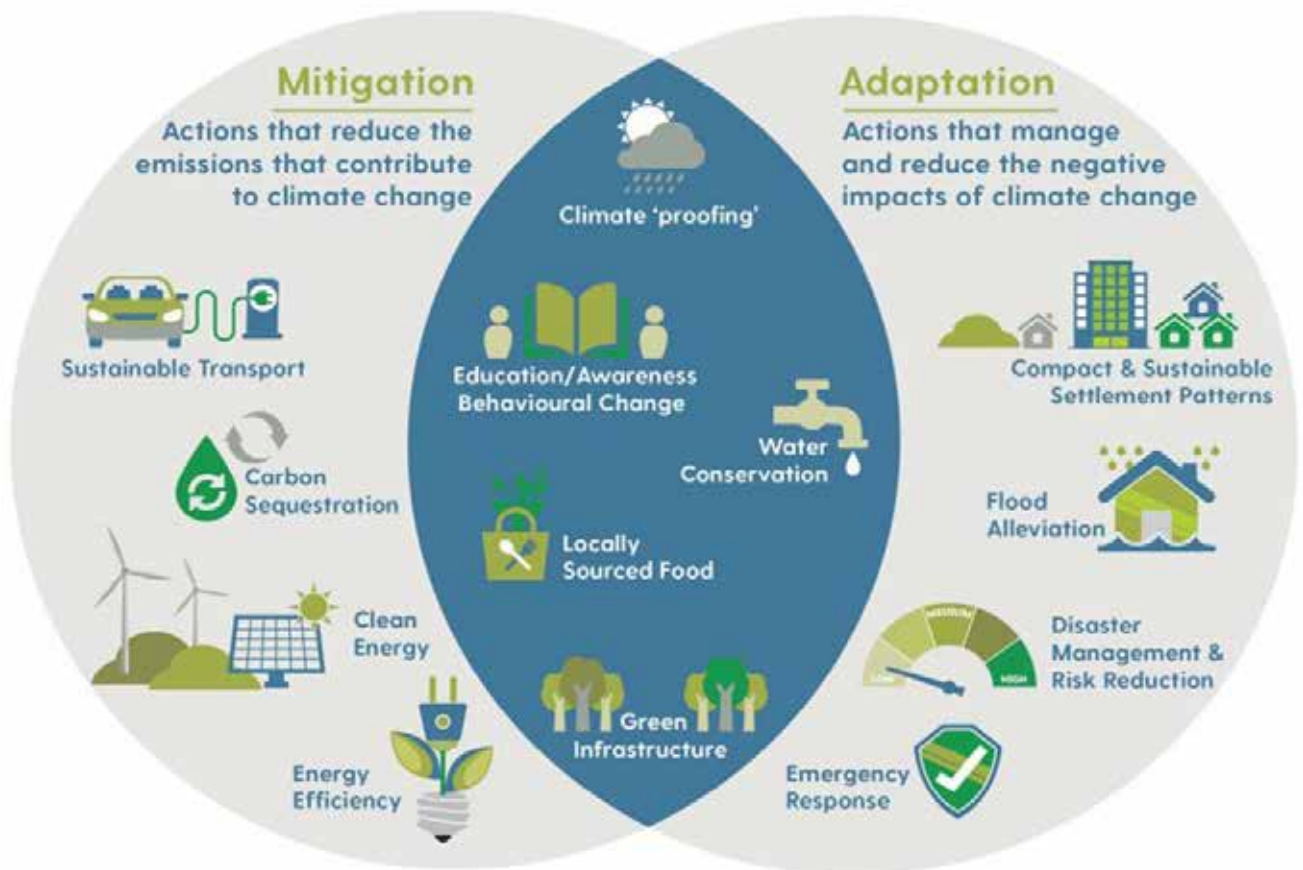
Timeline of Major Climatic Events in Fingal



The impacts and risks of climate change can be reduced and managed through mitigation and adaptation actions. Adaptation is the process of adjustment to actual or expected climate and its effects. Climate mitigation is a human action/intervention to reduce the sources or enhance the sinks of greenhouse gases to reduce the severity of climate change occurring or reduce its impact. This can include reducing the causes of climate change (for example, emissions of GHGs), which in turn will reduce future risks associated with climate change.

The aim of climate adaptation is to reduce the vulnerability of our environment, society and economy and increase resilience. Climate adaptation involves taking steps to adjust human and natural systems in response to existing and anticipated impacts and to take advantage of new opportunities that may arise. Adaptation also brings opportunity through green growth, innovation, jobs and ecosystem enhancement as well as improvements in areas such as water and air quality.

Figure 5.1: Mitigation and Adaptation Actions (Source: Eastern and Midland Climate Action Regional Office).



Spatial Planning and particularly land-use planning is a key instrument by which both adaptation and mitigation measures are placed and delivered within the broader perspective of sustainable development. Spatial planning offers a multi-faceted and evidenced-based approach for the integration and coordination

of relevant “climate-proofed” policies and investment decisions for the delivery of key projects and infrastructure at appropriate locations.

The National Planning Framework confirms that the planning process provides an established means through which to implement and integrate climate change objectives, including adaptation, at local level and the transition to a Low Carbon and Climate Resilient Society. The NPF also states that; “in addition to legally binding targets agreed at EU level, it is a national objective for Ireland to transition to be a competitive low carbon, economy by the year 2050”.

There are a range of cross cutting National Policy Objectives included in the NPF, which address a variety of climate action issues including:

- Integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives;
- Promoting renewable energy use and generation at appropriate locations within the built and natural environment;
- Ensuring flood risk management informs place making by avoiding inappropriate development in areas at risk of flooding;
- Integrating sustainable water management solutions, such as Sustainable Urban Drainage (SUDS), permeable surfacing and green roofs;
- Integrating planning for Green Infrastructure and ecosystem services will be incorporated into the preparation of statutory land use plans; and
- Improving air quality and helping to prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning.

In the context of planning for the mobilisation of mitigation and adaptation efforts at local level it is important to recognise the multi-faceted impact of the climate challenge and the need to support the ability of all sectors, communities and individuals to scale up response efforts. The statutory requirements of the Development Plan in relation to climate action are set out as a mandatory objective in the Planning Act:

Section 10(2)(n) of the Act requires that a development plan shall include objectives for:

