







DÚN LAOGHAIRE-RATHDOWN COUNTY COUNCIL

CLIMATE CHANGE ACTION PLAN

2019-2024

ANNUAL PROGRESS REPORT 2022

This Annual Progress Report 2022 for the Climate Change Action Plan, has been prepared by the dlr Council Climate Action team in conjunction with Codema – Dublin's Energy Agency and the Dublin Metropolitan Climate Action Regional Office (CARO), and in partnership with the Environment and Climate Action Strategic Policy Committee and the Elected Members of Dún Laoghaire-Rathdown County Council.

FOREWORD

This is the third Annual Progress Report, since the publication of the Council's Climate Change Action Plan 2019-2024. We continue to focus on the implementation and monitoring of the Plan, in the creation of a climate resilient County, across the areas of climate action, biodiversity and the circular economy.

Within the framework of evolving Government legislation and policy, the Council continues to make progress across the five theme areas of Energy and Buildings, Transport, Flood Resilience, Nature Based Solutions and Resource Management. The key focus at this stage in the implementation of the CCAP, is rolling out ambitious climate action projects, drawing down available sources of funding, both supported by a progressive policy framework. This includes the County Development Plan 2022-2028, which came into effect in April 2022.

This year we selected the Dún Laoghaire and Blackrock areas, as the County's new Decarbonising Zone. As an action of the national Climate Action Plan 2021, this area is set to become the focus for a range of climate action measures, such as the identification of projects and outcomes, that will contribute to achieving national climate targets. We will develop a Decarbonising Zone Implementation Plan in the coming months, in collaboration with the Department of the Environment, Climate and Communications, Codema – Dublin's Energy Agency and the Dublin Climate Action Regional Office (CARO).

In 2022, we advanced our efforts in leading on the transition from a 'linear' to a 'circular' economy, by being the first local authority in Ireland to sign up to the ambitious European Circular Cities Declaration. In doing so we have joined like-minded local authorities across Europe, who are committed to the need to decouple economic growth, from resource use and recognise and share a common vision of a circular economy.

By taking part in the second Dublin Climate Action Week, which took place in September 2022, we continue to share a common vision with our partner local authorities, Dublin City Council, Fingal County Council and South Dublin County Council. One of our flagship events this year was delivering a European wide webinar 'Circular Economy Transition: The Role of Cities and Local Authorities', which was hosted by the Chair of the Council's Environment and Climate Action Strategic Policy Committee.

This initiative again reminds us of the continued need for local level climate action, sustained leadership across communities and shared learning and up-skilling, in addressing both the causes and impacts of climate change and realising the combined benefits of reducing both. As we continue to implement and monitor our Climate Change Action Plan, the Council and the Elected Members, are committed to mainstreaming climate action across our buildings, facilities, functions and services.

Paul Kennedy
Director of Infrastructure and Climate Change

INTRODUCTION

This Report is the third Annual Progress Report for the Council's Climate Change Action Plan 2019-2024, covering the reporting period October 2021 to October 2022. Since the publication of the CCAP, the Council continues to focus its efforts on the implementation and monitoring of the Plan, in creating a climate resilient County, across the areas of climate mitigation and adaptation, biodiversity and the circular economy. The Climate Change Advisory Council Annual Progress Report 2022 gives the national local authority sector an overall progress assessment of 'Good', in relation to climate action activities stating, 'Building upon last year's scorecard assessment, the integration of mitigation with adaptation demonstrates good progress. The climate action training programme appears to be successful and should increase mainstreaming in the future. Obtaining sufficient resources appears to be a priority of the CAROs over the near future, which should reduce challenges to implementation' (Climate Change Advisory Council, 2022).

The Council continues to main-stream its efforts and collaborate across departments, staff and elected members, to achieve energy efficiency and emission reductions across its own buildings, facilities, travel, functions and services, and influence climate action in the wider community. This is derived from the Council's Corporate Plan, a core value of which is 'Climate First - Adopt a climate first approach to decision making'.

Dún Laoghaire-Rathdown County Council's - Climate Change Action Plan 2019-2024 was approved in May 2019, in accordance with the National Adaptation Framework - Planning for a Climate Resilient Ireland 2018 (NAF). The approved CCAP sets out four key targets and a range of actions that the Council will undertake, in the areas of energy and buildings, transport, flood resilience, nature based solutions and resource management. The Plan was developed by the Council in conjunction with Codema - Dublin's **Energy Agency and the Dublin Climate Action** Regional Office (CARO). The Plan was subject to public consultation and Strategic Environmental Assessment and Appropriate Assessment processes. The Council has committed to reviewing and reporting on the Climate Change Action Plan annually, to the CARO and the Department of the Environment, Climate and Communications.

The Dún Laoghaire-Rathdown County Development Plan 2022–2028 was made by the elected members

of the Council and came into effect in April 2022. The 'creation of a climate resilient County', is one of five Strategic County Outcomes which underpins the Plan and it sets out a comprehensive vision for the necklace of towns and villages that make up the County. The Plan also includes a stand-alone 'Climate Action' chapter, with a broad range of climate action and biodiversity policy objectives.

In 2022, the Council bolstered its efforts in transitioning to a circular economy, by being the first local authority in Ireland to sign the European Circular Cities Declaration. This is a commitment from cities and regions across Europe, 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 and recognise that local and regional governments have a critical role to play and share a common vision of a circular economy. The European Circular Cities Declaration is managed by ICLEI - Local Governments for Sustainability and Circle Economy, to which there are currently sixty-two signatories.

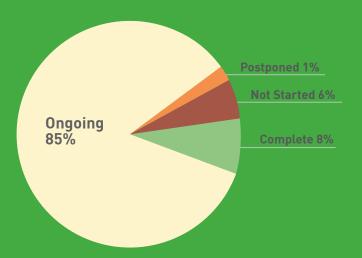
Dún Laoghaire-Rathdown County Council has selected the Dún Laoghaire and Blackrock areas, as a new Decarbonising Zone (DZ). The development of a DZ, is a local authority action, of the national Climate Action Plan 2021. This zone is set to become the focus for a range of climate action measures, such as the identification of projects and outcomes, that will contribute to achieving national climate targets. These targets are set out in the Climate Action and Low Carbon Development (Amendment) Act 2021 and the national Climate Action Plan 2021. The Council, together with the Dublin CARO and Codema, will work with the Department of the Environment, Climate and Communications and the Sustainable Energy Authority of Ireland (SEAI), on the development of a DZ Implementation Plan. The Implementation Plan will explore the energy and climate characteristics of the DZ area in more detail and will profile and identify projects that can be developed addressing climate mitigation, adaptation and biodiversity.

The four Dublin local authorities in conjunction with Codema and CARO, organised and delivered the second Dublin Climate Action Week (DCAW22), which took place in September 2022. The overall vision of DCAW22 was – 'to highlight Dublin's climate action progress to its citizens and demonstrate the leadership role of the four local authorities in conjunction with other partners'. Over fifty online and in person events took place throughout the week, which included

webinars, workshops, site visits, cycles and walking tours. Further information on DCAW22 is available at www.dublinclimateactionweek.ie.

This Annual Progress Report presents a summary of progress to date, across the five theme areas. The following sections of this report provide an overview of progress across each theme area, a detailed update on each individual CCAP action is contained in the action tables in this document. The majority of actions are broadranging and have a rolling duration, and are generally greater than one year in life-span. For example, actions such as gulley cleaning or coastal defence monitoring activities, will always be fundamental in increasing the adaptive capacity of Council services to address climate change. The ongoing and rolling nature of such actions will be needed in perpetuity and are likely to take a higher level of priority in the future. As such the progress of this CCAP should not be solely measured on the number of 'Complete' actions, but rather the mainstreaming of climate action across all LA functions and services, and enabling the County to become a more climate resilient area, as part of the wider Dublin city region.

144 ACTIONS



ACTION AREA	NO. OF ACTIONS	COMPLETE	ONGOING	POSTPONED	NOT STARTED
Energy & Buildings	25 Actions	4 Actions	20 Actions	0 Actions	1 Action
Transport	26 Actions	3 Actions	23 Actions	0 Actions	0 Actions
Flood Resilience	25 Actions	2 Actions	21 Actions	0 Actions	2 Actions
Nature-Based Solutions	39 Actions	2 Actions	30 Actions	2 Actions	5 Actions
Resource Management	29 Actions	1 Action	28 Actions	0 Actions	0 Actions
TOTALS	144	12	122	2	8

2022 PROGRESS HIGHLIGHTS



144 Climate Actions



118
Green Schools



83% of public lighting upgraded to LED



82
Council houses upgraded



55
Dublin Climate
Action Week 2022
events



51% energy efficiency improvement



50 Active Travel Projects



38% reduction in greenhouse gas emissions



30 Parks and Open Spaces



27
Sustainable Energy
Communities



live EU funded projects



2Flood Relief
Projects



European
Circular Cities
Declaration



Decarbonising Zone

UPDATES TO POLICY AND LEGISLATION SINCE THE ADOPTION OF THE CCAP

The policy and legislative context relating to climate action is continually evolving, recent updates are summarised below.

The Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law on the 23rd of July 2021. The Act enshrines the National Climate Objective:

"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".

The Act states that carbon budgets for the purpose of achieving the National Climate Objective shall be proposed by the Climate Change Advisory Council (CCAC) and approved by Government for a five-year period, with new budgets introduced for each subsequent 5-year period thereafter. Following the process set out in the Act, the CCAC submitted, and published in October 2021, the first proposed carbon budget programme. The Programme, comprising three 5-year budgets (2021-2025; 2026-2030; and 2031-2035), came into effect on 6th April 2022. Sectoral emission ceilings were approved by Government at the end of July 2022. The next Climate Action Plan is due to be published by the end of 2022. It will reflect the Carbon Budgets and Sectoral Emissions Ceilings for the relevant sectors and provide a roadmap of actions to ensure compliance.

A further provision of the Act provides that the Minister may issue guidelines in respect of the content and preparation of the local authority Climate Action Plans and that local authorities shall comply with these guidelines. To support local authorities in the preparation of their Climate Action Plan and in response to the provisions of the 2021 Act, Climate Ireland, the Environmental Protection Agency and the Climate Action Regional Offices, under the oversight of a project advisory group, have worked in partnership to advance a set of guidelines for local authorities. The Dublin CARO, Codema and Dublin City Council were represented on this group. A draft final version of these guidelines were issued by the Local Government Management Agency (LGMA), to the sector in September 2022.

As the four Dublin local authorities have already published Climate Change Action Plans (CCAPs) 2019-2024, comprising adaptation and mitigation actions, it is the intention that existing plans will be varied and amended to align existing CCAPs with the requirement of this new national guidance and increased level of ambition stemming from the Climate Action and Low Carbon Development (Amendment) Act 2021 and forthcoming National Climate Action Plan.

The Climate Action Plan 2021 (CAP 2021), published in November 2021 is an ambitious plan to put Ireland on a more sustainable path, cutting emissions, creating a cleaner, greener economy and society and protecting the country from the consequences of climate change. The Plan provided indicative ranges of emissions reduction for each sector of the economy by 2030 and sets out a range of actions required for delivery of climate targets. An accompanying Annex provided implementation details for actions, specific timelines and responsibilities.

The First Climate Plan 2021 Progress Report was published on 9th June 2022 and contained details of progress made on 423 climate action measures, due for delivery in Q4 2021 and Q1 2022. A completion rate of 73% was reported overall. The report highlighted sectors with the highest climate impact, to develop a better understanding of the measures that will contribute the most to mitigation and adaptation targets.

The Circular Economy and Miscellaneous Provisions Act 2022 was published in July 2022 and underpins Ireland's shift from a 'take-make-waste' linear model to a more sustainable, circular pattern of production and consumption, that retains the value of resources in the economy for as long as possible. The transition from a linear consumption based economy, to a circular economy has the potential to significantly reduce greenhouse gas emissions, as well as drive a more sustainable way of consumption and living across society and across sectors. In addition to phasing out single-use packaging and incentivising the use of recycled and reusable alternatives, the Act introduces mandatory segregation for commercial waste and provides for the GDPR-compliant use of a range of technologies, such as CCTV for waste enforcement purposes.

The Climate Change Advisory Council published its annual review in September 2022. A key task of the Council is to conduct an annual review of progress made

This graphic presents a summary of climate action governance from Local Autority level to National Government level.

JUST TRANSITION COMMISSIONER

CLIMATE ACTION PLAN DELIVERY BOARD

Chaired by the Department of the Environment, Climate and Communications and the Department of the Taoiseach

NATIONAL ADAPTATION STEERING GROUP

Chaired by the Department of the Environment, Climate and Communications with representatives from all Government Departments, Agencies, Local Authority Sector for Sectoral and Local Adaptation Plans CLIMATE CHANGE ADVISORY COUNCIL

CCAC ADAPTATION SUB COMMITTEE

GOVERNMENT DEPARTMENT LEVEL GOVERNANCE

CCMA CLIMATE ACTION, TRANSPORT AND NETWORKS COMMITTEE

- · Local Authority representatives
- · Local Government Management Agency (LGMA) representatives

NATIONAL LOCAL AUTHORITY CLIMATE ACTION STEERING GROUP

· CCMA · Dublin City Council

·IGMA

- · Dublin City Council
- · Cork County Council
- · Kildare County Council· Kilkenny County Council
- · Department of the Environment, Climate and
- Communications
- · EPA
- ·OPW
- · Met Éireann · Geological
- Survey
- Ireland

LOCAL AUTHORITY NATIONAL LEVEL GOVERNANCE

NATIONAL CLIMATE ACTION REGIONAL OFFICE MANAGEMENT GROUP

- · Dublin Metropolitan CARO
- · Eastern & Midlands CARO
- · Atlantic Seaboard South CARO
- · Atlantic Seaboard North CARO
- Dublin City CouncilCork County Council
- · Kildare County Council
- · Kilkenny County Council
- · Mayo County Council
- · Department of the Environment, Climate and Communications
- · EPA
- · Climate Ireland

CLIMATE ACTION REGIONAL OFFICES – NATIONAL LEVEL GOVERNANCE

REGIONAL CLIMATE ACTION STEERING GROUP

- · Dublin Metropolitan CARO
- · Codema
- · Eastern and Midland Regional Assembly
- · Dublin City Council
- · Dún Laoghaire-Rathdown County Council
- · Fingal County Council
- · South Dublin County Council

REGIONAL LEVEL GOVERNANCE



Full Council and Strategic Policy Committees (SPC) Climate Action Team

Full Council and Strategic Policy Committees (SPC) omhairle Contae hine Gall ingal County ouncil

Climate Action Team

Full Council and Strategic Policy Committees (SPC) Combairle Contae
Atha Cliath Theas
South Dublin County Council

Climate Action Team

Full Council and Strategic Policy Committees (SPC)



LOCAL AUTHORITY GOVERNANCE

Summary of National to Local Authority Level Climate Action Governance

(Please note, this graphic is a summary for information only as it was not possible to include all Department, Agency and group names on this graphic)

to 2005), assuming implementation of planned policies and measures and the use of the flexibilities available;

• Carbon budgets proposed by the Climate Change

over the previous year across all sectors, in reducing greenhouse gas emissions and furthering the transition to a low-carbon, climate-resilient and sustainable economy and society by 2050. In its 'traffic light' review of sectoral adaptation progress the Local Government Sector has improved on the 2021 report and noted as 'Good Progress' being made by Local Authorities and CAROs. In particular "the Council acknowledges the resource and capacity constraints facing local authorities and the Climate Action Regional Offices (CAROs) given their importance in delivering mitigation and adaptation". The report notes that the integration of mitigation with adaptation demonstrates good progress and that the climate action training programme appears to be successful and should increase mainstreaming in the future. A recommendation in the 2022 review is that 'this (local authority/CARO) sector would benefit from further consideration and coordination of the associated socio-economic and environmental (including biodiversity) risks and

- Advisory Council have been approved by the Oireachtas for the periods 2021-25, 2026-30 and 2031-35. The projections highlight that there is currently a significant gap between the budgets and the projected emissions over the budget periods. This gap will need to be addressed very quickly if Ireland is to stay within the Carbon Budgets; and
- Spending more time at home due to hybrid working and the increasing cost of fossil fuels highlights the need for our houses to become more energy efficient. Implementing currently planned measures for the installation of 680,000 heat-pumps by 2030 and retrofitting 500,000 homes, is projected to achieve a 41.5% reduction in residential emissions in 2030 (compared to 2018).

The Environmental Protection Agency's Ireland's Provisional Greenhouse Gas Emissions 1990-2021 was published in July 2022. The report shows an increase in emissions of 4.7% in 2021 compared to 2020, when Covid-19 restrictions had led to a significant lowering of emissions. In total in 2021, 61.53 million tonnes of carbon dioxide equivalent (Mt CO2eg) were emitted, with emissions 1.1 per cent above 2019 pre-Covid-19 restriction levels. The increase is mostly due to a significant increase in emissions from the Energy sector, due to a tripling of coal and oil use in electricity generation in 2021, with increases also seen in the agriculture and transport sectors.

opportunities and actions to manage these'. (CCAC, 2022).

The Sustainable Energy Authority of Ireland's Annual Report 2021 on Public Sector Energy Efficiency **Performance** showed primary energy savings of 4,576 GWh, 848,000 tonnes of CO2 savings and a total of €298 million in cost savings across the sector.

The Environmental Protection Agency's Ireland's Greenhouse Gas Emissions Projections 2021-2040 was published in July 2022. It provides an updated assessment of Ireland's total projected greenhouse gas emissions to 2040, which includes an assessment of progress towards achieving its national ambitions under the Climate Action and Low Carbon Development (Amendment) Act 2021 and EU emission reduction targets for 2030 as set under the EU Effort Sharing Regulation (Regulation (EU) 2018/842). Key findings include:

In February 2022, the second of three Working Group reports from the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment report (AR6) was published. The Working Group 2 report: Climate Change 2022: Impacts, Adaptation and Vulnerability, recognises

• Urgent implementation of all climate plans and policies, plus further new measures, are needed for Ireland to meet the 51% emissions reduction target and put Ireland on track for climate neutrality by 2050;

the interdependence of climate, biodiversity and people and integrates natural, social and economic sciences more strongly than earlier IPCC assessments. The report drew the following conclusions:

• Ireland can meet its non-Emission Trading System (ETS) EU targets of a 30% emission reduction by 2030 (compared

- Recent changes in the climate are widespread, rapid, and intensifying, and unprecedented in thousands of years;
- Urgent action required to deal with increasing risks;
- Safeguarding and strengthening nature is key to securing a liveable future;
- Cities are hotspots of impacts and risks, but also a crucial part of the solution; and
- There is a narrowing window for action.

