Proposals for a new Climate Change Bill

Strategic Environmental Assessment
Post Adoption Statement

March 2020

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1. **Background**

1.1.1 Scotland has some of the most ambitious statutory targets on emissions reductions to help tackle global climate change. These were initially implemented through the Climate Change (Scotland) Act 2009 (‘the 2009 Act’). However, in the 2016 – 2017 Programme for Government, the Scottish Government confirmed its intention to bring forward a new Climate Change Bill to further strengthen these targets. Following advice from the UK Committee on Climate Change in March 2017, proposals for a new Climate Change Bill were published for consultation in June 2017. An associated Strategic Environmental Assessment (SEA) Environmental Report was prepared and published alongside the proposals.

1.1.2 The Bill, as introduced to Parliament, proposed to increase the 2050 emissions reductions target to 90% by 2050 (compared to 80% in the 2009 Act) on baseline levels. It also increased the target level for 2020 (42% to 56%), and introduced new targets for 2030 and 2040. Provisions about advice, plans and reports in relation to these targets were also included.

1.1.3 The Bill received Royal Assent on 31 October 2019 to become the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 (‘the 2019 Act’). The final version of the Act increases the ambition of targets on emissions reductions to net zero (equivalent to 100% reduction from baseline levels) by 2045 alongside increases in the 2030 and 2040 interim targets. Further provisions are made on related emissions accounting, reporting and planning duties, and other minor and consequential modifications.

1.1.4 All provisions in the 2019 Act are in force from 23 March 2020, as designated by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 (Commencement) Regulations 2020. Further information on the provisions of the Act is included in section 5.

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2. The Strategic Environmental Assessment Process and Findings

2.1. The Strategic Environmental Assessment Process

2.1.1 The Environmental Assessment (Scotland) Act 2005 (the ‘2005 Act’) requires public bodies in Scotland to carry out a Strategic Environmental Assessment (SEA) on their plans, programmes and strategies. SEA is a way of examining plans, programmes and strategies as they develop, to identify any significant effects they may have on the environment. It also ensures that environmental considerations are taken into account and aims to build in mitigation measures to avoid or minimise any potentially significant adverse effects on the environment and to enhance positive ones.

2.1.2 The SEA process for the Bill began with a Scoping Report which was issued to the three SEA statutory consultation authorities for views in April 2017. The Scoping Report set out the likelihood of significant environmental effects on a number of environmental receptors. All three consultation authorities (Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage (SNH) and Historic Environment Scotland (HES)) commented on the scope of the SEA and their views were taken into account in conducting the assessment.

2.1.3 At scoping stage, it was considered likely that the proposals to change the levels of emissions targets would yield significant beneficial environmental impacts, particularly in the context of climatic factors. It was also identified that through the implementation of the wide range of proposals, lower level policies, programmes, and strategies that seek to mitigate or adapt to climate change, there could be potential for indirect or secondary effects across the environmental topic areas. As a consequence, all the SEA environmental topic areas were scoped into the assessment.

2.1.4 A two-stage assessment process was undertaken. The first stage involved the review of findings from previous SEA Environmental Reports, relevant to the proposals for a new Bill. This drew together key findings and provided an overview of known environmental effects. The second stage of the assessment drew heavily on the stage 1 findings to provide a broad, overarching view of potential environmental effects as a result of the Bill. Assessment findings were reported in narrative form and focused on the potential for environmental effects, resulting from actions taken to meet revised emissions reduction targets. In addition, the assessment looked at the potential for cumulative and in-combination effects.
2.2. **Findings and recommendations of the assessment**

2.2.1 The assessment found that the introduction of a new Climate Change Bill to raise the ambition of Scotland’s targets for reducing greenhouse gas emissions will enhance Scotland’s efforts at tackling climate change, with likely benefits to climatic factors. In addition, positive secondary effects are expected for air quality, population and human health, and material assets, due in large part to the further decarbonisation of energy generation and transport. These benefits could be increased by making sure climate change action is brought in line with overarching Scottish Government objectives. The assessment also identified the likelihood of indirect or secondary impacts, both positive and negative, as a consequence of actions undertaken to meet the new emissions reduction targets, rather than as a result of the setting of any new targets.