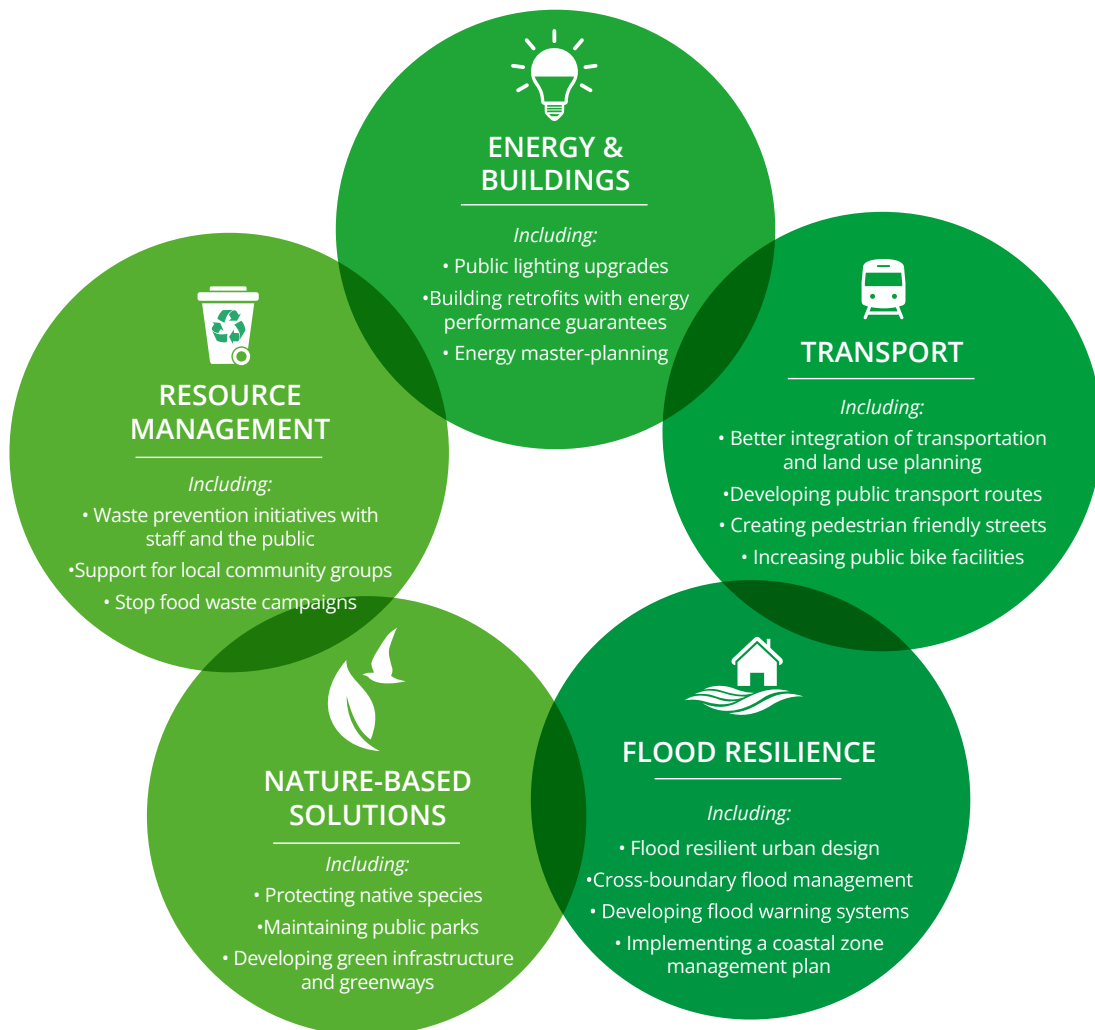
the promotion of sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to,

- i. reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources, and*
- ii. reduce anthropogenic greenhouse gas emissions and address the necessity of adaptation to climate change, taking account of the local authority climate action plan (within the meaning of section 14B of the Climate Action and Low Carbon Development Act 2015), where such a plan has been made for the area in question; in particular, having regard to location, layout and design of new development.*

This Plan provides an opportunity to focus on particular land-use aspects of climate action and how the planning system can be utilised to effect positive change and action. Several components of the Plan are directly and indirectly related to climate action. These include:

- Compact Growth and Sustainable Mobility
- Importance of Sustainable Transport Measures
- Energy Related Objectives
- The role of Nature-based Solutions
- Flooding and Water Management in Mitigating and
- Adapting to Climate Change

Climate action is an overarching and cross-cutting theme across this Plan in line with the policies and objectives contained in the NPF, the RSES, FCC's *Climate Change Action Plan 2019–2024*, as well as other relevant national, European legislation and agreements in relation to climate action.



5.2 Context

The current Fingal Development Plan is underpinned by the principles of sustainable development, climate change adaptation, social inclusion and high-quality design. The current Plan contains adaptation and mitigation measures and actions to address Climate Change and Fingal County Council recognises the need for the development of a robust strategy to increase climate resilience. The importance of factoring climate change adaptation measures into the Development Plan is also recognised in the current Plan and it has regard to the *National Climate Change Adaptation Framework, Building Resilience to Climate Change 2012*, which requires the integration of adaptation and mitigation measures. This Plan seeks to build on the progress made by the current Plan with respect to tackling climate change. Since the adoption of the current Plan and as part of the response to climate change, Climate Action Regional Offices have been established and Fingal sits within the Dublin Metropolitan Region. The Dublin Metropolitan Climate Action Regional Office (CARO) is one of four regional climate change offices that have been set up in response to Action 8 of the 2018 National Adaptation Framework (NAF).

One of the roles of the Dublin CARO is to assist the Local Authorities within the region in preparing their own Climate Change Action Plan. Fingal County Council adopted the *Fingal County Council Climate Change Action Plan 2019–2024* which further demonstrates Fingal County Council's commitment to transitioning to a low carbon society and economy. This Climate Change Action Plan features a range of actions across five key areas including Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management, that collectively address the four targets of this Plan:

- A 33% improvement in the Council's energy efficiency by 2020
- A 40% 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
- To actively engage and inform citizens on climate change

33%

improvement in the Council's **energy efficiency** by 2020



Make Dublin a **climate-resilient region** by reducing the impacts of future climate change-related events

40%

reduction in the Council's **greenhouse gas emissions** by 2030



Actively engage and **inform our citizens** on climate change

In order for Fingal County Council to achieve these targets, this Climate Change Action Plan sets out the greenhouse gas emission levels in the County and the current and future climate change impacts, through the development of mitigation and adaptation baselines. It also examines the future impacts that climate change may have on the region and then sets out a first iteration of actions that will be used to reduce the source and effects of these impacts.

Fingal County Council has prioritised the promotion of active travel as part of our ongoing commitment to Climate Action with the creation of the Environment, Climate Action and Active Travel Department, which will have responsibility for mobility planning and the delivery of the NTA's Cycle Network within the County.

We are developing a network of high-quality Greenways as part of our wider sustainable transport infrastructure programme. This sustainable infrastructure will improve quality of life for our residents as they will increase the numbers of people who will chose to cycle and walk thereby reducing dependency on private car use and lowering carbon emissions, improving air quality levels and reducing congestion.

5.3 Opportunities

The factors that contribute to climate change as well as its effects are wide ranging and relate to a significant number of other issues that are informed by the Plan. As such, Climate Action is a central theme and an ever-present factor/principle throughout this Plan.

This Plan seeks to promote healthy place-making and provide well serviced neighbourhoods which will ensure permeability and promote walking and cycling as the primary, default choice by making these options easier and safer. This will be achieved through the principles of compact growth and integration of land-use and transport planning that underpin this Plan and that inform the policies and objectives of the Plan. This approach has a dual benefit, reducing reliance on the private car, which will “help” climate change and our transition to a low carbon society, but also improving the day to day lives of residents of Fingal.

The *Fingal County Council Climate Change Action Plan 2019–2024* concentrates on two approaches required to tackle climate change. The first, mitigation, consists of actions that will reduce current and future greenhouse gas emissions and examples of these include reductions in energy use and switching to renewable energy sources. The second approach, adaptation, consists of actions that will reduce the impacts that are already happening now from our changing climate and those that are projected to happen in the future. These include flood protection, reduced impact of rising sea levels, increased resilience of infrastructure and emergency response planning.

This Plan adopts this approach when responding to climate change through climate mitigation and climate adaptation. This Plan plays an important role through the implementation of its policies and objectives to help address mitigation and adaptation requirements and move towards a low-carbon, resilient County.

This Plan builds on the five key areas which feature in the *Climate Action Plan* (Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management) and with a focus on evidence-based and spatially appropriate policies. The Plan aims to influence a reduction in carbon emissions and the negative impacts of climate change by promoting compact urban growth and sustainable transport as well as measures to minimise coastal erosion and flooding, enhance green infrastructure and biodiversity,



minimise energy use, promote energy conservation and use of renewable energy sources. The Plan provides for effective management of our resources to ensure that our carbon footprint is reduced.

Fingal has been and continues to be impacted by coastal erosion. The National Coastal Change Management Strategy Steering Group was set up and had its first meeting in September 2020. The group is tasked with considering the development of an integrated, whole of Government coastal change strategy. These recommendations, when published, will play an important part in any Coastal Change Management Policy of the Development Plan.

