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Resilient Regions  
GLASGOW CITY REGION  
Clyde Rebuilt

Sniffer

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# GLASGOW CITY REGION

Climate Change Adaptation Strategy SEA Post  
Adoption Statement



## Sniffer

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# GLASGOW CITY REGION

## Climate Change Adaptation Strategy SEA Post Adoption Statement

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## Sniffer

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# GLASGOW CITY REGION

## Climate Change Adaptation Strategy SEA Post Adoption Statement

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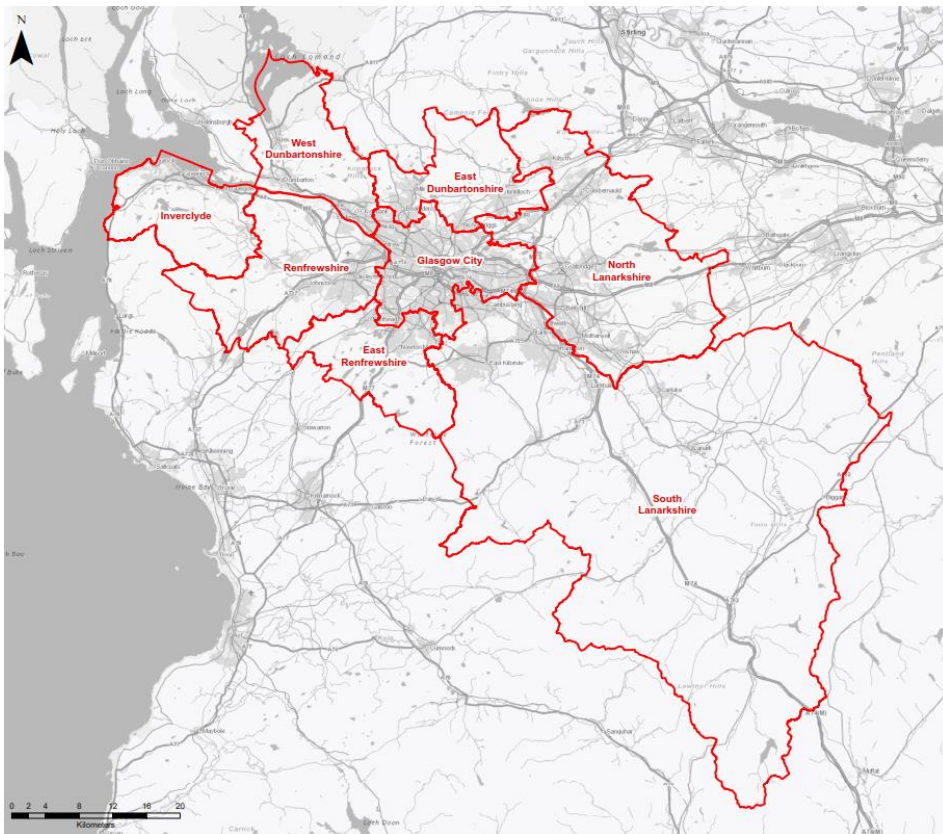
SEA FEEDBACK

# 1 INTRODUCTION

## 1.1 THE ADAPTATION STRATEGY

- 1.1.1. Climate Ready Clyde (CRC) has voluntarily committed to developing a Climate Adaptation Strategy ('the Strategy') and Action Plan to drive the City Region's climate adaptation approach. The Strategy sets the strategic framework for climate change adaptation in the City Region through to 2030.
- 1.1.2. CRC is an unincorporated association of 14 public and private sector partners (supported by the Scottish Government) working on climate change adaptation. It includes the region's eight local authorities, the Scottish Environment Protection Agency (SEPA), , Strathclyde Partnership for Transport (SPT), University of Glasgow, University of Strathclyde, Scotia Gas Networks and NHS Greater Glasgow and Clyde. During the 2020/2021 financial year, Transport Scotland were also a member. The City Region which CRC covers is shown in Figure 1.1 below.

**Figure 1-1 - Glasgow City Region covered by Climate Ready Clyde**



- 1.1.3. The Strategy comprises of a high-level vision and objectives that are supported by a number of interventions and sub-interventions across the City Region. These interventions are designed to



achieve the Theory of Change<sup>1</sup> for a Climate-Ready City Region (developed by CRC to outline the pathways of change towards a City Region which flourishes in its future climate. ).

- 1.1.4. CRC has developed the Strategy as an innovative and ambitious way to drive the City Region's transformational adaptation approach, particularly in sectors and systems that work at the regional scale (e.g. infrastructure, housing, transport, economic development and land use planning) and which require collective, concerted, collaborative effort to adapt.
- 1.1.5. The Strategy seeks to ensure the City Region's economy, society and environment is not only prepared, but continues to flourish in the face of the impacts arising from the climate crisis. In this context, the overarching vision is: ***"A Glasgow City Region that flourishes in the future climate"***.

## **1.2 APPROACH TO THE CLIMATE ADAPTATION STRATEGY SEA**

- 1.2.1. A Strategic Environmental Assessment (SEA) was undertaken alongside the development of the Adaptation Strategy to ensure that sustainability aspects were incorporated into the Strategy.
- 1.2.2. SEA is required by European Directive EC/2001/42 (SEA Directive), which is implemented in Scotland by the Environmental Assessment (Scotland) Act 2005 (the "SEA Act").
- 1.2.3. A SEA is mandatory for plans (including strategies) and programmes (PPS) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste or water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent of projects listed in the EIA Directive 2014/52/EU.
- 1.2.4. SEA is an iterative process of gathering data and evidence, assessment of environmental effects, developing mitigation measures and making recommendations to refine plans or programmes in view of the predicted environmental effects. The effects predicted at this stage have remained at a strategic level.
- 1.2.5. The SEA was carried out in parallel with the development of the Strategy, which considered the potential environmental, social and economic impacts of the Strategy's objectives and interventions.

## **1.3 PURPOSE OF THE POST ADOPTION STATEMENT**

- 1.3.1. This Post Adoption Statement (PAS) is the last formal output of the SEA process. The PAS is a key tool for improving transparency in the plan (or strategy) and decision-making process. This document allows stakeholders to see how environmental and sustainability factors have been considered throughout the development of the Strategy. It demonstrates how consultation comments have been taken into account throughout the process and outlines the measures for monitoring the significant environmental effects of implementing the Strategy.
- 1.3.2. The PAS demonstrates transparency on the iterative and coordinated development of the Strategy and the SEA and draws the strategic process to a close. The PAS satisfies a requirement of the

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<sup>1</sup> Climate Ready Clyde (2020). Theory of change for a Climate Ready Glasgow City Region. [online] available at: <http://climatereadyclyde.org.uk/theory-of-change/>

SEA Regulations<sup>2</sup> (Part 3) which states that as soon as reasonably practicable after the adoption of a Plan, the following information is provided:

**Table 1.1: Requirement of the PAS**

Requirements of the SEA Act	Where is this addressed in the PAS?
Describe how environmental considerations have been integrated into the PPS	Section 2
Describe how the environmental report has been taken into account	Section 3
Describe how opinions expressed in response to consultation have been taken into account	Sections 2.5 and Section 4
How the results of any relevant consultation under regulation 14 of the Environmental Assessment of Plans and Programmes Regulations 2004 have been taken into account	Section 4
Set out the reasons for choosing the PPS as adopted, in the light of the other reasonable alternatives considered	Section 5
The measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme	Section 6
Describe how the results of any transboundary consultations have been taken into account	Not applicable

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<sup>2</sup> Environmental Assessment (Scotland) Act 2005

## 2 HOW ENVIRONMENTAL CONSIDERATIONS HAVE BEEN INTERGRATED INTO THE SEA AND THE STRATEGY

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- 2.1.1. This section of the PAS provides an overview on where the SEA process has addressed and documented the range of environmental issues considered as appropriate at the strategic level. A range of formal SEA study outputs have been produced, including:
- SEA Screening Report;
  - SEA Scoping Report;
  - SEA Environmental Report;
  - Habitats Regulations Appraisal (HRA) Screening Report; and
  - SEA PAS.
- 2.1.2. Environmental considerations were integrated into the preparation of the Strategy throughout the SEA process. The identification of a SEA framework allowed likely significant positive and negative effects to be identified, and the effects of reasonable alternatives to be evaluated and compared with each other. This process assisted in the development of preferred interventions, driving them in a direction more likely to achieve sustainable development.
- 2.1.3. Environmental considerations of the draft interventions, objectives and alternatives identified during the preparation of the Strategy were also evaluated. Measures to avoid, reduce and, as much as possible, offset any significant adverse effects were incorporated into the development of the Strategy. The process began with the preparation of the SEA Scoping Report to support the preparation of the draft Strategy. Each stage of the SEA process informed and influenced the development of the Strategy.
- 2.1.4. Consultation has been integral to the planning process and has helped to ensure that consideration has been given to environmental and sustainability issues during the formulation of the Strategy. Further information on this can be found in Section 4 of this statement.
- 2.1.5. Each of these reporting documents, and their associated appendices, are briefly described below setting out how environmental considerations were taken into account at each stage. They can be accessed online from <http://climatereadyclyde.org.uk>. How environmental considerations were taken into account at each stage has also been summarised below.

## 2.2 SCREENING

- 2.2.1. In April 2020 Sniffer conducted an initial SEA Screening exercise to determine the requirement for SEA to be undertaken. The SEA Screening concluded that the Strategy has the potential to achieve significant positive environmental effects, considering the cumulative potential across all areas of the Strategy.
- 2.2.2. It identified the need to proactively adapt to climate change through new actions, as well as by influencing other national, regional and local plans and strategies, and that influencing allocation of resources, and activities, is likely to reduce or reverse significant deterioration of, and impact on the environment as well as the region's economy and society.

- 2.2.3. Through the screening consultation the SEA Consultation Authorities (CAs) were also of the view that a SEA was required and that a SEA Scoping Report would be needed for further consultation in order to set the scope and level of detail required for the environmental assessments in order to inform the Environmental Report.

## 2.3 SCOPING

- 2.3.1. A SEA Scoping Report was prepared, which included: a review of relevant PPS; identification of the characteristics of the Glasgow City Region and its key sustainability issues and opportunities; and an outline of the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the Strategy.
- 2.3.2. This work was used to develop the SEA Framework. The SEA Framework included 18 SEA objectives, which were compiled in order to guide the future assessment of objectives, strategic alternatives and interventions
- 2.3.3. Following consultation with the Consultation Authorities (Scottish Environment Protection Agency [SEPA], NatureScot [previously known as Scottish Natural Heritage] and Historic Environment Scotland [HES]) during September 2020, the assessment was carried out. Appendix A sets out the comments received during the scoping stage.

