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ENVIRONMENTAL SCIENCE &
PLANNING

CORK CITY COUNCIL ELECTRIC VEHICLE CHARGING STRATEGY

Strategic Environmental Assessment Environmental Report

Prepared for:
Cork City Council



Comhairle Cathrach Chorcaí
Cork City Council

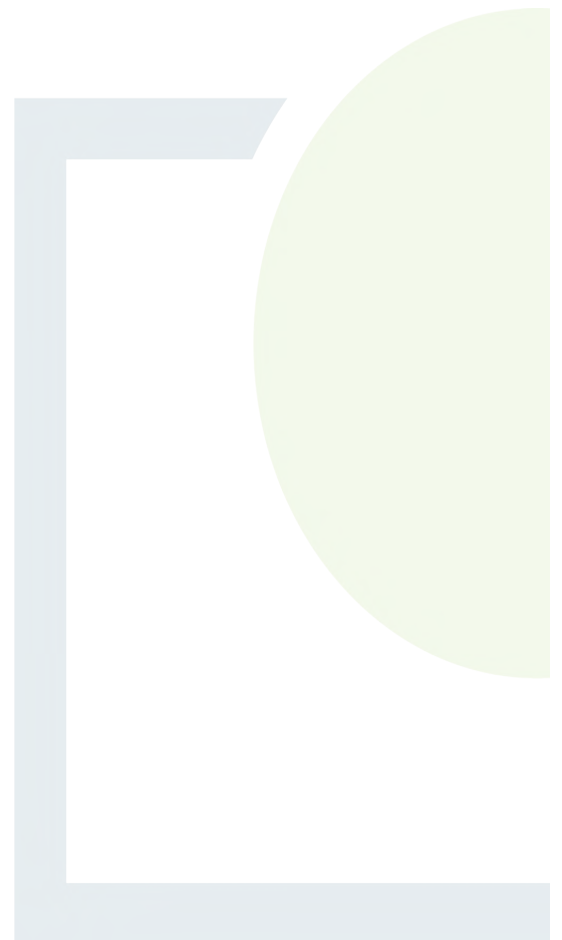
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Strategic Environmental Assessment Environmental Report for the Cork City Council Electric Vehicle Charging Strategy

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NON-TECHNICAL SUMMARY

Introduction

This is the non-technical summary of a draft version of the environmental report for the Strategic Environmental Assessment (SEA) of the Cork City Council (CCC) Draft Electric Vehicle (EV) Charging Strategy (herein referred to as 'the Draft Strategy'). The purpose of this SEA is to identify and evaluate the likely significant environmental effects of implementation of the Draft Strategy.

Background

The CAP 2023 has set targets for a 50% reduction in transport emissions by 2030. This includes a 20% reduction in total vehicle kilometres, a reduction in fuel usage, and significant increases to sustainable transport trips and modal share. It acknowledges that fleet electrification and use of biofuels will provide the greatest share of emissions abatement in the medium term, requiring 30% of the private car fleet to be electrified by 2030. The CAP supports regional and local authorities with the development of EV Network Plans, and that these plans should be aligned with the adopted national Electric Vehicle Charging Infrastructure Strategy 2022-2025.

In response, CCC has prepared the Draft Strategy for the functional area of Cork City. The Strategic Environmental Assessment (SEA) Screening of the Draft Strategy has determined that it should be subject to full SEA.

Approach to SEA

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public. These stages are defined as:

- Stage 1 – Screening: deciding whether a SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

The SEA process generally runs in parallel with the Appropriate Assessment (AA) process, which is an assessment process focusing on the potential effects of a plan or project on sites designated for nature protection known as 'European Sites'. In this instance, AA Screening concluded that the Draft Strategy is not likely to have any significant effects on European sites, alone or in combination with other plans or projects, however. Consequently, a Stage 2 AA is not required for the Strategy.



The Draft Strategy

The Draft Strategy will provide for the delivery of publicly accessible electric vehicle charging infrastructure in Cork City to deliver the substantial reductions in transport GHG emissions to meet the statutory 2030 target. The Draft Strategy will demonstrate alignment with EU and national climate action policy and targets, particularly in relation to a reduction of transport sector GHG emissions.

The Draft Strategy will make recommendations with respect to the different types of charging infrastructure required and its spatial distribution within Cork City. The Draft Strategy has identified a first wave of infrastructure investment to be designed and constructed up to 2025 which will subsequently be monitored and analysed to refine the delivery of subsequent waves of investment.

The Draft Strategy will primarily focus on the delivery of residential neighbourhood charging infrastructure which can be further broken down into two types of charging facilities:

- **Neighbourhood Charging Stations:** These charging stations are typically normal speed installations with a total charging speed of 22kW shared between 2 charge points at each charging station.
- **Community Charging Stations:** These are fast charging stations with a total charging speed of between 50kW and 150kW shared between 2-4 charge points

The Environmental Baseline

An evaluation and a characterisation of the current state of the environment likely to be affected by the Draft Strategy has been undertaken to inform the SEA process.

The following Environmental Components were considered during this evaluation:

- Population & Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeological & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

A non-technical and high-level summary of the baseline environment is provided in the table below. This table presents key salient facts regarding the baseline environment of the functional area the Strategy applies to.