5.4 Strategic Aims

5.4.1 National Level

The *Climate Action Plan 2019* is committed to achieving a net zero carbon energy system for Irish society and create a resilient and sustainable country. Decarbonisation is a must if the world is to contain the damage from the impact of GHG emissions and build resilience for our countries and communities. The Climate Action Plan sets out over 180 actions, together with numerous sub-actions, that need to be taken at a time when the warning signs are growing, and the time for taking action is rapidly reducing. It identifies how Ireland will achieve its 2030 targets for carbon emissions and puts us on a trajectory to achieve net zero carbon emissions by 2050. Every relevant sector is addressed: electricity, enterprise, housing, heating, transport, agriculture, waste, and the public sector. In particular, the Climate Action Plan states that better land-use management should be responsible for 26% of total carbon dioxide emission reductions over the period 2021 to 2030.

The National Adaptation Framework (NAF); Planning for a Climate Resilient Ireland 2018 by Department of Communications, climate action and Environment (DCCAE) (which was developed in accordance with section 5 of the *Climate Action and Low Carbon Development Act 2015* sets out the national strategy to reduce the vulnerability of the Country to the negative effects of climate change and to avail of positive impacts. It outlines a whole of government and societal approach to climate adaptation. Under the Framework, a number of Government departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for. The Framework states that regardless of how successful efforts to reduce GHG emissions prove to be, the impact of climate change will continue over the coming decades because of the delayed impacts of past and current emissions.

This NAF and its successors will set out the context to ensure local authorities, regions and key sectors can assess the key risks and vulnerabilities of climate change, implement climate resilience actions and ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making.

The NPF has as a National Strategic Outcome; “transition to a low carbon and climate resilient society”. Every year Government issue an Annual Transition Statement which includes an overview of climate change mitigation and adaptation policy measures adopted to reduce GHG emissions and to adapt to the effects of climate change in order to enable the achievement of the national objective of transitioning to a low carbon, climate resilient and environmentally sustainable economy by the end of 2050.

The *National Mitigation Plan (NMP) 2017* by Department of Communications, Climate Action and Environment (DCCA) includes over 100 individual actions for various Ministers and public bodies to implement in an effort towards decarbonising our economy, progress of which will be reported to Government annually in its Annual Transition Statement. The actions relate to decarbonising electricity generation, the built environment, transport and agriculture, forestry and land-use sectors. The NMP will be succeeded by new NMPs at least every 5 years as provided for under the *Climate Action and Low Carbon Development Act 2015*.

5.4.2 Regional Level

The Regional Spatial and Economic Strategy (RSES) 2019 for the Eastern and Midland Region sets out an integrated policy to enable the creation of a sustainable region with the capability to be resilient to future climate change. The RSES identifies a number of key Regional Strategic Outcomes which include, the need to conserve and enhance the biodiversity of our protected habitats and species including landscape and heritage protection, to identify, protect and enhance our Green Infrastructure and ecosystem services, to ensure the sustainable management of our natural resources, to build climate resilience, to support the transition to a low carbon economy by 2050 and the protection of the healthy natural environment to ensure clean air and water for all.

In terms of addressing the future challenges of climate change, the Council will work closely with the Climate Action Regional Offices (CAROs). The Dublin Metropolitan Climate Action Regional Office (run by the four Dublin Local Authorities assisted by Codema) and the Eastern and Midland Climate Action Regional Office (run by Kildare County Council) will be responsible for planning and actions regarding Climate Change mitigation and adaptation in their regions. CARO's shall ensure coherence and coordination with the RSES when formulating regional climate change adaptation plans.

5.5 Policies and Objectives

The approach taken with our policies and objectives in relation to Climate Action is to set out broad or high-level policies and objectives, such as indicating that Fingal County Council will support the implementation of applicable European and National legislation and policy in relation to Climate Action as well as the general principles of mitigation and adaptation.

As we move through this chapter, the policies and objectives will become more localised and specific, focusing on the various elements of mitigation and adaptation such as compact and sustainable settlement patterns, a resilient built environment, Green Infrastructure, energy efficiency and clean energy and sustainable transport.

The policies and objectives set out below accord with the overall objectives of national climate action policy, the Fingal County Council CCAP as well as the climate action principles set out in the NPF and RSES.

Policy CAP1 – National Climate Action Policy

Support the implementation of national objectives on climate change including the “Climate Action Plan 2019 to Tackle Climate Breakdown”, the “National Adaptation Framework” 2018 and the “National Energy and Climate Plan for Ireland 2021–2030” and other relevant legislation, policy and agreements in relation to climate action.

Objective CAO1 – Fingal County Council Climate Change Action Plan

Implement Fingal County Council's 2019 Climate Change Action Plan 2019–2024 in consultation and partnership with stakeholders including the Dublin Metropolitan Climate Action Regional Office (CARO) and Codema.

Objective CAO2 – Quantification of Greenhouse Gases

Support the Eastern and Midland Regional Assembly (EMRA) in identifying a robust method for quantifying the relative GHG impacts of alternative spatial planning policies as part of the European Union ESPON “QGasSP” research programme.

Policy CAP2 – Mitigation and Adaptation

Prioritise measures to address climate change by way of both effective mitigation and adaptation responses in accordance with available guidance and best practice.

5.5.1 Compact and Sustainable Settlement Patterns

In terms of climate change and land-use planning, the Development Plan plays an important role, by guiding the sustainable growth of the County, encouraging more compact mixed-use development and greater use of active and sustainable transport options such as cycling, walking and public transport, restricting development in areas that are at risk of flooding or coastal erosion and protecting the natural landscape and biodiversity.

Both the NPF and the RSES establish the importance of addressing climate action and the need to promote sustainable and compact growth and to progress climate change mitigation and adaptation through land-use planning. The NPF includes National Strategic Outcome No. 8 to “Transition to a Low Carbon and Climate Resilient Society” and at a regional level, the RSES outlines climate action as one of the three key principles underpinning the Strategy in line with national policy. Good planning policies, which promote a compact urban form, linking of transportation and land-use planning and the protection and enhancement of biodiversity create climate resilient communities and neighbourhoods. The policies and objectives that result in proper planning and sustainable development are consistent with those that result in a climate resilient society and this is recognised and supported in Fingal's recently adopted *Climate Change Action Plan 2019–2024*.

Chapter 2: Planning for Growth sets out a sustainable settlement strategy for the County in which compact growth, including brownfield redevelopment and urban infill, is a priority in line with the NPF and the RSES.

Chapter 3: Sustainable Placemaking and Quality Homes sets out a strategy which places a focus on the development of lands located within the footprint of existing settlements, centred around convenient public transport options and developed to increased densities to prioritise sustainable low carbon movement and the creation of walkable mixed-use neighbourhoods. This strategy is also reflected in Chapter 6 Connectivity and Movement.

Policy CAP3 – Climate Resilient Settlement Patterns

Promote sustainable settlement and transport strategies within the county and identify measures, including targets for modal shift, to reduce energy use, GHG emissions and adaptation to climate change.

5.5.2 Resilient Development

It's important that existing and future development within the County responds and is resilient to the impacts of climate change. As such, there is a need for both new and existing development not only to mitigate against climate change, but also to respond and adapt to such changes.

Chapter 14 Development Management Standards contains comprehensive guidance regarding the standards and criteria by which development proposals within the County will be assessed. A central guiding principle of this chapter is to ensure that climate action forms an integral consideration in the Development Management process.

Policy CAP4 – Sustainable Environmental Infrastructure

Ensure that the County's need for sustainable environmental infrastructure is addressed in a way which contributes to wider climate action goals and targets.

Policy CAP5 – Climate Mitigation and Adaptation in the Built Environment

Ensure the built environment is equipped for the impacts of climate change by supporting climate change mitigation and adaptation measures as part of new and existing developments.

Policy CAP6 – Climate Mitigation and Adaptation in relation to the archaeological and built heritage of the county

Advance and support mechanisms through which the Council can develop resilience, adapt or mitigate the impact of Climate Change on the archaeological and built heritage of the county.

Policy CAP7 – Appropriate adaptation of Ireland's built and archaeological heritage

Promote awareness and the appropriate adaptation of Ireland's built and archaeological heritage to deal with the effects of climate change.