2.2.2 In view of the UK Committee on Climate Change advice in 2017 that evidence was not yet available to set a target for net-zero emissions at the time of consultation, the Strategic Environmental Assessment supported the proposal to allow for such a target to be set at a later date, once the evidence becomes available. The assessment concluded that achieving further reductions in greenhouse gas emissions will increase Scotland’s resilience to future climatic change. This could also facilitate adaptation, particularly through changes in the area of land use management and in the storage of carbon within the terrestrial and marine environments.

2.2.3 The necessary infrastructure will need to be in place if Scotland is to meet more ambitious targets. Such infrastructure will also be a primary source of any negative secondary effects that may arise and the SEA Environmental Report recommended that existing infrastructure is reused wherever possible and that existing, project-level mitigation measures are implemented and enforced. It was further identified that, at present, there is some uncertainty surrounding the extent of action and environmental impacts that may arise as a result of more ambitious targets. The Environmental Report recommended that as new plans and policies emerge, the potential for cumulative impacts must be kept in mind.

2.2.4 The technical proposals for the establishment of a target framework as part of the Bill were seen as not likely to have significant environmental effects as these are largely administrative in nature. Therefore, these proposals were not included in the assessment.
2.3. Integration of Environmental Considerations into the Climate Change Bill

2.3.1 Preparing the environmental baseline as part of the Bill SEA Environmental Report aided in taking into account environmental considerations in the development of the draft Bill itself. The focus of the SEA was on the environmental effects resulting from the increased ambition of Scotland’s emission reductions targets. As detailed proposals and policies for the delivery of the new statutory targets were expected to be developed following the implementation of the Bill, through statutory strategic delivery plans (“Climate Change Plans”) required under the legislation, the SEA Environmental Report focused solely on the proposals regarding the strategic ambitions and not on potential mechanisms to deliver these.

2.4. Consultation and engagement

2.4.1 The proposals in the Climate Change Bill were informed by a comprehensive consultation process. This included advice from the UK Committee on Climate Change, discussions with key stakeholders, and a number of wider consultation workshops and events.

2.4.2 The formal public consultation took place in the period June – September 2017 with a number of other engagement events during the preparation of the Bill. These included two discussion business breakfast events hosted by Scotland’s 2020 Climate Group, six community consultation events run by the Scottish Communities Climate Action Network titled “We need more ambition!” which ran in the same period as the public consultation, and a stakeholder event discussing the technical aspects of the consultation paper.

2.4.3 A technical discussion group was also established, which met five times in the period October 2017 – February 2018 and considered the technical elements of the Bill. There was also an additional stakeholder event in January 2018 to discuss updated advice received from the UK Committee Climate Change in December 2017 on one technical aspect of the emissions accounting proposals.

2.4.4 All of the above engagement was used alongside formal responses to the public consultation to inform the Climate Change Bill as introduced to Parliament.

2.5. Structure of the Post Adoption Statement

2.5.1 This Post Adoption Statement concludes the SEA process and sets out those ways in which the findings of the SEA Environmental Report and the views expressed by consultation respondents have been taken into account as the Bill was finalised into the 2019 Act.

2.5.2 Section 18(3) of the Environmental Assessment (Scotland) Act 2005 sets out the information that should be included in the Post Adoption Statement. This can be summarised as:

- how environmental considerations have been integrated into the plan, programme, or strategy;
- how the Environmental Report has been taken into account;
- how the opinions of consultees have been taken into account;
- the reasons for choosing the strategy as adopted, in light of the other reasonable alternatives considered; and
- the measures to be taken to monitor the significant environmental effects of the implementation of the plan, programme or strategy.
3. Opinions expressed on the draft Climate Change Bill

A total of 19,365 consultation responses were received, of which 19,092 were campaign responses with or without variation, coordinated by several organisations. The consultancy *Dialogue by Design* were commissioned by the Scottish Government to conduct the independent analysis of responses and provide a summary report of these, which was published in December 2017.

3.1. Updating the target ambition

Consultation responses

3.1.1 Respondents generally supported the proposal of raising the ambition of the 2050 and interim greenhouse gas emission reduction targets. However, many perceived the Bill proposals as a minimum requirement and felt that they should be even more ambitious, including the setting of a net zero target and the potential for its achievement before 2050. Other respondents supported the proposal to include provisions in the new Climate Change Bill that allow for a net zero target to be set at a later date, highlighting the flexibility this provides.

