

STRATEGIC ENVIRONMENTAL ASSESSSMENT NON-TECHNICAL SUMMARY OF ENVIRONMENTAL REPORT FOR THE COUNTY SLIGO CLIMATE ACTION PLAN 2024 -2029

PREPARED FOR SLIGO COUNTY COUNCIL UNDER SI 435 OF 2004 AS AMENDED

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1 Non Technical Summary

An Environmental Report has been prepared as part of the Strategic Environmental Assessment of the County Sligo Climate Action Plan 2024-2029. This is the Non-Technical Summary of this report.

1.1 Background

Through the Climate Action and Low Carbon Development (Amendment) Act 2021, Ireland is now on a legally binding path to net-Zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade. The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change. As required by the 2021 Act, Sligo County Council is preparing their first Local Authority Climate Action Plan (LA-CAP) which must be adopted by the Elected Members before 23rd February 2024. This will continue the work undertaken over the first Climate Change Action Plan 2019-2024 which was non statutory.

1.2 Outline of the CAP

The plan will cover all of the functional area of County Sligo. **Figure 1.1** shows the location of County Sligo, and the Atlantic Seaboard North Climate Action Regional office extent (CARO). The principal themes are identified and these are supported by actions. These themes include:

- Sustainability and resource management.
- Governance
- Community resilience and transition
- Environment and Biodiversity
- Transport and mobility

Sligo County Council will use its CAP in planning how it will reduce greenhouse gas emissions from across its own assets and infrastructure, whilst also taking on a broader role to influence, facilitate and co-ordinate the climate actions of communities and other stakeholders and what it will do to advocate for climate action in Sligo. In order to ensure that the CAP is centred around a strong understanding of the role and remit of Sligo County Council on climate action, the Plan is being developed though the following framework.

• Full accountable: Targeted actions for areas where Sligo County Council has full accountability for climate action within their own operations.

• Influence: Actions for where Sligo County Council can influence businesses, communities, and individuals in the delivery of local climate action through the functions and services they provide.

• Coordination: Actions for where Sligo County Council can coordinate and facilitate local and community action bringing together stakeholders in partnership to achieve climate action related projects.

• Advocate: Actions aligned to Sligo County Council role as advocate on climate action through raising awareness, communicating, informing, and engaging in open dialogue on the topic.

While the Climate Action Plan will be ambitious to reflect the leadership role of Sligo County Council on climate action, the Plan will not include actions whereby their implementation and achievement fall outside our role, remit, and governance.

The Plan will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment, Ecological Impact Assessment and requirements as appropriate) that form the statutory decision-

making and consent granting. Actions arising from the plan will demonstrate compliance with the environmental protection measures in the Sligo County Development Plan 2022 -2028, and SEA Environmental Report and Natura Impact Report that accompanies same.

Figure 1-1 County Sligo and the CARO Atlantic Seaboard North



1.3 Steps in the SEA Process The steps involved in SEA are as follows:

- Screening (determining whether or not SEA is required).
- Scoping (determining the range of environmental issues to be covered by the SEA).
- The preparation of an Environmental Report (current stage)
- The carrying out of consultations.
- The integration of environmental considerations into the Plan or Programme.
- The publication of information on the decision (SEA Statement).

Consultation on scoping stage 1.4

Submissions received at scoping stage have all informed the scope of this SEA.

1.5 Relationship to other plans and programmes

It is a requirement of the SEA to review and assess how the draft strategy may interact with other plans and programmes; this review was undertaken as part of the SEA and please see Chapter 3 of the SEA ER. Arising from the review, the following Table 1 highlights key implications from this review and how it relates to the UN sustainable development goals and the EPA State of Ireland's Environment (2020). The Strategic Environmental Objectives in the table below are used in the SEA process to assist in the assessment and identification of significant environmental effects.

Strategic E	nvironmental Objectives in the draft Sligo County Development	EPA Ireland's Environment	UN Sustainable Development Goals
Climate Change	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport Support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures. 	SOE3 Health and Wellbeing SOE5 Air Quality SOE4 Climate SOE6 Nature SOE 8 Marine SOE9 Clean Energy SOE 11 Water Services SOE12 Circular Economy SOE13 Landuse	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts
Population and Human Health (PHH)	 Safeguard the Sligo's citizens from environment-related pressures and risks to health and well-being including air, water and noise pollution, climate change and flooding. Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being 	SOE3 Health and Wellbeing SOE4 Climate SOE5 Air Quality SOE 11 Water Services SOE 12 Circular Economy SOE13 Landuse	 Goal 3: Ensure healthy lives and promote wellbeing for all at all ages. Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts.

TABLE 1-1 STRATEGIC ENVIRONMENTAL OBJECTIVES AND LINKS TO EPA STATE OF IRELAND'S ENVIRONMENT AND SUSTAINABLE DEVELOPMENT GOALS

Strategic En	vironmental Objectives in the draft Sligo County Development	EPA Ireland's Environment	UN Sustainable Development Goals
Biodiversity , Flora and Fauna (BFF)	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital 	SOE 4 Climate SOE 5 Air Quality SOE 6 Nature SEO 8 Marine SOE 11 Water Services SEO 12 Circular Economy SOE 13 Land use	 Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 3: Ensure healthy lives and promote wellbeing for all at all ages. Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Soil and Geology (SG)	 Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites 	SOE4 Climate SOE6 Nature SOE 11 Water Services SOE 12 Water Services SOE13 Landuse	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Strategic Er	nvironmental Objectives in the draft Sligo County Development	EPA Ireland's Environment	UN Sustainable Development Goals
Plan 2024 - Water (W)	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, including coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals 	2020 SOE3 Health and Wellbeing SOE5 Air Quality SOE4 Climate SOE6 Nature SOE 11 Water Services SOE13 Landuse	Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
Air and Noise (AN)	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality 	SOE3 Health and Wellbeing SOE5 Air Quality SOE4 Climate SOE6 Nature SOE 8 Marine SOE9 Clean Energy SOE 11 Water Services SOE12 Circular Economy SOE13 Landuse	Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.