## 2.4 ENVIRONMENTAL REPORT

- 2.4.1. At the Environmental Report (ER) stage each of the Strategy interventions, objectives and alternatives were assessed against the SEA Framework and the 18 SEA objectives. Feedback from the previous scoping consultation was also addressed within the ER and summarised within Appendix A – Scoping Comments, which appended the main ER.
- 2.4.2. Following consultation with the public, statutory consultees and other stakeholders, between November and December 2020, a number of amendments and recommendations were identified. An updated SEA ER was provided, which took into account consultation comments.
- 2.4.3. In light of consultation comments and Strategy amendments, the ER was updated in April-May 2021, which re-assessed the interventions and objectives of the Strategy that were amended as a result of public consultation. Further details on the changes made following consultation can be found in Section 4 of this PAS. Appendix A sets out the comments received during ER consultation stage.

## 2.5 HABITATS REGULATIONS ASSESSMENT

- 2.5.1. At the ER stage consultation stage, NatureScot identified the need for a Habitats Regulations Assessment (HRA) to accompany the Strategy and SEA.
- 2.5.2. The SEA ER assessment mitigation identified that as interventions develop further through the Action Plan, consideration should be given at the local level to impacts upon Natura 2000 sites and project level Habitats Regulations Assessment (HRA) should be undertaken as required.
- 2.5.3. In light of this, a strategic level Habitats Regulations Screening Assessment (HRSA) was undertaken in line with the Conservation of Habitats and Species Regulations 2010 (The Habitats

Regulations)<sup>3</sup> to consider whether the Strategy may have significant impacts upon areas of nature conservation importance that are designated to be of European importance. Whilst feeding in to the SEA process, the HRSA was undertaken as a standalone assessment.

## 2.6 ENGAGEMENT WITH STAKEHOLDERS

2.6.1. Consultation was integral to the development of the Strategy and the SEA process. Continuing engagement with stakeholders helped to ensure that consideration was given to environmental and sustainability issues throughout the development of the Strategy.

Engagement on the design and delivery of the Strategy and Action Plan continued throughout the process with the Board for the Climate Ready Clyde, including representatives from 15 key organisations (As listed in Section 1 of this statement). Over the course of the Strategy development, a number of engagement events and workshops were carried out by Sniffer. As a result of the COVID-19 pandemic, these were held online via Zoom and publicised on social media and on the Climate Ready Clyde. These events ensured that the views of stakeholders were incorporated into the Strategy during the development phase.

A summary of consultation events has been provided in Table 2-1 below.

**Table 2-1 – Consultation Events**

Consultation Event	Date	Description
Local consultation event - Glasgow (in partnership with Glasgow City Council)	24-Nov-20	This was an online local public consultation event to inform content of final Strategy. This provided residents an overview of adaptation action in Glasgow, the draft Adaptation Strategy and associated elements including SEA Environmental Report, and consultation process. It provided a platform for residents to express initial thoughts on climate change, the draft Strategy, and ask questions.
Local consultation event – Dunbartonshire (in partnership with East Dunbartonshire Council and West Dunbartonshire Council)	02-Dec-20	This was an online local public consultation event to inform content of final Strategy. It provided residents an overview of adaptation action in Dunbartonshire, the draft Adaptation Strategy and associated elements including SEA Environmental Report, and consultation process. It provided a platform for residents to express initial thoughts on climate change, the draft Strategy, and ask questions.
Young person's consultation event (in partnership with 2050 Climate Group)	03-Dec-20	This was an online regional public consultation event to inform content of final Strategy. This provided young people an overview of what young people are already doing on adaptation and the key elements of the draft Adaptation Strategy and associated elements including SEA Environmental Report and consultation

<sup>3</sup> The Conservation of Habitats and Species Regulations 2010, No.490 [online] available at: <https://www.legislation.gov.uk/uksi/2010/490/contents/made>

Consultation Event	Date	Description
		process. It provided a platform for young people to express initial views on climate change and the draft Strategy and ask questions.
Regional consultation events - Glasgow City Region	9 and 16 Dec 2020	This was held as an online regional public consultation event to inform content of final Strategy. It gave residents an overview of adaptation action in GCR, the draft Adaptation Strategy and associated elements including SEA Environmental Report, and consultation process. It provided a platform for residents to express initial thoughts on climate change, the draft Strategy, and ask questions.
Local consultation event – Lanarkshire (in partnership with North Lanarkshire Council and South Lanarkshire Council)	11-Dec-20	This was an online local public consultation event to inform content of final Strategy. It gave residents an overview of adaptation action in Lanarkshire, the draft Adaptation Strategy and associated elements including SEA Environmental Report, and consultation process. The event provided a platform for residents to express initial thoughts on climate change, the draft Strategy, and ask questions.

### 3 HOW THE SEA HAS BEEN TAKEN INTO ACCOUNT

- 3.1.1. Each stage of the SEA was undertaken iteratively, thereby influencing and informing each stage of the Strategy preparations. The SEA findings and recommendations have been taken into account while making modifications to the Strategy throughout its development.
- 3.1.2. The SEA process (as documented in the SEA ER) helped to identify key issues and opportunities by gathering data and evidence. It proposed mitigation measures and made recommendations to refine the Strategy in view of the predicted economic, social and environmental effects. Sniffer utilised the outputs from the SEA to challenge and inform the narrative and policies within the Strategy and to drive towards better environmental outcomes and greater sustainability.
- 3.1.3. Finally, a monitoring framework was developed, which sets out sample monitoring indicators and potential mechanisms. These indicators have been informed by the SEA and will help to assess the implementation of the Strategy and identify significant environmental effects arising from implementation of the Strategy.
- 3.1.4. **Table 3-1** below outlines how the Strategy took into account the SEA at each of the key SEA stages. Appendix B sets the comments and suggestions from the SEA, that were integrated into the development of the Strategy.

**Table 3-1 – Integration of the SEA**

SEA Stage	How the Adaptation Strategy has taken the SEA into account
Scoping	<p>The SEA Scoping Report provided policy context, a baseline of the City Region and identified key sustainability issues and opportunities, which fed into the development of the SEA Framework. The scoping report themes, issues and opportunities helped inform the development of the Strategy.</p> <p>A review by the SEA specialist team provided some initial thoughts and suggestions on the emerging Strategy, which was fed back to Sniffer.</p> <p>The feedback was utilised by Sniffer, taking the themes raised in the consultation to consider changes to the draft Strategy ahead of consultation. Details of SEA feedback provided to Sniffer at the Scoping Stage, and how it has been taken into consideration, is detailed in Table B-1 in Appendix B.</p>
Environmental Assessment	<p>The assessment of the draft interventions, objectives and strategic alternatives was undertaken, from which feedback was provided to Sniffer and amendments were made to the emerging Strategy.</p>
Environmental Reporting	<p>The SEA ER set out the results of the SEA assessment, as well as proposed mitigation and enhancement measures in order to avoid or reduce the effects identified through the assessment of interventions.</p> <p>The SEA ER also presented a number of monitoring measures and indicators to help measure the sustainability outcomes of the</p>

SEA Stage	How the Adaptation Strategy has taken the SEA into account
	<p>Strategy, and to measure the performance of the Strategy against environmental objectives and targets Indicators for monitoring the implementation of the Strategy will form part of the forthcoming Action Plan.</p> <p>Details of SEA feedback provided to Sniffer within the ER, and how it has been taken into consideration, is detailed in Table B-2 in Appendix B.</p>
Main Consultation	<p>The SEA ER was issued to consultees in November 2020 for a six week consultation period, alongside the draft Adaptation Strategy. Sniffer sought the views of statutory bodies and other stakeholders on the results of the SEA.</p> <p>Following the consultation, a number of recommendations and amendments were suggested. In light of these comments an updated SEA Environmental Report was produced. Details on how these comments have been integrated is provided in Section 4 and a full list of consultation comments has been provided in Appendix A.</p>
Monitoring	<p>Sniffer will use a set of indicators to monitor the outcomes of the Strategy. The proposed indicators are set out in Table 6-1 of this document.</p> <p>These indicators will also be used to identify significant environmental effects arising from implementation of the Strategy, building on those identified within the SEA. These monitoring indicators will also form part of the forthcoming Action Plan.</p> <p>The final Strategy and Action Plan will also include provisions for the Secretariat to monitor progress. This will be done through a two yearly independent assessment of progress, as well as a strategic review and refresh of the Theory of Change (including whether the conditions for change are being met).</p>



## 4 HOW OPINIONS EXPRESSED DURING CONSULTATION HAVE BEEN TAKEN INTO ACCOUNT

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4.1.1. The SEA Directive requires consultation at various stages of the process and the responses to consultation to be taken into account during the preparation of the PPS and before its adoption. At each stage of the preparation of the Strategy, the Strategy and the SEA have been publicly consulted on, with Consultation Authorities, the general public and other interested parties.

4.1.2. The consultation undertaken has been summarised below.

### SCOPING CONSULTATION

4.1.3. A SEA Scoping Report was issued to the Scottish Government's SEA Gateway on 3<sup>rd</sup> September 2020. The report was issued by the SEA Gateway to the Consultation Authorities (CAs) – NatureScot, SEPA and HES to enable them to make comments on the proposed content and scope of the SEA ER. The responses received from the CAs and how they were addressed were set out in Appendix A of the SEA ER and are reproduced in Appendix A of this PAS.

4.1.4. The consultation responses received helped to provide more detail within the baseline and review of PPS; suggested wording changes to the SEA objectives; sought clarifications on methodology and how objectives were linked; and emphasised the social aspects of the SEA. There were also recommendations for the development of the Strategy.

### SEA ER CONSULTATION

4.1.5. The SEA ER was issued to consultees, via the SEA Gateway, on 12<sup>th</sup> November 2020, for a six week consultation period, alongside the Strategy.

4.1.6. Consultation comments were received from the Consultation Authorities as well as members of the public. Five local consultation events were held, including a Young Persons event (in partnership with the 2050 Climate Group). In addition, members of the public could comment on both the Strategy and SEA via the questionnaire on the CRC website<sup>4</sup>. In total there were 13 respondents.

4.1.7. The questionnaire included three specific questions on the SEA:

- 7. What are your views on the accuracy and scope of the information used to describe the SEA environmental baseline set out in the Environmental Report?
- 8. What are your views on the predicted environmental effects as set out in the Environmental Report?
- 9. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?

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<sup>4</sup> <http://climatereadyclde.org.uk/our-adaptation-strategy-and-action-plan-v2/>

4.1.8. Five responses were received for questions 7 and 8 (8 respondents skipped the question) and four responses (9 respondents skipped the question) were received for question 9.

4.1.9. Appendix B sets out the ER consultation comments received and how they have been addressed.

## 4.2 CHANGES TO THE ADAPTATION STRATEGY POST-CONSULTATION

4.2.1. Following consultation on the draft Strategy and the SEA ER, a number of changes were made to the Strategy, which are set out in Table 4-1 below.