In April 2022, the third of three Working Group reports from the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment report (AR6) was released. The Working Group 3 report: Climate Change 2022: Mitigation of Climate Change focuses on in-depth evidence, research and actions that can be taken to mitigate climate change. The report drew the following conclusions:

- Limiting global warming will require major transitions in the energy sector. This will involve a substantial reduction in fossil fuel use, widespread electrification, improved energy efficiency, and use of alternative fuels;
- Cities and other urban areas also offer significant opportunities for emissions reductions. These can be achieved through lower energy consumption (such as by creating compact, walkable cities), electrification of transport in combination with low-emission energy sources, and enhanced carbon uptake and storage using nature. There are options for established, rapidly growing and new cities;
- Reducing emissions in industry will involve using materials more efficiently, reusing and recycling products and minimising waste. Achieving net zero will be challenging and will require new production processes, low and zero emissions electricity, hydrogen, and, where necessary, carbon capture and storage; and
- Agriculture, forestry, and other land use can provide large-scale emissions reductions and remove and store carbon dioxide at scale. Response options can benefit biodiversity, help adapt to climate change, and secure livelihoods, food, water, and wood supplies.

Conference of the Parties (COP) 27

Ireland is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) since 2016. For nearly three decades, the UN has been convening 195 signatory countries and 191 parties for Global Climate Summits called 'COPs' which stands for 'Conference of the Parties'. As an EU member state, Ireland is bound to targets for the EU-27 and as such attended COP27 in Sharm El-Sheikh, Egypt in November 2022. At the Paris climate summit in December 2015 (COP 21), 196 nations agreed to hold global temperature rises to "well below 20 C (degree Celsius)," with an aspiration to limit rises to 1.50 C above pre-industrial levels.

The key outcome of COP27 was the establishment of a 'Loss and Damage Fund' for countries particularly vulnerable to climate change. COP27 also resulted in countries delivering a package of decisions that reaffirmed their commitment to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels. The package

also strengthened action by countries to cut greenhouse gas emissions and adapt to the inevitable impacts of climate change, as well as boosting the support of finance, technology and capacity building needed by developing countries.

LOCAL AUTHORITY RESOURCING AND FUNDING

The Climate Action Regional Offices, working with the County and City Management Association (CCMA), have been actively engaging with the Department of the Environment, Climate and Communications, to secure funding towards the cost of putting resources in place, to allow the sector to scale up efforts in delivering effective climate action. These resources are also needed in advance of the preparation of the Climate Action Plans as required under the 2021 Climate Act. In Delivering Effective Climate Action 2030 (DECA 2030), the local government strategy on climate action, an overarching commitment on leadership is highlighted to ensure a coherent approach to climate action, across the administrative and political structures of all thirty-one local authorities.

Representatives from the County & City Management Association (CCMA), the Local Government Management Agency (LGMA), the Climate Action Regional Offices (CARO) and the Association of Irish Local Government (AILG) appeared before the Oireachtas Joint Committee on Environment & Climate Action (31st May 2022), to discuss challenges and opportunities for local authorities in climate action. The Chairman of the CCMA Climate Action & Transport Network committee gave an opening statement that provided an overview of some of the climate action work undertaken across the sector over the last number of years and stated the ambition to scale up efforts and play a key leadership role locally and nationally in delivering effective climate action. However, he noted that it was clear from discussions across the sector that there is insufficient staff capacity at local authority level to implement that ambition and he highlighted in particular, the need for climate action resources across local authorities and for an enhanced CARO.

CODEMA UPDATE

ENERGY MANAGEMENT

Codema assists in the direct energy management within Dún Laoghaire-Rathdown County Council, completing the SEAI Monitoring and Reporting (M&R), to show the

authority's progress towards its 2030 50% energy efficiency improvement target. By the end of 2021, the Council had improved its energy efficiency by 51% compared to the 2009 baseline. In addition to this, a target of a 51% absolute reduction in energy-related greenhouse gases, has also been set by 2030. This target will use a separate baseline to the energy efficiency target, taking an average of emissions from 2016-2018. Codema has begun to assess what additional actions will be required to achieve this target, using the latest Gap-to-Target tool developed by SEAI. By the end of 2021, the Council had reduced its greenhouse gas emissions by 38% compared to this baseline.

Codema assists the Council in the maintenance of the ISO 50001 Energy Management System (EnMS), to drive energy performance and energy awareness throughout the Council. A significant part of this role is attending the monthly energy team meetings and preparing monthly energy reports for each of the Significant Energy Users (SEUs) identified in the Council. In 2022, nineteen Display Energy Certificates (DECs) were generated for public buildings. Codema has worked with dlr Leisure to develop the Council's first Energy Performance Contract (EPC) for the three leisure centres: Meadowbrook, Loughlinstown and Monkstown. Codema was involved in the procurement of this project, culminating in the contract being signed in 2021. Works in Loughlinstown and Monkstown have now been completed and they have entered the monitoring and reporting stage of the EPC. Works in Meadowbrook leisure centre are anticipated to begin in 2023.

ENERGY AND CLIMATE AWARENESS

As one of the organising partners, Codema worked very closely with Dún Laoghaire-Rathdown County Council throughout the organisation and implementation of Dublin Climate Action Week 2022 (DCAW22). There was excellent synergy and collaboration achieved across the DCAW22 Steering Group, resulting in a cohesive and informative week of events. Codema continues to support the Home Energy Saving Kit Scheme across Dún Laoghaire-Rathdown County Council's libraries and developed an additional three kits for library branches. There are now 11 Home Energy Saving Kits available for the public to borrow free-of-charge, from libraries across the County. The Home Energy Saving Kit scheme has continued to expand nationally, with the kits now available to borrow from over 160 libraries across Ireland.

DUBLIN REGION ENERGY MASTER PLAN

Codema has completed the development of the Dublin Region Energy Master Plan, supported through the SEAI

Research, Development and Demonstration (RD&D) programme. The aim of this project is to evaluate and outline the cost-optimal, spatially possible and technically feasible low-carbon scenarios for Dublin, to meet its 2030 and 2050 CO2 reduction targets from the perspective of society, energy consumers and the energy sector. This project looked at the three main energy sectors (heat, electricity and transport) and the synergies between them, to deliver more cost-effective low-carbon pathways for Dublin. It also looked at current and future policy impacts and shortfalls to targets needed, to make Dublin net carbon neutral by 2050. This is the first master plan of its kind in Ireland to look at County and Small Area Level and to assess which solutions will work best within local constraints. The finished plan will aid planners, policy makers and other decision makers in all energy related plans in the future.

SUSTAINABLE ENERGY COMMUNITIES (SEC)

Codema are the co-ordinators for the SEAI Sustainable Energy Communities (SEC) Programme for the Dublin and Mid East region. The seven counties (four Dublin local authorities, Kildare, Wicklow and Meath) are each provided with a mentor to help advise the SECs and move them along their progress from learning about energy and climate change, to preparing an Energy Master Plan (EMP) and Register of Opportunities, to finally undertaking projects. The aim is to upskill and educate, but also to reduce energy consumption through behavioural change, energy efficiency, renewable and smart solutions. The seven local authorities are acting as Lead Applicants on behalf of the SECs for their Energy Master Plans, by providing bridging finance to activate grants and procurement expertise for hiring consultants. Work has been carried out to improve and streamline the EMP process, to make it more accessible for SECs, by reducing risk and highlighting stakeholders throughout the Plan making process. This has been achieved through Dublin City Council's EMP Framework, which is managed by Codema and available to the seven local authorities. A Memorandum of Understanding has been signed by five of the seven LAs (Dublin City, South Dublin, Dún Laoghaire-Rathdown, Meath and Kildare), in order to make the EMP process more accessible for SECs, and reduce administration for LAs. The tender will last for four years, with two years remaining, and has already proved very popular with sixteen new SECs signing up this year across the region, and a current total of one hundred and sixty six SECs. Dún Laoghaire-Rathdown County Council has twenty-seven SECs, with five EMPs completed to date.

DECARBONISING ZONES (DZ)

Codema has supported the Climate Action Regional Offices (CAROs) with the development of the guidelines for the implementation of Decarbonising Zones, and has supported the Dublin local authorities with the DZ selection process and is also providing ongoing support with the development of DZ Implementation Plans, for inclusion in future updates to the Climate Change Action Plans (CCAPs), for each of the Dublin local authorities.

EU PROJECTS

An area Codema has extensive knowledge and experience in is the application and delivery of EU projects across a range of funding streams, at present there are several active projects, namely:

Zero Together: Codema has made significant progress in relation to the Zero Together project, which sets out to create a collaborative roadmap and strategy for the Dublin region, to meet 2030 and 2050 emission-reduction targets. Dún Laoghaire-Rathdown County Council is a member of the Zero Together Transition Team, which includes representatives across academia, transport, local authorities, community, energy and NGOs, to work together collaboratively to develop a roadmap to reduce Dublin's emissions. Over the course of ten months between 2021 and 2022, Codema organised eight facilitated workshops with the Transition Team. Throughout thirty hours of deliberation, the team brought their knowledge and expertise to the process, setting out a vision for Dublin, discussing the current barriers, setting out the strategic directions and looking at the key actions that need to be implemented for Dublin's energy transition.

The Zero Together roadmap is grounded in three core elements to ensure that it is fair and impactful: 1) an evidence-base to direct the roadmap and ensure that it is grounded in the best available information and science, 2) collaboration across a diverse range of sectors, moving beyond silos and working together to develop and disseminate the roadmap and 3) public engagement and participation. All of these three elements are in motion; the Dublin Region Energy Master Plan is the culmination of three years of research and was launched in June 2022, the Transition Team has been formed and engaged in a number of exploratory workshops and public engagement activities have also commenced. The Zero Together initiative is being supported by the EU Horizon 2020 TOMORROW project, where Dublin - along with five other pilot European cities - is being guided on best-practice energy transition management processes.

In September 2021, Codema launched a Dublin-wide Zero Together survey, to get the public's views on how to move Dublin away from fossil fuels. Over 1,000 people responded to this survey, which had some very interesting findings, including 68% of respondents stating that they would like initiatives that 'allow people living and working in Dublin to discuss, propose and vote on actions that could be presented to local authorities and national government'. In September 2022, Codema launched its 'Postcards from Dublin 2050' campaign, as part of Dublin Climate Action Week 2022. This initiative invites the people of Dublin to share their ideal vision of Dublin, free from fossil fuels. Codema will build on the next phases of this campaign and wider Zero Together public engagement, in 2023.

Decarb City Pipes: Codema are partners in the Decarb City Pipes 2050 project, which commenced in September 2020. This project is focused on the decarbonisation of heat through capacity building in cities. This includes creating local working groups (made up of key local stakeholders within the cities of Bilbao, Bratislava, Dublin, Munich, Rotterdam, Vienna and Winterthur, to outline gaps in knowledge and current practices (planning methodologies, tools, policy instruments, effective governance structures, etc.) and then go about addressing these gaps through peer-to-peer learning, with input from an experienced Advisory Board. An in-depth engagement process will be adopted to develop these roadmaps, to build strong effective working relationships within each city, and ensure strong buy-in from stakeholders. As part of this engagement process Codema has set up a local working group of key stakeholders for Dublin which includes the ESB, Gas Networks Ireland, Dublin City Council, Dún Laoghaire-Rathdown County Council, Sustainable Energy Authority of Ireland, Commission for Regulating Utilities, the Department of the Environment, Climate and Communication, and Geological Survey Ireland. This group has agreed a heating outlook for Dublin as well as its members partaking in peer-to-peer knowledge sharing sessions, in areas such as geothermal energy, boiler replacement studies etc.

REDAP (Regional Energy Demand Analysis Portal)

project: which was approved under the 2018 European Research Area Network (ERA-Net) Smart Energy Systems fund and is supported by the Sustainable Energy Authority of Ireland. REDAP, which started in November 2019 and was completed in March 2022, presents a cross-sectoral approach to regional energy systems and will help endusers to spatially visualise and better understand the characteristics of urban energy demand. This project built on the work Codema had previously done in developing

the Spatial Energy Demand Analysis (SEDAs), The REDAP project gives insight into the building stock and also provides information on the transport sector. It combines Geographic Information Systems (GIS) with urban energy planning data to provide an integrated approach to energy in both the building and transport sectors, and spatial planning. This in turn enables planners, policy-makers and decision makers, to make more informed decisions relating to energy demand, energy efficiency and renewable energy alternatives, whilst also generating an increased evidence base to inform further project feasibility and implementation.

QGasSP: Codema, together with Tallinn University of Technology (TalTech), Stockholm Environment Institute (SEI) and Oivan, were awarded the tender for QGasSP. This research was financed through the European Spatial Planning Observation Network (ESPON) Programme, which is an applied research programme aimed at supporting the formulation of territorial development policies in Europe. This project which started in October 2020, was completed in May 2022. The objective of this research project was to produce a methodology that will allow planning authorities at national, regional and local administrative levels, to quantify the influence of spatial planning policies on greenhouse gas emissions in a consistent manner. More specifically, the objective was to address the knowledge demands and technical requirements of the four stakeholders included within this Targeted Analysis Project, namely, the Eastern and Midlands Regional Authority, who are the lead stakeholder in this project, Scottish Government – Planning & Architecture Division (UK), Department of Infrastructure, Northern Ireland (UK) and Regional Council of Kymenlaakso (FI).

The Greenhouse Gas Impact Assessment (GGIA) tool Targeted Analysis is designed to quantify the climate impact of spatial plans and policies in territories, cities and municipalities throughout Europe. GGIA provides two alternative modes for greenhouse gas (GHG) emissions quantification: The 'Territorial mode' consists of sectoral modules and quantifies the direct GHG emissions arising within the specific areas. The 'Consumption-based mode' quantifies the GHG emissions which arise from the consumption of goods and services by the residents in the area. For this project, the purpose of the targeted analysis is to identify robust methods for quantifying the relative impact on GHG emissions of alternative spatial planning policies, to inform strategic alternatives. Codema's role in this project was to lead the case study pilots, building related GHG methodology and data collection. This project specifically targets the EMRA's Regional Spatial and Economic Strategy - Regional Policy Objective (RPO)

3.6 – 'City and county development plans shall undergo assessment of their impact on carbon reduction targets and shall include measures to monitor and review progress towards carbon reduction targets'.

DeliveREE will create an innovative project finance and delivery structure for energy efficiency projects in the Dublin region, across the four Dublin local authorities, using various performance-based contracting structures. By creating a structured approach, DeliveREE will 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; whose performance guarantees are both critical for achieving value for money and provide a mechanism for the involvement of private capital.

DeliveREE will do this by:

- Creating a 'one stop shop' Project Implementation Unit (PIU) for project owners to go to for energy saving projects;
- Creating an innovative standardised central project delivery system for processing potential projects, to achieve speed of assessment and give confidence and familiarity to clients & market players;
- Removing legal and administrative barriers through cooperatively designing approved assessment templates and procedures to ensure quality control and due diligence;
- Aggregating projects, bundling multiple small and medium projects together to attract the Energy Service Company (ESCo) market and private financing, and gain large scale impact on efficiency in the building stock; and
- Using a range of performance-based contracts to ensure long-term guaranteed energy savings, and de-risk cashflows.

DeliveREE will test and develop the PIU with the rollout of a pipeline of energy efficiency projects in public sector buildings and services across the four Dublin local authorities, over a period of four years. The pipeline includes over 140 buildings and sites across the local authorities, including a mix of building types such as leisure centres, fire stations, theatres, libraries, head offices, community buildings and landfill treatment facilities. The project will save an average of 24GWh over the contract lifetime, amounting to 3.8 ktCO2 savings. The total capital expenditure is €20.4m, with an estimated total contract value of these energy projects of approximately €23.5m of which at least €9.75m will be privately financed. Based on the consortium's experience of delivering projects with a mix of financing sources, there is a financing split aim of 20% project owner, 50% grant and 30% private financing, on average across the contracts. Procurement for the first three lots of aggregated projects is expected to begin by the end of 2022. These projects include energy efficiency measures on five buildings and Solar PV at a landfill site in South Dublin County Council and energy efficiency measures at five buildings in Dún Laoghaire-Rathdown County Council.

The DeliveREE consortium consists of technical, facilitation, project management, communications, procurement, legal and financial experts, as well as project owners who will test the DeliveREE structure. In addition to the four Dublin local authorities and Codema, the wider project consortium includes:

- Resourceful Futures Ltd (UK) bring their extensive experience in legal, commercial and finance, from developing and deploying energy transition (power, heat and energy efficiency) and circular economy projects, to remove legal and administrative barriers, and add bankability, due diligence and project risk allocation;
- Philip Lee Solicitors Ltd has vast legal experience in large energy infrastructure projects and will provide expertise to ensure compliance with legal and regulatory requirements, including public procurement advice; and
- Sustainable Development Capital LLC (SDCL) bring their in-depth experience of investing in energy efficiency projects; they manage the Irish Energy Efficiency Fund and invest in energy efficiency retrofit projects and seek a return based on savings achieved.

CLIMATE ACTION REGIONAL OFFICE (CARO) UPDATE

The Climate Action Regional Offices (CAROs) were established in 2018 in response to Action 8 of the 2018 National Adaptation Framework (NAF) – Planning for a Climate Resilient Ireland. The offices are mandated to co-ordinate engagement across the varying levels of government and help build on experience and expertise that exists in the area of climate change and climate action. The offices have a role in driving climate action at both regional and local levels, including supporting the implementation of local adaptation plans/Climate Change Action Plans.

The composition of the four Climate Action Regions has been determined by the geographical and topographical characteristics, vulnerabilities and shared climate risks experienced across local authority areas. The four CARO regions, constituent local authorities and associated lead authorities are shown in the table on this page.

The Dublin Metropolitan CARO has been working closely with the four Dublin Climate Teams and Codema, to support the implementation of their Climate Change Action Plans. The Dublin CARO has a regional steering group comprising the four Director of Services of the Dublin local authorities, and colleagues from Codema and the Eastern and Midland Regional Assembly. Examples of projects and progress across the six key areas of the CARO work programme are included below:

Management and Governance

- National, Regional and local climate team meetings
- Participation in sectoral adaptation steering groups and working groups
- Preparation of detailed business case to support climate action for the local authority sector
- Participation in relevant CCMA/LGMA and Government working groups on Climate Action

Climate Adaptation

- Assisting local authorities with implementation and reporting of Climate Change Adaptation/Action Plans including implementation guidance;
- Preparation of guidance such as documentation for adaptation of regional and local roads;
- Working with Government Departments and agencies on the implementation of sectoral adaptation plans;
- Collaborating with key climate actors such as Climate Ireland, 3rd Level Universities etc; and
- Participation on National Working Groups such as the Coastal Change Strategy Steering Group.

Climate Mitigation

- Participation in Regional and National Electric Vehicle (EV) working groups;
- Collaboration with energy agencies and the Sustainable Energy Authority of Ireland (SEAI) on energy related projects; and
- Identifying and assisting local authorities with projects eligible for the National Climate Action Fund.