Strategic Er	nvironmental Objectives in the draft Sligo County Development	EPA Ireland's Environment	UN Sustainable Development Goals
Pian 2024 -	 Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels 	2020	
Material Assets	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting 	SEO3 Health and Wellbeing SOE 5 Air Quality SOE9 Clean Energy SOE 13 Land use SOE 11 Water Services SOE 12 Circular Economy	 Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Strategic Environmental Objectives in the draft Sligo County Development Plan 2024 -2028		EPA Ireland's Environment 2020	UN Sustainable Development Goals
	energy efficient buildings, retrofitting, smart- buildings, cities and grids		
Cultural Heritage (CH)	 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). Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage 	SOE3 Health and Wellbeing SOE 12 Circular Economy SOE13 Landuse	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.
Landscape	 To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention 	SOE3 Health and Wellbeing SOE 4 Climate SOE 5 Air Quality SOE 6 Nature SEO 8 Marine SOE 11 Water Services SOE 12 Circular Economy SOE 13 Land use	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.

2 Describing the current environment

Baseline data has been gathered to present information on the current environment within the area. The Baseline section describes the following:

- Green and Blue network, ecosystem services.
- Biodiversity, Flora and Fauna
- Population and Human Health
- Soil and Geology
- Water Resources including flooding
- Air Quality and Climate
- Cultural Heritage
- Landscape
- Material Assets, and the
- Interaction between the above topics. These are summarised below:

2.1.1 Green and blue network, ecosystem services

Green Infrastructure is defined as 'an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations' (Comhar, 2010). Such spaces include woodlands, coastlines, flood plains, hedgerows, fields, gardens, turloughs, lakes, city parks and street trees, and the benefits to humans they provide include water purification, flood control, carbon capture, food production and recreation. Incorporation of green infrastructure in spatial planning and sectoral decision making helps to prevent biodiversity loss and fragmentation of ecosystems, thus restoring, maintaining and enhancing ecosystems and their services. It will improve resilience and adaptation to climate change and enable greater connectivity between ecosystems in protected areas and the wider countryside. There are many inter-relationships between green-infrastructure and other environmental parameters, for instance, its integration with human health through sport and recreation opportunities as well as increasing accessibility to amenity and recreation areas and promoting social inclusion; natural heritage and cultural heritage. Sligo is rich in biodiversity and developing the connectivity between existing ecological corridors offers great potential in the Plan area for biodiversity and increasing resilience to climate change effects.

Ecosystem services are the benefits that flow from nature to people. They can be provisioning (e.g. the supply of food, clean air and water and materials), regulating (e.g. water and climate regulation, nutrient cycling, pollination, or the formation of fertile soils), or cultural (e.g. recreation opportunities, or the inspiration we draw from nature). Natural ecosystems are multifunctional – they can provide a wide range of services simultaneously. The range and flow of these benefits depends largely on biodiversity and ecosystem condition.

A network of healthy ecosystems often provides cost-effective alternatives to traditional 'grey' infrastructure, offering benefits for EU citizens and biodiversity. This is why the EU promotes the use of nature-based green and blue infrastructure solutions¹. See below for ecosystem services provision.

¹ https://ec.europa.eu/environment/nature/ecosystems/index_en.htm



2.1.2 Biodiversity, Flora and Fauna

The Plan area is rich in biodiversity, containing many important, and protected, habitats and species such as, coastal habitats from cliffs to estuaries, reefs, machairs, mudflats, sandy beaches, and terrestrial habitats such as lakes, turloughs, fens, wetlands, woodlands, bats, wildfowl (duck and geese), waders, salmon, and otters. However, it also contains many other habitats which are not protected such as scrub, parks, streams, hedgerows, tree lines, roadside verges, housing estate open spaces and gardens. It is these locally important habitats and species within the landscape, including extensive areas of peatlands and heath, broadleaf woodlands, grasslands and turloughs, which provide links between the more rare and protected habitats, and are essential for the migration, dispersal and genetic exchange of wild plants and animals such as garden birds (robins, wrens, finches, etc.) and migrant summer visitors (swallows, cuckoos, warblers, etc.), otters, hedgehogs, bats, pigmy shrew and other Irish mammals, salmon and other fish species, and a variety of invertebrates, including Geyer's Whorl Snail, beetles, bees, butterflies, dragonflies and damselflies. They also allow for the spread of seeds, which benefit the wildflower populations of County Sligo. It is recognised that many rare and protected species are reliant on locally important species, and as such the protection of common habitats and species should not be underestimated.

2.1.3 Population and human health

In the 2022 Census, the total population of County Sligo was identified as being of 70,198 persons, an increase in total population in the County by c. 7% (c. 4,663 persons) since the previous census. The NPF Implementation Roadmap provides a transitional set of population projections to inform city and county development plans for the periods to 2026 and to 2031. The population growth projections for County Sligo indicate population growth up to 71,500 - 72,500 persons by 2026 and up to 74,000 - 75,500 persons by 2031.

