



**Comhairle Cathrach
na Gaillimhe**

Galway City Council

Strategic Enviromental Assessment Statement of the Galway City Climate Action Plan 2024-2029

FEBRUARY 2024

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This report has been prepared by Minogue Environmental Consulting Ltd with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for Galway City Council and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

1 Strategic Environmental Assessment Statement

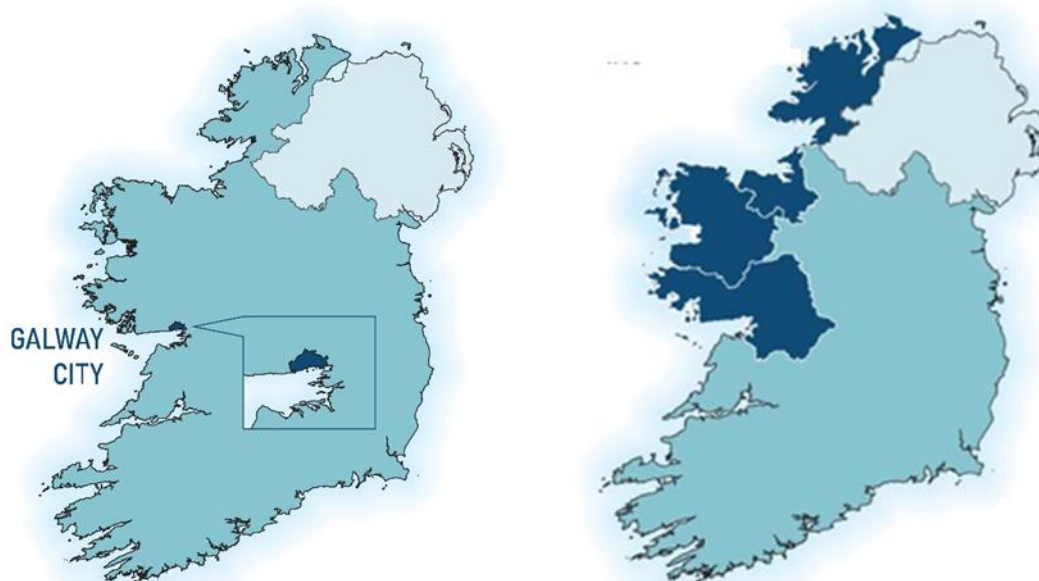
1.1 Introduction

A Strategic Environmental Assessment was undertaken on the Galway City Climate Action Plan (CAP) 2024-2029 in order to comply with the SEA Directive. Strategic Environmental Assessment (SEA) is the formal evaluation of the likely significant environmental effects of implementing the Development Plan and is carried out at each stage of the Plan preparation process. The SEA Environmental Report (2023) accompanies the Galway City CAP and contains the findings of this assessment. An SEA Statement is the final aspect of the SEA process. The *Strategic Environmental Assessment Guidelines, Assessment of the Effects of Certain Plans and Programmes on the Environment (DEHLG 2004)* sets out that the purpose of the SEA Statement is to summarise the following:

- How environmental Considerations and the Environmental Report were factored into the Plan;
- How submissions/consultations were taken into account;
- Reasons for choosing the Plan as adopted, in light of other reasonable alternatives considered;
- Monitoring Measures.

Figure 1.1 below presents the plan area within the Atlantic Seaboard North CARO.

FIGURE 1-1 GALWAY CITY AND THE CARO ATLANTIC SEABOARD NORTH



1.2 How Environmental Considerations and the Environmental Report were factored into the Plan and how Submissions/Consultations were taken into account

SEA was integrated into the various stages of the plan making process and guided the preparation of alternative scenarios, and actions across several themes including leadership and governance, Communities Resiliency & Transition, and environment and biodiversity amongst others.

The SEA process was carried out having regard to international and national legislation, strategies, plans and guidelines on environmental protection and sustainable development. Submissions received from Environmental Authorities were also taken into account in the drafting of the Galway

City CAP and Environmental Report. Recommendations from environmental assessments relating to European sites also informed the SEA process. The specific steps taken were as follows:

1.2.1 Scoping Consultation

Galway City Council formally consulted with Environmental Authorities during the 'scoping' stage of the SEA process, issued to the statutory environmental authorities from 4th October to 2nd November 2023. This consultation identified the range of environmental issues and the level of detail to be included in the Environmental Report.

Table 1-1 Summary of Scoping Submissions from Environmental Authorities

Consultee	Summary of comments	SEA Response
EPA	<p>The scale of the challenge facing Ireland to address climate change is significant, as highlighted in our State of Environment Report 'Ireland's Environment - An Integrated Assessment 2020' 1 (EPA, 2020). We urgently need to accelerate action to reduce our greenhouse gas emissions and implement adaptation measures to increase our resilience to climate change.</p> <p>We welcome that the Plan will set out a framework of climate actions to be carried out by Galway City Council, in collaboration with other key stakeholders, over the five-year period from 2024 to 2029. This includes establishing climate action related strategic goals, high level objectives to support the delivery of these goals and also actions that are time-bound, measurable and focused on local level climate action.</p> <p>We acknowledge that draft strategic goals look to address energy, the built environment and related infrastructure, transportation, natural environment and green infrastructure, Economic development and green enterprise/business, community resilience and just transition, and Governance related aspects. We also acknowledge that the Plan will take account of both climate mitigation and climate adaptation actions. We recognise the importance of ensuring that the National Transition Objective is underpinned by a clean, healthy and well-protected environment.</p>	Noted.
	<p>It is important, in developing and implementing the Plan, that it is set within the context of a wider and more integrated approach to environmental protection.</p>	Noted, and agreed.
	<p>We note that the Plan will progress the climate adaptation and mitigation required at a local level and will support - a clear pathway to implement national climate policy locally and prioritise action on evidence-focused climate measures that need to be taken.</p> <p>The SEA should play a key role in ensuring that this is achieved and should inform decision-making around the assessment and selection of actions and measures. The SEA should also assist in identifying ways to maximise the potential co-benefits of climate related measures for air quality, human health, biodiversity, water quality and other interrelated areas (i.e. win-win solutions).</p> <p>A key role of SEA is in assessing and informing the selection and refinement of actions and measures that maximise the co-benefits of climate actions for the wider environment and society. This should be highlighted in the SEA Report and the Plan</p>	Noted, the SEA and AA has influenced the CAP and provided additional recommended actions as well as amendment of existing actions to enhance overall environmental performance of the CAP. These include co benefits and cross cutting mitigation measures.
	<p>You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, (such as the latest National Climate Action Plan) as well as any relevant sectoral or regional adaptation plans and adjacent local authority climate action plans.</p> <p>The Plan should include a commitment to consider any relevant updated actions, measures or recommendations that may arise in updates to the National Climate Action Plan over the lifetime of the Plan.</p>	Relevant sectoral climate action and adaptation plans are considered within Chapter 3 and 4 of this SEA ER.

