

Policy and Sustainability Committee

10.00am, Tuesday, 30 August 2022

2030 Climate Strategy - environmental assessment consultation and annual review

Executive/routine
Wards
Council Commitments

1. Recommendations

It is recommended that the Policy and Sustainability Committee:

- 1.1 Note that the Climate Strategy and the Implementation plan are live documents that when published last year, the Committee agreed would be reviewed at key points and to take account of findings of the Strategic Environmental Assessment being undertaken
- 1.2 Approve for consultation the draft environmental report (attached at appendix 1)
- 1.3 Note that while the consultation process on the environmental report will be focussed on the statutory partners, the consultation will also be open to the key city partners and the public, offering an opportunity for wider feedback
- 1.4 Note that outcomes from the consultation process will be accommodated in an update to the 2030 Climate Strategy and implementation plan and a final Environment Report, all of which will be brought to Committee in November 2022.
- 1.5 Note that elements of the strategy and implementation plan may be subject to further prioritisation to reflect recent changes in local government resourcing and capacity.
- 1.6 Note that individual programs and actions in the 2030 Climate Strategy continue to undergo Strategic Environmental Assessments, and Integrated Impact Assessments, as appropriate.

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Report

2030 Climate Strategy environmental assessment consultation and annual review

2. Executive Summary

- 2.1 The Council approved the publication of the 2030 Edinburgh Climate Strategy while acknowledging that both the Strategy and the Implementation Plan would need to operate as a 'live document' that would need to be reviewed at key points, including to take account of the outcome of the Strategic Environment Assessment (SEA) that was underway.
- 2.2 The findings of the SEA are set out in a draft environmental report (attached at Appendix 1) which is now ready for consultation.
- 2.3 While the consultation focuses primarily on the environmental report, it includes the opportunity to invite city partners and the public to provide wider comments on the live strategy document which will continue to evolve, reflecting the changing net zero context and partner activity.
- 2.4 Since the strategy was published in December 2021, the Council is also facing a challenging financial outlook at the same time as reduced capacity. Therefore, the strategy and implementation plan may need to undergo further prioritisation to ensure that available resources are focused on the areas which will have the greatest impact in terms of reductions in the city's emissions.
- 2.5 The process laid out in this report would allow for a refreshed 2030 Climate Strategy to be brought to committee at the same time as a report on the Council and city performance against the net zero target.

3. Background

- 3.1 The Council approved the publication of the 2030 Edinburgh Climate Strategy in November 2021 while acknowledging that both the Strategy and the Implementation Plan would need to operate as a 'live document' that would need to be reviewed at key points. This included taking account of the outcome of the Strategic Environment Assessment (SEA) that was underway.
- 3.2 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. 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).

- 3.3 Through the SEA process, an environmental assessment has been undertaken and findings are set out in a draft environmental report (attached at Appendix 1). The environmental report is now ready for public consultation, with requirements to specifically seek views from the relevant statutory consultation authorities (Scottish Environmental Protection Authority (SEPA), Historic Scotland (HS), and Scottish National Heritage (SNH)). Engagement with these authorities was undertaken during the strategy development and has been ongoing since.
- 3.4 This process was expected to complete and come back to committee early in 2022, however due to capacity and local elections, this is the first opportunity to bring the report for consideration.

4. Main report

- 4.1 The scope of the SEA itself reflects the fact that parts of the strategy will, or have, undergone their own SEA such as the City Plan and the City Mobility Plan.
- 4.2 The consultation on the draft environmental report (and in line with the live strategy approach) presents a broader opportunity for key partners and the public to reflect on the strategy a year on from first publication and reflect any issues that are now in a position to be updated.
- 4.3 Main points raised in the draft environmental report are:
 - 4.3.1 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.
 - 4.3.2 Following the baseline and policy review it was determined that all of the SEA topics had the potential for 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.
 - 4.3.3 The SEA assessment used a set of SEA objectives and assessment criteria which cover each of the environmental topics scoped into the assessment. These objectives have been developed from a comprehensive review of the baseline and policy requirements and refined in discussion with the Statutory Authorities (SEPA, Nature Scot and HES).
- 4.4 The SEA objectives are:
 - 4.4.1 Air quality: To improve air quality and reduce emissions of key pollutants
 - 4.4.2 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
 - 4.4.3 Population and human health: Improve the quality of life and human health for all through improved environmental quality

- 4.4.4 Cultural heritage: Conserve or enhance the historic environment
 - 4.4.5 Material assets: To promote the sustainable use and management of material assets
 - 4.4.6 Landscape and townscape: Protect and enhance the landscape and townscape character and setting of the city
 - 4.4.7 Water: Prevent the deterioration and where possible, enhance the status of the water environment and reduce/manage flood risk in a sustainable way
 - 4.4.8 Biodiversity, flora & fauna: Protect, maintain and enhance biodiversity, flora and fauna and habitat networks
 - 4.4.9 Land and soil: Protect valuable land resources, minimise detrimental effects of land use change and promote soil restoration
- 4.5 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 ensures a proportionate approach to assessment. There are six Strategic Action Areas with a number of Strategic Actions forming each area that have been subject to the SEA assessment, as follows:
- 4.5.1 A net zero, climate resilient development and growth (15 Strategic Actions);
 - 4.5.2 Net zero energy generation and energy efficient buildings (26 Strategic Actions);
 - 4.5.3 Net zero emission transport (7 Strategic Actions);
 - 4.5.4 Net zero circular economy (15 Strategic Actions);
 - 4.5.5 Listening to citizens and empowering communities (10 Strategic Actions); and
 - 4.5.6 Investing in change (13 Strategic Actions).
- 4.6 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, to ensure a value driven assessment 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 of the Draft Environmental Report.
- 4.7 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. A further workshop was undertaken with the statutory consultation authorities in July 2022 to discuss the SEA approach and draft findings. Comments from that workshop have also informed the draft Environmental Report.
- 4.8 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.

- 4.9 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 to determine the effects of implementing the Strategy as a whole. 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 are expected to be neutral.
- 4.10 The assessment did not identify any negative environmental impacts as a result of the Strategy. 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. These are presented in Section 5 of the Draft Environmental Report.

5. Next Steps

- 5.1 The findings from the consultation will be accommodated within the 2030 climate strategy and its implementation plan as needed.
- 5.2 As set out in previous Committee reports, the strategy will continue to operate as a live document and may be subject to further prioritisation to ensure activities are focused on those areas with greatest carbon reduction impacts and evolving knowledge and technical/legal advancements.
- 5.3 Committee will receive a summary of consultation responses and a report recommending any changes to the 2030 Climate Strategy and Implementation Plan at its November 2022 committee. This timing is aligned to existing climate reporting (including Edinburgh's public bodies climate change duties, and annual reporting on the City's 2030 target) to ensure members have as full a picture as possible on Edinburgh's net zero actions.

6. Financial impact

- 6.1 There are no direct financial impacts arising from this report.
- 6.2 The costs associated with the development of the SEA are being met by the resources set aside for the delivery of the strategy within the 2021/22 and 2022/23 Council budgets.

7. Stakeholder/Community Impact

- 7.1 In line with the Council's consultation Policy, this consultation has been considered by the Consultation Advisory Panel to ensure it meets quality criteria. The consultation will last for a period of 6 weeks (subject to approval of the new

consultation policy at committee in August) as a proportionate timeframe for SEA consultations. This also reflects the substantive formal and informal consultation undertaken in developing the strategy and in the ongoing engagement with stakeholders in the city.

- 7.2 An Integrated Impact Assessment has been undertaken on the 2030 Climate Strategy. It is envisioned further IIAs will be commissioned as appropriate as key strategic actions are taken forward.

8. Background reading/external references

- 8.1 [Strategic Environmental Assessment guidance](#), Scottish Government, June 2022.
- 8.2 [2030 Climate Strategy](#), City of Edinburgh Council, October 2021
- 8.3 [2030 Climate Strategy – Draft for Consultation](#), City of Edinburgh Council, June 2021
- 8.4 [2030 Climate Strategy – consultation and engagement](#), City of Edinburgh Council, August 2021
- 8.5 [2030 Climate Strategy and Implementation Plan](#), City of Edinburgh Council, November 2021

9. Appendices

- 9.1 Appendix 1: Strategic Environmental Assessment Environmental Report
- 9.2 Appendix 1a: SEA Baseline
- 9.3 Appendix 1b: Policy Programmes and Strategy Review
- 9.4 Appendix 1c: Statutory Authority Comments
- 9.5 Appendix 1d: Strategic Actions Sifting Exercise



Strategic Environmental Assessment Environmental Report

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.

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

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- 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 Government's 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 ensures a proportionate approach to assessment. There are six Strategic Action Areas with a number of Strategic Actions sitting 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 SEA. 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	<p>A minor positive effect on air quality is expected from the energy generation and energy efficient building and the emissions transport areas for action.</p> <p>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.</p> <p>Strategic actions that plan to reduce emissions and support the transition to electric vehicles will contribute to improving air quality.</p>
Climatic Factors	<p>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.</p> <p>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.</p> <p>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.</p>
Population and Human Health	<p>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.</p> <p>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.</p> <p>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.</p>

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SEA Topic	Summary of Assessment Findings
	<p>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.</p>
Cultural Heritage	<p>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.</p> <p>There was a neutral relationship with the energy generation and energy efficient buildings, emission transport, and investing in change Strategic Action Areas.</p> <p>No clear relationship or negligible relationship is present between cultural heritage and the other Strategic Action Areas</p>
Material Assets	<p>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.</p> <p>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.</p> <p>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.</p>
Landscape and Townscape	<p>A neutral effect on the landscape and townscape objectives is expected from the climate resilience development, energy generation and energy efficient buildings, emission transport and investing in change Strategic Action Areas.</p> <p>Most Actions that would have an impact on landscape, such as 20minute 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.</p> <p>Decarbonising the region's energy infrastructure may also have a beneficial impact depending on the nature and location of the infrastructure.</p> <p>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</p> <p>There was no clear relationship or negligible relationship between the landscape and townscape objective and the other Strategic Action Areas</p>
Water	<p>A minor positive effect on the water objective is expected from the climate resilience development Strategic Action Area</p> <p>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 waterbodies.</p> <p>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.</p>

SEA Topic	Summary of Assessment Findings
	<p>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.</p> <p>There was no clear relationship or negligible relationship between the water objective and the other Strategic Action Areas.</p>
Biodiversity, Flora and Fauna	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>There was no clear relationship or negligible relationship between the biodiversity objective and the other Strategic Action Areas.</p>
Land and Soil	<p>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.</p> <p>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.</p> <p>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.</p> <p>There is no clear relationship or negligible relationship between the land and soil objective and the other Strategic Action Areas.</p>

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

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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.

1. Introduction

1.1 Purpose of this Report and Statutory Requirements

Strategic Environmental Assessment (SEA) provides planning 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.

1.2 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.

1.3 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

1.4 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.

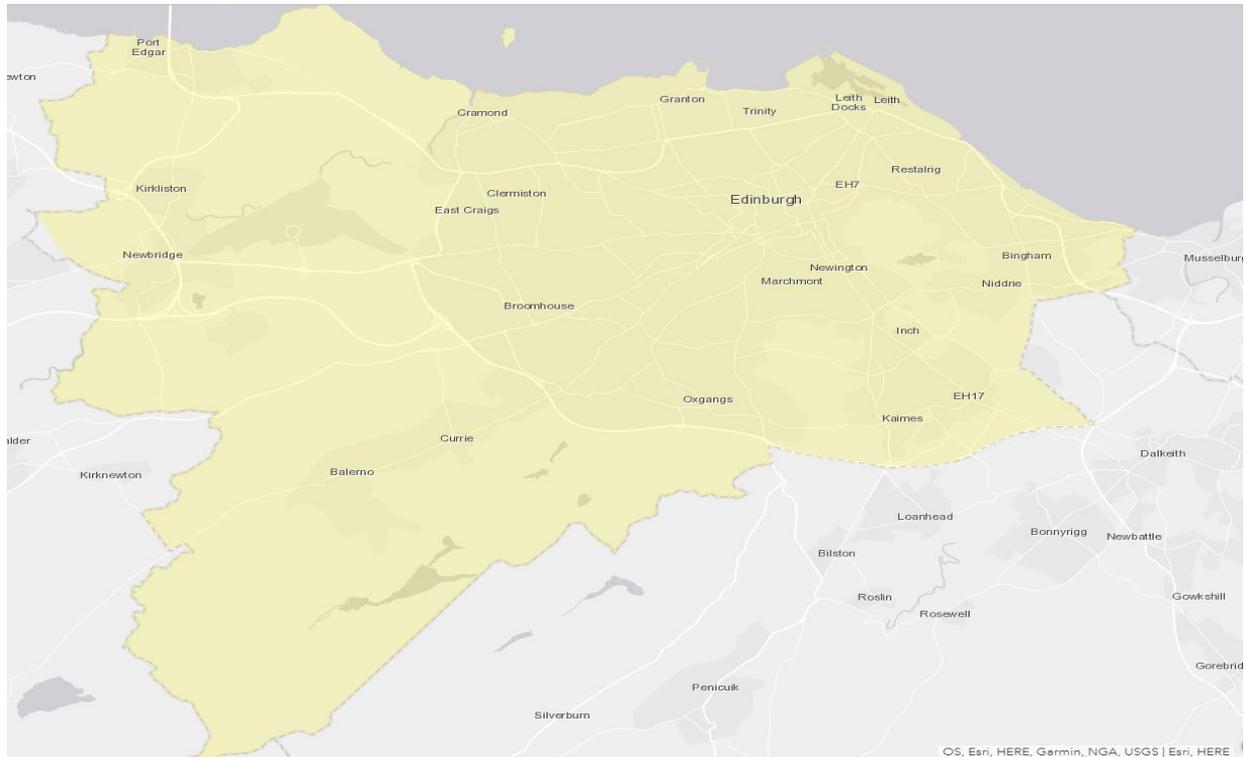


Figure 1.1: The City of Edinburgh Council Boundary

1.5 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.

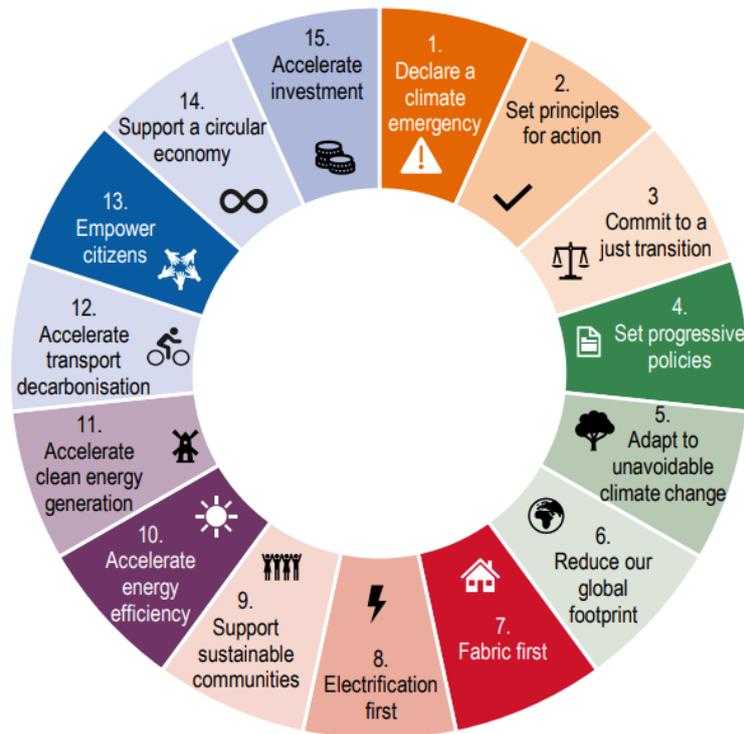


Figure 1.2: Strategic Approach and Principles (City of Edinburgh Council, 2021)

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:

- 10 Unlocking and accelerating energy efficiency in homes and buildings
- 11 Enabling the development of a citywide programme of heat and energy generation and distribution infrastructure
- 12 Accelerating the decarbonisation of public transport
- 13 Supporting citizen empowerment, behaviour change and community activism
- 14 Supporting business transition and the greencircular economy
- 15 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.

2. Policy and Environmental Context

2.1 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.

2.2 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Maintain and improve water quality

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Topic	Key Environmental Requirements/Objectives
	<p>Avoid and minimise effects on natural processes, particularly natural flood management and catchment processes through sensitive design and consultation</p> <p>Do not negatively impact existing urban drainage system and seek to improve where appropriate.</p> <p>Contribute to the response to climate change, through sustainable design mitigation and adaptation</p>
Land and soil	<p>Protect soil restoration to encourage carbon capture</p> <p>Encroach on valuable greenfield areas</p> <p>Encourage use of brownfield sites</p> <p>Protect prime agricultural land and carbon-rich peat soils</p>
Air and Climatic Factors	<p>Reduce harmful emissions to air</p> <p>Support Edinburgh's transition to a low carbon economy</p> <p>Promote 'clean' economic growth</p> <p>Encourage modal shift to lower emission modes of travel</p> <p>Protect citizens from the harmful effects of air pollution</p> <p>Air quality should not be compromised by new or existing development and where places are designed to minimise air pollution and its effects</p> <p>Ensure citizens are well informed, engaged, and empowered to improve air quality</p> <p>Contribute to the response to climate change, through sustainable design mitigation and adaptation</p> <p>Integrate whole life carbon considerations through sustainable design</p>
Cultural Heritage	<p>Ensure that there are no significant adverse impacts on the integrity of cultural heritage sites and cultural heritage resources</p> <p>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.</p> <p>Seek to enhance the significance of Inventory Gardens and Designed Landscape sites through education at other Inventory sites such as Holyrood Park</p> <p>Promote a sustainable approach that integrates conservation with the needs of all communities and visitors to historic sites</p> <p>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</p> <p>Ensure that the Outstanding Universal Value (OUV) of the World Heritage Site and its setting is understood, protected and sustained.</p> <p>Relationship between World Heritage Site and economic success needs to be protected, developed and celebrated.</p> <p>Improve active travel access to heritage sites</p>
Landscape/Townscape	<p>Ensure that the unique qualities of the city, its historic environment and the character of its urban areas are safeguarded for the future</p> <p>Protect important landscape and natural features of the environment</p> <p>Increase the number of people that can benefit from greenspaces that are sustainably managed, biologically diverse and contribute to health and wellbeing.</p> <p>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</p> <p>To respect and enhance the skyline and key views</p>

2.2.1 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.