Sligo Town is the County's main urban centre, which provides employment, education, healthcare and other services to people living in its large hinterland, within and beyond the County boundaries. It is

the designated Regional Growth Centre of the North-West. Approximately 20,000 persons live in Sligo Town.

Disadvantaged people are more likely to live in poor quality built environments and have limited access to transport and local amenities supporting healthy choices. This has further implications in regard to climate change and adaptation and mitigation to climate change including transport options, green infrastructure, energy provision and efficiencies and air quality emissions. Poor air quality is a major health risk, causing lung diseases, cardiovascular diseases, and cancer. Health implications of poor air quality from transport impacts the lungs, liver & spleen²Children, the elderly and citizens suffering from asthma and respiratory conditions are most affected. As well as negative effects on health, air pollution has considerable economic impacts; cutting short lives, increasing medical costs, and reducing productivity through lost working days. Other environmental resources interact with human health and include material assets (wastewater and water services, energy, transport), and water quality as well as access to green and blue space.

2.1.4 Geology and Soil

The oldest rocks in the Sligo area are exposed in the northeast Ox Mountains and on Rosses point. The dominant rock types in Sligo belong to the Carboniferous System (355 – 310 million years). There are 25 geological heritage sites, and include:

- Meenamore;
- Diarmuid and Gráinne's Cave;
- King's Mountain Rift;

Peat soils in the county are very important in terms of climate change – when functioning properly they are significant carbon sinks as well as providing means to retain water and assist in flood alleviation measures plus their importance for cultural and natural heritage.

2.1.5 Water resources including flooding

The Water Framework Directive (WFD) requires the achievement of good status in all waters and that the status of water bodies does not deteriorate. The County is situated within the surface water catchments of: Erne; Sligo Bay and Drowse; Upper Shannon (26A53 and 26B54); and Moy and Killala Bay. The main waterbodies in the County include: Lough Gill; Lough Arrow; Lough Talt; Lough Gara; Easky Lough; Templehouse Lake; Owenmore River; Unshin River; River Moy; and Easky River.

The WFD status of the rivers and lakes within the area to which the Plan relates is classified as high, good and moderate however, sections of rivers and streams (including: Bunnanaddan Stream; Cartonkillerdoo; Douglas, Sligo; Garavogue; Grange, Sligo; Owenmore, Sligo; Tubbercurry Stream; Tubbercurry; and Gill) are identified as being of poor status, while the Templehouse Lake is identified as bad due to unsatisfactory ecological/biological and/or physio-chemical status.

The status (2016-2021) of transitional and coastal waterbodies within and adjacent to the area to which the Plan relates ranges from moderate to high and good, including a number of unassigned waterbodies.

Agriculture, urban run off, urban wastewater, hydromorphological and anthropogenic pressures, extractive industry, forestry, domestic wastewater and invasive species are exerting significant pressures affecting WFD 'At Risk' waterbodies in Sligo.With climate change there are increased extreme weather events that contribute to flooding across a range of sources.

2.1.6 Air Quality and Climatic Factors

Poor air quality leads to more than 1300 premature deaths each year in Ireland. Ireland's two main pollutants of concern are: Fine particulate matter (PM2.5), where the dominant source is residential solid fuel burning. Nitrogen dioxide (NO2), where the dominant source is transport.

² Life Emerald 2023.

2.1.7 Climate Factors

Ireland must invest in structural and behavioural change to enable the transition to a climate neutral, climate-resilient country. These changes include the rapid decarbonisation of energy and transport and the adoption of sustainable food production, management and consumption systems. In December 2022, the government published Climate Action Plan 2023 (CAP23). It is the first updated plan since the introduction of the Climate Action and Low Carbon Development (Amendment) Act 2021. CAP23 aims to keep Ireland's emissions within its mandatory carbon budget and achieve the legally binding target of reducing emissions by 51% (from a 2018 baseline) by 2030.

Sectoral emissions ceilings refer to the total amount of greenhouse gas emissions that each sector of the economy is allowed to produce during a specific time period. In Ireland the sectoral emissions ceilings set out the maximum emissions that are permitted from each sector to ensure that Ireland remains within its carbon budgets. These sectors are:

- Electricity
- Transport
- Built Environment (Residential, Commercial & Public Sector)
- Industry & Other
- Agriculture
- Land Use, Land Use Change and Forestry (LULUCF)

 Table 2.1 provides a summary of Co. Sligo emissions in comparison to National emissions.

TABLE 2-1 COUNTY SLIGO EMISSIONS, NATIONAL EMISSIONS AND AS % OF NATIONAL EMISSIONS

Emissions Category	County Sligo Emissions (ktCO ₂ e)	National Emissions ¹ (ktCO ₂ e)
Residential	167 (17%)	9,552 (15%)
Commercial Services	53 (6%)	4,618 (7%)
Manufacturing	30 (3%)	6,737 (10%)
Industrial Processes	9 (1%)	2,267 (3%)
Transport	131 (14%)	12,196 (19%)
Waste	5 (1%)	991 (1%)
Agriculture	429 (45%)	22,134 (34%)
LULUCF	119 (13%)	6,657 (10%)
Total	943 (100%)	65,152 (100%)

Figure 2.1 presents the extreme climate events in County Sligo, from the CAP 2024.



2.1.8 Material Assets

Access to an efficient transport network contributes to opportunities for all sectors of the population to access services, facilities and social networks that are necessary to meet daily needs. Ease of accessibility enhances quality of life, promotes social inclusion, presents opportunities, and promotes human health through expansion of cycle and walking infrastructure.