Consultee	Summary of comments	SEA Response
	<p>The Plan and SEA should consider the recent Climate Council Annual Review report, which is available at: https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR2023-FINAL%20Compressed%20web.pdf</p> <p>Additionally, the relevant objectives and policy commitments of the National Planning Framework and the Northern and Western Regional Spatial and Economic Strategy and the Galway City Development Plan should be aligned with and considered, as appropriate.</p>	<p>Noted, agreed.</p> <p>Relevant objectives from national, regional and county/city plans are considered and aligned with as relevant.</p>
	<p>Greenhouse Gas Emissions</p> <p>In preparing the Plan and SEA, the direct and indirect impacts of the Plan on greenhouse gas emissions and removals should be assessed. The Agency's most recent projections reports Ireland's Greenhouse Gas Emissions Projections 2022-2040 (EPA, 2023) and Ireland's Provisional Greenhouse Gas Emissions 1990-2022 (EPA, 2023) should be considered. The Climate Action Plan identifies actions to decarbonise electricity generation, the built environment and transport and to move towards carbon neutrality for agriculture, forest and land use sectors. The Plan should also integrate and align with the relevant actions in the Climate Action Plan, as appropriate</p>	<p>Actions in the plan address transport, built environment, landuse, as well as agriculture and forestry. Some additional actions are recommended in this regard through the SEA and AA assessment processes.</p>
	<p>Climate Adaptation</p> <p>In preparing the Plan and SEA, you should consider how the impacts of climate change, individually and in combination, are likely to influence the implementation of the Plan. The Plan should look to improve resilience of existing and planned critical infrastructure, systems and procedures to the effects and variability of climate change. Vulnerable populations should be considered in the context of just transition/adaptation. The cascading effects of proposed adaptation measures should also be considered. Recent extreme weather events could be useful to assist in identifying areas where for further work is needed to improve resilience, e.g. the resilience of critical water service infrastructure to flooding and drought</p>	<p>The cumulative effects of adaptation measures is considered in Chapter 7 of this SEA.</p>
	<p>The Plan should include appropriate adaptation measures that can be implemented either directly or through relevant land use plans and/or specific plans e.g. Flood Risk Management Plans, River Basin Management Plans etc. The Plan will also help inform local authority land use and transport planning. Additional aspects to consider may include changes in native species and habitats and the spread of invasive species, pests and pathogens. In this regard, the Plant Atlas 2020 project looking at Ireland's changing flora might be useful to consider. A summary of this results can be found at: https://bsbi.org/wpcontent/uploads/dlm_uploads/2023/02/BSBI-Plant-Atlas-2020-summary-reportIreland-WEB.pdf</p>	<p>Will be considered and integrated as appropriate. Invasive species, and key findings from the BSBI Plant Atlas is included in chapter 4 of the SEA ER,</p>
	<p>Water Quality</p> <p>The Plan should consider the most recent Water Framework Directive water quality status and risk information, available on the EDEN WFD app. Relevant future projections of river flow are available in either EPA research reports (such as HydroPredict, pending), or academic papers related to these projects.</p>	<p>Noted, will be considered and is included in Chapter 5 as well as mitigation and monitoring provisions. The SEA supported mitigation through Nature Based Solutions throughout the</p>

Consultee	Summary of comments	SEA Response
		process to provide co-benefits.
	<p>Air quality</p> <p>The Plan should consider the Draft National Clean Air Strategy (DECC). The Air Quality in Ireland 2021 Report (EPA, 2022) sets out the most recent status in each of the four air quality zones in Ireland and may be useful to consider. Data on levels of atmospheric pollutants from the EPA's national ambient air quality monitoring network should also be integrated as appropriate. The pollutants of most concern are traffic-related, including Particulate Matter and Nitrogen Dioxide.</p>	Noted, will be considered given localised transport emissions and impacts on biodiversity, water and human health.
	<p>Recent EPA Climate change related publications</p> <p>Some recent climate change publications that may be useful to consider in preparing the SEA and the Plan are shown below: -Ireland's Greenhouse Gas Emissions Projections 2022-2040 (EPA, 2023) - Ireland's Final Greenhouse Gas Emissions 1990-2021 (EPA, 2023) - Ireland's Provisional Greenhouse Gas Emissions 1990-2022 (EPA, 2023) - Climate Change's Four Irelands (EPA, 2022) - Ireland's Air Pollutant Emissions 2021 (1990-2030) (EPA, 2023)</p> <p>Additionally, further reports/publications are available at: can be consulted at https://www.epa.ie/publications/monitoring--assessment/climate-change/.</p> <p>Research report 429: Building Coastal and Marine Resilience in Ireland (EPA, 2023) may be useful to consider. It discusses the need for identification and increased awareness of climate change risks to Ireland's coastal communities. It also highlights the importance of building national resilience across socio-ecological and economic systems. Other climate-related environmental research reports are available at: https://www.epa.ie/publications/research/climate-change</p>	<p>Noted, will be reviewed and included as appropriate.</p> <p>Galway City CAP baseline emissions inventory is also presented in the SEA ER.</p> <p>SEA mitigation measure includes this publication re coastal and marine resilience.</p>
	<p>EPA State of the Environment Report Our State of Environment Report, Ireland's Environment - An Integrated Assessment 2020 (SOER2020) identifies thirteen high level 'Key Messages for Ireland'. Specifically, information provided in the following chapters should be considered, as appropriate and relevant. - Chapter 2 (Climate) highlights the clear need for systemic change in Ireland to ensure the country will become the climate neutral and climate resilient society it aspires to be. More urgency is needed to deliver actions on climate mitigation and adaptation and to ensure that Ireland meets its international obligations to reduce greenhouse gas (GHG) emissions. Further measures are required to meet national and EU ambitions to keep the global temperature increase to 1.5°C.</p> <p>These measures will contribute to Ireland achieving climate neutrality by 2050. - Chapter 11 (Transport). The transport sector has a significant impact on the environment, including being responsible for 20 per cent of Ireland's greenhouse gas emissions. A sustainable mobility transformation is required, with the next decade crucial, whereby necessary journeys are made by sustainable modes such as walking, cycling and public transport, followed by using electric vehicles where unavoidable. For this transformation to happen the measures relating to transport in the Climate Action Plan, and other necessary measures, must be fast tracked.</p> <p>Long-term, integrated spatial and transport planning can achieve compact development and move trips to other modes of transport, including cycling and should be supported in the Plan. Shifting to these modes is an essential part of a sustainable and climate-neutral transition for the transport sector. - Chapter 12 (Energy). Almost 90% of our total energy use is provided by combustion of mostly imported fossil fuels, which is unsustainable, and we need to begin fast tracking measures within</p>	<p>Noted and agreed.</p> <p>The CAP supports active travel and SEA has assessed same.</p>

Consultee	Summary of comments	SEA Response
	the Climate Action Plan and other necessary solutions. This will involve strategic planning to transform this situation by 2050. Transitioning to using clean energy is essential for the protection of human health, our climate and the wider environment and will help support sustainable development of our society and economy. - Other chapters to consider include Chapter 6 (Nature) and Chapter 13 (Environment and Agriculture).	
	<p>Population and Human Health: Air quality and water quality considerations should also be included in the list of aspects to be considered in relation to population and human health. Issues around equity and how vulnerable groups can be best assisted in dealing with and adapting to climate change should be considered, as relevant to the Plan.</p> <p>Biodiversity: The Plan should also seek to protect existing green and blue infrastructure and key ecological corridors from inappropriate development.</p> <p>Water Resources: With regards flooding, the Plan should consider the need for appropriate zoning and development of lands to avoid incompatible land uses in areas at risk of significant flooding.</p> <p>Soils / Geology: The protection of high nature value farming areas, and key agricultural lands should be considered. Where natural resources are required to support development, these should be carried out as efficiently as possible.</p> <p>Landscape: The key issues for the SEA to consider could also include the potential 'visual impact' of any proposed measures with potential to impact on sensitive landscape areas.</p> <p>Material Assets Transportation: The Plan should align with the transport commitments in the National Planning Framework, Northern and Western Regional Spatial and Economic Strategy, and the Galway Metropolitan Area Transport Strategy, where appropriate and relevant.</p> <p>Water Supply: Uisce Eireann's National Water Resources Adaptation Framework (and any relevant Regional Water Resource Plans) takes account of potential climate change implications for drinking water supply/service provision and may be also useful to consider.</p> <p>Cross-cutting issues Climate change will affect all aspects of our economy and society, with many issues impacting on the operations of individual local authorities. In implementing the Plan and in responding effectively to climate change, coordination, and collaboration among stakeholders on cross-cutting issues is needed</p>	These topics are considered in Chapter 4s, 7 and mitigation measures recommended as appropriate.
	<p>The Plan should include a commitment to implement the environmental monitoring programme and associated reporting set out in the Environmental Report.</p> <p>We suggest including a separate section on 'Monitoring, Implementation and Reporting' in the Plan, setting out the provisions for monitoring and reporting on the implementation of the Plan and periodic reviews. There may be merits in aligning the periodic reviews of the Plan with existing cyclical reporting e.g. Ireland's Environment, National Planning Framework, Water Framework Directive, Marine Strategy Framework Directive etc.</p> <p>In between review periods for the Plan, we recommend that Plan-related implementation reports are published annually, or biennially, as appropriate. We recommend aligning these Plan implementation monitoring/reporting with the environmental monitoring required under the SEA legislation. Doing so would enable the environmental performance of the Plan to be</p>	<p>Noted, the monitoring for the SEA ER is presented in Chapter 9.</p> <p>The CAP provides in Chapter 5 for Implementation and Reporting.</p>