**Table 4-1 - Adaptation Strategy Amendments**

Section	Amendments
Part 1 - Strategy Foreword	The Foreword was amended to include a stronger regional emphasis on action, and to draw in further emphasise the regional nature of the Strategy using landmarks such as New Lanark and Whitelee.
Part 1 – The economics of adaptation, Just resilience and ecological resilience	A new section on the economic case for adaptation (including estimates of the impact of climate change on GDP) as well as the need for a just approach, as well as the case for considering ecological resilience. These strengthened the case for intervening.
Part 2 - Strategy Objectives	A new Strategy Objective was added – Strategy Objective 1: ‘ <i>Seeks to build the region’s social, economic, and environmental resilience to climate change</i> ’. This was added to emphasise the overarching aim of the Strategy. In addition, a box was added on the synergies and trade-offs with net zero to highlight the need to consider linkages and the potential for adaptation to make mitigation easier or more difficult and vice versa.
Part 2 - Place Based Priorities	The Strategy included a new place based priority – ‘ <i>Strategic Economic Investment Locations (SEILs): These locations offer potential for a rebalanced low carbon economy, boosting competitiveness and tackling inequality. They also promote the Scottish Government’s key economic sectors and Scottish Enterprise’s locational priorities. The large scale, long-term investment planned to achieve these outcomes means they have a high potential to lock in future climate risks</i> ’.
Part 3 – Flagship Actions	This section was updated to reflect the need for a ‘whole system approach’. This was added to further emphasise that the large scale changes envisaged need to occur at the system level rather than in individual sectors or in response to individual hazards.
Intervention 1	Sub intervention 1.3 was updated to include capacity building amongst leaders and recognise the need for leaders and providing training for them.
Intervention 2	Sub intervention 2.2 was updated to be explicit about the synergies/trade-offs with wider sustainability objectives. The

Section	Amendments
	intervention also included a new sub intervention - 2.3 Targeted community capacity building for adaptation.
Intervention 4	<p>The main intervention text was reworded to – <i>‘Enable and equip individuals and communities to participate in adaptation, focusing on the most vulnerable’</i>.</p> <p>An additional sub intervention was added - 4.1 <i>A shared understanding of how current community engagement is structured for adaptation.</i></p>
Intervention 7	<p>The following sub interventions for Intervention 7 were updated:</p> <p><i>‘7.2 The implementation of an integrated climate alert warning system for Glasgow City Region</i></p> <p><i>7.3 Continued delivery of strategic Flood Risk Management activities</i></p> <p><i>7.4 A regional property flood resilience and resistance installation programme</i></p> <p><i>7.5 Exploration of new insurance models’</i></p>
Intervention 8	Intervention 8 was amended to <i>‘Ensure everyone’s homes, offices and infrastructure are resilient to future climate impacts’</i> .
Intervention 9	<p>Intervention 9 was updated to reflect the need to identify regional priorities for nature based solutions, based on the benefits afforded to the most vulnerable.</p> <p>This intervention was also updated to give greater prominence to land management and has expanded the focus from merely forestry to habitat restoration, encompassing peatland and habitats.</p> <p>The sub interventions were updated as follows:</p> <p><i>‘9.1 Identify regional priorities for nature-based solutions</i></p> <p><i>9.3 Creation of the Clyde Climate Forest</i></p> <p><i>9.4 Increase investment in targeted habitat restoration’</i></p>
Interventions 9 and 11	Further emphasis on the region’s similarly diverse economy and activities (mentioning agriculture, wind-farm construction and forestry) was added to interventions 9 and 11, which was broadened to focus on other wider habitat restoration.
Intervention 10	<p>This intervention was updated to <i>‘Enhance regional decision making and establish Glasgow City Region as a global research and knowledge hub for adaptation’</i>.</p> <p>Sub intervention 10.3 was also updated to: <i>‘Convene an Expert Advisory Committee on Adaptation’</i>.</p>

Section	Amendments
Intervention 11	This intervention was updated to <i>'Begin the transition to an economy resilient to future climate impacts'</i> .

### 4.3 CHANGES TO THE SEA POST-CONSULTATION

4.3.1. Following consultation on the draft Strategy and the SEA ER, a number of changes were made to the SEA ER, which have been outlined in Table 4-2 below.

**Table 4-2 – Summary of Changes to the SEA ER**

Section/ Themes	Amendments
Section 2 – Strategy Context and Overview	This section was updated to include details on the updated seven principles from the Theory of Change, the new Strategy objective, updated interventions and the additional place based priority (Strategic economic investment locations).
Section 7 – Compatibility Assessment of the Strategy	The updated Strategy included a new Strategy objective - Strategy Objective 1 - seeks to build the region's social, economic, and environmental resilience to climate change.  The updated ER included an assessment of Strategy Objective 1.
Section 8 – Evaluating the Potential Environmental Effects	The assessment summaries within this section were updated to reflect the changes to the assessment of interventions. The main changes were to: <ul style="list-style-type: none"> <li>■ Intervention 2;</li> <li>■ Intervention 4;</li> <li>■ Intervention 8; and</li> <li>■ Intervention 9.</li> </ul> Further details on these changes are detailed below.
Section 9 – Table 9-1 Mitigation and Enhancement Measures	Table 9-1 was updated to reflect the changes to the Strategy, particularly reflecting where additional text to interventions was provided.  The addition of further details on the Action Plan lead to the removal of mitigation for Strategy Objective 2 (previously 1), whilst the addition of details on development infrastructure types for Intervention 8 lead to the removal of mitigation.  This section also took into account mitigation set out within the HRSA so the table included new mitigation for Interventions 6, 8 and 9 – <i>'These three interventions have the potential to facilitate projects that would themselves require HRA at project level in line with the Habitats Regulations'</i> .

Section/ Themes	Amendments
Section 10 - Table 10-1 – Monitoring Measures	<p>On the recommendation of HES, the Scottish House Conditions Survey<sup>5</sup> was added to the list of sample data sources to monitor the effects of the Strategy on the historic environment.</p> <p>Table 10-1 was also updated with some new indicators as suggested by SEPA, taken from their SEA Guidance notes<sup>6</sup>.</p>
Intervention 2	<p>The addition of sub intervention 2.3 resulted in changes to SEA5. The effects were upgraded from a minor positive effect to a significant positive effect, as it focuses on those communities who are the most exposed and vulnerable to impacts.</p>
Intervention 4	<p>The amendment of the explanatory text to sub Intervention 4.4 removed the uncertainty surrounding SEA9 (landscape) and SEA10 (historic environment). This upgraded the effects from uncertain to minor positive, as seeking approaches and methods that draw on the region’s history of change and sense of place, could contribute to positive placemaking enhancing both the natural and built landscape and the region’s historic environment.</p>
Intervention 8	<p>The addition of more explanatory text and examples provided in the ‘strategy in action’ section for Intervention 8, resulted in the upgrade of SEA8 (green networks) from neutral to minor positive.</p>
Intervention 9	<p>The addition of the ‘use of vacant and derelict land will be explored in order to support the interventions, particularly in the Clyde Corridor’ resulted in the scoring of SEA16 (efficient use of land) being upgrade from neutral to significant positive.</p>

<sup>5</sup> Scottish Government, Scottish House Condition Survey, 2019, [online] available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/statistics/2020/12/scottish-house-condition-survey-2019-key-findings/documents/scottish-house-condition-survey-2019-key-findings/scottish-house-condition-survey-2019-key-findings/govscot%3Adocument/scottish-house-condition-survey-2019-key-findings.pdf?forceDownload=true>

<sup>6</sup> SEPA, Strategic Environmental Assessment, SEA Guidance, 2019 [online] available at: <https://www.sepa.org.uk/environment/land/planning/strategic-environmental-assessment/>

## 5 REASONS FOR CHOOSING THE STRATEGY AS ADOPTED IN LIGHT OF OTHER REASONABLE ALTERNATIVES

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- 5.1.1. The SEA Act requires the identification and assessment of ‘reasonable alternatives’ to a PPS. This can be used to achieve environmental benefits and, where well executed, can be an opportunity for the SEA to add value to the planning process by encouraging lateral thinking. Alternatives must be realistic and are likely to emerge from the plan-making process.
- 5.1.2. The SEA of the Strategy aimed to objectively assess and compare three strategic alternatives:
- **Alternative 1. Continue Current Work** – Adaptation efforts in Glasgow City Region would continue through the existing planned adaptation work of local and regional actors, National and UK policy, as well as autonomous adaptation resulting from extreme weather events, or broader market trends;
  - **Alternative 2. Incremental adaptation planning approach** – This would focus on incremental actions to address recommendations from the evidence base on climate risks, a sectoral approach, aligned with the Theory of Change, as well as encouraging organisations involved in CRC adaptation actions where the central aim is to maintain the essence and integrity of a system or process at a given scale;
  - **Alternative 3. Transformational approach** – This would seek to achieve fundamental change in the region’s systems in line with the Theory of Change, so as to deliver a step change in resilience to climate change and adaptive processes, and mobilise a wider cohort of actors, including new communities, organisations and businesses. Use of systems thinking is adopted, to ensure a greater sense of scale is captured and to move beyond current silo thinking. Consideration would be given to transformational adaptation as a social process, and the need to ensure the political economy and power dynamics are considered, which would help to deliver new thinking. Finally, this approach analyses the barriers, and levers of change to help identify limits to incremental adaptation and the mechanisms to catalyse transformational adaptation. A key element of the Strategy would be the development and delivery of a climate resilient innovation portfolio as a new approach to transformation. In parallel, it would set out a series of adaptation solutions which address climate risks and opportunities, as well as broader enabling factors in finance and economics, governance and decision making, and culture and behaviours.

## 5.2 ASSESSMENT OF ALTERNATIVES

- 5.2.1. Each stage of the SEA worked to progressively identify and assess the reasonable alternatives defined for the Strategy. As per the SEA Act, the reasonable alternatives were considered to the same level of detail as the preferred option. Therefore, the assessment of alternatives was conducted using the same methodology applied to the assessment of interventions.
- 5.2.2. The process of assessing alternatives identified key issues and areas for development to be considered by the further development of the Strategy.
- 5.2.3. The transparent assessment methods applied, the detailed level of engagement with the Consultation Authorities and other stakeholders, and the supporting work undertaken by the development of the Strategy, has enabled the SEA process to recommend the Transformational Approach as the preferred option for the Strategy.
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## 5.3 REASONS FOR CHOOSING ALTERNATIVES

- 5.3.1. In order to achieve the vision of a city region that flourishes in a future climate, a widespread and sustained change is required. Glasgow City Region has already set its ambition to reach net zero well ahead of the Paris Agreement, and now wants to bring this date forward to be climate ready (for climate risks) by 2030.
- 5.3.2. The Strategy therefore took an approach which combined an incremental and transformational approach for a number of reasons:
- Estimates for future emissions (such as those from Climate Action Tracker<sup>7</sup>) were pointing to higher end scenarios of warming, which are likely to require more significant adaptation to address – with a step change required in both efforts to manage exposure but also to build adaptive capacity.
  - The UK Climate Change Risk Assessment, and Climate Ready Clyde's own Regional Climate Risk and Opportunity assessment for the City Region highlighted that there was a significant gap between climate risk and adaptation action, as well as and between both of those and the Strategy's vision.
  - To date adaptation action in the Glasgow City Region has been incremental, with the risk assessment results showing that such approaches are not adequately managing the risks
  - The region's Vision and Theory of change for flourishing in a future climate sets out a variety of conditions which have the characteristics of both incremental and transformational adaptation.
  - The literature review from Clyde Rebuilt<sup>8</sup> on what transformational adaptation looks like set some characteristics and conditions for transformational change in the region. It recognised that transformation of a region is likely to involve a spectrum of approaches from incremental to transformational, and from sector to system level.