2.2.2 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
<p>Edinburgh has six Air Quality Management Areas (AQMAs). Five AQMAs are in locations where annual mean limits for nitrogen dioxide (NO₂) are regularly exceeded.</p> <p>There is one AQMA, at Salamander Street, where annual mean limits for particulate matter (PM₁₀) are regularly exceeded.</p> <p>Need to adapt to predicted climate change and its potential impacts.</p> <p>Edinburgh's infrastructure needs to be resilient against adverse climate impacts, and also consider potential positive impacts, such as a longer summer season.</p> <p>The population of Edinburgh is projected to increase by 13% or 75,965 between 2016 and 2041</p>	<p>Air and Climatic factors</p> <p>Population and human health</p>	<p>The SEA should ensure the Climate Strategy interventions achieve the city's emission reduction targets, particularly the national target of net zero by 2045.</p> <p>The SEA should ensure the Climate Strategy supports the move towards sustainable modes of travel and encourages greater use of safe active travel options.</p> <p>The SEA should ensure that the impact on human health is considered as a result of poor air quality, particularly in the AQMAs.</p> <p>The SEA should ensure the Climate Strategy actions do not counteract</p>

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<p>The Council have identified 18 noise Management Areas and 10 Quiet areas.</p> <p>Congestion in the city centre</p> <p>Cycle safety due to presence of significant numbers of large vehicles.</p> <p>Impact of deteriorating air quality on the impact of the historic buildings</p> <p>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.</p>		<p>the actions identify in the Cleaner Air for Scotland 2 report.</p>
<p>Edinburgh has a rich cultural heritage with a World Heritage Site, Scheduled Monuments, listed buildings and conservation areas and inventory garden and designated landscapes.</p> <p>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.</p> <p>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.</p>	<p>Cultural Heritage</p>	<p>The SEA should ensure the Climate Strategy will preserve and protect Edinburgh's significant cultural heritage.</p> <p>The SEA should ensure the Climate Strategy seeks to enhance the cultural assets of Edinburgh's World Heritage Site.</p>
<p>Need to protect and improve the water status of waterbodies and avoidance of flood risk and areas which could contribute to increased flood risk.</p> <p>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.</p>	<p>Water</p>	<p>The SEA should ensure the Climate Strategy has interventions which protect and enhance Edinburgh's water bodies and coastline.</p> <p>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.</p>
<p>Increasing demand on existing transport infrastructure from projected population growth.</p> <p>Increasing demand for resources such as water and wastewater treatment, heat and energy, and waste management created by new built development.</p>	<p>Material Assets Population and Human Health</p>	<p>The SEA should ensure the Climate Strategy supports the projected increase in population.</p>

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Development pressure- streetscape/civic pressure		
<p>The majority of farmland in the area is classified as prime agricultural land, with the majority also within the Edinburgh Green Belt.</p> <p>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.</p>	Land and Soil	<p>The SEA should ensure the Climate Strategy has considered the importance of prime agricultural land when developing future infrastructure.</p> <p>The SEA should ensure the Climate Strategy aims to protect the city's limited peat rich soils.</p>
<p>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.</p> <p>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.</p> <p>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.</p> <p>The presence of people and vehicles associated with transport can create disturbances for local wildlife, including disturbance resulting from noise and artificial light.</p>	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.
<p>Edinburgh has a unique landscape setting surrounded by hills and open countryside.</p> <p>Unique townscape and urban realm with key views that need to be protected</p>	Landscape and Townscape	The SEA should ensure the Climate Strategy protects the unique character and townscape of the city centre.

2.3 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.

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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	<p>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.</p> <p>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 pollution¹.</p>
Material Assets	<p>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.</p> <p>Material assets are also considered within the proposed City Plan 2030, the City Centre Transformation Strategy and the City Mobility Plan.</p>
Water	<p>There would be limited change to water quality if the Climate Strategy was not implemented.</p> <p>Surface water management is considered within Edinburgh's Flood Risk and Surface Water Management Plan</p>
Land and soil	<p>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.</p> <p>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.</p>
Air and Climatic Factors	<p>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.</p> <p>The city is likely to become more vulnerable to climate changes and may struggle to adapt to more frequent extreme weather events.</p> <p>Air and Climatic factors are also considered in detailed within the City Mobility Plan.</p>

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.>

SEA Topic	Evolution under a 'Do Nothing' Scenario
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 .
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.

² HES (2019). Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=843d0e97-d3f4-4510-acd3-aadf0118bf82>

3. 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.

3.1 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 amenities 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 it seeks to protect and enhance the city's natural capital by delivering nature-based solutions to the impacts of climate change.

SEATopic	Scoped In/Out	Comment
Land and Soil	In	The Strategy will likely deliver positive impacts through soil restoration to encourage more carbon to be captured.

3.2 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.

3.3 Climate Strategy Elements subject to SEA Assessment

In line with the Scottish Governments *Strategic Environmental Assessment Guidance 2019*, 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: <ul style="list-style-type: none"> • A net zero, climate resilient development and growth • Net zero energy generation and energy efficient buildings • Net zero emission transport

Climate Strategy Elements	Subject to SEA assessment	Comment
		<ul style="list-style-type: none"> • Net zero circular economy • Listening to citizens and empowering communities • Investing in change <p>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.</p>
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.

3.4 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	<p>Contribute to reducing emissions of key pollutants to air from road and air travel</p> <p>Contribute to reducing emissions to air from energy generation and heating</p> <p>Contribute towards achieving the aims and objectives of the Council's Air Quality Action Plan</p> <p>Improve air quality within existing AQMAs</p> <p>Contribute towards achieving the aims and objectives of the LEZ</p>
Climatic Factors	Reduce GHG emissions in order to meet Scotland's emissions reduction target of net zero by 2045	<p>Promote and facilitate modal shift to more sustainable transport options?</p> <p>Encourage the provision of low/ zero carbon technologies?</p> <p>Promote and support the best use of clean fuels/ technologies?</p>

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		Avoid new Greenhouse Gas (GHG) emissions?
Climatic Factors	Promote and enable adaptation to climate change	<p>Protect and increase the resilience of buildings</p> <p>Protect and increase the resilience of greenspace/open space</p> <p>Protect and increase the resilience of Edinburgh's coastal defences</p>
Population and Human Health	Improve the quality of life and human health for all through improved environmental quality	<p>Reduce the health gap and inequalities and improve healthy life expectancy?</p> <p>Promote and enhance/improve access to open space, greenspace and the wider countryside?</p> <p>To protect and improve human health and wellbeing through improving the quality of the living environment of people and communities?</p> <p>Increase sustainable access for all users to essential services employment and the natural and historic environment?</p> <p>Reduce exposure to air pollution by most vulnerable groups?</p>
Cultural Heritage	Conserve or enhance the historic environment	<p>Build the historic environment's resilience to climate change?</p> <p>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?</p> <p>Have an impact upon the outstanding universal value (OUV) of the Old and New Towns of Edinburgh World Heritage Site (WHS)?</p> <p>Have an impact on key views to and from heritage assets?</p> <p>Improve access to and understanding of the historic environment?</p> <p>Respect / respond to the historic urban spatial structure / plan of the city?</p> <p>Have an impact upon the cultural identity of the city?</p>
Material Assets	To promote the sustainable use and management of material assets	<p>Promote sustainable use and management of existing infrastructure e.g. transport, water, heat, energy or flood protection infrastructure?</p> <p>Support or lead more sustainable maintenance activity in new development?</p> <p>Contribute towards 'Zero Waste' objectives?</p> <p>Increase the amount of waste which is reused, recycled and recovered?</p>
Landscape and Townscape	Protect and enhance the landscape and townscape character and setting of the city.	<p>Protect or enhance sensitive views?</p> <p>Create and maintain an attractive public realm?</p> <p>Respect existing urban landscape and settlement pattern?</p> <p>Protect and enhance the character, integrity and liveability of key streetscapes, including removing barriers to use?</p>

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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 wastewater 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?

3.5 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.	-

Score	Description	Symbol
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.	~

3.6 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.

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

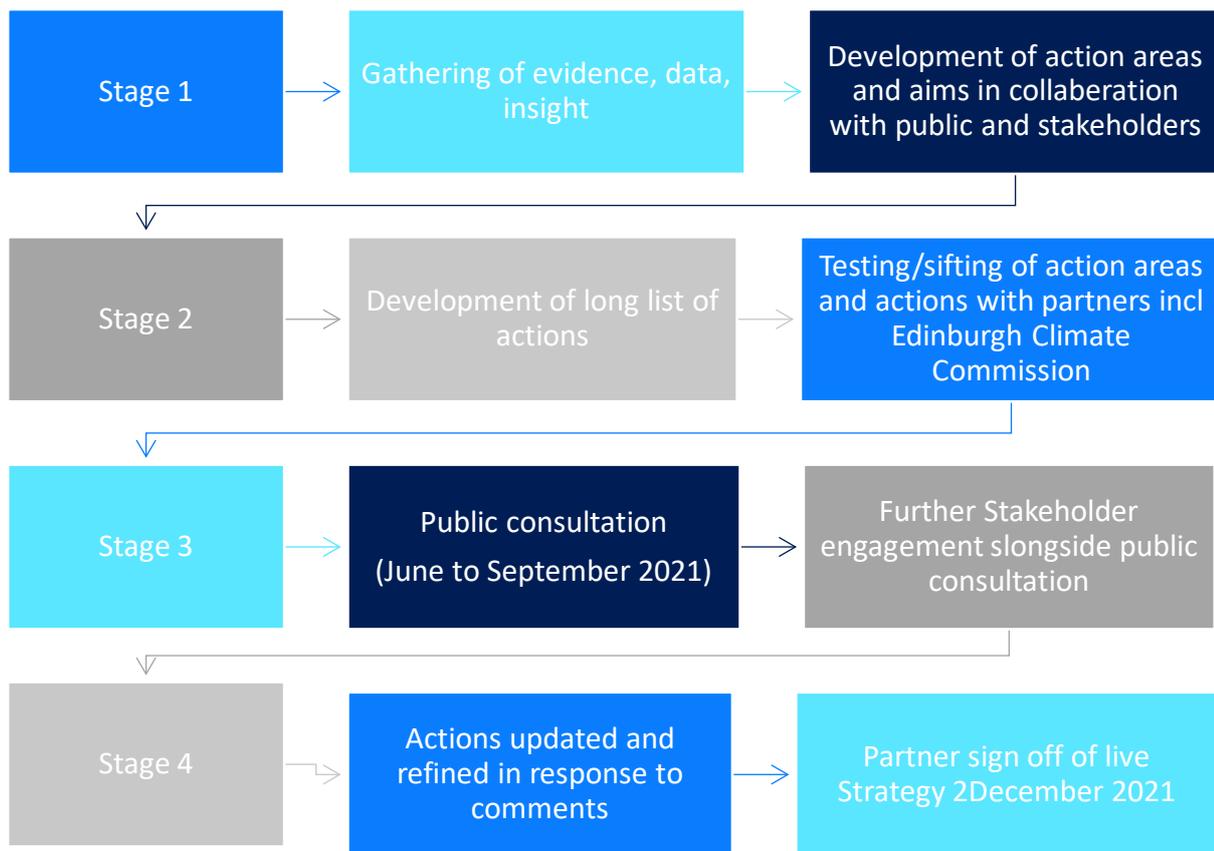


Figure 3.1: Approach to the Development of the Climate Strategy 2030 (provided by the City of Edinburgh Council)

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.

4. Assessment of Environmental Effects

4.1 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.

4.1.1 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 ensure 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.

4.1.2 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 of Actions for each Strategic Action Area. Table 4.7 provides a summary of the assessment and an overall score for the environment.

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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 Areas 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 scores are 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 region's 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.

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Biodiversity, Flora and Fauna	Reducing the emissions associated with GHGs will have an indirect benefit on biodiversity and ecosystem services. Moving 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 scores 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 emissions 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.

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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 scores 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.

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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 scores 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.

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Overall this Strategic Action Area's scores are 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 help 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) are 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.

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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.
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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	+

4.2 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 interproject cumulative assessment is not considered valuable for the Climate Strategy.

To ensure a value driven assessment the assessment summarised 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	++	<p>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.</p> <p>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.</p> <p>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).</p> <p>Overall, a significant positive cumulative effect on air quality is expected from the Strategy .</p>
Climatic Factors	++	<p>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.</p> <p>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.</p> <p>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.</p> <p>Overall, a significant positive cumulative effect on climatic factors is expected from the Strategy .</p>

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SEATopic	Cumulative Score	Summary of Cumulative Assessment
Population and Human Health	++	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Overall, a significant positive cumulative effect on population and human health is expected from the Strategy .</p>
Cultural Heritage	+	<p>Adapting Edinburgh's World Heritage Site to be resilient to the impacts of climate change will conserve it for future generations.</p> <p>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.</p> <p>Overall, a minor positive cumulative effect on cultural heritage is expected from the Strategy .</p>
Material Assets	++	<p>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.</p> <p>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.</p> <p>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.</p> <p>Overall, a significant positive cumulative effect on material assets is expected from the Strategy.</p>
Landscape and Townscape	+	<p>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.</p> <p>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.</p> <p>Overall, a minor positive cumulative effect on landscape and townscape is expected from the Strategy.</p>

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SEATopic	Cumulative Score	Summary of Cumulative Assessment
Water	+	<p>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</p> <p>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.</p> <p>Overall, a minor positive cumulative effect on water is expected from the Strategy.</p>
Biodiversity, Flora and Fauna	+	<p>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.</p> <p>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.</p> <p>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.</p> <p>Overall, a minor positive cumulative effect on biodiversity is expected from the Strategy.</p>
Land and Soil	0	<p>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.</p> <p>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.</p> <p>Overall, a neutral cumulative effect has been identified on land and soil.</p>

5. 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.	

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Enhancement Recommendations for Implementation Plan	Relevant SEA Topic
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

6. Next Steps

6.1 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 in line with the ongoing monitoring framework.

6.2 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 the 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

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SEA Stage	Timescale
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

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Appendix A. SEA Baseline

Revision no:0.2

City of Edinburgh Council

Climate Strategy 2030
August 2022

Appendix A. SEABaseline

Baseline data were collated 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
- Land and soil
- Water
- Landscape and townscape
- Biodiversity, flora and fauna
- Material assets
- Population and human health
- Cultural heritage

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.

Air Quality

Edinburgh has six Air Quality Management Areas (AQMAs; Figure 3). Five of these AQMAs are in locations where annual mean limits for NO₂ are regularly exceeded, these include:

- City Centre
- Glasgow Road
- Great Junction Street
- Inverleith
- St John's Road

There is only one AQMA, at Salamander Street, where annual mean limits for PM₁₀ are regularly exceeded.



Figure 3: AQMAs currently declared in Edinburgh (Air Quality in Scotland, 2021)¹

Key issues relevant to appraisal of Climate Strategy:

- Edinburgh has six AQMAs, five AQMAs are in locations where annual mean limits for NO₂ are regularly exceeded.
- There is one AQMA, at Salamander Street, where annual mean limits for PM₁₀ are regularly exceeded.

Climatic Factors

Edinburgh is aiming to meet the current national reductions target (42% reduction by 2020 and 80% by 2050²) for carbon emissions by reducing CO₂ emissions in the transport sector by 290kt CO₂³.

Edinburgh has a maritime climate with cold and humid winters and mild summers, however Scotland’s climate is changing and the impacts on Edinburgh are already being felt. Climate projections show that Edinburgh will experience warmer and wetter winters, summers are expected to become hotter and drier, and occurrences of extreme rainfall events are expected to increase. In response, the City of Edinburgh Council continue to develop a variety of strategies, frameworks and goals to address the change in climate.

Data from the Met Office⁴ shows a distinct warming trend for Edinburgh in line with climate change predictions, outlining a daytime temperature rise of 0.75°C comparing 1961-1990 averages with those of 1981-2010. As well as warming, climate change trends predict drier summers for southeast Scotland, with periods of intense rainfall projected to become more extreme.

¹ Air Quality in Scotland (2021). Available from <https://www.scottishairquality.scot/laqm/aqma#/la/461>

² The Scottish Government (2019). Available from <https://www.gov.scot/policies/climate-change/reducing-emissions/>

³ The City of Edinburgh Council (2015). Available from <https://www.edinburgh.gov.uk/downloads/download/13734/sustainable-energy-action-plan>

⁴ Met Office (2021). Available from <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages>

While Edinburgh has suffered from a number of river floods, coastal flooding has not been a significant issue up to now. However, there are concerns that climate change could lead to more widespread coastal flooding, resulting from a combination of rising sea levels (see Figure 4), increased frequency of storm surges, and rougher sea conditions. The Dynamic Coast – The National Overview 2021⁵ report draws upon the latest climate projections on sea level rise, providing strategic evidence on the projected extent of coastal erosion in Scotland. Importantly, national-level modelling of Scotland’s wave-dominated soft coast reveals that coastal erosion currently affects 46% of soft shorelines (an increase from 38% over that report in 2017). The extent and rate of coastal erosion, and the risk to coastal assets, is expected to increase under all emissions scenarios.

In addition to the above, the frequency of severe rainfall events and flooding in the city is expected to increase in the coming decades⁶. Instances of intense and prolonged summer rainfall have caused localised disruption and damage, with flooding resulting from a combination of surface water and surcharged drainage. UKCP18 projections indicate that Scottish winters will become wetter, with more heavy rainfall and a greater number of wet days, although this increase is less extreme in east Scotland than in the west. In summer months, total rainfall amounts are expected to decrease, while convectional rainfall will trigger storms between 10% and 45% more extreme than at present.

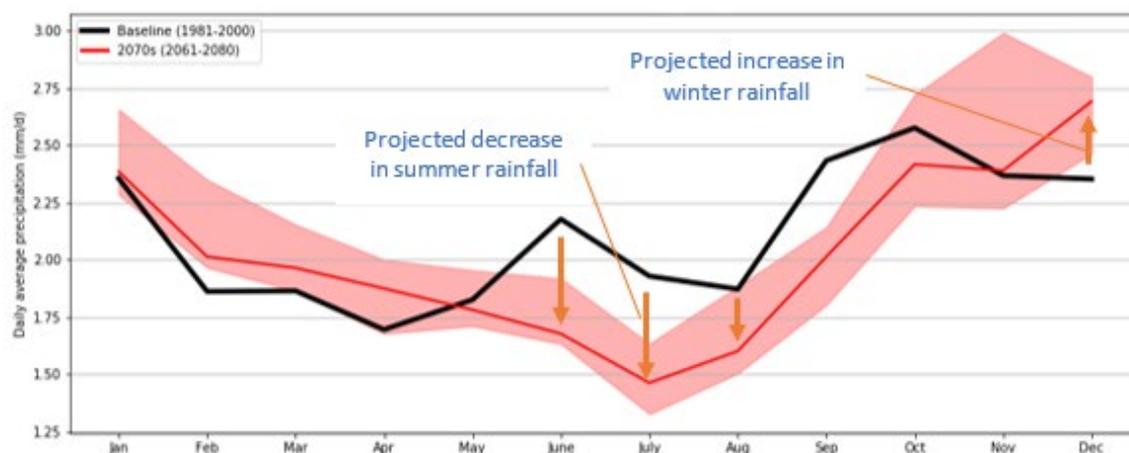


Figure 4: UKCP18 Daily average precipitation for the baseline and future 2070s period under the high emissions (provided by the City of Edinburgh Council)

Sea levels in the UK rose at a rate of around 1.4 mm/year in the 20th century⁷. This is associated with the increase in global temperatures and its impact on oceanic thermal expansion and ice melt. This trend is projected to continue to the end of the 21st century and beyond. Edinburgh’s coast is projected to experience the impacts of sea level rise. Rates of increase are largely independent of all emissions scenarios over the next 20 years, with increases of 16-20 cm possible relative to the 1981-2000 baseline (see Figure 5). Rates vary notably in the latter half of the century, with possible increases as high as 90 cm under the high emissions scenario. A medium emissions scenario results in sea level rise of 30-40 cm but with the possibility of rising by up to 60 cm.

