Strategic Environmental Assessment Environmental Report

Revision no: 0.2

City of Edinburgh Council

Climate Strategy 2030

August 2022

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# Key Facts

|  |  |
| --- | --- |
| Name of Responsible Authority | City of Edinburgh Council |
| Title of PPS | 2030 Climate Strategy |
| Requirement for the PPS | As noted by the Climate Emergency Response Group, if Scotland is to meet its 2045 target, our cities need to make faster progress and Edinburgh needs to play its part by striving to reach net zero by 2030. |
| Subject of PPS | Climate Change |
| Period covered by PPS | 2020 - 2030 |
| Frequency of Updates | Annual |
| Area covered by PPS | The City of Edinburgh Council area (see Figure 1) |
| Purpose of the PPS | This PPS sets out the clear and practical steps Edinburgh will take to tackle the challenge of climate change and achieve our aim of becoming a net zero city by 2030. |
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# Non-Technical Summary

## Introduction

This report summarises the findings of the Strategic Environmental Assessment (SEA) which was conducted for the City of Edinburgh Council’s 2030 Climate Strategy. The Environmental Assessment (Scotland) Act 2005 sets out the statutory requirements for conducting a SEA, which ensure the environment and other sustainability aspects are considered at an early stage of decision making when preparing public plans, programmes and strategies (PPS).

The purpose of the draft Environmental Report is to:

* Provide information on the 2030 Climate Strategy;
* Identify, describe and evaluate the likely environmental influence of the strategy;
* Provide recommendations for the Climate Strategy Implementation Plan; and
* Provide an opportunity for the Consultation Authorities and the public to comment on any aspect of this draft Environmental Report.

## Background to the Climate Strategy

The Climate Strategy was drafted in response to the City of Edinburgh Council declaring a climate emergency in 2019 and setting an ambition for both the Council and the city to become net zero by 2030. . For Edinburgh to deliver the 2030 net zero target system-wide change is required across the city. Recognising this, the Council has worked with key city partners to put together actions that can be implemented now, using tested approaches and lessons learned from experiences in other cities.

The Council undertook extensive collaboration with key city partners and Edinburgh citizens during late 2020 and the first part of 2021 to establish the key priorities a strategy should focus on. Key themes emerging from this engagement activity informed the development of an early draft strategy which was reviewed by the Edinburgh Independent Climate Commission. Feedback from this review was used to develop a further iteration of the strategy which was issued for public consultation between June and September 2021, with the results reported to Committee in October 2021. A live version of the strategy was agreed by city partners in December 2021 to enable priority actions to be progressed as part of the city’s commitment to tackling the climate emergency on the understanding that an SEA would be undertaken and the live strategy would be reviewed as required and on an ongoing basis.

A workshop was undertaken in July 2022 with the Consultation Authorities before the Environmental Report was released for statutory and public consultation.

## Policy Context

The 2030 Climate Strategy sets out the clear and practical steps Edinburgh will take to tackle the challenge of climate change and achieve the city’s aim of becoming a net zero city by 2030. The Strategy is focused on putting in place actions that can be implemented now, using approaches that will work and drawing from lessons learned and experience from other cities.

The Climate Strategy sits overarching to many other Edinburgh PPS including City Plan, City Mobility Plan, Edinburgh City Centre Transformation Strategy and other action plans.

## Environmental Context

A baseline information gathering exercise was carried out in order to summarise the key environmental characteristics against the SEA topics. The full SEA baseline Is provided in Appendix A of this draft Environmental Report.

A review of baseline data was also undertaken to provide a summary of the key environmental issues for the city and an analysis of the likely evolution of each baseline issue in the absence of the Climate Strategy (i.e. a do-nothing option). Key environmental issues and problems included:

* Edinburgh’s infrastructure needs to be resilient against adverse climate impacts, and also consider potential positive impacts, such as a longer summer season.
* The social, economic and physical environmental conditions in Edinburgh are variable and therefore do not provide a consistent quality of environment adequate to ensure good standards of public health across all areas and communities.
* Increasing demand on existing transport infrastructure from project population growth.
* Increasing demand for resources such as water and wastewater treatment, heat and energy, and waste management created by new built development.
* Land take as a result of new infrastructure and development can lead to loss, disturbance and fragmentation of habitats. This means a less resilient network to buffer the effects of climate change, as well as loss of biodiversity.

In the absence of the Climate Strategy 2030, the city’s development is still considered within the City Plan, the City Centre Transformation Strategy and the City Mobility Plan. Urban realm improvements, transport management interventions and active travel improvements are all covered within these strategies. However, the Climate Strategy provides more holistic Strategic Actions which aim to help the city adapt to the changing climate conditions, become more resilient to extreme weather events and achieve its emission reduction targets.

## Assessment Methodology and Recommendations

The SEA focuses on strategic level issues and does not consider detailed measures for specific developments and construction projects within the study area. Recommendations for the Climate Strategy Implementation Plan have been identified and outlined in the Environmental Report.

Following the baseline and policy review it was determined that all of the SEA topics may see both positive and/ or negative impacts, however some would be more significant than others and some of the impacts to the topics may only be significant as a cumulative impact.

The SEA assessment uses a set of SEA objectives and assessment criteria which cover each of the environmental topics scoped into the assessment. The SEA objectives are:

* Air quality: To improve air quality and reduce emissions of key pollutants
* Climatic factors: Reduce GHG emissions in order to meet Scotland's emissions reduction target of net zero by 2045 and Promote and enable adaptation to climate change
* Population and human health: Improve the quality of life and human health for all through improved environmental quality
* Cultural heritage: Conserve or enhance the historic environment
* Material assets: To promote the sustainable use and management of material assets
* Landscape and townscape: Protect and enhance the landscape and townscape character and setting of the city
* Water: Prevent the deterioration and where possible, enhance the status of the water environment and reduce/manage flood risk in a sustainable way
* Biodiversity, flora & fauna: Protect, maintain and enhance biodiversity, flora and fauna and habitat networks
* Land and soil: Protect valuable land resources, minimise detrimental effects of land use change and promote soil restoration

These objectives have been developed from a comprehensive review of the baseline and policy requirements. In line with the Scottish Governments Strategic Environmental Assessment Guidance 2013 the assessment has been focused on the key elements within the Climate Strategy which are likely to have significant environmental effects. This to ensures a proportionate approach to assessment. There are six Strategic Action Areas with a number of Strategic Actions siting under each area that have been subject to the SEA assessment, as follows:

* A net zero, climate resilient development and growth (15 Strategic Actions);
* Net zero energy generation and energy efficient buildings (26 Strategic Actions);
* Net zero emission transport (7 Strategic Actions);
* Net zero circular economy (15 Strategic Actions);
* Listening to citizens and empowering communities (10 Strategic Actions); and
* Investing in change (13 Strategic Actions).

Some interventions that fall under the remit of these Strategic Actions are included within City Plan 2030, City Mobility Plan and other local PPS which have been subject to their own SEAs. Therefore, the Strategic Actions within each Strategic Action Area of the Climate Strategy were sifted to identify which actions are already subject to the SEA process by virtue of them already being outlined in other PPS. The outcome of the full sifting exercise is provided in Appendix D.

In accordance with the 2005 Act, the statutory consultation authorities (NatureScot; Scottish Environment Protection Agency and Historic Environment Scotland) were consulted on the scoping report and their comments and views were considered and these are provided in Appendix C of this Environmental Report.

## Reasonable Alternatives

The context for the assessment of reasonable alternatives is limited by the requirement to meet the ambitious climate change targets. Given the current legislative context, and the declared climate emergency, it was identified that the current ambition can only be to achieve the maximum emissions reductions possible, reflected across all sectors. Therefore ‘do minimum’ or precautionary approaches were not considered realistic strategic alternatives. Alternatives for the Strategy were considered in the development of the priorities and Strategic Actions. The strategic actions have emerged and been refined through a collaborative process where thoughts and feedback from elected members, city partners, the public, and the Edinburgh Climate Commission were sought and used to shape the approach and strategic actions. Environmental criteria including impacts on emissions, impacts on resilience to the effects of climate change, the impact of emissions on human health, air quality management targets, and a just transition were key factors in determining the final list of Strategic Actions.

## Key Findings

The SEA concluded that the ‘Strategic Actions that were sifted into the assessment would have positive or neutral effects across the SEA topics, with significant positive benefits identified for climatic factors, population and human health and material assets. This assessment did not identify any negative impacts that could occur on the environment as a result of these Actions. Therefore, no mitigation measures were proposed. Instead, the SEA focused on identifying enhancement measures to be considered in the update of Climate Strategy Implementation Plan.

A summary of the findings is presented in the table below against each of the SEA topics.