5.5.2.1 Climate Mitigation Actions for Buildings

With regard to climate mitigation actions, existing commercial and residential development require targeted intervention in order to reduce their impact on climate change. The government's Housing for All Plan will support the retrofit of 500,000 homes in Ireland by 2030 to a B2 Building Energy Rating (BER).

In line with this overall approach, proposals for major retro-fitting of existing buildings should seek to reduce carbon dioxide emissions, improve the efficiency of resource use (such as water) and minimise the generation of pollution and waste from existing building stock. Such retro-fitting projects should also seek to use innovative energy efficiency measures, such as de-centralised and renewable energy in order to further reduce their carbon footprint.

Another key mitigation measure in relation to the built environment is to ensure that proposals for substantial demolition and reconstruction works can be justified having regard to the “embodied carbon” of existing structures as well as the additional use of resources and energy arising from new construction relative to the reuse of existing structures.

Climate mitigation actions will also be required to be integrated into the building design, construction and operation of new development within the County. In this regard, sustainable building design will include consideration of the building fabric, energy efficient services, energy generation and material resource conservation.

A key climate mitigation action which shall be implemented into all new development relates to the need to reduce energy demand, to increase energy efficiency and to provide renewable energy on-site if possible.

5.5.2.2 Climate Adaptation Actions for Buildings

With regard to climate adaptation actions for buildings, both existing and future development should be resilient to climate change. This should include promoting nature-based solutions such as green and natural infrastructure as the key component of Sustainable Drainage Systems (SuDS), as well as grey infrastructure such as walls, embankments and attenuation tanks.

The Council will seek to add green spaces to Fingal County Council owned buildings where appropriate, including roof tops, car parks and appropriate areas to contribute to air purification within our towns and villages.

Climate change will have a huge impact on Fingal. Addressing challenges in all areas is vital. The addition of green spaces to office roofs including county hall and all Fingal owned buildings and top floors of car parks and apartment buildings will add important air purifiers to our towns and villages. We have seen this done successfully in other European cities.

5.5.2.3 Climate Action Energy Statements

In order to ensure that all future development aligns with the principles of energy efficiency and the use of efficient and renewable sources of energy, all applications for significant new developments, or for significant refurbishment projects, shall be required to submit a Climate Action Energy Statement as part of any overall design statement for a proposed development. Chapter 14 Development Management Standards refers in further detail.

This statement shall also provide outline information relating to the anticipated energy performance and CO₂ emissions associated with the development.

Details as to the required contents of any such Climate Action Energy Statement are included in Chapter 14 Development Management Standards.

Policy CAP8 – Retrofitting and Reuse of Existing Buildings

Support the retrofitting and reuse of existing buildings rather than their demolition and reconstruction where possible.

Policy CAP9 – Energy Efficiency in Existing Buildings

Support high levels of energy conservation, energy efficiency and the use of renewable energy sources in existing buildings, including retro-fitting of appropriate energy efficiency measures in the existing building stock.

Policy CAP10 – Climate Mitigation Actions in the Built Environment

Promote low carbon development within the County which will seek to reduce carbon dioxide emissions and which will meet the highest feasible environmental standards during construction and occupation. New development should generally demonstrate/provide for:

- a. Building layout and design which maximises daylight, natural ventilation, active transport and public transport use;
- b. Sustainable building/services/site design to maximise energy efficiency;
- c. Sensitive energy efficiency improvements to existing buildings;
- d. Energy efficiency, energy conservation, and the increased use of renewable energy in existing and new developments;
- e. On-site renewable energy infrastructure and renewable energy;
- f. Minimising the generation of site and construction waste and maximising reuse or recycling; and
- g. The use of construction materials that have low to zero embodied energy and CO₂ emissions.

Policy CAP11 – Climate Adaptation Actions in the Built Environment

Development proposals should demonstrate sustainable design principles for new buildings/services/site. The Council will promote and support development which is resilient to climate change. This would include:

- a. Measures such as green roofs and green walls to reduce internal overheating and the urban heat island effect;
- b. Ensuring the efficient use of natural resources (including water) and making the most of natural systems both within and around buildings;
- c. Minimising pollution by reducing surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems (SuDS);
- d. Reducing flood risk, damage to property from extreme events– residential, public and commercial;
- e. Reducing risks from temperature extremes and extreme weather events to critical infrastructure such as roads, communication networks, the water/drainage network, and energy supply;
- f. Promoting and protecting biodiversity and green infrastructure.

Policy CAP12 – Climate Action Energy Statements

All new developments involving 30 residential units and/or more than 1,000 sq. m. of commercial floor space, or as otherwise required by the Planning Authority, will be required to submit a Climate Action Energy Statement as part of the overall Design Statement to demonstrate how low carbon energy and heating solutions, have been considered as part of the overall design and planning of the proposed development.

5.5.3 Energy

It is clear that a key part of our efforts to tackle the climate emergency is a switch to renewable sources and to make our current use of energy more efficient. In this regard, Fingal County Council welcomes and supports the use of renewable energy generated either by large renewable energy facilities, by micro-renewable technologies installed in buildings, or through the adaptation of existing facilities in the County to utilise their existing outputs such as heat generation.

The drafting of a Local Authority renewable energy strategy (LARES) is currently being progressed by the Council. The LARES will promote the use of renewables throughout the County. This Plan supports Renewable Energy projects through the inclusion of appropriate policies and objectives, while also having regard to relevant National and Regional policy for both on-shore and off-shore renewable energy.

The decarbonisation of the energy sector by shifting from fossil fuels to low or zero-carbon energy sources is a key element of climate action policy. This will require the energy sector to embrace a more diverse range of low, zero-carbon and renewable energy sources and to provide for secure, resilient, decarbonised and decentralised utilities.

In addition, area-based initiatives, such as Decarbonising Zones, and initiatives aimed at changing how energy is produced and consumed, such as the SEAI's Sustainable Energy Communities play an important role in transitioning towards low carbon energy solutions.

5.5.3.1 Renewable Energy

A renewable energy source means energy that is sustainable, something that can't run out, or is endless, like the sun and is, therefore, a more sustainable alternative to fossil fuels, which are finite. Renewable energy sources includes wind energy, solar energy, water energy (hydro, wave and tidal energy), geothermal energy (from heat below the surface of the earth), ambient energy (from air) and biogas (anaerobic digestion).

The *National Climate Action Plan* includes a commitment that 70% of our electricity needs will come from renewable sources by 2030. The plan states that achieving this target will involve phasing out

coal and peat-fired electricity generation plants, increasing our renewable electricity, reinforcing our grid (including greater interconnection to allow electricity to flow between Ireland and other countries), and putting systems in place to manage intermittent sources of power, especially from wind.

Currently within Fingal, the principle renewable energy sources include solar, wind and micro-renewables, but opportunities exist for other renewable energy sources to be provided in the future and this Plan seeks to assist in the diversification of renewable energy provision in the County.



5.5.3.2 Solar Energy

With regard to solar energy, there are a range of technologies available to exploit the benefits of the sun, including photovoltaic panels (PV), solar thermal panels, solar farms and solar energy storage facilities. Small to medium scale solar rooftop PV installations are suitable for urban areas, particularly large industrial roof spaces, where land availability is limited. Solar PV can be installed in new developments or retro-fitted on to existing buildings.

5.5.3.3 Wind Energy

In terms of wind energy micro-renewable wind energy generation has a significant part to play in reaching national targets for renewable electricity and potential may exist for on-site and micro wind energy production in industrial areas and business parks subject to the requirement to protect residential amenity in surrounding areas. In residential areas of the County, micro-renewable wind energy generation is currently permissible under the provisions of the Planning and Development Regulations, 2001 (as amended).