3.1.2 Some respondents were opposed to the proposed targets, and a few would prefer the 2050 target to remain at 80% reduction from baseline levels, with the provision to increase it later. A few respondents expressed concerns about the feasibility of the proposed 2050 and interim targets.

3.1.3 Many respondents supported the proposal to set the levels of annual targets as a direct consequence of interim and 2050 targets. They saw this approach as sensible, and believed it will be clear if targets are not being achieved. Other respondents suggested a non-linear approach to setting annual and long-term targets.

3.1.4 Many respondents were supportive of the proposal to present annual targets in the form of percentage reductions from baseline levels, for consistency with the form of the long-term targets. A number of respondents raised concerns with this approach and suggested publishing absolute figures alongside percentages to address these.

Scottish Government response

3.1.5 In line with updated advice from the UK Committee on Climate Change on targets received in May 2019\(^\text{10}\), following a joint commission from the Scottish, Welsh and UK Governments in October 2018 after the publication of the IPCC’s Special Report on global warming of 1.5 degrees\(^\text{11}\), the long term target set out in the Bill was amended at Stage 2 of the parliamentary process to net zero by 2045. The 2030 and 2040 interim targets were also adjusted at Stage 2 to reductions of 70% and 90% by 2030 and 2040 respectively (compared to 66% and 78% in the Bill as introduced). The 2020 target remained unchanged at 56%. The 2030 target was then amended again at Stage 3 of the process to a 75% reduction. These amendments are all relevant to the responses received to the Bill consultation calling for increased ambition.

3.1.6 In line with the 2017 advice of the UK Committee on Climate Change, the Bill as introduced (and retained into the 2019 Act), requires that annual target levels are set as a direct consequence of the long term target levels and in the same, percentage-based form as these.

3.1.7 Statutory duties resulting from any missed targets remain the same as under the 2009 Act. These state that additional policies to catch up excess emissions must be set out as soon as reasonably practicable.

3.2. Emissions accounting for targets

Consultation responses

3.2.1 Many respondents supported the proposal to set targets on the basis of actual emissions, removing the accounting adjustment for the EU Emissions Trading Scheme (ETS). They felt the proposal will improve accuracy, consistency, and transparency of the current system; and make communication about targets easier to understand. Some respondents believed that using actual emissions will better reflect progress and motivate further action. Other respondents suggested that both figures be reported in parallel, and a few opposed the proposal referring to perceived benefits of the accounting adjustment for the EU ETS.

Scottish Government response

3.2.2 In line with the 2017 advice of the UK Committee on Climate Change, the Bill as introduced (and retained into the 2019 Act), requires that progress to targets should be based on “actual” emission levels from all sectors of the economy, as opposed to the “EU ETS adjusted” accounting used under the 2009 Act.

\(^{10}\) https://www.theccc.org.uk/publication/net-zero-the-ucks-contribution-to-stopping-global-warming/

\(^{11}\) https://www.ipcc.ch/sr15/
3.3. **Reviewing targets**

**Consultation responses**

3.3.1 Many respondents were supportive of the ability to update interim and 2050 targets through secondary legislation, but felt that this should only be allowed for increasing targets. Other respondents believed that decreasing targets should be allowed, but via primary legislation or a super affirmative secondary legislation procedure.

3.3.2 Some respondents felt that additional considerations should be added to the current list of target-setting criteria, which already includes scientific knowledge, technology, environmental considerations, and European and international law and policy. A number of respondents wished to see further detailed comments on the Scottish emissions budget, social circumstances, economic circumstances, and impact on remote rural and island communities. They also highlighted the importance of equality, intergenerational and international equity, and human rights and suggested additional criteria which they felt should be considered when setting or updating targets.

**Scottish Government response**

3.3.3 The 2019 Act sets out that Scottish Ministers may, by regulations, modify one or more of the percentage figures in relation to interim targets (and/or the net-zero emissions target date) with a higher or lower figure (and/or an earlier or later year). However, proposals to lower target levels can only be made if the UK Committee on Climate Change has advised that this should occur solely as a result of changes in scientific understanding regarding climate change or the measurement of emissions.