| SEA Topic | Summary of Assessment Findings |
| --- | --- |
| Air Quality | A minor positive effect on air quality is expected from the energy generation and energy efficient building and the emissions transport areas for action.  Actions that set progressive planning policies to increase energy standards in new buildings and support renewable energy solutions that decarbonise the regions energy infrastructure, is expected to contribute towards reducing emissions to air from energy generation and heating.  Strategic actions that plan to reduce emissions and support the transition to electric vehicles will contribute to improving air quality. |
| Climatic Factors | A significant positive effect on climatic factors is expected from all areas of action except listening to citizens and empowering communities which expects a minor positive effect.  Some Actions are aimed at achieving net zero emissions and increasing the speed of adaptation of the city, encouraging the city to commit to becoming net zero, increase participation in circular programmes supporting sustainable practices, and the integration of legislation/frameworks to support the city's response to the climate emergency promote and enable adaptation to climate change.  Actions that aim to reduce emissions in the city through innovative zero emission solutions - including investments into EV infrastructure for public transport and lobbying for emission reductions in aviation - will help to reduce GHG emissions, promote and support the best use of clean fuels/technologies and promote and facilitate modal shift to more sustainable transport options. |
| Population and Human Health | A significant positive effect on population and human health is expected from the energy generation and energy efficient buildings Strategic Action Area, while the other Strategic Action Areas scored minor positive.  Improvements to air quality and natural assets will have a beneficial impact on health and wellbeing, as residents can spend more time with nature, also encouraging physical activity.  Actions to build on community wealth (through net zero communities' pilots) and projects which maximise opportunities to deliver low-cost, clean, renewable energy to neighbourhoods and communities (with a focus on areas experiencing inequalities) is expected to improve human health and wellbeing. Retrofitting of social housing will have direct benefits on health and wellbeing through the improvement of indoor air quality while the retrofitting itself will provide green jobs and fair work opportunities.  Strategic actions that seek to support people from all backgrounds to access good quality jobs in a net zero economy and develop the skills necessary to meet the requirements of net zero businesses may have a beneficial effect on increasing sustainable access for all users to employment opportunities. |
| Cultural Heritage | A minor positive effect on cultural heritage is expected from the climate resilience development strategic action. Adapting Edinburgh’s World Heritage Site to be resilient to the impacts of climate change will conserve it for future generations.  There was a neutral relationship with the energy generation and energy efficient buildings, emission transport, and investing in change Strategic Action Areas.  No clear relationship or negligible relationship is present between cultural heritage and the other Strategic Action Areas. |
| Material Assets | A significant positive effect on material assets is expected from energy generation and energy efficient buildings and a minor positive effect from climate resilience development, circular economy, and investing in change areas for action.  Strategic actions, including Actions to increase energy standards, support the city's projected energy needs and improved heat network connectivity is expected to promote sustainable use and management of existing energy and heat infrastructure.  Strategic actions that support a more circular economy may have a beneficial impact by contributing towards 'zero waste' objectives and increasing the amount of waste which is re-used, recycled and recovered. |
| Landscape and Townscape | A neutral effect on the landscape and townscape objective is expected from the climate resilience development, energy generation and energy efficient buildings, emission transport and investing in change Strategic Action Areas.  Most Actions that would have an impact on landscape, such as 20-minute neighbourhoods and green and blue infrastructure, were sifted out of the SEA assessment as they are considered within other PPS SEA assessments including the City Plan 2030.  Decarbonising the region’s energy infrastructure may also have a beneficial impact depending on the nature and location of the infrastructure.  Reducing the emissions associated with GHGs could have an indirect benefit on landscape and townscape as the amenity of the city will improve with time  There was no clear relationship or negligible relationship between the landscape and townscape objective and the other Strategic Action Areas. |
| Water | A minor positive effect on the water objective is expected from the climate resilienT development Strategic Action Area.  A number of the Strategic Actions are aimed at developing a long-term approach to water management. Improving water management in the city will reduce the risk of flooding and will allow for better integration of the blue and green network. This is likely to enhance the water quality status, amenity value and accessibility of Edinburgh's water bodies.  Collaborating with green finance experts to support the resourcing and delivery of major city climate projects, beginning with the city Water Vision would have an indirect positive impact on the water objective, by improving water quality and reducing flood risk.  A neutral effect on the water objective is expected from energy generation and energy efficient buildings, emission transport, and investing in change Strategic Action Area.  There was no clear relationship or negligible relationship between the water objective and the other Strategic Action Areas. |
| Biodiversity, Flora and Fauna | A minor positive effect on the biodiversity objective is expected from the climate resilience development Strategic Action Area, which includes a number of Strategic Actions seek to protect and enhance the biodiversity across the whole of Edinburgh.  Managing and enhancing Edinburgh’s natural assets across key public sector operational estate site and protecting and enhancing greenspace will have a beneficial effect on biodiversity.  A neutral effect on the biodiversity objective is expected from the energy generation and energy efficient buildings, emission transport, and investing in change Strategic Action Areas.  Reducing the emissions associated with GHGs will have an indirect benefit on biodiversity and ecosystem services. Moving to renewable energy solutions will reduce the impact on natural assets with the use of sustainable infrastructure.  There was no clear relationship or negligible relationship between the biodiversity objective and the other Strategic Action Areas. |
| Land and Soil | Of the sifted in Actions there are no specific Actions that directly affect the land and soil objective. However, if sustainable investments are made to promote adaptation to climate change there would be an indirect impact on land and soil.  Reducing the emissions associated with GHGs will have an indirect benefit on land and soil with the reduction of surface water pollution affecting soil quality.  A neutral effect on the land and soil objective is expected from the climate resilient development and growth, energy generation and energy efficient buildings, emission transport, and investing in change Strategic Action Areas.  There is no clear relationship or negligible relationship between the land and soil objective and the other Strategic Action Areas. |

To ensure a value driven assessment the assessment summarised in the table above demonstrated the potential for significant environmental effects of the ‘sifted in’ actions only, however in undertaking the cumulative assessment of the Strategy i.e. the intra-plan cumulative assessment, the potential for significant environmental effects of those ‘sifted out ’actions were also considered. That assessment concluded that a significant positive cumulative effect is anticipated on air quality, climatic factors, population and human health and material assets SEA objectives, while cultural heritage, landscape, water and biodiversity are expected to experience a minor positive cumulative effect. The cumulative effects for land and soil is expected to be neutral.

## Next Steps and Monitoring Framework

The draft Environmental Report will be issued alongside the Climate Strategy for **public consultation for a period of six weeks**. All comments and representations will be considered before finalising the Environmental Report.

Best practice in SEA Monitoring requires that a detailed monitoring framework reflects the implementation of the Strategic Actions and identifies where existing indicators (from the delivery of the strategy) can be used to track progress and, ideally, is embedded within the final Strategy to ensure that monitoring is undertaken as part of the delivery.

CEC has developed a monitoring framework to determine the success of the strategy. The Implementation Plan identifies a number of indicators that relate to outcomes identified within the Strategy. The intention is to review those indicators as required and on an ongoing basis and determine if they are still fit for purpose. Any new indicators will be identified following the consultation period and published in the Post Adoption Statement.

# Introduction

## Purpose of this Report and Statutory Requirements

Strategic Environmental Assessment (SEA) provides plan-making authorities with a transparent process to incorporate environmental considerations into decision making at an early stage and in an integrated and documented manner.

The overall objective of SEA 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 and programmes with a view to promoting sustainable development*” (Article 1 of the European SEA Directive 2001/42/EC).

This report has been prepared in accordance with Section 15(3)(b) of The Environmental Assessment (Scotland) Act 2005 (hereafter referred to as the 2005 Act). Responsible authorities must prepare an ER to “identify, describe and evaluate the likely significant effects on the environment of implementing” the Strategy. This report should be based on the outcomes of the SEA Scoping and the information requirements specified in Schedule 3 of the 2006 Act. This report will be consulted on in tandem with the Strategy for a period of six weeks as agreed with the Consultation Authorities through SEA Scoping.

This report presents the findings of the SEA of the Climate Strategy 2030. The assessment has been carried out in accordance with statutory SEA requirements and presents the anticipated impacts from the Strategy on the SEA topics scoped into the assessment (see Section 3.1) and relevant to the study area (See Figure 1). In accordance with the statutory SEA requirements, a Non-Technical Summary (NTS) will accompany the report. The main objectives of this report are to fulfil the statutory SEA reporting requirements, identify anticipated significant environmental effects from the Climate Strategy 2030 and proposed enhancement measures which should be incorporated into the supporting Implementation Plan.

## How to Comment on this Report

This report and accompanying NTS are being issued for consultation. Subject to approval from by City of Edinburgh Council (CEC) all documents will be available for consultation for a period of six weeks. Details of how to participate in the consultation will be available on the CEC consultation hub and published in the local press prior to the commencement of the consultation period.

In accordance with Section 15(3)(b) of the 2005 Act, a letter forming the proposed consultation arrangements will be submitted to the Scottish Ministers by CEC prior to the commencement of the consultation period.

## Structure of the Report

The structure of this report is as follows:

* Section 2 provides a summary of the policy and environmental context highlighting the key environmental issues and challenges and the future baseline evolution without the Climate Strategy.
* Section 3 presents the SEA approach, outlining the elements scoped into the assessment, the SEA objectives used in the assessment and the assessment methodology.
* Section 4 summarises the SEA assessment of the Strategic Actions, alternative scenarios and the cumulative effects assessment for all the Strategic Actions proposed within the Climate Strategy.
* Section 5 presents the enhancement recommendations for the Climate Strategy Implementation Plan.
* Section 6 presents the next steps and monitoring framework.

This environmental report is supported by the following appendices:

* Appendix A: SEA Baseline
* Appendix B: Relationship with relevant Plans Programmes and Strategies
* Appendix C: Statutory Authority Comments
* Appendix D: Strategic Actions Sifting Exercise

## Background to the Climate Strategy

The Climate Strategy was drafted in response to the City of Edinburgh Council declaring a climate emergency in 2019 and setting an ambition for both the Council and the city to become net zero by 2030. For Edinburgh to deliver the 2030 net zero carbon target the council requires system-wide change across the city. Recognising this, the Council has worked with key city partners to put together actions that can be implemented now, using tested approaches and lessons learned from experiences in other cities.

The Council began its city engagement process on climate change with the Edinburgh Talks Climate survey in November 2019. The Edinburgh Talks Climate Report summarised the views of more than 2,000 residents of all ages and backgrounds who were directly involved in the Edinburgh Talks Climate Survey, online Dialogue and communications campaign, and the city’s first Youth Summit on Climate Change which took place in February 2020. This activity informed the development and delivery of consultation and engagement with public and private sector organisations across the city, alongside further engagement with citizens, including through a series of focus groups. This activity was originally planned for spring/summer 2020 but was delayed due to Council resources being diverted towards Covid response and recovery, and so took place over the latter part of 2020 and first part of 2021. Those views informed the creation of the Draft Climate Strategy, in addition to ongoing partnership working with the Edinburgh Climate Commission and the Council’s strategic partners.

The Draft 2030 Climate Strategy was publicly consulted on between June and September 2021, consultation report included the views of around 920 residents and other stakeholders who took part in the Council’s online survey, submitted a letter, or participated in one of the virtual focus groups held over the summer. A summary of the comments received from the public are presented in the council’s October 2021 Policy and Sustainability committee report. This was followed by the Committee agreeing a ‘live’ strategy document in November 2021 with this being published following consideration by city partners via the Edinburgh Partnership Board in December 2021.