Environmental Component	Summary of the Baseline Environmental Characteristics
Population & Human Health	<p>In the 2022 Census, the total population of Cork City was 224,004 persons.</p> <p>Cork City is identified by the Southern Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 as being part of the Cork Metropolitan Area. The transitional population projection for the Cork Metropolitan Area until 2031 is 408,826 persons.</p>
Biodiversity, Flora & Fauna	<p>There is 1 designated SPA partially within the Strategy area; Cork Harbour SPA (004030).</p> <p>There is 1 designated Ramsar site partially within the city boundary; Cork Harbour.</p> <p>There are 11 pNHAs within or partially within the City, of which include: Lee Valley, Shournagh Valley, Blarney Castle Woods, Douglas River Estuary, Glanmire Wood, Cork Lough, Dunkettle Shore, Ballincollig Cave, Blarney Lake, Ardamadane Wood and Blarney Bog.</p> <p>12 TPOs within the City have been identified within the City Development Plan.</p> <p>There are 3 designated Flora Protection Order Sites in the City; near Cork City (Bryum intermedium), Cork City (Scleropodium touretii) and Blarney (Entosthodon muhlenbergii).</p> <p>There is 1 Wildfowl Sanctuary within the City: The Lough (WFS-12).</p> <p>The River Lee is a protected salmonid water.</p> <p>The most dominant land cover type is urban.</p>
Landscape, Seascape and Visual Amenity	<p>The landscape of Cork City is formed by a unique set of natural and built elements that have evolved over time. The distinctive ridgelines and topography to the north of the city are formed by the lower ranges of the Boggeragh Mountains to the north-west and the Nagle Mountains to the north. The southern ridges belong to the Shehy Mountains, the peaks of which lie to the east of County Cork. The rivers Lee and Sulhane merge around Macroom to the west of the county, and flow east along the post-glacial valley into the Lee proper, through Cork City, into Lough Mahon, Cork Harbour and south into the Atlantic Ocean.</p> <p>The Cork City Council Landscape Study (2008) divides the city into 8 Landscape Character Areas.</p> <p>There are 11 Areas of High Visual Amenity in Cork City.</p>
Cultural Heritage - Archaeological & Architectural	<p>There are 60 archaeological sites within Cork City Centre including standing stones and medieval walls and c. 400 entries to the RMP within the surrounding towns, villages and hinterland. Churches, houses, distilleries, factories and graveyards are amongst the most common recorded monuments and sites of significant archaeological, historic and cultural importance include St. Francis' Well, Skiddy's Castle, and Sunday's Well. Clusters of archaeological heritage are concentrated around the City's historic core and within the centres of other settlements in the Strategy area.</p> <p>The City's historic core consists of the Medieval City and Georgian City with many sites of significant archaeological interest. Cork City Centre is also designated a Zone of Archaeological Potential.</p> <p>There are hundreds of entries to the RPS within the City, which include many notable buildings such as: St. Fin Barre's Cathedral, Elizabeth Fort and City Hall. Cork City has an important vernacular heritage with many important historic buildings and structures. Historic Street Character Areas are designated within Cork City and consist of groups of buildings with architectural and social interest.</p>
Soils	<p>Dominant soil types in the country include Urban Soils and Brown Earth Soils.</p> <p>Other soils include Alluvial Soils, Gleys, and Brown Podzols.</p>
Land Use	<p>Land use mapping for Cork City is shown in Figure 4-9 of the main body of the report. This mapping shows the extent of all land use present in the city area (e.g., urban fabric)</p>
Air Quality & Noise	<p>The Cork City conurbation is defined as 'Zone B' out of the four zones in Ireland. There are six monitoring stations within the city boundary.</p> <p>The current air quality in Cork City is identified by the EPA as being of Good status.</p> <p>Existing noise related impacts can be seen in Figure 4-10 of the main body of the report.</p>
Water	<p>The city is located mainly within the Lee River and Cork City Harbour catchments. The Celtic Sea lies on the west of the city's coastline. The WFD status of coastal water bodies (2016-2021) for Cork City Harbour is of moderate status and the Celtic Sea is identified as being of high status.</p>



Environmental Component	Summary of the Baseline Environmental Characteristics
	<p>The WFD groundwater status (2016-2021) underlying Cork City is generally identified as being of good status.</p> <p>The WFD status of rivers and streams (2016-2021) draining Cork City ranges from good (sections of rivers and streams, including Moneygurney and Lee to moderate (sections of rivers and streams including: Curragheen) and to poor (sections of rivers and streams including: Bride and Glasheen).</p> <p>Cork City is located on the south coast of Ireland, and some of the Strategy boundary is subject to flood risk from the Celtic Sea.</p>
Material Assets	<p>Material assets include transport infrastructure, power generation plants and supply networks, water supply, wastewater treatment infrastructure and waste disposal sites among others. Potential opportunities and conflicts associated with these assets will be considered in the SEA. Other material assets covered by the SEA include archaeological and architectural heritage and natural resources of economic value, such as soil, air and water.</p> <p>Cork City is traversed by a number of major roads – the M8/N8, N22, N20, N27, N28, N40 and the N71. The City is served by the intercity commuter train services and local connections to metropolitan commuter towns.</p>
Tourism and Recreation	<p>Cork City hosts ‘Wild Atlantic Way’ and the success of the brand strategy will result in infrastructure demands to previously less trafficked areas. Cork City Council has developed the Visit Cork Sustainability Strategy (2023-2030). Cultural Heritage sites in Cork City. also support heritage-related tourism and recreation</p>
Climate Change	<p>Cork City is affected by climate change policy and issues broadly.</p> <p>The recent Climate Action and Low Carbon Development (Amendment) Act 2021 was established to provide for the approval of plans by the Government in relation to climate change. This aims at pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050. Ireland’s Climate Action Plan 2023 sets out Ireland’s national and sectoral targets in this regard.</p> <p>Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland.</p>

Section 4 of the main body of the Draft SEA Environmental Report contains further detail on baseline environmental characteristics, including a variety of details environmental mapping, for those who wish to develop a more in-depth understanding of the environmental baseline. Section 7 of the main body of the Draft SEA Environmental Report contains a summary of the evaluation of the environmental effects of the implementation of the Draft Strategy, including a summary of the various positive impacts, negative impacts, and cumulative impacts associated with Draft Strategy implementation.

Evolution of the Baseline Environment

The SEA Directive requires that consideration is given to the likely evolution of the baseline environment in the event the Strategy is not progressed and implemented. In the event the Strategy is not implemented; the baseline environment in Cork City would primarily evolve in line with local plans and policies currently being implemented for the area (e.g., the Cork City Development Plan 2022-2028, the Cork City Local Authority Climate Action Plan 2024 - 2029, the Cork City Heritage and Biodiversity Plan).



These local plans and policies are predicted to align with high-level policy defined in the national plans such as the National Planning Framework or the national Climate Action Plan (CAP24), and regional policy defined in the Southern Regional Spatial & Economic Strategy, for example. These higher order plans are predicted strongly influence the land use planning framework and environmental conditions in Cork City. These plans will support the transition to a low-carbon and climate-resilient society generally, including the transition to alternative fuel vehicles in particular, active travel development, compact growth and transport sector decarbonisation.

Traffic and transport conditions in Cork City will evolve in line with the Cork Metropolitan Area Transport Strategy 2040 which aims to deliver an accessible, integrated transport network in the Cork Metropolitan Area. This Strategy supports a variety of sustainable transport and travel initiatives such as the development of transport mobility hubs and strategic park and ride facilities.

Not progressing the more focussed and local area specific set of EV charging infrastructure development proposals defined in the Draft Strategy would present several significant lost opportunities. The Draft Strategy provides a greater degree of focus and specificity in relation to the development of EV charging infrastructure in Cork City. A variety of likely positive environmental effects associated with the Draft Strategy implementation would not come to fruition (e.g., the better facilitation of a reduction in Internal Combustion Engine (ICE) based vehicle greenhouse gas (GHG) emissions, improvements in local air quality conditions). A number of potential adverse effects associated with the existing baseline scenario are more likely to continue to occur (existing ICE based vehicle emissions may be maintained or reduced more gradually in the context of Cork City - resulting in ongoing impacts on climate and local air quality). The likelihood of exceedances of ambient air quality standards in the City due to vehicle emissions in congested areas would be greater as a result.

In the event none of the proposals defined in the Draft Strategy are implemented, the expansion of the EV network in the city will have less express policy support. Promoting and facilitating a shift from ICE-based vehicle use to the use of electric vehicles in Cork City will have less express policy support.

Strategic Environmental Objectives

The SEA Directive states that an SEA should also look at *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'* The identification of environmental protection objectives relevant to a plan provide the basis for evaluating the significance of impacts during the SEA process. All environmental protection objectives relevant to the Strategy have been identified.

Strategic Environmental Objectives (SEOs) are methodological measures which facilitate the development of targets against which the environmental effects of the Draft Strategy can be tested. SEOs are based on wider environmental protection objectives on local, regional, national, European and international level that are relevant to the Draft Strategy. They are high-level in nature and set strategic goals for environmental protection and improvement.