⁵ Centre of Expertise for Waters (2021). Available from: <https://www.crew.ac.uk/dynamic-coast>

⁶ The Edinburgh Partnership (2014). Available from <https://www.edinburgh.gov.uk/downloads/file/24709/resilient-edinburgh-evidence-base-and-risk-analysis>

⁷ Met Office (2018) UKCP18 Science Overview Report. Available from <https://www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Overview-report.pdf>

As Figure 5 shows, sea level change in Edinburgh will continue to increase over the next 80 years

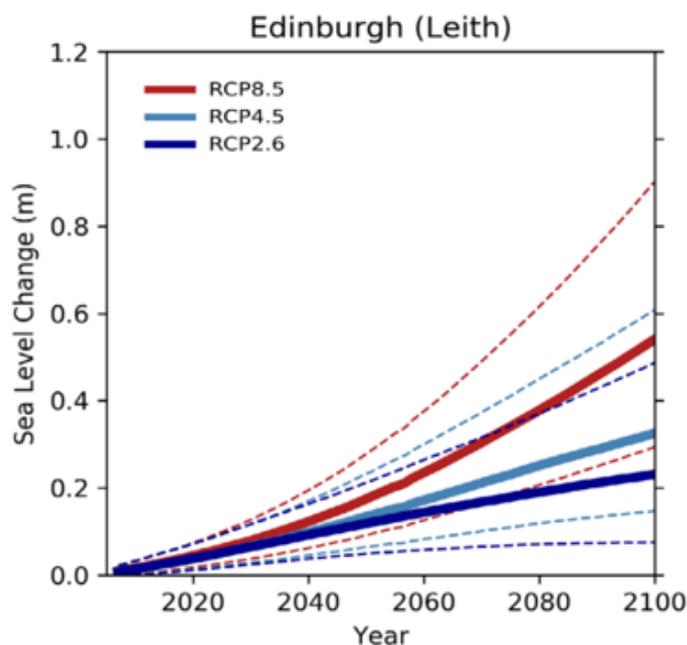


Figure 5: Sea level rise to 2100 using the UKCP18 probabilistic projections (provided by Atkins Ltd Edinburgh Climate Change and Adaptation Assessment 2021/22)

As summarised in Table A.1, the following changes to local conditions can be expected⁸.

Table A.1: Expected changes in Edinburgh’s climate and weather conditions

Changes in Conditions	‘Overall Confidence’ in scientific evidence for each change
Minimum, average and maximum daily temperatures will increase in all seasons, with the greatest increase in summer	High/Medium
What is considered a heatwave (projected to become around 4 times more frequent in the latter half of the 21 st century) or extremely hot summer today will occur more frequently in future (Up to a 5°C temperature increase during summer months by the 2070s)	Medium
Rainfall is projected to become more seasonal, with an increase in average winter and autumn rainfall. Average summer rainfall is projected to decrease in Edinburgh in coming decades	Medium/Low
Heavy rainfall events may occur more frequently in winter, spring, and autumn. Summer heavy rainfall events are projected to become more extreme	Medium/Low

⁸ Edinburgh Sustainable Development Partnership (2016). Available from <https://www.edinburgh.gov.uk/downloads/file/24705/edinburgh-adapts-our-vision-2016-to-2050>

Edinburgh signed its climate emergency declaration in May of 2019, thereby committing itself to work towards net-zero emissions by 2030. Produced by the ESRC Place-Based Climate Action Network (PCAN), this net-zero roadmap is designed to inform how Edinburgh can work towards that ambitious target in the coming years.

Analysis of the Net Zero Carbon Roadmap for Edinburgh shows that emissions have fallen by 42% since 2000, due to a combination of increasingly decarbonised electricity supply, structural change in the economy, and the gradual adoption of more efficient buildings, vehicles and businesses⁹. With full decarbonisation of UK electricity by 2045, and taking into account economic growth, population growth and on-going improvements in energy and fuel efficiency, it is projected that Edinburgh’s baseline emissions will only fall by a further 9% by 2030, 13% by 2037, and 15% by 2045. This is a total of just over 50% between 2000 and 2045 (see Figure 6). Emissions included here are derived from fuel, landfill sites and industry within the area and emissions from electricity used within the area (even if it’s generated elsewhere).

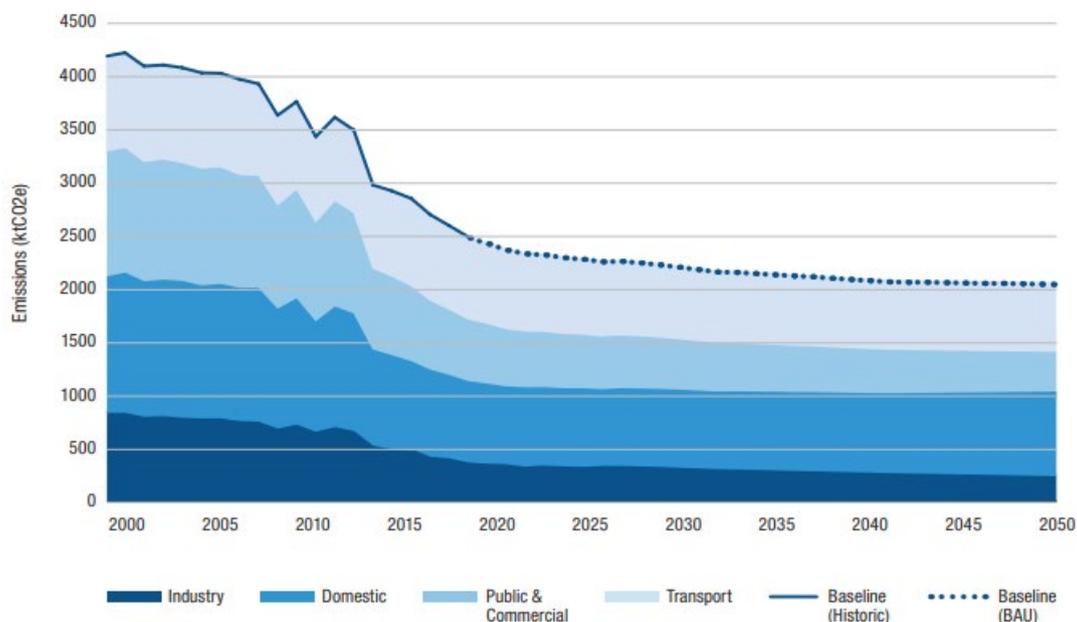


Figure 6: Edinburgh’s Carbon Emissions (2000-2050)¹⁰

Currently, 31% of Edinburgh’s emissions come from the transport sector, with housing responsible for 29% of emissions and public and commercial buildings accounting for 23% and industry 17%. At current rates of emissions output, Edinburgh is set to use its total carbon budget of 22.1 megatonnes over the period between the present and 2050 in just over a decade at some point during the winter of 2031. However, Edinburgh could stay within its carbon budget by reducing its emissions by c.8% year on year.

There is opportunity across all sectors to introduce low carbon measures, including an increase in walking and cycling, enhanced public transport, electric and more fuel-efficient vehicles (transport) and better lighting, improved process efficiencies and a wide range of other energy efficiency measures (industry).

Land and Soil

⁹ Williamson, E., Sudmant, A., Gouldson, A. and Brogan, J (2020). Available from https://www.researchgate.net/publication/349769809_A_Net_Zero_Carbon_Roadmap_for_Edinburgh

¹⁰ Williamson, E., Sudmant, A., Gouldson, A. and Brogan, J (2020). Available from https://www.researchgate.net/publication/349769809_A_Net_Zero_Carbon_Roadmap_for_Edinburgh

The majority of farmland in the area is classified as prime agricultural land (Soil Survey of Scotland Land Capability for Agriculture, Macaulay Institute for Soil Research¹¹) with the majority also within the Edinburgh Green Belt (see Figure 7). In addition, there is a limited amount of carbon-rich and peatland soil which can be found in the Pentland Hills which is a designated Special Landscape Area.

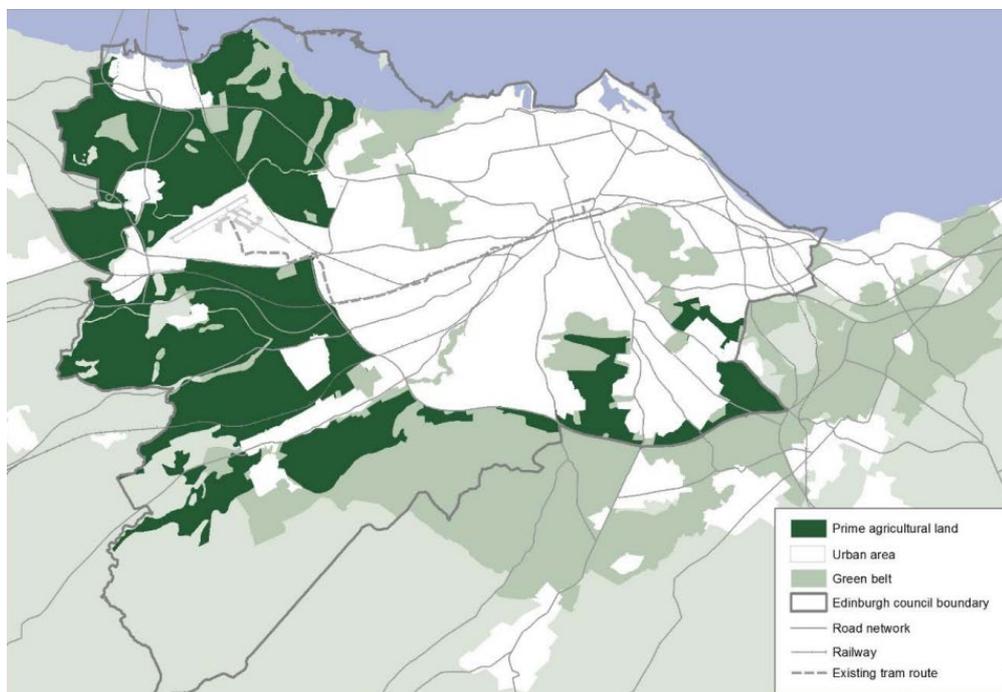


Figure 7: Prime Agricultural Land in Edinburgh in 2017 (City of Edinburgh Council, 2020)¹²

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. However, there are significant areas of vacant and derelict sites in clusters, including Newbridge and parts of the waterfront (see Figure 8), although the total amount in Edinburgh has dropped by 20% from 223ha in 2011 to 178ha in 2017.

¹¹ The James Hutton Institute (2019). Available from <https://www.hutton.ac.uk/learning/natural-resource-datasets/soilshutton/soils-maps-scotland/download>

¹² The City of Edinburgh Council (2021). Available from https://consultationhub.edinburgh.gov.uk/sfc/choicesforcityplan2030/user_uploads/choices_for_city_plan_2030_city_plan_environmental_report_january_2020.pdf



Figure 8: Vacant and Derelict, Scottish Vacant and Derelict Land Survey for the City of Edinburgh 2017(City of Edinburgh Council, 2017)¹³

¹³ The City of Edinburgh Council (2017). Available from https://www.gov.scot/publications/maps_of-vacant-and-derelict-land-in-edinburgh/

Water

Areas of importance for flood management : These have been identified within the study area associated with specific water bodies. The potentially vulnerable areas in the Forth Estuary Local Plan District within the City of Edinburgh council are: Granton, Water of Leith catchment, Braid Burn catchment, Cramond Bridge, South Gyle, Broxburn and Bathgate, South Queensferry, Lasswade, Riccarton, Dalkieth and Musselburgh, Niddrie Burn/ Burdiehouse Burn catchment and Musselburgh¹⁴.

Rivers: Edinburgh is drained by a number of relatively short rivers which generally flow from southwest to northeast, rising in and around the Pentland Hills and discharging into the Firth of Forth. Principal among these is the Water of Leith, which flows through the heart of the city.

River, coastal and surface water flooding: The Water of Leith has been subject to intermittent flooding since people first settled in the area. However, this has become more of an issue with the increasing number of people living in close proximity. The Murrayfield, Roseburn and Gogarburn (around the airport) areas have a history of flooding and flood prevention schemes have been implemented to minimise the risk. In addition, due to the extent of hard surfacing within the urban area, there is a significant risk of surface water flooding events. SEPA has published a Flood Risk Management Strategy (FRMS) for the Forth Estuary. The City of Edinburgh Council has also produced a Local Flood Risk Management Plan (LFRMP)¹⁵, which was adopted in June 2016. This identifies areas vulnerable to flooding and potential mitigation actions. The LFRMP provides further information on the funding and timetable for delivering the actions identified in the strategy between 2016 and 2022. The FRMS and LFRMP are planned to be updated every six years. In addition, the Council will prepare surface water management plans following the completion of an Integrated Catchment Study in 2021. Due to project timescales, this information is not expected to be available prior to the plan being adopted. However, if the information does become available it will be incorporated into this SEA. Notably, updates to the SEPA pluvial maps and coastal flood hazard maps are underway, with outputs anticipated to be available in the next 18 months. These maps, along with other updates being made to flood mapping in the Southeast of Scotland, will be taken into consideration as the climate change strategy evolves and develops.

Water supply: Edinburgh's water requirements are now supplied via a network of reservoirs in the Tweedsmuir, Moorfoot and Pentland Hills, some of which act as the main supply reservoirs and others act as holding or compensation reservoirs. This infrastructure was the subject of a recent major investment programme. Although the availability of water reserves could become a greater issue in the future, as a result of climatic changes, it is the capacity of the treatment and distribution infrastructure which may impose a more immediate restriction on the amount and location of new development in the Edinburgh area.

Water quality: Overall the groundwater across the Edinburgh region is in good condition according to the SEPA database. The surface waters around the coast to the north of the city are in good condition, while the surface water quality to the east of the city at Leith Docks to Port Seton is in poor condition¹⁶ (SEPA, 2019).

The City of Edinburgh Council have also set out their 'Vision for Water Management in the City of Edinburgh' (2021)¹⁷. The vision describes how the City of Edinburgh Council will adapt to the challenges of climate change with respect to the management of water. In summary, the vision is *to develop a long-term and sustainable approach to river, coastal and stormwater management across the city and its environs*,

¹⁴ SEPA (2022). Forth Estuary Local Plan District. Available at https://www2.sepa.org.uk/frmstrategies/forth_estuary.html

¹⁵ The City of Edinburgh Council (2016). Available from http://www.edinburgh.gov.uk/info/20006/emergencies_safety_and_crime/1433/flood_risk_management_plan

¹⁶ SEPA (2015). Available from <https://www.sepa.org.uk/data-visualisation/water-classification-hub>

¹⁷ The City of Edinburgh Council (2021). Available from <https://www.edinburgh.gov.uk/downloads/file/30101/vision-for-water-management-in-the-city-of-edinburgh#:~:text=Our%20vision%20is%3B,respecting%20our%20unique%20historic%20heritage>

respecting our unique historic heritage. This will involve all stakeholders and address the flooding and water quality risks associated with our changing climate as a result of changes in rainfall and sea level rise.'

Landscape

Edinburgh has numerous outstanding features within easy reach of the City Centre: Holyrood Park including Arthur's seat and Salisbury Crags, the Braid Hills and Blackford Hill, Corstorphine Hill and the Pentland Hills. These fall within the Green Belt and are also designated as Special Landscape Areas. The Green Belt around Edinburgh was first established in 1957 and it has been an important tool in shaping the City's growth and containment and supports regeneration. The current Local Development Plan (LDP) released a significant amount of land from the Green Belt, primarily to meet housing land requirements in the first SDP, and to implement national planning policy in West Edinburgh.

Within the City Centre itself, Edinburgh has open spaces of world class value. These include topographic and natural features that define the city, such as Arthur's Seat, the Water of Leith and Braid Burn river valleys and the coastline. In addition, there are large areas of open space which are important to the character of the city such as the Meadows. These are linked with footpaths, green corridors and watercourses (see Figure 9) to form a strong green infrastructure within the urban area (see Figure 9).

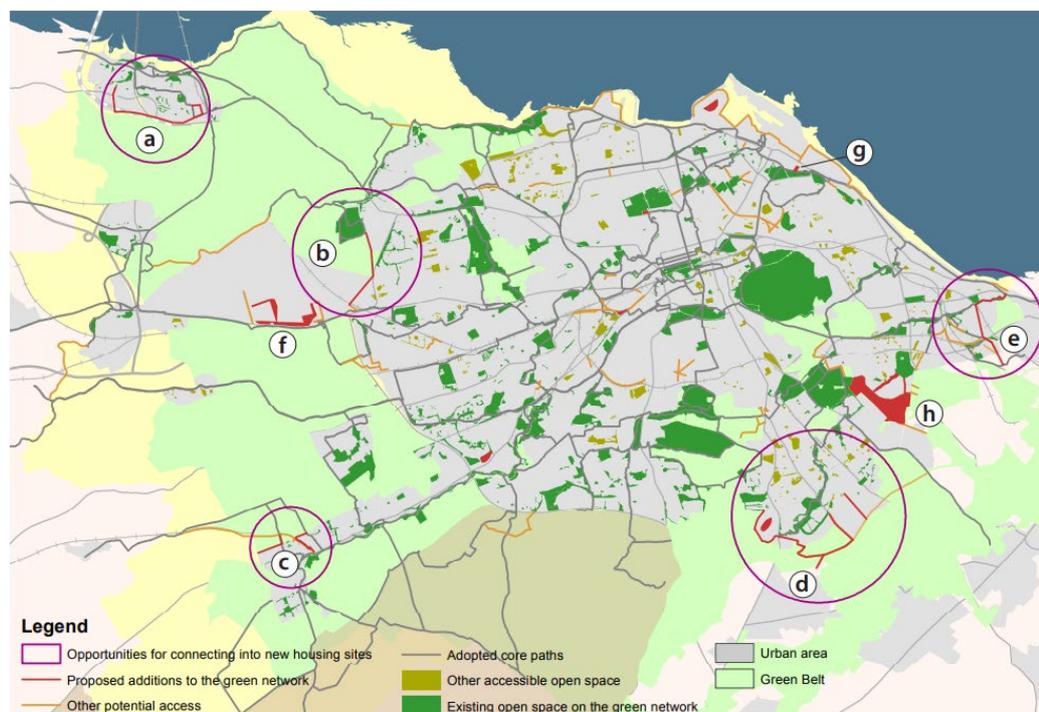


Figure 9: Edinburgh's Green Network, part of the Open Space 2021 Strategy¹⁸

The Open Space Strategy 2021 aims to improve and extend the city's network of open space in order to improve quality of life, support economic vitality and build excellent places. The Strategy has a co-ordinating and interdependent role in terms of a number of Council plans and strategies, including those relating to parks and gardens, allotments, play, sports facilities, active travel, climate change adaptation, sustainability and biodiversity. It looks back at what has happened over the last five years and looks forward at the priorities for Open Space into the 2020s, whilst sharing inspiring examples from across the Council Area. Table A.2 outlines some of the key considerations from the strategy.