As one of the key sectors for emission reduction, actions are urgently needed to promote other forms of transport including public transport, walking and cycling. A Local Transport Plans is being prepared for Sligo City that will identify short to longer term actions across scale to make walking, cycling and public transport more viable and attractive.

Uisce Éireann has provided information on wastewater treatment capacity, constraints and projects planned within the County to improve the existing network, to assist the Council in the preparation of the new County Development Plan. This information indicates where there may be wastewater treatment capacity available to accommodate growth ("headroom") in terms of Population Equivalent (PE) in areas serviced by a public wastewater treatment plant. Spare treatment capacity is identified as being available in all of these settlements except for: Castlebaldwin WWTP; Rosses Point WWTP; Drumcliffe WWTP (limited capacity); and Easky WWTP (limited capacity). The highest levels of headroom (PE) are available at Sligo Town WWTP (22,972 PE); Ballysadare WWTP (2,814 PE); and Dromore West WWTP (2,237 PE).

There are two main sources of water supplying the Sligo and Environs area, namely Kilsellagh Reservoir and Lough Gill. The Sligo and Environs Water Supply Scheme is designed to provide for the domestic, agricultural and industrial water requirements of Sligo Town and its outlying regions, such as Ballincar, Rosses Point, Strandhill, Collooney and Ballintogher

The Circular economy relates to a transition from carbon heavy, linear resource use. Circular economy systems:

• keep the added value in products for as long as possible and aim to eliminate waste.

• keep resources within the economy when a product has reached the end of its life, so that they can be productively used again and again and hence create further value.

2.1.9 Cultural heritage including archaeology and built heritage

County Sligo has a rich archaeological heritage. Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Examples of archaeological monuments in Letterkenny include souterrains (stone passages), cashels, enclosures, and churches. Archaeology in Ireland is protected framework of International conventions and national laws and planning policies.

The architectural heritage of Sligo spans many centuries. This heritage reflects past lives and is an important record of the economic and social history of the county. Architectural heritage includes churches, courthouses, commercial and institutional buildings including banks and post offices, country houses, and also includes vernacular architecture. Within this range of building types are structures, streetscapes, village and town cores of such architectural heritage significance or special character that they are deemed worthy of protection either as individual elements which are listed on the Record of Protected Structures (RPS), as groups of buildings within Architectural Conservation Areas (ACAs) or as particular built heritage types that have been recorded as part of the unique identity of Sligo.

2.1.10 Landscape and seascape

County Sligo is characterised by a variety of mainly rural landscapes, including rough pasture predominantly in the mountains, hills, and peat bogs. On the east, the boundary with County Leitrim runs southward through the coastal lowland to the limestone Dartry Mountains, including Benbulben Mountain (noted as one of Ireland's most distinctive natural landmarks). The County boundary crosses Glencar and an area of plateau to Lough Gill with the island of Innisfree. West of the Collooney Gap, the ridge forms the Ox Mountains and a peat moorland and, to the north, an area of continuously farmed lowland, from the mouth of the River Moy to the Leitrim border. The coastal areas of the County include Sligo Bay with three long estuaries, leading to the towns of Drumcliff, Sligo, and Ballysadare, which receive the waters of the Rivers Drumcliff, Garravogue, and Owenmore. The different landscapes found across the Plan area have varying visual and amenity values, topography, exposure levels and contain a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity.

2.1.11 Decarbonising zone

A Decarbonisation Zone (DZ) is a spatial area identified by the local authority in which a range of climate mitigation, adaptation and biodiversity measures and action owners are identified to address local low carbon energy, greenhouse gas emissions, and climate needs to contribute to national climate action targets.

In accordance with Action 165 of the National Climate Action Plan 2019, each local authority was required to 'identify and develop plans for one Decarbonising Zone' within their respective administrative area. An Action Plan for the DZs must be included in the Local Authority Climate Action Plans (LA CAP) as identified in the LACAP guidelines. As a component of the LACAP, the DZ is subject to the same statutory processes, timeframes, and other procedural requirements of making the LA Climate Action Plan. The DZs are a demonstration and test bed to focus on a range of climate mitigation, adaptation and biodiversity measures including the identification of projects and outcomes to assist in the delivery of the National Climate Objective. Carnmore, a residential area southeast of Sligo town was selected as the Decarbonising Zone for the county.

2.1.12 Evolution of the plan area in the absence of the Climate Action Plan

The SEA legislation requires that consideration is given to the likely evolution of the current baseline where implementation of the CAP 2024-2029-does not take place. In the absence of the CAP the

environment would evolve under the requirements of the current Sligo County Development Plan 2018 to 2024, and CDP 2024 -2030 once adopted.

Overall, this Climate Action Plan will be monitored and updated on an annual basis, with a review and revision every five years. Whilst the CDP-2024 -2030 will remain the primary landuse framework for the county, in the absence of the CAP, the detailed actions accompanied by targets and indicators will not allow for the annual measuring of progress in this area. This presents a lost opportunity to implement changes at local authority, and community level across the county.

Key actions relating to nature based solutions which offer a suite of positive environmental effects would not be implemented with subsequent opportunities lost to green up infrastructure, promote food security and enhance tree planting. Other actions such as peatland rehabilitation, targeted energy efficiencies and risk assessment would be omitted. At county level, the local authority would be less likely to contribute to continue to the reduction in carbon emissions associated with their fleet, lighting and buildings. Promoting regional or inter county actions relating to public transport, walking and cycling may be less effective in the absence of this action plan.