All SEOs applicable to the Strategy are presented in the table below.



Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within Cork City.
Population & Human Health	PHH1	Avoid or minimise impacts to population and human health.
	PHH2	Ensure Electric Vehicle infrastructure avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure supported development does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with all legislation underpinning biodiversity and nature conservation in Ireland, including the Wildlife Acts 1976 to 2023.
	B3	Avoid impacts on features of the landscape which - by virtue of their linear and continuous structure or their function as 'stepping stones' (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources at important sites, including locally important sites.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid impacts on valued natural, cultural and built landscape, townscape, seascape and visual amenity.
Cultural Heritage - Archaeological & Architectural	CH1	Avoid impacts upon or conflicts with archaeological heritage (including entries to the RMP), architectural heritage (including entries to the RPS and NIAHs), cultural heritage and the historic environment generally.
Land Use	LU1	Avoid or minimise effects on existing land use.
	LU2	Avoid conflict with potential future land use, having regard to the Cork City Development Plan 2022 - 2028 and other relevant land use policy.
Air Quality and Noise	AQN1	Support compliance with Ambient Air Quality Standards, especially in the context of the urbanised, densely populated and well trafficked environment of Cork City centre.
	AQN2	Reduce the impact of Internal Combustion Engine based vehicles on ambient air quality in Cork City.
	AQN3	Avoid the occurrence of noise and dust nuisance during Electric Vehicle Charging Infrastructure development works.
Material Assets	MA1	Improve the level of Electric Vehicle Charging Infrastructure in Cork City.
	MA2	Support the transition to zero or low carbon Electric Vehicles in Cork City.
	MA3	Avoid impacts on the electricity grid. Deliver Electric Vehicle Infrastructure in harmony with grid infrastructure improvements.
	MA4	Avoid or minimise effects on current and planned transport infrastructure and traffic conditions.
	MA5	Avoid or minimise effects upon existing and (where known) planned water and gas infrastructure.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.



Environmental Component	SEO Code	Strategic Environmental Objective
Climate Change	CF1	Support in the achievement of the national target of a 50% reduction in transport Greenhouse Gas emissions by 2030.
	CF2	Support reducing Cork City Council organisational Greenhouse Gas emissions by 51% in accordance with requirements of the Cork City Local Authority Climate Action Plan and the Public Sector Mandate defined in the national Climate Action Plan.
	CF3	Support in the delivery of Cork City Decarbonisation Zone objectives.

Description and Evaluation of Strategy Alternatives

The SEA Directive requires that reasonable alternative means of achieving the strategic goals of the Strategy (taking into account the objectives and the geographical scope of a plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Such reasonable alternatives must be realistic and capable of implementation. Reasonable alternatives were assessed against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the Strategy.

The underpinning goal of the reasonable alternative evaluation process was to ensure that the selection of preferred alternatives by the Local Authority is informed by environmental considerations.

The following reasonable alternatives to the Strategy were identified:

- a) Is it preferable to progress the expansion of the EV Charging Network in Cork City through the Cork City Development Plan 2022 - 2028 or through a dedicated EV Charging Strategy?
- b) Reasonable Alternatives for the Spatial Distribution of the EV Charging Network in Cork City
- c) Reasonable Alternatives for the EV Charging Strategy Delivery Timeframe.

An evaluation of the potential effects of the reasonable alternatives on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. A summary of this evaluation is presented below:

- a) Is it preferable to progress the expansion of the EV Charging Network in Cork City through the Cork City Development Plan 2022 - 2028 or through a dedicated EV Charging Strategy?
 - o It was determined that developing and adopting a dedicated, bespoke EV Charging Strategy was preferred over using the CDP to deliver the expansion of the EV charging network given that a dedicated Strategy would provide a greater degree of focus and specificity in relation to the development of EV charging infrastructure in Cork City. This would result in a more appropriately focussed, detailed and extensive Strategy and a more concentrated effort for delivery. This approach was predicted to be more likely to result in the development of a suitable EV charging network in Cork City, and, as a result, will better support the uptake in EVs, a reduction in the use of ICE-based vehicles and associated emissions, and a reduction in transport sector GHG emissions overall in Cork City. This approach is more likely to maximise potential positive environmental effects on material assets, climate, air quality and population and human health associated with the delivery of an expanded EV charging network in Cork City.
- b) Reasonable Alternatives for the Spatial Distribution of the EV Charging Network in Cork City.



- Seven reasonable alternative Scenarios were considered under this heading. Among the number of reasonable alternative spatial distribution strategies, Scenario 2 was determined to be the preferred Reasonable Alternative spatial distribution approach. Scenario 2 best aligns with potential EV charging requirements analysed and identified in by the national Electric Vehicle Charging Infrastructure Strategy 2022-2025. It is predicted that Scenario 2 will better accommodate universal access to EV charging infrastructure, an uptake in EVs in Cork City, and the realisation and maximisation of potential positive environmental effects associated with Draft Strategy implementation - on material assets, the climate environment, local air quality and population and human health.
- c) Reasonable Alternatives for the EV Charging Strategy Delivery Timeframe.
 - Two reasonable alternatives were considered under this heading. It was determined that a phased delivery of EV charging infrastructure across two delivery phases, 2023 - 2025 and 2025 - 2030, will align with predicted levels of EV uptake defined in Electric Vehicle Charging Infrastructure Strategy 2022-2025.

Evaluation of the Environmental Effects of Draft Strategy Implementation

A detailed evaluation of the potential effects of the preferred Draft Strategy on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. A concise and non-technical summary of the key environmental effects associated with Draft Strategy implementation is presented below. The potential negative effects presented assume the absence of the appropriate mitigation defined in this Non-technical Summary and in Section 8 of the main body of the Draft SEA Environmental Report.

- The evaluation is strategic and high-level in nature given the strategic nature of the Strategy.
- Environmental effects of the Draft Strategy have been described in accordance with descriptive terminology defined in the Environmental Protection Agency's guidance document entitled 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022).
- The evaluation considers all potential direct, indirect/secondary, cumulative¹, synergistic², short, medium and long-term, permanent and temporary, positive and negative environmental effects.
- The evaluation considers inter-relationships and interactions between one environmental component and another which can result in an environmental impact.
- The evaluation considers all potential environmental effects arising from unforeseen abnormal events.
- The evaluation considers potential transboundary effects.
- The potential environmental effects described are the potential effects that could occur in the absence of appropriate environmental mitigation.
- AA Screening concluded that the Draft Strategy is not likely to have any significant effects on European sites, alone or in combination with other plans or projects, however. Consequently, a Stage 2 AA is not required for the Strategy. This conclusion has appropriately informed the environmental effect analysis in accordance with Integrated Biodiversity Assessment principles.

¹ The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

² The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.



Mitigation Measures

Overview of Mitigation Measures

Potential negative environmental effects that may occur as a result of the implementation of the Strategy (without considering any mitigation) were identified.

The SEA Directive requires that mitigation measures to prevent, reduce and as fully as possible offset any potential significant negative environmental effects due to the implementation of a plan are defined.