The 2030 Climate Strategy is for the whole city, with the study area shown in Figure 1.1. It recognises the Council must take a leading role in co-creating a green, clean, and sustainable future for the city and ensuring a just transition to net zero, but it also recognizes the Council cannot do this alone. The strategy has been developed following engagement with key city partners - public, private and voluntary sector, communities, and individual citizens, who can have an impact on the city’s emissions by reducing their own footprints or collaborating to unlock change. The strategy does not seek to replicate all the individual organisational plans that exist to reduce emissions and tackle climate change. The strategy is supported by a detailed implementation plan which sets out the actions that partners are already committing to in the early stages of Edinburgh’s journey to net zero.

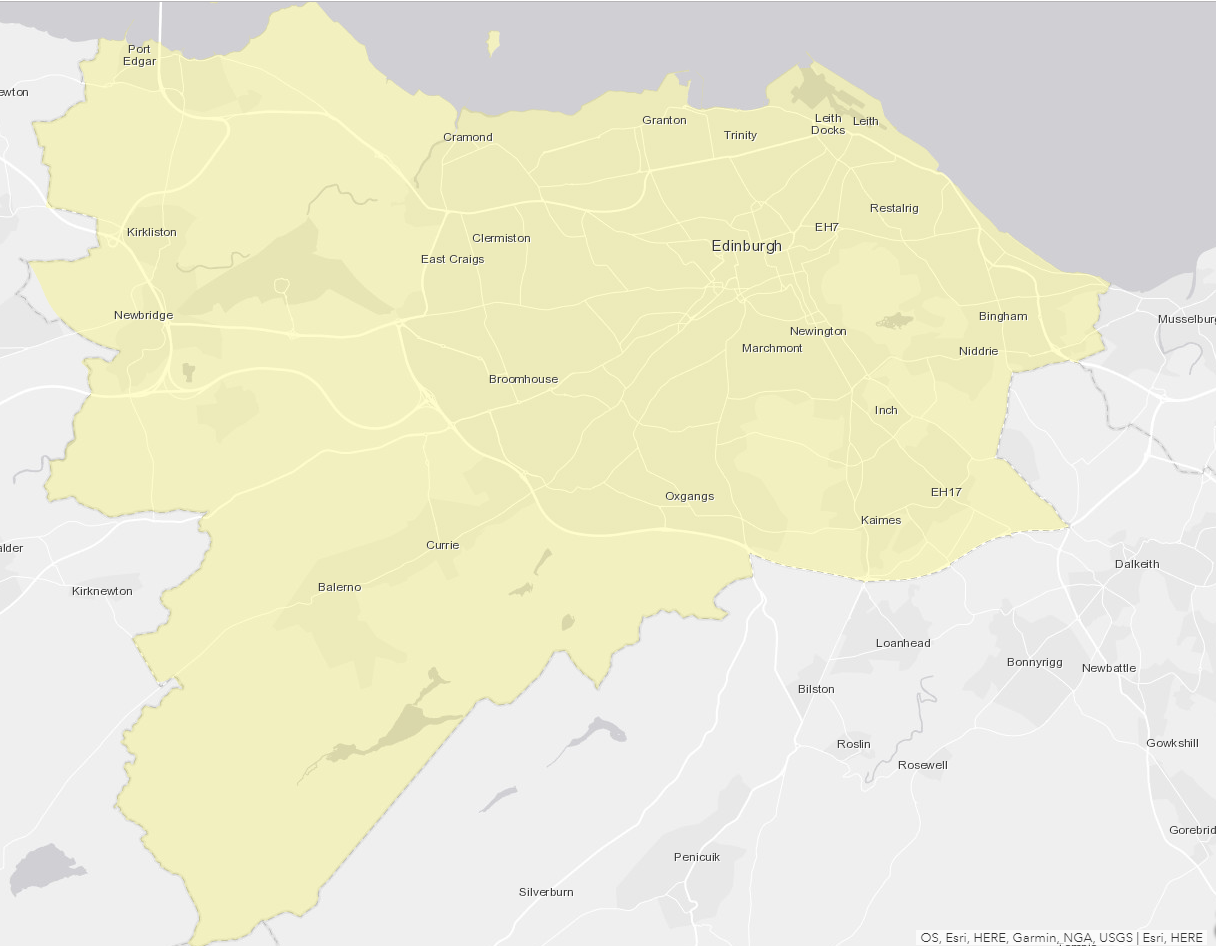


Figure 1.1: The City of Edinburgh Council Boundary

## The Climate Strategy

The 2030 Climate Strategy sets out a city-wide approach to reducing greenhouse gases and building climate resilience in Edinburgh.

The Strategy outlines how to deliver a net zero, climate ready city by 2030 as well as a healthier, thriving and inclusive capital for people to live and work in. Figure 2 shows the strategic approach and principles outlined in the draft Climate Strategy.



Figure 1.2: Strategic Approach and Principles (City of Edinburgh Council, 2021)

Figure 1.2 presents seven underlying core principles of the strategy; these are sectors 3 to 9 of the wheel. These underpin the priorities and Strategic Action Areas which aim to renew the focus on climate resilience and accelerating adaptation of the city. The priorities comprise:

1. Unlocking and accelerating energy efficiency in homes and buildings
2. Enabling the development of a citywide programme of heat and energy generation and distribution infrastructure
3. Accelerating the decarbonisation of public transport
4. Supporting citizen empowerment, behaviour change and community activism
5. Supporting business transition and the green circular economy
6. Collaborate to develop a citywide programme of green investment proposals

The Strategy outlines six Strategic Action Areas that each have a list of Strategic Actions aimed at achieving certain outcomes, these are aligned to the priorities above. The six Strategic Action Areas are:

* A net zero, climate resilient development and growth
* Net zero energy generation and energy efficient buildings
* Net zero emission transport
* Net zero circular economy
* Listening to citizens and empowering communities
* Investing in change

The Strategy is supported by an implementation plan which outlines the deliverables, timescales, milestones and resources needed to achieve the city’s ambitious climate goals, along with an approach to measuring outcomes and impact.

# Policy and Environmental Context

## Introduction

This section summarises the outcomes of a policy review and environmental baseline review, highlighting the key environmental issues and challenges. This has served as an important base upon which to build the SEA methodology and assessment.

## Relationships with other plans, programmes or strategies

The Climate Strategy provides a shared vision and framework for a range of existing plans and strategies including, but not limited to the City Centre Transformation Strategy, City Mobility Plan, 10-year sustainable housing investment plan, Edinburgh Biodiversity Action Plan and 20-minute neighbourhoods.

SEA consideration of the Strategy, within the context of a focused range of other PPS, supports the identification of current/ wider environmental protection objectives and issues that the Strategy should take cognisance of, and might support with its delivery.

A comprehensive policy review has been undertaken and is attached as Appendix B to this report. A summary of the key environmental requirements and objectives identified through the review is presented in Table 2.1

A review of the associated environmental protection objectives highlights existing and potential problems, as well as opportunities for enhancement and benefits, and has served as an important base upon which to build the SEA Assessment.

Table 2.1: Key Environmental Requirements/Objectives

|  |  |
| --- | --- |
| **Topic** | **Key Environmental Requirements/Objectives** |
| Biodiversity | Ensure that there are no significant adverse impacts on the integrity of designated sites  Conserve and enhance biodiversity at all levels  Create a natural environment valued for its natural capital and which aims to deliver multiple benefits, including social and economic  Improve connectivity of natural places  Create a natural environment resilient to the threats of climate change, invasive species, habitat fragmentation, pests and diseases  Contribute to the response to climate change, through sustainable design mitigation and adaptation |
| Population and Human Health | Plan for demographic change  Maintain and improve health  Promote active travel and decarbonising travel  Promote access to quality open space  Improve the city’s walking and cycling infrastructure  Reduce the need to travel |
| Material Assets | Promote sustainable design and innovation to reduce material consumption  Minimise waste generation  Maximise re-use of material resources and use of recycled materials  Maintain and enhance transport infrastructure  Encourage innovative approach to heat generation/renewable infrastructure |
| Water | Maintain and improve water quality  Avoid and minimise effects on natural processes, particularly natural flood management and catchment processes through sensitive design and consultation  Do not negatively impact existing urban drainage system and seek to improve where appropriate.  Contribute to the response to climate change, through sustainable design mitigation and adaptation |
| Land and soil | Protect soil restoration to encourage carbon capture  Encroach on valuable greenfield areas  Encourage use of brownfield sites  Protect prime agricultural land and carbon-rich peat soils |
| Air and Climatic Factors | Reduce harmful emissions to air  Support Edinburgh’s transition to a low carbon economy  Promote ‘clean’ economic growth  Encourage modal shift to lower emission modes of travel  Protect citizens from the harmful effects of air pollution  Air quality should not be compromised by new or existing development and where places are designed to minimise air pollution and its effects.  Ensure citizens are well informed, engaged, and empowered to improve air quality  Contribute to the response to climate change, through sustainable design mitigation and adaptation  Integrate whole life carbon considerations through sustainable design |
| Cultural Heritage | Ensure that there are no significant adverse impacts on the integrity of cultural heritage sites and cultural heritage resources  Identify and assess the potential impacts of proposals on the setting of heritage assets and establish and refine final proposals to mitigate the impact or, where possible, enhance the setting of heritage assets.  Seek to enhance the significance of Inventory Gardens and Designed Landscape sites through education at other Inventory sites such as Holyrood Park  Promote a sustainable approach that integrates conservation with the needs of all communities and visitors to historic sites  Interpret and present the history and significance of the Old and New Towns of Edinburgh to the highest quality and promote equality of opportunity to access and enjoyment  Ensure that the Outstanding Universal Value (OUV) of the World Heritage Site and its setting is understood, protected and sustained.  Relationship between World Heritage Site and economic success needs to be protected, developed and celebrated.  Improve active travel access to heritage sites |
| Landscape/Townscape | Ensure that the unique qualities of the city, its historic environment and the character of its urban areas are safeguarded for the future  Protect important landscape and natural features of the environment  Increase the number of people that can benefit from greenspaces that are sustainably managed, biologically diverse and contribute to health and wellbeing.  Improve the quality of life in local communities by conserving and enhancing the natural and built environment to create more healthy and attractive places to live  To respect and enhance the skyline and key views |

### Environmental Baseline

A baseline information gathering exercise was carried out in order to summarise the key environmental characteristics of the City of Edinburgh Council area, focusing on SEA issues. Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires the Climate Strategy to be assessed against the following environmental issues:

* Air Quality
* Climatic factors
* Population and human health
* Cultural heritage
* Material assets
* Landscape and townscape
* Biodiversity, flora and fauna
* Water
* Land and soil

Appropriate baseline information is important to allow a ’Base Case’ or Business as Usual option to be developed. The Base Case will be used in the SEA assessments, as a reference to help highlight particular environmental problems risks and opportunities. A detailed environmental baseline is provided in Appendix B of this report.