2.1.13 Inter-relationships

Environmental sensitivity mapping was prepared to inform the overall assessment of the CAP and to aggregate different environmental themes to help identify areas of greater and lesser environmental sensitivity. The key datasets used to inform this sensitivity mapping are shown in the ESM map in **Figure 2.2**



FIGURE 2-2 COUNTY ENVIRONMENTAL SENSITIVITY MAP

Biodiversity, flora and fauna Weight: 2 Variables: Margaritifera Sensitive Areas, Natural Heritage Areas, Special Areas of Conservation, Special Protection Area

Cultural Heritage Weight: Variabi

pulation and Human Health Weight: I Variables: WED RPA Groundwater Drinking Water, WFD RPA Surface Water Drinking Water (Lakes), WFD RPA Surface Water Drinking Water (Rivers) Soils and Geology Weight: I Variables: Peet Bogs

Water Weight: 2 Variables: Aquifer Vulnerability, Wetlands, WFD Groundwater Status, WFD Lake Status, WFD River Status

Air & Climactic Weight: 2 Variables: Flood Extents Current Scenarios (Coastal 10 Year and Fluvial 10 Year) (High)

3 Consideration of Alternatives

The SEA Directive requires that reasonable alternatives be assessed to demonstrate how the preferred strategy performs against other forms of action. Alternatives must be developed, described and assessed within the SEA process, with the results presented in the Environmental Report.

- Alternative 1 Prioritise reducing GHG emissions from largest GHG emitting sectors in the County 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 Following the evaluation and assessment of the alternatives above against the SEOs, the preferred strategic alternative for the approach to the CAP 2024 -2029 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 a number of SEOs.

4 Assessment of significant environmental effects

A summary of the significant environmental effects are shown below in Table 4.1 The SEA ER also considered in combination effects across other plans and programmes and within plan elements.

TABLE 4-1 SUMMARY OF SIGNIFICANT ENVIRONMENTAL EFFECTS

Торіс	Discussion
Population	Many of the actions identified in the CAP give rise to medium to term positive effects
and human	on population and human health both by responding and adapting to the impacts of
health	climate change, and also reducing greenhouse gas emissions through a series of
	measures.
	Reflecting the opportunity for co-benefits of the CAP, measures around energy
	efficiency and retrofitting plus renewable energy opportunities can help address fuel
	poverty in relation to vulnerable individuals as well as the chance to reuse energy from
	within the local area, for example
	. 10 Ensure that the Social Housing Retrofitting Program is completed each year,
	and expanded where possible.
	11 Identify potential energy saving initiatives that can be applied to social housing
	stock and carry out pilots before extension to all stock
	16 Continue to work with Sligo SEC partners on exploring the potential for developing a
	green gus network und u biogus jucility in singo. Reflecting key objectives in the Draft Slige CDR 2024-2020 and the proparation of a
	Local Transport Plans for the Sligo City) the CAP will support and encourage a modal
	chift in transport hy expanding the walking and cycling network, making walking and
	cycling safer and encouraging and promoting greater engagement and awareness
	raising in relation to walking and cycling and promoting behavioural change: for
	example see Action 38 Develop Sustainable Travel Mobility Hubs and promote shared
	mobility solutions that will allow for the move away from private car ownership
	······································
	Interactions between active travel support in the CAP, the draft CDP, LPT will support
	modal shifts, in terms of making walking and cycling safer and more attractive on daily
	basis.
	Addressing GHG emissions from the Transport and Residential sectors as the above
	actions do have accompanying positive impacts in terms of local air quality and
	therefore on human health. In addition, the impact of particulate matter and other
	airborne particles extend beyond human health to the entire terrestrial and aquatic
	environment (Tositti et al., 2018 ³).
	In the absence of mitigation, whilst the current Sligo CDP 218-2024 and draft CDP
	2024-2030 policies will apply there could be adverse environmental effects around
	capacity building, training, embedding nature based solutions that can provide co
	benefits across many environmental resources, subject to robust assessment and
	aesign.
	These could result in localised and supergistic impacts on parameters including sultural
	heritage landscape that may affect population and human health. Equally group
	infrastructure measures narticularly at sensitive locations such as coastal babitats can
	impact sense of place landscape character as well as cross cutting adverse effects
	such as coastal squeeze
	Encouraging and accessing local knowledge and capacity is provided for within the CAP
	but additional recommendations are made in this regard based on supporting nature

³ Particulate pollution and its toxicity to fish: An overview ,Gokul, Ramesh Kumar, Prema, Arun, Paulraj, Faggio. Comparative Biochemistry and Physiology Part C Vol:270. 2023.