Consultee	Summary of comments	SEA Response
	<p>evaluated and would also provide for increased transparency during implementation.</p> <p>The SEA-related monitoring should address positive, negative and cumulative effects where they are likely to occur and should include provision for on-going review to facilitate an early response to any significant environmental issues that may arise. The Environmental Report should specify the monitoring frequency and responsibilities and include provisions for reporting on the monitoring. To avoid duplication in data collection, the same indicators should be used for the plan-related and SEA-related monitoring where possible</p>	
Department of Housing, Heritage and Local Government	<p>Having considered the SEA Scoping Report, the Department makes the following observations:</p> <ol style="list-style-type: none"> 1. The Department would welcome a Strategic Environmental Objective addressing ‘no net contribution to biodiversity losses or deterioration’, which accords with the wording of <i>Objective 1.1.3 of the National Biodiversity Action Plan 2017 – 2021</i>. This objective requires all Public Authorities and private sector bodies to ‘<i>move towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure</i>’. 2. ‘Biodiversity, Flora and Fauna’ data sources: <ul style="list-style-type: none"> • proposed Natural Heritage Areas, Nature Reserves and Refuges for Fauna or Flora designated under the Wildlife Acts 1976 to 2012, • Species protected under the Wildlife Acts including protected flora, • ‘Protected species and natural habitats’, as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur), • Important bird areas such as those identified by Birdlife International, • Features of the landscape which are of major importance for wild flora and fauna, such as those with a “stepping stone” and ecological corridors function, as referenced in Article 10 of the Habitats Directive, • Other habitats of ecological value in a national to local context, • Red data book species 3. The Department recommends an action to ‘Identify, map and utilise local authority owned land and habitats for nature-based solutions including Sustainable Drainage System and Green Infrastructure’. Furthermore, consideration should be given to the incorporation of Nature-based Solutions to the Management of Rainwater and Surface Water Runoff into plans and developments as a Water Strategic Environmental Objective. Best practice interim guidance should be consulted: ‘Nature-based solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas’ published by the Department, supported by LAWPRO available at: https://www.gov.ie/en/publication/10d7c-nature- 	<p>1.A new SEO has been included in the SEA ER to reflect the National Biodiversity Action Plan;</p> <p>2. This data is included, as relevant and appropriate in the SEA ER Baseline chapter and monitoring.</p> <p>3. Action recommended for inclusion. Note text in E 9 that partially addressed this: <i>“Consider and implement Nature Based Solutions (NBS) on all internal and</i></p>

Consultee	Summary of comments	SEA Response
	<p>based-solutions-to-the management-of-rainwater-and-surface-water-runoff-in-urban-areas-best-practice interim-guidance-document/</p> <p>4. Measures should be included in the SEA for collective scientific analysis of post planning species monitoring reports submitted to the Local Authority to ascertain positive and negative species trends and success or otherwise of mitigation at Local Authority level and to inform future development. The recent Department publication 'Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland' should be consulted.</p>	<p><i>GCC planning permitted projects to ensure climate resilience and promoting biodiversity net gain, thereby creating vibrant, liveable and sustainable public realm. Further to include sustainable urban drainage systems, with appropriate regard to environmental protection requirements, including designated European sites. Increase in leaf cover in Galway City area, considering trees and vertical shading solutions."</i></p> <p>Reference to LAWPRO guidance on NBS recommended for inclusion in CAP also.</p> <p>4 Noted, could be considered under preparation of new biodiversity action plan</p>
	<p>The Department notes that Shantalla/Westside has been selected as a 'Decarbonisation zone' (DZ) in the scoping document. The following designated sites should be considered in relation to this: Lough Corrib Special Area of Conservation (SAC) (Site Code: 000297), Galway Bay Complex (SAC) (Site Code: 000268) and Inner Galway Bay Special Protected Area (SPA) (Site Code: 004031). The NIR should include information on what alternative areas were considered and compared. The Department recommends identifying, protecting and enhancing the existing nature based carbon sequestering habitats in a DZ including but not limited to species rich grasslands, peatlands, wetlands, hedgerows and woodlands that would be integral to Galway City achieving its own and the Government's 2030 and 2050 Climate Change targets.</p>	<p>Noted. CAP provides analysis as to criteria used in selecting DZ areas. Final CAP and SEA ER also provides mitigation to ensure consideration of these Natura 2000 sites, see Section 4.1 of the CAP.</p>
	<p>The Department would like to draw your attention to the Climate Change Sectoral Adaptation Plan for Built and</p>	<p>Noted, and agreed.</p>

Consultee	Summary of comments	SEA Response
	<p>Archaeological Heritage (CCSAP) (2019) prepared as part of the National Adaptation Framework. The Heritage Division of this Department is engaged with the local authorities through the departmental Climate Change Advisory Group and established Working Groups to ensure a consistent approach to protection and adaptation of heritage assets across the country and an alignment of policies, plans and actions across national, regional and local climate action.</p> <p>The Department anticipates ongoing engagement with the local authorities throughout the implementation of the current and future sectoral adaptation plans. In the preparation and implementation of the local authority adaptation strategy, there are several issues regarding protection of built and archaeological heritage that this Department recommends be taken into account to identify the heritage assets at risk in its area, assess their vulnerability to climate change, increase their resilience and develop disaster risk reduction policies for direct and indirect risks.</p>	

1.2.2 Preparation of Galway City CAP 2024 -2029

As part of the Environmental Report, baseline data was provided on the current state of the environment in and adjacent to the plan area of Galway City. This was collated through a review of currently available data, as recommended in SEA Guidelines and related to indicators set out in the SEA Directive: biodiversity flora and fauna; population and human health; soil; water; air and climatic factors; material assets; cultural heritage and landscape. Recommendations from environmental assessments relating to European sites also informed the preparation of the Strategy and Environmental Report, these assessments are contained in the *Natura Impact Statement (NIS)*. The SEA ER also applied ecosystem services from NPWS mapping to demonstrate water retention, filtration and carbon in soil at plan level. Where SEA Scoping submissions highlighted research, for example EPA recommendations on research around coastal communities resilience to climate change and the attitudes to climate change (Climate Change in the Irish Mind - Support for Climate Policies'and Climate Change in the Irish Mind - Climate Risk Perceptions), these were integrated to the baseline of the SEA and discussion of significant impacts.

Baseline information and consideration of alternatives were reviewed from other strategies and plans, namely the Galway City Development Plan 2023 -2029, other concurrent climate action plans being prepared across other local authorities and supporting environmental assessments (SEA and AA).