Potential also exists for the production of electricity from large-scale off-shore wind energy facilities off the coast of Fingal in the Irish Sea. In this regard, Fingal County Council supports the implementation of the *Offshore Renewable Energy Development Plan 2014* and subsequently reviewed in 2018 and will co-operate with state and semi-state agencies in relation to the implementation of projects in the Irish Sea.

Where appropriate, Fingal County Council will also seek to facilitate infrastructure such as grid infrastructure on the land side of any renewable energy proposals of the offshore wind resource, in accordance with the principles of the National Marine Planning Framework.

5.5.3.4 Geothermal Energy

Geothermal energy refers to the heat energy generated and stored in the Earth. This energy can be used for heating our homes and if the source is hot enough, electricity generation. To support its commitments under the *National Climate Action Plan* and the 2019 Programme for Government, the government carried out an "Assessment of Geothermal Resources for District Heating" and also prepared a "Roadmap for a Policy and Regulatory Framework for Geothermal Energy in Ireland".

According to these documents, Ireland has a recognised potential for low-to-medium temperature geothermal energy resources (> 400 m deep) suitable for large-scale or district heating and cooling in municipal, residential and industrial areas. To support the greater deployment of geothermal energy in Ireland, the government is developing a policy regulatory framework to facilitate the exploration for, and development of, geothermal energy resources.

5.5.3.5 Other Sources of Renewable Energy

In addition to the primary sources of renewable energy addressed above, other sources of renewable energy exist, which have the potential to contribute to the overall goal of decarbonising the energy sector. Another source of renewable energy would be biomass, which is plant or animal material used as fuel to produce electricity or heat and examples include wood, energy crops and waste from forests, yards, or farms.

Policy CAP13 – Energy from Renewable Sources

Actively support the production of energy from renewable sources, such as from solar energy, hydro energy, wave/tidal energy, geothermal, wind energy, combined heat and power (CHP), heat energy distribution such as district heating/cooling systems, and any other renewable energy sources, subject to normal planning and environmental considerations.

Policy CAP14 – Micro-Renewable Energy Production

Support and encourage the development of small-scale wind renewable facilities / micro-renewable energy production.

Policy CAP15 – Offshore Wind-Energy Production

Support the implementation of the 2014 “Offshore Renewable Energy Development Plan” (OREDPP) and to facilitate infrastructure such as grid facilities on the land side of any renewable energy proposals of the offshore wind resource, where appropriate and having regard to the principles set out in the National Marine Planning Framework.

Policy CAP16 – Geothermal Energy

Support the exploration for, and development of, geothermal energy resources having regard to emerging government policy on geothermal energy.

5.5.3.6 District Heating and Waste Heat

District heating and waste heat recovery are a highly significant source of low carbon energy, and as set out in the RSES. District Heating is a system for distributing heat generated in a centralised location through a system of insulated pipes for residential and commercial heating requirements such as space heating and water heating. These networks typically use locally sourced heat energy and distribute to local homes and businesses, therefore, reducing the County's reliance on imported energy and fuel. District heating utilises low carbon heat sources such as renewable energy and waste heat recovery, reducing the County's CO₂ emissions, while achieving energy efficiency and climate change mitigation. District heating is specifically referred to in the Climate Action Plan 2019 which states in order to realise the potential of district heating the government will take action to: “ensure the potential of district heating is considered in all new developments and in particular in Strategic Development Zones (SDZs)”. Furthermore, Action 70 of the Climate Action Plan states that the government will “support the delivery of two district heating projects under the Climate Action Fund”.

In order to ensure the future development of District Heating in the County, it will be necessary to ensure that significant new residential and commercial developments, in close proximity to potential heat sources (such as datacentres) are “district heating enabled”, where feasible, so as to ensure that valuable opportunities to capture and utilise waste heat are realised. Where this is not feasible, the proposed energy and heating solution should offer a similarly efficient and low carbon solution.

Details as to the requirements a development must meet in order to be considered “district heating enabled” is provided in Chapter 14 Development Management Standards.

Policy CAP17 – Waste Heat, District Heating and Decentralised Energy

Actively encourage the development of low carbon and highly efficient district heating and decentralised energy systems across the County utilising low carbon heat sources such as renewable energy and waste heat recovery and to promote the connection of new developments to district heating networks where such systems exist/can be developed in a given area.

Policy CAP18 – Supporting the Potential of District Heating in Fingal

Support the potential of district heating in Fingal, all Climate Action Energy Statements submitted to the Council (see Policy CAP12) shall include an assessment of the technical, environmental and economic feasibility of district or block heating or cooling, particularly where it is based entirely, or partially on energy from renewable and waste heat sources.

Policy CAP19 – Capture and Utilisation of Waste Heat

Encourage proposed and existing developments and facilities (such as data centres) to capture and utilise otherwise wasted heat, and use waste heat either on-site, or in an adjoining, and nearby sites, in compliance with all relevant Energy Efficiency Regulations.

5.5.3.7 Decarbonising Zones, Energy Initiatives and Energy Zones

A number of significant strategies and initiatives have been introduced or are being prepared in order to further drive the transition towards low carbon energy use across the County as a whole as well as in local communities.

5.5.3.7.1 Decarbonising Zones

Action 165 of the *Climate Action Plan 2019* also identified the need to engage at a local level and included a specific action which requires Local Authorities to identify and develop plans for at least one Decarbonising Zone (DZ) in their administrative area. A Decarbonising Zone is a spatial area identified by the Local Authority, in which a range of climate mitigation measures can co-exist to address local low carbon energy, greenhouse gas emissions and climate needs. Fingal County Council is working to identify a Decarbonising Zone and work is progressing in conjunction with Codema and CARO on the identification and implementation of this zone to provide for the development of demonstrator projects which will harnessing a range of energies technologies and initiatives.

5.5.3.7.2 Energy Initiatives

Public and stakeholder engagement is extremely important in addressing climate change and it is recognised that there is a need to foster and build momentum on wider citizen engagement in climate change, across all age groups. A successful established example of community engagement in this regard is the SEAI's Sustainable Energy Communities initiative, which assists groups of people to come together to improve how energy is used for the benefit of their community with the common goals of using less energy, using clean, renewable energy and using smart energy.

5.5.3.7.3 Energy Zones

This ongoing work will also assist in the identification of potential “Strategic Energy Zones” in accordance with Regional Policy Objective (RPO) 7.35 of the RSES which states that “EMRA shall, in conjunction with Local Authorities in the region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of community and micro-energy production in urban and rural settings and the potential for renewable energy within industrial areas”.

5.5.3.7.4 Dublin Regional Energy Masterplan

Codema is developing the Dublin Region Energy Master Plan, which will develop evidence-based, and costed pathways for the Dublin region to achieve its carbon emission reduction targets to 2030 and 2050, building on the energy areas identified in the Spatial Energy Demand Analyses (SEDAs) for the four Dublin Local Authority areas.

Policy CAP20 – Decarbonising Zones

Support the designation and implementation of a Decarbonisation Zone or Zones within the County in order to address local low carbon energy, greenhouse gas emissions and climate needs.

Policy CAP21 – Strategic Energy Zones

Support the designation of potential Strategic Energy Zones within the County in conjunction with the Eastern and Midland Regional Authority.

Policy CAP22 – Strategic Energy Communities

Support the ongoing efforts and future development of Sustainable Energy Communities in Fingal through the SEAI “Sustainable Energy Communities” Initiative.

Policy CAP23 – Dublin Regional Energy Masterplan

Support the preparation of the Dublin Regional Energy Masterplan by Codema and to support its implementation in conjunction with neighbouring Dublin Local Authorities, Dublin Metropolitan CARO and other relevant stakeholders.

5.5.4 Waste

5.5.4.1 Circular Economy

Chapter 11 Infrastructure and Utilities and Chapter 14 Development Management Standards of this Plan seeks to integrate a more sustainable approach to waste based on circular economy principles. National climate action policy emphasises the need to take action to address climate action across all sectors of society and the economy. In the waste sector, policy on climate action is focused on a shift towards a “circular economy” encompassing three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems.