Communications and Citizen Engagement

- Presentations to Councils, Government Departments and Agencies, youth organisations and the general public;
- Supporting individual local authorities with community engagement events including climate action workshops;



- Maintenance of the CARO website and social media communication channels:
- Production of a quarterly on-line newsletter detailing new policy, legislation, best practice examples of climate mitigation and adaptation, news; and
- Preparation of submissions on climate relevant public consultations.

Training And Education

- Preparation and rollout of a comprehensive Climate Action training plan for the local authority sector across all levels:
- Identification of external training and upskilling opportunities in climate action for the local authority sector; and
- Collaboration with expert organisations and representative bodies for tailored workshops and training seminars.

Knowledge Development

- Development of online Weather impacts Reporting App (WIRE) for local authorities;
- Preparation of guidance and position papers on climate action topics;
- Identification and communication of funding opportunities for climate action projects in local authorities and assistance with application process;
- Participation in relevant climate action research projects from the Environmental Protection Agency research programmes and other funding programmes; and
- Engaging with local authorities and regional assemblies on spatial planning issues relating to climate action.

A key focus of the CARO work programme for 2022 has been the roll out of climate action training across the local authority sector. This training plan has been developed by the CAROs in collaboration with partners such as the Local Authority Environmental Services Training Group (LASTNG), Climate Ireland, the Sustainable Energy Authority of Ireland (SEAI), Met Éireann, the Environmental Protection Agency, the Institute for Public Administration and others. Training has been targeted at all staff levels and focuses on the following six pillar areas;

- Climate Action Leadership aimed at all elected members & senior staff;
- Climate Action Awareness Training aimed at building capacity across climate action teams;
- General Awareness Building online training for all indoor staff to raise awareness of climate action;

- Practical Climate Action training for all outdoor staff to assist them to deliver practical climate action measures;
- Behavioral Change Training to empower staff to promote positive change both internally and across the community; and
- Specific and Targeted Training training arising from specific knowledge gaps or individual policy/ role requirements, such as spatial planning, flood risk management.

Despite the Covid-19 restrictions that were in place for the first part of 2022, the training programme advanced in interactive online formats and workshops throughout the year, across all CARO regions. To date, approximately 16,500 training places have been provided to staff from all local authorities, across all 6 training pillars of the Local Authority Climate Action Training Programme. Other key work areas for Dublin CARO throughout 2021 included:

Strengthening communications

This has been primarily by developing the CARO website and the CARO quarterly e-newsletter. The CARO website was launched in February 2021 and has had over 144,000 views and 86,000 users to date. The most popular sections of the website include projects, research, local authority climate action, training and academic courses. The CARO newsletter has more than 700 subscribers across a range of local authorities, agencies, government departments, academia and members of the public. Both the website and the newsletter are key tools for dissemination of information on climate policy, research, funding, events, training and examples of climate action work across the local authority sector.

Community outreach

Working with the four Dublin local authorities and Codema, a significant number of events were undertaken as part of Dublin Climate Action Week in September 2022, both in-person and online. Additional outreach will be achieved through the delivery of recorded webinars on the CARO website for future use. Other partnerships have included the GAA Green Clubs Phase 1 programme, Age Friendly Ireland, An Taisce Climate Ambassadors and 3rd Level universities to participate in events and workshops on climate action.

Changing behaviour and empowering local adaptation

CARO have worked with artists, a number of local authorities, academia and other partners on the Creative Climate Action funded project 'Línte na Farraige' (Lines of the Sea). It consists of a series of LED light art installations at coastal locations to visualise sea level rise and storm surge. Communication tools such as a website,

information boards and a social media campaign have been devised to engage the public on climate action. The project launched in September 2022 with an installation at the Spanish Arch, Galway and Wexford Promenade in October 2022. Further installations may be completed in Dublin in early 2023.

Providing expertise to national policy formation

CARO contributed to policy development as a member of expert groups, for the following publications:

- Project Advisory Group on Local Authority Climate Action Plan Guidelines;
- Dublin Local Authority Electric Vehicle Charging Strategy;
- Local Authority Electrification of Fleet and EV Charging Guidance;
- Preparation of submissions to DECC National Adaptation Framework and Department of Transport Electric Vehicle Charging Strategy;
- Local Authority Green Public Procurement Training Steering Group; and
- Dublin's Energy Transition Roadmap (Zero Together).





Climate Action Regional Offices (CAROs)

CLIMATE ACTION REGION	LOCAL AUTHORITY FUNCTION AREA	LEAD AUTHORITY
Dublin Metropolitan	Dublin City, Dún-Laoghaire- Rathdown, South Dublin, Fingal	Dublin City Council
Eastern and Midlands	Carlow, Cavan, Kildare, Kilkenny, Laois, Leitrim, Longford, Louth, Meath, Monaghan, Offaly, Roscommon, Tipperary, Waterford, Westmeath, Wexford, Wicklow	Kildare County Council with support from Kilkenny County Council
Atlantic Seaboard North	Donegal, Sligo, Mayo, Galway City & County	Mayo County Council
Atlantic Seaboard South	Clare, Limerick, Kerry, Cork City & County	Cork County Council

Climate Action Regional Offices

PROGRESS SUMMARY BY CCAP ACTION AREA

ENERGY & BUILDINGS

With ongoing increases in energy prices, there is a renewed focus on reducing European and national dependence on fossil fuels, in powering and heating homes and other buildings. Under the national Climate Action Plan 2021, the public sector, including local authorities, is required to bolster efforts in increasing energy efficiency, reducing greenhouse gas emissions, with a focus on renewable heat in buildings, going forward. Dún Laoghaire-Rathdown County Council continues to mainstream its efforts and collaborate across departments, to achieve energy efficiency and emission reductions across its own buildings, facilities, travel, functions and services, and influence climate action in the wider community. This is derived from the Council's Corporate Plan, a core value of which is 'Climate First - Adopt a climate first approach to decision making'.

In 2021, the Council improved its energy performance by 51%, compared to the baseline year of 2009 and is continually improving its own energy efficiency and carbon reduction, through the ISO 50001 Energy Management System. This meets the 50% energy efficiency target by 2030, as required by the national Climate Action Plan 2021 and the Sustainable Energy Authority of Ireland, reflecting the national climate objective, as set out in the Climate Action and Low Carbon Development (Amendment) Act 2021. In terms of emissions, the Council shows a 38% improvement in CO2 equivalent emissions, when compared to the baseline average of 2016-18. However, as expected following the return to pre-Covid-19 level of activity, the year-onyear comparison with 2020 shows an increase of 9% in emissions. 2021 was a strong year for implementation

of energy saving projects across the Council, particularly with dlr Leisure Energy Performance Contracts (EPC) and continued Public Lighting improvements. To date 83% of public lighting has been upgraded to LED. Implemented projects saved over 7 million kilowatt hours (kWh) in 2021. This work is undertaken by the Council's cross-departmental Energy Team, which is co-ordinated by the Architect's department.

The Council continues to make progress in both the development of new homes, and the energy upgrade and refurbishment of the existing social housing stock. With regard to new residential development, the tender process for the development of 597 new social and affordable homes at Shanganagh Castle, Shankill, has been concluded and a contractor has been appointed. The development has been specified to very high environmental and sustainability standards and will be one of the largest housing developments in Europe to achieve passive house low energy use standards.

2022 is the second year of a 10-year Energy Efficiency Retrofit Programme, that is expected to grow each year to meet the Programme for Government retrofit commitment. Under this programme, local authorities are required to retrofit existing housing stock to a B2/ Cost Optimal BER. The allocation of funds to each Local Authority in 2022 was calculated on a stock percentage basis and with funding allocations, based on an expected average cost of €33,000 per property. This year the Council upgraded 82 homes, in excess of its 2022 target of 68 homes.

The programme of works being undertaken by the Housing Maintenance Section to ensure the selected properties receive a B2/Cost Optimal BER include,



Launch of Shanganagh Housing Project



Council housing upgrade works at Beaufort, Glasthule

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external wall and attic insulation, solar PV, new doors and windows, air to air or air to water heat pumps, mechanical ventilation, blocking of fireplaces and low energy lighting. The retrofit works have translated into significant savings for Council tenants and a vastly improved living experience in their homes. The Council commenced a stock condition survey in 2022, to identify suitable properties for future Energy Efficiency Retrofit Programmes.

The tender process for the refurbishment of Park House, Dún Laoghaire, has been completed and work has commenced. This project is classed as a 'major renovation' for the purposes of Part L of the Building Regulations (Part L Amendment) Regulations (S.I. No. 538 of 2017). Refurbishment works on the Coast Guard Cottages is well underway and includes a range of energy improvement works including installation of low energy heat pumps, low energy radiators, improved thermal values for external walls, ceilings, and floors, and energy efficient lighting. Major refurbishment works have been completed on a further five vacant Council homes, allowing these homes to be returned for use as comfortable and energy efficient homes for the purpose of social housing. The works included attic, wall and floor insulation, boiler/heating control upgrades, improved airtightness, replacement of windows and doors, and improved ventilation systems.

The Council has partnered with both Belarmine Sustainable Energy Community (SEC) and Shankill Action for a Green Earth (SAGE) - Sustainable Energy Community, to provide bridging finance, to support the preparation of the first comprehensive Energy Master Plans (EMP) for their areas. The bridging finance as provided by the Council, has helped the recent procurement of expert consultants who will work with the SECs on their comprehensive local Energy Master Plans. The completed EMPs will include a

Register of Opportunities, which is a range of projects that the SEC could move forward with into the future. There are currently twenty-seven registered SECs across the County and this number is growing. These groups form part of the SEC Dublin Mid-East region, which is co-ordinated by Codema – Dublin's Energy Agency. Each SEC in the region is provided with a local mentor to guide them through the three-step process of 'Learn-Plan-Do'. This planned approach is aimed at assisting local SECs to be become more energy-efficient, use renewable energy and consider smart energy solutions.

Codema – Dublin's Energy Agency is currently working with the Council and the other Dublin local authorities, on an application to the Sustainable Energy Authority of Ireland's (SEAI) Public Sector Pathfinder Retrofit Programme, with a focus on low-carbon and energy efficiency retrofit projects. The Pathfinder funding scheme, co-funded by the Department of the Environment, Climate and Communications, provides capital funding for energy retrofit building projects, aimed at testing approaches and developing a model that can be replicated across the wider public sector. Codema and the four Dublin local authorities have held a number of meetings with SEAI and are currently preparing a detailed Position Paper, which will be appended to a Memorandum of Understanding, signed by SEAI and the Dublin local authorities.

In October 2022, the Council's Architects department hosted an 'Inspiration and Advice for Home Energy Upgrades' in-person event, as part of Open House 2022. In addition to a number of presentations on the day, the event also gave attendees the opportunity to 'Meet the Expert' in considering home energy upgrades, including Architects and Home Energy 'One-Stop-Shop' representatives, see case studies of residential projects,



dlr launch support for Sustainable Energy Communities



Inspiration and Advice for Home Energy Upgrades event

discuss grants with Sustainable Energy Authority of Ireland representatives and see live demonstrations of Codema's award winning Home Energy Saving Kits. As part of Dublin Climate Action Week in September 2022, the Council also hosted a 'Home Energy Pop-Up Shop' at George's Street, Dún Laoghaire, where members of the public could drop in and speak to staff from Codema and SEAI on home energy efficiency and upgrade works.

TRANSPORT

Transport continues to dominate as the largest national energy-consuming sector, with 34% share of final consumption in 2020, as outlined in SEAI's Energy in Ireland Report, published in December 2021. As set out in the Greater Dublin Area Transport Strategy 2022 to 2042, in Metropolitan Dublin, the mode share for cars is forecast to fall from 52.4% to 41.9% in a 24 hour period, with public transport forecast to increase to 19.7% from 17% and cycling to 14.% from 4.3%, as measured in 2016. In 2020, national private car energy use remained the transport sub-sector, with greatest energy use, at 42% of all transport. SEAI estimate that nationally, electric vehicles travelled 127 million kilometres in 2019, and 154 million kilometres in 2020, just 0.5% of the combined activity of petrol and diesel vehicles.

In June 2022, the Dublin local authorities launched Dublin's first Electric Vehicle (EV) Strategy, which will see 1,650 charge points deployed by 2025 across the city. The Dublin region represents 25% of Ireland's car fleet and has a significant role to play in the decarbonisation of the country's transport system. The four Dublin local authorities are working together to deploy EV charging

infrastructure in order to support and accelerate this transition. Throughout the Summer period, the Council sought Expressions of Interest from the public on the possible location of EV charging points, throughout the County. The Council will also engage with Zero Emission Vehicle Ireland (ZEVI), which was established in July 2022, to accelerate the uptake of zero emission vehicles and help decarbonise the transport sector. The operations of ZEVI will include the following:

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

Dún Laoghaire-Rathdown County Council continues to demonstrate national leadership, in improving pedestrian and cycling infrastructure, to encourage the uptake of cycling and walking throughout the County. In January 2022, the Council received an allocation of €38 million from the National Transport Authority (NTA), to help facilitate the development of various infrastructure projects across the County, including projects such as junction improvements for cyclists and pedestrians, greenways in parks, Harbour Area public realm improvements, and accessibility improvements. The Council is currently progressing fifty live projects, including the 'dlr Connector' walking, cycling and public realm improvement scheme, which would connect neighbourhoods and villages east to west across the County through a safe, accessible and attractive walking and cycling route, with public realm and greening



EV Charge Point



Launch of dlr 2022 National Transport Authority funding

improvements. The Council also undertook and is currently progressing a number of public consultations as part of Part 8 projects, including the dlr Central Scheme and the Taney Road to N11 Active Travel Route.

The Council's flagship Coastal Mobility Route, which saw two million cycling and walking trips in its first year, was awarded the Cycling Infrastructure Award 2022 from the European Cycling Federation. The route has recorded a more equal gender split of people cycling (35% of all cyclists were females), which is much higher than the national average. A higher number of children and teenagers cycling was also recorded, with parents reporting that they would leave their children cycling on their own on the route.

As part of Dublin Climate Action Week 2022, Dún Laoghaire Rathdown County Council and ESB launched the e-bike pilot project in Sandyford Business District. This is the fourth bike share scheme in the County, where users can rent a bike for a short period, using a Smart Phone App. The pilot programme will run for a ten-month period and include 112 bikes, with 14 e-charging stations in some of Dublin's busiest commuter locations across the four Dublin Local Authorities, with two locations in Dún Laoghaire-Rathdown County Council; on Three Rock Road in the Sandyford Business District and on Crofton Road in Dún Laoghaire. Bleeper and Moby Bike Share Operators will maintain and operate the eBikes via their Apps with the charging infrastructure provided by ESB as part of their docking station.

The Council continues to expand the services provided by the Bike Hub, which was launched in Dún Laoghaire in June 2021. This facility gives people access to cycling regardless of their age, ability or income. A free inclusive

IF BIKE HUB

The Bike Hub, Dún Laoghaire

bike rental scheme was launched in 2022. The fleet of inclusive bikes includes two pedal-assist Cycling Without Age trishaws, which are designed to carry one or two people. Older adults and people with limited mobility can avail of the opportunity to go on a free cycle at an easy pace, piloted by trained volunteer pilots taking in the sights and sounds of the coastline of the Coastal Mobility Route. There is also a tandem bike, a handcycle and a specialised electric assisted trike for hire by children or adults who find regular two-wheeled bicycles challenging.

The Council hosted a number of cycling events during national Bike Week 2022 and Dublin Climate Action Week 2022, including family cycles, public bike clinics and cycling training. Dún Laoghaire-Rathdown County Council seeks to cultivate a cycling culture in the County, through the implementation of appropriate infrastructure and promotional measures, which positively encourages all members of the community to cycle at all life stages and abilities as a mode of sustainable transport that delivers environmental, health and economic benefits to both the individual and the wider community.

In April 2022, the Council adopted the County
Development Plan 2022-2028. In implementing the new
Plan, the Council continues to plan for future growth
by promoting the integration of transport and land use
planning, with a focus on compact growth, served by
high quality public transport. The Development Plan
also introduces a number of new concepts including the
'10-minute' neighbourhood whereby people can access
the services they need, such as shops, parks, playgrounds,
schools, all within a ten minute time frame of their home,
by walking cycling or using public transport. These efforts
continue to contribute to a shift away from the use of
private car, which reduces greenhouse gas emissions,
improves air quality and enhances quality of life.

FLOOD RESILIENCE

The 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) on flood defence projects, own delivery of minor flood defence projects, use of nature-based solutions to manage flood risks, including use of Green Roofs, activation of the Severe Weather Assessment Team and flood emergency response plans, upgrading of culvert

screens and installation of monitoring cameras and rebuilding infrastructure in the aftermath of extreme weather events. Ongoing flood alleviation projects include the Deansgrange Flood Relief Scheme and the Carrickmines/Shanganagh Flood Relief Scheme.

Work on the Bray Landfill Coastal Protection Project has been ongoing throughout 2022. Installation of 100 metres of rock armour to the front of the Golf Club is complete and the rock armour stretch to the front of the landfill is ongoing. The rock is being imported from local building sites in Killiney and surrounding areas. Work has commenced on the foundations for the north / south access paths. Additional smaller scale works, including works to the stream culvert have commenced. This project is expected to be completed during Q1 2023.

The Council continues to take part in two dynamic EU funded projects. The four year project, SCORE, (Smart Control of the Climate Resilience in European Coastal Cities), outlines a comprehensive strategy, developed via a network of ten coastal city 'living labs', to rapidly, equitably and sustainably enhance coastal city climate resilience though an Ecosystem-Based Approach (EBA), supported by sophisticated digital technologies. The Dún Laoghaire based 'Dublin Coastal City Living Lab' was developed through the Smart Sandyford research programme which facilitates local government, academics and industry working together on smart city research. The Council is also a partner in the EU funded PRECINT project, which aims to address the risk of critical infrastructure from natural hazards and cyber-physical attacks. The project aims to connect private and public critical infrastructure stakeholders in a geographical area, to a common management approach, in increasing the resilience of

Bray Landfill Coastal Protection Project

critical infrastructure. As of October 2022, both projects are now undergoing Stakeholder Analysis Engagement analysis, with interventions in the planning stage.

The Council is a partner in the Línte na Farraige (Lines of the Sea) project, which is funded by the Government's Creative Climate Action programme, which forms part of the national Climate Action Fund. This will result in a set of striking visual light installations designed by Finnish artists, that will be placed across four Irish coastal sites in Dublin, Wexford and Galway. The installations will be comprised of illuminated horizontal lines that represent future sea levels and storm surges. The project officially launched in September 2022, with the opening of solar powered installations at the Spanish Arch in Galway and at Wexford Harbour, in October 2022. Further information is available at www.lintenafarraige.com.

The Council is collaborating on a Green Roof project with the Dublin CARO and University College Dublin. The purpose of the project is to investigate how effective green roofs are in decreasing storm water runoff from developments and the extent of flooding. It is proposed that baseline data will be collated on public and private sector roofs over a period of one year, with data being used to calculate water attenuation from a flood prevention perspective.