The key environmental issues considered included the following and the SEA ER provided key recommendations to address same (see table 1. 2 below)

Table 1-2: Key Environmental Issues

Indicator	Summary of Issues and SEA Recommendations
Biodiversity Flora and Fauna	<ul style="list-style-type: none"> Focus is being put on predicting how a changing climate will impact on some of our most threatened species, for example species at the range limits. Combined with change landuse patterns and activities most recently research (2023¹) record a decline in range and abundance or both of native plant species with native grassland species suffering the greatest decline. Lakes and wetlands have also been affected; some lakes are now dominated by the few aquatic plants favoured by nutrient enrichment, such as the introduced Nuttall's Pondweed. There is evidence that climate change may have affected the Irish flora by helping some southern species to spread northwards. In contrast, the overwhelming majority (80%) of species introduced into Ireland since 1500 have increased. In Galway City one of the most prevalent impacts of climate change in recent years has been the increase in flood events. Management of flood-related issues is therefore of critical importance to the future sustainable development of the city. Coastal erosion is another prevalent impact of climate change in the city. Over a period of decades, this will inevitably lead to loss or modification of some coastal habitats and interference with human use of the coastal zone. Of the 94 identified ecological processes², across terrestrial, marine and freshwater ecosystems, that underpin ecosystem functioning and support services to people, 82% showed evidence of impact from climate change. <p>SEA recommendation:</p> <ul style="list-style-type: none"> Clear and measurable actions to address nature-based solutions to support co benefits and ecologically driven responses to interventions around climate change impacts,

¹ Botanical society of Britain and Ireland Plant Atlas 2020. [BSBI-Plant-Atlas-2020-press-release-Ireland-FINAL.pdf](#)

² Biodiversity Climate change sectoral adaptation plan NPWS 2019

Indicator	Summary of Issues and SEA Recommendations
	<p>mitigation and adaptation.</p> <ul style="list-style-type: none"> • Actions to address and respond to invasive species. • Creating space for nature at landscape scale to facilitate mobile species. • Research into interactions between climate change on soil, water, air and biodiversity.
Population and Human Health	<ul style="list-style-type: none"> • Climate³ change can influence health through altering exposure to stressors such as extreme weather events; vector-, food- and waterborne infectious diseases; changes in the quality and safety of air, food, and water; and stresses to mental health and wellbeing. • Exposures that result from climate change can be categorised as exposures with direct health impacts (e.g. storm, drought, flood, heat wave, temperature change, wildfires) or exposures with indirect health impacts (e.g. water quality, air quality, land use change, ecological change). • The extent to which exposures which result from climate change impacts on health will be influenced by mediating factors, including individual or social factors such as demographics, socio-economics, health status, access to care, conflict. environmental factors for example geography, baseline weather, air and water quality, vegetation. institutional capacity such as primary health care, warning systems. • The potential climate change impacts on health are wide ranging such as deaths, injuries, respiratory disease, heat stroke, poisoning, water-borne diseases, infectious diseases, under nutrition, mental illness. • Health gains can occur from key climate change actions (“co-benefits”) such as: increasing consumption of diets with low greenhouse gas emissions and improving agriculture and good waste practices. Reducing co-pollutants from household solid fuel combustion, better lighting and application of passive design principles. Reducing greenhouse gases and associated co-pollutants from industrial sources. Increasing energy efficiency, reducing demand for fossil fuels and increasing demand renewable energy. Increasing green areas in urban spaces. Increasing active travel, modifications to public transport and to the built environment. • EPA (2023) research⁴ identified that people in Ireland feel that ‘others’ - such as future generations or people far away - are more threatened by climate change than themselves in the here and no. No figures are available for Galway City but at County scale 85 % of respondents in county (including Galway City) were worried about climate change. <p>SEA Recommendations</p> <ul style="list-style-type: none"> • Actions to support community awareness, engagement and ownership of climate change impacts, mitigation and adaptation. • Enhanced placemaking through nature-based solutions as an adaptive measures and support for active travel and modal shift. • Support for energy efficiency in the built environment and circular economy. • Research and support on appropriate landuse activities in the appropriate environment. • Key focus on groups and demographics more vulnerable to impacts of climate change and support in terms of addressing fuel poverty, access to local food and

³ Health Impacts of Climate Change and the Health Benefits of Climate Change Action: A Review of the Literature A Department of Health Research Paper, 2019.

⁴ Climate Change in the Irish Mind - Support for Climate Policies’and Climate Change in the Irish Mind - Climate Risk Perceptions. <https://www.epa.ie/news-releases/news-releases-2023/people-in-ireland-support-climate-policies-with-some-opposition-specific-to-local-concerns-and-issues.php>

Indicator	Summary of Issues and SEA Recommendations
	<p>public transport.</p> <ul style="list-style-type: none"> Investigate and promote the potential and pivotal role creativity can play in addressing the challenges presented by climate action. Just Transition mechanisms and access to support for same.
Soil and Geology	<ul style="list-style-type: none"> Maintaining and enhancing soil function and its carbon storage role where possible, recognising the essential role soils, and particularly functioning peatlands (peat soils present in the western part of the plan area) can contribute to climate change mitigation and adaptation. Addressing extent of soil sealing, increased surface run off and variable permeability of lands in the plan area. Retention and creation of areas of greenfield in terms of open space, green infrastructure, permeability and biodiversity considerations. Because of the complex interrelationship between water, air and soil, declining soil quality can contribute to negative or declining water or air quality and function. Significant changes to soil condition can be brought about by the impacts of climate change including changes in air temperature, precipitation and extreme weather events - increased occurrence of summer droughts and increased winter rainfall. High nature value farming areas, and key agricultural lands should be considered. Where natural resources are required to support development, these should be carried out as efficiently as possible. <p>SEA Recommendations</p> <ul style="list-style-type: none"> Supporting research and actions relating to carbon sequestration in soil Nature based solutions to provide co benefits including to retention and enhancement of soil quality and soil diversity Reuse of brownfield lands and support for circular economy through adaptive reuse of buildings and waste streams Support for sustainable landuse.
Water	<p>Climate change poses risks to the delivery of water management objectives, but these risks depend on local catchment and water body conditions. Climate change affects the status of water bodies, and it affects the effectiveness of measures to manage the water environment and meet policy objectives. The future impact of climate change on the water environment and its management is uncertain. Impacts are dependent on changes in the duration of dry spells and frequency of 'flushing' events. The following risks are identified for water resources:</p> <ul style="list-style-type: none"> Lower water levels and higher water temperature will reduce dissolved oxygen and lead to algal blooms and increased concentration of bacteria and other pollutants in the water. Increased precipitation increases the risk to groundwater quality from septic tank systems, agricultural, forestry and urban centre runoff. Saltwater intrusion on freshwater systems. River Basin Management plans will provide for more integrated management requirements for our water resources. Climate change threatens coastal areas, which are already stressed by human activity, pollution, invasive species and storms. Sea level rise threatens to erode and inundate coastal ecosystems and communities including unique ecosystems such as wetlands and machair (sand dunes). Warmer and more acidic oceans are likely to disrupt coastal and marine ecosystems on native species, algal blooms. Increase in fluvial, pluvial (urban storm water) and groundwater flood risk. Increasing risk to our coastal communities and assets. Threat of coastal squeeze of inter-tidal habitats where hard defences exist. The development of flood forecasting systems in conjunction with community. <p>SEA Recommendations</p> <ul style="list-style-type: none"> Landscape consideration of water through LAWPRO and catchment management Support for nature-based solutions through the catchments

Indicator	Summary of Issues and SEA Recommendations
	<ul style="list-style-type: none"> • Management to 'slow the flow' and increase overall resilience of the ecosystems. • Research and assessment of risks and then supporting actions to achieving Water Framework Directive Objectives from climate change impacts.
Air and Climatic Factors	<p>These have been identified as cross cutting impacts across all the SEA topics scoped into the SEA ER and are presented throughout the document.</p> <p>Climate change is impacting ecosystems through changes in mean conditions and in climate variability, coupled with other associated changes such as increased ocean acidification and atmospheric carbon dioxide concentrations. It also interacts with other pressures on ecosystems, including degradation, defaunation and fragmentation. At the same time, ecosystems can also assist in the mitigation of, and adaptation to, climate change.</p> <p>.</p> <p>SEA recommendations</p> <p>Actions in the CAP should be cross cutting and encompass all the sectors for emission reductions:</p> <ul style="list-style-type: none"> • Electricity • Transport • Built Environment (Residential, Commercial & Public Sector) • Industry & Other • Agriculture • Land Use, Land Use Change and Forestry (LULUCF) <p>A focus on nature-based solutions, the opportunity to provide co benefits for other environmental topics and strong evidence based approach to solutions is recommended.</p> <p>EPA data is clear that reaching the 2030 target requires implementation of policies that deliver emission reductions across all sectors in the short term. Current decarbonisation actions are being outpaced by increased energy demand across the economy and dependence on fossil fuels for energy generation. A continued lack of delivery of large-scale practical actions to decarbonise activities in all sectors will see an exceedance of the first two carbon budgets.</p>
Material Assets	<p>Flood events and possible consequent risk of subsidence may have a significant impact on critical infrastructure such as roads, rail, electricity, water and communications. This in turn would have a potential impact on productivity, economic confidence and general social wellbeing. Hotter summers could also place an additional stress on key infrastructure.</p> <ul style="list-style-type: none"> • High temperatures can result in Hot-weather-related changes in demand (e.g. higher daily and peak demand). Higher precipitation levels can result in more frequent water/wastewater asset flooding, asset loss and potential for environmental pollution as well as increased drawdown in the autumn/winter for flood capacity, leading to resource issues in the following spring/summer. • Low precipitation - Reduced availability of water resources (surface water and groundwater sources) • Increased storminess Business continuity impacts/ interruptions • More frequent water/wastewater asset flooding, asset loss and potential for environmental pollution. Interruption to business continuity⁵. <p>SEA Recommendations</p> <ul style="list-style-type: none"> • Identify material assets most at risk from impacts of climate change. • Increase resilience to effects of climate change on critical infrastructure. • Energy transition and decarbonise the plan area to help meet targets. • Energy efficiency measures and the decarbonising zone. • Support for nature-based solutions to avoid over engineering responses to impacts on material assets. • Actions relating to circular economy, food waste and local food production.
Cultural heritage	<ul style="list-style-type: none"> • The direct effects of climate change on heritage may be immediate or cumulative. Thus, damage from catastrophic events such as floods and storms are likely to