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<sup>7</sup> The Climate Action Tracker, [online] available at: <https://climateactiontracker.org/global/temperatures/>

<sup>8</sup> Climate Ready Clyde, Resilient Regions: Clyde Rebuilt, [online] available at: <http://climatereadyclyde.org.uk/wp-content/uploads/2020/12/What-does-transformational-adaptations-look-like-FINAL2.pdf>

## 6 HOW SIGNIFICANT EFFECTS FROM THE SEA WILL BE MONITORED

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- 6.1.1. Regulation 19 of the SEA Act requires that monitoring is undertaken on a PPS so that the significant environmental effects of implementation can be identified, and remedial action imposed.
- 6.1.2. The purpose of monitoring is to provide an important measure of the sustainability outcome of the Strategy, and to measure the performance of the Strategy against sustainability objectives and targets. Monitoring is also used to manage uncertainty, improve knowledge, enhance transparency and accountability, and to manage sustainability information.
- 6.1.3. As the Strategy moves into delivery, the CRC Board will monitor progress both on the delivery of interventions and the effects on reducing climate risks and realising opportunities identified within the Risk and Opportunity Assessment. The CRC Board will also oversee further development of the SEA monitoring and reporting mechanisms.

### 6.2 MONITORING

- 6.2.1. The final Strategy and Action Plan recognises the importance of monitoring progress and includes provisions for the Secretariat to monitor progress. This will be done through a two yearly independent assessment of progress, as well as a strategic review and refresh of the Theory of Change (including whether the conditions for change are being met).
- 6.2.2. The CRC Secretariat and members will also work with Scottish Government to ensure efforts feed into the national reporting processes for monitoring performance against the Public Bodies Duties and the Scottish Climate Change Adaptation Programme. Furthermore, CRC will work with the Climate Change Committee to support progress evaluations and the UK Climate Change Risk Assessment process. The Risk and Opportunity Assessment will be updated every five years following on from the UK Climate Change Risk Assessment.
- 6.2.3. A detailed set of indicators for monitoring the implementation of the Strategy have not been selected at this stage of the process, so an initial indicative set of high level SEA monitoring indicators have been developed as set out in **Table 6-1** below. These will be included as part of the finalising the independent assessment report.
- 6.2.4. These are not about monitoring the success of adaptation actions in relation to these issues, but about ensuring that significant improvements to the environment are delivered as part of the implementation of the Strategy.

**Table 6-1 – Monitoring Measures**

SEA Topic	Sample Monitoring Indicators	Mechanism/ Timescales
Natural Capital	<ul style="list-style-type: none"> <li>▪ The number of net gain enhancement schemes implemented through the Strategy</li> <li>▪ Tree canopy cover data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annually drawing upon data from the eight City Region local authorities and GCV Green Network Partnership</li> <li>▪ Satellite data</li> </ul>



SEA Topic	Sample Monitoring Indicators	Mechanism/ Timescales
Climatic Factors	<ul style="list-style-type: none"> <li>Changes in GHG emissions across the City Region</li> <li>Uptake in sustainable / renewable energy</li> <li>Number of flood alleviation / natural flood management schemes implemented</li> <li>Number of properties / businesses at risk of flooding</li> <li>Number of people living in areas of high risk of heat</li> </ul>	<ul style="list-style-type: none"> <li>Annually drawing upon data from the eight City Region local authorities</li> <li>Scottish Government/BEIS data</li> <li>Earth observation data</li> </ul>
Population and Human Health	<ul style="list-style-type: none"> <li>Uptake in people using active travel</li> <li>Access to greenspace</li> <li>The number of people living in deprivation</li> </ul>	<ul style="list-style-type: none"> <li>Annually through the Scottish Health Survey and Household Survey</li> <li>Deprivation will be measured by the Scottish Index of Multiple Deprivation which is updated every four years. Next update is due in 2024</li> </ul>
Biodiversity	<ul style="list-style-type: none"> <li>The number of biodiversity and / or green network enhancement schemes implemented through the Strategy</li> <li>Adverse impacts of future developments on biodiversity</li> <li>Fragmentation and decline of habitats across the City Region</li> <li>Rate of loss of carbon rich soils / peat within the City Region (e.g. tonnes/ year)</li> </ul>	<ul style="list-style-type: none"> <li>Annually through reviewing local authority State of the Environment Reports</li> <li>Review of the State of Scotland's Greenspace Report which is produced every 4-5 years, the last was produced in 2018</li> </ul>
Landscape	<ul style="list-style-type: none"> <li>Impact of future development on areas with high landscape and / or townscape value</li> <li>Level of access to the wider environment</li> </ul>	<ul style="list-style-type: none"> <li>Annually through reviewing local authority State of the Environment Reports</li> <li>Regular updates to the core path plans across the City Region local authorities</li> <li>Review of the State of Scotland's Greenspace Report which is produced every 4-5 years, the last was produced in 2018</li> </ul>
Cultural Heritage	<ul style="list-style-type: none"> <li>Adverse impacts of future developments on the historic environment</li> <li>The number of historic sites that benefit from climate change protection</li> </ul>	<ul style="list-style-type: none"> <li>Annually through reviewing local authority State of the Environment Reports</li> <li>Annually through updates to the Buildings at Risk Register</li> </ul>
Water Environment	<ul style="list-style-type: none"> <li>Adverse impacts of future developments on the water environment and water quality</li> </ul>	<ul style="list-style-type: none"> <li>Annually through reviewing local authority State of the Environment Reports</li> </ul>

SEA Topic	Sample Monitoring Indicators	Mechanism/ Timescales
	<ul style="list-style-type: none"> <li>▪ The number of homes, businesses and infrastructure that benefit from water efficiency or flood risk measures</li> <li>▪ The number of schemes that result in the addition of blue infrastructure</li> <li>▪ Number and type of flooding incidents within the City Region (per year)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annual review data from SEPA</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>▪ An improvement in air quality arising from all sectors</li> <li>▪ The uptake of electric cars and bikes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annually drawing upon data from the eight City Region local authorities</li> <li>▪ Annually through reviewing local authority State of the Environment Reports</li> <li>▪ Transport Scotland / Local Authority annual statistics</li> </ul>
Material Assets	<ul style="list-style-type: none"> <li>▪ The number of homes and businesses that benefit from retrofitting measures</li> <li>▪ Adverse impacts of future developments on geological and agriculturally important land and carbon rich soils</li> <li>▪ An improvement in the minimisation of waste from all sectors</li> <li>▪ Addition / removal of community allotments and growing spaces</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annually through reviewing local authority State of the Environment Reports</li> <li>▪ Annual waste data from SEPA</li> <li>▪ Review of the State of Scotland's Greenspace Report which is produced every 4-5 years, the last was produced in 2018</li> </ul>

# Appendix A

## CONSULTATION COMMENTS





**Table A-1 – Consultation Responses**

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
<b>Scoping Consultation</b>					
1	Historic Environment Scotland	It is our understanding that Glasgow City Region's first Climate Adaptation Strategy (the CAS) is intended to set the strategic framework for adaptation in the City Region to build resilience to the range of possible climate futures in Glasgow City Region.	General	No action required	Noted.
2	Historic Environment Scotland	We note that the historic environment has been scoped into the assessment.	General	No action required	Noted.
3	Historic Environment Scotland	On the basis of the information provided, we are content with this approach and are satisfied with the scope and level of detail proposed for the assessment, subject to the detailed comments provided below.	SEA Methodology	No action required	Noted.
4	Historic Environment Scotland	We recommend that you add the potential adverse effects of adaptation measures that are inappropriate for historic / traditional structures to the key challenges / opportunities. You should also note that noise and air pollution have the potential to affect both non-designated and designated historic environment assets.	Baseline - Heritage	Action required	Noted, Table 4-1 in the Environmental Report has been updated to reflect this comment.
5	Historic Environment Scotland	We are broadly content with the objectives proposed for cultural heritage but recommend that the second objective includes historic townscapes in addition to landscapes.	SEA Objectives	Action required	Noted, the objective in Table 5-1 has been updated to include historic townscapes
6	Historic Environment Scotland	You propose to consult over the period of November -December 2020, but do not state a specific time period. We recommend a minimum 6 week consultation period where possible, to give stakeholders sufficient time to engage and respond.	Next Steps	Action required	Noted, it is anticipated that the SEA ER along with the Draft Strategy will be consulted upon for a six week period commencing in November 2020.



Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
7	NatureScot	Subject to the specific comments set out below, NatureScot is content with the scope and level of detail proposed for the Environmental Report.	General	No action required	Noted.
8	NatureScot	Overall this scoping exercise is comprehensive, particularly in its use of baseline characterisation to derive SEA Objectives, and this matches the thoughtful approach to the Adaptation Strategy itself.	General	No action required	Noted.
9	NatureScot	We are satisfied that Table 6.1 (p33, 6.2.1) covers the main environmental issues associated with the Strategy and that they are all scoped in.	SEA Methodology	No action required	Noted.
10	NatureScot	SNH notes that the consultation on the Environmental Report is proposed from November to December 2020. Hopefully this will be for a period of at least six weeks, which we would be content with.	Next Steps	No action required	Noted, it is anticipated that the SEA ER along with the Draft Strategy will be consulted upon for a six week period commencing in November 2020.
11	NatureScot	Consideration of strategic alternatives (p5, 2.2) We suggest the “Do Nothing” alternative should be re-named “Continue current work” or similar, if only to avoid misunderstanding by a casual reader. “Do Nothing” could incorrectly imply no adaptation effort at all.	Assessment of Alternatives	Action required	Noted, the 'Do Nothing' alternative has been renamed in Section 6 of the SEA ER as suggested.
12	NatureScot	The transformational approach appears the best option, as structural change is what is needed in order to take enough action to make a difference quickly enough.	Assessment of Alternatives	No action required	Noted.
13	NatureScot	There should be more specific reference to Local Development Plans in Appendix B (which are mentioned at 4.2.2), as land use planning is one of the key systems through which adaptation must be achieved.	PPS	Action required	Noted, Appendix B of the SEA ER has been updated to include the eight adopted Local Development Plans from the Glasgow City Region.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
14	NatureScot	The Scottish Rural Development Programme is included in Appendix B and this programme, and its future iterations, will be very important, as it potentially influences a lot of land management in the region.	PPS	No action required	Noted.
15	NatureScot	SEA Scoping Report - Table 5-4 (p19, 5.2.26) The SPA is called Slamannan Plateau (not Slamannan Heights as stated).	Baseline - Biodiversity	Action required	Noted, this has been updated within Appendix C of the SEA ER.
16	NatureScot	SEA Scoping Report - Table 5-5 (p20, 5.2.34) – on Biodiversity Increased risk to species and habitats from new diseases and pathogens could be added to the table.	Baseline - Biodiversity	Action required	Noted, Table 4-1 in the SEA ER has been updated to reflect this recommendation.
17	NatureScot	The following could also be added to the table as opportunities: <ul style="list-style-type: none"> <li>Restoring peatlands to help increase resilience to climate change,</li> <li>Natural flood management, such as re-naturalising the course of rivers and restoration of their adjacent habitats to slow down and hold water during heavy rain events,</li> <li>Managed realignment to allow coastal habitats and the benefits they bring, to migrate landward instead of being lost to sea-level rise, and</li> <li>Creating nature friendly SUDS to cope with the predictions of increased rainfall.</li> </ul>	Baseline - Biodiversity	Action required	Noted, Table 4-1 (Biodiversity and Material Assets (Incl. Soil Resources)) in the SEA ER has been updated to reflect this recommendation.
18	NatureScot	An implication for the Strategy that could be added to this table might include promoting nature-based solutions, which cover more of the points listed above, rather than just woodland planting or natural woodland re-generation.	Baseline - Biodiversity	Action required	Noted, Table 4-1 in the SEA ER has been updated to reflect this recommendation.
19	NatureScot	Guidance recommends that plan-making bodies can consider opportunities to combine the earlier stages of SEA and Habitats Regulations Appraisal, where appropriate, even though the differing requirements mean that the two assessments cannot be fully integrated. One option is to conduct the earlier stages in parallel, such	Habitats Regulations Appraisal	No action required	Noted. At this regional stage the interventions presented are not considered to be developed to an extent whereby the spatial location / scale of the interventions is known,

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		<p>as environmental information gathering, prediction of plan effects, and some early consultation stages.</p> <p>If the Habitats Regulations Appraisal is undertaken in parallel with SEA, it is important that the findings of both appraisals are separately and clearly documented and that the record of the Habitats Regulations Appraisal uses the correct terminology, applying them appropriately. In practice, it is easier to set out the Habitats Regulations Appraisal in a separate record, and where appropriate provide a cross-reference to it in the Environmental Report.</p>			nor would their potential for likely significant effects upon Natura 2000 sites be able to be predicted. As the interventions and actions detailed in the Strategy as developed further through the Action Plan consideration will be given to the potential for Natura Sites to be affected and Habitats Regulations Appraisal undertaken as required.
20	NatureScot	<p>SEA Scoping Report - Table 6-2 Climatic Factors</p> <p>There is scope to re-work this section, to better reflect the valuable conclusions in Table 5-2 regarding integration of adaptation with net-emissions-reduction. Firstly, the proposed Appraisal Question “Support the transition to net zero greenhouse gas emissions” would work better as one of the Objectives. Secondly, the importance of this issue justifies unpacking it through the use of several Appraisal Questions – for example:</p> <ul style="list-style-type: none"> <li>o “Help reduce / limit actual emissions of greenhouse gases?”</li> <li>o “Help reduce actual emissions from the food system?” (there are potential key synergies here with increased food security as an adaptation)</li> <li>o “Support the long-term security of carbon stored in vegetation and soils?”</li> </ul>	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D. It should be noted that the second indicator question proposed in relation to emissions from the food system has been omitted. It is considered that, despite this being an issue which does need to be addressed, this indicator would be difficult to baseline and as such we would be unable to complete a meaningful assessment at this regional level.
21	NatureScot	<p>Biodiversity</p> <p>An Appraisal Question could include whether the Strategy will help protect and restore peatlands, or more generally, whether the Strategy promotes nature-based solutions for adapting to and mitigating the effects of climate change?</p>	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		Peatlands could be added to the SEA Objective here as well so, not just woodlands but, other habits are highlighted.			
22	NatureScot	Water Environment The Appraisal Question “Protect the coastal environment from sea-level rise and inundation?” strongly implies a policy only of resistance. With the predicted acceleration of sea-level rise, building our way out of the problem with coastal defences cannot be a sufficient response and would harm the water environment. Therefore, I suggest the question is changed to “Address coastal flood risk through a full range of approaches from protection of assets to re-location, using nature-based solutions where possible?” or similar.	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.
23	NatureScot	Material Assets Carbon-rich soils are briefly discussed at 5.2.83 and 5.2.92, but considering their importance to the regional level of net emissions, they should explicitly feature in both the Objectives and the Appraisal Questions.	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.
24	NatureScot	Schedule 3 of the Environmental Assessment (Scotland) Act 2005 sets out the information to be included in the Environmental Report.	Next Steps	No action required	Noted.
25	NatureScot	Scoping Report - Appendix C Draft Assessment Matrices - Clarification is needed on the assessment of Alternative Strategies (Table C1) – i.e. will this use scoring as in Table C2?	SEA Methodology	Action required	Noted, further detailed in included in Sections 3.2 and 6 of the SEA ER.
26	NatureScot	Table C3 Assessment of Interventions – We suggest the scoring system could also include “?” and “+/-“ for uncertain and mixed effects respectively (both of these are mentioned in 7.2.9).	SEA Methodology	Action required	Noted, further detail on the assessment criteria for the assessment of the interventions is included in Section 3.2 of the SEA ER.



Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
27	NatureScot	A section on monitoring the objectives within the Strategy / the success of the Strategy should be included.	SEA Methodology	Action required	Noted, a monitoring framework has been included in Section 10 of the SEA ER.
28	NatureScot	It will be a significant challenge to ensure that all of the relevant people are encouraged to allow this Strategy to influence their work and decision making. At present, there may be some that may not see the relevance or understand the links between their work and climate change. The Strategy therefore needs to be both easy for people to understand and written in a way that allows them to understand how it relates to their work, and also readable (i.e. a useful document, but not too long that people are put off reading it).	Adaptation Strategy	No action required	Noted.
29	SEPA	Scoping Report Appendix 2, Table B1 lists the relationship of the proposed climate change adaptation Strategy with other relevant Plans, Programmes and Strategies (PPS) according to whether they are of International / National / Regional status. Some of the PPS included have themselves been subject to SEA. Where this is the case you may find it useful to prepare a summary of the key SEA findings that may be relevant to the Climate Change Adaptation Strategy. This may assist you with data sources and environmental baseline information and also ensure the current SEA picks up environmental issues or mitigation actions which may have been identified elsewhere	PPS	No action required	Noted, it is considered that the baseline as presented in Appendix C of the SEA ER and the subsequent assessment (including proposed mitigation) are sufficiently developed for this regional level strategy and each has drawn on information from local level PPS where deemed appropriate.
30	SEPA	We welcome the identification of a number of Plans, Programmes and Strategies that have identified the importance of renewable and low carbon energy. However, the approach that has been taken has referred only to electricity and has not included renewable and low carbon heat in the Material Assets chapter. We consider that this omission will make it difficult to adequately answer the appraisal question identified in Table 6-2 “Will the plan Increase the resilience of infrastructure and material assets to the impacts of climate change (including flood risk, extreme weather, heat and cold)”. We recommend that, in order to appropriately scope the environmental impacts of renewable and low carbon heat in addition to electricity, that the	PPS	Action required	Noted, Appendix B of the SEA ER has been updated to include the relevant PPS as suggested.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		<p>following PPS are included as baseline documents:</p> <p>National</p> <ul style="list-style-type: none"> <li>o Scottish Government Heat Networks Bill – whilst this is not yet legislation, the implications of the measures contained in the bill could impact on the climate adaptation Strategy.</li> <li>o Scottish Government Energy Strategy – as outlined in this document, heat accounts for more than half of the energy we consume (page18)</li> <li>o Scottish Government Heat Policy Statement: Towards Decarbonisation Heat: Maximising the Opportunities for Scotland (2015)</li> <li>o Scottish Government Programme for Government 2019</li> </ul> <p>Local</p> <ul style="list-style-type: none"> <li>o Glasgow Local Heat and Energy Efficiency Strategy – pilot document which assesses the priorities for energy efficiency measures or encouragement of district heat or other low carbon heat for the whole Glasgow City area. This will contribute towards understanding of the energy (heat and electricity, and energy efficiency) baseline for the area.</li> </ul>			
31	SEPA	We consider that Scotland’s Heat Map should be used as baseline data for identification of renewable and low or zero carbon heat sources within the Glasgow Climate Adaptation Strategy area. We understand that there are a number of proposed renewable and low or zero carbon heat projects that are under development in the Strategy area, and the heat map can be used to identify these.	Baseline - Material Assets	Action required	Noted, Appendix C of the SEA ER has been updated to include further information from Scotland's Heat Map.
32	SEPA	We consider that the environmental issues described generally highlight the main issues of relevance for the SEA topics within our remit.	General	No action required	Noted.
33	SEPA	We are satisfied with the alternatives outlined. These should be assessed as part of the SEA process and the findings of the assessment should inform the choice of the preferred option. This should be documented in the Environmental Report.	Assessment of Alternatives	No action required	Noted, the assessment of alternatives is set out within Section 6 of the SEA ER.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
34	SEPA	We agree that in this instance all environmental topics should be scoped into the assessment.	SEA Methodology	No action required	Noted.
35	SEPA	Appraisal Questions - Biodiversity <ul style="list-style-type: none"> <li>o SEPA would recommend that the SEA considers the limiting / preventing of the spread of Invasive Non Native Species (INNS).</li> <li>o Agroforestry shelter belts will also benefit biodiversity (particularly if connecting to woodlands) in addition to providing abatement to air pollution by absorbing pollutants in the air, and thus benefit both Air Quality and Biodiversity topics.</li> </ul>	SEA Objectives	Action required	Noted, Table 4-1 and Table 5-1 in the SEA ER has been revised to reflect these recommendations. This has also been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.
36	SEPA	Appraisal Questions - Water <ul style="list-style-type: none"> <li>o We would suggest that for the water environment, the SEA considers whether the relevant River Basin Management water classifications require upgrading and whether or not finances from the Water Environment Fund (WEF) might be available.</li> <li>o An objective to reduce water use, ensure sustainable use of water and improve water use efficiency would be welcome. This could address rainfall harvesting and enabling grey water use in toilets (finding alternatives to using drinking water to flush toilets and other tasks that do not require this level of purification).</li> <li>o The question in relation to taking a whole catchment approach to flooding may also help to identify mitigation for the effects of surface sealing by using more permeable materials and construction to allow infiltration and reduce the amount of runoff, plus creating rain gardens and other integrated features within urban areas to catch and accelerate infiltration of flood water.</li> </ul>	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.  With regards the availability of Water Environment Fund it is considered that this should be addressed at a local level as interventions are further developed.
37	SEPA	Appraisal Questions - Climatic Factors <ul style="list-style-type: none"> <li>o The introduction of Heat Networks will be an important factor in helping to reduce Climate Change. Given the potential positive effects of heat networks, SEPA would expect the SEA to give them due consideration. We would therefore suggest that the ability of the Strategy to promote Heat Networks is included as an appraisal question within Table 6-2 - potentially against the topic of Climatic</li> </ul>	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect these recommendations. Additions have been made under the Climatic Factors, Material Assets, Population and Human Health, and Air Quality topic headings. This has also been