The Council continues to promote nature-based solutions, such as green infrastructure and Sustainable Urban Drainage Systems (SuDS), in response to flood risk.

Measures that include nature can have multiple benefits beyond flood defence, such as providing new spaces for recreation and habitats for wildlife. The integration of SuDS measures into developments is also undertaken by way of the Development Management and Forward Planning functions of the Council.

NATURE-BASED SOLUTIONS

The Council continues to undertake nature based solution projects and initiatives that promote the importance of preserving and enhancing biodiversity, and promoting eco-systems services across the County. The Council is responsible for over thirty parks of varying sizes and a range of areas of public open space. The Council ensures that these are managed in a sustainable manner to ensure that future generations can enjoy the benefits of these amenities in terms of recreation, health and wellbeing. The Council has also adopted an ethos of not using herbicides or sprays in landscape management of green infrastructure across the County.

Fernhill Park continues to be an exemplar for developing nature based solutions in the County. In June 2022, the Council completed Phase 2 of the development of the Park, marking a major milestone in the overall development of this flagship amenity. The works carried out and completed included a new vehicular access point on the Enniskerry Road, the installation of 10 EV charging points, a multi-purpose grass playing facility, two-lane running track, calisthenics and a surrounding network of paths linking through to the rest of the Park. The design was shaped by the aims and objectives in the Fernhill Park and Gardens Masterplan and guided by the principles of the Fernhill Park & Gardens Sustainable Development Strategy.

The Community Garden in Fernhill Park is open and an operating model has been agreed. Members aim to promote, facilitate and enhance community gardening and food growing, sustainability and environmental initiatives. The next phase of the project is to expand services to the general public.

In 2022, citizens of the County were invited to take part in a 'Parks Pollinators and Plants Survey', undertaken in collaboration with Trinity College Dublin. This forms part of a wider project called 'A Biodiversity and Social Assessment of Plants, Pollinators, and Park Management Strategies in Dún-Laoghaire-Rathdown County Council Urban Parks'. The survey forms the key part of the social assessment of this research, which aims to determine the ways in which people perceive and value plant and pollinator diversity in urban parks.

In September 2022, contracts were signed by the Council for works to start at Myrtle Square and Convent Lane in

Dún Laoghaire. Myrtle Square will be a new public space in the heart of Dun Laoghaire town. It will provide a destination point and an attractive space for locals and visitors to linger, relax, play and enjoy. The completed, permanent scheme will be characterised by nature and greening. A new grove of trees, groundcover, and climbing plants will establish a calm, pleasant location. The space will feature a canopy structure, generous public seating and a bespoke multi-tiered play unit. SuDS (sustainable urban drainage system) is to be utilised in the scheme. This is a method of absorbing rainwater run-off into the planted areas in a more natural way. Nature in the form of bird and bat habitats will encourage biodiversity and nature into the heart of the town.

The Council is finalising the new Tree & Urban Forestry Strategy (2021-31), which should be completed by the end of Q4 2022. The Council has committed to using the i-Tree software as developed by the US Department of Agriculture, that helps quantify the environmental benefits provided by trees. This will also be used by the Council to enhance tree management and for community initiatives, including schools. This follows on from the Council's ongoing Discover Tree Tag initiative. These informational tags invite the public to engage in appreciation of the trees they encounter, learn about the benefits that the trees provide and the critical role that trees play in mitigating the intensifying impacts of climate change.

The Council continues to collaborate with the Eastern and Midland Regional Assembly (EMRA), in the EU funded PROGRESS project. This project aims to develop a mapping approach which will provide enhanced information, to make better decisions regarding the management of existing green infrastructure and the



Fernhill Park Phase 2 works



Works commence at Myrtle Square and Convent Lane, Dún Laoghaire

economic growth from resource use and recognise that local and regional governments have a critical role to play

planning and design of future schemes in the County and other locations. It will help to identify the ecosystem services value associated with green infrastructure and help to improve decision making based on available scientific information, but in a user friendly map format. It is envisaged that this project will then be expanded to a regional and national level. The Council also created an ecosystem services toolkit for schools, which has been rolled out throughout 2022.

RESOURCE MANAGEMENT

In 2022, the Council enhanced efforts to lead on the transition from a 'linear' to a 'circular' economy, by being the first local authority in Ireland to sign up to the European Circular Cities Declaration. A circular economy is a model of production and consumption, which involves sharing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. The Council wishes to continue this circular economy transition, noting that:

- 62% of global greenhouse emissions are released during the extraction, processing and manufacturing of goods;
- Only 9% of materials globally are reused;
- Resource demand has more than tripled since 1970 and could double again by 2050 demand imbalance is already being felt; and
- Limiting global warming to 1.5°C above pre-industrial levels can only be achieved through a circular economy.

The European Circular Cities Declaration is a commitment from cities and regions across Europe, 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 and recognise that local and regional governments have a critical role to play and share a common vision of a circular economy. The European Circular Cities Declaration is managed by Circle Economy and ICLEI - Local Governments for Sustainability, to which there are currently sixty-two signatories.

As part of Dublin Climate Action Week 2022, the Council hosted an online webinar titled 'Circular Economy Transition: The Role of Cities and Local Authorities', which was hosted by the Chair of the Council's Environment and Climate Action Strategic Policy Committee (SPC). The keynote speaker was Ossian Smyth TD, Minister of State at the Department of Public Expenditure and Reform and European speakers included representatives from ICLEI – Local Governments for Sustainability, City of Prague, City of Copenhagen and Albergaria-a-Velha Municipality, Portugal. The Council is committed to ongoing collaboration with these and other European local authorities, in its circular economy activities.

The Council continues to reach its targets for enforcement and implements its Recommended Minimum Criteria for Environmental Inspections Plan, working with the Waste Enforcement Regional Lead Authority (WERLA), Environmental Protection Agency (EPA), Trans-Frontier Office and other local authorities. The Council also continues to undertake resource management in line with the Government's Waste Action Plan for a Circular Economy and the Waste Management Plan for the Eastern-Midlands Region.

The Environmental Awareness programmes and campaigns carried out in 2022 included a Swap Shop and Toy upcycling workshops as part of Dublin Climate Action Week, Green-Schools, free public workshops on



dlr signs European Circular Cities Declaration



Swap Shop during Dublin Climate Action Week 2022

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composting, Relove Fashion, Picker Pals, Newsletters, Tidy Districts, Community Clean-up Scheme, Recycled Christmas Decoration Competition, Halloween Campaign, Stop Food Waste Christmas Campaign, Stop Food Waste Summer Campaign, Anti-Litter Children's Poster Competition, Litter to Craft workshops, upcycling events, Environment and Climate Action Grant for Communities, Anti-Litter Anti-Graffiti Grant Scheme, the development of school waste prevention videos, national food waste recycling week, free compost and food caddy day, Free Hazardous Waste Collection, installation and promotion of Bike Reuse at Ballyogan Recycling Park. The Green Business Section and the Local Enterprise Office (LEO) continue to engage with businesses across the County, in programmes such as EcoMerit, MODOS, Green for Micro.

The Council also supported Dalkey Tidy Towns, who won the Ireland – Silver Award and a Special Energy Certificate, at the prestigious Entente Florale Awards in September 2022. Entente Florale is a European wide competition for villages, towns, cities, communities and public bodies administered by the international organisation Association Européenne pour le Fleurissement et le Paysage (AEFP). Entente Florale raises the awareness of the importance of the green environment to the quality of living in participating communities, in residential, urban and industrial areas.

A free mattress amnesty day was organised on Saturday 3rd September 2022 at Ballyogan Recycling Park. It

gave an opportunity for residents to have their old mattresses recycled, without any cost. The Council held a free household hazardous waste collection on Sunday 4th September 2022, for residents to dispose of any herbicides/pesticides, aerosols, waste engine oils, coolant adhesives, chemicals with identification labels, waste paints, paint thinners, cleaning agents like bleaches and medicine or pharmacy waste. Overall, 754 mattresses and 19 tonnes of hazardous waste were collected at these free events.

The Council's Big Belly bins are monitored on a daily basis through a combination of visual inspection, emptying, cleaning and maintenance/replacement of parts, as necessary to ensure serviceability. This physical monitoring is carried out by the cleansing crews and foremen managing the bin service and supported by the cleansing management team. All Big Belly bins are also recorded on the bespoke application 'Clean' for remote monitoring purposes. This application is utilised by cleansing crews, foremen and management to optimise the collection service and includes mapping, emptying/service history, repair alerts, up to date data on percentage fullness, collection history and more. The cleansing section are currently operating a smart bin service including 461 bins across the County which is the largest number of smart bins in operation since their inception. The recycling initiative has continued into 2022, with a further 15 smart bins being added to enhance the initiative.





NO ACTION

TIME-FRAME

LEAD(S) INDICATORS

TARGET(S) IMPACTED

PROGRESS REPORT 2022

STATUS

ACTIONS CURRENTLY BUDGETED

EN	ENERGY PLANNING											
E1	Create Dublin Region Energy Master Plan	In the next 5 years	Codema	Website with e-Map	GHG	In June 2022, Codema published the Dublin Region Energy Master Plan. The Plan provides evidence-based pathways for the Dublin Region to achieve its carbon emission reduction targets to 2030 and 2050. It is the result of three years of research, to identify the greatest potential to reduce emissions related to heat, electricity, transport and buildings in Dublin. The Master Plan also brings together national government plans and policies to show the impact they will have on Dublin. The research was funded by the Sustainable Energy Authority of Ireland under its Research, Development & Demonstration Funding Programme.	Complete					
E2	Prepare DLR Sustainable Energy and Climate Action Plan	In the next 5 years	Codema	SECAP document	GHG	In October 2019, Codema submitted the four Dublin local authority Sustainable Energy and Climate Action Plan (SECAP) to CoM on behalf of the LAs, which were intially accepted. Updated CoM criteria in the intervening period, now require local authorities to also address climate mitigation across the wider county area (outside the LAs' direct remit/control). Pre-contacting messages concerning the mitigation pillar and the feedback reports were sent to the Dublin local authorities informing the DLAs that the SECAPs are required to be reviewed, to comply with the new CoM SECAP requirements, to address county-wide climate mitigation. Codema is currently reviewing these requirements in consultation with CoM, CARO and the four Dublin local authorities. A review meeting will take place with CoM Joint Research Office during Q4 2022.	Ongoing					
E3	Develop and implement Public Lighting Master Plan	In the next 5 years	Infra- structure & Climate Change	Plan completed and ongoing conversion to LEDs	GHG	The upgrading programme for public lighting is ongoing, with over 83% LED as of June 2022. Further improvements will be made going forward, by upgrading the decorative lanterns and brackets. The Council is also investigating the use of renewable technologies and how they may be used to reduce energy needs.	Ongoing					
E4	Evidence-based climate change chapter in County Development Plan 2022-2028	In the next 5 years	Planning	Chapter with policies and development management standards	GHG GHG	A Climate Action chapter has been included in the adopted County Development Plan 2022-2028. The 'creation of a climate resilient County', is one of five Stategic County Outcomes which underpins the Plan. Overall, the Plan contains mitigation and adaptation policy objectives, which complement the dlr Climate Change Action Plan. The new County Development Plan came into effect on 21st	Complete					

April 2022.



NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
EI	NERGY EFFICIEN	CY & REN	IEWABLES				
E5	Deep retrofits of housing stock to nZEB or EnerPHit standard	In the next 5 years	Housing	# of units reaching nZEB or EnerPHit Standard		The tender process for the refurbishment of Park House, Dún Laoghaire, has been completed and work has commenced. This project is classed as a 'major renovation' for the purposes of Part L of the Building Regulations (Part L Amendment) Regulations (S.I. No. 538 of 2017). Every effort is being made to achieve nZEB standard, with the refurbishment works including insulation to the existing structure, air-tightness measures and the installation of air-source heat pumps and photovoltaic panels.	Ongoing
l					GHG	The tender process for the development of 597 new social and affordable homes at Shanganagh has been concluded and a contractor has been appointed. The development has been specified to very high environmental and sustainability standards and will be one of the largest housing developments in Europe to achieve passive house low energy use standards.	
l						Refurbishment works on the Coast Guard Cottages is well underway and includes a range of energy improvement works including installation of low energy heat pumps, low energy radiators, improved thermal values for external walls, ceilings, and floors, and energy efficient lighting.	
l						Major refurbishment works have been completed on a further five (5) vacant Council homes, allowing these homes to be returned for use as comfortable and energy efficient homes for the purpose of social housing. The works included attic, wall and floor insulation, boiler/heating control upgrades, improved airtightness, replacement of windows and doors, and improved ventilation systems.	
E6	Undertake energy efficiency works in the Council's housing stock	In the next 5 years	Housing	% of housing stock with energy efficiency measures implemented	GHG	Efficiency Retrofit Programme, that is expected to grow each year to meet the Programme for Government retrofit commitment. Under this programme, local authorities are required to retrofit existing housing stock to a B2/Cost Optimal BER. The allocation of funds to each Local Authority in 2022 was calculated on a stock percentage basis and with funding allocations based on an expected average cost of €33,000 per property. This year the Council upgraded 82 homes, in excess of its 2022 target of 68 homes. The programme of works being undertaken by the Housing Maintenance Section to ensure the selected properties receive a B2/Cost Optimal BER include, external wall and attic insulation, solar PV, new doors and windows, air to air or air to water heat pumps, mechanical ventilation, blocking of fireplaces and low energy lighting. The Council commenced a stock condition survey in 2022, to identify suitable properties for future Energy Efficiency Retrofit Programmes.	Ongoing









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NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS	AC:
E7	Review all significant energy users within the Council to increase energy efficiencies	In the next 5 years	DLRCC Energy Team, Codema	Review savings monthly through Energy Elephant	GHG	As part of the Council's's on-going ISO50001 certification, an Energy Review incorporating the organisation's Significant Energy Users (SEUs) is undertaken on an annual basis. This Review compiles data and information from Action Plans and Internal Audits of all SEUs, including public lighting, fleet, County Hall, Harbour Square, Balloyogan Operations Centre and dlr LexIcon and other libraries. The projects implemented across dlr during 2021 produced energy savings of over 7 million kWh, with Public Lighting's LED programme and dlr Leisure's Energy Performance Contract (EPC) responsible for the largest share. These energy savings are the most reported on the SEAI's Monitoring & Reporting system, since reporting began in 2013.	Ongoing	CTION AREA: ENERGY & BUILDINGS
E8	Implement EPC project in 3 Council leisure centres	In the next 5 years	DLRCC Energy Team, Codema	Contract signed, measurement and verification of savings	GHG	Since the award of the contract in June 2021, works began across the three leisure centres of Meadowbrook, Monkstown and Loughlinstown. The capital works undertaken to date include new pool circulation pumps, pool cover replacement, combined heat and power (CHP) installation, conversion to LED lighting on all-weather pitches, as well as operational improvements being initiated. Across the three leisure centres, these significant improvements have contributed to 10% decrease in energy consumption between 2020 and 2021. It should be noted that the disruption to service due to Covid-19 may make this comparison less representative of operations during normal level of services.	Ongoing	
E9	Apply for energy funding through SEAI's BEC, EXEED and deep retrofit programmes	In the next 5 years	DLRCC Energy Team, Codema	# of successful applications	GHG	Codema is currently working with dlr and the other Dublin Local Authorities on an application to SEAI's Pathfinder funding scheme, with a focus on low-carbon and energy efficiency retrofit projects. EU funded projects also include DeliveREE and ProBono.	Ongoing	
E10	Continue upgrading public lighting to LEDs	In the next 5 years	Infra- structure & Climate Change	# of lights upgraded	GHG	The upgrading programme for public lighting is ongoing, with over 83% LED as of June 2022. Further improvements will be made going forward, by upgrading the decorative lanterns and brackets. The Council is also investigating the use of renewable technologies and how they may be used to reduce energy needs.	Ongoing	
E11	Continued compliance with ISO 50001	In the next 5 years	DLRCC Energy Team, Codema	Certification maintained	GHG	Pursuit of continual improvement in energy performance is integral to continued compliance with the ISO 50001: 2018 standard. A surveillance audit by Certification Europe was completed at the end of 2021 and was dlr's most successful to date, with zero non-conformances reported. An in-depth recertification audit will take place at the end of 2022.	Ongoing	
E12	Display Energy Certificates for public buildings	In the next 5 years	DLRCC Energy Team, Codema	# of DECs generated annually for public buildings	GHG	As part of the annual Display Energy Certification process, Codema undertook site visits to the relevant dlr buildings. Out of 19 DECs undertaken in 2022, 1 building (the Grainstore) received an A rating, 8 received B rating, 8 received C rating and 2 D ratings were also included. No buildings had a lower rating than 2021 and with the majority trending upwards on last year's DEC rating.	Ongoing	



NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
E13	Annual Monitoring and Reporting to SEAI	In the next 5 years	DLRCC Energy Team, Codema	M&R data submitted to SEAI annually	GHG	The SEAI's annual Monitoring and Reporting data returns for 2021 have been completed, including new requirements to report on staff business travel. The results show that dlr has a 51% improvement in energy efficiency compared to the 2009 baseline. This is consistent with the 51% improvement seen in 2020. In terms of emissions, dlr shows a 38% improvement in CO2 equivalent emissions, when compared to the baseline average of 2016-18. However, as expected following the return to pre-Covid-19 level of activity, the year-on-year comparison with 2020 shows an increase of 9% in emissions. 2021 was a strong year for implementation of energy saving projects across the Council, particularly with dlr Leisure EPC and continued Public Lighting improvements. Implemented projects saved over 7 million kWh in 2021.	Ongoing
E14	Promote DLR's exemplar role of energy efficiency in public sector	In the next 5 years	DLRCC Energy Team, Codema	# of exemplar projects promoted		Following on from the success of 2021's energy webinar, a free public in-person workshop and a 'Meet the Experts' event in County Hall took place in October 2022, to encourage and support people considering home energy upgrades. An organisation-wide 'Staff Energy Awareness Webinar' was held in May 2022, to inform and encourage all dlr staff members to engage in energy-saving behaviours at work and at home.	Ongoing
E15	Publish Energy Review annually	In the next 5 years	Codema	Review published, # recommendations implemented	GHG	The 2022 Energy Review document is currently being finalised by Codema and will be published during Q4 2022. A review is also underway for ISO 50001 re-certification requirements.	Ongoing
E16	Energy audit of Council-owned historic buildings and develop a programme of works to improve energy efficiency while ensuring measures do not compromise the character of the building	In the next 5 years	Energy Team / All Departments	# of audits complete	GHG	The Council has prepared a new Heritage Plan 2021-2025, which includes a number of actions relating to built heritage and climate mitigation and adaptation measures. This action can also be further developed in conjunction with the implementation of Archaeological and Built Heritage Climate Change Sectoral Adaptation Plan, which includes actions related to local authorities. The Dublin CARO are represented on the Plan implementation Working Group. There is also scope to involve other stakeholders such as the other Dublin local authorities and the Department of Culture, Heritage and the Gaeltacht.	Ongoing
E17	Facilitate the Small Business Innovation and Research (SBIR) challenge for climate change solutions	In the next 5 years	Smart Dublin	# of successful applications	GHC GHC	The Enterprise Ireland SBIR Challenge has not yet resumed. The Council will continue to liaise with Enterprise Ireland on the progress of this initiative, in particular through the dlrBETA initiative.	Not started
E18	Monitoring of smart lighting trials in the County	In the next 5 years	Infra- structure & Climate Change	Results from trial	GHG GHG	There were no expansions to the smart lighting trials in 2022. Monitoring of EV charging parking spaces has started, to enable the Council to gather data on parking space capacity issues, in advance of any policy changes for Council EV charing infrastructure.	Complate





NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
RE	SEARCH & INNO	VATION					
E19	Continue to use Energy Elephant to monitor energy use in Council buildings	In the next 5 years	DLRCC Energy Team, Codema	Monthly energy reports	GHG	The Energy Elephant platform continues to be used to track energy use across the Council's buildings. The platform provides data on energy consumption and costs, through bills and meter readings and also provides a figure for associated carbon emssions. Energy Dashboards for each SEU (Significant Energy User - Buildings) are available on the dlr staff intranet. This enables the Council's annual M&R process to the Sustainable Energy Authority of Ireland.	Ongoing
ENE	RGY AWARENES	S					
E20	Energy awareness initiatives in Council-owned buildings	In the next 5 years	DLRCC Energy Team, Codema	# of staff participating in events and activities	GHG	In May 2022, a staff energy awareness presentation to encourage energy saving at work and at home was delivered online by the Energy Team. The My Mobility Hub continues to provide staff in County Hall and Ballyogan, with the option to use EVs for their work travel journeys.	Ongoing
E21	Monitor and develop the Home Energy Saving Kits in dlr libraries	In the next 5 years	DLRCC Energy Team, Codema	# of kits borrowed	GHG GHG	Three additional Home Energy Saving Kits have been developed for the Council's libraries. 11 kits are now available for the public to borrow within the dlr library network. Additional kits are also on order to be made available in Q1 2023. A kit is also available for Council staff to borrow.	Ongoing
E22	Expand tenancy assistance programme to include tenant energy awareness	In the next 5 years	Housing, DLRCC Energy Team	% of tenants attending programme	GHG	Work on the new dlr Tenant Handbook was completed in January 2021. The new handbook comprises seven distinct documents, that are available to read on the website and are also given to all residents signing a new tenancy with the Council. All documents have been written in plain English and have been awarded the plain English mark by the National Adult Literacy Agency (NALA).	Ongoing
E23	Participation in EU DeliverEE Project	In the next 5 years	Housing, DLRCC Energy Team	# of project actions and deliverables completed	GHG	dlr is a partner in the EU Horizon 2020 funded DeliverEE project, together with a range of partners including Codema and the other three Dublin local authorities. The DeliveREE project, will support the retrofit of a range of Council facilities such as leisure centres, fire stations, theatres, libraries, offices, community buildings and landfill treatment sites. This pipeline of projects will be completed over the next four years and is expected to reduce carbon emissions in Dublin by almost 4,000 tonnes.	Ongoing
E24	Dublin Climate Action Week	In the next 5 years	Dublin local authorities, Codema, CARO	# of events and attendees		The four Dublin local authorities in conjunction with Codema and CARO organised 'Dublin Climate Action Week' in September 2022. The overall vision of Dublin Climate Action Week 2022 was – 'to highlight Dublin's climate action progress to its citizens and demonstrate the leadership role of the four local authorities in conjunction with other partners'. A steering group chaired by South Dublin County Council, worked together to devise a programme of events and promotional material. In total, over 50 in-person and on-line events were delivered across the CCAP theme areas of Energy & Buildings, Transport, Flood Resilience, Nature Based Solutions, Resource Management and Citizen Engagement.	Ongoing

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
E25	H2020 PROBONO Project	In the next 5 years	IT - Information Technology	# of project actions and deliverables completed		Under the European Green Deal, PROBONO, embraces nature conservation to develop green buildings within our communities. The aim of the project is to enable buildings, towns and cities to evolve naturally over time, whilst not putting pressure on the environment. Central to the development towards green buildings is sustainability, highlighting the need for working with new technologies and services through planning, design, manufacturing, construction, and operational steps of a building's life-cycle. Throughout 2022, the Council has been engaging with the stakeholders in the buildings identified as part of the Probono Project: County Hall, Harbourmasters Lodge, The Ferry Terminal, The Lexicon and Social Housing. This has progressed steadily through a visit in Octobe 2022, from Smart Innovation Norway to engage with the stakeholders and start working towards a Geo-Design Event to be held in Q4 2022.	Ongoing









ACTION

FRAME

LEAD(S)

TRANSPORT

INDICATORS

TARGET(S) **IMPACTED**

PROGRESS REPORT 2022

STATUS

ACTIONS CURRENTLY BUDGETED

1		С	D	٧.	П	0	NI	C
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T1 Increase number of electric vehicles in the Council fleet

In the next 5 vears

Ballyogan Operations Centre

of EVs procured



There are currently 29 EV vehicles in the Council fleet.

Ongoing

PLANNING & PUBLIC REALM

T2 Reduce parking to provide for sustainable travel alternatives

In the next5 vears

In the

next 5

years

Traffic

Reduction in on-street car parking numbers



In 2022, 7 car parking spaces were removed to provide for 35 cycle stands (70 cycle parking spaces).

Ongoing

ACTIVE TRAVEL & BEHAVIOUR CHANGE

T3 Promotion of road safety and active travel in schools

Traffic

of road safety events and initiatives

The Council issued a Cycling Bus Guide, Walking Bus Guide and a Travel Plan Guide to all schools in 2022.

A total of 80 school wardens (including reserves) were assigned to operate near schools in 2022, to help children cross busy roads at school times.

The Council supported the delivery of Cycle training in schools as part of the DTTaS Cycle Right programme. 2022 - 784 pupils in 15 schools (Jan-Jun)

The Council delivered Cycle Parking to schools. 2022 – Delivery of 33 cycle toaster stands (x 5 cycle stands) and 26 scooter parking stands (x 10) to 11 schools





Bike Week 2022. Several events were held during Bike Week 2022, including a family 6km cycle (Blackrock to Newtownsmith), public bike clinics in Dun Laoghiare and Dundrum, staff cycle and female cycle training.

A Bike Theft campaign was held in conjunction with An Garda Síochána using dlr Times publication. The "Lock It or Lose It" campaign aimed to raise awareness of bike security within the cycling community, was also promoted. This encouraged cyclists to purchase a good bike lock when buying a bike.

Safe Routes to School Programme, School Zones. The Council is working with NTA and An Taisce Green Schools to develop and deliver the 'Safe Routes to School – School Zones' initiative in Dun Laoghaire-Rathdown. Public consultation was recently completed for the following schools

- Carysfort National School, Blackrock
- The Harold School, Eden Road Lower, Glasthule, Co Dublin.
- Holy Family National School, Dunedin Park, Monkstown Farm,
- Holy Cross National School in Dundrum

Ongoing

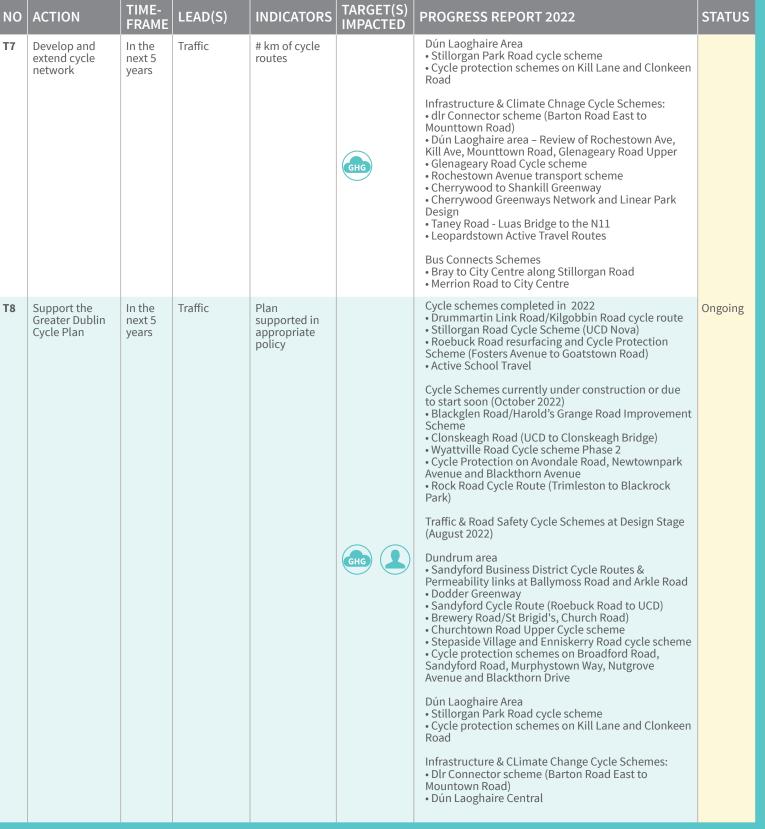


NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
Т4	Develop and expand the County walking network	In the next 5 years	Traffic, Road Maintenance	Length of footway improved, # of new pedestrian crossings, # of pedestrian crossings upgraded with LED lights	GHG	2022 schemes include: Johnstown Road Pedestrian Crossing Clarinda Park West Road Pedestrian Improvement Newtownpark Pedestrian/Cycle Crossing Churchtown Road Lower Traffic Calming scheme Various junction improvement around the County 2022 No new pedestrian crossing on Lower Kilmacud Road Zebra Crossings on Granville Road and Longmeadow Drive Continuous path facilities along Lower Kilmacud Road Permeability improvements at Goatstown Close Removal of kissing gates and other barriers Road Maintenance works programme Major Works ('Roads' Programme) resulted in the reconstruction/resurfacing of a road length of c. 8.5 km. Minor Works ('Patching' Programme) resulted in a road area of c. 14,694 square metres being reconstructed/resurfaced or the equivalent of c. 2.4km of road. Footpath Upgrade Programme works completed to upgrade a footpath length of c. 8.3 km.	Ongoing
Т5	dlr Sports Partnership organised walks	In the next 5 years	dlr Sports partnership	# of walks, # of people attending	•	23 walks organised by dlr Sports Partnership Oct 2021 to August 2022.	Ongoing
Т6	Permeability and connectivity in planning process	In the next 5 years	Transport Planning	Adopted development plan includes permeability	GHG	A number of permeability links have been included in developments as part of the planning process and these will be delivered in the coming months and years.	Ongoing
Т7	Develop and extend cycle network	In the next 5 years	Traffic	# km of cycle routes	GHG	Cycle schemes completed in 2022 Drummartin Link Road/Kilgobbin Road cycle route Stillorgan Road Cycle Scheme (UCD Nova) Roebuck Road resurfacing and Cycle Protection Scheme (Fosters Avenue to Goatstown Road) Cycle Schemes currently under construction or due to start (October 2022) Blackglen Road/Harold's Grange Road Improvement Scheme Clonskeagh Road (UCD to Clonskeagh Bridge) Wyattville Road Cycle scheme Phase 2 Cycle Protection on Avondale Road, Newtownpark Avenue and Blackthorn Avenue Rock Road Cycle Route (Trimleston to Blackrock Park) Traffic & Road Safety Cycle Schemes at Design Stage (August 2022) Dundrum area Sandyford Business District Cycle Routes Sandyford Business District Cycle Routes Sandyford Business District Cycle Routes Sandyford Cycle Route (Roebuck Road to UCD) Brewery Road/St Brigid's, Church Road) Churchtown Road Upper Cycle scheme Stepaside Village and Enniskerry Road cycle scheme Cycle protection schemes on Broadford Road, Sandyford Road, Murphystown Way, Nutgrove Avenue and Blackthorn Drive	











NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
Т8	Support the Greater Dublin Cycle Plan	In the next 5 years	Traffic	Plan supported in appropriate policy	GHG 1	Glenageary Road Cycle scheme Rochestown Avenue transport scheme Cherrywood to Shankill Greenway Cherrywood Greenways Network and Linear Park Design Taney Road - Luas Bridge to the N11 Leopardstown Active Travel Routes Review of the Covid 19 Measures (Blackrock, Dun Laoghaire) Abbey Road and Stradbrook Road Rapid deployment scheme Bus Connects Schemes Bray to City Centre along Stillorgan Road Merrion Road to City Centre	Ongoing
Т9	Cycle Training Programme in schools	In the next 5 years	Traffic	# of students trained	GHG 1	The Council supported the delivery of Cycle training in schools as part of the DTTaS Cycle Right programme. 2022 - 1,048 pupils in 21 schools	Ongoing
T10	Develop County bike sharing scheme	In the next 5 years	Traffic	# of bikes in County	GHG	Bleeperbike, Moby Bike and Zipp Mobilities have a licence to operate a stationless bike share scheme in the County with permits for 50 bikes Licence and permit fees were both waived for operators in 2021 and 2022.	Complete
T11	Cycle parking in public realm	In the next 5 years	Traffic	# of additional cycle parking spaces	GHG	Roads and Parks 122 cycle parking stands (244 spaces) and 9 cargo bike stands installed up to end October 2022. Schools 2022 – Delivery of 33 cycle toaster stands (x 5 cycle stands) and 26 scooter parking stands (x 10) to 11 schools (October 2022)	Ongoing
T12	30 km/h speed limits	In the next 5 years	Traffic	# of roads with 30 km/h speed limit	GHG	A review of speed limits in the County has commenced, with a view to updating the speed limit bye-laws. Public consultation is due to take place in Q1 2023.	Ongoing
T13	Road maintenance improvements	In the next 5 years	Road Maintenance	Km of regional and local roads with improvement works carried out	GHG	2022 Road Maintenance works programme: • Major Works ('Roads' Programme) resulted in the reconstruction/resurfacing of a road length of c. 8.5 km. • Minor Works ('Patching' Programme) resulted in a road area of c. 14,694 square metres being reconstructed/resurfaced or the equivalent of c. 2.4km of road. • Footpath Upgrade Programme works completed to upgrade a footpath length of c. 8.3 km.	Ongoing
PUI	BLIC TRANSPOR	RT					
T14	Expand bus network in the County	In the next 5 years	Traffic	Work with NTA on Bus Connects	GHG	Delivery of bus services and bus routes is being progressed by the National Transport Authority as part of the Bus Connects project and the Council has engaged with the NTA on the following schemes in the County: • Bray to City Centre along Stillorgan Road • Merrion Road to City Centre The Council is working with the NTA to facilitate the implementation of further bus stops throughout the County including a new bus layby on Dundun Bypass.	Ongoing



NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
T15	Expand rail network in the County	In the next 5 years	Transport Planning	Work with NTA and Transport Infrastructure Ireland on MetroLink and Luas expansion	GHG	No rail schemes are currently being progressed in the County. A new Dart station is being planned for Woodbrook.	
T16	Expand car clubs in the County	In the next 5 years	Traffic	Regulation of car clubs and number of car club vehicles	GHG	Car club licences have been issued to two operators to date in the County. 1. 2019-2022 Gocar (33 permits) 2. 2022-YUKŐ Toyota Car Club (11 permits)	Ongoing
T17	Expand EV network in the County	In the next 5 years	Traffic, Public Lighting	# of EV charge points	GHG	The four Dublin Local Authorities, CARO and SMART Dublin comprise the EV Regional working group, which produced Dublin's first Electric Vehicle Strategy in June 2022. The strategy will allow each local authority to examine how they can best facilitate the provision of electric vehicle-charging infrastructure across the Dublin region and the scale of investment required. The CARO has been invited by the Department of Transport to sit on their Public Sector Infrastructure Delivery Group to be set up by Zero Emission Vehicle Ireland (ZEVI) in Q4 2022. In 2022, the Council undertook a public consultation process to enable members of the public, to give their thougths and recommendations on the future of EV charging within the County. In 2022, two electric bicycle charging stations were installed, in partnership with ESB, as a trial to ascertain the current electric bike desire within the County and this trial will be expanded to other areas within the County in 2023.	Ongoing
T18	Engagement with citizens on new sustainable travel initiatives and schemes	In the next 5 years	Traffic	# of interactions from citizens on DLR Public Consultation Hub on infrastructure schemes and sustainable travel initiatives	GHG 1	Public Consultation was undertaken on the following Active Travel Schemes in 2022 Road Safety Plan 2022 to 2030 – August 2022 (Plan adopted in Septmber 2022) School Cycle and Scooter Parking - May 2022 Roebuck Road Cycle Route (Goatstown to UCD) – March 2022 Churchtown Road Upper- Traffic Calming & Cycle Scheme – March 2022 Bike Locker Parking – February 2022 Safer Routes to school – school zones (Carysfort National School, Holy Family National School, and Holy Cross National School in Dundrum) Taney Road to N11 Active Travel Scheme Dun Laoghaire Central DLR Connector Blackrock Park to Trimleston Avenue Sustainable Transport Improvements Glenageary Road Upper Active Travel Improvements Deansgrange Cycle Route School Mode Share Survey	Ongoing
T19	Replacement of diesel hand sweepers/diesel power washers with electric models	In the next 5 years	Ballyogan Operations Centre	% reduction over initial benchmark, % of CO ₂ saved	GHG	The Council is reviewing and engaging with the suppliers available in Ireland, to identify alternative electric models that meet the performance criteria for the Council's operations. No equipment was purchased in 2022.	Ongoing

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
T20	Participation in EU WeCount Project	In the next 5 years	Infrastructure and Climate Change	# of sensors installed across dlr	GHG 1	The Council supported University College Dublin in the delivery of the EU funded WeCount project. To enhance local knowledge of traffic and travel patterns across the County, dlr residents were invited to engage in the WeCount project, by hosting a sensor at the front of their property. More than 100 sensors were deployed across Dublin, with air quality in the vicinty of schools being identified as a main concern for citizens.	Complete
T21	The Bike Hub	In the next 5 years	Inter- departmental	# of bikes and supporting services available	GHG 1	Following on from its launch in 2021, The Bike Hub have continued to provide an inte- gral service. Achievements in 2022 include: • over 200 bikes distributed to low income citizens with a lot of the work done by local community volunteers, with parts and accessories funded by The Bike Hub • over 300 ride bookings in 2022 • Environmental achievements include, 960 KG Reused • Repair Services totalling 1800 KG • Carbon saving of 77.8 tonnes. • There are now 22 dedicated volunteers assisting with the project • Social value of the scheme has been estimated at €119,490.00	Ongoing
T22	dlr Summer Streets initiative	In the next 5 years	Infrastructure and Climate Change	% increase in footfall on streets pedestrianised	GHG 1	The dlr Summer Streets initiative for George's Street Lower in Dún Laoghaire was completed in 2021. The scheme continued in Cabinteely during 2022 and a number of parklets across the County were also put in place. The Council also extended outdoor dining exemptions to the end of 2022.	Ongoing
T23	Cargo Bike Pilot Scheme	In the next 5 years	Infrastructure and Climate Change,	# of business participating in the pilot	GHG (This pilot scheme has ended with a number of local businesses continuing to use the eCargo Bikes directly with Bleeper.	Ongoing
T24	Inclusive Cycling for All Campaign	In the next 5 years	Infrastructure and Climate Change,	# of times bikes rented	GHG 1	The collaboration between dlr Sports Partnership, Dún Laoghaire-Rathdown County Council, The Bike Hub and Cycling Without Age was extended into 2022, with all parties eager to continue the collaboration. A promotional video showcasing the scheme was launched and featured in the Transport for Ireland Bike Week program. New mobility bikes facilitating wheelchair mounting were purchased, adding to the existing fleet of inclusive bikes. There are also public realm improvements planned for the area surrounding The Bike Hub, to make it more accessible and welcoming to all users. Citizens can still make online bookings via the portal at www. thebikehub.ie. The Bike Hub staff are on site to facilitate this as well as assist with the correct use of all bikes.	Ongoing
T25	Disabled Accessible EV Parking & Charging Bay Pilot	In the next 5 years	Multi- departmental	# of parking bays installed	GHG (No new additional Disabled Accessible EV Parking & Charging Bays were installed in 2022.	Complete
T26	To replace the diesel forklift at Ballyogan Recycling Park with an electric forklift	In the next 5 years	Infrastructure and Climate Change,	# of electric forklifts procured.	GHG	As the Council continues to upgrade its fleet, it is planned to replace the diesel forklift at Ballyogan Recycling Park with an electric forklift.	Ongoing



ACTION

FLOOD RESILIENCE

INDICATORS





PROGRESS REPORT 2022

(fixed surveying points) were installed by dlr in 2016 at 21 separate locations between the Old Bray Landfill (just North of Bray Harbour) and Seafield. These stations are surveyed yearly and also after storm events. These sites are all currently on Council owned land. The installation of monitoring stations was one of the recommendations in the 2010 Coastal Strategy Study commissioned by dlr.