3.3.4 Section 5 of the 2019 Act sets out the updated list of target-setting criteria. These include the premise that targets should have the objective of not exceeding the fair and safe Scottish emissions budget. Further to this, target-setting criteria include, but are not limited to, the consideration of scientific knowledge, relevant technology, social circumstances and the impacts on remote and rural communities. New criteria are added in relation to: i) public health, ii) the likely impact of the target on the achievement of sustainable development, including the achievement of the United Nations sustainable development goals and iii) current international carbon reporting practice.
3.4. **Reporting and future plans**

**Consultation responses**

3.4.1 Concerning the frequency of updates to and the duration of future Climate Change Plans, respondents generally preferred the current frequency (every five years) and duration (of approximately 16 years), but some provided alternative suggestions. Respondents who agreed with the current frequency felt that setting plans every five years provides a suitable balance of flexibility and long-term stability. Some respondents felt that short-term plans allow for urgent action and quicker adaptation to change; while others felt that long-term plans provide certainty and stability for long-term planning and investment for implementation.

3.4.2 Some respondents supported the suggestion to create Climate Change Plans after the Paris Stocktakes, which take place every five years, to avoid the need to update them. Respondents who were opposed to this proposal saw it as an unnecessary delay to Scottish climate change efforts. Some suggestions included making provisional plans prior to the stocktakes and updating them afterwards.

3.4.3 Respondents generally felt that the period for parliamentary consideration of Climate Change Plans should be 90 or 120 days as they believed a period of more than 60 days would allow for proper scrutiny and consensus-building. Some respondents were supportive of the proposal to make up for any shortfall against targets in future Climate Change Plans, seeing it as essential to avoid missing future targets. Respondents who objected to the proposal were concerned about a potential time lag between shortfalls occurring and remedial action being implemented. They suggested alternative approaches to deal with shortfalls.

**Scottish Government response**

3.4.4 The 2019 Act requires the publication of Climate Change Plans at least every 5 years with a plan period of either 15 years, beginning with the year in which the draft plan is laid before Parliament, or a period of between 10 and 20 years.

3.4.5 The 2019 Act extends the parliamentary scrutiny period for draft Climate Change Plans to at least 120 days, of which at least 60 must be sitting days. A new requirement is added to also seek the views of the UK Committee on Climate Change on draft Plans.

3.4.6 The 2019 Act also adds a new reporting requirement that a suite of annual progress reports must be laid before Parliament by Scottish Ministers, to report on progress to the delivery of each substantive (sectoral) chapter of the most recent climate change plan.
3.5. **Assessing the wider impacts of the proposals**

**Consultation responses**

3.5.1 Some respondents felt that the proposals would impact positively on people, improving quality of life and health, and lead to an increase in income equality. Others said that details are lacking to be able to identify potential impacts. Respondents sometimes stated that the Scottish Government has a responsibility to future generations to address climate change. They often reflected on the need for people to change their behaviour as Scotland transitions to a low carbon economy and discussed barriers to behaviour change.

3.5.2 Many respondents said that the proposals will be beneficial to the Scottish economy, with increased employment in sectors such as renewable energy or electric transport, as well as research and development opportunities. It was felt that increased energy efficiency will also reduce business costs. Other respondents were of the view that the proposals represent a challenge to Scotland’s economy and businesses, and feared that there may be higher transport and energy costs, or increased taxation. Respondents often referred to the need for a just transition to a low carbon economy, with input from a range of stakeholders and support available for businesses. Respondents who commented on the potential positive environmental effects of the proposals said that the predicted effects set out in the Environmental Report are accurate, and these are further discussed in section 4 of this Post Adoption Statement.

**Scottish Government response**

3.5.3 The Bill, as introduced, was accompanied by a number of impact assessments to help identify the wider effects of the proposals. These included a joint Equality, Children’s Rights and Wellbeing and Fairer Scotland Impact Assessment, a separate Business and Regulatory Impact Assessment as well as a Strategic Environmental Assessment, all of which helped inform the Bill proposals.

3.5.4 Changes to the Bill with relevance to these other assessments also occurred during its parliamentary passage. For example, the 2019 Act sets out a set of “just transition principles”, which Ministers must have regard to when preparing Climate Change Plans. These provisions will ensure that action to reduce emissions is done in a way which supports environmentally and socially sustainable jobs, creates decent, fair and high value work and supports low-carbon investment and infrastructure.
3.6. Other issues

Consultation responses

3.6.1 Respondents emphasised various broader issues relating to the proposals put forward in this consultation, including climate change impacts, the need for urgent action, and the commitments under the Paris Agreement. Some respondents highlighted the importance of global approaches in setting targets such as global emissions budgets and the Climate Fairshares Model. They praised the Scottish Government for what they viewed as better than expected recent progress against current climate change targets, and felt that it is important for Scotland to maintain its position as a global leader in climate change mitigation. Many respondents provided various suggestions for the proposals and methods to achieve the proposed targets.