Following the evaluation of the environmental effects of Draft Strategy implementation, the following forms of mitigation were adopted to ameliorate the negative environments of the Strategy:

- Mitigation through consideration of alternatives.
- Mitigation through integration of environmental considerations into the Strategy.
- Mitigation through consideration of development management standards/environmental protection objectives contained in the CDP.

Environmental considerations were appropriately taken into account during the Draft Strategy development process and when considering reasonable alternatives. The preferred Draft has been chosen on the basis that it will generate the maximum level of effects, and the minimum level of negative environmental effects.

The Draft Strategy development process was carried out in parallel with the SEA process. Regular communication and interaction took place between the environmental assessment team and the Draft Strategy development team. Environmental considerations that came to light during the SEA process, including consultation processes, were regularly communicated to the Draft Strategy development team during the Draft Strategy development process. As necessary, environmental mitigation measures to ameliorate the potential negative environmental effects of implementing the Draft Strategy were developed and then integrated into the Draft Strategy. This process ensured optimal Draft Strategy development and environmental outcomes. Environmental considerations were also integrated into the Draft Strategy so as to facilitate maximising identified positive environmental effects of the Draft Strategy.

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined proposals in the Draft Strategy. This text has been shaped to ensure that environmental considerations are appropriately taken into account during Draft Strategy implementation. This text has been shaped to ensure Draft Strategy implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects.

A set of additional environmental mitigation measures were also defined and integrated into a separate section of the Draft Strategy. These additional mitigation measures shall be adopted during the implementation of the Draft Strategy.

In addition to the environmental mitigation measures integrated into the Draft Strategy, the development management standards and environmental protection measures defined in the Cork City Development Plan 2022 - 2028 (CDP) will serve to mitigate the environmental effects of any development proposals supported by the Draft Strategy. These development management standards/environmental protection measures have been defined for the express purpose of ensuring proper planning and sustainable development in the local authority functional area. The CDP has been subject to its own SEA and AA. The Draft Strategy has been prepared having appropriate regard to the policies and objectives contained in the CDP.



Conclusions

The reasonable alternative evaluation has resulted in the development of a Draft Strategy that achieves the best environmental outcomes in comparison to other reasonable alternatives considered.

The adoption of the mitigation measures integrated into the Draft Strategy, in combination with the continued adoption of the development planning and control related environmental protection measures defined in the CDP will prevent, reduce and as fully as possible offset any potential negative environmental effects due to the implementation of the Draft Strategy. No further mitigation measures were required for the Draft Strategy.

Monitoring Measures

The SEA Directive requires that the environmental effects of the implementation of a plan are monitored in order 'to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action.'

A series of indicators and targets were established for identified SEOs to enable ongoing monitoring and measurement of Draft Strategy implementation performance, the environmental effects of the implementation of the Draft Strategy and the efficacy of environmental mitigation measures. Such monitoring will be carried out regularly to support Draft Strategy implementation.

SEO indicators are simple and effective quantifiable indicators used to measure the environmental effects of implementing the Strategy and the progress of SEO objectives and targets. SEO targets set focussed, measurable aims and thresholds that the Draft Strategy can support the achievement of.

A robust monitoring programme has been established for the implementation of the Draft Strategy.

Where monitoring identifies that the implementation of the Draft Strategy is having a significant negative environmental effect, an in-depth review of the Draft Strategy should take place and the Draft Strategy should be updated in a manner that satisfactorily mitigates these environmental effects (i.e., through the adoption of additional environmental mitigation measures). Similarly, where monitoring indicates that potential positive environmental effects associated with Strategy implementation are not being adequately realised, the Draft Strategy should be reviewed and updated in a manner that supports the realisation of all potential positive environmental effects, having regard to the overall vision and high-level objectives of the Draft Strategy.



1. INTRODUCTION

1.1 Background

The Climate Action and Low Carbon Development Act (as amended) provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (CAP), in which sets out actions that must be taken to commit Ireland to a target reduction of greenhouse gases (GHGs) by 51% by 2030 and to achieve net zero GHG emissions by 2050.

The CAP 2024 has set targets for a 50% reduction in transport emissions by 2030. This includes a 20% reduction in total vehicle kilometres, a reduction in fuel usage, and significant increases to sustainable transport trips and modal share. It acknowledges that fleet electrification and use of biofuels will provide the greatest share of emissions abatement in the medium term, requiring 30% of the private car fleet to be electrified by 2030.

The CAP supports regional and local authorities with the development of EV Network Plans, and that these plans should be aligned with the adopted national Electric Vehicle Charging Infrastructure Strategy 2022-2025³. The Cork City Development Plan has also set out a clear objective (Objective 5.22) in support of the rollout of electric vehicle (EV) charging infrastructure both on-street and within existing car parks, in addition to their inclusion in new development.

In response, Cork City Council (CCC) has prepared the Draft Electric Vehicle (EV) Charging Strategy for the functional area of Cork City.

The Strategic Environmental Assessment (SEA) Screening of the Draft Strategy has determined that it should be subject to full SEA.

1.2 Draft SEA Environmental Report

This document has been produced by FT and is the Draft SEA Environmental Report for the Strategy. It forms the main written output of the SEA process and as such presents information on the environmental assessment and likely environmental issues related to the implementation of the Strategy.

The broad purpose of this Draft SEA Environmental Report was as follows:

1. Identify, evaluate and describe the likely significant effects on the environment of the Draft Strategy and reasonable alternatives.
2. Inform the preparation of the Draft Strategy.
3. Provide environmental authorities and the public with an early opportunity to make submissions on a draft version of the Draft Strategy and its potential environmental effects - and incorporate changes where necessary to the Draft Strategy and SEA processes.

³ The Department of Transport published their Electric Vehicle Charging Infrastructure Strategy for 2022-2025, which is the framework for the delivery of electric vehicle (EV) charging infrastructure in Ireland to support the Climate Action Plan targets.



1.3 Background to SEA and Legislative Context

SEA was required under the EU Council Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive)⁴. The SEA Directive requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The overarching objective of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans....with a view to promoting sustainable development'*⁵

SEA is a process for evaluating, at the earliest appropriate stage, the environmental consequences of implementing Plan or Programme (P/P) initiatives prepared by authorities at a national, regional or local level or which have been prepared for adoption through legislative means.

SEA is described within the Department of the Environment, Community and Local Government's (2004) Guidelines for Regional Authorities and Planning Authorities on the Implementation of SEA Directive (2001/42/EC) as the *'formal systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme'*.

SEA is intended to provide the framework for influencing decision-making at an earlier stage when P/Ps – which give rise to individual projects – are being developed. It is noted that SEA should result in more sustainable development through the systematic appraisal of policy options.

1.4 Purpose of this SEA

The purpose of SEA in this case was to enable the local authority to incorporate environmental considerations into decision-making at an early stage and in an integrated way throughout the Strategy development process, and to:

1. Identify, evaluate and describe the likely significant effects on the environment of implementing the Strategy.
2. Ensure that identified adverse effects are communicated, mitigated and that the effectiveness of mitigation is monitored.
3. Identify beneficial (and neutral) effects, and to ensure these are communicated.
4. Provide an opportunity for statutory and public stakeholder involvement.