Fingal County Council's approach to waste management is consistent with the EU Waste Hierarchy and the circular economy approach to waste which promotes the principles of prevention, re-use, recycling, energy recovery and sustainable disposal. The transition towards a circular economy is already well underway and the *Government's Waste Action Plan for a Circular Economy 2020 – 2025* outlines the new focus which goes beyond simple management of waste and moves towards how we look at resources more broadly, thereby capturing the maximum value of all materials. This Waste Action Plan provides Ireland with a roadmap for waste planning and management and is supported by the *Circular Economy Bill 2021* and Government Strategy to comply with EU Waste Directive obligations.

Fingal will continue to facilitate the implementation of national legislation and national and regional waste management policy having regard to the waste hierarchy, including the *Eastern Midlands Region Waste Management Plan 2015–2021* (EMRWMP), which informs these Development Plan policies and objectives. The implementation of the EMRWMP must ensure that European and national mandatory targets are achieved and, in doing so, that the health of communities in the region, its people and the environment are not compromised. A *National Waste Management Plan for a Circular Economy* is currently in preparation and this will replace the existing Regional Waste Management Plans.

5.5.4.2 Construction and Demolition Waste

In addition to setting out policy measures relating to issues including municipal waste, food waste and single use plastic, the Waste Action Plan addresses the issue of construction and demolition waste as it relates to the planning system.

The Waste Action Plan highlights the ongoing revision of the *2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Waste Projects* as well as the intention to bring construction and demolition waste within the framework of statutory planning Guidelines. It also notes that construction and waste management plan Guidelines will be updated to ensure that there is a consistent application of planning requirements.

Policy CAP24 – Circular Economy

Support the shift towards the circular economy approach as set out in the National Waste Policy for 2020–2025.

Policy CAP25 – Waste Management Plans for Construction and Demolition Projects

Have regard to existing Best Practice Guidance on Waste Management Plans for Construction and Demolition Projects as well as any future updates to these Guidelines in order to ensure the consistent application of planning requirements.

5.5.5 Sustainable Transport

According to data collected by the SEAI, the transport sector was the single largest consumer of energy in Ireland, accounting for 42.3% of energy use in 2018. In terms of greenhouse gas emissions, data collected by the EPA indicates that the transport sector was responsible for 20.4% of total greenhouse gas emissions in



2019, second only to the agriculture sector. This data demonstrates the need not only to reduce transport by private vehicles, but also to reduce the direct emissions from vehicles themselves.

Promoting and delivering more sustainable forms of transport and movement in the County is central to the overall approach to the development of the County during the lifetime of this Plan. This approach recognises the benefits of providing better infrastructure and facilities for pedestrians and cyclists and incorporating these with our rich natural heritage resource, limiting the use of the private car to essential use only and promoting a switch to electrical vehicles through the provision of EV charge points in suitable locations throughout the County. It should also be noted that the Local Authority is providing EV charge ducting in all new social housing units and ensures the provision of EV chargers in accordance with the building regulations in all new developments.

With regard to the provision of enhanced, suitably located, integrated, more frequent and sustainable public transport, Fingal County Council will continue the work with the NTA and TII to ensure the delivery of key public transport projects that will directly benefit Fingal and encourage a move away from dependency on the private car and towards a low carbon society. Fingal County Council also continues to prioritise the promotion of active travel as part of its ongoing commitment to climate action through the work of the Environment, Climate Action and Active Travel Department which is responsible for the delivery of sustainable active mobility solutions. Chapter 6 Connectivity and Movement of this Plan sets out a strategy which responds to key transport challenges by seeking to minimise the need to travel and by promoting a shift from private car use towards more sustainable forms of transport.

5.5.5.1 Decarbonising Transport and Electric Vehicles (EVs)

The *National Climate Action Plan 2019* calls for the combination of measures to influence the spatial pattern of development, urban structure and overall mobility, with low carbon technology measures, such as a significant increase in the EV fleet. The Plan sets out a government target to accelerate the take up of EV cars and vans so that Ireland reaches 100% of all new cars and vans being EVs by 2030. Approximately one third of all vehicles sold during the decade will be Battery Electric Vehicles (BEV) or Plug-in Hybrid Electric Vehicles (PHEV).

In order to cater for this growth in electric vehicles, it will be necessary to ensure that sufficient charging points and rapid charging infrastructure are provided to appropriate design and siting considerations and having regard to the *Planning and Development Regulations 2001* as amended, which have been updated to include EV vehicle charging point installation. Regard will be had to advances being made in EV charging technology as well as the development of new, efficient, innovative and accessible ways of providing charging points.

Policy CAP26 – Electric Vehicles

Ensure that sufficient charging points and rapid charging infrastructure are provided on existing streets where such infrastructure does not impede persons with mobility issues and in new developments subject to appropriate design, siting and built heritage considerations and having regard to the *Planning and Development Regulations (2001)* as amended, which have been updated to include EV vehicle charging point installation, so that EV Street Charging Points be provided to every community of the County.

5.5.6 Flood Resilience

Surface water management and flood prevention remain the responsibility of the Local Authorities and the Office of Public Works (OPW). The management of surface water drainage in Fingal over the lifetime of this Plan and beyond will be key to reducing surface water run-off both mitigating and adapting to climate change and flooding. With more extreme rainfall events anticipated with climate change, Fingal is likely to experience increased flooding (pluvial, fluvial and coastal, groundwater and network) in vulnerable areas of the County.

The Floods Directive calls for member states to undertake strategic flood risk assessments and to identify flood risk management measures. The Office of Public Works (OPW) has prepared flood maps for future climate scenarios and Flood Risk Management Plans outlining measures such as flood alleviation schemes / flood defense works (grey infrastructure) to manage flood risk within the relevant river catchments.

Fingal County Council will actively encourage and promote the use of green solutions such as swales, tree pits, green roofs, downpipe planters, ponds and wetlands for drainage, which minimise negative environmental impacts resulting from development. Green Infrastructure as part of Sustainable

Drainage System (SuDS), also has a role to play in reducing flood risk and in integrated water resource management. Green Infrastructure reduces the rate and volume of water entering the drains by intercepting it, providing temporary and permanent storage areas, and allowing water to infiltrate into the ground rather than being directed to drains. Facilitating run-off to percolate through natural features such as the natural ground, tree pits, green roofs and swales, will provide for staged water treatment helping to remove pollution and sediments and thereby, improving the water quality of our rivers in line with the requirements of the *Water Framework Directive*.

Establishing space for rivers corridors also plays a role in adaptation responses to achieve flood resilience. Protecting existing river corridors and landscaping and providing natural flood management measures such as the creation of wetlands within river corridors can help to manage river flooding by reducing the volume of runoff, by promoting water infiltration into the soil and slowing runoff to streams, and by delaying the downstream passage of flood flows.

This Plan has been subject to and is accompanied by a Strategic Flood Risk Assessment (SFRA), prepared in accordance with the *Guidelines for Planning Authorities* DEHLG and OPW, 2009. Consequently, this Plan zones appropriate sites for development and identifies how flood risk can be reduced.

Chapter 11 Infrastructure and Utilities sets out a riparian corridor policy approach for the County's rivers including policies and objectives relating to SuDS. Chapter 14 Development Management Standards sets out additional supportive objectives and required standards in relation to Surface Water Management, foul and surface water drainage systems, water conservation and green roofs.

Policy CAP27 – Flood and Water Resource Resilience

Support the delivery of soft, green and grey adaptation measures to enhance flood and water resource resilience where appropriate in the County.

Policy CAP28 – Flood Risk Assessment and Adaptation

Address flood risk at strategic level through the process of Strategic Flood Risk Assessment, and through improvements to the County's flood defences.

Policy CAP29 – Natural Flood Risk Mitigation

Encourage the use natural flood risk mitigation or nature-based solutions including integrated wetlands, green infrastructure, and Sustainable Drainage Systems (SuDS) as part of wider adaptation and mitigation responses to achieve flood resilience.