Scottish Government response

3.6.2 The targets in the 2019 Act are amongst the most ambitious of any country in the world. In particular, the end target of net-zero emissions of all greenhouse gases by 2045, five years ahead of the UK, matches the UK Committee on Climate Change’s advice on the “highest possible” ambition – as called for under the Paris Agreement. The new 75% target for 2030 goes far beyond what the 2018 IPCC Special Report says is needed globally over the next decade to prevent warming of more than 1.5°C.

3.6.3 In order to ensure the involvement of Scotland’s people in achieving our climate change ambitions, the 2019 Act includes a provision for the creation of a Citizens Assembly to report to both Ministers and Parliament by 2021 with recommendations on measures proposed to achieve the emissions reduction targets.
4. **Opinions expressed on the Environmental Report**

4.1.1 Question 12 of the consultation on a new Climate Change Bill invited opinions on assessing the environmental impacts of the proposals. The question contained five sub-questions (a – e) to help frame responses on the Environmental Report and these are provided below. Corresponding views and comments received have been summarised in the sections that follow.

- What are your views on the evidence set out in the Environmental Report that has been used to inform the assessment process? (Please give details of additional relevant sources)
- What are your views on the predicted environmental effects as set out in the Environmental Report?
- Are there any other environmental effects that have not been considered?
- Do you agree with the conclusions and recommendations set out in the Environmental Report?
- Please provide any other further comments you have on the Environmental Report.

4.1.2 Questions 12 a – e received between 127 and 149 responses. Across these questions, most respondents who expressed a view on the Environmental Report were supportive of its use of evidence and agreed with the predicted environmental effects the Environmental Report set out, as well as its conclusions and recommendations. Of those respondents who criticised the report in general terms, many suggested that this should consider emissions from the production of goods and services elsewhere that are consumed in Scotland. Some respondents claimed that the Environmental Report does not adequately address the urgency of climate change because the Bill proposals are not ambitious enough. A small number of respondents commented that the report is unclear or biased.

4.1.3 Many respondents did not comment in detail on the report, stating that they did not have an opinion, or that the document was too complex. Responses below have been amalgamated under the two headings of views expressed on the evidence and assessment of the Environmental Report, and the report’s findings. This is the case as these were the SEA questions which received detailed responses. In addition, respondents included a number of other comments, including on mitigation and monitoring, which are also detailed below.
4.2. Evidence and assessment process

Consultation responses

4.2.1 The SEA consultation authorities and respondents who provided detailed feedback, described the evidence used to inform the assessment process and set out in the report as comprehensive, well-summarised and clear. They considered that the approach taken, which includes a review of previous relevant assessments, was appropriate. Respondents welcomed the inclusion of references to transport and planning strategies and evidence on the potential health impacts of the proposals.

4.2.2 Some respondents expressed a view that aspects of the report required further consideration or that parts of it relied on assumptions or narrow evidence bases thus limiting the scope for accurate predictions to be made. Some respondents offered additional relevant sources to address perceived gaps in the evidence to inform the assessment process, including articles, Scottish and UK government publications and research from organisations like the Centre for Alternative Technology.

4.2.3 Some respondents suggested topics they felt could be included in greater detail in the evidence set out in the report, including:

- management planning for river basins and flooding;
- agriculture and land use;
- pollution and air quality;
- ocean acidification;
- the spread of human and animal diseases;
- the impacts of fossil fuel extraction; and
- emerging energy sources, such as hydrogen and bioenergy.

Scottish Government response

4.2.4 The additional information provided by respondents is helpful and will be taken into consideration in subsequent SEA work, where appropriate. We are satisfied that this does not alter the findings of the assessment as outlined in the Environmental Report.
4.3. Predicted environmental effects

Consultation responses

4.3.1 There was agreement among most respondents and the SEA consultation authorities that the assessment represents adequately the range of environmental impacts which may occur. They highlighted that proposals will impact positively on global climate, and often specified positive secondary impacts that could result from decreased emissions, such as improved health and air quality, and increased biodiversity. Some respondents welcomed the inclusion of potential negative effects in the report as well, specifically the impacts of new energy infrastructure.