### Environmental Issues and Challenges

Consideration of environmental baseline, issues and trends will provide the basis against which long term effects of the Climate Strategy will be monitored and assessed. Relevant environmental problems are summarised in Table 2.2.

Table 2.2: Environmental Issues and Challenges

|  |  |  |
| --- | --- | --- |
| **Environmental Problems** | **Relevant Topics** | **Implications for the Climate Strategy SEA** |
| Edinburgh has six Air Quality Management Areas (AQMAs). Five AQMAs are in locations where annual mean limits for nitrogen dioxide (NO2) are regularly exceeded.  There is one AQMA, at Salamander Street, where annual mean limits for particulate matter (PM10)are regularly exceeded.  Need to adapt to predicted climate change and its potential impacts.  Edinburgh’s infrastructure needs to be resilient against adverse climate impacts, and also consider potential positive impacts, such as a longer summer season.  The population of Edinburgh is projected to increase by 13% or 75,965 between 2016 and 2041  The Council have identified 18 noise Management Areas and 10 Quiet areas.  Congestion in the city centre  Cycle safety due to presence of significant numbers of large vehicles.  Impact of deteriorating air quality on the impact of the historic buildings  The social, economic and physical environmental conditions in Edinburgh are variable and therefore do not provide a consistent quality of environment adequate to ensure good standards of public health across all areas and communities. | Air and Climatic factors  Population and human health | The SEA should ensure the Climate Strategy interventions achieve the city’s emission reduction targets, particularly the national target of net zero by 2045.  The SEA should ensure the Climate Strategy supports the move towards sustainable modes of travel and encourages greater use of safe active travel options.  The SEA should ensure that the impact on human health is considered as a result of poor air quality, particularly in the AQMAs.  The SEA should ensure the Climate Strategy actions do not counteract the actions identify in the Cleaner Air for Scotland 2 report. |
| Edinburgh has a rich cultural heritage with a World Heritage Site, Scheduled Monuments, listed buildings and conservation areas and inventory garden and designated landscapes.  Need to ensure proposals are in-keeping as to not devalue the historic character of the area and retain and enhance the townscape at city wide and neighbourhood level and protect cultural activities that take place within the city centre.  Edinburgh is under significant development pressure particularly in the historic core. There is a need to protect cultural heritage from the negative impacts of development e.g. setting of Scheduled Monuments, loss or degradation of listed buildings, effect of pollutants, etc. | Cultural Heritage | The SEA should ensure the Climate Strategy will preserve and protect Edinburgh’s significant cultural heritage.  The SEA should ensure the Climate Strategy seeks to enhance the cultural assets of Edinburgh’s World Heritage Site. |
| Need to protect and improve the water status of waterbodies and avoidance of flood risk and areas which could contribute to increased flood risk.  Need to respond to increased rainfall and implications on surface water within a constrained city centre. This is inclusive of all sources of flood risk, including fluvial and pluvial risk, culverted watercourses, sewers, tidal interactions and groundwater. | Water | The SEA should ensure the Climate Strategy has interventions which protect and enhance Edinburgh’s water bodies and coastline.  The SEA should ensure the Climate Strategy presents interventions that will allow the city to adapt to the changing climate particularly increased rainfall and the impact on surface water run-off. |
| Increasing demand on existing transport infrastructure from projected population growth.  Increasing demand for resources such as water and wastewater treatment, heat and energy, and waste management created by new built development.  Development pressure - streetscape/civic pressure | Material Assets  Population and Human Health | The SEA should ensure the Climate Strategy supports the projected increase in population. |
| The majority of farmland in the area is classified as prime agricultural land, with the majority also within the Edinburgh Green Belt.  Edinburgh has a relatively low incidence of vacant and derelict land compared with other central belt authorities.  High land values and pressures for development means that land tends to be re-used quickly. | Land and Soil | The SEA should ensure the Climate Strategy has considered the importance of prime agricultural land when developing future infrastructure.  The SEA should ensure the Climate Strategy aims to protect the city’s limited peat rich soils. |
| Edinburgh has three Special Protection Areas (SPAs) and one proposed Special Protection Area (Outer Firth of Forth and St Andrews Bay Complex pSPA). The SPAs comprise Imperial Dock Lock SPA, the Firth of Forth SPA and Forth Islands SPA.  Edinburgh also has seven Sites of Special Scientific Interest (SSSI) covering a total area of 1,239 hectares, 8 local nature reserves and 109 non-statutory designated sites.  Land take as a result of new infrastructure and development can lead to loss, disturbance and fragmentation of habitats. This means a less resilient network to buffer the effects of climate change, as well as loss of biodiversity.  The presence of people and vehicles associated with transport can create disturbances for local wildlife, including disturbance resulting from noise and artificial light. | Biodiversity | The SEA should ensure the Climate Strategy has presented interventions that will ensure the protection of special designated sites and where appropriate considered their enhancement. |
| Edinburgh has a unique landscape setting surrounded by hills and open countryside.  Unique townscape and urban realm with key views that need to be protected | Landscape and Townscape | The SEA should ensure the Climate Strategy protects the unique character and townscape of the city centre. |

## Environmental Baseline Evolutions

The Strategy provides a coherent joined up approach to meeting challenging targets. In the absence of the Climate Strategy 2030, the city’s development is still considered within the proposed City Plan 2030, the City Centre Transformation Strategy and the City Mobility Plan, however without the Strategy there is likely to be a less effective piecemeal approach to achieving the outcomes of these PPS. Urban realm improvements, transport management interventions and active travel improvements are all covered within these strategies. However, the Climate Strategy provides more holistic Strategic Actions which aim to help the city adapt to the changing climate conditions, become more resilient to extreme weather events and achieve its emission reduction targets. The evolution of the environmental baseline, particularly the environmental problems and trends identified within Table 2.2 against each of the SEA topics are presented in Table 2.3.

Table 2.3: Evolution of Environmental Baseline

|  |  |
| --- | --- |
| **SEA Topic** | **Evolution under a ‘Do Nothing’ Scenario** |
| Biodiversity | Biodiversity, flora and fauna is protected through other Council policies and wider environmental legislation, therefore there would be limited change. |
| Population and Human Health | If the Climate Strategy is not implemented, it is possible that the existing transport infrastructure and urban realm would not be able to accommodate the predicted population growth. An inability to manage traffic levels will exacerbate air pollution ultimately leading to the failure of the national net zero targets set by the Scottish Government.  Poor air quality will cause wider health impacts for the city’s population and would be particularly harmful given that the population is aging, and the elderly are more vulnerable to air pollution[[1]](#footnote-1). |
| Material Assets | If the Climate Strategy is not implemented and energy demand continues to increase (as a result of a growing population), there would be little change to energy standards and energy efficiency in new buildings across the city. Inefficient use of energy will contribute to the city failing to meet its net zero emission targets.  Material assets are also considered within the proposed City Plan 2030, the City Centre Transformation Strategy and the City Mobility Plan. |
| Water | There would be limited change to water quality if the Climate Strategy was not implemented.  Surface water management is considered within Edinburgh’s Flood Risk and Surface Water Management Plan |
| Land and soil | If the Climate Strategy is not implemented and demand for motorised transport increases, it may be necessary to construct further large-scale transport facilities, such as new roads and bridges, to cope with demand. Construction and use of such facilities could lead to land contamination, soil erosion and soil sealing. Pressure for the development of new transport facilities could also lead to the loss of any prime agricultural land and peat rich soils remaining in the city.  Land and soil impacts are considered in the City Mobility Plan which focuses on shifting to more sustainable modes and reducing traffic in the city centre through the Low Emission Zone. |
| Air and Climatic Factors | If the Climate Strategy and the demand for and use of motorised forms of transport continues or even increases then air pollution will worsen, contributing more greenhouse gases to the atmosphere and ensuring that the city fails to meet its emission reduction targets and obligations under the Climate Change (Scotland) Act 2009.  The city is likely to become more vulnerable to climate changes and may struggle to adapt to more frequent extreme weather events.  Air and Climatic factors are also considered in detailed within the City Mobility Plan. |
| Cultural Heritage | There would be limited change to cultural heritage assets attributed to the Climate Strategy if it was not implemented, however these assets are at risk from the impacts of climate change as outlined in HES’ A Guide to Climate Change Impacts[[2]](#footnote-2). |
| Landscape and Townscape | Landscape and townscape are considered in detail within the proposed City Plan 2030, the City Centre Transformation Strategy and the City Mobility Plan. Therefore, there would be limited change to landscape and townscape if the Climate Strategy was not implemented. |

# SEA Assessment Approach

This section sets out the approach to the SEA assessment and the assessment criteria used. The findings of the assessment are presented in Section 4.1. Following the assessment of the Strategic Actions, any potentially negative impacts identified will be discussed with the project team to determine effective enhancement measures. The key recommendations are likely to include recommendations for the Implementation Plan.

## Scoping of SEA Topics

Following the baseline and policy review it was determined that all of the SEA topics may see both positive and/ or negative impacts, however some would be more significant than others and some of the impacts to the topics may only be significant as a cumulative impact. Table 3.1 outlines all topics scoped into the assessment.