⁴ Transposing Irish Regulations: S.I. No. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by S.I. No. 200 of 2011 (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011). S.I. No. 436 of 2004 (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by S.I. No. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

⁵ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities (Department of the Environment, Community and Local Government, 2004)



1.5 Appropriate Assessment

Appropriate Assessment (AA) is an assessment process focusing on potential effects related to European Sites - which form the Natura 2000 network - these sites have been designated or proposed for designation by virtue of their ecological importance. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

The Habitats Directive⁶ requires, inter alia, that plans (such as the Draft Strategy) undergo Screening for AA (Stage 1) and if necessary the preparation of a Natura Impact Report (Stage 2), to establish the likely or potential effects on European Sites arising from plan implementation.

This first stage of the AA process is referred to as 'Screening for AA' and the purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a European Site in view of the site's conservation objectives.

AA Screening concluded the Draft Strategy will not give rise to any adverse effects on designated European sites, alone or in combination with other plans or projects. Consequently, a Stage 2 AA is not required for the Draft Strategy.

⁶ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora



2. THE DRAFT STRATEGY

2.1 Overview

Cork City Council's EV Infrastructure Draft Strategy will focus on the delivery of publicly accessible electric vehicle charging infrastructure to allow for the targeted uptake in electric vehicles in Cork City. The Draft Strategy will make recommendations with respect to the different types of charging infrastructure required and its spatial distribution within Cork City. The Draft Strategy will identify a first wave of infrastructure investment to be designed and constructed up to 2025 which will subsequently be monitored and analysed to refine the delivery of subsequent waves of investment.

The Draft Strategy will focus on the delivery of publicly accessible charging infrastructure (primary focus on residential neighbourhood and destination charge points) with the objective to serve the charging needs of residents and visitors to the city. Further electric vehicle charging infrastructure will be delivered in the city to include en-route charging infrastructure and charging infrastructure for buses and heavy goods vehicles.

The preparation of the Draft Strategy will be informed by a process of public participation and consultation. The Draft Strategy will represent an important document that will form the foundations to support and facilitate the development of EV charging infrastructure within the local authority area.

2.2 Context

The Climate Action and Low Carbon Development Act (as amended) provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (CAP) and sets out actions that must be taken to commit Ireland to a target reduction of GHGs by 51% by 2030 and to achieve net zero GHG emissions by 2050. In particular, the CAP provides targets for a 50% reduction in transport emissions by 2030. The CAP supports regional and local authorities with the development of EV Network Plans, and that these plans should be aligned with the adopted national Electric Vehicle Charging Infrastructure Strategy 2022-2025.

The Alternative Fuels Infrastructure Regulation sets several mandatory national targets for the deployment of alternative fuels infrastructure across all countries in the European Union which will be subdivided further to each jurisdiction in the state to ensure a balanced approach is delivered.

Objective 5.22 of the Cork City Development Plan 2022 - 2028 (CDP) supports the use of EVs and the provision of charging infrastructure on-street, within carparks and in new developments.

In response, Cork City Council has prepared a Draft Strategy for the rollout of Electric Vehicle Charging Infrastructure in the city.

2.3 Draft Strategy Content

The Draft Strategy will make recommendations with respect to the different types of charging infrastructure required and its spatial distribution within Cork City. The emerging Draft Strategy has identified a first wave of infrastructure investment to be designed and constructed up to 2025 which will subsequently be monitored and analysed to refine the delivery of subsequent waves of investment.

Cork City Council's Electric Vehicle Infrastructure Draft Strategy will primarily focus on the delivery of residential neighbourhood charging infrastructure which can be further broken down into two types of charging facilities:



- **Neighbourhood Charging Stations:** These charging stations are typically normal speed installations with a total charging speed of 22kW shared between 2 charge points at each charging station.
- **Community Charging Stations:** These are fast charging stations with a total charging speed of between 50kW and 150kW shared between 2-4 charge points.

Broad development management criteria in relation to these networks have been defined within the emerging Draft Strategy:

- The Draft Strategy will involve Phased Deployment of Fast Charging infrastructure within a 360 metre walk (approximately a five minute walk) of those living in homes without access to private off-street parking and within a 720 metre walk (approximately a 10 minute walk) of those living in homes with driveways.
- The Draft Strategy will involve Phased Deployment of Normal Speed Chargers within a 144 metre walk (less than a two minute walk) of those living in homes without access to a driveway or private off-street parking.

Key Principles set to underpin the strategy are as follows:

Principle 1: EV infrastructure will form part of a wider sustainable transport network.

In the context of Cork City Council's Electric Vehicle Infrastructure Strategy, the siting of new EV charging stations will avoid impacting on both existing and proposed new active and sustainable transport projects in the city. In addition, a key objective in the siting of new charge points in the city is that they will be easily accessible by foot from the surrounding residential areas.

Principle 2: EV charging infrastructure will work for everyone, regardless of age, health, income, or other needs.

The Cork City Council's Electric Vehicle Infrastructure Strategy will require all charge points to be well lit, incorporate sustainable energy generation (where possible) and that a percentage of wheelchair accessible units will be included for within the total stock of infrastructure charging stations. In terms of electricity costs, the strategy will include opportunities for residents to avail of both low cost charging opportunities (i.e. normal speed charging) and fast charging (generally at a higher cost).

Principle 3: For the majority of EV users, home charging will remain the main solution.

Cork City Council's Electric Vehicle Infrastructure Strategy will identify areas in the city where homes do not have access to a private adjacent parking space and where it is not possible to have a private home charger.

Principle 4: Options will be provided for those who cannot charge at home.

Cork City Council's Electric Vehicle Infrastructure Strategy will be a focus on providing normal speed charge points (generally low cost and the closest public available equivalent to home charging) close to areas of the city where residents have restricted access to off-street private car parking. The strategy will also provide for fast charging infrastructure to allow for greater flexibility in charging options in the city for all electric vehicle users. The provision of residential community charging stations will also provide for the following:

- Business users including light vehicle owners;
- Visitors to the city (including EV visitors to homes without a home charger);



- Taxis;
- Homes with two Electric Vehicles;
- Homes where the deployment of a home charger is not possible or overly expensive;
- Individual home(s) which do not have access to private off-street parking but are in an area where predominately homes are provided with driveways;
- Redundancy should there be a technical problem with the home charger; and
- Support the possible delivery of multi-modal interchanges to include, car share schemes, (e)bike hire, and other community services (i.e. parcel delivery, etc.).

Principle 5: Across the EV charging network, EV charging systems will be interoperable and as simple as possible to use.

The delivery of interoperability will primarily be the responsibility of Zero Emission Vehicles Ireland, however Cork City Council's Electric Vehicle Infrastructure Strategy will ensure a consistent approach to infrastructure delivery across the jurisdiction to facilitate the introduction of common data and reporting requirements across the country.

The ambition of the Strategy is to meet the needs of the Climate Action Plan target of 940,000 electric vehicles in total by 2030

2.4 Relationship of the Draft Strategy with Other Relevant Plans and Programmes

An examination of how the Draft Strategy interrelates with other national, regional and local plans and programmes has taken place and is documented in Appendix 1.