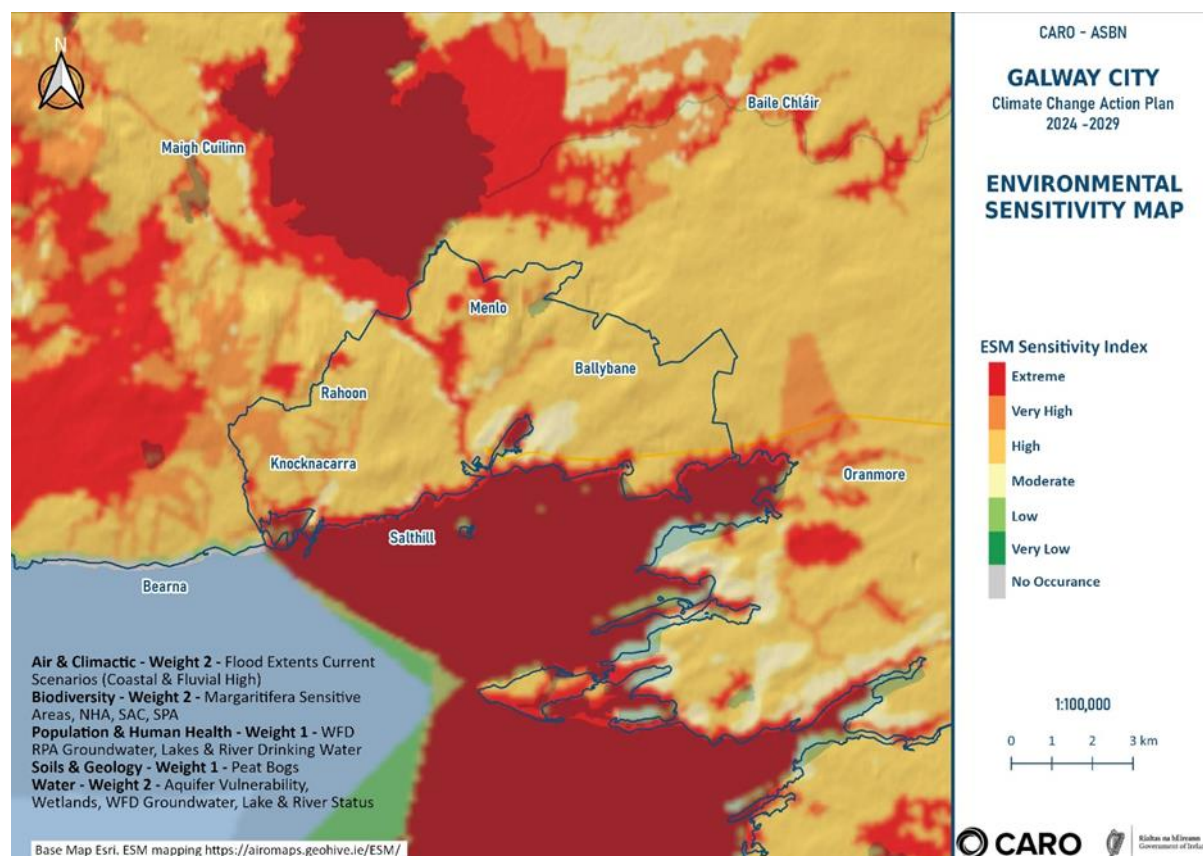
⁵ Water Quality and Water Services Infrastructure Climate Change Sectoral Adaptation Plan

Indicator	Summary of Issues and SEA Recommendations
	<p>increase at the same time as slow-onset environmental deterioration mechanisms. The way these impacts manifest will vary according to the sensitivity of the heritage and its exposure (Murphy and Ings, 2013). Exposure will alter with location and aspect, while sensitivity will be determined by the nature of the heritage resource (type, material) and its current condition.</p> <ul style="list-style-type: none"> • In addition, there will be indirect impacts related to societal responses to climate change in terms of both adaptation (e.g. changes in land use) and mitigation (e.g. the renovation or upgrading of historic buildings to reduce energy consumption). • The Urban heat island effect is likely to act as a risk multiplier, meaning that buildings in urban centres will be propelled more rapidly towards damaging temperature thresholds for microbiological and/or chemical decay mechanisms. Higher temperatures can provide conditions for established pest species to spread and increase in number. • Western Atlantic Europe is likely to see an increase in biodeterioration due to mould and pests as higher temperatures provide more hospitable environments for both. • Cultural landscapes such as parks and gardens and archaeological clusters are at risk from increasing pests and diseases as well as droughts, wildfires and windthrow. Alterations in natural landscape characteristics will also impact indirectly on material cultural heritage by disturbing the 'sense of place' and on intangible culture, which expresses landscape through art, poetry and music. <p>SEA Recommendations</p> <ul style="list-style-type: none"> • Creative responses to engage on climate change through Creative Ireland support. • Support for energy efficiency and adaptive reuse of existing buildings
Landscape	<p>Landscape and townscape changes will result from climate change impacts on:</p> <ul style="list-style-type: none"> • soils and vegetation • rivers and coasts • hills and lowlands • buildings <p>Landscapes will also be affected by adaptation and mitigation measures in response to climate change, for example renewable energy infrastructure, or interventions to address surface water management, modal shifts and flooding. There is also likely to be an increase in flooding, erosion and slope instability. Semi-natural habitats are likely to change as species' favoured conditions move north. This could affect native woodlands and aquatic habitats. There are likely to be direct effects on trees and forests reflecting changing patterns of rainfall, increases in storm damage and a potential increase in pests and disease. This could be most evident in agricultural areas, woodlands, designed landscapes and settlements. The pattern of snowfall and snow lie is likely to change.</p> <p>Along low lying sections of coast, or in areas where flooding or land stability are already issues, changes in landscape character could be quite dramatic. However, for the most part these changes will be more gradual and subtle - modifying rather than transforming the landscape.</p> <p>SEA recommendations</p> <ul style="list-style-type: none"> • Landscape response to climate adaptation where possible • Integration of blue and green infrastructure • Engagement and awareness raising around landscape scale effects and response to climate change.

For the decarbonising zone, an environmental profile was prepared to inform the assessment and identify if required, mitigation measures.

Environmental sensitivity mapping was also used as a means to assess inter relationships across environmental topics. In addition to other baseline mapping was applied during the SEA process.

Figure 1-2 Galway City Environmental Sensitivity Map



The Environmental Report set out Strategic Environmental Objectives (SEO) (Table 1.1). These were identified based on a current understanding of the key environmental issues, climate change action and related to the SEA ER of the Galway City Development Plan 2023 -2029 SEA ER. The CAP actions were evaluated against these SEOs. A matrix was used to rate the impact of the policies and objectives, as having potential positive, indirectly positive, neutral, uncertain, negative, or indirectly negative impacts.