5.5.7 Coastal Management

Fingal continues to be impacted by coastal erosion. The National Coastal Change Management Strategy Steering Group was set up and had its first meeting in September 2020. The group, tasked with considering the development of an integrated, whole of Government coastal change strategy.

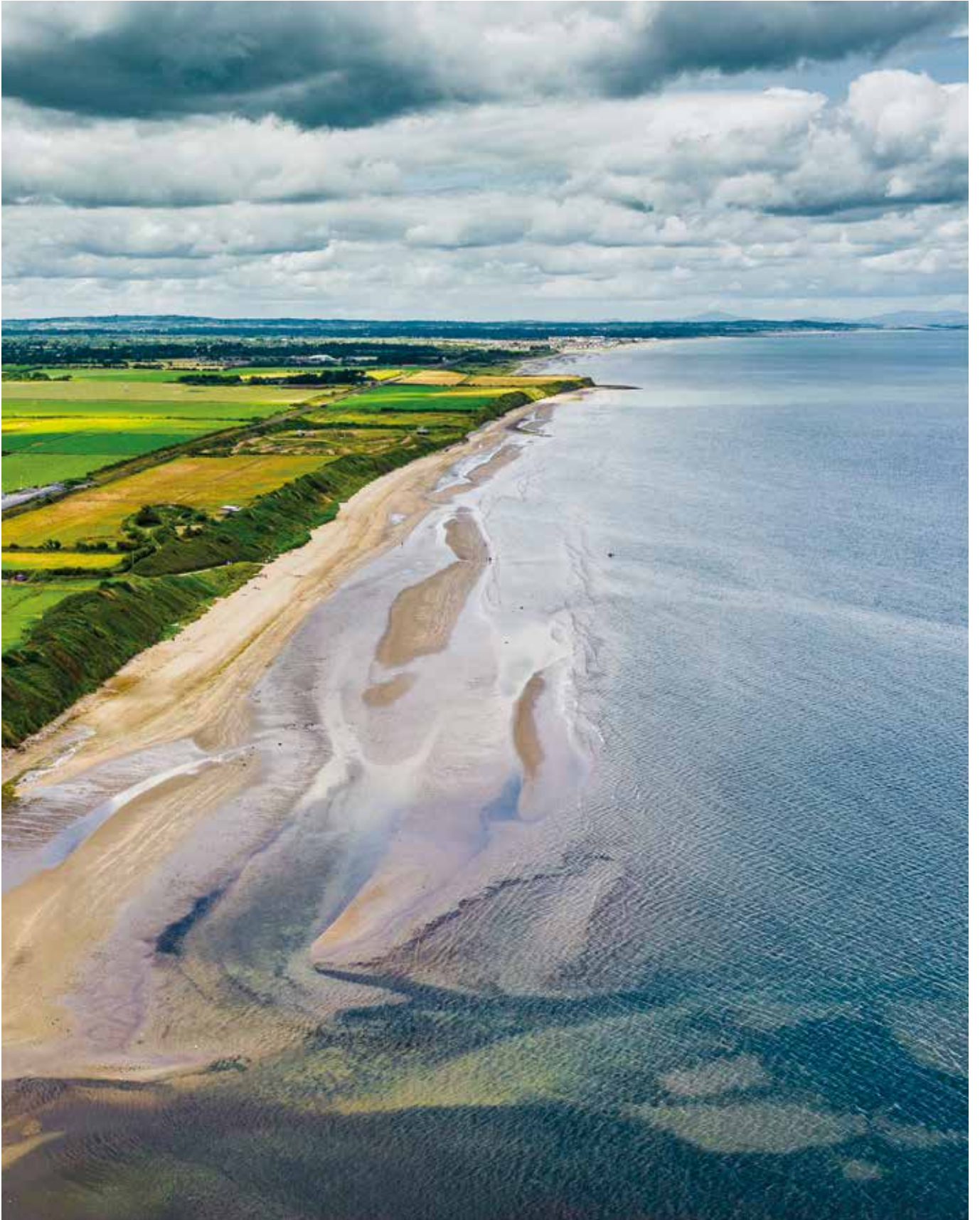
Best practice in coastal zone management suggests non-interference with the coast and coastal processes if at all possible. This is mainly due to the often complex and unforeseen consequences on other parts of the coast that can be caused by protective measures and the costs associated with the installation and future maintenance of coastal protection structures.

Fingal County Council will continue to work with relevant authorities such as the Office of Public Works on the identification and development of additional flood protection measures where necessary. This Plan acknowledges the dynamic nature of the coastline and includes a range of policies and objectives on how coastal change is to be managed.

Coastal monitoring continues to be an integral part of coastal management. With this in mind, the OPW in consultation with Fingal County Council is piloting the Rogerstown Outer Estuary as one of 5 National locations. Drone flights have commenced, and this pilot will inform the roll out of a National programme.

Coastal defence proposals for Portrane, Rush and Rogerstown Outer Estuary are progressing, and an Options Report has been completed and the preferred option has been communicated to the community through a series of virtual information meetings. The installation of specially designed Y-shaped groynes structures combined with beach supplementation and flood embankments at the Burrow and a floodwall in Rush are considered the preferred coastal defence options. The consultants are now (November 2021) finalising the design and preparing supporting documents for the project.

Fingal County Council is the first Local Authority in the Country to undertake a risk assessment of the effect on climate change hazards on its heritage assets. The results of this risk assessment will act as a robust baseline for the prioritisation of mitigating actions. The Council will consider the inclusion of objectives in relation to climate change adaptation to ensure climate change measures are not detrimental to heritage assets.



Policy CAP30 – Coastal Monitoring

Monitor coastal erosion and accretion along Fingal's coastline to identify locations at risk of coastal erosion and flooding.

Policy CAP31 – Coastal Protection

Ensure the provision of appropriate coastal protection measures in locations at risk of coastal erosion and flooding.

Policy CAP32 – Coastal Zone Management

Support coastal zone management measures for adapting to climate change which include restoration of degraded ecosystems, increased flood resilience, water quality improvement, habitat conservation and provision of amenities for the residents of and visitors to Fingal.

Policy CAP33 – Engagement with Key Stakeholders

Continue to work with national and regional authorities and other key stakeholders with regard to flood defence required to protect vulnerable urban areas from worst case scenario sea level rises in the coming decades.

5.5.8 Nature-Based Solutions and Green Infrastructure

Green Infrastructure can assist the County to adapt and become resilient to the effects of climate change while also playing a role in climate mitigation. The County's Green Infrastructure features include natural and semi-natural features (the marine environment, parks, woodland, waterbodies, etc.) and nature based infrastructure (such as green roofs, tree pits, rain gardens and green walls).

These natural assets and urban greening elements provide a range of functions and benefits (ecosystem services) that contribute towards climate change adaptation and mitigation. The County's trees, vegetation and soil capture and store carbon and provide evaporative cooling and shading in our urban areas and settlements, mitigating the urban heat island effect.

Increasing, restoring and connecting habitats rich in biodiversity that provide valuable ecosystem services, is essential to increasing the County's resilience to climate change and improving quality of life. Chapter 9 Green Infrastructure and Natural Heritage sets out adaptive Green Infrastructure and urban greening policies and objectives to help implement climate action in the County.

Policy CAP34 – Climate Action and Green Infrastructure

Protect, connect and expand the County's Green Infrastructure while optimising the climate change adaptation and mitigation services it provides.

5.5.9 Climate Action as a Cross Cutting Theme

Climate Action is a cross cutting theme and one of the main components of this Plan. In line with the above, every chapter of the Plan contributes to the overall effort to adapt to and mitigate the impacts of climate

change. The summary table below, provides a brief overview of the principal ways that each relevant chapter in the Plan makes a concrete contribution to climate action efforts and how in broad terms, each chapter addresses the various climate action policy areas addressed in this chapter.