LOOD RESILIENCE

TARGET(S)
IMPACTED

STATUS

ACTIONS CURRENTLY BUDGETED

TIME-

FRAME

LEAD(S)

FL	OOD RISK MANAGEMEN	Т				
F1	Implement flood risk management guidelines	In the next 5 years	Multi- departmental	# of projects following guidelines	Flood Risk Management measures currently being designed in compliance with relevant national guidelines.	Ongoing
F2	Coordinate Emergency Response Plans incorporating climate change	In the next 5 years	Drainage, lead agencies, AGS, HSE	Quarterly meetings with neighbouring local authorities	Flood Emergency Plan is continually updated and exercises take place on a yearly basis when possible.	Ongoing
F3	Prepare and implement an integrated Coastal Zone Management Plan that addresses natural and cultural heritage and follows the Marine Spatial Planning Directive/ Framework	In the next 5 years	Parks	Coastline maintained, improvement in habitats	A dlr Coastal Defence Strategy Study was commissioned in 2010. This study is currently under review and ongoing monitoring is taking place along sections of the coast.	Ongoing
F4	The Council and CARO will work with the Geological Survey of Ireland in the areas of urban geology and coastal vulnerability	In the next 5 years	CARO and Municipal Services	Working Group Established	Whilst a working group has not been formally established, there have been a number of engagements between the GSI and the CARO to ensure that each organisation has an appreciation of each other's work programme to enable work on mutually beneficial projects where resources allow.	Ongoing
F5	Implement coastal monitoring programme, map of vulnerable areas	In the next 5 years	Parks	Map produced	In 2021, a study was undertaken by CARO Atlantic Seaboard South to assess current and future coastal erosion challenges and requirements for Local Authorities. This study took its basis from the 2017 Fingal County Council's Coastal Policy and Practice Audit and expanded on the scope by considering further sources of information available since the document was published. The findings of the study concluded that Local Authority practitioners working in the coastal erosion area require greater supports in terms of practical guidance and training. To progress the findings of the study, CARO has developed a proposal for scoping and developing guidance and training requirements for Local Authorities in the area of coastal erosion. A National Working Group has been established with Local Authority personnel working in the area of coastal management. Monitoring stations	Ongoing

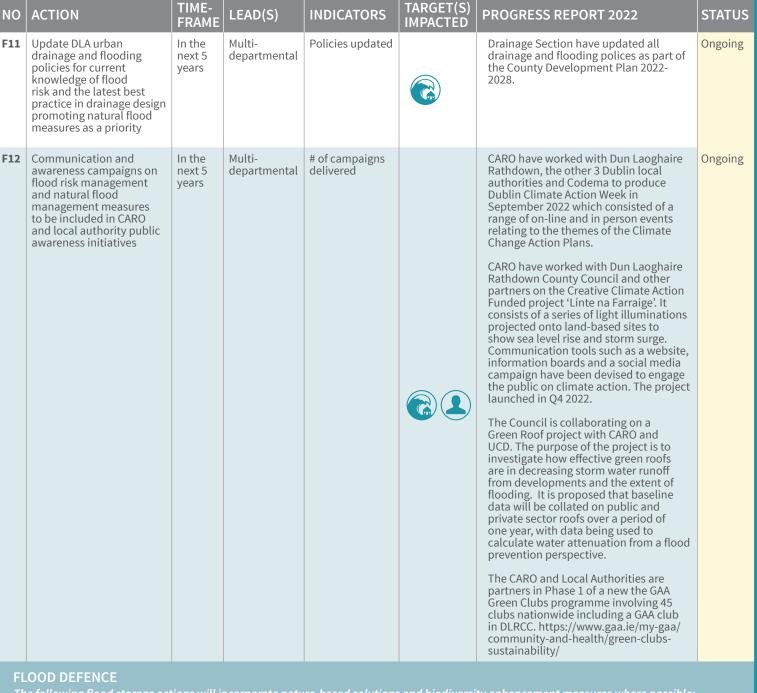


NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
F6	Develop and implement a biosphere work programme within the County	In the next 5 years	Parks	Work programme developed and implemented		This action will be undertaken by the Dublin Bay Biosphere Partnership, which includes the three relevant Dublin local authorities and Dublin Port.	Ongoing
F7	Develop a climate change impact GIS risk map with scenarios for the Dublin Region	In the next 5 years	Climate Ireland, Infrastructure and Climate Change multi- departmental	GIS map developed		CARO in conjunction with Climate Ireland have published a climate change risk and vulnerability methodology, which is available via the Local Authority Portal on the CARO website. A national webinar was held on 14th June to provide an overview of the methodology to representatives from all local authorities. The risk assessment methodology will be trialled across the local authorities in the Atlantic Seaboard North Region in Q3/Q4 2022, the learnings from which will inform further development and implementation of a methodology across the sector.	Ongoing
F8	Develop template to capture impacts, response and costs (including ecosystem services/natural capital costs) for all major climate events	In the next 5 years	Infrastructure and Climate Change	Template developed and issued		The CARO have developed a mobile data collection App named WIRE (Weather Impact REgister) for local authority staff to record the impacts of weather events. The data collected by the App can be accessed via an online Map Viewer and Data Dashboard with spatial analysis and reporting functionality to assist climate adaptation planning. The WIRE App was piloted in a number of local authorities in 2020/2021, after which upgrade work was completed with the finalised App launched in 2022. CARO are working with interested LAs to implement the system across Climate Action Teams and wider Local Authority teams. CARO are also working to link other data collection systems in use in LAs, such as MapAlerter, with the WIRE App dataset. For further information contact wire@caro.ie	Ongoing
F9	Risk workshops to assess impacts on Council services	In the next 5 years	All departments	Risks identified		Ongoing Risk assessments take place in conjunction with the OPW. The SWAT team carry out dynamic risk assessments when Met Eireann and advise Weather warnings.	Ongoing
F10	Establish a Working Group to deal with the Issue of Pluvial Flood Risk. This shall include: How to manage "urban creep" and the increase in impermeable. surfaces . Promotion of SuDS early in design process. Development of pluvial flood forecasting through use of point rainfall forecasting . Interim use of DCC "FLAG" meetings as a model for DLAs in relation to pluvial flood forecasting and response.	In the next 5 years	Multi- departmental	Working group established		Group established within Drainage (ECFRAM Team). Part of their remit is to arrange for mapping of Pluvial Flood Risk Areas and liaise/source funding from the OPW.	Ongoing









The following flood storage actions will incorporate nature-based solutions and biodiversity enhancement measures where possible:

F13	Cabinteely Park flood storage	In the next 5 years	Water and Drainage, Parks	Project at feasibility stage	The scheme is now part of an overall catchment project.	Ongoing
F14	Fernhill Park flood storage feasibility study	In the next 5 years	Water and Drainage, Parks	Project at feasibility stage	The scheme is now part of an overall catchment project.	Ongoing





NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
F15	Kilbogget Park flood storage	In the next 5 years	Water and Drainage, Parks	Project completed		Kilbogget Park Flood Storage project was completed in May 2021. The completed structure now greatly assists in managing flood risk downstream and is a vital component in the Council's adaption to the risks posed by climate change.	Complete
F16	Installation of screen monitoring cameras	In the next 5 years	Water and Drainage, Parks	Project completed		The installation of screen monitoring cameras is ongoing across the County.	Ongoing
F17	Glenavon Park flood storage and integrated wetland	In the next 5 years	Water and Drainage, Parks	Project completed		This project is now part of the Deansgrange Stream Flood Relief Project which commenced in December 2019.	Ongoing
F18	Marlay Park enhanced flood storage	In the next 5 years	Water and Drainage, Parks	Project completed		The project is undergoing further evaluation.	Ongoing
F19	Sandyford Park flood storage	In the next 5 years	Water and Drainage, Parks	Project completed		This project has not commenced to date and requires further technical evaluation in partnership with the Office of Public Works (OPW),	Ongoing
F20	Corbawn coastal protection works	In the next 5 years	Roads Maintenance	Project completed		Corbawn coastal protection works were completed in Q2 2019.	Complete
F21	Promote and encourage community involvement in the retrofit of SuDS in existing developments	To be decided	Parks, Water and Drainage	# of communities involved		The integration of SuDs measures into developments is undertaken by way of the Development Management and Forward Planning functions of the Council.	Ongoing
F22	Bray Landfill Coastal Protection Project	In the next 5 years	Water and Drainage, Parks	Project completed		Work on the Bray Landfill Coastal Protection Project is ongoing. Installation of 100 metres of rock armour to the front of the Golf Club is complete and the rock armour stretch to the front of the landfill is approximately 50% complete. Work has commenced on the foundations for the north / south access paths. Additional smaller scale works, including works to the stram culvert have commenced. This project is expected to be completed during Q4 2022.	Ongoing
F23	Linte na Farraige - Creative Climate Action	In the next 5 years	Infrastructure and Climate Change	# of LED installations produced		CARO has worked with Dun Laoghaire Rathdown County Council and other partners on this Creative Climate Action Funded project. It consists of a series of light illuminations projected onto land-based sites to show sea level rise and storm surge. Communication tools such as a website, information boards and a social media campaign have been devised to engage the public on climate action. Solar powered installations were launched in Galway and Wexford in Q4 2022. Refer to www. lintenafarraige.com	Ongoing







NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
F24	H2020 SCORE Project	In the next 5 years	IT - Information Technology	# of projects actions and deliverables completed		The intensification of extreme weather events, coastal erosion and sea-level rise are major challenges to be urgently addressed by European coastal cities. The science behind these disruptive phenomena is complex, and advancing climate resilience requires progress in data acquisition, forecasting, and understanding of the potential risks and impacts for real-scenario interventions. The Ecosystem-Based Approach (EBA) supported by smart technologies has potential to increase climate resilience of European coastal cities; however, it is not yet adequately understood and coordinated at European level. SCORE outlines a co-creation strategy, developed via a network of 10 coastal city 'living labs' (CCLLs), to rapidly, equitably and sustainably enhance coastal city climate resilience through EBAs and sophisticated digital technologies. SCORE will establish an integrated coastal zone management framework for strengthening EBA and smart coastal city policies, creating European leadership in coastal city climate change adaptation in line with The Paris Agreement. This Project is now undergoing Stakeholder Analysis Engagement Mode with interventions in the planning stage.	New





NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
F25	H2020 PRECINCT Project	In the next 5 years	IT - Information Technology	# of project actions and deliverables completed		EU Critical Infrastructures (CIs) are increasingly at risk from cyber-physical attacks and natural hazards. Research and emerging solutions focus on the protection of individual CIs, however, the interrelationships between CIs has become more complex, for example, in smart cities and managing the impacts of cascading effects and enabling rapid recovery is becoming more pertinent and highly challenging. PRECINCT (Preparedness and Resilience Enforcement for Critical Infrastructure Cascading Cyberphysical Threats and effects with focus on district or regional protection) aims to connect private and public CI stakeholders in a geographical area to a common management approach, which will yield a protected territory for citizens and infrastructures. This Project is now undergoing Stakeholder Analysis Engagement Mode with interventions in the planning stage.	New







10	ACTION	TIME- FRAME LEAD(S)	INDICATORS	TARGET(S)	PROGRESS REPORT 2022	STATUS
		FRAME		INITACIED		

ACTIONS CURRENTLY BUDGETED

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N1	Establish regional working group on nature-based solutions	In the next 5 years	Parks & Biodiversity	Working group established	This is being progressed by the existing working group of Senior Parks Superintendents of the four Dublin local authorities. This group is collaborating with the City of London Corporation on reviewing the London Tree Stategy, with a view to scoping a regional approach to developing nature based solutions, across the four Dublin local authorities.	Ongoing
N2	Agree joint action plans to protect habitats and species native to the County	In the next 5 years	Parks & Biodiversity	Action plans agreed and implemented	The four Dublin local authorities have commenced discussions on developing a methodology approach to this action. This action should also be undertaken at national and regional level, in partnership with relevant stakeholders such as National Parks & Wildlife Service (NPWS).	Not started
N3	Establish interdepartmental working group with engineers and planners	In the next 5 years	Parks & Biodiversity	Working group established	This is currently facilitated by way of development and delivery of projects including Part 8 schemes etc. This was also facilitated by way of the preparation of the adopted County Development Plan, which had shared input across Council departments.	Ongoing
N4	Workshop on NBS, green infrastructure and Sustainable urban Drainage Systems (SuDS)	In the next 5 years	Parks & Biodiversity	Workshop undertaken, report of outcomes	This action has yet to be developed and can involve partnership with the Dublin CARO and UCD.	Post- poned
N5	Produce regional floodplain management guidelines - use Santry River as demonstration	In the next 5 years	Parks & Biodiversity	Guidelines produced	The intent of the action is currently addressed by way of the SuDs Manual by Ciria, with regard to planning for future development.	Complete
N6	Undertake a feasibility study to develop an ecosystems audit template	2021	Parks & Biodiversity	Template produced	The Council's Biodiversity Officer has worked with the Eastern Midlands Regional Authority to develop a tool to inform decision makers on Green Infrastructure and Ecosystem Services Scoring. This pilot project is currently being finalised, with a view to developing it further and expanding to other local authorities.	Ongoing
N7	Assessment of the impact of climate change on biodiversity and ecosystem services	2019	Parks & Biodiversity, Drainage	Report and recommendations	This action will be developed in conjunction with the implementation of Biodiversity Climate Change Sectoral Adaptation Plan, which includes actions related to local authorities. There is also scope to involve other stakeholders such as third level institutions, Dublin CARO and Environmental Protection Agency (EPA)	Not started



NATURE-BASED SOLUTIONS

NC	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
GI	REEN INFRASTRUC	TURE					
N8	Develop and implement pollinator support actions	In the next 5 years	Parks & Biodiversity	Strategy completed		A number of actions have been continued and new ones completed in 2022 including: dlr biodiversity Local Soil Local Seed project, Seed savers training for communities, seed harvesting of Shanganagh and Fernhill parks, pollinator areas created by Parks Section continues, Fernhill Park conservation grazing, reduction in chemicals use for weed control, dlr Slow to Mow campaign. The Council's Biodiversity Officer is on the All-Ireland Pollinator Plan Steering Group and providing input to new AIPP guidance for communities, dlr is also a partner of the All-Ireland Pollinator Plan. The Council's Wildlife Corridor Plan also incorporates pollinators.	Ongoing
N9	Create region- wide map of green networks to support walking and cycling	In the next 5 years	Parks, Traffic	Map produced	GHG	As part of its Active School Travel initiative, the Council produced a web-map showing the location of all existing cycle routes in the County, including those in parks / greenways i.e. Blackrock Park, Kilbogget parks interventions. This map will continue to be developed as the cycle network is enhanced across the County, in partnership with the National Transport Authority (NTA) and other relevant stakeholders.	Ongoing
N10	Implement Public Open Space and Parks Strategy	In the next 5 years	Parks	Strategy produced		This is undertaken by way of the Development Management process and the assessment of planning applications with regard to open space standards etc. This also relates to the review and implementation of the Council's Green Infrastructure Strategy and Play Policy.	Ongoing
N1:	I Incorporate natural play space into existing parks	In the next 5 years	Parks	# of spaces incorporated		The Council is currently preparing a new Play Policy, the purpose of which is draw up a set of policies to guide the delivery of play opportunities across the County. As part of the implementation of the Blackrock Park Masterplan, the Council is developing plans for a temporary teenage area within the Park. The incorporation of natural play space into parks is also addressed in the adopted County Development Plan.	Ongoing
TF	REE MANAGEMENT						
N12	Implement dlr TREES 2011- 2015 strategy by producing a map of trees in the County	In the next 5 years	Parks	Online map of trees and plants		The Council is finalising the new Tree & Urban Forestry Strategy (2021-31), which should be completed by the end of Q4 2022. The Council has committed to using the i-Tree software as developed by the US department of Agriculture, that helps quantify the environmental beenfits that trees provide. This will also be used by the Council to enhance tree management and for community initiatives, including schools. The updating of existing tree symbols across the County was completed as part of the new County Development Plan. These trees relate to zoning objective 'To protect and preserve trees and woodlands'.	Ongoing