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		<p>Factors.</p> <ul style="list-style-type: none"> <li>o Questions in relation to microgeneration, neighbourhood grids, battery storage, uptake of electric vehicles (cars and bikes), renewable heat and active travel could also be included e.g. Does the plan promote development of 20 minute neighbourhoods, where everything essential is available within a 20 minute walk?</li> <li>o Questions could be included on increased resilience and shortened supply chains which could be achieved by promoting agriculture within the City Region area (on the areas identified suitable for mixed agriculture and on prime agricultural land) e.g. Does the plan increase resilience in the food system? Or, Does the plan create more produce growing space woven into communities e.g. through making more land available for allotments, making vacant / derelict land available or establishing garden share scheme?</li> </ul>			accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.
2038	SEPA	<p>Appraisal Questions - Material assets (including soil resources)</p> <ul style="list-style-type: none"> <li>o The disruption and exploitation of carbon rich soils, such as peatlands, and the subsequent loss of this form of carbon store, is a topic worthy of consideration. While the SEA will consider impacts to agricultural soils, SEPA would recommend that it also includes an assessment of potential impacts on carbon rich soils. We would recommend that the protection of carbon rich soils is added to the appraisal questions for the topic of Material Assets (including Soil Resources).</li> </ul>	SEA Objectives	Action required	Noted, Table 5-1 in the SEA ER has been revised to reflect this recommendation and this has been accounted for in the Environmental Assessment as set out in Section 8 and Appendix D.
39	SEPA	Including a commentary section within the matrices in order to state, where necessary, the reasons for the effects cited and the score given helps to fully explain the rationale behind the assessment results. This allows the Responsible Authority to be transparent and also allows the reader to understand the rationale behind the scores given.	SEA Methodology	Action required	Noted, the assessment matrices as set out in Appendix D of the SEA ER includes a commentary section which explains the rationale for the assessment undertaken for each intervention.
40	SEPA	Where it is expected that other plans, programmes or strategies are better placed to undertake more detailed assessment of environmental effects this should be clearly set out in the Environmental Report.	SEA Methodology	No action required	Noted, this information is set out in Appendix D of the SEA ER where deemed appropriate.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
41	SEPA	We would expect all aspects of the PPS which could have significant effects to be assessed.	SEA Methodology	No action required	Noted, refer to Appendix D of the SEA ER.
42	SEPA	We support the use of SEA Objectives as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects.	SEA Objectives	No action required	Noted.
43	SEPA	When it comes to setting out the results of the assessment in the Environmental Report please provide enough information to clearly justify the reasons for each of the assessments presented. It would also be helpful to set out assumptions that are made during the assessment and difficulties and limitations encountered.	SEA Methodology	Action required	Noted, the assessment matrices as set out in Appendix D of the SEA ER includes a commentary section which explains the rationale for the assessment undertaken for each intervention. Any assumptions / limitations encountered during the assessment are set out in Section 3.3 of the SEA ER.
44	SEPA	It is helpful if the assessment matrix directly links the assessment result with proposed mitigation measures	SEA Methodology	Action required	Noted. This will be set out clearly within the mitigation section (section 9) and within the assessment matrices
45	SEPA	We are content with the proposed detailed assessment matrix and particularly welcome the commentary box to fully explain the rationale behind the assessment results.	SEA Methodology	No action required	Noted.
46	SEPA	We are content with the proposed SEA Objectives to be used in the assessment.	SEA Objectives	No action required	Noted.
47	SEPA	We would encourage you to use the assessment as a way to improve the environmental performance of individual aspects of the final option; hence we support proposals for enhancement of positive effects as well as mitigation of negative effects.	SEA Methodology	No action required	Noted, the assessments undertaken have considered the potential for enhancement measures where possible.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
48	SEPA	It is useful to show the link between potential effects and proposed mitigation / enhancement measures in the assessment framework.	SEA Methodology	Action required	Noted, mitigation / enhancement measures are set out in Section 9 of the SEA ER and where appropriate linkages to the assessments undertaken have been included.
49	SEPA	<p>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).</p> <p>One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA.</p>	SEA Methodology	Action required	Noted, mitigation / enhancement measures are set out in Section 9 of the SEA ER and where appropriate linkages to the assessments undertaken have been included.
50	SEPA	Where the mitigation proposed does not relate to modification to the plan itself then it would be extremely helpful to set out the proposed mitigation measures in a way that clearly identifies: (1) the measures required, (2) when they would be required and (3) who will be required to implement them. The inclusion of a summary table in the Environmental Report [such as that presented in SEPA's response] will help to track progress on mitigation through the monitoring process.	SEA Methodology	Action required	Noted, mitigation / enhancement measures are set out in Section 9 of the SEA ER and where appropriate linkages to the assessments undertaken have been included.
51	SEPA	Although not specifically required at this stage, monitoring is a requirement of the Act and early consideration should be given to a monitoring approach particularly in the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.	General	Action required	Noted, a monitoring Section (section 10) has been included in the ER.
52	SEPA	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.	General	Action required	Noted, a summary of the responses to all comments from the SEA Consultation Authorities has been



Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
					set out above and is included in Appendix A of the SEA ER.
<b>ER Consultation</b>					
1	Public Questionnaire	<p>7. What are your views on the accuracy and scope of the information used to describe the SEA environmental baseline set out in the Environmental Report?</p> <p>The accuracy is poor as the rate of climate change and biodiversity loss is rapidly exceeding all the estimates and predictions.</p>	Baseline	No action required	The baseline information has been based upon the best available and up to date information.
2	Public Questionnaire	<p>7. What are your views on the accuracy and scope of the information used to describe the SEA environmental baseline set out in the Environmental Report?</p> <p>My expertise is not in the assessment of climate change impacts, and as such am not well-placed to comment on the information used to describe the SEA. However, relating to my following comment on the links between the SEA and the subsequent Social Impact Assessment, the following references may be of value in understanding the interface between environmental impacts of climate change and climate adaptation in the Glasgow City Region, and of how SEA outputs may be best mobilised to bring benefit to society.</p> <p>Baka, A., &amp; Mabon, L. (2020). Assessing equality in neighbourhood availability of quality greenspace in Glasgow, Scotland, United Kingdom. SocArXiv. <a href="https://doi.org/10.31235/OSF.IO/D9JEH">https://doi.org/10.31235/OSF.IO/D9JEH</a></p> <p>Cowley, J., Kiely, J., &amp; Collins, D. (2016). Unravelling the Glasgow effect: The relationship between accumulative bio- psychosocial stress, stress reactivity and Scotland's health problems. Preventive Medicine Reports, 4, 370–375. <a href="https://doi.org/10.1016/j.pmedr.2016.08.004">https://doi.org/10.1016/j.pmedr.2016.08.004</a></p>	Baseline	Action required	The information sources have been reviewed and have been used to better inform the SEA assessment of SEA objectives.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		<p>Mabon, L., et al (2020). Climate change, marginalised communities and considered debate within Scotland's climate emergency. Scottish Geographical Journal. <a href="https://doi.org/10.1080/14702541.2020.1834335">https://doi.org/10.1080/14702541.2020.1834335</a></p> <p>Majekodunmi, M., Emmanuel, R., &amp; Jafry, T. (2020). A spatial exploration of deprivation and green infrastructure ecosystem services within Glasgow city. Urban Forestry and Urban Greening, 52, 126698. <a href="https://doi.org/10.1016/j.ufug.2020.126698">https://doi.org/10.1016/j.ufug.2020.126698</a></p>			
3	Public Questionnaire	<p>SEA Background &amp; Assessment Criteria</p> <p>We welcome the changes made to the Plans, Programmes and Strategies (PPS) assessment, baseline, SEA Objectives and indicator questions in line with our previous advice.</p>	Baseline	No action required	Noted
4	Public Questionnaire	<p>8. What are your views on the predicted environmental effects as set out in the Environmental Report?</p> <p>Serious underestimate.</p>	Environmental Assessment	No action required	Noted
5	Public Questionnaire	<p>8. What are your views on the predicted environmental effects as set out in the Environmental Report?</p> <p>Ok</p>	Environmental Assessment	No action required	Noted
6	Public Questionnaire	<p>8. What are your views on the predicted environmental effects as set out in the Environmental Report?</p> <p>As above, this is not an area where I feel I have sufficient expertise to comment.</p>	Environmental Assessment	No action required	Noted
7	Public Questionnaire	<p>8. What are your views on the predicted environmental effects as set out in the Environmental Report?</p> <p>We note the potential for negative impact on Landscape and Cultural Heritage.</p>	Environmental Assessment	No action required	Noted



Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
8	Public Questionnaire	<p>8. What are your views on the predicted environmental effects as set out in the Environmental Report?</p> <p>The SEA clearly identifies cumulative benefits that will result from the implementation of the Strategy. This is particularly encouraging and highly supportive of a green recovery that is also socially inclusive.</p>	Environmental Assessment	No action required	Noted
9	Public Questionnaire	<p>9. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?</p> <p>Proposals do not go far enough to address the problems faced.</p>	Environmental Assessment	No action required	Noted
10	Public Questionnaire	<p>9. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?</p> <p>Ok</p>	Mitigation and monitoring	No action required	Noted
11	Public Questionnaire	<p>9. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?</p> <p>Whilst I do not have the expertise to comment meaningfully on the findings of the SEA, I would welcome the opportunity for the concurrent Social Impact Assessment to be opened up for comment and review. Scotland has an increasingly strong community of social science researchers working on climate justice issues across a breadth of disciplines (e.g. urban studies, geography, sociology, economics) who may be able to offer comment on the methodology and findings of the SIA and offer suggestions for follow-on research.</p>	Mitigation and monitoring	No action required	CRC are undertaking a social impact assessment in parallel to the development of the main Strategy. This is a voluntary assessment and is designed to reflect duties under the Equality Act 2010, but also to consider broader social issues associated with climate change in the Glasgow City Region.
12	Public Questionnaire	<p>9. What are your views on the findings of the SEA and the proposals for mitigation and monitoring of the environmental effects set out in the Environmental Report?</p>	Mitigation and monitoring	No Action required	CRC have undertaken consultation with the statutory consultees during November – December 2020, where comments were received on