¹⁸ The City of Edinburgh Council (2016). Available from <https://www.edinburgh.gov.uk/downloads/file/22616/open-space-2021>

Table A.2: Key considerations outlined in the Open Space Strategy 2021

Benefits of Open Space in Edinburgh	How is Open Space in Edinburgh Changing?
82% of Edinburgh’s citizens are satisfied with parks and greenspaces compared to 76% nationally and around 71% of residents have taken part in 30 minutes physical activity each week	Comparisons between the 2010 Open Space Strategy and 1969 Open Space Plan found that open space had increased by some 200 hectares over the 40-year period. In the last five years, there has been a less marked change in the overall quantity and composition of greenspace
Studies in Edinburgh and Dundee found that better availability of greenspace within deprived communities is associated with significantly lower levels of stress and improved mental wellbeing	Across the types of openspace quantified in the Open Space Audit (2016) there have been losses and gains since 2009. However, the overall amount of open space has remained relatively constant, with a net loss of under two hectares
Edinburgh’s open space network includes an urban forest of almost 630,000 trees, which help to filter air pollution, intercept and soak up flood waters, slow global warming by storing carbon and provide natural cooling during warmer weather	Some spaces have changed type to reflect changes in management practices, such as designating Magdalene Glen as a Community Park or via the introduction of new outdoor sports facilities, allotments or community growing spaces
Greenspaces can provide above ground storage for flood waters, reducing the need for costly defences. Along the Braid Burn, flood storage has been formalised at Firhill High School, Inch Park and Edinburgh University Playing Fields	Losses have tended to apply to bowling greens, playing fields, semi-natural greenspaces and residential amenity green space. In these cases, planning policy seeks to avoid losses which would impact on local character, recreational provision, biodiversity and green networks.

Whilst methods of comparing open space provision in different cities vary, one study by Greenspace Scotland¹⁹ found that Edinburgh had the highest proportion of public parks and gardens in Scotland, some 17% of all open space based on 2010 data. This compares with 13% in Glasgow and 8% across urban Scotland.

Biodiversity, Flora and Fauna

Edinburgh has a diverse range of valued areas, habitats and species, including sites designated under the European Union’s Wild Birds Directive (Directive 79/409/EEC, as amended). These ‘European Sites’ comprise:

- Firth of Forth Special Protection Area (SPA)
- Outer Firth of Forth and St Andrews Bay Complex SPA
- Imperial Dock Lock SPA
- Forth Islands SPA

The Firth of Forth is also a Ramsar site, which is an international designation for Wetlands of International Importance. At present, the Climate Strategy contains strategic policies rather than any site-specific policies,

¹⁹ Greenspace Scotland (2012). Available from: <https://www.nature.scot/sites/default/files/2017-06/The%20Second%20State%20of%20Scotland%27s%20Greenspace%20Report%20-%20greenspace%20scotland%20-%20Jan%202012.pdf>

objectives or proposed interventions. As such, a screening under the Scottish Habitats Regulations, Conservation (Natural Habitats, &c.) Regulations 1994, (the first stage of a Habitats Regulations Appraisal HRA) will not be undertaken. However, as the Climate Strategy develops, if any aspects of it have a spatial context (for example, public transport corridors) that could influence a European Site, the need for an HRA will need to be revisited and discussed with NatureScot.

There are also seven nationally designated Sites of Special Scientific Interest (SSSIs) with Edinburgh, covering a total area of 1,239 hectares and non-statutory designated sites. The non-statutory sites comprise 109 Local Nature Conservation Sites (including Local Biodiversity Sites and Local Geodiversity sites) Table A.3 shows the various natural heritage designations in Edinburgh.

Edinburgh has a Biodiversity Action Plan (EBAP 2009-21), which aims to: raise awareness of the rich biodiversity in Edinburgh; encourage Partners and others to take positive action to protect and enhance our natural environment; promote co-ordination and communication between Partners and others to further conservation within Edinburgh; and influence other plans, policies and strategies relating to Edinburgh.

Table A.3: Natural Heritage Designations

Designation	Number of Sites
SPA: Designated under the Wild Birds Directive for wild birds and their habitats	3 and 1 proposed (Firth of Forth SPA, Imperial Dock Lock (Leith) SPA, Forth Islands SPA Outer Firth of Forth and St Andrews Bay Complex (pSPA))
Ramsar sites: designated under the Convention of Wetlands of International Importance	1 (Within same boundary as Firth of Forth SPA)
SSSIs	7 (Agassiz Rock, Arthurs Seat Volcano, Balerno Common, Duddingston Loch, Firth of Forth, Inchmickery, Wester Craiglockhart Hill)
Local Nature Reserves	8 (Burdiehouse Burn Valley Park, Cammo Estate, Corstorphine Hill, Easter Craiglockhart Hill, Hermitage of Braid & Blackford Hill, Meadows Yard, Ravelston Woods)
Local Nature Conservation Sites	109 Local Biodiversity sites (LBS) 71 Local Geodiversity sites (LGS) 30

Material Assets

Public Transport Infrastructure : Generally, Edinburgh is well served by public transport, with an extensive bus and rail network and a developing tram and park and ride network. However, with a growing population, there is increasing pressure on public transport services. Many people travel to work by car, causing traffic congestion and significant pressure on parking spaces. There are several emerging transport schemes which will help improve existing public transport infrastructure, including the new tram service and additional park and ride sites. The Edinburgh Tram project is the largest infrastructure proposal to improve the city's overall transport networks and to date connects the Airport to the city centre, with further development underway towards Leith and Newhaven.

Rights of Way Edinburgh has an extensive network of offroad footpaths and cycle paths laid out over the past two decades, utilising abandoned railway alignments or following the banks of the city's water courses. The area is traversed by a series of core paths that form the Core Path Network across the city.

Key transport infrastructure:

Key infrastructure can be defined as infrastructure which is regarded as important in a local geographic area and supports the delivery of essential services at a local level. In Edinburgh key infrastructure includes:

- The Queensferry Crossing
- Forth Road Bridge and Forth Rail Bridge
- Edinburgh City Bypass
- Edinburgh Waverley and Haymarket Train Stations
- Edinburgh Bus Station
- Lothian Bus and Tram Routes²⁰
- Cycling and Walking Routes²¹ Forth Ports Leith

Natural Assets:

SEPA (2016)²² guidance on material assets in SEA's outlines that natural assets are assets of the natural environment that consists of minerals (such as sand, gravel, rock, and slate), watercourses (supporting natural drainage and flood prevention processes), natural flood management processes, forestry and woodlands, agricultural land and associated elements such as field boundaries (e.g. hedges, stone walls).

With reference to the other environmental topics outlined in this SEA, natural assets in Edinburgh include:

Soil - Farmland located in prime agricultural land (Soil Survey of Scotland – Land Capability for Agriculture, Macaulay Institute for Soil Research²³). Limited amount of carbon-rich and peatland soil, found in the Pentland Hills which is a designated Special Landscape Area.

Water - Areas of importance for flood management include the Water of Leith and Forth Estuary. The Water of Leith has been subject to intermittent flooding since people first settled in Edinburgh. The Murrayfield, Roseburn and Gogarburn areas have a history of flooding. There are a number of short rivers in Edinburgh, rising in and around the Pentland Hills and discharging into the Firth and Forth.

Biodiversity - Edinburgh has three Special Protection Areas and one proposed Special Protection Area. The Firth of Forth is a Ramsar site which is an international designation for Wetlands of International Importance. There are also seven nationally designated Sites of Special Scientific Interest within Edinburgh, eight Local Nature Reserves and 109 Local Nature Conservation Sites.

²⁰ East Coast Buses (2020) Lothian Network Map. Available from <https://www.lothianbuses.com/wp-content/uploads/2021/09/210912-LB-Network-Map.pdf>

²¹ The City of Edinburgh Council (2022) Cycling and Walking Routes Maps. Available from <https://www.edinburgh.gov.uk/cycling-walking/explore-quietroutes/1>

²² SEPA (2016). Available from: <https://www.sepa.org.uk/media/219432/lups-sea-gu4-consideration-of-material-assets-in-sea.pdf>

²³ The James Hutton Institute (2019). Available from: <https://www.hutton.ac.uk/learning/natural-resource-datasets/soilshutton/soils-maps-scotland/download>

Population and Human Health

Figure 10 shows the total resident population of Edinburgh was 527,620 at the 2020 mid-year estimate and covers an area of 26,373 hectares (National Records Scotland, 2022)²⁴. The age structure of Edinburgh’s population differs significantly from the national average, with fewer children and older people and more young adults. The population of the City of Edinburgh is projected to increase by 15% (or 75,965 people) between 2016 and 2041²⁵ (see Figure 11).

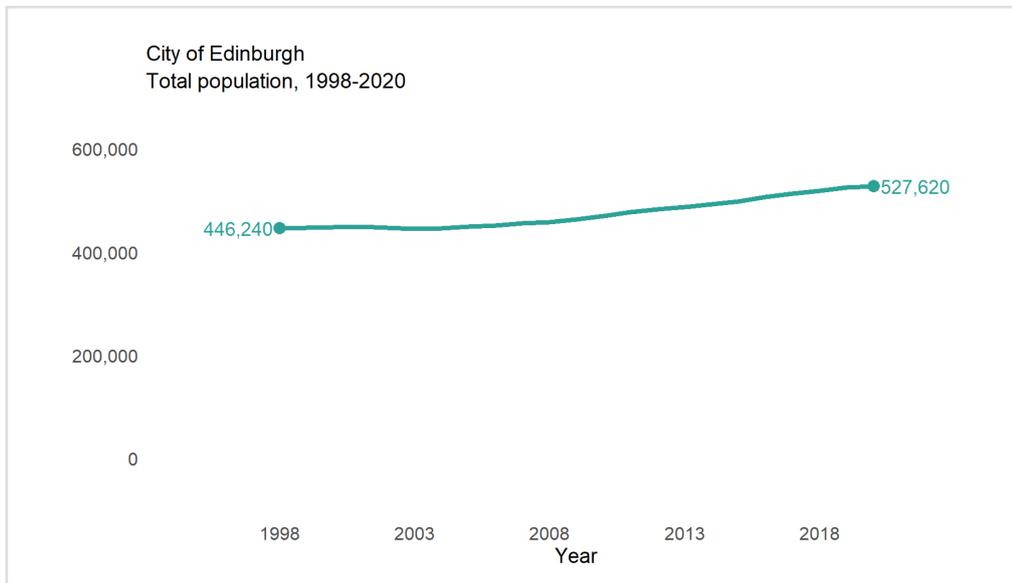
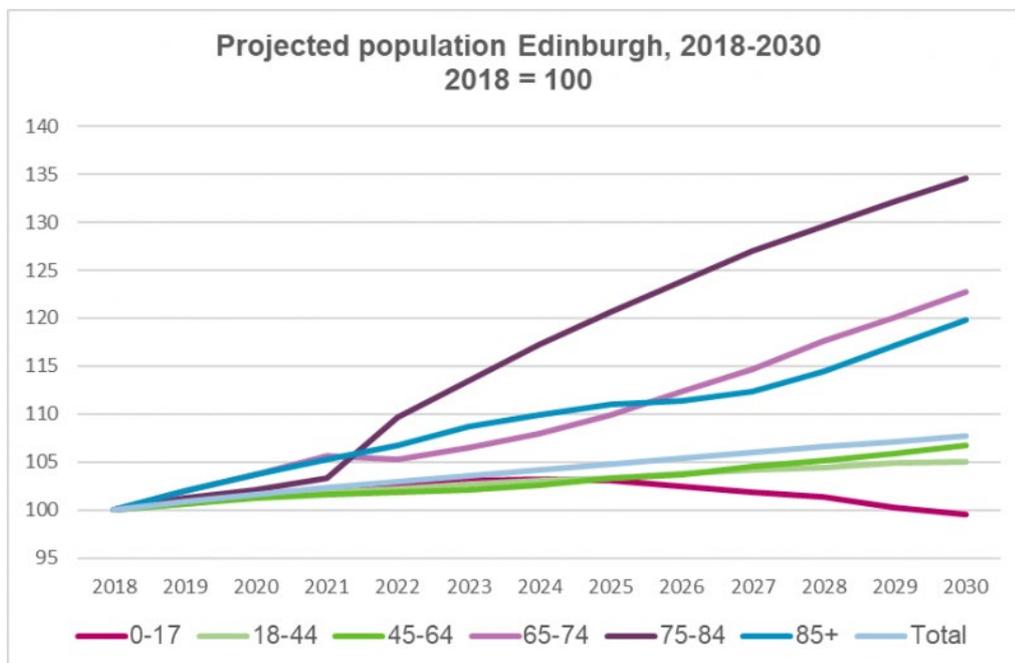


Figure 10: Edinburgh’s total population 1998-2020 (NRS Scotland, 2021)²⁶



²⁴ National Records of Scotland (2022). Available from: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates/mid-2020>

²⁵ '2016-based principal population projections for 2016-2041, by sex, council area and single year of age', National Records of Scotland (2018)

²⁶ City of Edinburgh Council (2021). Available from <https://www.nrscotland.gov.uk/files/statistics/council-area-data-sheets/city-of-edinburgh-council-profile.html>

Figure 11: Projected population Edinburgh 2018-2030 (Edinburgh Health and Social Care Partnership, 2021)²⁷

In general, the population of Edinburgh enjoys a high standard of health. Life expectancy is high, with females living 81.1 years on average and males living to 77.1 years on average. However, there are significant inequalities in general health and mortality rates between different neighbourhoods within the city.

Noise can be a serious problem to people living in urban areas. In line with the Environmental Noise (Scotland) Regulations 2006, an Edinburgh Noise Action Plan was published in 2008. The Council identified three Noise Management Areas and 10 Quiet Areas in 2014 as part of round 1 of the noise mapping process. Following round 2, 18 Noise Management Areas and 10 Quiet areas were identified in the city (see Table A.4). Work by the Edinburgh Agglomeration Working Group is now commencing on the fieldwork for round 3. The working group will continue to co-ordinate the action planning process and work with the Environmental Noise Steering Group and the Scottish Government in its delivery of the requirements of the Environmental Noise Regulations.

Table A.4: Candidate Noise Management Areas and Quiet Areas

Noise Management Areas	Quiet Areas
A70 at Moat Street, Fountainbridge/Craiglockhart	Inverleith Park
A71 at Gorgie Road near Robertson Avenue, Fountainbridge/Craiglockhart	Royal Botanic Gardens
A70 at Slateford Road, Fountainbridge/Craiglockhart	Lochend Park
A702 at Morningside Road, near Steeß Place, Meadows/Morningside	Arthur’s Seat Volcano, Holyrood Park and Duddingston Loch
A8 at Roseburn Gardens, Roseburn Street, Corstorphine/Murrayfield	Jewel Park
A70 at Orwell Place, West Park Place, Sighthill/Gorgie	Craiglockhart Dell
A702 at Gilmore Place, Home Street, Lochrin Terrace, West Tollcross, City Centre	Easter Craiglockhart Hill
A702 Lauriston Place at Glen Street, City Centre	Hermitage of Braid/Blackford Hill
East Fountainbridge, West Port at Lady Lawson Street, City Centre	Galachlaw
At West Nicholson Street, Southside/Newington	Burdiehouse Burn Valley Park
Deanhaugh Street, Raeburn Place, Inverleith	
Broughton Road at Dunedin Street, Leith Walk	
Easter Road at London Road, City Centre	
Brunswick Road, Easter Road, Leith Walk	
A902 at Ferry Road, Forth	
Lindsay Road at Portland Street, Leith	

²⁷ Edinburgh Health and Social Care Partnership (2022). Available from <https://www.edinburgh-hsc.scot/the-ijb/jsna/populationanddemographics/#:~:text=Key%20points%20include%3A%20The%20population%20of%20Edinburgh%20in%20mid%2D2019%20was%20estimated%20to,of%20the%20population%20are%2065%2B>

Ferry Road at Madeira Street, Leith Walk	
Great Junction Street at Bangor Road, Leith	

An emerging public health priority in Edinburgh as well as many cities in the UK and across the world, is poor air quality. This is primarily caused by road transport emissions of gases such as nitrogen oxides (NOx) and particulate matter (PM_{2.5} and PM₁₀). These can have significant impacts on health, child development and environmental quality. In Scotland, recent work by Health Protection Scotland estimates that in 2016 there were 1,724 attributable deaths (not actual deaths, but modelled estimates that would be attributable to long-term exposure) associated with man-made PM_{2.5}. In Edinburgh, this is equivalent to 153 attributable deaths in the same year. The council's Air Quality Action Plan (AQAP) and Active Travel Action Plan both aim to increase health benefits in Edinburgh, through implementing controlled parking zones to improve air quality and by encouraging modal shift to more active travel.

The Council's administrative area includes several establishments controlled under Major Hazards legislation²⁸. There is a requirement to ensure that new development is not located in an area where it will put occupants at undue risk from these hazards.

Cultural Heritage

Conservation Areas: There are 50 conservation areas in Edinburgh, an increase of 10 since 2011 (see Figure 12) of widely varying character, ranging from the mediaeval Old Town, the Georgian New Town, Victorian suburbs and former villages which have been absorbed as the city has grown.