3. SEA METHODOLOGY

3.1 The SEA Process

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public (Figure 3-1). These stages are defined as:

- Stage 1 – Screening: deciding whether an SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

This Draft SEA Environmental Report documents the outcomes of Stage 3.

The SEA process generally runs in parallel with the Appropriate Assessment (AA) process, which is briefly discussed in Section 1.5. In this instance, AA Screening concluded that the Draft Strategy is not likely to have any significant effects on European sites, alone or in combination with other plans or projects, however. Consequently, the AA process in this case has not progressed beyond Stage 1 AA Screening.

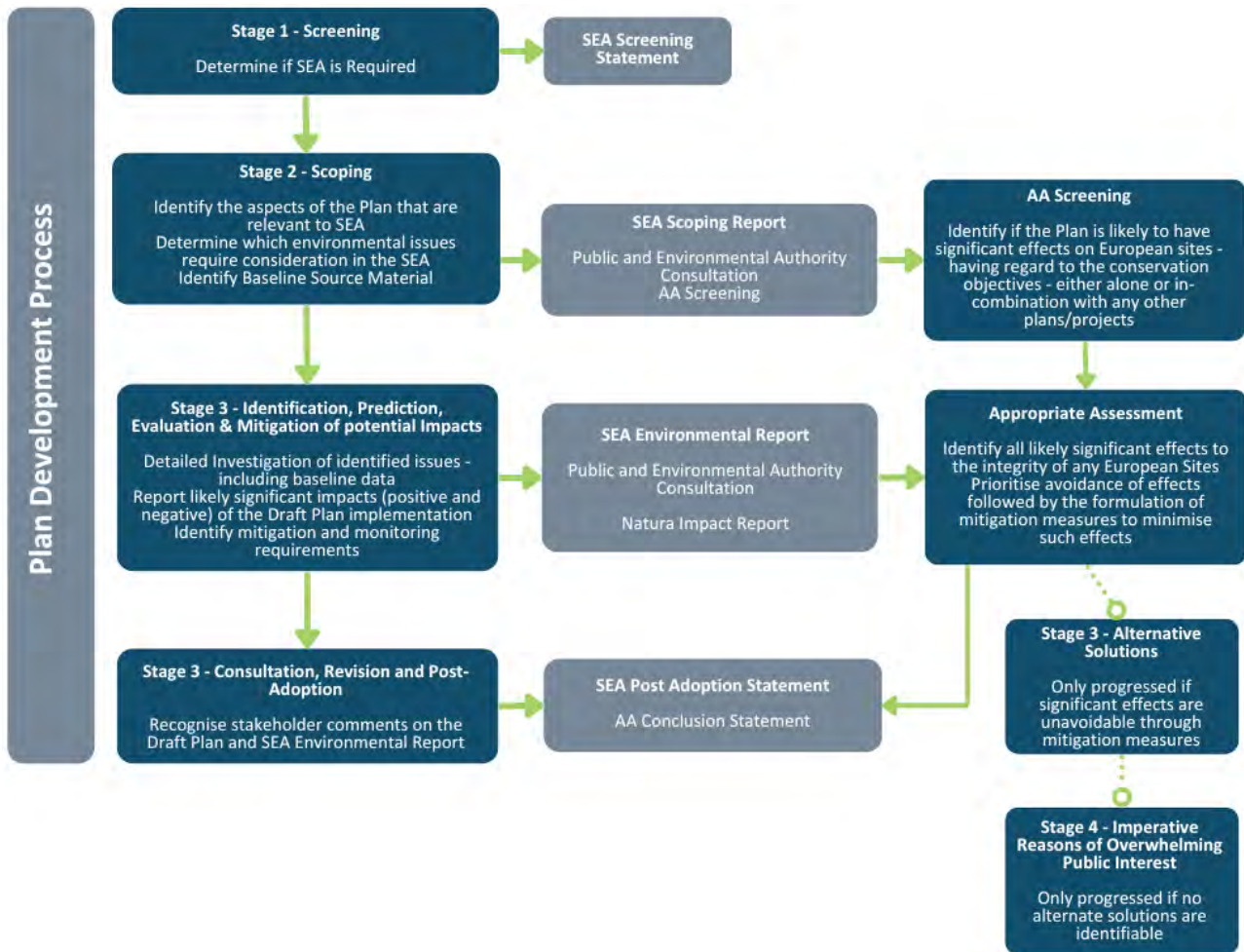


Figure 3-1: SEA and AA Stages and Key Deliverables

3.2 Overview of the Strategy and SEA Processes

Given the nature of the Draft Strategy, significant environmental effects were likely (in the absence of appropriate environmental mitigation), and therefore SEA was 'screened in' in this instance.

The SEA followed elements of Integrated Biodiversity Impact Assessment⁷. In this instance, AA Screening concluded that the Draft Strategy is not likely to have any significant effects on European sites, alone or in combination with other plans or projects, however. Consequently, a Stage 2 AA is not required for the Strategy. The AA Screening Report has suitably informed the preparation of this Draft SEA Environmental Report.

⁷ As detailed in the EPA's 2013 Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual.



A SEA Scoping Report was produced for the emerging Draft Strategy. This SEA Scoping Report, along with SEA Scoping submissions and consideration of these submissions by the SEA process, helped communicate and define the scope of the environmental issues which are to be dealt with by the SEA, as per the SEA Guidelines⁸.

The preparation of the Draft Strategy and the SEA took place concurrently and the findings of the SEA informed the Strategy.

Taking into account the scope detailed in the SEA Scoping Report which was produced for the emerging Strategy, the environmental effects associated with the implementation of the Draft Strategy as defined were identified, evaluated and described in this Draft SEA Environmental Report. This report also defines mitigation measures to prevent adverse environmental effects due to the implementation of the Draft Strategy as defined.

A draft version of the Strategy is now accompanied by a draft version of this report on public display as part of the required statutory public consultation. Submissions during this period of public consultation will be responded to in the Council's report on public consultation to be prepared, with updates made to the SEA documentation where relevant.

Any proposed modifications to the Draft Strategy at that stage will be examined to ensure that they do not generate additional likely, significant effects on the receiving environment or the Natura 2000 network of designated ecological sites not previously considered by SEA process or the AA Screening Report for the Draft Strategy.

When the Final Strategy is adopted, the SEA documents will be finalised and a SEA Statement, which will include information on how environmental considerations were integrated into the Strategy, will be prepared. The Final Strategy will then be implemented and environmental monitoring of the environmental effects of Strategy implementation, as defined under the SEA, will be undertaken.

3.3 SEA Processes Undertaken To Date

3.3.1 SEA Screening

The first stage of the SEA process was to carry out SEA Screening to determine the requirement for SEA of the Draft Strategy. An SEA Screening Report was produced which considered the potential environmental effects of the emerging Draft Strategy.

It was concluded, based on a pre-screening check, and a review against the environmental significance criteria as set out in Annex II of the SEA Directive, that a full Strategic Environmental Assessment is required for the Draft Strategy. An SEA Screening Determination to this effect was produced by the CCC.

The main reasons for 'screening in' in the Strategy are listed below:

- Given the nature, scale and magnitude of the Strategy, the Draft Strategy has the potential to result in the generation of significant adverse environmental effects (in the absence of environmental mitigation).