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
N13	Develop Dublin tree and plant guide	In the next 5 years	Parks	Completion of tree and plant guide		The Council has committed to using the i-Tree software as developed by the US Department of Agriculture, that helps quantify the environmental beenfits that trees provide. This will also be used by the Council to enhance tree management and for community initiatives, including schools.	Post- poned
N14	Update <i>dlr TREES</i> 2011-2015 strategy	In the next 5 years	Parks	# and variety of trees planted or removed per annum		The Council is finalising the new Tree & Urban Forestry Strategy (2021-31), which should be completed by the end of Q4 2022. The Council has committed to using the i-Tree software as developed by the US Department of Agriculture, that helps quantify the environmental beenfits that trees provide. This will also be used by the Council to enhance tree management and for community initiatives, including schools.	Ongoing
N15	Promote the Heritage Tree Hunt	In the next 5 years	Parks	# of site visits		The Council has committed to using the i-Tree software as developed by the US Department of Agriculture, that helps quantify the environmental beenfits that trees provide. This will also be used by the Council to enhance tree management and for community initiatives, including schools.	Ongoing
COI	NSERVATION AND	PRESER	RVATION				
N16	Complete and climate proof Biodiversity Action Plan, Invasive Alien Species Plan, and dlr TREES 2011-2015 strategy	In the next 5 years	Parks & Biodiversity	Plans completed		The dlr County Biodiversity Plan was completed in Q1 2022 and has been published. The Invasive Species Plan was completed and was published in 2021. A staff IAS workshop took place in Q1 2022.	Ongoing
N17	Review Dublin Bay Biosphere Plan and identify areas vulnerable to climate change	In the next 5 years	Parks, Planning	Map of vulnerable areas and species' habitats, # of hectares protected		The Biosphere Conservation Plan was reviewed and a second one has been drafted by the three Biodiversity officers of FCC, DCC and dlr in 2022. The climate review of the Dublin Bay Biosphere Conservation Plan is to be undertaken by the Dublin Bay Biosphere Partnership, which will be carried out in 2023.	Ongoing
N18	Coordinate action on biodiversity across the four Dublin Local Authorities	In the next 5 years	Parks & Biodiversity	Working group established		There are a number of ongoing actions in this area: Brent Geese Tagging Project by FCC, dlr and DCC in progress 2018 - 2021 which has extended to Q4 2022. FCC and dlr have also a wintering waders bird tagging project for 2022 - 2023. Otter Survey Project dlr and DCC completed in 2020. Seal Tagging Biosphere and LA's Project planned for 2020 postponed to 2023 due to COVID-19 pandemic and followed by lack of available contractors in 2022.	Ongoing
N19	Protect and conserve floodplains, wetlands, and coastal areas subject to flooding	In the next 5 years	Parks	Map of areas to be protected		The Council has completed the flood alleviation measures at Kilbogget Park, as part of the Loughlinstown Flood Relief Scheme. This project was funded by the OPW and the scheme protects over 250 homes. Flood alleviation measures continue to be considered as part of Council projects as required and are undertaken on a cross-departmental basis.	Ongoing
N20	Promote the natural, historical and amenity value of watercourses while maximising flood protection	In the next 5 years	Parks	Map of areas to be protected		The natural, historical and amenity value of watercourses is considered as part of the implementation of the Catchment Flood Risk Assessment and Management (CFRAM) Programme (CFRAMS) on an ongoing basis, including for example the Dargle River. This is undertaken on a cross-departmental basis.	Ongoing



NATURE-BASED SOLUTIONS

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S)	PROGRESS REPORT 2022	STATUS
N21	Launch awareness campaign to build awareness of native species	In the next 5 years	Parks & Biodiversity	Campaign launched, # of citizens participating in campaign activities	•	Raising awareness of species continues including the Hedgehog Survey workshop in Q3 2022, hedgerow talk, nature walks including bat walk Cabinteely Park for Biodiversity Week 2022 and pond life events as part of Heritage Week 2022.	Ongoing
N22	Bee Friendly Estates - promote planting of pro-pollinator flora	In the next 5 years	Parks, Environment	Increase in bee population		A number of actions have been continued and new ones completed in 2022 including: dlr biodiversity Local Soil Local Seed project, Seed savers training for communities, seed harvesting of Shanganagh and Fernhill, pollinator areas created by Parks Section continues, Fernhill Park conservation grazing, reduction in chemicals use for weed control, dlr Slow to Mow campaign. The Council's Biodiversity Officer is on the All-Ireland Pollinator Plan Steering Group and providing input to new AIPP guidance for communities, dlr is also a partner of the All-Ireland Pollinator Plan. The Council's Wildlife Corridor Plan also incorporates pollinators.	Ongoing
N23	Update hedgerow study	In the next 5 years	Parks & Biodiversity	2007 hedgerow study updated		Phase I of the dlr Hedgerow Study was completed in 2021 and Phase II is currently in progress in Q4 2022. A Hedgerow Toolkit for schools has been developed along with a Poster for the Benefits of Hedgerows (Ecosytem Services) which will be launched in Q4 2022.	Ongoing
N24	Development of community garden at Fernhill Park	In the next 5 years	Parks	# of citizens using community garden, # of food produced on-site		The Community Garden in Fernhill Park is open and an operating model has been agreed. Members aim to promote, facilitate and enhance community gardening and food growing, sustainability and environmental initiatives. The next phase of the project is to expand services to the general public.	Ongoing
N25	Deliver green roofs on civic buildings	In the next 5 years	Architects	# of Council buildings with green roofs	GHG GHG	The Council's Architects department continues to promote the inclusion of green roofs in civic buildings and social housing developments. This includes the current social housing proposals at St. Laurence's, Stillorgan and Moyola Court, Churchtown. This is also now part of the new County Development Plan. The Council is collaborating on a Green Roof project with CARO and UCD. The purpose of the project is to investigate how effective green roofs are in decreasing storm water runoff from developments and the extent of flooding. It is proposed that baseline data will be collated on public and private sector roofs over a period of one year with data being used to calculate water attenuation from a flood prevention perspective.	Ongoing
N26	Develop demonstration sites to show how to combine nature conservation with existing land uses	In the next 5 years	Parks & Biodiversity	Demonstration sites implemented	GHG GHG	Conservation Grazing at Fernhill Park continued during 2022. Also the seed harvesting project was completed in Q3 2022 in the Fernhill meadows and this seed will be used for other appropriate areas, providing a more sustainable way of developing local pollinator sites. A pilot project has commenced on seeding into existing poor meadows in the Park, using harvested yellow rattle from Shanganagh Park meadows to improve species richness. Seed Harvesting of Shanganagh meadows was also undertaken in Q3 2022.	Ongoing

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
N27	Produce A Guide to Sustainable Living in County Dublin	In the next 5 years	Parks, Environment	Guide produced		This action will be developed in partnership with the other Dublin local authorities and other stakeholders as relevant. dlr continues to use Fernhill Park as a showcase for sustainability. Composting toilets were piloted in Fernhill Park during 2022.	Not started
N28	Identify further sites suitable for community gardens for local food production	In the next 5 years	Parks	Number of sites across County		Potential sites for community gardens are currently being considered in association with Men's Shed groups in Blackrock and Meadowbrook. There is also potential for a site within Cabinteely walled garden.	Ongoing
N29	Sustainable gardening workshops	In the next 5 years	Parks, Environment	# of workshops held, # of attendees		The Council continues to promote its 'Slow to Mow' campaign, including an online brochure, to encourage native wildflowers back into the grass habitat.	Ongoing
N30	Support local communities through Lifelong Biodiversity Education	In the next 5 years	Parks, Biodiversity, Communications	# of participants, yearly reports		Biodiversity events were held on a monthly basis in 2022 and also during Biodiversity Week and Heritage Week. A Seed saving course took place over the month of September, for local communities to learn to collect local seed, importance of local soil and to create a small patch meadow in parks.	Ongoing
N31	Assess benefit of increasing buffer distance of 10m from water courses to distances of 20m, 50m and 100m, in order to protect biodiversity and provide greater flood attenuation	In the next 5 years	Parks & Biodiversity	Comprehensive assessment completed	GHG GHG	Setback from watercourses is addressed in Policy Objective GIB 24 of the new County Development Plan, which states 'It is a Policy objective to maintain and protect the natural character and ecological value of the river and stream corridors in the County and where possible to enhance existing channels and to encourage diversity of habitat and nature-based solutions that incorporate biodiversity features'. The Plan also states that 'Development proposals in riparian corridors will be considered providing, where practicable, they: dedicate a minimum of 10 m each side of the water's edge for amenity and biodiversity and up to 30 m for areas where the ecosystem functioning of the catchment requires it, (where practicable). The Council will take cognisance of the Southern Regional Fisheries Board (SRFB), 'Planning for Watercourses in the Urban Environment'. Any works which will impact on a watercourse must adhere to best practice guidelines as outlined in the Inland Fisheries 'Guidelines on protection of fisheries during construction works in and adjacent to waters'.	Not started
N32	Establish a grant scheme to landowners of riparian habitat for the planting of trees and enhancement of riparian habitats to increase resilience to climate change	In the next 5 years	Biodiversity, Parks, Environment, Water and Drainage	# of hectares planted and enhanced		There are existing funding sources available for such works to be undertaken, including Local Agenda 21, Water Framework Directive Community Water Development Fund etc. Further consideration of this action should have regard to existing / future funding sources and supports from other external stakeholders.	Ongoing



NATURE-BASED SOLUTIONS

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
N33	Tree planting in areas identified for climate change resilience	In the next 5 years	Biodiversity, Parks, Water, Drainage	# of hectares planted	GHG GHG	The Council's Parks Section intend to create community woodlands across the County with tree planting projects of all different sizes. These will be local, planted and looked after by local volunteers, with native trees. These woodlands will range from micro woodlands (10m x 10m) to more substantial areas of 1 hectare (ha).	Ongoing
N34	Pilot Demonstrator Projects for Rain Gardens and Blue- Green Streets – new builds and retrofitting	In the next 5 years	Parks and Landscape Services, Drainage, Roads Maintenance	Successful pilot trials (vegetation establishment, civic engagement, water quality, stormwater mitigation)	GHG	The implementation of this action can be considered as part Forward Planning and Development Management processes, in the context of addressing climate adaptation. This can address both public and private sector projects and proposed developments in the future.	Not started
N35	Map dlr wildlife corridors across the County and evaluate their ecosystem services including climate change resilience and how this can be protected and enhanced	In the next 5 years	Biodiversity, Parks, Environment	Map produced		A review of the Hedgerow Surveys 2008 was completed in Q4 2020, with an added assessment of how to apply ecosystem scoring to hedgerows. This is the first application of ESS to hedgerows in Ireland. A survey of the Townland Boundary Hedgerows for the County was undertaken in 2021, with an associated report provided Q4 2021. Further hedgerow surveys have been completed in Q2 and Q3 of 2022. A report is due in Q4 2022.	Ongoing
N36	Improve climate change resilience across DLR by changing our landscape management of green infrastructure including green spaces, roadside verges and streamsides to create nature wildlife and pollinator areas within DLR. Extend our Slow to Mow campaign to reach all parts of the County	In the next 5 years	Biodiversity, Parks,	Management plan produced. Slow to Mow extended		The Council has adopted an ethos of not using herbicides or sprays in landscape management of green infrastructure across the County. This has been undertaken successfully at a range of sites including at Cabinteely and at cemeteries. It is now part of current Parks policy and the department annual maintenance programme.	Ongoing
N37	Increase awareness of the benefits of biodiversity and ecosystem services to climate change resilience	In the next 5 years	Biodiversity, Parks	# of citizens reached		The Council's Biodivesity webpages host a Natural Capital and Ecosystem Services section. In 2021 the Council partnered with the Eastern and Midland Regional Assembly and University of Barcelona, in a pilot PROGRESS Project to develop a tool for decision makers in relation to Green Infrastructure and ecosystem servcies and this project forms the basis of further work in this area post 2022. The Council's Biodiversity Officer created an ecosystem services toolkit for schools and are rolling it out in schools in 2022.	Ongoing







NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
N38	Myrtle Square & Convent Lane Project	In the next 5 years	Biodiversity, Parks, Environment	Project Completed	GHG	In September 2022, contracts were signed by the Council for the work to start at Myrtle Square and Convent Lane in Dún Laoghaire. Myrtle Square will be a new public space in the heart of Dun Laoghaire town. It will provide a destination point and an attractive space for locals and visitors to linger, relax, play and enjoy. The completed, permanent scheme will be characterised by nature and greening. A new grove of trees, groundcover, and climbing plants will establish a calm, pleasant location. The space will feature a canopy structure, generous public seating and a bespoke multi-tiered play unit. Suds (sustainable urban drainage system) is to be utilised in the scheme. This is a method of absorbing rainwater run-off into the planted areas in a more natural way. Nature in the form of bird and bat habitat will encourage biodiversity and nature into the heart of the town.	Ongoing
N39	Blackthorn Park	In the next 5 years	Biodiversity, Parks, Environment	Project Completed	GHG	This project has been completed on a former brownfield site along the Drummartin Link Road, Sandyford Business Park, Dublin 18.	Complete





RESOURCE MANAGEMENT

NO ACTION

TIME-FRAME

LEAD(S)

INDICATORS

TARGET(S)

PROGRESS REPORT 2022

STATUS

ACTIONS CURRENTLY BUDGETED

AC	TIONS CURF	KENIL	Y BUDGE	IED			
WA	ASTE MANAGEMEI	NT					
R1	Monitor and enforce waste regulation	In the next 5 years	WERLA and Enforcement	Environmental Performance Assessment from EPA	GHG	The Council continues to reach its targets for enforcement and implement its Recommended Minimum Criteria for Environmental Inspections Plan, working with the Waste Enforcement Regional Lead Authority (WERLA), Environmental Protection Agency (EPA), Trans-Fromtier Office and other local authorities.	Ongoing
R2	Assess waste in Council-owned and operated buildings and plan actions to be taken	In the next 5 years	Facilities Management	Report outlining current situation and plan of action to be taken	GHG	With the impact of Covid-19, many staff worked remotely and waste generated in corporate buildings was greatly reduced as a result of this. New tenders for facilities management were issued last year with increased requirements for the management of waste in these buildings. All paper is also recycled.	Ongoing
R3	Run staff recycling awareness campaign	In the next 5 years	Facilities Management, Corporate Services, Infrastructure and Climate Change		GHG 1	The public recycling bins continue to be provided beyond the end of the 2021 pilot and a further 6 bins will be added this year.	Ongoing
R4	Identify neighbourhoods/ areas in region in need of bring banks	In the next 5 years	Infrastructure and Climate Change	# of areas identified, # of new bring banks established	GHG	The adopted County Development Plan seeks to provide for civic amenity facilities and bring centres as part of an integrated waste collection system in accessible locations throughout the County and promote the importance of kerbside source segregated collection of household and commercial waste, as the best method to ensure the quality of waste presented for recycling is preserved.	Ongoing
R5	Participate in the Local Authority Prevention Network	In the next 5 years	Infrastructure and Climate Change	# of grants for waste-related projects	GHG	The Council continues to participate in the Local Authority Prevention Network of local authorities and submits projects for funding annually. The LAPN 2021-2022 project involved a collaboration between the Local Enterprise Offices in Dublin City Council and Dún Laoghaire-Rathdown County Council, DLR's Green Business Officer and the Eastern-Midlands Regional Waste Management Plan Office to run a MODOS training programme for micro-enterprises and SMEs. Training was offered over four half days on Circular Economy Introduction & Principles, Climate Strategy & Carbon Footprinting	Ongoing
						Climate Strategy & Carbon Footprinting Overview, Resource Efficiency and Customer Engagement. A taster session, one on one mentoring for participants and an in-person networking event were also provided. A project report was submitted to the EPA in April 2022 outlining the outcomes and the potential for replication and further development of MODOS.	





Public Awareness

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
R6	Collaborate with the EPA's national waste prevention programmes	In the next 5 years	Infrastructure and Climate Change	# of people engaged	GHG 1	Food waste education was included in the environmental awareness campaign programme for 2022. A 'Seven Secrets to Stop Festive Food Waste' campaign ran over the Christmas period, in collaboration with nine other local authorities and the EPA. The 'Know What Food You Need' and 'Know What Meals You're Going to Eat' social media campaigns in collaboratiuon with the EPA ran over 2022. These campaigns encouraged people to know the food they need to buy and plan to eat as good food planning behaviours to help them to reduce their food waste. As part of Dublin Climate Action Week 2022, Council staff and Elected Members availed of the EPAs new Stop Food Waste online training programme, which will be made available to the public in the coming months.	Ongoing
R7	Continue environmental awareness campaigns to support the public in their efforts to prevent waste	In the next 5 years	Infrastructure and Climate Change	# of campaigns held	GHG 1	Environmental Awareness programmes and campaigns in 2022 included Green-Schools, free public workshops on composting, Relove Fashion, Picker Pals, Newsletters, Tidy Districts, Community Clean-up Scheme, Recycled Christmas Decoration Competition, Halloween Campaign, Stop Food Waste Christmas Campaign, Stop Food Waste Summer Campaign, Anti-Litter Children's Poster Competition, Litter to Craft workshops, upcycling events, Environment and Climate Action Grant for Communities, Anti-Litter Anti-Graffiti Grant Scheme, the development of school waste prevention videos, national food waste recycling week, free compost and food caddy day, Free Hazardous Waste Collection, installation and promotion of Bike Reuse at Ballyogan CA (Bikes for Africa programme) and Free Mattress Collection.	Ongoing
R8	Promote Reuse Month annually	In the next 5 years	Infrastructure and Climate Change	# of Council run events	GHG (L)	Reuse Month and the National Upcyle competition are promoted annually.	Ongoing
R9	Promote and support Circular Economy Initiatives	In the next 5 years	Infrastructure and Climate Change	# of initiatives supported	GHG C.	In 2022 dlr signed the European Circular Cities Declaration, being the first local authority in Ireland to do so. The Declaration is a commitment from cities and regions to enhance efforts to transition from a linear to a circular economy. The Council continues to support the implementation of the Government's Waste Action Plan for a Circular Economy 2020 at a local level, with activities such as the Relove Fashion Competition, the annual Christmas tree recycling campaign, introduction to composting workshops, a swap shop, toy upcycling workshops, collaborating with the Regional Waste Management Planning Office and the Local Enterprise Office to facilitate Circular Economy training for the business community.	Ongoing