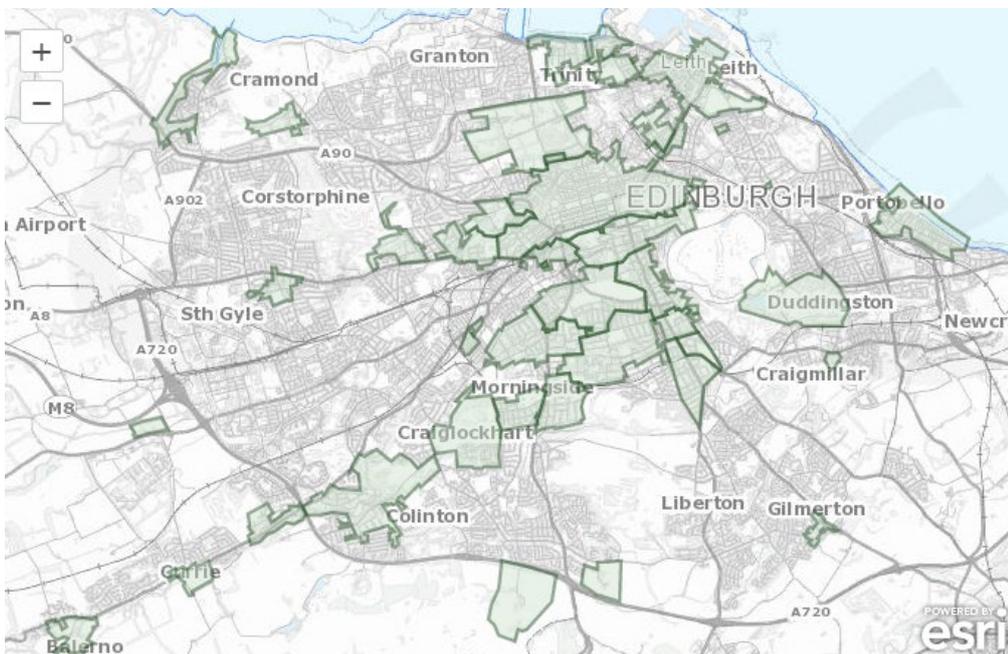


Figure 12: Conservation areas in Edinburgh (City of Edinburgh Council, 2022)²⁹

Historic gardens and designed landscapes: Historic Environment Scotland maintain the Inventory of Gardens and Designed Landscapes, which was initiated in 1987. The purpose is to record assets of national, regional

²⁸ The Control of Major Accident Hazards (COMAH) Regulations 2015

²⁹ The City of Edinburgh Council (2022). Available from <https://www.edinburgh.gov.uk/conservation/-/listed-buildings/1>

and local importance. They are valuable in terms of contribution to scenery, history, artistic design, wildlife, horticulture or tourism. A total of 17 sites, a reduction of three since 2011, are listed within the Council's area.

Listed Buildings: Edinburgh has the largest concentration of listed buildings in the UK outside London, with 4,830 listed items, comprising approximately 34,000 individual properties (as of June 2018).

Scheduled Monuments: Scotland has a rich heritage of scheduled monuments. They are important both in their own right and as a resource for research, education, leisure and tourism. There are currently 56 scheduled monuments within the City of Edinburgh Council boundary.

World Heritage site: The key historic designation in Edinburgh is the New and Old Town World Heritage Site, which was inscribed by UNESCO (United Educational Scientific and Cultural Organisation) in 1995. One of only six in Scotland, it covers approximately 4.5sq kms of the city's historic core. Another key World Heritage site in the Edinburgh area is the Forth Bridge (a railway bridge) which was inscribed in 2015. Its three diamond-shaped towers form a cantilever bridge which was completed in 1890 and carries a dual-track railway line 46 metres above the Firth of Forth.

In addition to the designated sites above there are a variety of non-designated heritage assets and sites of known or suspected archaeological significance that can be found across the wider Edinburgh area.

Strategic Environmental Assessment Environmental Report

Appendix B. Relationship with relevant Plans Programmes and Strategies (PPS)

Revision no:0.2

City of Edinburgh Council

Climate Strategy 2030
August 2022

Appendix B: Relationship with relevant Plans Programmes and Strategies (PPS)

Table B.1: Relevant PPS and Environmental Objectives

Name of PPS or Legislation	Environmental Objectives
Climate	
Climate Change Scotland Act 2009	This Act introduces a new duty on the Council (and all public bodies) to exercise their function in a way that is best calculated to contribute towards the greenhouse gas emission reductions by at least 80% by 2050.
Climate Change (Emissions Reduction Targets) (Scotland) Act 2019	The Act sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, 90% by 2040.
Securing a green recovery on a path to net zero: climate change plan 2018-2032 – update (Scottish Government, 2020)	<p>The outcomes of the plan for Scotland are to bring about a healthier society, an enhanced and protected natural environment and a diversified, resilient and sustainable economy.</p> <p>The update to the climate change plan builds on the work undertaken by the last two Programmes for Government (2020-2021 and 2019-2020) which have committed to delivering a Green New Deal, outlining how investments can help in reducing climate change. The update focuses on a Green Recovery from the Covid-19 pandemic and as such provides actions which align with the new emissions reductions targets up to 2032 since the previous plan. The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 received Royal Assent in October 2019 and set revised annual and interim emissions reduction targets to achieve the net zero by 2045 target set by the Scottish Government.</p>
The Climate Change (Nitrogen Balance Sheet) (Scotland) Regulations 2022	Requires the establishment of a national Nitrogen Balance Sheet for Scotland by March 2022, via a process of regulations. The Scottish Government is now consulting on proposals for establishing a Scottish Nitrogen Balance Sheet (SNBS).
Resilient Edinburgh Climate Change Adaptation Framework 2014 to 2020 (The Edinburgh Partnership, 2012)	<p>This Framework sets out Edinburgh's strategic approach to increasing resilience to the impacts of climate change. Climate change adaptation provides a unique opportunity for the Council and its citywide partners to work together to ensure that Edinburgh continues to be a climate resilient city.</p> <p>The Framework takes a risk-based approach that:</p> <ul style="list-style-type: none"> Assesses how vulnerable Edinburgh is to weather-related risks and predicted climate change impacts; Uses climate projections to understand how climate change accentuates existing risks or creates new risks/ opportunities in the future; Identifies what city services and sectors may be affected by these existing and future risks and/ or opportunities; Presents a number of high-level actions that should be taken to address the most significant risks identified.

Name of PPS or Legislation	Environmental Objectives
Edinburgh Council's Sustainable Energy Action Plan 2015 - 2020 (City of Edinburgh Council, 2015)	This plan set out an approach to reduce the city's carbon emissions (21% of these emissions are from transport, 36% from households and 43% from industry and commerce) from the 2005 level by at least 42% by 2020 through improved energy usages and generation. The Plan proposed the development of five programmes to reach the proposed emission reduction target, one of which includes sustainable transport. Part of this programme was to support the current Local Transport Strategy (LTS) by reducing the need to travel, encouraging more active travel within Edinburgh and decarbonising travel. Notably, additional/ revised Sustainable Energy Action Plans that are in progress are being taken forward as part of the Climate Strategy Implementation Plan.
Edinburgh Adapts Climate Change Adaptation Action Plan 2016-2020 (Edinburgh Sustainable Development Partnership, 2016)	The plan set out a vision to take action to prepare for the challenges that Edinburgh will face in the future in the context of climate change. The associated Action Programme set out specific actions under 5 sections, including the Built Environment and Infrastructure. At present, a new adaptation plan is being developed that will likewise reflect the challenges that Edinburgh will face in the future in response to the impacts of climate change.
A Net-Zero Carbon Roadmap for Edinburgh (Edinburgh Climate Commission, 2020)	Edinburgh signed its climate emergency declaration in May 2019, thereby committing itself to work towards net-zero emissions by 2030. Produced by the ESRC Place-Based Climate Action Network (PCAN), this net-zero roadmap is designed to inform how Edinburgh can work towards that ambitious target in the coming years.
Climate Emissions Analysis and 2030 City Sustainability Strategy Approach (City of Edinburgh Council, 2020)	In order to deliver the 2030 net zero carbon target, the City of Edinburgh Council brought forward an internal and external-facing sustainability programme that includes citizen engagement, tests of change and innovation with new partners, establishing and providing ongoing support to the independent Edinburgh Climate Commission and development of a Carbon Scenario Tool. This programme also includes the development of a 2030 Climate Strategy for the city, and the Council's contribution to its implementation, alongside a Council Emissions Reduction Plan to address the Council's own organisational emissions.
Climate Ready Scotland: Climate Change Adaptation Programme 2019-2024 (Scottish Government, 2019)	The Scottish Climate Change Adaptation Programme provides an overarching framework for adaptation to climate change, setting out Scottish Ministers' objectives in relation to adaptation to climate change and their policies and proposals for meeting those objectives, as required by the 2009 Act. It refers to cross cutting policies and programmes which support the following outcomes: Communities are inclusive, empowered, resilient and safe in response to the changing climate.

Name of PPS or Legislation	Environmental Objectives
	<p>The people in Scotland who are most vulnerable to climate change are able to adapt, and climate justice is embedded in climate change adaptation policy.</p> <p>Scotland’s inclusive and sustainable economy is flexible, adaptable and responsive to the changing climate.</p> <p>Scotland’s society’s supporting systems are resilient to climate change.</p> <p>Scotland’s natural environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change.</p> <p>Scotland’s coastal and marine environment is valued, enjoyed, protected and enhanced and has increased resilience to climate change.</p> <p>Scotland’s international networks are adaptable to climate change.</p>
Just Transition Commission	<p>The Scottish Government set out its commitment that ending the contribution to climate change should be in a way that is fair and leaves no one behind.</p> <p>An independent Just Transition Commission reported to the Scottish Government in March 2021, providing a series of recommendations to deliver on this commitment. This included that Scottish Government, local authorities and developers must “commit to creating communities that embed low carbon lifestyles, while improving our health and wellbeing”.</p> <p>Scottish Government policies which are intended to support a just transition include improvements for priority bus infrastructure and improving connectivity for people in lower socio-economic groups.</p>
Scotland’s Energy Strategy: Position Statement (Scottish Government, 2021)	<p>The Energy Strategy position statement provides an overview of our key priorities for the short to medium-term in ensuring a green economic recovery, whilst remaining aligned to our net zero ambitions, in the lead up to COP26.</p>
Equalities and Diversity Framework 2021 to 2025	<p>This Equality and Diversity Framework for 2021 -25 sets out the Council’s ambitions to advance equality and promote diversity. It also responds to new legislative requirements and policy changes since the Equality Act 2010, including The Fairer Scotland Duty, introduced in 2018, Child Poverty (Scotland) Act (2017) and others directly related to human rights.</p>
Edinburgh Biodiversity Plan 2019 to 2021	<p>This Plans set out the response to the challenges from climate change on the natural environment including the decline in biodiversity and degradation of ecosystems. It aimed to raise awareness of biodiversity in Edinburgh, take action to protect and enhance the natural environment, and encourage others to take conservation action and influence plans policies and projects in Edinburgh. A new plan is being developed in 2022 that will focus on developing a ‘Vision for a Nature Positive City’ and other responses to the ecological emergency’.</p>

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Name of PPS or Legislation	Environmental Objectives
Edinburgh Climate Commission – Green Recovery Report	The report highlights the conditions for a successful green recovery and makes ten recommendations urging; the acceleration of existing programmes, for new and more effective partnerships to deliver, and for a green economic recovery in Edinburgh, creating jobs, reducing emissions, and building a better, fairer city.
A Low Carbon Economic Strategy for Scotland (Scottish Government, 2010)	The Low Carbon Economic Strategy is an integral part of the Government’s Economic Strategy (GES) to secure sustainable economic growth in addition to being key in the Scottish Government’s approach to meeting Scotland’s climate change targets and the transition to a low carbon economy. The strategy identifies decarbonising and improving the efficiency of transport as key enablers for enhanced productivity and increasing sustainable economic growth.
Low Carbon Scotland – Meeting Our Emissions Reduction Targets 2013-2017: Second Report (Scottish Government, 2013)	Sets out methods for meeting Scotland’s emissions reduction targets for the period of 2013 to 2027, structured around key sectors including energy; homes and communities; business, industry and the public sector; transport; waste and resource efficiency; and rural land use.
Decarbonising the Scottish Transport Sector (Transport Scotland, 2021)	In 2019, Scotland introduced a new set of economy wide emission targets to reflect the updated advice of the UK Committee on Climate Change. This led to Scotland setting a target to reduce emissions to net-zero by 2045, with the interim target to reduce emissions by 75% between 1990 and 2030 and 90% by 2040.
Scotland’s Climate Assembly: Recommendations for Action – Scottish Government Response (Scottish Government, 2021)	The document is structured to mirror the Assembly’s Full Report – Recommendations for Action. This document provides Scottish Government response to the 16 identified goals and the subsequent 81 recommendations that underpin them. Both the scale and urgency of the climate emergency is recognised as the driving force for this report. It is also noted that where required Scottish Government will work collaboratively with the UK Government to achieve action or suggest alternative options that are believed to meet the aim of the recommendations.
Local Heat and Energy Efficiency Strategy (City of Edinburgh Council, 2023)	Although this has not yet been published, the City of Edinburgh Council are required to prepare and action this strategy by 2023 - providing a useful source of information with regards to energy and heat generation, transmission and use across the city area. A Local Heat and Energy Efficiency Strategy will form part of a wider City Heat and Energy Masterplan that is currently being developed. This Masterplan is one of the Climate Strategy actions and will consider energy for both transport and heat.
Biodiversity, Flora & Fauna	
Habitats Regulations (translated into specific legal obligations by the Conservation (Natural Habitats, &c.) Regulations 1994, amended 2012)	The Habitats Regulations transpose the provisions of the EU Habitats and Birds Directives (European Council Directive 92/43/EEC Habitats Directive) into Scottish Law and require that plans and projects are subject to an

Name of PPS or Legislation	Environmental Objectives
	appropriate assessment of their implications for European sites.
Nature Conservation (Scotland) Act 2004	This Act is in place to conserve biodiversity and protect the nations precious natural heritage. Implementation is linked to the national biodiversity strategy.
Scotland’s Biodiversity: A Route Map to 2020 (Scottish Government, 2015)	The route map sets out the priority work needed to meet the international Aichi Targets for biodiversity and improve the state of nature in Scotland.
Convention on Biological Diversity – UK Post 2010 Biodiversity Framework/ Scottish Biodiversity Strategy (JNCC and Defra, 2012)	This strategy sets out targets to conserve species and habitats that are considered vulnerable or threatened on a local or national basis and in turn contribute to the conservation of our global biodiversity; promote awareness of local natural resources; promote community engagement in and ownership of the practical conservation of natural resources and promote the sustainable and wise use of resources. A revised implementation plan was produced in 2018 as a number of changes both at a country and UK level since the framework and the original Plan was produced. For example, approaches to biodiversity conservation have become more devolved, leading to the development of new country-level plans, strategies and legislation; and several new concepts relating to biodiversity conservation have emerged, including natural capital, ecosystem services, and natural resource management.
2020 Challenge for Scotland’s Biodiversity (Scottish Government, 2013)	The focus of the strategy is on protecting and restoring healthy ecosystems, connecting people with nature and ensuring biodiversity contributes to sustainable economic growth.
Scotland's Biodiversity: It's in Your Hands (Scottish Government, 2004)	This strategy outlines several actions with the overall aim of conserving biodiversity for the health, enjoyment and wellbeing of the people of Scotland in the present and in the future.
Scotland’s Biodiversity Progress to 2020 Aichi Targets – Report 2019 (NatureScot, 2021)	This report presents an assessment of Scotland's progress towards meeting the 20 Global Aichi Targets. The Convention on Biological Diversity (CBD) set 20 global targets, known as Aichi Targets, to be met by 2020.
Wildlife & Countryside Act 1981 (as amended).	This Act implements the European Council Directive 2009/ 147/ EC on the conservation of wild birds. The Act is concerned with the protection of native species; nature conservation including protection for SSSI and National Parks; and maintaining public rights of way records.
Pollinator Strategy for Scotland 2017 - 2027 (NatureScot, 2017)	The Pollinator Strategy aims to make Scotland a more pollinator friendly place, addressing recent significant declines in these important species.
Wildlife and Natural Environment (Scotland) Act 2011	Draws together and updates legislation on nature conservation. Focuses on a series of key measures relating to certain land management activities.
Population & Human Health	
Land Reform (Scotland) Act 2003	This Act establishes statutory public rights of access to land for recreational and other purposes.