Table 3.1: Scoping of SEA Topics

|  |  |  |
| --- | --- | --- |
| **SEA Topic** | **Scoped In/Out** | **Comment** |
| Air Quality | In | The Strategy will likely deliver significant positive impacts by reducing greenhouse gas emissions from private vehicles and buses and managing the ability for vehicles to access certain parts of the city centre. |
| Climatic Factors | In | The Strategy is likely to deliver significant positive impacts with reduced emissions through encouraging modal shift to more sustainable modes of transport, use of low carbon transport, opportunity for climate change adaptation and incorporating resilience measures |
| Population and Human Health | In | The Strategy will likely deliver positive impacts to residents and visitors of the Edinburgh by delivering public awareness and empowering them to make a change. The positive impacts on air quality and climate will also have beneficial impacts on human health for the Edinburgh population. |
| Cultural heritage | In | The Strategy will likely deliver positive impacts on the setting of historic assets and sites of cultural importance through improved amenity as the city moves away from private vehicles and towards sustainable modes. |
| Material Assets | In | The Strategy will likely deliver positive impacts on transport infrastructure across the city as it looks to provide new infrastructure to support sustainable modes of transport e.g. electric vehicle infrastructure. |
| Landscape and Townscape | In | The Strategy will likely deliver positive impacts on landscape and visual amenity through the reduction in private vehicles, enhancement of the city’s natural capital and integrating the urban landscape with blue-green infrastructure. |
| Water | In | The Strategy will likely deliver positive impacts on water through the protection of the city’s coasts but also through creating a sustainable approach to water management. |
| Biodiversity, Flora & Fauna | In | The Strategy will likely deliver positive impacts as its seeks to protect and enhance the city’s natural capital by delivering nature-based solutions to the impacts of climate change. |
| Land and Soil | In | The Strategy will likely deliver positive impacts through soil restoration to encourage more carbon to be captured. |

## Response to Consultation Comments

Statutory requirements of the SEA include the requirement to provide consultation authorities with a detailed explanation of the plan in order to fully understand the likely environmental effects. Consultation authorities were asked to provide a view on the Climate Strategy Scoping Report produced in April 2022. A summary of the key comments from the statutory consultation authorities and the response to how this has been captured in the SEA is provided in Appendix C.

## Climate Strategy Elements subject to SEA Assessment

In line with the Scottish Governments *Strategic Environmental Assessment Guidance 2013* the assessment has been focused on the key elements within the Climate Strategy which are likely to have significant environmental effect to ensure a proportionate approach to assessment. Table 3.2 outlines the different elements of the Climate Strategy alongside commentary as to why it has or has not been scoped into the SEA assessment.

Table 3.2: Climate Strategy elements subject to SEA Assessment

|  |  |  |
| --- | --- | --- |
| **Climate Strategy Elements** | **Subject to SEA assessment** | **Comment** |
| Principles | No | The principles are delivered through the wider Strategic Actions and therefore the SEA assessment will focus on these elements. |
| Levers | No | It was determined that this element would not have a significant effect on the environment. |
| Priorities | No | The priorities are delivered through the wider Strategic Actions and therefore the SEA assessment will focus on these elements. |
| Case for Change | No | It was determined that this element was background information to inform the development of the Strategic Actions and as such would not have a significant effect on the environment. |
| Policy Context | No | It was determined that this element was background information to inform the development of the Strategic Actions and as such would not have a significant effect on the environment. |
| Strategic Actions | Yes | There are six Strategic Action Areas within the Climate Strategy, these are:   * A net zero, climate resilient development and growth * Net zero energy generation and energy efficient buildings * Net zero emission transport * Net zero circular economy * Listening to citizens and empowering communities * Investing in change   Some Strategic Actions within these Strategic Action Areas are included within the proposed City Plan 2030, City Mobility Plan and other local PPS which have been subject to their own SEA. Therefore, the assessment of the Strategic Action Areas will give due consideration to the environmental impacts identified within the other SEAs and in some cases Strategic Actions will be sifted out of the assessment (see Appendix D). See Section 4 of this Environmental Report for the assessment of the sifted in Strategic Actions. |
| Implementation Plan | No | The 2030 Climate Strategy is supported by an Implementation Plan. Although the Implementation Plan is not subject to the SEA process it will provide further context to the Strategic Actions, allowing the SEA specialists to understand the potential environmental impacts of these Actions. |

## SEA Objectives

The SEA assessments will use a set of SEA objectives and supporting assessment guide questions, identified in Table 3.3 that cover each of the environmental topics scoped into the assessment. The SEA objectives and assessment guide questions presented have been developed from a comprehensive review of both the baseline issues and policy requirements and to align with the Scottish Government Climate Change Plan Update (2021) and both the City Plan 2030 and City Mobility Plan SEAs, to allow a consistent approach to assessment.

Table 3.3: SEA Objectives and Assessment Guide Questions

|  |  |  |
| --- | --- | --- |
| **SEA Topic** | **SEA Objective** | **SEA Assessment Guide Questions**  **How will the policy/action…** |
| Air Quality | To improve air quality and reduce emissions of key pollutants | Contribute to reducing emissions of key pollutants to air from road and air travel  Contribute to reducing emissions to air from energy generation and heating  Contribute towards achieving the aims and objectives of the Council’s Air Quality Action Plan  Improve air quality within existing AQMAs  Contribute towards achieving the aims and objectives of the LEZ |
| Climatic Factors | Reduce GHG emissions in order to meet Scotland's emissions reduction target of net zero by 2045 | Promote and facilitate modal shift to more sustainable transport options?  Encourage the provision of low/zero carbon technologies?  Promote and support the best use of clean fuels/technologies?  Avoid new Greenhouse Gas (GHG) emissions? |
| Climatic Factors | Promote and enable adaptation to climate change | Protect and increase the resilience of buildings  Protect and increase the resilience of greenspace/open space  Protect and increase the resilience of Edinburgh’s coastal defences |
| Population and Human Health | Improve the quality of life and human health for all through improved environmental quality | Reduce the health gap and inequalities and improve healthy life expectancy?  Promote and enhance/improve access to open space, greenspace and the wider countryside?  To protect and improve human health and wellbeing through improving the quality of the living environment of people and communities?  Increase sustainable access for all users to essential services, employment and the natural and historic environment?  Reduce exposure to air pollution by most vulnerable groups? |
| Cultural Heritage | Conserve or enhance the historic environment | Build the historic environment’s resilience to climate change?  Have a direct impact, or impact on the setting of Listed Buildings, Scheduled Monuments, Inventory Gardens and Designed Landscapes, Conservation Areas and non-designated historic environmental assets, places and spaces?  Have an impact upon the outstanding universal value (OUV) of the Old and New Towns of Edinburgh World Heritage Site (WHS)?  Have an impact on key views to and from heritage assets?  Improve access to and understanding of the historic environment?  Respect / respond to the historic urban spatial structure / plan of the city?  Have an impact upon the cultural identity of the city? |
| Material Assets | To promote the sustainable use and management of material assets | Promote sustainable use and management of existing infrastructure e.g. transport, water, heat, energy or flood protection infrastructure?  Support or lead more sustainable maintenance activity in new development?  Contribute towards ‘Zero Waste’ objectives?  Increase the amount of waste which is re-used, recycled and recovered? |
| Landscape and Townscape | Protect and enhance the landscape and townscape character and setting of the city. | Protect or enhance sensitive views?  Create and maintain an attractive public realm?  Respect existing urban landscape and settlement pattern?  Protect and enhance the character, integrity and liveability of key streetscapes, including removing barriers to use? |
| Water | Prevent the deterioration and where possible, enhance the status of the water environment and reduce/manage flood risk in a sustainable way | Contribute to reducing emissions and particulates of key pollutants to water from road transport?  Support network resilience to anticipated extreme weather events and climate change?  Promote the avoidance of flood risk?  Reduce the demand for waste-water treatment? |
| Biodiversity, Flora & Fauna | Protect, maintain and enhance biodiversity, flora and fauna and habitat networks | Protect and or enhance the national and local integrity of designated biodiversity sites and wildlife sites?  Protect and or enhance the integrity of existing habitat and green/blue networks and other wildlife corridors?  Protect protected species?  Support green blue infrastructure or nature-based solutions to assist in creating climate resilient development? |
| Land and Soil | Protect valuable land resources, minimise detrimental effects of land use change and promote soil restoration | Protect soil restoration to encourage carbon capture?  Protect valuable greenfield areas?  Encourage use of brownfield sites?  Protect and restore prime agricultural land and carbon-rich soils such as peat?  Promote soil and peatland restoration to encourage carbon capture? |

## Assessment Criteria

The SEA assessment will use the criteria outlined in Table 3.4. Where negative effects are identified, appropriate enhancement measures will be suggested in Section 5. A score has been assigned for each SEA topic within the six Strategic Action Areas. An overall score for the environment has then been identified for each Strategic Action Area. The cumulative assessment, presented in Section 4.2, also uses this assessment criteria to give an intra-plan cumulative score per SEA topic.

Table 3.4: SEA Scoring Matrix

|  |  |  |
| --- | --- | --- |
| **Score** | **Description** | **Symbol** |
| Significant (Major) Positive Effect | Strategic Action Area is likely to have a direct, significant, long term positive effect on the objective and /or contribute significantly to the achievement of the SEA topic/ objectives. | ++ |
| Minor Positive Effect | Strategic Action Area is likely to have some positive influence on the SEA topic/ objectives and/contribute to the achievement of the objective but not significantly. | + |
| Neutral Effect | Strategic Action Area is assessed as being neutral or having no influence/ effect on the SEA topic/ objectives. | 0 |
| Minor Negative Effect | Strategic Action Area is likely to have some minor negative impact on the SEA topic/ objectives and could be addressed through mitigation. | - |
| Significant (Major) Negative Effect | Strategic Action Area has an uncertain relationship to the SEA topic/ objectives.  In addition, there may be insufficient information to enable an assessment to be made. | -- |
| Uncertain Effect | Strategic Action Area an uncertain relationship to the SEA topic/ objectives.  In addition, there may be insufficient information to enable an assessment to be made. | ? |
| No Clear Relationship | There is no clear relationship or negligible relationship between the Strategic Action Area and the SEA topic/ objectives. | ~ |

## Assumptions and Limitations

The context for the assessment of reasonable alternatives is limited by the requirement to meet the ambitious climate change targets. Given the current legislative context, and the declared climate emergency, it was identified that the current ambition can only be to achieve the maximum emissions reductions possible, reflected across all sectors. Do minimum or precautionary approaches were not considered viable strategic alternatives. Alternatives were considered in the development of the priorities and Strategic Actions; further information is provided in Section 3.7.