RESOURCE MANAGEMENT

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
LIT	TER & RECYCLIN	G IN THE	PUBLIC REA	LM			
R10	Use €coMerit programme to advise businesses on how to become resource efficient	In the next 5 years	Infrastructure and Climate Change	# of businesses participating	GHG 1	The Council continues to promote and support the roll out of the EcoMerit Programme to businesses, to enable them to become more resource efficient and to reduce the carbon footprint of their operations in the County. Sustainabilty Training was provided to SMEs in conjunction with DLR Chamber and SustHub and MODOS Training was delivered to create awareness of the opportunities provided to businesses by embracing the principles and practices of the circular economy. The Local Enterprise Office provides financial supports to microenterprises in its Green for Micro offer and promotes the Enterprise Ireland offers provided under its Climate Planning Fund e.g., GreenStart, GreenPlus and Climate Action Vouchers.	Ongoing
R11	Promote and encourage resource management in schools	In the next 5 years	Infrastructure and Climate Change	Continued participation of schools in conference workshops		Resource efficiency is actively encouraged and promoted in local schools across the County. The Council's environmental awareness school programmes in 2022 included Green-Schools, Relove Fashion, Picker Pals, Litter to Craft workshops, Recycled Christmas Decoration Competition, Plastic Free Schools and the development of educational vidoes on resource management for schools.	Ongoing
R12	Encourage and support schools in implementing the Green-Schools environmental programme	In the next 5 years	Infrastructure and Climate Change	# of schools participating		The Green-Schools programme is managed locally by dlr, in association with An Taisce. 27 Green School flags awarded in 2022, including three schools receiving their first flag.	Ongoing
R13	Work in partnership with resident/ community groups in climate-related programmes	In the next 5 years	Infrastructure and Climate Change	# community groups	•	The Environment and Climate Action Grant funded twenty-seven community based environmental projects in 2022.	Ongoing
R14	Run anti-dumping and anti-litter campaigns using SBIR challenges	In the next 5 years	Smart Dublin, Infrastructure and Climate Change	# of campaigns, # of people reached		Hazardous waste, bikes for Africa and mattress amnesty were held in Q3 2022. The Enterprise Ireland SBIR Challenge has not yet resumed. The Council will continue to liaise with Enterprise Ireland on the progress of this initiative.	Ongoing
R15	Implement anti- dumping and anti- litter initiatives	In the next 5 years	Infrastructure and Climate Change	# of campaigns, # of people reached	•	The Mattress Amnesty Day and Household Hazardous Waste Collection are held annually. In September 2022, 754 mattresses and 19 tonnes of hazardous waste were collected at these free events.	Ongoing
R16	Support community anti- litter actions, including actions at the seashore	In the next 5 years	Infrastructure and Climate Change	# of days held, # of participants	•	The dlr Community Clean-up scheme supports voluntary groups wishing to organise a litter pick in their local area by providing a kit (bags, pickers and gloves) and collecting the litter bags after the event. The scheme is available to community groups, estate management groups, residents' associations, tidy towns, tidy district groups and schools. This dlr Community Clean-up scheme is open all year. In 2022, dlr also facilited clean up kits for National Spring Clean and Dublin Community Clean Up 2022.	Ongoing



NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
R17	Introduce leaf composting programme	In the next 5 years	Infrastructure and Climate Change	# of residents' associations participating		Further engagement is necessary on the practicalities of implementation of such an initiative. Initial discussions were held but further engagement is necessary with local community groups and other local authorities who have carried out similar initiatives to scope the requirements and arrange trials.	Ongoing
R18	Support and encourage community engagement in local litter issues	In the next 5 years	Infrastructure and Climate Change	# of initiatives supported annually by Council		The dlr Community Clean-up scheme supports voluntary groups wishing to organise a litter pick in their local area by providing a kit (bags, pickers and gloves) and collecting the litter bags after the event. The scheme is available to community groups, estate management groups, residents' associations, tidy towns, tidy district groups and schools. This dlr Community Clean-up scheme is open all year. In 2022 this scheme also supported and facilitated National Spring Clean and the Dublin Community Clean-up 2022. The Council continues to support and encourage community engagement about local litter issues through the annual Tidy Districts Competition.	Ongoing
R19	Monitoring of Big Belly Bins in County	In the next 5 years	Cleansing	Reduced energy consumption of fleet, # of bins in County	GHG 1	The Council's Big Belly bins are monitored on a daily basis through a combination of visual inspection, emptying, cleaning and maintenance/replacement of parts, as necessary to ensure serviceability. This physical monitoring is carried out by the Cleansing crews and Foremen managing the bin service and supported by the cleansing management team. All Big Belly bins are also recorded on the bespoke application "Clean" for remote monitoring purposes. This application is utilised by cleansing crews, foremen and management to optimise the collection service and includes mapping, emptying/service history, repair alerts, up to date data on percentage fullness, collection history and more. The combination of physical and remote monitoring enables dlr to provide a highly efficient and flexible service, capable of coping with the changing demands on bin services The bin service is reviewed on an annual basis with the focus of making best use of existing stock, to address high pressure areas in the control of street litter. The cleansing section are currently operating a smart bin service including 461 bins across the county which is the largest number of smart bins in operation since their inception. The recycling initiative has continued into 2022, with a further 15 smart bins being added to enhance the initiative.	Ongoing
R20	Collaboration with Refill.ie to reduce single use drinking water bottles	In the next 5 years	Infrastructure and Climate Change	Feasibility assessed		Heritage drinking water fountain at Corbawn Lane has been restored to operation in 2022.	Ongoing



RESOURCE MANAGEMENT

NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S) IMPACTED	PROGRESS REPORT 2022	STATUS
PI	ROCUREMENT						
R21	Climate-related evaluation criteria in all DLRCC tenders. Use the EPA Green Procurement Guidance for the Public Sector to support sustainable procurement procedures	In the next 5 years	Corporate Services	Criteria developed and implemented		CARO in conjunction with a range of partners have devised a comprehensive training programme on green public procurement for the local authority sector to operationalise the recently published EPA 'Green Public Procurement Guidance for the Public Sector'. CARO established the Local Authority Green Public Procurement Training Steering Group in 2021 to ensure a collaborative agreement by key stakeholders on course content and its emphasis, timeframe for delivery, maximising training uptake and maximising effectiveness in building the capacity of local authority staff, budget holders and procurement specialists in integrating climate change considerations into their work. In total more than 600 staff have completed green public procurement training across the local authority sector, with rollout of three tailored programmes to continue into 2023 under the management of the Local Authority Services National Training Group (LASNTG).	Ongoing
R22	Expand housing assistance programme to include tenant waste and water awareness	In the next 5 years	Housing, Infrastructure and Climate Change	Programme developed	GHG 1	The current dlr Tenants Awareness Handbook (Section 8 - Environmental Issues and Saving Energy in the Home) addresses a range of environmental issues, including water and waste management and awareness.	Ongoing
R23	Waste management guidelines developed for developers of new housing schemes	In the next 5 years	Housing, Infrastructure and Climate Change	Guidelines are developed and signed off on	GHG	An exerpt from dlr Guidelines for Waste Mangement in dlr Guidelines in Residential and Commercial Developments have been included as Appendix 6 of the adopted County Development Plan 2022-2028. This provides guidance on the design considerations for Waste Management in Residential and Commercial developments.	Ongoing
R24	Pizza Box Bin Trial	In the next 5 years	Housing, Infrastructure and Climate Change	# of pizza boxes collected		The Pizza bin initiative proved successful in addressing smart bin hopper blockages at hotspot locations and has been subsequently expanded to 9 locations across the County. The initiative continues to operate successfully and has been adopted by other local authorities around the country.	Ongoing
R25	Plastic Raiders Project	In the next 5 years	Infrastructure and Climate Change			The Council supported University College Dublin in the implementation of this Science Foundation Ireland funded project. The Plastic Raider project combines remote sensing technologies and bottom-up citizen science to create sustainable, intergenerational change in polluting and environmental activism behaviours. The project enables citizens to act on climate change and sustainable development. The key societal impacts of the citizen science activities will be to raise awareness, engage and empower citizens and consumers with concrete tools to monitor their impacts on the environment. The Council undertook a pilot with outdoor vendors in the People's Park Market, on the tracking of plastic products using sensors and the OpenLitterMap app.	Complete







NO	ACTION	TIME- FRAME	LEAD(S)	INDICATORS	TARGET(S)	PROGRESS REPORT 2022	STATUS
R26	On-street Recycling Bin Trial	In the next 5 years	Municipal Services	# of recycling bins installed		Whilst the recycling trial period has concluded, the results of the study proved favourable in supporting a more expanded trial and recycling initiative. The recycling bins continue to be in operation, with 15 additional units purchased in 2022.	Ongoing
R27	Anti-Litter/Dog Fouling Poster Competition	In the next 5 years	Infrastructure and Climate Change	# of entries received		In 2022, dlr ran the Anti-Litter/Dog Fouling Poster Competition. The Anti-Litter/Dog Fouling Poster Competition was open to all primary schools within Dún Laoghaire-Rathdown. Over 100 entries were received and the eight winning posters will be used within the Environmental Awareness Section, to raise awareness regarding anti-litter and dog fouling throughout the County.	Ongoing
R28	Take Me Home Anti-Litter Campaign	In the next 5 years	Infrastructure and Climate Change	# of campaigns, # of people reached		The dlr Community Clean-up scheme supports voluntary groups wishing to organise a litter pick in their local area by providing a kit (bags, pickers and gloves) and collecting the litter bags after the event. The scheme is available to community groups, estate management groups, residents' associations, tidy towns, tidy district groups and schools. This dlr Community Clean-up scheme is open all year. In 2022 this scheme also supported and facilitated National Spring Clean and the Dublin Community Clean-up 2022. The Council continues to support and encourage community engagement about local litter issues through the annual Tidy Districts Competition.	Ongoing
R29	Love Your Place, Leave No Trace	In the next 5 years	Infrastructure and Climate Change	# of campaigns, # of people reached	•	In Q2 2022, dlr further expanded the Big Belly fleet with 25 additional Smart Bin installations under the annual bin review. A further 6 recycling bins are also scheduled for installation across the county. As in 2021, seasonal large wheelie bins were placed in key locations during the summer months and in September, new street bin advertising was rolled out in support of the "Love this Place, Leave No Trace" campaign.	Ongoing

CONCLUSION

This third Annual Progress Report has provided a comprehensive update on all Climate Change Action Plan actions, across the five theme areas of Energy & Buildings, Transport, Flood Resilience, Nature Based Solutions and Resource Management. Dún-Laoghaire Rathdown County Council continues to focus on the implementation and monitoring of the Plan, in the context of enhancing efforts across the areas of climate action, biodiversity and the circular economy. The Council also advances its efforts in influencing climate action in the wider community. This is derived from the Council's Corporate Plan, a core value of which is 'Climate First - Adopt a climate first approach to decision making'.

Set against the backdrop of an evolving framework of national legislation and policy, the Council maintains a strong commitment to pursuing a leadership role on climate action. In Delivering Effective Climate Action 2030, the local government strategy on climate action, an overarching commitment on leadership is highlighted to ensure a coherent approach to climate action across the administrative and political structures of all thirty-one local authorities.

Out of the 144 Actions in the Council's Climate Change Action Plan, 85% are Ongoing and 8% are now Complete. In 2022, new climate action Key Performance Indicators (KPIs) were introduced by the Local Government Management Agency (LGMA), to be included in annual returns to the National Oversight and Audit Commission (NOAC). Progress on CCAP actions is also to be included in the annual return, going forward. It is noted that any new actions should be actions included in the national Climate Action Plan that highlight local authorities as a stakeholder or be a regional climate action project in collaboration with other local authorities. As such, no new local actions have been added to the Annual Progress Report for 2022. Actions involving

the other Dublin local authorities, CARO and Codema have been accounted for in this Annual Progress Report.

The key focus at this stage in the implementation of the CCAP, is rolling out ambitious climate action projects, drawing down available sources of funding, both supported by a progressive policy framework. This includes the new County Development Plan 2022-2028, which came into effect in April 2022. The 'creation of a climate resilient County', is one of five Strategic County Outcomes which underpins the Plan.

In 2022, the Council signed up to the European Circular Cities Declaration, being the first local authority in Ireland to do so. This is a commitment from cities and regions across Europe, 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 and recognise that local and regional governments have a critical role to play and share a common vision of a circular economy.

The Council also selected the Dún Laoghaire and Blackrock areas, as the County's new Decarbonising Zone. As an action of the national Climate Action Plan 2021, this area is set to become the focus for a range of climate action measures, such as the identification of projects and outcomes, that will contribute to achieving national climate targets.

Under the Climate Action and Low Carbon
Development (Amendment) Act 2021, each local
authority in Ireland, will be required to make a new
Climate Action Plan, addressing both mitigation and
adaptation baselines and measures. It is anticipated
that the Council's current Climate Change Action Plan



(CCAP) will be revised, within this legislative context, including taking account of the new Decarbonising Zone of the Dún Laoghaire and Blackrock areas and associated Implementation Plan. For all local authorities, the new / revised Climate Action Plans will be prepared having regard to guidance from the Local Government Management Agency and in accordance with a Circular, to be issued from the Minster for the Environment, Climate and Communications and in accordance with the relevant provisions of the 2021 Act.

The ongoing implementation and monitoring of the current Climate Change Action Plan, together with that of the other Dublin local authorities, in partnership with Codema – Dublin's Energy Agency and the Dublin Climate Action Regional Office (CARO), provides for a clear roadmap and coordinated approach to address the national climate objective as set out in the Climate Action and Low Carbon Development (Amendment) Act 2021, the ambitions of the Climate Action Plan 2021 and the shared energy and climate targets to 2030 and 2050.

12 - 17 September 2022

on Climate Action





Launch of Dublin Climate Action Week 2022



APPENDIX I: LOCAL AUTHORITY CLIMATE ACTION CHARTER

CLIMATE ACTION CHARTER

For Local Authorities and Minister for Communications, Climate Action and Environment on behalf of Government.

- (1) The signatories share the common understanding that:
- (a) the evidence of global warming is unequivocal and the effects of climate change are clearly evident;
- (b) it is important to take action and to work together to share best practices, to reduce Greenhouse Gas (GHG) emissions and address the impacts of climate change
- (c) reducing GHG emissions and preparing for climate change impacts will generate environmental, social, economic and health benefits for individuals, families, and communities
- (d) It is important to take action to adapt to the now inevitable consequences of climate change and to work collectively to ensure that the local authority sector is positioned to build resilience against negative impacts and avail of the positive effects that may occur.
- (2) The signatories acknowledge that a whole of government approach is essential in addressing climate change and recognise that:
- (a) Central Government has a lead role to play in developing policy and ensuring resources are made available to realise Ireland's commitment to achieving a net zero carbon energy system objective for Irish society and in the process, create a climate resilient, vibrant and sustainable country
- (b) Local Authorities are ideally placed to provide robust leadership in advancing this objective at the local and regional level. Support and resources will continue to be provided through the National Development Plan allocations, in addition to their own resources, which will aid them in developing and implementing relevant activities under this charter
- (c) Central and Local Government need to work in partnership and collaboration to ensure an effective response to the challenges presented by climate change
- (3) This Charter acknowledges that local authorities will, with the support of Central Government:
- (a) be advocates for Climate Action in our own policies and practices, and in our many various dealings with citizens and to underpin this role through the corporate planning process.
- (b) adhere to the UN Sustainable Development Goals, in particular Goal 13 Climate Action;
- (c) aim to measure the carbon impact of our various activities as accurately as possible and report as required so as to inform relevant local, regional and national policies,
- (d) implement, in so far as is practicable, measures which reduce our carbon emissions in line with national objectives, and develop a method for planning and reporting on these actions
- (e) deliver a 50% improvement in energy efficiency by 2030(on the 2009 baseline)
- (f) ensure that policies and practices at local government level lead us towards low carbon pathways and put in place a process for carbon proofing major decisions, programmes and projects on a systematic basis, including investments in transport and energy infrastructure moving over time to a near zero carbon investment strategy
- (g) Ask suppliers as part of the procurement process to provide information on their carbon footprint and on the sustainability practices and steps they plan to reduce its impact



- (i) support our employees to undertake changes in their lifestyles both at work and at home, to reduce carbon impact and encourage work-based employee-led groups to identify and implement ideas for improvement
- (j) put in place, and resource, a long term training strategy (technical and behavioural) for LA staff to provide appropriate capacity for the sector to deliver on climate action
- (k) encourage clients/customers/service users to undertake lifestyle changes to reduce their carbon impact, with a particular emphasis on supporting those clients/customers/service users who may face difficulties in funding such measures
- (l) cultivate and actively participate in partnerships with enterprise, community and voluntary groups so as to, improve the use of resources and reduced climate impact
- (m) play a key role in helping to build and implement a sustained localised citizen engagement model in supporting the various initiatives under the National Dialogue on Climate Action
- (n) exercise our planning and regulatory roles to help improve climate outcomes in the wider community and beyond the public sector, by developing and implementing robust evidenced based policy and standards on climate action, through appropriate and relevant adaptation and mitigation measures
- (o) continue to identify and develop specific actions to be taken to reduce the risks associated with negative climate change impacts and build resilience to these impacts through effective implementation of climate adaptation strategies/ Climate Change Action Plans
- (p) support elected officials in ensuring all council led activities are climate proofed in terms of achieving effective low carbon and climate resilient outcomes
- (q) Explore opportunities to partner or collaborate on climate action initiatives across the public, private and education
- (r) Support Enterprise through LEO/LCDC offices to exploit opportunities which will arise from meeting the challenges of Climate Change
- (s) work with relevant stakeholders to source funding for implementing climate action projects;
- (t) liaise with 3rd level institutions & the research community both nationally and internationally with a view to developing centres of excellence where appropriate
- (u) develop links with young citizens to give voice to their understanding and concerns on climate change and to enhance their awareness and the actions that they can take.
- (v) continue to develop and strengthen links with both central government (relevant departments and agencies) and regional bodies to help ensure a coordinated and coherent approach to the delivery of the national climate action agenda
- (w) Monitor, evaluate and report annually on the implementation of activities under this charter

APPENDIX II: LIST OF ACRONYMS

BER	Building Energy Rating
CARO	Climate Action Regional Office
CCAC	Climate Change Advisory Committee
CCAP	Climate Change Action Plan
CCMA	County & City Management Association
CFRAMs	Catchment Flood Risk Assessment & Management
CSO	Central Statistics Office
DAFM	Department of Agriculture, Food & Marine
DECC	Department of the Environment, Climate & Communications
DHPLG	Department of Housing, Planning & Local Government
DLAs	Dublin Local Authorities
DLR	Dún Laoghaire–Rathdown
DTTAS	Department of Transport, Tourism & Sport
EMWR	Eastern & Midlands Waste Region
EnPi	Energy Performance Indicator
EPA	Environmental Protection Agency
EPC	Energy Performance Contract
ESRI	Economic & Social Research Institute
EV	Electric Vehicle
GHG	Greenhouse Gases
LEADER	Liaisons entre actions de development de Léconomie Rurale
LGMA	Local Government Management Agency
NAF	National Adaptation Framework
NBS	Nature-Based Solutions
NZEB	Nearly Zero Energy Building
NTA	National Transport Authority
NPWS	National Parks & Wildlife Services
OPW	Office of Public Works
RD&D	Research, Development & Demonstration
RMCEI	Recommended Minimum Criteria for Environmental Inspections
SDZ	Strategic Development Zone
SEAI	Sustainable Energy Authority of Ireland
SEC	Sustainable Energy Community
SECAP	Sustainable Energy & Climate Action Plan
SPC	Strategic Policy Committee
SuDS	Sustainable Urban Drainage Systems
TPER	Total Primary Energy Requirement