Name of PPS or Legislation	Environmental Objectives
Getting the best from our lands: A Land use strategy for Scotland 2016-2021 (Scottish Government, 2021)	<p>This is a national land-use strategy which has been prepared under the Act. This identifies three objectives:</p> <ul style="list-style-type: none"> • Land based businesses working with nature to contribute more to prosperity; • Responsible stewardship of natural resources delivering more benefits; and • Urban and rural communities better connected to the land.
Disability Equality Scotland Strategic Plan 2020-2023 (Disability Equality Scotland, 2021)	<p>This strategic plan focused on four key priority area to ensure that all disabled people in Scotland are given a voice with trust, care and empathy. These priority areas are:</p> <ul style="list-style-type: none"> • Equality, participation, and inclusion – opportunities for disabled people to participate and meaningfully engage in national and local discussions, embedding inclusive communication in all methods of communication. • Access Panel Network – This Network is trained in accessibility legislation, equality and disability awareness allowing them to address inequalities and inaccessibility in local communities across Scotland. • Membership – Provide a valued membership that disabled people are proud to be part of. • Accessible Transport – Opportunities for increased engagement between disabled people and transport providers, including Transport Scotland’s Accessibility Team, the Mobility and Access Committee for Scotland and Community Transport.
Equality Act 2010	<p>The Equality Act 2010 requires public authorities to work to eliminate discrimination and promote equality in all their activities. Under Section 149 of the Equality Act a public authority has a duty to ensure that all decisions are made in such a way as to minimise unfairness, and do not have disproportionately negative impacts on people because of their protected characteristics or background.</p>
Fairer Scotland Duty (2018)	<p>Places a legal responsibility on named public bodies in Scotland to actively consider how they can reduce inequalities of outcome caused by socio-economic disadvantage, when making strategic decisions</p>
Covid Recovery Strategy: for a fairer future (Scottish Government, 2021)	<p>The Strategy acknowledges the hardship experienced during the global pandemic was not felt evenly, it has both highlighted the inequalities in society and made them worse. This strategy focuses on the efforts required to tackle the inequality and disadvantage.</p>
Road Safety Framework to 2020 (Transport Scotland, 2012)	<p>Commitment to the outcome of safer road travel in Scotland for everyone. This Framework describes the road safety vision for Scotland, aims and commitments, and the Scottish targets for reductions in road deaths and serious injuries to 2020.</p>
City of Edinburgh Council City Mobility Plan 2021-2030 (The City of Edinburgh Council, 2021)	<p>Set out Edinburgh’s route to achieving sustainable and effective mobility across the city and into the region. It contains a series of objectives and policy measures under</p>

Name of PPS or Legislation	Environmental Objectives
	the themes of People, Movement and Place which will, collectively, achieve the Vision for this Plan.
Play Strategy for Scotland: Our Action Plan (Scottish Government, 2013)	Action plan sets out the steps needed to realise the vision for play in Scotland. The vision is that Scotland can be the best place to grow up. A nation which values play as a life-enhancing daily experience for all our children and young people; in their homes, nurseries, schools and communities.
Achieving a Sustainable Future: Regeneration Strategy (Scottish Government, 2011)	This strategy responds to the challenges faced by our most disadvantaged communities to help create a Scotland where all places are sustainable, and where people want to live, work and invest.
Let's Get Scotland Walking – The National Walking Strategy (Scottish Government, 2014)	<p>The National Walking Strategy outlines a vision of Scotland where everyone benefits from walking. Its 3 strategic aims are:</p> <ul style="list-style-type: none"> • Create a culture of walking; • Better quality walking environments throughout Scotland; and • Enable easy, convenient and safe independent mobility for all. <p>It contains recommendations from a working group including removing physical, practical and knowledge barriers.</p>
Cycling Action Plan for Scotland 2017 – 2020 (Transport Scotland, 2017)	<p>This is the third iteration of the Cycling Action Plan for Scotland. Sets out a new set of actions to help achieve the vision of “10% of everyday journeys to be made by bike by 2020”. The actions are under 5 sections:</p> <ul style="list-style-type: none"> • Leadership and Partnership; • Infrastructure, Integration and Road Safety; • Promotion and Behaviour Change; • Resourcing; and • Monitoring and Progress.
Active Travel Task Force Report (Transport Scotland, 2018)	<p>The Task Force was announced by the Minister for Transport in November 2016, its remit was to identify and make recommendations to the Minister on ways to improve delivery of inclusive walking and cycling projects. The report sets out recommendations following extensive evidence gathering and consultation under the following headings:</p> <ul style="list-style-type: none"> • Infrastructure; • Policies, processes and resources; • Community engagement; and • Behaviour change and culture.
A Long-Term Vision for Active Travel in Scotland 2030 (Transport Scotland, 2014)	This sets out a long-term vision for delivering lasting change and increasing the number of people choosing to travel actively.
Going Further: Scotland's Accessible Travel Framework (Transport Scotland, 2016)	The first national Accessible Travel Framework for Scotland. It provides a national vision and outcomes for accessible travel, new ways of working to include disabled people and a high-level action plan to tackle issues.
Soil Conservation	

Name of PPS or Legislation	Environmental Objectives
Scottish Soil Framework (Scottish Government, 2009)	This framework promotes the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland, achieved through targeted activities including reducing soil erosion; greenhouse gas emissions from soil; and contamination.
Scotland's National Peatland Plan – Working for our Future (NatureScot, 2015)	The Plan recognises the wide range of benefits provided by healthy peatlands and sets out a number of aims to protect it.
Scotland's Third Land Use Strategy 2021-2026 – Getting the Best From our Land (Scottish Government, 2021)	Sets out the vision for sustainable land use in Scotland. The strategy outlines objectives, policies and actions which are required to deliver the strategy's vision. The vision for land use in Scotland, outlined by the strategy is for: 'A Scotland where we fully recognise, understand and value the importance of our land resources, and where our plans and decisions about land use will deliver improved and enduring benefits, enhancing the wellbeing of our nation'.
Draft Peatland and Energy Policy Statement (Scottish Government, 2016)	Statement provides a basis from which the Scottish Government and its agencies act in developing and implementing policies in relation to Peatland and energy.
Water	
Water Environment and Water Services (Scotland) Act 2003 The river basin management plan for the Scotland river basin district: 2015-2027 (SEPA, 2015)	The Act is in place to prevent deterioration in the status of the water environment, including rivers, lochs, estuaries, coastal waters and groundwater and protect, enhance and restore all surface water bodies to 'good' status. The area management plan supplements the RBMP for the Scottish river basin district in the delivery of Water Framework Directive requirements.
Flood Risk Management (Scotland) Act 2009 Flood Risk Management Strategy: Forth Estuary Local Plan District (SEPA, 2021)	This Act aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity through improved assessment and the sustainable and coordinated management of flood risk. This Act imposes a new duty on local authorities to exercise their flood risk related functions with a view to reducing overall flood risk and establishes the requirement to prepare plans to manage flood risk which will provide a framework for co-ordinating actions across catchments to deal with all forms of flooding and its impacts. This strategy identifies flooding sources, its impacts and outlines actions to address this flood risk in the Forth estuary area.
Marine (Scotland) Act 2010	The Marine (Scotland) Act aims to achieve good environmental status of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend. The Marine (Scotland) Act transposes the Directive into Scots law and makes provision for a new statutory marine planning system to sustainably manage demands on the marine environment.

Name of PPS or Legislation	Environmental Objectives
Scotland's National Marine Plan (Scottish Government, 2015)	The National Marine Plan fulfils joint requirements under the Marine (Scotland) Act 2010 and Marine and Coastal Access Act 2009 to prepare marine plans, providing a cohesive approach which covers both Scottish inshore and offshore waters and is in accordance with EU Directive 2014/89/EU on maritime spatial planning which came into force in July 2014.
Edinburgh and Lothians Strategic Drainage Partnership (ELSDP)	A mechanism proposed to implement the Vision for Water Management strategy. Vision to empower the ELSDP to make decisions in relation to the implementation of the different work streams, whilst maintaining an overview of all the existing and proposed work in the Council that relates to water issues. This will allow different work streams to be co-ordinated and ensure opportunities for shared working both internally and externally can be maximised.
Air	
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Department for Environment, Food & Rural Affairs, 2011)	Air quality targets have been set at the European and UK levels. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets objectives for Particulate Matter (PM), oxides of nitrogen (NO _x), sulphur dioxide (SO ₂) and ozone (O ₃) amongst others.
The Pollution Prevention and Control (Scotland) Regulations 2012	Allows for the regulation and monitoring of certain industrial activities that can generate airborne pollution.
Air Quality Action Plan (City of Edinburgh Council, 2008)	This Action Plan demonstrates how emissions of nitrogen oxides will be reduced in air quality management areas to achieve NO ₂ concentration objectives. The Air Quality Action Plan Progress with Actions (2015) Report for City of Edinburgh Council revised the Air Quality Action Plan, providing an update on progress achieved for measures contained in the AQAP and City of Edinburgh Council's Local Transport Strategy (2014). The conclusion is reached that steady progress has been achieved with respect to management of emissions from buses and freight via a voluntary approach.
Local Transport Strategy 2014-2019 (City of Edinburgh, 2014)	Sets out the transport policies and actions for the next five years that will contribute to the Council's vision of Edinburgh as a thriving, successful and sustainable capital city. The key actions within the current Air Quality Action Plan and Local Transport Strategy together is based on: (1) promoting cleaner transport (2) adoption of a fleet recognition efficiency scheme for reducing emissions from road freight vehicles (3) improving traffic flow and easing congestion by use of intelligent traffic signaling and (4) promoting modal shift away from car use by means of an Active Travel Action Plan, providing of Park and Rides, controlled parking and priority parking zones.
Environmental Noise (Scotland) Regulations 2006	This regulation implements the EU Environmental Noise Directive. It introduces strategic noise mapping and noise action planning for large urban areas, Noise Management Areas and Quiet areas.

Name of PPS or Legislation	Environmental Objectives
Edinburgh Agglomeration Noise Action Plan (Scottish Government, 2014)	This Action Plan identifies Noise Management Areas and sets out action plans to reduce noise levels where necessary and to preserve noise quality where it is good.
Cleaner Air for Scotland: the road to a healthier future (Scottish Government, 2015)	This strategy provides the mechanism for necessary improvement in air quality in Scotland. It places a greater focus on delivering air quality improvement through evidence-based actions and measures and is complemented by existing local air quality management regimes.
Cleaner Air for Scotland 2 – Towards a Better Place for Everyone (Scottish Government, 2021)	A new air quality strategy that sets out the Scottish Government’s air quality policy framework for the next five years and a series of actions to deliver further air quality improvements. It aims to maximise the benefits from action to tackle poor air quality and build on the linkages with other key government strategies that cover transport, climate change, health, environment, place, planning, energy and land use.
Clean Air Strategy 2019 (DEFRA, 2019)	Shows how we will tackle all sources of air pollution, making our air healthier to breathe protecting nature and boosting the economy. The strategy sets out a number of proposals in detail and also indicates how devolved administrations intend to make their share of emissions reductions. It complements three other UK government strategies: the Industrial Strategy, the Clean Growth Strategy and the 25 Year Environment Plan.
Environment Act 1995 – Local Air Quality Management (LAQM)	This Act imposes a duty on local authorities to review and assess air quality and work toward meeting the objectives contained in the UK air quality strategy for England, Scotland, Wales and Northern Ireland (2007).
Air Quality Standards (Scotland) Regulations 2010, transposing the EU Ambient Air Quality Directive (2008)/ 50/ EC)	These set limits and targets for several airborne pollutants with implications for human health, including carbon monoxide, oxides of nitrogen, Sulphur dioxide, and particulates.
Local Air Quality Management Policy Guidance PG 16 (Department for Environment, Food & Rural Affairs, 2016)	Explains the objective for improving air quality and provides a framework for activities in Local Air Quality Management Areas.
Clean Air Strategy 2018 (Department for Environment, Food & Rural Affairs, 2018)	The Clean Air Strategy shows how the UK will tackle all sources of air pollution, making the air healthier to breathe, protecting nature and boosting the economy. It sets out a wide range of actions on which the UK Government is consulting and shows how devolved administrations intend to make their share or emissions.
2021 Air Quality Annual Progress Report (APR) (The City of Edinburgh Council, 2021)	Report provides an annual update on the most recently available annual air quality monitoring data (2019), local pollutant trends and emerging issues, fulfilling the requirements of the statutory Local Air Quality Management Framework.
Cleaner Air for Scotland 2: Towards a Better Place for Everyone (Scottish Government, 2015)	In November 2015, the Scottish Government published ‘Cleaner Air for Scotland – The Road to a Healthier Future’. This was the first Scottish air quality strategy separate from the rest of the UK. CAFS sought to bring together the major policy areas relevant to air quality –

Name of PPS or Legislation	Environmental Objectives
	climate change, transport, planning, health and energy – within one overarching framework. CAFS2 replaces the CAFS and underwent its own public consultation in early 2021.
Material Assets	
Zero Waste Plan (Scottish Government, 2010)	This plan sets out Scotland’s ambition to become a zero-waste nation, where we increase resource efficiency by minimising Scotland’s demand on virgin materials through increasing and maximising the reuse, recycling and recovery of resources instead of treating them as waste. In addition to preventing the use of resources through re-design and designing for end-of-life purposes.
Making Things Last: A Circular Economy Strategy for Scotland (Scottish Government, 2016)	This strategy sets out our priorities for moving towards a more circular economy – where products and materials are kept in high value use for as long as possible. It builds on Scotland’s progress in the zero waste and resource efficiency agendas. A more circular economy will benefit: <ul style="list-style-type: none"> • The environment – cutting waste and carbon emissions and reducing reliance on scarce resources • The economy – improving productivity, opening up new markets and improving resilience.
Cultural Heritage	
Our Place in Time: the Historic Environment Strategy for Scotland (Scottish Government, 2014)	This is Scotland’s strategy for preserving the historic environment. The key outcome for the strategy is to ensure that the cultural, social, environmental and economic value of Scotland’s heritage makes a strong contribution to the well-being of the nation and its people. The Strategy has three high level aims, which includes i) investigating and recording the historic environment, ii) caring and protecting it and iii) sharing and celebrating the historic environment’s richness and significance.
Managing Change in the Historic Environment (Historic Environment Scotland 2010-2019)	The series provides best practice advice to guide changes to the historic environment. The guidance note provides advice on how to assess the impact of change on the setting of historic assets.
Creating Places: A Policy Statement on Architecture and Place (Scottish Government, 2013)	The policy statement sets out the value good design can deliver, noting that successful places can unlock opportunities, build vibrant communities and contribute to a flourishing community. The important role of maintaining cultural connections is also noted.
Historic Environment Scotland Act 2014	The Historic Environment Scotland Act 2014 sets out Historic Environment Scotland’s role and legal status, including changes in processes for the designation of monuments and buildings (scheduling and listing) and for consents relating to scheduled monuments, listed buildings and conservation areas.
Scotland’s Archaeology Strategy (Scottish Strategic Archaeology Committee, 2015)	The strategy was the first of its kind in Europe when launched in 2015. It reflects upon archaeological highlights over a five-year period and aims to make archaeology matter for everyone in Scotland. The review identifies the following key areas:

Name of PPS or Legislation	Environmental Objectives
	<ul style="list-style-type: none"> • Delivering archaeology • Enhancing understanding • Caring and protecting • Encouraging greater engagement • Championing innovation and skills
Historic Environment Policy for Scotland 2019	The HEPS is designed to support and enable good decision-making around changes to the historic environment. HEPS helps to deliver the vision and aims of <i>Our Place in Time</i>
Landscape	
European Landscape Convention (Council of Europe, 2000)	This convention was published to promote the protection, management and planning of all landscapes, including natural, urban and peri-urban areas, as well as special, every day and also degraded landscapes.
Creating Places: A policy statement on Architecture and Place for Scotland (Scottish Government, 2013)	Policy statement sets out the value good design can deliver, noting that successful places can unlock opportunities, build vibrant communities, and contribute to a flourishing community. The important role of maintaining cultural connections is also noted.
Place Principle (Scottish Government, 2019)	The Scottish Government's Place Principles promotes a shared understanding of place, and the need to take a more collaborative approach to a place's services and assets to achieve better outcomes for people and communities. The principle encourages and enables local flexibility to respond to issues and circumstances in different places.
Designing Streets: A Policy Statement for Scotland (Scottish Government, 2010)	Designing Streets is the first policy statement in Scotland for street design and marks a change in the emphasis of guidance or street design towards place-making and away from a system focused upon the dominance of motor vehicles.
People, Place and Landscape: A Position Statement from NatureScot and Historic Environment Scotland (HES and Nature Scot, 2019)	The Position Statement sets out the vision and approach of SNH and HES for managing change in Scotland's landscapes in more detail. The Statement includes the following vision: 'All Scotland's landscapes are vibrant resilient. They realise their potential to inspire and benefit everyone. They are positively managed as a vital asset in tackling climate change. They continue to provide a strong sense of place and identity, connecting the past with the present and people with nature, and fostering wellbeing and prosperity.'
SNH Landscape Policy Framework – Policy Statement No. 05/01 (NatureScot, 2005)	This policy statement sets out their approach for Scotland's landscape and how they seek to fulfil the requirements of Government policy related to landscape.
Other Relevant PPS	
National Transport Strategy (NTS) (Transport Scotland, 2016)	The NTS sets the long-term vision for our transport policies. It was first published in 2006 after the Scottish Government consulted the public, interested individuals and a wide range of organisations on their views for the future of transport in Scotland.
National Transport Strategy 2 (NTS2) (Transport Scotland, 2020)	It is a Strategy for the whole transport system (people and freight) and it considers why we travel and how

Name of PPS or Legislation	Environmental Objectives
	<p>those trips are made, by including walking, wheeling, cycling, and travelling by bus, train, ferry, car, lorry and aeroplane. It is a Strategy for all users: those travelling to, from and within Scotland.</p> <p>The Strategy does not identify or present specific projects, schemes, initiatives or interventions, but sets out the strategic framework within which future decisions on investment will be made.</p> <p>Policies on climate action include:</p> <ul style="list-style-type: none"> • Reduce emissions generated by the transport system to mitigate climate change and improve air quality. • Support demand management to encourage more sustainable transport choices. • Facilitate shift to sustainability and providing space – efficient modes of transport for people and goods. • Improve quality and availability of information to enable all to make more sustainable transport choices. • Ensure transport system adapts to projected climate impacts. • Reduce the negative impacts which transport has on the safety, health and wellbeing of people. <p>NTS2 sets out the Sustainable Travel Hierarchy, and the Sustainable Investment Hierarchy which are to be used to inform investment decisions on transport options and are integral to prioritising investments which support the transition to net zero and considering the whole lifecycle of transport.</p>
<p>Reducing car use for a healthier, fairer and greener Scotland - A Route Map to achieve a 20% reduction in car kilometres by 2030 (Transport Scotland, 2021)</p>	<p>This route map supports the commitment in the Climate Change Plan Update for reduction in car km by 20% by 2030. It provides the context for encouraging behaviour change, by reducing the need to travel, living well locally, switching modes, and combining or sharing car trips.</p> <p>Various interventions are recommended, including adoption of NPF4 (see below), extending superfast broadband across Scotland, embedding the Place Principle and 20-minute neighbourhoods into plans, guidance on mobility hubs for integrating shared modes, and investment in active travels and freeways.</p>
<p>SEStran Regional Transport Strategy 2015-2025 (SEStran, 2015)</p>	<p>This sets out a regional transport strategy for the Edinburgh city region with 4 key objectives:</p> <ul style="list-style-type: none"> • Economy: to ensure transport encourage growth in a sustainable manner; • Accessibility: to improve accessibility for those with limited transport choice; and • Environment: to ensure development is achieved in an environmentally sustainable manner; and • Safety and Health: to promote a healthier and more active population.
<p>Strategic Transport Projects Review 2 (Transport Scotland, 2022)</p>	<p>STPR2 will help to inform transport investment in Scotland for the next 20 years. The output from STPR2</p>