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		For mitigation of potential negative effects on Landscape and Cultural Heritage, promoters and designers should liaise with Historic Environment Scotland, Nature Scotland, SEPA and other statutory consultees.			potential mitigation measures. These have been updated within this ER.
13	HES	<p>Intervention 8</p> <p>A significant proportion of the region's homes, offices, buildings and infrastructure will be historic or traditional structures, and we consider that there is likely to be a large degree of cross-over between Interventions 8.5 and 8.6. To ensure optimum outcomes, it will be important to ensure that the regional retrofit framework proposed in Intervention 8.5 takes a holistic approach which embeds appropriate measures for the historic environment from the outset.</p>	Adaptation Strategy: Interventions	Action required	Noted. The Interventions and Sub-interventions in the Strategy are not designed to be separate but considered together. However, as plans are developed to implement this, the role of historic and traditional structures will also be considered.
14	HES	Historic Environment Scotland has produced a range of case studies of energy efficiency retrofit, climate change adaptation and reuse of a wide range of different types of historic built assets that can inform this approach. Our work on climate change adaptation for historic and traditional buildings and structures is ongoing, and we would welcome further engagement on the delivery of Intervention 8.5 and exploration of how it will complement Intervention 8.6.	Adaptation Strategy: Interventions	Action required	CRC will continue to engage with Historic Environment Scotland throughout the delivery of the interventions.
15	HES	Well maintained buildings are more energy efficient, and more resilient to the impacts of climate change. In addition to retrofit, we recommend that you consider how encouraging regular maintenance and repair can contribute to securing the climate resilience of existing homes, offices, buildings and infrastructure through the Strategy.	Adaptation Strategy: Interventions	Action required	Noted. It was felt that this was covered as part of Intervention 4, enabling and equipping individuals to participate in adaptation, but there may be a need to strengthen this approach if not sufficiently effective in relation to the historic built environment
16	HES	We welcome the inclusion of Intervention 8.6, directly addressing the historic environment, and the commitment to collaboration to working with Historic Environment Scotland and other historic environment	Adaptation Strategy: Interventions	Action required	Agreed. The scope of the sub-intervention covers the range of the region's historic assets, with a

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		sector organisations. The wording of this intervention places a focus on some of the most high-profile and internationally valued historic environment sites in the region, and we welcome their inclusion. However, it will be important to ensure that in delivering this intervention, a holistic approach is taken which creates a framework for the whole historic environment, incorporating historic assets of varying types and levels of cultural significance.			couple of the most prominent ones shown for illustration.
17	HES	<p>Intervention 9</p> <p>Much existing blue and green infrastructure is also part of the historic environment. To make and keep our landscapes resilient, we have to consider the environment on a holistic basis and draw on both cultural and perceived natural heritage. However, established ways of managing the natural and historic environment do not always recognise that benefits and outcomes to both are often interdependent, and ecosystem services and natural capital accounting do not generally work well in recognising the contribution of the historic environment in the context of blue-green infrastructure. In view of this, we encourage you to take a holistic environmental approach to delivery of Intervention 9, and to explore the mutual benefits that can occur from the utilisation and enhancement of historic blue-green infrastructure.</p>	Adaptation Strategy: Interventions	Action required	Agreed – The updated Strategy recognises the role of historic blue and green infrastructure through sub-intervention 9.6, which now emphasises the need for infill or expansion of existing blue and green infrastructure. Furthermore, a key principle to the Strategy is that since it is about transforming systems, all the Interventions must be delivered together as a holistic approach rather than being seen as individual silos. Cultural heritage is also referenced in Interventions 6, 8, whilst the wider role of culture is also included in Interventions 1 and 5.
18	HES	<p>Intervention 11</p> <p>Historic buildings can make a significant contribution to the circular economy. Nearly half of controlled waste comes from the construction and demolition industries. Existing buildings should be considered as assets. The preference should always be for their continued use and reuse – including materials salvaged from necessary demolitions. Retention and reuse of historic building stock and reuse of long lifespan salvaged materials can make a significant contribution to the circular economy and waste reduction, and we encourage you to explore how this can contribute to delivery of Intervention 11.</p>	Adaptation Strategy: Interventions	Action required	Intervention 11 was updated to acknowledge the wider shifts also taking place in the economy, such as the shift to circularity. In addition the Strategy was updated to reference the need to consider broader policy agendas, and the best practices in other areas of sustainability such as circularity mitigation as part of delivery (p.20).

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
19	HES	<p>We are broadly content to agree with the findings presented in the Environmental Report, subject to the following detailed comments:</p> <ul style="list-style-type: none"> <li>As discussed in Part 1, we consider that there is a close alignment between Intervention 9 and the historic environment, and that there is potential for positive effects for SEA10 to occur. We also consider that there is potential for positive effects for SEA10 through the promotion of retention and reuse of historic environment assets in support of a circular economy.</li> <li>Monitoring: The Scottish Housing Condition Survey is a useful source of data in relation to the condition and maintenance of historic / traditional homes.</li> </ul>	SEA ER Monitoring	Action required by WSP	The Scottish Housing Condition Survey has been added to the list of data sources within Table 10.1 - Monitoring Measures. The assessment of Intervention 9 has been reviewed.
20	NatureScot	<p>Chapter 3 – SEA Methodology 3.2 – SEA Environmental Report</p> <p>The assessments in this section do not appear to make use of the ‘+/-’ conclusion – regularly utilised in other SEAs where both positive and negative impacts of an alternative or policy etc. have been identified, and as recommended by us in our scoping advice. However, it does not appear that this has significantly affected the conclusions of this SEA with regard to any of the topics that fall within our remit.</p>	SEA Methodology	Action required	Use of the +/- option was removed as it was considered that those effects where both positive and negative effects could arise were best described as uncertain, due to the nature of the Strategy. The assessment narrative does, however, highlight the potential for positive and negative effects. The identification of uncertain effects also allows for mitigation and monitoring measures to be identified, whilst +/- effects do not necessarily warrant mitigation or monitoring measures.
21	NatureScot	<p>8.2 – Assessment of Environmental Effects</p> <p>In our scoping advice for this SEA we pointed out the necessity for all such plans and strategies to be made subject to a Habitats Regulations Appraisal (HRA), but suggested that the most practical approach would be to set out the HRA in a separate record, with cross-</p>	HRA	No action required	A HRA screening has been undertaken and will be published alongside the Strategy and PAS.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		referencing between it and the SEA Environmental Report (ER) included in the text of both where appropriate.			
22	NatureScot	In response, the ER appears to state only (in the discussion of Mitigation/Enhancement at section 8.2.31) that "...project level Habitats Regulations Assessment (HRA) should be undertaken as required". This approach is justified in Appendix A (which discusses the scoping consultation responses received from the statutory consultees) by pointing out that the Strategy has not been "...developed to an extent whereby the spatial location / scale of the interventions is known, nor would their potential for likely significant effects upon Natura 2000 sites be able to be predicted."	HRA	No action required	A HRA screening has been undertaken and will be published alongside the Strategy and PAS.
23	NatureScot	While NatureScot would not necessarily disagree with that conclusion (though this is stated without prejudice to any views we may later wish to express in response to any consultation over an HRA for this Strategy), it does not negate the need for the requirements of the Habitats Regulations to be fulfilled in relation to this Strategy.	HRA	No action required	A HRA screening has been undertaken and will be published alongside the Strategy and PAS.
24	NatureScot	An HRA will need to be undertaken – and again, we advise that its findings be set out in a separate, stand-alone, record. However it may well be that it ends up being a fairly short appraisal – concluding in a straightforward manner that there will be no likelihood of significant effects on any European Site as a result of the Strategy itself, as it does not direct any specific development or projects to any specific locations (as has been stated).	HRA	No action required	A HRA screening has been undertaken and will be published alongside the Strategy and PAS.
25	SEPA	We have considered the ER and are satisfied that an adequate assessment of the Glasgow City Region Climate Change Adaption Strategy 2020 – 2030 has been carried out. We welcome the inclusion of Appendix A which summarises the comments from the consultation authorities and how these were taken into consideration in the assessment.	General	No action required	Noted

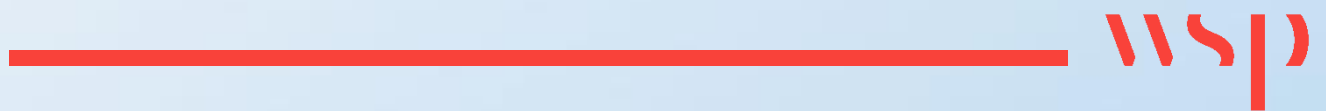


Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
26	SEPA	SEA Background & Assessment Criteria We welcome the changes made to the Plans, Programmes and Strategies (PPS) assessment, baseline, SEA Objectives and indicator questions in line with our previous advice.	ER -PPS Review	No Action required	Noted
27	SEPA	Assessment of Alternatives We are satisfied with the alternatives, and the assessment of these, set out in Section 6 of the ER. We note a transformational approach was likely to result in positive effects across all SEA topics.	ER - Alternatives	No Action required	Noted
28	SEPA	Compatibility Assessment We welcome the assessment of the compatibility of the Strategy Objectives with the SEA Objectives. Although these were found to be largely compatible, we note this identified some amendments to the Strategy Objectives.	ER - Compatibility Assessment	No Action required	Noted
29	SEPA	Evaluating the Potential Environmental Effects / Mitigation and Enhancement While the assessment did not identify any negative effects of the Strategy it did identify a number of uncertain effects. This is explained in many instances due to the level of detail currently available regarding the Interventions. Given the strategic nature of the Strategy, we acknowledge effects will ultimately depend on how the Interventions are implemented.	ER - Intervention Assessment	No Action required	Noted
30	SEPA	However, a theme across the mitigation / enhancement measures was that Intervention wording could be amended to draw out more details of the projects/investments/approaches etc to allow a more accurate assessment. While Table 9-1 suggests these measures are to be 'Embedded into Strategy narrative' it is unclear if it is anticipated that the SEA will be updated if that detail becomes available (this step isn't covered in Table 11-1 SEA and Strategy Timetable) or whether instead more local assessments will be undertaken once the forthcoming	ER – Mitigation	Action required	The Strategy has been updated and this version of the ER has been amended to reflect this update. The PAS outlines how the Strategy has considered the suggestions made within the SEA ER.