4.3.2 Respondents highlighted the importance of mitigation through project planning and monitoring as well as through the reuse of existing infrastructure. A few respondents claimed that there are likely to be other environmental effects that have not been considered in the report, but which cannot yet be predicted.

4.3.3 While some respondents said that the predicted environmental effects were presented clearly in the report, and were consistent with recent research on climate change, others identified gaps in the effects provided. Some respondents said that the environmental effects of renewable energy sources, Carbon Capture and Storage (CCS) technologies and any other infrastructure required to meet the targets, will need to be considered further. They considered the possibility that negative environmental effects currently generated by traffic in one location could be replaced by negative effects from energy generation elsewhere, suggesting that a strategic approach may be required to monitor and address cumulative negative effects.

4.3.4 Several respondents referred to the inclusion of references to CCS in the report, and expressed both opposition to and support for its proposed use.

Scottish Government response

4.3.5 The SEA Environmental Report explored the environmental effects resulting from the strategic ambitions of the Bill and not as a result of potential specific mechanisms to deliver these. We note the comments received in this respect and will take into account comments on areas for consideration in future plans, programmes and strategies, as applicable.
4.4. Other comments on the Environmental Report

4.4.1 Some respondents commented on features of the report that they supported, including the emphasis on adaptation, the use of renewable energy technologies and the need for planning and policy alignment across sectors. Respondents often emphasised the importance of additional assessments as proposals are put in place, requesting that the principle for the development of a monitoring scheme should be embedded in the Bill. They said that this monitoring must consider the achievement of national policy objectives alongside the proposed targets, with sector-specific accounting and policies, and consultation on strategic issues.

4.4.2 Other comments that some respondents offered on the structure and context of the Report include:

- providing the views of statutory consultees in an appendix;
- making links with relevant UN Sustainable Development Goals;
- examining additional reasonable alternatives to the proposed targets, such as tighter interim targets;
- assessing the environmental effects of a range of scenarios for interim targets; and
- considering food production as its own category.

4.4.3 Although Question 12 was about the Environmental Report, some respondents expressed views on the predicted environmental effects of climate change more generally, emphasising the uncertainty in modelling any future climate change and encouraging the Scottish Government to prepare for worse case scenarios. Of those who commented directly on the Environmental Report, there was general agreement that the report gave an accurate assessment of these effects. In addition, some respondents provided suggestions to reduce specific sectoral emissions to address the effects of climate change.

4.4.4 Respondents and the SEA consultation authorities also provided a number of comments on mitigation and monitoring with the latter discussed in section 6 of this Post Adoption Statement. Regarding mitigation, comments received acknowledged that as the Bill set a strategic ambition and not a delivery mechanism, mitigation measures are difficult to envisage at this point. Respondents also noted the recognition of synergies identified between mitigation and adaptation and their role in securing a resilient low carbon society. Comments also included a request for outlining more detailed mitigation measures.
Scottish Government response

4.4.5 The provisions in the 2019 Act will now inform the preparation of a range of Scottish Government strategic documents, including but not limited to, an update to the 2018 Climate Change Plan.

4.4.6 In relation to the comments on adaptation, the Scottish Government recognises that whilst reducing emissions will be key to Scotland’s fight against future climate change, we must also prepare for the changes which are already locked in. We are already seeing warming in Scotland, with more extreme weather events and rising sea levels. As a nation we must adapt to these changes. The 2019 Act does not make substantive changes to the statutory framework of the 2009 Act on climate change adaptation matters, as this is working well. In September 2019, we published our second 5-yearly statutory Climate Change Adaptation Programme under the 2009 Act, which is designed to deliver a step-change in collaboration and secure the benefits of a climate-ready and resilient nation. The new Programme sets out how we are responding to risks covering a range of global warming scenarios with around 170 policies and proposals across Scotland. The Programme is derived from the UN Sustainable Development Goals and Scotland’s National Performance Framework.
5. The Climate Change (Emissions Reduction Targets) (Scotland) Bill as passed

5.1. Consideration of reasonable alternatives

5.1.1 The 2005 Act requires that the Scottish Government identify, describe and evaluate the likely significant effects on the environment of any reasonable alternatives to the plan, programme or strategy, taking into account its objectives and geographical scope.