Name of PPS or Legislation	Environmental Objectives
	will help to deliver the vision, priorities and outcomes for transport set out in the NTS2. STPR2 aligns with other national plans such as the Climate Change Plan and the fourth National Planning Framework (NPF4).
National Planning Framework 3 (Scottish Government, 2014)	The National Planning Framework 3 aims to guide Scotland’s development over the next 20 to 30 years and sets out strategic development priorities to support the Government’s goal of sustainable economic growth. The framework will play a key role in co-ordinating policies with a spatial dimension and will help move Scotland towards a low carbon economy.
Scotland 2045 - Fourth National Planning Framework draft (Scottish Government, 2021)	<p>The NPF4 Draft sets out that targets of net zero emissions by 2045 must be met with significant progress expected towards this by 2030. New infrastructure will be needed across Scotland to aid the shift towards net zero and adapt to the impacts of climate change that are already set to be experienced including flood risk, water scarcity, environmental change, coastal erosion, impacts on forestry and agriculture, extreme weather events, and risks to health, food security and safety.</p> <p>It is set out in the framework that investment will be made into nature-based solutions whilst also addressing biodiversity loss.</p> <p>Four main visions are set out in the framework:</p> <ul style="list-style-type: none"> • Sustainable places • Liveable places • Productive places • Distinctive places
A National Mission with Local Impact – Infrastructure Investment Plan for Scotland 2021-2022 to 2025-26 (Scottish Government, 2021)	<p>Sets out the delivery plan and spending priorities for the Scottish Government’s National Infrastructure Mission commitment to increase annual investment in infrastructure, boosting inclusive economic growth. The vision of the plan is that “our infrastructure supports Scotland’s resilience and enables inclusive, net zero, and sustainable growth.”</p> <p>Core themes of the plan include:</p> <ul style="list-style-type: none"> • Enabling transition to net zero emissions and environmental sustainability. • Building resilient and sustainable places. • Investment priorities highlighted in the plan include various measures to: <ul style="list-style-type: none"> • Support the decarbonisation of transport and increase in active travel. • Improve natural capital (new forestry planting and investment in supporting the reuse of vacant and derelict land). • Boost resilience and adaptation, including £60M for climate adaptation and resilience measures on the trunk road network, and an additional £150M for flood risk management.
Scottish Planning Policy (SPP) (Scottish Government, 2014)	SPP sets out the Scottish Government’s view of the purpose of planning; the core principles and objectives

Name of PPS or Legislation	Environmental Objectives
	<p>for key parts of the system; statutory guidance on sustainable development and planning; concise subject planning policies, including the implications for development planning and development management; and the Scottish Government's expectations of the intended outcomes of the planning system.</p> <p>SPP and NPF3 share a single vision and outcomes for the planning system in Scotland (See NPF3).</p> <p>The December 2020 update to the SPP was removed following a legal challenge at the Court of Session in August 2021.</p>
SES plan Strategic Development Plan (SDP) 2 (2016)	The SDP sets out a strategy to guide the development of the Edinburgh city region over the next 20 years.
Choices for Edinburgh City Plan 2030 (City of Edinburgh Council, 2020)	This is the main issues report for the Edinburgh City Plan 2030, Edinburgh's next local development plan. This document outlines and seeks views on the main choices for the Plan.
Open Space 2021 (City of Edinburgh Council, 2016)	<p>A strategy to protect, look after and expand the Edinburgh's network of green spaces for the next five years. It aims to help guide and set standards for the care and improvement of existing open spaces; provide the context to community-led greenspace initiatives and planning decisions; predict where new parks, play areas and sports pitches will be needed in years to come; identify where links can be formed and improved between open spaces to support walking, cycling and wildlife; and help the city prepare for, and adapt to current and future impacts of climate change.</p>
Edinburgh Core Path Plan (City of Edinburgh Council, 2008)	The Core Paths Plan identifies a system of routes that provide the community and visitors with non-motorised access throughout the local authority area.
Central Scotland Green Network	Identified as National Development in NPF3 this aims to deliver a high-quality green network that will meet environmental, social and economic goals designed to improve people's lives, promote economic success, allow nature to flourish and help Scotland respond to the challenge of climate change.
Sustainable Edinburgh 2020 (City of Edinburgh Council, 2020)	<p>A framework for the sustainable development of Edinburgh until 2020. The vision is:</p> <p>"Edinburgh in 2020 will be a low carbon, resource efficient city, delivering a resilient local economy and vibrant flourishing communities in a rich natural setting."</p>
Edinburgh Economy Strategy (City of Edinburgh Council, 2021)	Provides direction for Council work to support the economy through this period of change and set clear priorities for actions on which we will collaborate with partners. this strategy sets out the Council's vision and approach to ensuring a stronger, greener, and fairer Edinburgh economy.
National Strategy for Economic Transformation (NSAT) 2022	The Strategy set a vision for Scotland to be a fairer, wealthier and greener economy. It focuses on five policy programmes including: Entrepreneurial People and Culture, New Market Opportunities, Productive

Name of PPS or Legislation	Environmental Objectives
	Businesses and Regions, Skilled Workforce and a Fairer and More Equal Society.
2050 Edinburgh City Vision	Sets out the emerging new 2050 vision for Edinburgh with four emerging themes: An Inspired City, a Thriving City, A Connected City and a Fair City.

Strategic Environmental Assessment Environmental Report

Appendix C. Statutory Authority Responses on SEA Scoping Report

Revision no:0.2

City of Edinburgh Council

Climate Strategy 2030
August 2022

Appendix C. Statutory Authority Responses on SEA Scoping Report

Table C.1: Comments from the Statutory Authorities

Section	Comment	Our Response
Scottish Environment Protection Agency (SEPA)		
Relationship with other Plans, Policies and Strategies (PPS)	'Cleaner Air for Scotland: the road to a healthier future (Scottish Government, 2015)'. Please be aware of Cleaner Air for Scotland 2 Towards a Better Place for Everyone Cleaner Air for Scotland-2 Towards a Better Place for Everyone- gov.scot (www.gov.scot)	Updated the policy review appendix in the Environmental Report.
Baseline Information	We are aware that City of Edinburgh Council will have to prepare and action Local Heat and Energy Efficiency Strategy (LHEES) by the end of 2023. This document should be a useful source of information with regards to energy and heat generation, transmission and use across the city area and contain content relevant to the baseline of this strategy. We acknowledge that integrating information from a strategy which is not yet published is complex however the SEA process should be cognisant of this information moving forward.	Updated the policy review appendix in the Environmental Report.
	Updates to the SEPA pluvial maps are currently underway and the flood map outputs are anticipated to be available in the next 18 months....the SEA could identify them as future additions to the baseline. The next coastal flood hazard maps to be updated will be for South East Scotland...As with the pluvial maps however, we want to the potential for other updates to flood maps, including coastal, which should be taken into account as the climate change strategy (and related PPS) evolve and develop.	Added to the Environmental report baseline.
	We would support the Council to extend the scope of their assessment to include the transmission of energy within the scope of the Strategy.	Energy transmission is taken forward through the Heat and Energy Efficiency Partnership Board co-chaired by CEC and S P Energy Networks and membership from across the heat and energy sector Actions identified in the strategy to partner with SP Energy Networks will ensure a strategic policy approach will be taken to heat and energy and consideration of environmental factors will be incorporated in these workstreams. CEC will look to update the implementation plan to include this environmental consideration.

Strategic Environmental Assessment Environmental Report Appendix C

Section	Comment	Our Response
6.3.1 SEA Objectives	This approach is supported by the Scottish Government's new clean air strategy – Cleaner Air for Scotland 2 (CAFS2)– Towards a better place for everyone– published in 2021. Further to this the relevant plans, policies and strategies for air quality are outdated, there are new air quality strategies prepared by both the Scottish government (CAFS2) and the UK government (Defra Clean Air Strategy 2019) and the Council are updating their own local plan for air quality.	Updated the policy review appendix in the Environmental Report.
	Additionally, we recommend the 50 recommendations for maximising co-benefits between air quality and climate change interventions as set out in the CAFS Governance Group climate change report is used to guide the development of the SEA objectives and assessment questions in table 9 for air and climatic factors.	CAFS2 has been added to the Appendix B and the SEA objectives were reviewed with awareness of the CAFS recommendations.
	We suggest the current questions be amended as follows: 3.9 Contribute to reducing emissions of key pollutants to air from road transport 3.10 Contribute to reducing emissions to air from energy generation and heating 3.11 Contribute towards achieving the aims and objectives of the Council's Air Quality Action Plan 3.12 Improve air quality within existing AQMAs 3.13 Contribute towards achieving the aims and objectives of the LEZ	Updated SEA objectives guide questions.
Environmental Issues and Challenges	Annual progress reports on air quality to the Scottish government and SEPA should be reviewed to adequately understand the air quality issues faced by the council and actions to improve air quality.	Annual progress reports were reviewed in the development of the strategy and will be reviewed as part of the ongoing monitoring
	The Council should also note the below action in CAFS2 which is highly relevant to the development of the Climate strategy and SEA: Local authorities working with Transport Scotland and SEPA will look at opportunities to promote zero-carbon city centres within the existing LEZs structure.	CAFS2 has been added to the Appendix B and the SEA objectives were reviewed with awareness of the CAFS recommendations.
	We suggest [the SEPA Carbon Emissions Tool] is considered in both the strategy and the SEA development to test transport related assumptions.	At this strategic level we are not proposing to use any carbon tool. The rationale for this was discussed at the Environmental Report workshop with the Statutory Authorities.
	We also recommend that the SEA refers to the recently updated Dynamic Coast 2 dataset (Dynamic Coast Reports).	Updated the policy review appendix in the Environmental Report
Table 6	The report states, "need to respond to increased rainfall and implications on surface water within constrained city centre". We are in agreement with this statement, however we advise this statement	Updated in the Environmental Report.

Strategic Environmental Assessment Environmental Report Appendix C

Section	Comment	Our Response
	is inclusive of all sources of flood risk including fluvial risk, culverted watercourses, tidal interactions, groundwater etc.	
	We note there is no reference to the Edinburgh and Lothian Strategic Drainage Partnership, however this may be a key partnership that could help to deliver some of the objectives from the 2030 Climate Strategy and linkages should be considered.	Updated the policy review appendix in the Environmental Report
Mitigation and Enhancement	We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate)	Mitigation and enhancement section has been added to the Environmental report.
Monitoring	It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.	Noted and will be considered in the final version of the Environmental report.
Outcomes of the Scoping exercise	We would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken into account.	All comments received on the scoping report have been presented in this Appendix C.
NatureScot		
Table 1	We suggest another key objective might be protecting or adapting the coast to sea level change and erosion, although this could be covered by the Air and Climatic Factors objective 'Contribute to the response to climate change, through sustainable design mitigation and adaptation'. As well as Air and Climatic Factors this key objective could also apply to Water and Biodiversity.	This objective has been added to Water and Biodiversity in Table 2.1
Baseline Information	We suggest another source of baseline information which is relevant to the coastline is Dynamic Coasts(2)	Updated the baseline appendix in the Environmental Report
Environmental problems	The need to adapt to the effects of climate change is a cross cutting issue which affects most topics, not just climatic factors and population/human health. For example, coastal adaptation could be seen as a Water issue; possible Firth of Forth SPA squeeze or more generally habitat resilience, a Biodiversity issue. Within Biodiversity, the results of development fragmenting habitats, as mentioned, means a less resilient network to buffer the effects of climate change, as well as loss of biodiversity. It's not always clear within the scoping report, that biodiversity addresses both.	Updated Table 2.2.
SEA Objectives	Needing to adapt to climate change is a key issue and reflected in the SEA objective 'Promote and enable adaptation to climate change'. The related SEA question 'Help adapt the infrastructure network to direct and indirect risks associated with climate change projections for Scotland' is an all-encompassing question which could cover many things within many topics. As such, it's perhaps not as smart or as measurable as it could be. For example, infrastructure could be anything from buildings to parks to coastal defences, and many things could help contribute to adaptation, including nature-based solutions. Perhaps it would be more useful to break this question down further, for example 'protect and increase resilience	Updated the climate guide questions in Table 3.3.

Section	Comment	Our Response
	of...?' Adaptation itself will benefit most topics, from biodiversity, to climate to population health etc.	
	There is not a coastal or sea related SEA objective or question within the Water topic..... But perhaps this is included within the adaptation question discussed above. It would be useful to make this clearer in the Environmental Report	Coastal guide question added to Table 3.3. within the Climatic factors objective.
	Green blue infrastructure or nature based solutions will also be used to help infrastructure adapt to climate change and therefore it may be useful to capture this somehow within the SEA questions. Again this could form part of the adaptation question above, perhaps highlighting the need to explore the questions further around this objective. For example, can nature be used to create, or to assist in creating, climate resilient development?	Guide question added to Table 3.3 to reflect the need for nature-based solutions. This has also fed into the development of enhancements
	The potential for restoring peatland could be highlighted further within [the SEA questions relevant to peat]. For example 'Promote soil and peatland restoration to encourage carbon capture' or 'protecting and restoring prime agricultural land and carbon rich soils such as peat'	Updated Table 3.3.
Historic Environment Scotland (HES)		
Table 6	It would be helpful for the environmental problems identified for the historic environment to demonstrate a focus on the strategy topic area. For example, to recognise the issues that climate change raises for the historic environment, and also the opportunities and challenges that will arise from the implementation of mitigation and adaptation measures. More information about this can be found here: Climate Change Lead Public Body for Scotland's Historic Environment	Added a guide question around climate change resilience to the cultural heritage objective.
SEA Objectives and Assessment Questions	We recommend that you include objectives and assessment questions which reflect the likely aims and outcomes of the Strategy. In the case of the historic environment, this includes assessment criteria which can identify likely effects of adaptation and mitigation measures on the historic environment, and which also identify opportunities for the Strategy to address climate change issues facing the historic environment	Added a guide question around climate change resilience to the cultural heritage objective.
Reasonable Alternatives	We would expect all reasonable alternatives considered in the development of the Strategic Actions to be assessed and reported in the Environmental Report to the same level of detail that preferred options are assessed and reported.	Clarification of the process behind the assessment of reasonable alternatives has been included in the Environmental Report. This was discussed in the Environmental Report workshop with the Statutory Authorities.
	The SEA timeline provided at table 11 discusses public consultation on the Environmental Report but does not refer to consultation on the Strategy itself. For the avoidance of doubt, the consultation should be on both the Environmental Report and the Strategy (the relevant document).	Clarification on the programme has been added to the final table of the Environmental Report.

Strategic Environmental Assessment Environmental Report

Appendix D. Strategic Actions Sifting Exercise

Revision no:0. 2

City of Edinburgh Council

Climate Strategy 2030
August 2022

Appendix D. Strategic Actions Sifting Exercise

This appendix shows the sifting process for the SEA assessment. All the strategic actions in the Climate Strategy were sifted to identify if they were already captured within an SEA process as part of another plans, programmes or strategy. If the strategic action was considered to be captured elsewhere it was sifted out the Climate Strategy SEA. For example, 20-minute neighbourhoods are considered within the City Mobility Plan SEA and therefore were sifted out of the Climate Strategy SEA.

Table D.1: Net Zero, Climate Resilient Development and Growth Strategic Action Area Sift

Number	Strategic Action	Sift in / out
1	Laying the policy foundations to support net zero development which designs in climate resilience	
1.1	Set new planning and policy guidance within the City Plan 2030	Out - City Plan Sets out new policies and proposals relating to the development and use of land in the Edinburgh area, and where new infrastructure and community facilities are required (page 6).
1.2	Work with developers, investors and landowners to deliver net zero climate resilient development of the city	Out - City Plan Overall objective of the plan is to support future growth of the city to be sustainable and net-zero (page 8). Specifically, the plan aims to ensure that the planning of housing, employment and services addresses the need for net-zero development (page 8). Aim 4 requires all new buildings to be net-zero in their operational emissions and supports the delivery of heat network and energy infrastructure to help Edinburgh transition to net-zero (page 8).
2	Re-designing services to meet citizen's needs locally	
2.1	Re-design services and amenities to deliver sustainable 20-minute neighbourhoods across hub locations	Out - City Mobility Plan Section 4: Place aims to create great places which have been designed for people. Within this the CMP advocates several policy measures aimed at creating sustainable places which support the 20-minute neighbourhood concept (page 47). Policy Measure Place 2: 20-Minute Neighbourhoods is covered on page 50.
3	Leading the way on net zero, climate resilient development	
3.1	Work with public sector partners to identify opportunities for exemplar policy approaches for new build operational estate	In
3.2	All new Council-led housing developments within the 10-year sustainable housing investment plan will be net zero	In
3.3	All new build learning estate projects will meet the Scottish Government's Learning Estate Investment Programme energy target and work towards the Scottish Net Zero Public Sector buildings standard.	In
3.4	Develop innovative approaches to net zero development and construction which address both operational and embodied emissions	In
3.5	Develop an off- site net zero construction methodology through the Edinburgh Home Demonstrator (EHD) project	In
4	Renew the focus on climate resilience and accelerating the adaptation of the city	
4.1	Undertake a city-wide climate change risk assessment and cost analysis (CWCCRA)	In
4.2	The City of Edinburgh Council will convene city and region partners to collaborate on a long-term 'Climate Ready Edinburgh' plan, taking full account of the city's natural assets.	In
4.3	Adapt Edinburgh's World Heritage Site to be resilient to the impacts of climate change	In
4.4	Develop a regional approach to climate change risk assessment and adaptation, maximising opportunities to enhance the natural environment.	Out - Page 13 of the City Plan 'Regional Context and Change'. The City Plan will have major influences on the delivery of sustainable transport modes alongside national and regionally focused projects. Throughout the report, recognition is given to the importance of placing focus on the aims of 'national, regional and local policy drivers' (page 15).
5	Developing a long-term and sustainable approach to water management across the city	
5.1	Deliver a Water Management Vision and Strategy identifying the risks and co-ordinating actions to alleviate impacts from all sources of flooding in the city.	In

Number	Strategic Action	Sift in / out
5.2	Integrate design for water and flooding within the urban landscape using blue-green infrastructure	In
5.3	Deliver a network of green and blue spaces across the city which help protect our communities from climate change impacts, provide active travel routes, and protect and enhance the city's natural environment and biodiversity	Out – City Plan Aim 1 seeks to deliver green and blue networks, bringing community services closer to homes (page 8). Further information on the Green Blue network can be found on page 22 – outlining that this form of infrastructure (e.g greenspaces and watercourses) are significant assets to the city with multifunctional value.
6	Protecting and enhancing the city's natural capital to improve health and well-being, capture carbon, and deliver nature-based solutions to climate resilience	
6.1	Deliver a co-ordinated approach to managing and enhancing Edinburgh's natural assets across key public sector operational estate sites	In
6.2	Deliver a city-wide programme to manage, protect and enhance greenspace and biodiversity – addressing the ecological and climate emergencies	In
6.3	Deliver nature-based solutions to the impacts of climate change	Out - City Plan The main reference to nature-based solutions is provided in Env 35 'Reducing Flood Risk' (page 118). Here, it is suggested that mitigating measures against flood risk must be appropriate in planning terms and have fully explored sustainable, nature-based solutions as the optimal way to address adverse flood risk impacts.
6.4	Develop an Edinburgh Nature Network for the city	In
7	Protecting the City's coast	
7.1	Adapt the city's coast to be resilient to climate change, beginning with delivering around 200 hectares of new and enhanced coastal park in Granton in north west Edinburgh.	Out - City Plan Env 35 Reducing Flood Risk (page 118) outlines the principles for ensuring that Edinburgh's coast will be resilient to climate change. Specific reference to Granton is given on page 160 (BGN24). Further information on Coastal Granton is provided on page 51.
8	Delivering rapid whole-system change	
8.1	Call on the Scottish Government to use the lessons from responding to Covid-19 to enable accelerated local action and decision making on tackling the climate emergency.	Out - City Mobility Plan Page 12 'Covid-19 Impacts and Recovery' of the City Mobility Plan . This section speaks about the opportunity to embed some of the beneficial outcomes of lower traffic levels (more walking and cycling, local trip-making etc.). There is also opportunity around addressing changes in peak time travel patterns with more flexible working. Hence, in response to Covid-19, measures can be implemented to support safe and efficient forms of travel that supports the fight against climate change and encourages sustainable economic growth.
9	Shared risk-taking to develop innovative solutions	
9.1	Call on the Scottish Government to collaborate with the City of Edinburgh Council on shared risk-taking to develop innovative solutions to tackling climate change.	Out - City Mobility Plan Chapter 6 of the City Mobility Plan 'Implementation' (page 55) recognises that the successful delivery of the CMP/Implementation Plan will depend on effective partnerships with governance structures that guide regional transport infrastructure and planning e.g., Transport Scotland. With this, recognition is given to risk management – whereby risks to the delivery of key projects will form part of the monitoring process and ways to manage/monitor these risks will be explored.
10	Embedding net zero climate resilient requirements	
10.1	Call on the Scottish Government to embed net zero and climate resilience requirements into new and existing policy, legislation, regulations and statutory guidance.	In
10.2	Call on Scottish Government to ensure Local Authorities have the powers and resources required to accelerate the pace of energy efficiency and climate resilience improvements to multi tenure tenement buildings.	In