⁸ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities (DEHLG, 2004), Page 18 "It is recommended that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities."



- In the absence of appropriate mitigation, the Draft Strategy may generate significant adverse effects on a number of baseline environmental aspects, such as population and human health (e.g., due to construction noise nuisance), the air environment (i.e., due to construction dust), material assets (e.g., due to grid capacity demand) or the historic environment.
- The Draft Strategy has the potential to create cumulative environmental effects, in-combination with other plans relevant to the Cork City functional area, including effects that may result in the exceedance of environmental quality standards.
- The Cork City functional area contains a variety of sensitive environmental features that may be impacted by the implementation of the Draft Strategy, in particular historic environment/townscape and cultural heritage features (e.g., Historic Character Areas).

3.3.2 SEA Scoping

The second stage of the SEA process is carrying out SEA Scoping. The purpose of SEA Scoping is to establish the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts. An SEA Scoping Report is produced to document the scoping process.

FT produced a final SEA Scoping Report for the emerging Strategy which was informed by consultation responses from the environmental authorities. The SEA Scoping Report outlined information on the Strategy, including the need for the Strategy, its temporal and geographical area and overall objectives. It facilitated scoping the environmental components and understanding the environmental issues to be considered under the SEA process. The Scoping Report was also required to facilitate statutory consultation to ensure that the approach proposed for the SEA is appropriate. A copy of this report was made available to the statutory environmental authorities.

The SEA Scoping Report, along with SEA scoping submissions and consideration of these submissions by the SEA process, helped communicate and define the scope of the environmental issues which are to be dealt with by the SEA, the methods which will be used to address these issues, and the level of detail required to address these issues, as per the SEA Guidelines.

The Environmental Components in the SEA Directive that were 'scoped in' are as follows:

- Population & Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeological & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change



3.3.3 SEA Consultation

Consultation with statutory environmental authorities was undertaken to inform the SEA Scoping process. A draft version of the SEA Scoping Report and appropriate SEA scoping questions were issued to the statutory environmental authorities. The consultation period lasted for 4 weeks.

In line with SEA Regulations, the following statutory environmental authorities were consulted on the scope and level of detail of the information to be included in this Draft SEA Environmental Report:

- Department of Agriculture, Food and the Marine (DAFM)
- Department of the Environment, Climate and Communications (DECC)
- Department of Housing, Local Government and Heritage (DHLGH)
- Environmental Protection Agency (EPA)

The scoping consultation feedback is presented in Appendix 2.

These statutory environmental authorities will also be provided with an opportunity to make submissions on this Draft SEA Environmental Report which will accompany the Draft Strategy on public display as required by SEA Regulations.

In addition to the above statutory environmental authorities, the following interested stakeholders will be consulted on the Draft SEA Environmental Report:

- An Taisce
- Climate Change Advisory Council
- Cork Chamber of Commerce
- Department of Enterprise, Trade and Employment (DETE)
- Department of Transport (DoT)
- EirGrid
- Electricity Supply Board (ESB)
- Fáilte Ireland
- Gas Networks Ireland
- Industrial Development Authority (IDA)
- Inland Fisheries Ireland (IFI)
- Inland Waterways Association of Ireland (IWAI)
- Irish EV Association (IEVA)
- Landscape Alliance Ireland
- National Transport Authority (NTA)
- Cork County Council
- Office of Public Works (OPW)
- Southern Regional Assembly
- Sustainable Energy Authority of Ireland (SEAI)
- The Heritage Council



- Tourism Ireland
- Transport Infrastructure Ireland (TII)
- Uisce Éireann (formerly Irish Water)
- University College Cork - Sustainable Energy Research Group
- Zero Emission Vehicles Ireland (ZEVI)

Members of the public will also be provided with an opportunity to make submissions on the draft version of the Draft Strategy and the Draft SEA Environmental Report.

All consultation responses received from the above environmental authorities, interested stakeholders and members of the public will be considered as appropriate during Strategy development and SEA processes as required by SEA Regulations.

3.4 SEA Environmental Report

3.4.1 Environmental Assessment Approach and Methodology

The third stage involves the strategic level identification, prediction, evaluation and mitigation of potential environmental impacts associated with the Strategy. An SEA Environmental Report is produced to document this process. The SEA Environmental Report is integral to the SEA process and is compiled during the Strategy development process to allow for adequate consideration of the likely, significant environmental effects of the Draft Strategy and the incorporation of appropriate environmental mitigation measures into the Draft Strategy. It should serve to guide the Strategy development process and ensure optimal environmental outcomes.

The SEA Environmental Report forms the main written output of the SEA process. It serves to document the evaluation of the likely, significant environmental effects of implementing the Strategy on the relevant Environmental Components defined in the SEA Directive. It defines Strategic Environmental Objectives (SEOs) and associated targets and indicators relating to each Environmental Component area. It defines environmental mitigation measures to prevent, reduce and offset the likely, significant environmental effects of implementing the Strategy and monitoring measures to measure the environmental effects of the Draft Strategy. It provides the Strategy developer, statutory Environmental Authorities, interested stakeholders and the general public with a clear understanding of likely, significant environmental effects associated with implementing a P/P.

A summary of the information contained in an SEA Environmental Report is presented below:

- A non-technical summary of the environmental assessment carried out to inform the SEA Environmental Report.
- A description of the P/P under consideration, including detail on the main objectives of the P/P, the contents of the P/P, anticipated P/P outcomes, and how the P/P relates to other P/Ps.
- A description and characterisation of the baseline environment that has the potential to be affected by the implementation of the P/P, including the evolution of the baseline environment without the implementation of the P/P (i.e., under a 'do-nothing' or 'do-minimum' scenario).
- A description of any existing environmental problems relevant to the P/P.
- Environmental protection objectives (including indicators and targets) relevant to the P/P and the way these objectives and environmental considerations have been taken into during the Strategy development process.



- A description of reasonable alternatives identified, the reasons for considering these alternatives within the scope of the environmental assessment, and an evaluation of their likely significant effect on the environment.
- An evaluation of the likely significant effects of the implementation of the P/P (including reasonable alternatives) on the environment, and in particular on the following environmental components: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of environmental mitigation measures proposed to prevent, reduce and offset likely significant environmental effects that may occur during the implementation of the P/P.
- A description of the monitoring measures to be implemented to monitor the likely, significant effects of implementing a P/P.

This Draft SEA Environmental Report is produced for the Draft Strategy and will be issued to the statutory environmental authorities and identified interested stakeholders to allow them to make submissions on the environmental assessment undertaken, and the environmental mitigation and monitoring measures proposed. It will also be published for public display with a draft version of the Strategy, to allow for members of the public to make submissions on the environmental assessment.

3.4.2 SEA Environmental Report Authors

FT is a consultancy based in Cork, Carlow and Dublin, specialising in civil and environmental engineering, planning and environmental assessment. The company has established an experienced, professional team specialising in all forms of statutory environmental assessment, including EIA, AA and SEA. This team has the support of many in-house engineers, scientists, planners and subject specialists.