## Reasonable Alternatives

Article 14(2) of the 2005 Act requires that:

*“The report shall identify, describe and evaluate the likely significant effects on the environment of implementing (a) the plan or programme; and (b) reasonable alternatives to the plan or programme, taking into account the objectives and the geographical scope of the Plan or Programme”.*

Reasonable alternative should consider alternatives to the Climate Strategy itself as well as alternatives to interventions and actions presented within the final strategy. The strategy and its Strategic Actions on which this SEA is focused, has been developed through an iterative process, linked closely to the evidence base setting out city emission sources and opportunities for the City. The strategic actions have emerged and been refined through a collaborative process where thoughts and feedback from elected members, city partners, the public, and the Edinburgh Climate Commission were sought and used to shape the approach and strategic actions.

Figure 3.1 outlines the process that was undertaken by the strategy development team and partners in the production of the Strategy and Strategic Actions.

Figure 3.1: Approach to the Development of the Climate Strategy 2030 (provided by the City of Edinburgh Council)

Alternatives for the Strategy were primarily considered in the development of the Strategic Action Areas at Stage 1 and Stage 2 of the Strategy Development. At this stage, environmental criteria including impacts on emissions, impacts to the resilience to the effects of climate change, the impact of emissions on human health, air quality management targets, and a just transition were key factors in determining the final list of Strategic Actions.

While the 1st version of the Strategy was published in December 2021, CEC stipulates that this is a living strategy which will be updated and refined as required and on an ongoing basis as set out in the monitoring approach Section 6.1. Priorities for action will be identified annually in discussion with partners and the implementation plan will be updated accordingly.

# Assessment of Environmental Effects

## SEA Assessment of the Strategic Actions

This section presents the key findings of the SEA assessment. An assessment of the Strategic Actions was undertaken to consider the likely significant environmental effects arising from each Strategic Action Area within the Climate Strategy.

### Sifting Approach

An initial sift of the strategy was undertaken to focus the assessment on the key elements within the Climate Strategy which are likely to have significant environmental effects. This was to ensures a proportionate approach to assessment. It was determined that the assessment would focus on Strategic Action Areas (and the underlying Strategic Actions) within the Climate Strategy as it was identified that this is where there was the biggest opportunity for significant environmental effect summarised in Table 3.2 of this report. The Strategic Action Areas are:

* A net zero, climate resilient development and growth;
* Net zero energy generation and energy efficient buildings;
* Net zero emission transport;
* Net zero circular economy;
* Listening to citizens and empowering communities; and
* Investing in change.

A secondary sift was then undertaken of the Strategic Actions within each Strategic Action Area to identify which actions fell under the remit of other PPS that were subject to their own SEA’s including the City Plan 2030, City Mobility Plan and Edinburgh City Transformation Strategy. An example of this includes implementing a Low Emission Zone scheme to reduce harmful emissions. This is captured within the Net zero emissions transport Strategic Action Area but as it is also a policy intervention within the Edinburgh City Mobility Plan, it has been sifted out of the SEA Process for the Climate Strategy at this stage. The outcome of the sifting exercise is provided in Appendix D.

### Assessment Approach and Findings

Following the sifting approach outlined in Section 4.1.1, the remaining Strategic Actions were assessed as a package of actions. The assessment considers the impact of the Strategic Action under the assumption it is successful. For example, if the action is to ‘encourage partner organisations to sign up to the Edinburgh Climate Compact’, then the assessment has assumed that this has occurred and then assess what the environmental implications of this may be.

The assessment tables below present a score per SEA topic for each Strategic Action Area, as well as an overall score for the environment. These should be read in parallel with Appendix D which provides a list Actions for each Strategic Action Area. Table 4.7 provides a summary of the assessment and an overall score for the environment.

Table 4.1: Summary of the SEA Assessment for Net Zero Climate Resilient Development and Growth

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | A neutral effect on the air quality objective. Of the sifted in Actions there are no specific Actions within this Strategic Action Area that directly reduce emissions of key pollutants. |
| Climatic Factors | A significant positive effect on the second climate objective - promote and enable adaptation to climate change. Some Actions are aimed at achieving net zero emissions and increasing the speed of adaptation in the city. In addition to this, these Strategic Actions seek to protect and increase the resilience of buildings through Actions that seek to develop innovative approaches to net zero development and construction.  Actions to embed net zero climate resilience requirements into new/existing policy, legislation, regulations etc. will likely promote and enable adaptation to climate change. |
| Population & Human Health | A minor positive effect on the population and human health objective. Improvements to natural assets will have a beneficial impact on health and wellbeing, as residents can spend more time with nature, also encouraging physical activity. |
| Cultural Heritage | A minor positive effect on the cultural heritage objective. Adapting Edinburgh’s World Heritage Site to be resilient to the impacts of climate change will conserve it for future generations. |
| Material Assets | A minor positive effect on the material assets objective. The integration of design features for water and flooding within the city may 'promote sustainable use and management of existing infrastructure e.g. transport, water, heat, energy or flood protection infrastructure'. Actions such as 3.2-3.5 that commit to net zero housing investments/net zero building standards/net zero construction and building Actions may contribute towards zero waste objectives, support or lead more sustainable maintenance activities in new developments and promote sustainable use and management of existing infrastructure. |
| Landscape and Townscape | A neutral effect on the landscape and townscape objective. Of the sifted in Actions there are no specific Actions within the Strategic Action Area that directly impact landscape and townscape characteristics at this strategic level. |
| Water | A minor positive effect on the water objective. A number of the Strategic Actions, particularly 5.1 and 5.2, are aimed at developing a long- term approach to water management. Improving water management in the city will reduce the risk of flooding and will allow for better integration of the blue and green network. This is likely to enhance the water quality status of Edinburgh's water bodies. |
| Biodiversity, Flora and Fauna | A minor positive effect on the biodiversity objective. Managing and enhancing Edinburgh’s natural assets across key public sector operational estate sites and protecting and enhancing greenspace will have a beneficial impact on biodiversity. |
| Land and Soil | There are indirect effects from water management alleviating the impacts of flooding that could protect valuable land resources, while conserving biodiversity would indirectly promote soil restoration. At this strategic level the effect is considered to be neutral. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.2: Summary of the SEA Assessment for Net Zero Energy Generation and Energy Efficient Buildings

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | A minor positive effect on air quality. Actions that set progressive planning policies to increase energy standards in new buildings and support renewable energy solutions that decarbonise the region’s energy infrastructure, is expected to contribute towards reducing emissions to air from energy generation and heating. |
| Climatic Factors | A significant positive effect on the first and second climatic factors objectives - reduce GHG emissions in order to meet Scotland's emissions reduction target of net zero by 2045 and promote and enable adaptation to climate change. Strategic Actions under 1, 5, 7, 10 and 11 are aimed at achieving low/net zero emissions and increasing the speed of adaptation to climate change in the city. |
| Population & Human Health | A significant positive effect on population and human health. Actions to build on community wealth (through net zero communities' pilots) and projects which maximise opportunities to deliver low-cost, clean, renewable energy to neighbourhoods and communities (with a focus on areas experiencing inequalities) is expected to improve human health and wellbeing. Retrofitting for social housing will have direct benefits on health and wellbeing through the improvement of indoor air quality while the retrofitting itself will provide green jobs and fair work opportunities. |
| Cultural Heritage | Action 12.1 relates to retrofitting mixed tenure housing some of which will include listed buildings within the World Heritage Site. This could result in both positive or negative effects on these historic buildings depending on the design approach taken forward however at this strategic level the effect is considered to be neutral for the cultural heritage objective. |
| Material Assets | A significant positive effect on material assets. Strategic Actions, including Actions to increase energy standards, support the city's projected energy needs and improve heat network connectivity is expected to promote sustainable use and management of existing energy and heat infrastructure. |
| Landscape and Townscape | Decarbonising the regions energy infrastructure may also have a beneficial impact depending on the nature and location of the infrastructure. At this strategic level the effect is considered to be neutral. |
| Water | Long term climate change improvements from reducing emissions could reduce the frequency of extreme weather events such as flooding. This will indirectly impact the water objective through the sustainable reduction of flood risk. At this strategic level the effect is considered to be neutral. |
| Biodiversity, Flora and Fauna | Reducing the emissions associated with GHGs will have an indirect benefit on biodiversity and ecosystem services. Moving to renewable energy solutions will reduce the impact on natural assets with the use of sustainable infrastructure. At this strategic level the effect is considered to be neutral. |
| Land and Soil | By focussing on retrofitting existing social housing and less on development of new housing there is an indirect impact on land and soil by reducing the encroachment of valuable greenfield areas and minimising land use change. At this strategic level the effect is considered to be neutral. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.3: Summary of the SEA Assessment for Net Zero Emission Transport

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | A minor positive effect on air quality objectives. Strategic Actions that plan to reduce emissions and support the transition to electric vehicles and active travel will contribute to improving air quality. |
| Climatic Factors | A significant positive effect on climatic factors. Actions that aim to reduce emissions in the city through innovative zero emission solutions - including investments into EV infrastructure for public transport and strategies for emission reductions in aviation - will help to reduce GHG emissions, promote and support the best use of clean fuels/technologies and promote and facilitate modal shift to more sustainable transport options. |
| Population & Human Health | A minor positive effect on the population and human health objective. Actions that seek to reduce emissions - including investments into EV infrastructure and the city-centre operation plan - will contribute to improving air quality with subsequent benefits on quality of life and human health for all. Support from the Scottish Government into sustainable modes of travel, including active travel, will similarly improve human health and wellbeing through improving the quality of the living environment of people and communities. |
| Cultural Heritage | Reducing emission from private vehicles across the city will have an indirect benefit to the setting of cultural heritage resources and the fabric of historic buildings. At this strategic level the effect is considered to be neutral. |
| Material Assets | Of the sifted in Actions there are no Actions directly achieving the material assets objective. However, plans to integrate EV infrastructure are likely to promote sustainable use and management of existing transport infrastructure. At this strategic level the effect is considered to be neutral. |
| Landscape and Townscape | Reducing the emissions associated with GHGs could have an indirect benefit on landscape and townscape as the amenity of the city will improve with time. At this strategic level the effect is considered to be neutral. |
| Water | Reducing the emissions associated with GHGs could have an indirect benefit on water. For example water bodies could benefit as the quality of surface water run-off into water bodies would improve with time. At this strategic level the effect is considered to be neutral. |
| Biodiversity, Flora and Fauna | Reducing the emissions associated with GHGs will have an indirect benefit on biodiversity and ecosystem services. At this strategic level the effect is considered to be neutral. |
| Land and Soil | Reducing the emissions associated with GHGs will have an indirect benefit on land and soil with the reduction of surface water pollution affecting soil quality. At this strategic level the effect is considered to be neutral. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.4: Summary of the SEA Assessment for Net Zero Circular Economy