TOPIC	Discussion
	based solutions and referencing recent EPA research on coastal resilience and communities (<i>see Action 20</i> Continue to monitor coastal erosion along Sligo shoreline and maintain existing sea defences
Biodiversity, Flora and Fauna	The promotion of a nature based measures and resource management in particular along with blue and green infrastructure actions all strengthen overall protection of biodiversity resources and the Biodiversity SEOS. <i>Action</i>
	based solutions, and implement actions, including the establishment of an annual native tree planting programme, over lifetime of LACAP- this is recommended for additional mitigation to provide greater clarity and support for tree planting in appropriate locations and of appropriate mixes, to avoid indirect or direct loss of habitat that is important for a range of species including birds.
	Actions in particular those under Action 30 (Biodiversity plan)are identified as positive for BFF as well as interacting positive across other SEOs namely soil, water, air, climate change with indirect positive effects and direct positive effects on population and human health and material assets. Mitigation is recommended to further support and strengthen protection of habitats and species for these actions.
	In relation to other actions, such as those relating to landuse such as transport and Decarbonising zone of Carnmore existing mitigation in the Sligo CDP current and Draft would apply at development management and consenting, mitigation is recommended for a number of actions to emphasise focus on nature based solutions and co benefits as well as a number of new additional actions to align the actions closely with environmental and ecological assessments generally and the CDP in particular.
	Walking and cycling actions, if they were to take place on or near sensitive habitats or species vulnerable to disturbance would give rise to adverse effects. However, the existing environmental protection provisions in the CDP will apply and provide sufficient mitigation measures In addition mitigation measures are recommended for a number of these actions.
Water resources	 Potential effects on water resources (and frequently biodiversity) in the absence of mitigation include: Surface water runoff from impermeable surfaces leading to reduced water quality in groundwater springs or surface waters affecting qualifying habitats and species downstream(impacts can range from short to long term); Changes in the flow rate of watercourses arising from an increased footprint of impermeable surfaces within the Plan area - increasing the extent of impermeable surfaces will result in a decrease in infiltration and an increase in runoff; Generally, land use practices can result in water quality impacts and whilst surface water impacts may be identified quickly, impacts to groundwater can take much longer to ascertain due to the slow recharge rate of this water resource; Water quality impacts can also have human health impacts in the case where bacterial or chemical contamination arises. Pressures and impacts on material assets from climate change such as flooding with damage to wastewater treatment facilities or water supply is particularly relevant in this regard. The Sligo CDP 2017 -2023 (extended) and Draft CDP, already include a range of provisions and measures to address and minimise the above effects, including measures around green and blue infrastructure such as <i>OB D2 Prepare and support the implementation of a Green laferstructure Strategy for County Sligo</i>. flood risk

Торіс	Discussion
	management and development control as well as adaptation measures that support nature based solutions. The CAP however further enhances and strengthens these through the flood resilience actions and nature based solutions in particular. Implementation of the Biodiversity Plan for the County create positive interactions for Water SEOS as well as cross cutting other SEOS in a positive manner. A key focus on the actions should be to prioritise Nature Based solutions and learn from other relevant case studies and examples from Ireland and with EU that have demonstrated excellent outputs that provide co benefits. See for example the Compendium of Nature Based Solutions (2020) – Green Cities for Climate and Water Resilience, Sustainable Economic Growth, Healthy Citizens and Environments - <u>Compendium of nature-based and 'grey' solutions - GrowGreen (growgreenproject.eu)</u> Measures around nature based solutions, creating long term direct positive effects on water resources, as well as soil and biodiversity, population and human health. The action is recommended for mitigation to further detail and strengthen overall environmental protection.
Soil and Geology	Soil quality and function may be enhanced through particular measures associated with flood resilience, nature based solutions and resource management in particular. The carbon sequestration function of soil and healthy soil quality are extremely significant, across several environmental parameters but in particular for agriculture which amounts to 45% of the GHG emissions at county level.
	Support for the circular economy in particular around food waste, local food production is also positive, particular if composting can be applied to enhance soil function. Action 3: Support & implement the objectives and actions of the National Waste Management Plan for a Circular Economy, as they relate to Sligo A number of the measures relating to soil are identified for mitigation via NBS, to further strengthen the environmental performance of these actions.
Air Quality and Climate	Overall, the CAP will contribute positively to climate change adaptation, and mitigation through the actions as well as the KPIs included in the plan that will allow robust monitoring of actions. In summary, actions relating to nature based solutions give rise to increased surface water storage and potential carbon sequestration with accompanying co benefits across most SEOS in particular landscape, population and human health, air quality, water and soil and biodiversity. These are dependent on such green and blue infrastructure resources (existing) being understood and surveys, with interventions underpinned by scientific and robust evidence base. The SEA and AA has recommended additional text for certain actions to increase the focus on Nature based solutions.
	The focus on energy efficiency and innovation as seen through the actions identified in the CAP, examples include Action 1Implement ISO 50001 Energy Management System across the entire organisation to continually improve energy management standards & performance to achieve the 2030 targets (50% energy reduction & 51% GHG emission reduction from a 2016-2018 baseline). Other related measures including key measures relating to behavioural change around transport and the increase in walking/cycling and public transport measures are essential in addressing transport emissions over the lifetime of the CAP and beyond. The support and actions in the Carnmore DZ will facilitate peer to peer learning amongst communities and demonstrate successful actions at community and local
	scale. Recognising the ecosystems functions of soil, water and biodiversity is a key element in the Nature Based solutions theme and is an important acknowledgement that also provides for positive effects across a number of SEOs.