Table 1-3 Strategic Environmental Objectives⁶

SEA Topic	Strategic Environmental Objectives
Biodiversity	Protect, conserve and promote the enhancement of habitats, species and their sustaining resources in international and national designated sites and prevent adverse impacts (direct, cumulative and indirect) from development within or adjacent to these sites.
Flora and Fauna	Protect and conserve rare and threatened habitats and species, including those listed in the Habitats Directive and the Wildlife Acts.
	Protect and conserve the marine environment and promote the appropriate sustainable management of the coastal zone taking cognisance of potential direct, indirect and cumulative impacts on European sites.
	Support measures to control and manage alien/invasive species.
	Protect areas of local biodiversity value and stepping stones which provide connectivity for species and prevent wildlife habitat fragmentation that contributes <i>towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure</i> ⁷
	Promote ecological awareness and biodiversity.

⁶ SEOs from the SEA ER of the Galway City Development Plan, and SEA ERs of other concurrent CAPS in preparation; some SEOs were modified following scoping submissions.

SEA Topic	Strategic Environmental Objectives
Population, Human Health, Noise	Promote good quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns, land uses, including potential adverse noise quality impacts.
	Promote social inclusion and wellbeing/healthy living in the city.
	Minimise noise, vibration and emissions from traffic and minimise impact on residential amenities.
Air and Climate	<i>Support the delivery of all national climate policy as appropriate to the city with the prioritisation and acceleration of evidence-based measures</i> Promote climate adaption and mitigation measures in line with the Galway City Climate Change Adaption Strategy and any future plans.
	Enable sustainable development by encouraging new and existing development to reduce carbon emissions and build climate resilience.
	Improve air quality within the city
	Comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009).
Water	Maintain and improve, where possible, the quality of surface water, rivers, lakes and groundwater to meet the requirements of the National River Basin Management Plan.
	Maintain and improve, where possible, the quality of transitional and coastal waters, and to prevent the contamination of bathing water.
	Support the maintenance and improvement of drinking water supplies.
	Support the promotion of water conservation.
	Progressively reduce discharges of polluting substances to waters.
Soil and Geology	Maintain the quality of soils.
	Maximise the sustainable re- use of brownfield lands, and the existing built environment.
	Minimise the consumption of non-renewable sand, gravel and rock deposits.
	Protect and conserve important and audited geological heritage sites
Material Assets	Maximise use of the built environment in a sustainable and efficient manner.
	Maximise and support sustainable modes of transport.
	Ensure water and wastewater are planned for and provided as critical services infrastructure
	Facilitate measures to reduce all forms of air pollution.
Cultural Heritage	<i>To support adaptive re-use of existing uninhabited and derelict structures where possible opposed to demolition and new build (to promote sustainability and reduce landfill).</i> Promote the protection and conservation of the city's cultural, built archaeological and linguistic heritage, and where appropriate enhance character.
Landscape	Conserve and enhance the built heritage and landscape features of the city. <i>Support landscape scale responses to climate change adaptation and mitigation</i>
Interrelationships	Maintain and improve the health of people, ecosystems and natural processes
	Actively seek to integrate opportunities for environmental enhancement.

The assessment process highlighted actions with positive environmental effects at strategic scale and also recommended a number of amendments to or new actions to further strengthen the environmental performance of the CAP. Where potential uncertain or negative affects arose, they would be balanced by mitigation and monitoring measures including mitigation measures identified through the SEA, AA assessment processes as well as mitigation measures as appropriate from the City Development Plan 2023 -2029, as the key statutory landuse framework for the city.

Mitigation measures incorporated into the Galway City CAP are set out in Chapter 9 of the Environmental Report. They are integrated to the final plan as shown below in Table 1.3.

Table 1-4 SEA and AA Mitigation measures and their inclusion in the Final Galway City CAP 2024 -2029.

Action No.	Action Description	Included in Draft CAP? Yes/no
new action	In implementing this Galway City Climate Action Plan, ensure compliance with Galway Plan 2023-2029 and local area plan objectives and policies relating to environmental management, the protection of statutory Conservation Areas and ensure compliance with specific environmental management measures relating to this plan. Landuse plans and projects arising from this Climate Action Plan will be underpinned by Strategic Environmental Assessment, Environmental Impact Assessment, Appropriate Assessment, and Ecological Impact Assessments as relevant.	Yes Action 21
new action	Galway City Council will take account of any relevant recommendations in the EPA State of Our Environment Report 2024, once published, in implementing the Plan over its lifetime.	Included in Section 3.2 thematic focus of the CAP
new action	Galway City Council will consider any relevant updated actions, measures or recommendations that may arise in updates to the National Climate Action Plan over the lifetime of the Plan.	Included as a Key Performance indicator under Action 21
15	Establish climate ambassador program and forum to facilitate knowledge sharing, capacity building and just transition on climate and energy initiatives and nature-based solutions and actions across the city. Program to include climate/ energy/NBS leaders and pioneers from throughout the city including businesses and community groups.	Yes
32	Deliver the community climate action fund and work to identify further funding streams for local climate action projects and support communities and voluntary sector in developing and implementing climate adaptation and mitigation projects at local level supporting nature-based solutions that can provide co benefits to people and nature.	Yes
34	Develop and implement green space strategy (GSS) for Galway City Council owned green spaces that supports space for nature	Yes
37	Develop tree strategy for the Galway City area, including detail to increase tree canopy cover throughout the city through management of existing stock and new planting in appropriate places with appropriate planting mixes.	Yes
41	Develop a City Blueway Strategy for rivers and canals informed by ecological assessment and provision of appropriate buffers and wildlife corridors in collaboration with Office of Public Works (OPW), Inland Fisheries Ireland (IFI) and Lough Corrib Navigational Trustees (LCNT).	Yes
New action	With respect to DZ actions, ensure that they are aligned with the conservation objectives for the Lough Corrib Special Area of Conservation (SAC) (Site Code: 000297), Galway Bay Complex (SAC) (Site Code: 000268) and Inner Galway Bay Special Protected Area (SPA) (Site Code: 004031).	Included in Final Cap in Section 4.5 as follows: <i>Section 4.5: "Any development that has potential to occur as a result of the actions set out in this DZ plan will be subject to appropriate environmental assessments as necessary, ensuring alignment with the conservation objectives for the Lough Corrib SAC, SPA, and Galway Bay Complex SAC and Inner Galway Bay SPA European Sites."</i>

1.3 Draft CAP 2024 -2029 Stage

The draft CAP 2024 -2029, along with the Environmental Report and Natura Impact Statement (NIS) were put on public display and issued to the statutory environmental authorities for a six week period. The Draft Climate Action Plan public consultation process involved several key elements as outlined below.

- Online Public Notice on [Galway City Draft Local Authority Climate Action Plan \(LACAP\) Public Consultation | Galway City Council Online Consultation Portal](#)
- Galway City Councils public website contained details of the consultation process at the following location [GalwayCity - Galway City Council Climate Action Plan](#)
- Reports available for inspection at City Hall and public libraries across the city.
- Newspaper advertisements in Galway Advertiser in the November and December 2023 editions.
- Recurring social media posts (Facebook, Twitter, LinkedIn) during the consultation period to promote awareness of the public consultation period.
- PPN engagement.
- Adjoining Local Authority engagement via Climate Action Regional Office(CARO)
- Notification to Prescribed Bodies.

Three public information events took place as outlined below. The events were well attended in each of the areas with a total attendance estimated at 150 attendees.

1. Westside Community Centre, Galway City, Tuesday 28th November 2023
2. Knocknacarra Community Centre, Galway City, Tuesday 5th December 2023
3. Renmore Community Centre, Galway City, Tuesday 12th December 2023

The statutory draft plan consultation process was open from 24th November 2023 to 29th December 2023, during which time there were a total of 30 valid submissions and observations were received. Submissions directly commenting on the SEA ER were made by the EPA, the Department of Housing, heritage and local government and Department of Agriculture Food and The Marine and the National Seafood Centre. The SEA ER and NIS were updated as appropriate and changes are shown in the final SEA ER.