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | A neutral effect on the air quality objective. Of the sifted in Actions there are no specific Actions within the Strategic Action Area that directly reduces emissions of key pollutants. |
| Climatic Factors | A significant positive effect on climatic factors. Strategic Actions that encourage the city to commit to becoming net zero, increase participation in circular programmes supporting sustainable practices, and the integration of legislation/frameworks to support the city's response to the climate emergency promote and enable adaptation to climate change. |
| Population & Human Health | A minor positive effect on climatic factors. Strategic Actions that seek to support people from all backgrounds to access good quality jobs in a net zero economy and develop the skills necessary to meet the requirements of net zero businesses may have a beneficial impact on increasing sustainable access for all users to employment opportunities. |
| Cultural Heritage | No clear relationship or negligible relationship between this Strategic Action Area and the cultural heritage objective. |
| Material Assets | A minor positive effect on climatic factors. Strategic Actions that support a more circular economy and reduce waste, including the integration of circular economy principles, may have a beneficial impact by contributing towards 'zero waste' objectives and increasing the amount of waste which is re-used, recycled and recovered. |
| Landscape and Townscape | No clear relationship or negligible relationship between this Strategic Action Area and the landscape and townscape objective. |
| Water | No clear relationship or negligible relationship between this Strategic Action Area and the water objective. |
| Biodiversity, Flora and Fauna | No clear relationship or negligible relationship between this Strategic Action Area and the biodiversity objective. |
| Land and Soil | No clear relationship or negligible relationship between this Strategic Action Area and the land and soil objective. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.5: Summary of the SEA Assessment for Listening to Citizens and Empowering Communities

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | No clear relationship or negligible relationship between this Strategic Action Area and the air quality objective. |
| Climatic Factors | A minor positive effect on climatic factors. Actions to strengthen knowledge/embed education on climate change promote and enable adaptation to climate change as it helps people understand and address the impacts of the climate crisis - empowering them with the knowledge, skills, values and attitudes needed to act as agents of change. |
| Population & Human Health | A minor positive effect on population and human health. Strategic Actions that engage and educate citizens on the impacts of climate change, including awareness-raising campaigns and developments into the 20-minute neighbourhood concept, are expected to improve the quality of life and human health for all through improved environmental quality. |
| Cultural Heritage | No clear relationship or negligible relationship between this Strategic Action Area and the cultural heritage objective. |
| Material Assets | No clear relationship or negligible relationship between this Strategic Action Area and the material assets objective. |
| Landscape and Townscape | No clear relationship or negligible relationship between this Strategic Action Area and the landscape and townscape objective. |
| Water | No clear relationship or negligible relationship between this Strategic Action Area and the water objective. |
| Biodiversity, Flora and Fauna | No clear relationship or negligible relationship between this Strategic Action Area and the biodiversity objective. |
| Land and Soil | No clear relationship or negligible relationship between this Strategic Action Area and the land and soil objective. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.6: Summary of the SEA Assessment for Investing in Change

|  |  |
| --- | --- |
| **SEA Topic Scores** | **Description of Impact - This** Strategic Action Area **is expected to have…** |
| Air Quality | A neutral effect on the air quality objective. Of the sifted in Actions there are no specific Actions within the Strategic Action Area that directly impact air quality. |
| Climatic Factors | A significant positive effect on climatic factors. Strategic actions that support strategic sustainable investments and helps develop a city-wide approach to dealing with residual emissions may promote and enable adaptation to climate change. |
| Population & Human Health | A minor positive effect on climatic factors. Strategic actions that ensure population health data drives strategic planning for action on climate change is expected to promote and enable adaptation to climate change, giving recognition to the role of social sustainability in the climate change crisis. |
| Cultural Heritage | Of the sifted in Actions there are no specific Actions that directly affect the cultural heritage objective. However if sustainable investments are made to promote adaptation to climate change there would be an indirect impact on cultural heritage resources. At this strategic level the effect is considered to be neutral. |
| Material Assets | A minor positive effect on material assets. Strategic actions that support developments in the city's Green Investment Plan and calls on place-based net zero investments (including place-based finance systems) is expected to support the shift towards net zero infrastructure. |
| Landscape and Townscape | Of the sifted in Actions there are no specific Actions that directly affect the landscape objective. However if sustainable investments are made to promote adaptation to climate change there would be an indirect impact on public realm amenity. At this strategic level the effect is considered to be neutral. |
| Water | Collaborating with green finance experts to support the resourcing and delivery of major city climate projects, beginning with the city Water Vision would have an indirect positive impact on the water objective, by improving water quality and reducing flood risk. At this strategic level the effect is considered to be neutral. . |
| Biodiversity, Flora and Fauna | Of the sifted in Actions there are no specific Actions that directly affect the biodiversity objective. However if sustainable investments are made to promote adaptation to climate change there would be an indirect impact on biodiversity and ecosystem services. At this strategic level the effect is considered to be neutral. |
| Land and Soil | Of the sifted in Actions there are no specific Actions that directly affect the land and soil objective. However if sustainable investments are made to promote adaptation to climate change there would be an indirect impact on land and soil. At this strategic level the effect is considered to be neutral. |
| Overall this Strategic Action Area’s score is considered to be minor positive. | |

Table 4.7: Summary of the Climate Strategy Strategic Action Areas

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strategic Action Area** | **Air Quality** | | **Climatic Factors** | **Population and Human Health** | **Cultural Heritage** | **Material Assets** | **Landscape and townscape** | **Water** | **Biodiversity** | **Land and Soil** | **Overall score for Environment (cumulative effect)** |
| Climate resilience | 0 | ++ | | + | + | + | 0 | + | + | 0 | + |
| Energy Efficient Buildings | + | ++ | | ++ | 0 | ++ | 0 | 0 | 0 | 0 | + |
| Circular Economy | 0 | ++ | | + | ~ | + | ~ | ~ | ~ | ~ | + |
| Emissions from Transport | + | ++ | | + | 0 | 0 | 0 | 0 | 0 | 0 | + |
| Empowering Communities | ~ | + | | + | ~ | ~ | ~ | ~ | ~ | ~ | + |
| Investing in Change | 0 | ++ | | + | 0 | + | 0 | 0 | 0 | 0 | + |

## Cumulative Effects

Given that a number of the actions proposed within the Climate Strategy are captured within other PPS and therefore are already subject to an SEA, an inter-project cumulative assessment is not considered valuable for the Climate Strategy.

To ensure a value driven assessment the assessment summarised in Table 4.7 demonstrated the potential for significant environmental effects of the ‘sifted in’ actions only, however in undertaking the cumulative assessment of the Strategy i.e. the intra plan cumulative assessment, the potential for significant environmental effects of those ‘sifted out ’actions were also considered. This intra plan cumulative considers the cumulative impact across each SEA objective if all of the Strategic Actions were to be delivered at the same time. Table 4.8 presents a summary of the intra-plan cumulative effects on each SEA topic.