FT was retained by CCC to undertake SEA of the Strategy and are responsible for the completion of this SEA Draft Environmental Report. The competent experts involved in the preparation of this Draft SEA Environmental Report are outlined in Table 3-1.

Table 3-1: SEA Environmental Report Authors

Name and Qualifications	Project Role	Relevant Experience
Bernie Guinan MSc, BSc. (Envi. Sci & Tech), Dip. Pollution Assessment Control Dip. Business Development	Project Director	Bernie is Director with FT responsible for Waste & Resource Management and Environmental Science. She has 20 years' experience in delivering and managing projects in the environmental sector. Bernie has extensive experience coordinating EIA, SEA and AA projects, including large-scale and complex projects. She has in-depth knowledge of all environmental and planning policy, legislation and guidance.
Richard Deeney Advanced Diploma in Planning and Environmental Law, Kings Inns, Ireland 2017 B.Sc. First Class Honours Degree, Environmental Management,	Project Manager & SEA Team Lead	Richard is Principal Environmental Scientist at Fehily Timoney. Richard holds a B.Sc. First-Class Honours degree in Environmental Management from Dublin Institute of Technology. Richard works in the Circular Economy and Environment team at Fehily Timoney and is experienced in project managing and coordination of Planning Applications, Strategic Environmental Assessments, Environmental Impact Assessment Reports and Environmental Assessment, EIAR Screening and Scoping Reports, the development of Environmental



Name and Qualifications	Project Role	Relevant Experience
<p>Dublin Institute of Technology, 2012</p> <p>Chartered Environmentalist, The Society for the Environment</p>		<p>Management Plans and Systems, Environmental Auditing, and Air Emission Assessment.</p> <p>Richard has excellent experience in planning and environmental assessment for various types of development including waste facilities, quarries, renewable energy development and tourism development. He has experience project managing and coordinating completion of the suite of SEA and AA deliverables for 25 Local Authority Climate Action Plans and multiple Local Area Plans and Local Economic and Community Plans.</p>
<p>Andrew Torsney</p> <p>PhD, Ecotourism and visitor Behaviour Analysis, Trinity College Dublin, 2018 – Present (Part time)</p> <p>MRes Biodiversity and Conservation (Hons.), University of Leeds, UK, 2011 - 2012</p> <p>BSc Zoology, University College Dublin, 2007 - 2011</p>	<p>AA & Biodiversity Team Lead</p>	<p>Andrew has over 10 years' experience as a professional ecologist. He is responsible for all ecological work from project design and implementation to the preparation of reports. Interaction with key stake holder and statutory bodies such as the NPWS and the EPA is a vital part of this role. His role is diverse and complex working at both plan and project level. He has been the principal ecologist responsible for the preparation and co-ordination of SEA and AA for many statutory land use plans; as well as ECIAs, EIARs and AAs of Projects. Andrew has comprehensive technical knowledge in ecological assessments and legalities of the planning processes to facilitate streamlined delivery of assessments.</p> <p>Andrew is an experienced ecologist who holds four national species derogation licenses for bats (photography & roost disturbance), otters and badgers. Andrew has authored the NBDC Identification Guide to Irelands Bats and the Identification Guide to Regulated Invasive Plants. Andrew is an experienced botanical specialist with a focus on Annex I grassland habitats, having worked on the translocation of lowland hay meadow [6510] containing the floral protection order species meadow barley (<i>Hordeum secalinum</i>).</p>
<p>Eunice Wong</p> <p>B.Sc. First Class Honours, Environmental Science and Sustainable Technology, Munster Technological University, 2022</p>	<p>Project Support</p>	<p>Eunice is an Environmental Scientist on the Circular Economy and Environment team at Fehily Timoney and Company. Eunice holds a First-Class Honours BSc in Environmental Science and Sustainable Technology from Munster Technological University.</p> <p>Eunice has been involved in a variety of diverse and challenging projects since joining FT covering key aspects of remediation, baseline emission inventories, amenity development, environmental assessment, desk-based studies, and monitoring.</p> <p>She has been responsible for supporting the delivery of SEA and AA documentation such as Scoping Reports, Environmental Reports, Screening Reports and Statements, for 25 Local Authority Climate Action Plans as well as multiple Local Area Plans and Local Economic and Community Plans.</p>

3.4.3 Difficulties Encountered

No significant difficulties have been encountered during the undertaking of the assessment.



3.4.4 SEA Environmental Report Checklist

A checklist of information that must be included in this Draft SEA Environmental Report under the SEA Directive and transposing national legislation⁹ is provided in Table 3-2. This checklist cross-references the sections in the report where information can be found.

Table 3-2: SEA Environmental Report Checklist

Information Required	Relevant Section of the SEA Environmental Report
An outline of the contents and main objectives of the Draft Strategy and relationship with other relevant plans.	Section 2.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the Draft Strategy.	Section 4.
The environmental characteristics of areas likely to be significantly affected.	Section 4.
Any existing environmental problems which are relevant to the Draft Strategy including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive.	Section 4.
The environmental protection objectives, established at international, European Union or national level, which are relevant to the Draft Strategy and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 5.
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Section 6.
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Section 7 and Appendix 3.
Interrelationships between each Environmental Component.	Section 7 and Appendix 3.
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the Draft Strategy.	Section 8.
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the Strategy.	Section 10.
A non-technical summary of the information provided under the above headings.	Front section

⁹ The Environmental Report is required to contain the information specified in Annex 1 of the SEA Directive and Schedule 2 and 2B of S.I. 435 and 436 of 2004.



3.5 SEA Statement

Once the Strategy is adopted, CCC will publish a post adoption SEA Statement alongside the final Strategy. The post adoption SEA Statement is another integral component of the SEA process.

The SEA Statement will provide detail on how the environmental assessment and considerations detailed in the final SEA Environmental Report and SEA related consultation responses throughout the process have influenced the Strategy development process. It will summarise the reasoning for choosing the adopted, final Strategy in light of other reasonable alternatives. The SEA will contain detail of environmental mitigation and monitoring measures to be implemented over the lifetime of the Strategy.

The main purpose of the SEA Statement is to provide interested parties with a good and clear understanding of how the SEA process was carried out during the Strategy development process and how SEA informed and supported the process.

3.6 Integrated Biodiversity Impact Assessment

The environmental assessment undertaken was carried out in accordance with an Integrated Biodiversity Impact Assessment based methodology in accordance with EPA's guidance document entitled '*Final Report: Integrated Biodiversity Impact Assessment, Streamlining AA, SEA and EIA Processes. Best Practice Guidance.*' (2012).

The methodology employed facilitated the integration of SEA and AA processes relating to biodiversity impact assessment to ensure the effective and streamlined assessment of biodiversity impacts. The effective communication and integration of scientific knowledge and analysis between assessments took place. The AA Screening Report undertaken for the Draft Strategy, which concluded the Draft Strategy is not likely to have a significant effect on any European sites, suitably informed the biodiversity related assessment contained within this SEA.

3.7 Outcomes of the Strategy and SEA Processes

The SEA process has facilitated the integration of environmental considerations into the Draft Strategy, including environmental mitigation measures, contributing towards environmental protection and management and the appropriate, sustainable development of EV charging infrastructure in Cork City.