Where arising from the above submissions, as well as other valid submissions led to proposed changes to the CAP, these were screened for likely significant environmental effects from the SEA and were also subject to screening under the EU Habitats Directive. The respective screening reports can be found in Annex B of the SEA ER and the final NIS.

1.4 Approval of the CAP

The SEA process was considered at each stage of the making of the Plan. Having considered the plan and supporting SEA ER and NIS, the Galway City CAP 2024 -2029 was approved by the Members of Galway City Council in the 12th February 2024 meeting.

2 Reasons for choosing the CAP as adopted, in light of other reasonable alternatives considered

The alternatives considered in preparing the draft CAP in the first instance related to the strategic approach in how to most effectively facilitate, through policy and/or actions, the implementation of the proposed CAP. The alternatives considered in this regard are set out below:

- Alternative 1 - Prioritise reducing Greenhouse Gas (GHG) emissions from largest GHG emitting sectors in the City to mitigate against climate change impacts.
- Alternative 2 - Adopt a multi-pronged approach and focus on a range of priority areas to mitigate against and adapt to climate change impacts.
- Alternative 3 -: Adopt a multipronged approach - that has a strong community engagement emphasis - and focus on a range of priority areas to mitigate against and adapt to climate change impacts.

A 'Do Nothing' or 'Do Minimum' alternative is not a reasonable alternative in this instance as the preparation of an effective LACAP is a statutory requirement under Section 16 of the Climate Act

2.1.1 Key environmental challenges at city scale





















In addition to the environmental sensitivity map presented in Chapter 4, the following key environmental issues are relevant to the CAP and alternatives under consideration:

- Flood risk;
- Energy efficiency and adaptation to climate change;
- Seeking a meaningful reduction in the growth in demand for private transport;
- Ensuring that land use and transportation planning are integrated;
- Protection of the built and cultural heritage of the area;
- Protection of the environment by minimising waste and pollution;
- Promote the involvement of the local community in decision making and encourage social inclusion.

2.1.2 Climate Hazard Impacts

The key results from the Climate Change Risk Assessment including impacts experienced to date in Galway City and future risks are summarised below in Figure 2.1

FIGURE 2-1 CLIMATE CHANGE RISK ASSESSMENT IMPACTS EXPERIENCED TO DATE AND FUTURE RISKS

Hazard		Projected Change	Future Frequency
	Heatwave	Projections indicate an overall increase in average temperature (bottom left) of between 1.1 and 1.4°C for Galway City relative to the 1981-2000 period.	Frequent 
	Drought	Under a high emission scenario, projections indicate that heatwaves will become more frequent (bottom middle) by mid-century. Summer rainfall is expected to reduce by between 6 and 8% in the future when compared with the baseline period of 1981 to 2000, in both the RCP4.5 and RCP8.5 scenario contributing to potential drought conditions.	Common 
	Cold Spell	As a consequence of the increasing temperatures, a decrease in the number of frost days and ice days in the 2041-2060 future period when compared with the baseline period of 1981-2000, is projected for both the RCP4.5 and RCP8.5 scenario.	Rare 
	Heavy Snowfall	The annual snowfall in the region is projected to decrease substantially by the middle of the century for the RCP4.5 and RCP8.5 scenarios (bottom right).	Rare 
	Severe Windstorms	Projections of storms are subject to a high level of uncertainty. By mid century, projections indicate that average wind speed will remain similar to those currently experienced. There is limited evidence of a potential increase in the frequency of more intense storms which are currently rare events. However, more research is needed to confirm this increase.	Frequent 
	Coastal Flooding	Rising sea levels projections under a high emissions scenario indicate an increase of up to 0.24 m by 2050 which will increase the frequency of coastal inundation.	Very Frequent 
	Coastal Erosion	A rising sea level is strongly linked with coastal erosion and an increase in erosion rates and extent.	Common 
	Pluvial Flooding	Projections indicate an increase in the frequency of heavy rainfall days (days with precipitation >30mm) for Galway City with some areas projected to see increase of up to 37% (bottom right). This will likely result in an increased frequency of associated fluvial and pluvial flooding.	Frequent 
	River Flooding		Frequent 
	Groundwater Flooding	Projections of changes in groundwater flooding are currently not available, therefore there is uncertainty in the change in groundwater flooding frequency that can be expected.	Rare 

2.1.3 Preferred alternative

Following the above evaluation and assessment, the preferred strategic alternative for the approach to the CAP 2024 -2029 is Alternative 3. This is based on the following:

- In terms of all SEOs, Alternative 3 is identified as creating most positive interactions as it provides greater environmental performance overall and also allows for a greater environmental gain, than may be achieved through Alternatives 2 and 1.
- In addition, the multi- faceted approach contributes to greater co-benefits by providing for a wider range of environmental effects particularly around nature-based solutions and resource management.
- The inclusion of measures for citizen engagement and awareness raising through the CAP option is also positive for several SEOs.

3 Monitoring Measures

It is proposed, in accordance with the SEA Directive, to base monitoring on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water pollution levels. Monitoring will focus on the aspects of the environment that are likely to be significantly impacted upon by the implementation of the CAP.

It is proposed, in accordance with the SEA Directive, to base monitoring on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water pollution levels. Monitoring will focus on the aspects of the environment that are likely to be significantly impacted upon by the implementation of the CAP 2024-2029.

The targets and indicators are derived from the Strategic Environmental Objectives (SEOs) presented in Table 1.2. The target underpins the objective whilst the indicators are used to track the progress of the objective and targets in terms of monitoring of impacts. The monitoring programme will consist of an assessment of the relevant indicators and targets against the data relating to each environmental component. Similarly, monitoring will be carried out frequently to ensure that any changes to the environment can be identified.

This Climate Action Plan will be implemented by Galway City Council. Implementation of the CAP and in turn monitoring and reporting will be pivotal in demonstrating commitment and leadership in climate action at the local level.

A key part of the CAP is the provision of key performance indicators (KPIs) and annual reporting. Therefore, the suggested monitoring table below, whilst adapted for the SEA monitoring prepared for the Galway CDP 2023-2029 should cross reference and integrate the KPIs identified for the CAP 2024 -2029.

These will be used in annual reports to inform the performance of the local government sector on climate action, as part of the local government DECA 2030 Strategy. In accordance with part 3(w) of the Local Authority Climate Action Charter, Galway City Council will report annually to the Department of the Environment, Climate and Environment on progress on climate action at local level as part of the delivery of the national climate objective.

Progress on all actions will be reported via a reporting tool developed by CARO. Further, Galway City Council intends to complete and monitor a Sustainable Energy and Climate Action Plan (SECAP) as a future signatory member of the Covenant of Mayors for Climate.

Key implementation and reporting activities that Galway City Council will undertake are:

1. **Planning for Implementation:** Devising an approach for the implementation of actions on an annual basis.
 2. **Tracking and reporting progress through Key Performance Indicators:** Development and inclusion of plan level KPIs to track, measure and report on progress.
- Please see Table 3.1 overleaf for the monitoring measures.

Table 3-1 SEA Monitoring

SEA Topic	Indicators	Targets	Key responsibly authority /stakeholders	Data sources	Remedial Action
Biodiversity Flora and Fauna BFF	Condition of European Sites Biodiversity gain	Control significant adverse impacts (direct, cumulative and indirect impacts) to relevant habitats, species or their sustaining resources in designated ecological sites and networks Control significant adverse impacts on rare and threatened habitats and species or their sustaining resources, including those in the Habitats Directive and the Wildlife Acts. Improvements to the green network and public realm whilst projecting the city's ecological heritage Delivery of actions identified under River Basin Management Plan, All Ireland Pollinator Plan 2021-2026 and local plans including Galway Biodiversity Action Plan, Heritage Plan, Public Realm Strategy and forthcoming Greenspace Strategy.	GCC, NPWS, DHLGH, DTCAGSM, EPA, RBD stakeholders, GCC Biodiversity Action Plan and Heritage Plan stakeholders	NPWS and Department reports and database, National Biodiversity database centre, consultation with stakeholders where appropriate, LAPS, masterplans, large scale developments	Ongoing monitoring through the development management process Consultation with stakeholders to feed into 2-year report.