Table 5.1: Summary of Climate Action Measures by Chapter

Chapter 1 – Introduction
<ul style="list-style-type: none"> ➤ Supports a reduction in energy demand and emissions through a reduction on reliance on fossil fuels and unsustainable use of resources. ➤ Supports compact growth and the continued consolidation of existing settlements within the County. ➤ Supports the effective use of land well-served by public transport and the development of sustainable infrastructure. ➤ Supports the transition to a low-carbon, resilient and sustainable society.
Chapter 2 – Planning for Growth
<ul style="list-style-type: none"> ➤ Supports sustainable development through compact growth via appropriate infill and brownfield development and targeted growth along key transport corridors.
Chapter 3 – Sustainable Placemaking and Quality Homes
<ul style="list-style-type: none"> ➤ Supports the consolidation of towns and villages over continued greenfield development, enhancing settlement vitality and avoiding duplication of investment in services and infrastructure. ➤ Promotes high quality residential development incorporating a range of typologies and tenure options enabling people to right size at the right time. ➤ Provides sustainable resilient communities hosting a range of local services, high quality public realms and community infrastructure, all within easy reach by walking, cycling and public transport.
Chapter 4 – Community Infrastructure and Open Space
<ul style="list-style-type: none"> ➤ Support the provision of community infrastructure and open space at locations which are accessible by active travel, including walking or cycling and which are close to transport routes. This will reduce the need to drive to access services and facilities. ➤ Support “Fingal’s Keen To Be Green Facilities Project” which will see community facilities from around Fingal take part in a 5-stage plan to become sustainable and take action against the effects of Climate Change. The Project is a collaboration between Fingal’s Community Development Office, Fingal Environment, Climate Action and Active Travel Department and the Fingal Community Facilities Network.

Chapter 5 – Climate Action

- Supports the implementation of the FCC Climate Change Action Plan.
- Supports integrating climate action measures into development proposals.
- Supports the decarbonisation of the energy sector and the continuing development of renewable and low carbon sources of energy.
- Supports local and countywide energy strategies and initiatives.
- Supports the circular economy approach to waste.
- Supports the transition towards more sustainable modes of movement and transport and the decarbonisation of transport.
- Supports improving flood risk mitigation and adaptation measures including the use of nature-based solutions and SuDS.
- Supports the principles of nature-based solutions and urban greening.

Chapter 6 – Connectivity and Movement

- Supports land use policies which reduce demand for travel by bringing people and the activities they need to access closer together.
- Supports transitioning to low carbon mobility solutions through support for the ongoing development of a sustainable and integrated transportation network.
- A priority focus on increased provision of walking, cycling and public transport infrastructure.
- Encouraging behavioural change to more sustainable modes.
- Active support for key public transport projects and public transport accessibility in urban and rural areas.
- Designing roads and streets to improve conditions for sustainable modes.
- Seeks appropriate parking standards to facilitate sustainable development.
- Supports the effective management of strategic transport corridors to enable the efficient movement of people and goods.
- Supports reduced or zero emissions solutions for how goods are delivered and supports the potential that exists for the efficient use of the rail network to transport freight.
- Ensuring that transport corridors perform a function as green infrastructure links incorporating nature-based solutions.

Chapter 7 – Employment and Economy

- Support initiatives which provide opportunities for businesses to operate in more a more sustainable manner providing for resilience and for the mutual benefit of businesses and customers.
 - Support compact growth and the development of strategic development areas for population and employment growth in conjunction with appropriate infrastructure provision.
 - Support clustering as a key economic concept and as a means of locating businesses at combined locations, thereby reducing distances
 - Support the provision of quality employment and residential developments in proximity to each other in order to reduce the need to travel
 - Support the “Making Remote Work – National Remote Work Strategy” and facilities that enable people to live near their place of work.
 - Support the growth of the “green economy” including renewable energy, retrofitting, and electric vehicles and charging infrastructure and supporting the transition towards a circular economy
 - Support the development of tourism infrastructure, visitor attractions and supporting facilities at appropriate locations in the County in a manner that does not have an adverse impact on the receiving areas and the receiving environment.
 - Encourage the development of environmentally sustainable agricultural practices and ensure that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.
 - Support the Forest Service of the Department of Agriculture, Food and Marine in implementing sustainable forest development in line with National policy guidance.
- Facilitate and encourage the development of the alternative energy sector

Chapter 8 – Dublin Airport

- Places a strong emphasis on reducing climate emissions through increasing use of more sustainable transport modes and smarter travel approach for surface access to and from Dublin Airport.
- Support the restriction of increased employee car parking at the airport in an effort to reduce emissions.
- Support the requirement for large-scale developments at the airport to address carbon emissions as part of the development management process
- Encourage waste prevention and minimization throughout airport facilities.

Chapter 9 – Green Infrastructure and Natural Heritage

- Supports the implementation of the Fingal Biodiversity Action Plan, The Forest of Fingal-A Tree Strategy for Fingal, Keeping it Green – An Open Space Strategy for Fingal and Space for Play – A Play Policy for Fingal in the Draft Plan.
- Supports Fingal's Allotment Strategy, Community Gardens and promote re-wilding and pollinator initiatives within the County.
- Supports a co-ordinated and managed network of multifunctional green spaces linked to the wider regional Green Infrastructure network.
- Supports the integration Green Infrastructure and an ecosystem services approach into new developments / new growth areas.
- Supports the protection, maintenance, and enhancement of the watercourses and their riparian corridors in the county.
- Supports the protection and enhancement of the coast shoreline and marine environment as open space and valuable natural habitats.
- Provides for appropriate protection of trees and hedgerows, recognising their value to our natural heritage, biodiversity and climate action.

Chapter 10 – Heritage, Culture and Arts

- Co-operate with other agencies in the investigation of climate change on the fabric of historic buildings and traditional construction to enhance adaptive capacity, strengthen resilience and reduce the vulnerability of the built heritage
- Advance and support mechanisms through which the Council can develop resilience, adapt or mitigate the impact of Climate Change on the archaeological and built heritage of the county
- Supports retaining existing buildings and enhance their energy performance in keeping with best building conservation principles.
Supports operation with other agencies in the investigation of climate change on the fabric of historic buildings.
- Supports the implementation of the Community Monuments Fund in order to ensure the monitoring and adaptation of archaeological monuments and mitigate against damage caused by climate change.

Chapter 11 – Infrastructure and Utilities

- Supports nature-based and adaptive flood risk management and promote the use of Sustainable Drainage
- Systems (SuDS) in all developments.

- Supports the integration of watercourse/waterbodies management and protection with land use planning and development management.
- Supports the promotion and delivery of more sustainable forms of waste management in line with circular economy principles.
- Supports minimising/preventing waste and maximising material recycling, reuse and re-purposing.
- Supports renewable energy use and generation at appropriate locations within the built and natural environment.
- Supports the roll-out of the Smart Grids and Smart Cities Action Plan (2013) in order to enable new connections, grid balancing, energy management and micro grid development.

Chapter 12 – Implementation and Monitoring

- Supports the monitoring of and successful implementation of the climate action related policies set out in the plan.

Chapter 13 – Land Use Zoning

- Supports the development of compact, integrated settlements and a climate resilient County by promoting particular classes of use in appropriate locations.
- Supports the consolidation of existing centres and the redevelopment of brownfield land to support the efficient use of land.
- Provides for the safeguarding of green infrastructure as well as community and social infrastructure.

Chapter 14 – Development Management Standards

- Supports development which minimises resource consumption, reduces waste, conserves water, promotes efficient energy use and uses appropriate renewable technologies.
- Supports the use of sustainably sourced materials which are to be re-used and recycled wherever possible.
- Encourages the use of green building materials and low embodied energy products such as low carbon cement and recycled materials.
- Encourages developments which enhance biodiversity and provide for accessible open space and landscaping.
- Requires development to integrate surface water management principles including Sustainable Urban Drainage Systems (SuDS).