Topic	Discussion
Material Assets	Many of the measures provide for mitigation and adaptation with a view to minimising adverse effects of climate change on material assets, and also responding and facilitating behavioural and modal change in energy use and transport. Examples of these include the following:
	Unlike natural gas, which is extracted from the ground, green gas is man-made. It is obtained by purifying obtained from the transformation of organic matter by bacteria. Green gas is therefore a renewable, sustainable energy that can be used in exactly the same way as natural gas. Action 36:Deliver on existing multi-annual Active Travel programme and continue to work for future expansion of the network
	Promotion of nature based solutions and SuDs
	Climate proofing local authority actions
	 Actions relating to energy efficiency, renewable energy and circular economy are also identified as generating positive, long terms effects, being consistent with Material Asset SEOS, as well as soil and geology and accompanying positive medium term effects on population and human health and water, biodiversity.
Cultural	Archaeology and Built heritage features are present throughout the plan area, and in
Heritage	 particular those archaeological or built heritage features associated with the coastline may be particularly vulnerable to climate change effects. The concentration of built heritage features and historic settlements on the coastline increases their vulnerability to the effects of climate change. Cultural heritage is not often considered or captured adequately in coastal zone management planning and this can give rise to adverse effects on cultural heritage, for example: Overlooking cultural resources can result in loss of cultural identity associated with certain habitats; loss of tourism, recreational and educational opportunities; decline in local ecological knowledge, skills and technology pertaining to habitat management; and loss of opportunities for social and cultural capital⁴ Action18Identify & register heritage sites that are at risk from climate related weather events supports the data collection and should inform targeted responses to address sites at risk. This should interact with policies in the Draft CDP as well as support for adaptive reuse/ reuse of existing buildings. Research and risk assessment is important to ensure cultural heritage assets (tangible and intangible) are identified and managed with sensitive interventions to the fabric of the tangible cultural heritage feature.
Landscape	Long term positive effects are identified for the CAP and landscape primarily through the nature based solutions, green and blue infrastructure, increased tree planting etc. Many of the measures in the CAP require a landscape level response such as recognition of green and blue infrastructure and corridors and this an important approach to take when responding to climate change. Overall, positive effects identified for Landscape SEOs, as landscape change can be considerable with climate change effects in terms of changing water levels, habitat
	change, it ansport measures and adaptation measures such as hood fisk management.

⁴ Coastal cultural heritage: A resource to be included in integrated coastal zone management <u>SornaKhakzad^aMarnixPieters^bKoenraadVan Balen^c</u>

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Торіс	Discussion
	An increase in blue and green infrastructure, public realm and permeability would all create long term positive effects for the Landscape SEOs. Mitigation measure are recommended for a number of actions to strengthen consideration of landscape.

5 Mitigation measures

Mitigation measures that will prevent, reduce, and offset as much as possible any significant adverse effects on the environment of the plan area resulting from the implementation of the CAP. Mitigation involves ameliorating significant negative effects. Where the environmental assessment identifies significant adverse effects, consideration is given in the first instance to preventing such impacts or where this is not possible, to lessening or offsetting those effects. Mitigation measures can be generally divided into those that:

- Avoid effects;
- Reduce the magnitude or extent, probability and/or severity of effect;
- Repair effects after they have occurred, and
- Compensate for effects, by balancing out negative impacts with positive ones.

There are many environmental protection measures in the draft Sligo County Development Plan 2024-2030 that will apply and provide appropriate environmental protection and mitigation, and the SEA and AA processes identified additional mitigation measures. Examples of the mitigation measures to the CAP actions identified through the SEA and AA assessments are presented below in Table 5.1

Action No.	Action Description
new action	In implementing this County Sligo Climate Action Plan, ensure compliance with forthcoming Sligo County Development Plan 2024-2030 and current CDP 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.
new action	Sligo County 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.
new action	Sligo County 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.
14	Ensure all public lighting is retrofitted to low energy lamps and that the system is monitoring and managed to maximise energy efficiency with due regard to impacts on biodiversity
20	Continue to monitor coastal erosion along Sligo shoreline and maintain existing sea defences considering application of nature based solutions and in line with conservation management objectives of European Sites.
21	Convene a Flooding Working Group to improve local flood protection (maintenance) and enhanced flood response (required resources). Examine areas where sustainable urban drainage systems (SUDS) and nature based solutions can be considered.

TABLE 5-1 EXAMPLES OF MITIGATION MEASURES IDENTIFIED THROUGH THE SEA AND AA PROCESS

27	Support and participate in regular public events that will improve awareness around the impacts of climate change and ways that we can adapt. Work with PPN to identify relevant topics & communities with a key focus on message and communicating to vulnerable groups
Action	Action Description
No.	
30	Develop a Biodiversity Action Plan for Co. Sligo which addresses all of the relevant climate related issues, supports green and blue infrastructure, nature based solutions, integrates biodiversity considerations to new and existing developments, supports wildlife corridors and identification & implement appropriate actions. The implementation of the Biodiversity Plan will be underpinned by ecological surveys and assessments to ensure interventions are appropriate to the receiving environment.
31	Develop a register of Council owned properties that may be used for Nature based solutions, and implement actions, including the establishment of an annual native tree planting programme, over lifetime of LACAP that targets planting in appropriate place with appropriate planting mixes.

6 Monitoring

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.

It is recommended that data arising from planning applications, particularly in terms of environmental constraints mapping and Environmental Impact Statements be integrated into the GIS and monitoring system. This will assist in assessing cumulative impacts also, in particular ecology and water quality.

This Climate Action Plan will be implemented by Sligo County Council. Implementation of the LACAP 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 County Development Plan should cross reference and integrate the KPIs identified for the CAP 2024 -2029.

Key implementation and reporting activities that Sligo County 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.

Table 6.1 presents the monitoring table.