Ref	Organisation	Comment	In Reference to	Action Required	Summary of Action
		Action Plan, which will provide more detail on the Interventions, is published. If the detail becomes available at this stage, we would be happy to comment on any revisions to the assessment.			
31	SEPA	The mitigation identified for Interventions 6, 8 and 9 refers to the development of project specific mitigation measures. This is also a theme of the mitigation identified to address cumulative and synergistic effects. Table 9-1 suggests the mechanism for delivering these measures is at project level design and assessment. It may be useful to also capture this linkage within the Action Plan to ensure it is addressed.	ER – Mitigation	Action required	The indicators for monitoring the implementation of the Strategy will form part of the forthcoming Action Plan.
32	SEPA	Overall, one of the most important ways to mitigate significant negative environmental effects or enhance positive effects is to make changes to the Strategy itself. We note, as well as the matters discussed above, some changes have been identified through the assessment to mitigate / enhance the effects of the Strategy. We request the Post Adoption Statement clarifies where any changes have been made to the Strategy to reflect the assessment.	ER – Mitigation	Action required	The Strategy has been updated and this version of the ER has been amended to reflect this update.  The PAS outlines how the Strategy has considered the suggestions made within the SEA ER.
33	SEPA	Monitoring  We understand indicators for 'monitoring the implementation of the Strategy will form part of the forthcoming Action Plan'. This is a useful link between the assessment and the implementation of the Strategy. We recommend reference is made to our SEA guidance documents available on our website for further options and indicators to support monitoring of the environmental effects.	ER – Monitoring	Action required	Indicators in Table 10-1 have been updated in line with monitoring measures set out in SEPA's SEA guidance notes.

# Appendix B

**SEA FEEDBACK**







**Table B-1 - Summary of SEA Feedback of the Draft Strategy**

Section/ Item	Comment	Response
Section 7 – Draft Strategy	<p>The table includes three headings from the Theory of Change. This section could ideally do with some additional explanation on why the interventions align with the Theory of Change. I note that there is a figure to be produced which might help</p> <p>If possible, it would be useful to link up the spatial priority areas with the interventions possibly within the individual intervention explanatory text. I appreciate we touched on this during our chat on Monday and it might not be possible for all spatial priorities.</p>	Agreed - A mapping piece has been introduced aligning the Theory of Change with the interventions. A more detailed mapping of this with the next layer down will be included in the technical annex to the Strategy.
Sub-Intervention 1.1	How is it envisaged that the governance arrangement will be embedded / enforced? Will there be a specific requirement for future development / planning policy	To be discussed as part of the Action Plan
Sub-Intervention 1.2	This will require the buy-in of landowners in relation to the vacant derelict land. How is it envisioned they will be brought on-board?	To be discussed as part of the Action Plan
Sub-Intervention 1.3	What if the Clyde does not get designated as a national priority? Maybe need to think wider about Regional / Local priorities through emerging spatial plans?	The Clyde is already established as a priority in the indicative Regional Spatial Strategy. Reference included in the text.
Sub-Intervention 2.5	How will building owners be encouraged to make the transition to net zero. If buildings are assessed and the cost of adapting them is something that the owner cannot afford, what then?	Noted. Achieving net zero is partly beyond the scope of the Strategy and needs further discussion as part of the Action Plan. A regional or national framework to achieve net zero buildings is not established so very uncertain as to how the two will interface. Also, a finance plan is being prepared in support of the Strategy which will look at possible mechanisms for financing Strategy interventions.
Sub-Intervention 2.6	Can we take this a step further and work with Historic Environment Scotland to establish those assets at greatest risk from Climate	Noted. Historic Environment Scotland have already undertaken this work on properties in



Section/ Item	Comment	Response
	Change e.g. coastal assets potential prone to erosion / flooding and to evaluate impacts upon those assets as a priority	care, and are already working to prioritise investment, so hence a framework in the City Region.
Sub-Intervention 3.4	Requires buy in from spatial planners developing local authority based strategies. Need to ensure that the interventions are embedded early in these strategies from the top down. Again, it is reliant on landowners being open to the possibility of change and not developing for money	Agreed - early discussions have been positive, but again, further discussions needed on how best to achieve this - i.e. voluntary or changes in regulations sought.
Sub-Intervention 6.2	Education will be key, is it worth linking this to school aged children as well as focusing on local communities?	Noted - included a further emphasis on young people and education in the intervention on communities



**Table B-2 - Summary SEA Feedback outline in the ER**

Section/ Item	SEA Comment/ Feedback	CRC Response
Strategy - Vision	The overall vision of the Strategy could be updated to reference a future 'high quality environment.	A specific objective was added on building the region's social, economic and environmental resilience to change, but a high quality environment was implicit in the development of the vision and underpinning the Theory of Change. The vision statement was an outcome of all of the other processes of change, which have been included.
Strategy - Objective 1	Strategy Objective 2 could be amended to specifically reference environmental enhancement, to strengthen the policy.	A specific objective was added on building the region's social, economic and environmental resilience to change. Environmental enhancement is a key outcome of the Strategy but has not been included as the objectives. Instead, this is covered in detail with the Theory of Change. A separate set of paragraphs on the environmental enhancement has been added in the section 3 on the 'Need to Adapt' termed 'building ecological resilience', and in section 4 which has a set of long term outcome that ecological systems are resilient.
Strategy - Objective 2	The Strategy could include further details on the Action Plan in order to identify potential effects for population and health.	A strategic Action Plan has been developed in conjunction with the final draft of the Strategy, which provides a further level of detail of these potential effects, including the proposed high level benefits.
Strategy - Objective 3	Strategic Objective 3 could include emphasis on the natural and built environment and further indication on the types of organisations targeted.	As above, environmental enhancement is a key outcome of the Strategy, but has not been included as the objectives of the Strategy do not relate to the headline outcomes we want to achieve. Instead, this is covered in detail with the Theory of Change. A separate set of paragraphs on the environmental enhancement was added in the section 3 on the 'Need to Adapt' termed 'building ecological resilience', and in section 4 which sets out the long term outcome that ecological systems are resilient.

Section/ Item	SEA Comment/ Feedback	CRC Response
Strategy - Objective 4	Strategic Objective 4 could be amended to specifically reference social, economic and environmental resilience to climate change.	This was added as a specific new objective in the Strategy and Action Plan but did not relate to the headline outcomes we want to achieve. Instead, this was covered in detail with the Theory of Change. A separate set of paragraphs on the environmental enhancement has been added in the section 3 on the 'Need to Adapt' termed 'building ecological resilience', and in section 4 which has a set of long term outcome that ecological systems are resilient.
Intervention 1	The wording of the intervention could be amended to draw out more details on potential projects and technological advances, which would result in a more accurate assessment of the SEA Objectives.	This was hard to provide as it presupposes the understanding of what projects and advances might be - instead, Sub intervention 1.1 suggests a review of the landscape to identify these details.
Intervention 2	The mentoring programme could include a universal framework or overarching goals which identifies the importance of all strands of sustainability and ways in which businesses can contribute to bring about climate resilience without compromise.	Agreed - intervention 2.2 was updated to be explicit about the synergies/trade-offs with wider sustainability objectives
Intervention 3	The wording of the intervention could be amended to draw out more details on potential public and private sector investments, which would result in a more accurate assessment of the SEA Objectives.	Agreed - Indicative investment areas of nature-based solutions, infrastructure and built environment have since been included, due to the potential to lock in climate risk or to achieve multiple benefits. In addition, broader investment where there can be both public and private goods were identified.
Intervention 4	The wording of interventions could be amended to draw out more details on potential community engagement approaches, which would result in a more accurate assessment of the SEA Objectives.	Agreed - Intervention text was updated to refer to the use of trusted organisations and individuals.
Interventions 2, 3, 4, 8, 9 and 11	Ensure the needs and aspirations of groups with protected characteristics (including those from low	Agreed - acknowledgement of protected characteristics made in the early section in Just Resilience (section 3- the changing climate and need to adapt). The relevant interventions have



Section/ Item	SEA Comment/ Feedback	CRC Response
	<p>income households) are considered in delivering climate adaptation solutions.</p> <p>Community involvement would need to be inclusive in order to facilitate meaningful involvement of all community groups, particularly the most vulnerable.</p>	<p>been updated and strengthened to have a particular emphasis on inclusion</p>
Interventions 3, 6, 8 and 9	<p>Climate adaptation solutions must seek to maximise sustainability benefits from existing landscape, townscape and heritage assets by valuing them inherently and for the wider services they provide. Promoters and designers should liaise closely with CRC to avoid or minimise negative impacts, such as land take whilst seeking to maximise benefits, such as tranquillity.</p>	<p>Agreed. Section 9 of the Strategy outlines a specific role for CRC in delivery of the Strategy and Action Plan around coordinating institutions, communities and businesses and enabling and equipping action.</p>
Interventions 6, 8 and 9	<p>Development and retrofitting should incorporate design measures to lessen the impact on biodiversity and ensure biodiversity net gain. This could include the incorporation of green roofs and living walls. Nature based solutions should be sought over hard engineering options, in order to protect, sustainably manage and potentially restore the natural environment.</p>	<p>Agreed - added into an overarching suggestion in to the section on National, Regional and Local Policy Alignment and Standards rather than specifying in detail in each Intervention.</p>
Interventions 6, 8 and 9	<p>Building material selection of any hard engineering adaptation measures will need to adequately consider embodied carbon and the implications that this could have for meeting net zero targets.</p>	<p>Agreed - an overarching box on Net Zero synergies and trade-offs was included and references the need to consider this at the project level too.</p>
Interventions 6,7,8,9 and10	<p>Any form of construction and operation should be undertaken as sustainably as possible, making use of tools and processes, such as circular economy, waste hierarchy, CEEQUAL and BREEAM.</p>	<p>Agreed - added into an overarching suggestion in to the section on National, Regional and Local Policy Alignment and Standards rather than specifying in detail in each intervention</p>
Intervention 8	<p>The wording of the intervention should be developed further to identify potential development and</p>	<p>Agreed - the Background section was expanded to be clearer and ensure that the scope covers the built environment, energy, water, transport and communications infrastructure.</p>



Section/ Item	SEA Comment/ Feedback	CRC Response
	infrastructure types targeted in order to allow for a more accurate assessment.	
Intervention 10	CRC should seek public views on the consequences and trade-offs between potential actions to achieve net zero.	A box to be explicit on synergies and trade-offs of net zero was added and that this should be considered at a project level. This has also been addressed by flagship action 13 of a City Region committee for adaptation which will also consider the linkages to Net Zero in decision making
All interventions	CRC could provide further details on the types of projects, adaptation measures and general implementation of the interventions. This could result in a more accurate assessment across the SEA topics.	The development of adaptation programmes and projects in the City Region is really at an early stage which makes providing further detail difficult at this stage. Whilst the action plan has identified large scale Flagship Actions, the collaborative approach taken means that there is further work to do before it is clear exactly on how these measures will be taken forward and the scope, scale and their nature.
All Interventions	The implementation of interventions at local will require the development of project specific mitigation measures in consultation with both statutory and non-statutory consultees in order to minimise impacts and maximise the potential for enhancements to the local environment.	This wording has been added to Section 7 on the social and environmental impacts ensure that there is clarity around further actions and projects



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