SEA Topic	Indicators	Targets	Key responsibly authority /stakeholders	Data sources	Remedial Action
Population, Human Health and Noise PHHN	<p>Implementation of plan measures in relation to meeting population targets, improvements to provision of social and physical infrastructure including availability of public transport / public and community facilities, services, public realm and amenities</p> <p>Reduction in travel times and distances to and within the city and alleviation of traffic congestion</p> <p>Increase in modal shift from private car to public transport and active travel</p> <p>Increase in social inclusion and accessibility</p>	<p>Improvements to physical and social infrastructure, green network, public realm, active travel</p> <p>Delivery of actions in Galway Transport Strategy, LECP, Public Realm Strategy, forthcoming Greenspace Strategy</p>	GCC, Co Co, NTA, TII LECP stakeholders	GCC, TII, CSO, LECP, Healthy City and Age Friendly research, consultation with stakeholders where appropriate, LAPS, masterplans, large scale developments	Ongoing monitoring through the development management process and of plans and strategies including Galway Transport Strategy Consultation with stakeholders to feed into 2-year report
Air and Climate AC	<p>Implementation of Plan measures relating to climate reduction targets</p> <p>Traffic volumes and % modal shift, see also PHH monitoring measure</p> <p>Changes in air quality as identified during air quality monitoring programmes</p> <p>Improvements to the green network and public realm</p>	<p>Achievement of measures relating to climate reduction targets in plan and Galway Climate Adaption Strategy and 5-year action plan, future energy plan and energy action plan, implementation of Noise Action Plan</p> <p>Increase the percentage of population travelling by public transport including cycling and walking, and decrease in private vehicle dependency Improvement in Air Quality trends, particularly in relation to transport related emissions of NOx and particulate matter</p>	GCC, EPA, NTA, TII, DECC, CARO, SEAI, Climate Adaption Strategy stakeholders	GCC, SEAI , CSO databases, consultation with stakeholders where appropriate	Ongoing monitoring through the EPA monitoring programmes and regulation through development management process – planning conditions and enforcement Consultation with stakeholder to feed into 2-year report .

SEA Topic	Indicators	Targets	Key responsibly authority /stakeholders	Data sources	Remedial Action
Water W	<p>Status of water bodies and drinking water quality as reported by the EPA Water Monitoring Programmes</p> <p>Trends in water conservation</p> <p>Flood Risk Assessment incorporated into development proposals in flood risk areas</p> <p>Number of flood protection measures provided</p>	<p>Not to cause deterioration in the status or affect the ability of any surface water groundwater, transitional and coastal waters to achieve 'good status'</p> <p>Implementation of the objectives of the River Basin Management Plan 3rd Cycle (once finalised)</p> <p>Implementation of objectives of River Basin Management Plan, Water Framework Directive, EU (Drinking Water) Regulations, Bathing Water Quality Regulations</p> <p>Minimise development on land susceptible to significant flood and/or coastal erosion risk</p>	EPA, Irish Water, OPW, CFRAM stakeholders, RBD stakeholders including GCC and GCoCo	EPA, Irish Water Monitoring Programmes and databases, GCC, EPA, Irish Water reports, consultation with stakeholders where appropriate	<p>Ongoing monitoring through the EPA monitoring programmes and regulation through development management process – planning conditions and enforcement.</p> <p>Consultation with stakeholders to feed into 2-year report</p>
Soil and Geology SG	<p>Area of brownfield land developed.</p> <p>Increased densities appropriate to neighbourhood character</p> <p>Reduction in vacant sites and derelict buildings on registers</p> <p>Monitoring of historical landfill sites, enforcement</p> <p>Increase in recycling, and recovery of C&D waste,</p> <p>Conservation status of GSI sites</p>	<p>Achievement of measures in plan to meet NPF AND RSES targets of at least 50% of all new homes be delivered within the existing built-up footprint (2032 target)</p> <p>Reduce brownfield lands within the city</p> <p>Reuse and recycle C&D waste at source and encourage use of appropriate materials including from local sources, implementation of waste permit regulations</p> <p>Safeguard soil quality and quantity and to ensure that soils remain healthy and capable of supporting human activities and ecosystems</p> <p>Retain conservation status of important geological heritage sites</p>	GCC, EPA, GSI,	GCC, GSI and EPA databases, consultation with stakeholders where appropriate, LAPS, masterplans, large scale developments	<p>Ongoing monitoring through the EPA monitoring programmes and development management process.</p> <p>Consultation with stakeholders to feed into 2-year report</p>

SEA Topic	Indicators	Targets	Key responsibly authority /stakeholders	Data sources	Remedial Action
Material Assets MA	<p>Increase in sustainable transport facilities and infrastructure throughout the city</p> <p>Number of people travelling to work or school by public transport, walking or cycling</p> <p>Improvements in the public realm</p> <p>Changes in water quality as identified during water quality monitoring programmes</p> <p>Volume of waste recycled and to landfill</p> <p>Control of inappropriate development within SEVESO III site consultation zone</p> <p>SEE also PHHN and AC and BFF</p>	<p>Achievement of measures in the plan to Maintain and improve a high quality built environment</p> <p>Have an integrated, sustainable transport and land use system that eases movement to and within the city and promotes sustainable transport modes</p> <p>Meet EU, national and regional objectives for water quality and for recycling of municipal waste and its diversion from landfill</p> <p>Control inappropriate development within SEVESO III site consultation zone</p> <p>Delivery of actions in Galway Transport Strategy, Public Realm Strategy, forthcoming Greenspace Strategy</p>	GCC, Irish Water, EPA, NTA,TII, Regional Waste Authority, HSA	GCC, CSO, NTA, TII, Irish Water and EPA databases, consultation with stakeholders where appropriate	<p>Ongoing monitoring through the EPA monitoring programmes, development management process and of plans and strategies including Galway Transport Strategy</p> <p>Consultation with stakeholders to feed into 2-year report</p>

SEA Topic	Indicators	Targets	Key responsibly authority /stakeholders	Data sources	Remedial Action
Cultural Heritage CH	<p>Implementation of Plan measures relating to protect and promote cultural, built, archaeological and linguistic heritage</p> <p>Reuse and adaption of existing built heritage</p> <p>Number of grants administered for protected structures and cultural heritage projects/activities</p> <p>Number of ACA management plans prepared, number of additions to the RPS and any additional ACAs</p> <p>Increase in use of Irish in signage and place names of new residential developments, public roads, parks</p>	<p>Increase uptake of grants available for protected structures and to promote good conservation practice</p> <p>Expand the RPS and designate additional ACAs, where appropriate</p> <p>Increase the number of uninhabited and derelict structures that are restored opposed to demolition. Delivery of actions identified in Everybody Matters Cultural Strategy, Galway Heritage Plan, Public Realm Strategy, Cultural Strategy and Galway City Arts Plan</p>	GCC, DHLGH, DTCAGSM, GCC Heritage Plan, Cultural Strategy and Arts Plan stakeholders	GCC, NIAH databases, consultation with stakeholders where appropriate LAPS, masterplans, large scale developments	<p>Ongoing monitoring through Heritage plan and development management process</p> <p>Consultation with stakeholders to feed into 2-year report</p>
Landscape L	<p>Impacts on protected views/prospects, built heritage and G and RA zoned lands incorporated into development proposals as appropriate</p> <p>Improvements to the green network and public realm</p>	<p>Protect and enhance built heritage, designated ACAs, protected views/prospects and G and RA zoned lands</p> <p>Protect and enhance the green network and public realm in a sustainable manner Delivery of local area plans, environmental improvement schemes, ACA management plans and urban design framework plans, actions identified under Galway Biodiversity Action Plan, Heritage Plan and Public Realm Strategy</p>	GCC, Galway Biodiversity Action Plan and Heritage Plan stakeholders,	GCC, NIAH databases, National Biodiversity data centre, consultation with stakeholders where appropriate, LAPS, masterplans, large scale developments	<p>Ongoing monitoring through development management process</p> <p>Consultation with stakeholders to feed into 2-year report</p>