Biodiversity Flora andCondition of European sitesRequire all local level land use plans to includeDHLGH report of the implementation of theWhere condition of European sites is found to beFaunaincluded ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted SEAs and AAs as relevant for new Council policies, plans, programmes etc.number of spatial plans that have providing for the protection of Biodiversity and flora and fauna – see Chapter 24 "Natural HeritageRequire all local level land use plans to includeDHLGH report of the implementation of the measures contained in the Habitats Directive - as provisions in their land use plans required by Article 17 of the plans, programmes etc.Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the provisions in their land use plans relevant for new Council policies, plans, programmes etc.Number of spatial plans to include grean sites, other nature conservation sites, ecological metworks, and protected species providing for the protection of Biodiversity and flora and fauna – see Chapter 24 "Natural HeritageRequire all local level land use plans to include ecosystem plans to include ecosystem provisions in their land use oplans in their land use plans included under Water below linternal monitoring of likely internal monitoring of likelyWhere condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the portective (every 6 years) 109 are related to Plan neasures providing for the protection of Biodiversity and flora and fauna – see Chapter 24 "Natu	Торіс	Target	Indicators	Sources	Remedial Actions
minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as	Topic Biodiversity Flora and Fauna	Target Condition of European sites Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 24 "Natural Heritage	Indicators Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Sligo Local Biodiversity Action Plan Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Sligo Local Biodiversity Action Plan Screen for and undertake SEA and AA as relevant for new Council policies plans	Sources DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years) 109 DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years) Consultations with the NPWS Internal review of local land use plans Internal monitoring of preparation of local land use plans Included under Water below Internal monitoring of likely significant environmental effects of grants of permission	Remedial Actions Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Review internal systems Review internal systems Included under Water below Review internal system
			Biodiversity Action Plan Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below		

Торіс	Target	Indicators	Sources	Remedial Actions
		For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 24 "Natural Heritage"		
Population	Implementation of Plan measures	For review of progress on	CSO data	Review internal system
and Human Health	relating to the promotion of economic growth as provided for by Chapter 7 "Economic Strategy" and Chapter 28 "Economic Development" Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan Proportion of people reporting regular cycling / walking to school and work above previous CSO figures Number of spatial plans that include specific green infrastructure mapping	 implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 7 "Economic Strategy" and Chapter 28 "Economic Development" No spatial concentrations of health problems arising from environment Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures Require all local level land use plans to include specific green infrastructure mapping. 	Monitoring of Sligo County Council's Climate Change Adaptation Strategy 2019- 2024 and new CAP 2024 -2030 KPIs Internal review of local land use plan	Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response
Soil and	Proportion of population growth	Maintain built surface cover	EPA Geoportal	Where the proportion of growth on
Geology	occurring on infill and brownfield	nationally to below the EU	Compilation of greenfield and brownfield development for	infill and brownfield sites is not keeping pace
	relevant to Material Assets)	In accordance with National	the DHLGH	with the targets set in the NPF and
	, Instances where contaminated	Policy Objectives 3c of the	AA/Screening for AA for each	the RSES, the Council will liaise with
	material generated from	National Planning Framework, a	application	the Regional Assembly to establish
	brownfield and infill must be	minimum of 30% of the housing	Internal review of grants of	reasons and coordinate actions to
	disposed of Environmental	growth targeted in any	permission where	address constraints to doing so.

Торіс	Target	Indicators	Sources	Remedial Actions
	assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	settlement is to be delivered within the existing built-up footprint of the settlement To map brownfield and infill land parcels across the County Dispose of contaminated material in compliance with EPA guidance and waste management requirements Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission	contaminated material must be disposed of Internal monitoring of grants of permission	Consultations with the EPA and Development Management Review internal system
Water	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD Number developments permitted within flood risk areas	Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	PA Monitoring Programme for WFD compliance Internal monitoring of likely significant environmental effects of grants of permission	Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.

Торіс	Target	Indicators	Sources	Remedial Actions
				Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	Programmed delivery of Uisce Assets Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – in- combination with other septic tanks– contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and infrastructure wastewater See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health Increase in the proportion of people reporting regular cycling /	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Uisce Éireann DHLGH in conjunction with Local Authorities SO data Monitoring of Sligo County Council's Climate Change Adaptation Strategy 2019- 2024 and new CAP 2024 -2030 KPIs	Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity. Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.

Торіс	Target	Indicators	Sources	Remedial Actions
		walking to school and work above previous CSO figures		
Air	Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NOx, SOx, PM10 and PM2.5 as part of Ambient Air Quality Monitoring	Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NOx and particulate matte	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and DECC	Where proportion of population shows increase in private car use above Previous CSO figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above
Climate Change	Implementation of Plan measures relating to climate reduction targets A competitive, climate-resilient environmentally economy Share of renewable energy in Transport Energy consumption, the uptake of renewable options and solid fuels for residential heating Proportion of journeys made by private fossil fuel-based car compared to previous level Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets – including the legally binding targets of the Climate Action and Low Carbon Development) Act 2015, as amended, for Ireland to reach a target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). Decrease in the proportion of journeys made by residents of the County using private fossil	CSO data Monitoring of Sligo County Council's Climate Change Adaptation Strategy 2019- 2024 and new CAP 2024 KPIs Consultations with DECC	Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Atlantic Seaboard Climate Action Regional Office to establish reasons and develop solutions. Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response

Торіс	Target	Indicators	Sources	Remedial Actions
		fuel-based car compared to previous levels Share of renewable energy in transport Targets Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures		
Cultural Heritage	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan. Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan.	Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission Internal monitoring with DHHLG	Where monitoring reveals visitor pressure is causing negative effects on key tourist features along these routes, the Council will work with Regional Assembly, Fáilte Ireland and other stakeholders to address the pressures through additional mitigation tailored to the plans
Landscape	Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re- examine Plan provisions and the effectiveness of their implementation