5.1.2 In its advice to the Scottish Government in March 2017, the UK Committee on Climate Change outlined an alternative option in relation to target levels. The SEA considered this ‘reasonable alternative’ which was assessed alongside the Bill proposals, and this is outlined below:

- Maintain the 2050 target at 80% for now, creating review points at which the target ambition could be increased.

5.1.3 In its updated advice to the Scottish Government in May 2019, the UK Committee on Climate Change made a single recommendation of increasing the long-term target to net-zero emissions by 2045.

5.2. Consideration by Parliament

5.2.1 A number of amendments were lodged during the Bill’s passage through Parliament. The main changes as a result of this parliamentary process, relative to the Bill as introduced and in addition to those changes already discussed in the preceding sections of this report (in relation to targets and a Citizen’s Assembly on climate change) are outlined below.

- The creation of a national nitrogen balance sheet, with the purpose of recording how nitrogen use efficiency contributes to achieving the targets, is required to be created within 18 months of commencement;
- Future Infrastructure Investment Plans will be required to be accompanied by an assessment of how they are expected to contribute to the meeting of the targets;
- A new annual reporting duty is added on monitoring progress to the delivery of the Land Use Strategy;
- Existing annual reporting is strengthened on Scotland’s carbon footprint, which is a complementary emissions measure to the main set of figures on which targets are based and includes estimates of “consumption-based” emissions;
- Future climate change adaptation programmes will be required to include an international dimension;
- The role of sustainable development considerations, in particular links to the UN Sustainable Development Goals, is strengthened throughout the statutory framework;
A range of further amendments to the content requirements for future Climate Change Plans, to the effect that they must;

- include estimates of the costs and benefits of policies and also further assessments of their economic impacts, including at a regional scale.

- be prepared with regard to a set of “Just Transition principles” and a “Climate Justice principle”, and also include policies specifically relevant to supporting a Just Transition.

- set out proposals and policies on a range of specific matters (e.g. district heating, support for Electric Vehicles, oil & gas, regional land-use partnerships).

- set out proposals and policies on the establishment of a “whole farm” approach to emissions accounting and for the reduction of emissions on such a basis.

- include policies relevant to Scottish Government’s international, as well as domestic, climate change work, in particular support for action to tackle climate change in developing countries and approaches to “consumption-based” emissions associated with imported goods.

- use a chapter structure that follows UN emissions classification scheme headings.
6. Monitoring

6.1.1 Section 19 of the Environmental Assessment (Scotland) Act 2005 requires the Responsible Authority to monitor significant environmental impacts arising as a result of the implementation of the plan, programme or strategy. The purpose of the monitoring is to identify any unforeseen adverse effects at an early stage and to enable appropriate remedial action to be taken.

6.1.2 The Environmental Report outlined existing monitoring arrangements as part of a number of related plans, programmes and strategies, including monitoring provisions for the Scottish Energy Strategy and proposed annual energy statements, Cleaner Air for Scotland, and Scotland’s overall greenhouse gas emissions annual reporting. In addition, a number of monitoring frameworks were identified which target specific environmental receptors, including SEPA’s water quality monitoring arrangements under the Water Framework Directive.

6.1.3 With the exception of the Key Environment Statistics annual reporting, which is no longer updated as of September 2017, it is considered that the monitoring proposals detailed in the Environmental Report remain an appropriate mechanism to monitor the Bill’s environmental impacts. In particular, the annual publication of Official Statistics on Scotland’s greenhouse gas emissions, which directly determine whether each annual climate change target has been met.

6.1.4 An important addition to this existing reporting landscape will be the statutory requirement, established by the 2019 Act, for annual publication (and laying in Parliament for scrutiny) of separate monitoring reports on progress to delivering each substantive (sectoral) chapter of Climate Change Plans. The first set of such reports is required in May 2021 and will help Ministers and stakeholders to understand areas where the Plans are on track and areas where more effort may be needed.

6.1.5 The annual greenhouse gas emission statistics also contain information on the sector by sector emissions position and allow for the interdependencies between these to be explored. The requirement for the annual monitoring reports on progress to delivering Climate Change Plans to be prepared on a sector by sector basis also reflects the Bill’s wide-ranging and cross-sectoral implications.