Table D.2: Net Zero Energy Generation and Energy Efficient Buildings Strategic Action Area Sift

Number	Strategic Action	Sifted in/out
1	Laying the policy foundations	
1.1	Set progressive planning policies to increase energy standards in new buildings.	In
1.2	Require the use of low and zero emissions technologies to heat and power the city's buildings.	Out - Under Resources and Services (page 33), the City Plan requires new buildings to be net zero in terms of operational greenhouse gas emissions, supports existing buildings to be more efficient and supports new low and zero carbon energy generation developments. Page 164 (H86) New Housing Proposals: Edinburgh BioQuarter states that a master plan will be prepared to support the future development of a net-zero mixed-use development with a net-zero emissions target. In addition to this, all planning applications involving the construction or change of use of one or more buildings must be accompanied by a Sustainability Statement (page 16).
2	Meeting the city's energy needs sustainably	
2.1	Convene a City Heat and Energy Partnership (CH&EP)	In
2.2	Develop a city-wide heat and energy masterplan	In
3	Investing in heat and energy	
3.1	Develop a long-term city partner shared investment strategy to deliver the city-wide heat and energy masterplan.	In
3.2	Agree appropriate delivery mechanisms for the energy investment strategy.	In
4	Meeting future energy demand	
4.1	Establish a strategic partnership with SP Energy Networks	In
4.2	Align current and future grid development to the city's projected energy needs.	In
5	Developing regional energy solutions	
5.1	Develop regional renewable energy solutions which draw on the area's wind, geothermal, hydro and solar assets.	In
5.2	Learn from the H100 hydrogen pilot.	In
5.3	Collaborate with regional partners to decarbonise the region's energy infrastructure.	In
6	Developing heat networks	
6.1	Identify heat network zones across the city.	In
6.2	Ensure all Council-led infrastructure investment plans seek opportunities to connect to heat networks, beginning with our learning estate programme.	In
6.3	Work with communities and developers to deliver heat networks which meet the needs of key public sector buildings and major new developments across the city, beginning with Granton Waterfront and the BioQuarter.	In
7	Focusing on place-based energy projects	
7.1	Collaborate on place-based joint energy infrastructure projects which maximise opportunities to deliver low-cost, clean, renewable energy to neighbourhoods and communities, with a focus on areas experiencing inequalities.	In
7.2	Align strategic investment in the electricity grid with development plans, to support increased local energy generation.	In
8	Developing community energy generation projects which build community wealth	
8.1	Explore the potential for creating local energy generation communities as part of proposed net zero communities' pilots.	In
8.2	Develop a city-wide programme of community energy generation investment opportunities.	In
9	Retrofitting the city's social housing and public sector estate	

Number	Strategic Action	Sifted in/out
9.1	Develop a Whole House Retrofit delivery programme for retrofitting social housing across the city to the highest energy standards, to reduce energy demand and tackle fuel poverty.	In
9.2	Establish an Energy Efficient Public Buildings Partnership (EEPBP) to collaborate on retrofit, align investment plans and encourage confidence in, and planning for, the business and skills supply chain needed to deliver.	In
9.3	Ensure retrofit programmes create green jobs and fair work opportunities for citizens, targeting those at greatest risk of poverty.	In
10	Resourcing net zero public buildings	
10.1	Call on the Scottish Government to work with city partners to identify and deploy sufficient resources to deliver net zero public buildings.	In
11	Supporting small businesses, owner occupiers and private landlords	
11.1	Develop a new mechanism and business plan to support small businesses, owner-occupiers and private landlords to affordably retrofit their properties.	In
11.2	Develop electricity grid infrastructure and capacity to respond to increased demand from electric-powered heat.	In
11.3	Work with SP Energy Networks and the Scottish Government to identify measures to reduce the cost of electricity and support citizens to transition away from gas.	In
11.4	Call on the Scottish Government to bring forward at speed improved schemes to support citizens to fund energy efficiency upgrades.	In
12	Testing innovative approaches for challenging settings	
12.1	Scope and test innovative approaches to retrofit in challenging mixed-tenure settings, to develop models and accelerate progress.	In

Table D.3: Net Zero Emissions Transport Strategic Action Area Sift

Number	Strategic Action	Sifted in / out
1	Investing in active travel	
1.1	Prioritise investment in expanding the active travel network, connecting communities to services and amenities in their neighbourhoods.	Out - Focus is placed on the importance of investing in active travel throughout the CMP. Specifically, Policy Measure Movement 14: Walking and Wheeling and Policy Measure Movement 15: Cycling (pages 30-32) demonstrate the ways that active travel networks can be enhanced and expanded as necessary to serve and connect key destinations across the city. Within the city plan, active travel investment is likewise outlined as a key strategy for making Edinburgh more sustainable. This is outlined in the Green Blue Network section (page 22) and key active travel proposals (page 45) that are integrated into each place e.g. Place 7: Stead's Place (page 60).
2	Developing integrated public transport	
2.1	Improve the integration of our public transport system, and review routes and interchanges, within a city and regional context.	Out - Multiple policy measures within the CMP seek to improve the integration of our public transport system. E.g. People2: Travel Plans seeks to improve the inclusivity and accessibility of public transport routes. A review of routes is provided on page 20 – outlining the public transport routes across the city and identifying areas of the city where high concentrations of people exist but with low levels of access to public transport. The City Plan promotes public transport integration through the mass transit network, proposing new public transport actions that identify where public transport provision could be improved and extended (page 32).
3	Decarbonising buses	
3.1	Work with the Bus Decarbonisation Taskforce and private sector partners to develop a plan to decarbonise the city's bus fleet.	Out – CMP Policy Measure Movement 32: Cleaner Vehicles outlines that it is important that the city's bus fleet is as clean as possible. By 2021 80% of Lothian Buses fleet is expected to be Euro VI standard. To implement this, the CMP suggests the Bus Decarbonisation Taskforce, comprised of leaders from the bus, energy and finance sectors, aiming to ensure that the majority of new buses purchased from 2024 are zero emissions. The CMP also recommends that by the end of this decade, a fleet of low carbon buses carries all passengers at no or very low cost to the passenger (page 18).
4	Improving local air quality	
4.1	Implement a Low Emissions Zone scheme to reduce harmful emissions from transport and improve air quality.\	Out - City Plan Env 34: Pollution and Air, Water and Soil Quality the integration of Low Emissions Zones are discussed (page 118). Page 6 also states that the implementation of a Low Emissions Zone for the city centre is being consulted upon/progressed. Within the CMP, the Low Emission Zone is discussed under Policy Measure Movement 30 – Managing Traffic Signals (page 40). Here, the policy states that a LEZ will help Edinburgh comply with legal air quality standards and reduce the impact of harmful emissions.
5	Better management of the city centre	
5.1	Create a city-centre operation plan to reduce emissions by improving the way goods and service vehicles move around the city, supporting the use of innovative zero emission solutions for 'last mile' deliveries.	In
6	Supporting public sector transition to electric vehicles	
6.1	Identify opportunities to align to investment in EV infrastructure for public service and blue light fleet at strategic locations across the city, which also delivers 'down-time' availability for citizens and businesses where possible.	In
7	Delivering electric vehicle infrastructure	
7.1	Develop electricity grid infrastructure and capacity to respond to increased demand from growth in EV use.	Out - City Mobility Plan and City Plan Developments to the electricity grid infrastructure is not included, however, there are measures in the CMP and City Plan that seek to develop the infrastructure's capacity to respond to increased demand from the growth in EV use. In the CMP, this includes the integration of more EV charging points/hubs (page 36 and Movement 19: Mobility Hubs). This is likewise reflected in the City Plan (page 130).

Number	Strategic Action	Sifted in / out
7.2	Develop pilot proposals for blended finance public-use EV charging hubs in locations which align with the City Mobility Plan's aims of increasing sustainable travel and avoid adding to city-centre congestion.	Out - City Mobility Plan and City Plan Integration of EV charging hubs are outlined in both CMP and City Plan (as above). The CMP states that these will be provided in areas that helps to tackle the highest levels of in-commuting and congestion (i.e. support more sustainable movement, page 28). The City Plan outlines that charging hubs will be located on sites closely related to public transport corridors and railway stations (in park and ride facilities (page 130).
8	Engaging with citizens	
8.1	Deliver public awareness raising campaigns on sustainable and active travel	Out - City Mobility Plan Policy Measure People 1: Supporting Behaviour Change encourages changes in behaviour towards the use of sustainable modes of travel through information provision, initiatives, and campaigns (page 16).
8.2	Engage with citizens and businesses on the potential benefits of introducing a Workplace Parking Levy as part of a range of measures to deliver the City Mobility Plan.	Out - City Mobility Plan Policy Measure Movement 37 – Parking, Waiting, Loading Restriction covers the Workplace Parking Levy (page 44), outlining that this will work as a tool to reduce congestion. Following consultation, a proposal for this will be developed in Edinburgh. This will follow from legislation being passed by the Scottish Government and studies of workplace parking provision.
8.3	Support the creation of 20- minute neighbourhoods and streets for people	Out - CMP Section 4: Place aims to create great places which have been designed for people. Within this the CMP advocates several policy measures aimed at creating sustainable places which support the 20-minute neighbourhood concept (page 47). Policy Measure Place 2: 20-Minute Neighbourhoods is covered on page 50. The City plan aims to ensure that everyone has access to a range of amenities in their area through the promotion of 20-minute neighbourhoods with a range of housing types and other buildings that are adaptable and can meet the changing needs of communities and individuals (page 15). The 20-minute neighbourhood concept is supported throughout the plan.
9	Reducing emissions from flying	
9.1	Encourage partner organisations to sign up to the Edinburgh Climate Compact	In
9.2	Work with citizens and city partners to support staff and residents to make more sustainable travel choices in their professional and personal lives.	In
9.3	Call on the UK Government, the aviation sector and other stakeholders, to develop a national plan for managing aviation emissions that is fully in line with the Paris Agreement	In
10	Developing sustainable national public transport infrastructure	
10.1	Call on the Scottish Government to work with the UK Government to ensure the national public transport infrastructure supports sustainable travel	In
11	Streamlining processes to accelerate change	
11.1	Call on the Scottish Government to remove barriers to rapid action on local transport infrastructure	In
11.2	Call on Scottish Government to accelerate integrated ticketing for public transport.	Out - City Mobility Plan Page 26 of the City Mobility Plan under the 'Ticketing' section states that, 'We are committed to working with all public transport operators, regional partners and the Scottish Government to achieve this ambition' (the ambition being the implementation of integrated, flexible ticketing).

Table D.4: Net Zero Circular Economy Strategic Action Area Sift

Number	Strategic Action	Sifted in/out
1	Securing investment to transition to a net zero economy	
1.1	Develop a mechanism for connecting those looking to invest in a net zero city, with the businesses and organisations looking to drive the changes that support speed and scale of net zero action.	In
1.2	Deliver implementation plans for the Regional Prosperity Framework that drive investment which supports inclusive growth and transition to a net zero economy.	In
2	Enabling business leadership	
2.1	Establish a new business-led Forum to provide leadership on a just economic transition to a net zero city	In
2.2	Ensure Edinburgh’s tourism sector leads the way in sustainable urban tourism	In
3	Delivering the Edinburgh Climate Compact	
3.1	Support and encourage city businesses to sign up to the Edinburgh Climate Compact and commit to reduce their emissions	In
4	Exploring a green innovation challenge finance scheme	
4.1	Explore establishing a finance scheme to complement the Commission Climate Compact, stimulate new lead markets, and support Edinburgh businesses to play a full part in a net zero economy and a green recovery.	In
5	Business mentoring and support for net zero transition	
5.1	Deliver business mentoring and business support programmes to help employers take practical steps to realign their operations towards becoming net zero.	In
5.2	Deliver a new Business for Good programme to provide practical support and training for city businesses to transition to net zero, aligned to and complementing Council and other partner offerings	In
6	Supporting a more circular economy and reducing waste	
6.1	Increase participation in the Circular Edinburgh programme which supports businesses to reduce, re-use and recycle as part of embedding circular economy principles into their ways of working	In
6.2	Increase the proportion of the City’s food and drink sourced from sustainable local and regional supplies	In
6.3	Ensure that all public sector procurement spend actively supports this strategy so that by 2030 all new investment and purchase decisions are net zero.	In
7	Delivering skills and workforce development	
7.1	Scope skill needs and align workforce development programmes to meet the requirements of net zero businesses, and ensure Edinburgh’s workforce can deliver on new heat and energy, retrofitting, transport and other investments	In
7.2	Support people from all backgrounds to access good quality jobs in a net zero economy, and ensure that new green job opportunities are accessible to, and targeted towards, those at greatest risk of poverty	In
8	Securing enabling powers for local government, business and city partners to respond to climate change	
8.1	Call on Scottish Government to empower public sector partners to collaborate on net zero joint public procurement approaches	In
8.2	Call on the Scottish Government to build coherent and flexible legislative and regulatory frameworks that empower local government, business and city partners, so they can rapidly respond to the climate emergency in an agile and adaptive way.	In

Table D.5: Listening to Citizens and Empowering Communities Strategic Action Area Sift

Number	Strategic Action	Sifted in/out
1	Citizen engagement and dialogue	
1.1	Maintain an ongoing open dialogue with citizens about the transformation that needs to happen in the city, sponsoring a new independent Edinburgh Community Climate Forum to collaborate on how we take decisions and deliver change together.	In
1.2	Maximise opportunities to focus on climate change across our whole education system, all City of Edinburgh and other schools.	In
1.3	Call on the Scottish Government to work with city partners on awareness raising campaigns which support a frank discussion on climate change action.	In
2	Delivering sustainable services that enhance community wellbeing and economic benefits	
2.1	Develop sustainable models of public services interventions which deliver improved environmental and population health outcomes	Out - The City Plan 2030 gives attention to the lifelong health benefits of walking, wheeling and cycling by creating streets and public spaces for people over cars and improving and expanding sustainable public transport (page 30). Emphasis placed on the integration of public services that supports both healthcare and education services (page 8). Further information on the importance of interventions that support wellbeing and equalities outlined on page 14.
2.2	Develop a city-wide programme of community energy generation investment opportunities	In
3	Information about climate change	
3.1	Deliver awareness-raising campaigns	In
3.2	Support citizens to make informed choices that help to tackle climate change	Out - The City Plan proposes a number of interventions that will support citizens to make informed choices that help to tackle climate change. This includes the integration of cycle parking (Inf 6, page 127), the Cycle and Footpath Network (Inf 10, page 129) and Public Transport Proposals and Safeguards (Inf 11, page 129).
4	Supporting and engaging young people	
4.1	Work with young people in schools and in communities, to embed a legacy of change, drawing on COP26 coming to Scotland	In
4.2	Maximise opportunities to use school buildings and grounds to engage young people on climate change, help reduce schools' emissions and increase their contribution to greenspace and biodiversity	In
4.3	Strengthen climate change within our curriculum	In
4.4	Deliver a hydrogen education programme and schools challenge	In
5	Net zero communities	
5.1	Work with communities to develop proposals and seek funding for a pilot to understand what it would take for one of the 20-minute neighbourhood hubs to become a net zero community.	In

Table D.6: Investing in Change Strategic Action Area Sift

Number	Strategic Action	Sifted in/out
1	Providing an evidence base to support data-driven innovation and strategic sustainable investment at scale	
1.1	Develop Edinburgh’s Carbon Scenario Tool (CST) to build capacity for evidence-based decision making and benchmarking across cities.	In
1.2	Ensure population health data drives strategic planning for action on climate change.	In
1.3	Harness the city’s intellectual capital to support the development of innovative and financially sustainable interventions to tackle the climate emergency.	In
2	Developing partnerships for city net zero infrastructure investment	
2.1	Establish thematic city partnerships to identify opportunities for collaboration, align investment plans, and develop joint place-based approaches to net zero infrastructure investment in support of a city Green Investment Plan.	In
3	Developing and testing new finance models and scalable tests of change to support innovation	
3.1	Develop innovative finance models that share risk and reward and deliver economic and social benefits for Edinburgh’s citizens by exploring, for example, city investment bonds.	In
3.2	Seek funding to deliver scalable tests of change which use innovative finance models to deliver place-based net zero projects.	In
4	Collaborating to develop a citywide pipeline of green investment proposals and Green Investment Plan	
4.1	Increase capacity and resources to develop feasibility studies and business cases that enable the development of a pipeline of investible projects.	In
4.2	Collaborate with green finance experts to support the resourcing and delivery of major city climate projects, beginning with the city Water Vision.	In
4.3	Develop a Green Investment Plan and programme for the city, aligning investment and infrastructure proposals to support increased net zero investments in the city.	In
5	Delivering place-based net zero investment at scale	
5.1	Develop strategic approaches to mobilising place-based finance for net zero development and investment.	In
5.2	Call on the Scottish Government to work with public bodies to develop joined-up funding streams to deliver place-based investment at a scale which supports the transition to net zero.	In
5.3	Call on Scottish Government to ensure Edinburgh retains the economic benefits flowing from city partner investment in net zero action.	In
6	Developing a city-wide approach to dealing with residual emissions	
6.1	Develop a city-wide approach to off-setting residual emissions in support of achieving net zero by 2030.	In