Table 4.8: Cumulative Assessment Summary for each SEA topic

| SEA Topic | Cumulative Score | Summary of Cumulative Assessment |
| --- | --- | --- |
| Air Quality | ++ | Actions that set progressive planning policies to increase energy standards in new buildings and support renewable energy solutions that decarbonise the regions energy infrastructure, is expected to contribute towards reducing emissions to air from energy generation and heating. Strategic Actions that plan to reduce emissions and support the transition to electric vehicles will contribute to improving air quality.  Actions such as the Low Emission Zone, 20-minute neighbourhoods and bus decarbonisation are expected to bring substantial air quality improvements to the city. By preventing older vehicles into the city, air pollutants are reduced creating a cleaner air quality environment.  Sustainable 20-minute neighbourhoods will reduce the reliance on private vehicles for shorter journeys as people are able to make these trips using active travel modes (walking and cycling).  **Overall, a significant positive cumulative effect on air quality is expected from the Strategy.** |
| Climatic Factors | ++ | Some Actions are aimed at achieving net zero emissions and increasing the speed of adaptation of the city, encouraging the city to commit to becoming net zero, increase participation in circular programmes supporting sustainable practices, and the integration of legislation/frameworks to support the city's response to the climate emergency promote and enable adaptation to climate change.  Actions that aim to reduce emissions in the city through innovative zero emission solutions - including investments into EV infrastructure for public transport and lobby for emission reductions in aviation - will help to reduce GHG emissions, promote and support the best use of clean fuels/technologies and promote and facilitate modal shift to more sustainable transport options.  Decarbonising the city’s bus fleet will bring long-term improvements to air quality and support the transition to net zero which will in turn provide benefits to climatic factors objective.  **Overall, a significant positive cumulative effect on climatic factors is expected from the Strategy.** |
| Population and Human Health | ++ | Improvements to natural assets will have a beneficial impact on health and wellbeing, as residents can spend more time with nature, also encouraging physical activity.  Investing and expanding the active travel network will promote walking and cycling and encourage a move to active travel modes of transport directly bringing benefits to the health and quality of life of residents.  Actions to build on community wealth (through net zero communities' pilots) and projects which maximise opportunities to deliver low-cost, clean, renewable energy to neighbourhoods and communities (with a focus on areas experiencing inequalities) is expected to improve human health and wellbeing.  Strategic actions that seek to support people from all backgrounds to access good quality jobs in a net zero economy and develop the skills necessary to meet the requirements of net zero businesses may have a beneficial effect on increasing sustainable access for all users to employment opportunities.  **Overall, a significant positive cumulative effect on population and human health is expected from the Strategy.** |
| Cultural Heritage | + | Adapting Edinburgh’s World Heritage Site to be resilient to the impacts of climate change will conserve it for future generations.  Improvements to active travel will create better accessibility to cultural heritage resources, while improvements to air quality will help the fabric of historic buildings and the setting of cultural heritage resources.  **Overall, a minor positive cumulative effect on cultural heritage is expected from the Strategy.** |
| Material Assets | ++ | Strategic actions, including Actions to increase energy standards, support the city's projected energy needs and improved heat network connectivity is expected to promote sustainable use and management of existing energy and heat infrastructure.  Strategic actions that support a more circular economy may have a beneficial impact by contributing towards 'zero waste' objectives and increasing the amount of waste which is re-used, recycled and recovered.  Development of the electricity grid infrastructure and capacity to respond to increased demand for EVs will ensure that the city’s infrastructure meets future demand and is of a high quality.  **Overall, a significant positive cumulative effect on material assets is expected from the Strategy.** |
| Landscape and Townscape | + | Most Actions would have some impact on landscape. Sustainable 20-minute neighbourhoods would seek to reduce private car use in the city and therefore lead to reduced congestion (associated reduction in noise and air pollution) and improved visual amenity.  Reducing the need to travel into the city with a private vehicle will provide more opportunity for public realm improvements with a focus on pedestrians and cyclists across the city.  **Overall, a minor positive cumulative effect on landscape and townscape is expected from the Strategy.** |
| Water | + | A number of the Strategic Actions are aimed at developing a long-term approach to water management. Improving water management in the city will reduce the risk of flooding and will allow for better integration of the blue and green network. This is likely to enhance the water quality status, amenity value and accessibility of Edinburgh's water bodies.  Adapting the city’s coast to be resilient to extreme weather events as a result of climate change would have a beneficial impact on protecting homes from flood risk and meeting the water objective.  **Overall, a minor positive cumulative effect on water is expected from the Strategy.** |
| Biodiversity, Flora and Fauna | + | Managing and enhancing Edinburgh’s natural assets across key public sector operational estate site and protecting and enhancing greenspace will have a beneficial effect on biodiversity.  A number of the emissions reductions actions will result in the potential for positive effects on biodiversity as there would be fewer carbon emissions however not significant enough to score.  Developing nature-based solutions will not only support the transition to net zero but will also provide more habitats for biodiversity and support the city’s ecosystem services.  **Overall, a minor positive cumulative effect on biodiversity is expected from the Strategy.** |
| Land and Soil | 0 | A number of Strategic Action Areas would bring indirect benefits to the land and soil objective. For example, improvements to water management would alleviate the impacts of flooding and would protect valuable land resources, while conserving biodiversity and promoting soil restoration.  Reducing the emissions associated with GHGs will have an indirect benefit on land and soil with the reduction of surface water pollution affecting soil quality.  **Overall, a neutral cumulative effect has been identified on land and soil.** |

# Enhancement Recommendations for the Climate Strategy Implementation Plan

The assessment of the Climate Strategy Strategic Actions (Section 4.1) and the assessment of cumulative effects (Section 4.2) have not identified any negative impacts that could occur on the environment as a result of the Strategy. No mitigation measures are therefore required. Instead focus has been on developing a suite of enhancement measures to be considered in the Implementation Plan.

A number of neutral and minor positive significant positive effects were identified in the assessment findings. To enhance the positive effects identified in this Environmental Report, the recommendations for the Climate Strategy Implementation Plan are provided in Table 5.1.

Table 5.1: Enhancement recommendations for the Climate Strategy Implementation Plan

|  |  |
| --- | --- |
| Enhancement Recommendations for Implementation Plan | Relevant SEA Topic |
| Net zero, climate resilient development and growth | |
| Develop an outline business case for a programme of building assessments, beginning with buildings in areas identified for future joint retrofit investment. | Climatic factors |
| Clarify the members of the city’s climate adaptation partnerships referred to in the outcome ‘Renewing the focus on climate resilience and accelerating the adaptation of the city’. | All topics |
| Include actions that show ongoing collaboration between sectors and neighbouring councils to reduce GHG emissions. | Climatic Factors, Air Quality, Biodiversity, Water |
| Include commitment to ensure a collaborative approach with World Heritage and Historic Environment Scotland when developing an approach to retrofit properties located in conservation areas or listed buildings. | Cultural Heritage, Material Assets |
| Include actions that show ongoing collaboration with national and international organisations to share best practice on GHG emissions reduction, climate adaptation and nature-based solutions. | All topics |
| Include wider description of how the city’s infrastructure will be resilient to specific climate impacts, including specific reference to changes in temperature extremes, flooding, high winds and storminess. | Climatic Factors |
| Include actions that describe how land management practices on council-owned land will be adapted to enable increased carbon sequestration and biodiversity enhancement (e.g. type of land cover, vegetation cutting regimes). | Biodiversity, Climatic Factors |
| Add annual milestone targets in relation to tree planting for the Million Tree City Initiative. In addition to target numbers, this should also consider, for example, referring to areas of the city where tree planting could be most effective for amenity value, pollutant removal, cooling and shading. | Population and Human Health, Biodiversity |
| Include general, high-level reference to cultural heritage resources in the city at risk of climate impacts, describing how they are vulnerable (e.g. parks and gardens, historic buildings, archaeological resources) and how they will be protected. | Cultural Heritage |
| Add milestone targets in relation to reducing flood risk to the population. These should be informed by and linked to the Water Management Vision and Strategy, Strategic Flood Risk Assessment, and other relevant flood risk management plans. The targets should include reference to the specific locations of population most at risk and areas of deprivation. | Water |
| Add milestone targets in relation to SUDS installation and the efficacy of new and existing SUDS for surface water management. Monitoring of their biodiversity and amenity value should also be considered. |
| Consider public education campaigns and demonstrator projects to show the benefits of SUDS techniques (e.g. green roofs, rainwater harvesting) for private homes. |
| Include commitment to reduce water demand on the public sector estate and through working with the general public, private sector and Scottish Water. |
| Include general reference to the use of Green blue infrastructure or nature-based solutions to be explored and used to help infrastructure adapt to climate change | Biodiversity, Water, Land use, Climatic Factors |
| Net zero emission transport | |
| Include actions for city partners to use their procurement and purchasing power to support reductions in emissions from freight and shipping. | Climatic Factors, Water, Air Quality |
| Supporting a more circular economy and reducing waste | |
| Develop an outline business case for new circular economy projects in Edinburgh, including appropriate output and outcome targets. | Material Assets |
| Consider what milestone targets would be appropriate to help achieve the CEC target of all new investment and purchase decisions being net zero by 2030. | Material Assets |
| Add milestones to increase the number of businesses participating in the Circular Edinburgh programme across each of the implementation plan delivery phases. | Material Assets |
| Add reference to the need to consider carbon emissions at construction, operational and maintenance project stages and consider life cycle analysis for materials and technologies in relation to public sector procurement. | Air Quality, Climatic Factors, Material Assets |
| General |  |
| Ensure implementation plan actions and milestone are clearly attributed to the new city partnerships established to drive delivery of the Strategy priorities | All topics |

# Next Steps

## Monitoring

Section 19 of the 2005 Act requires the CEC, as the Responsible Authority, to monitor the significant environmental effects of the implementation of the Strategy.

Best practice in SEA Monitoring requires that a detailed monitoring framework reflects the implementation of the Strategy’s Strategic Actions and identifies where existing indicators (from the delivery of the strategy) can be used to track progress and, ideally, is embedded within the final Strategy to ensure that monitoring is undertaken as part of the delivery.

CEC has developed a monitoring framework to determine the success of the strategy. The Implementation Plan identifies a number of indicators that relate outcomes identified within the Strategy. The intention is to review those indicators as required and on an ongoing basis and determine if they are still fit for purpose. Any new indicators will be identified following the consultation period and published in the post adoption statement

The first iteration of Climate Strategy Implementation Plan has been produced and was signed off by partners in December 2021. It is expected that the Implementation Plan will be updated following the consideration of the enhancement measures provided in Section 5 of this Environmental Report and incline with the ongoing monitoring framework.

## SEA activities to date and next steps

Table 6.1 outlines the next steps of the SEA process and an indicative timeframe for each stage. A workshop was held with the Statutory Authorities in July 2022 ahead of the Environmental Report and the Climate Strategy public consultation period commencing in August.

CEC is proposing to use the statutory consultation on this draft Environmental Report as a broader opportunity for key partners and the public to sense check the strategy a year on from the draft strategy and in light of action taken to deliver the strategy over 2022.

Table 6.1: SEA Timeline

|  |  |
| --- | --- |
| **SEA Stage** | **Timescale** |
| Scoping Report  Prepared and issued scoping request to consultation authorities  (5-week consultation) | April - May 2022 |
| Received responses on Scoping report from Statutory Authorities | June 13 2022 |
| Draft Environmental Report  Carry out assessment and prepare and issue draft Environmental Report to Consultation Authorities and make available for public comment | August 2022 |
| Statutory Consultation on Environmental Report and Climate Strategy (6 week – consultation) | September to October 2022 |
| Consider responses and amend  Environmental Report as necessary | October 2022 |
| Adoption of Environmental Report | November 2022 |
| Post Adoption SEA Statement  Issue statement with finalised SEA Monitoring Framework and record of how the SEA process led to  improvement of the Climate Strategy | Winter 2022/2023 |

1. Impacts on Urban health (2022). Available at: <https://urbanhealth.org.uk/insights/reports/air-pollution-and-older-people#:~:text=Older%20people%2C%20compared%20to%20young,cognitive%20decline%20in%20older%20people>. [↑](#footnote-ref-1)
2. HES (2019). Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=843d0c97-d3f4-4510-acd3-aadf0118bf82> [↑](#footnote-ref-2)