



Northern Ireland
Assembly

Committee for Agriculture, Environment and Rural Affairs

Report on the Climate Change (No.2) Bill

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Table of Abbreviations

Abbreviation	Full Name
AERA	Agriculture, Environment and Rural Affairs
AFBI	Agri-Food and Biosciences Institute
BITC	Business in the Community
CAP	Climate Action Plan
CCC	United Kingdom Committee on Climate Change
CIWM	Chartered Institute of Wastes Management
DAERA	Department for Agriculture, Environment and Rural Affairs
FOE	Friends of the Earth
EJNI	Environmental Justice Network Ireland
EU	European Union
GB	Great Britain
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
KNIB	Keep Northern Ireland Beautiful
LMC	Livestock and Meat Commission
LULUCF	Land-Use-Land-Use-Change and Forestry
NI	Northern Ireland
NIEL	Northern Ireland Environment Link
NIGTA	Northern Ireland Grain Trade Association
NIMEA	Northern Ireland Meat Exporters Association
ROI	Republic of Ireland
SAMBIT	Small and Medium Business Impact Test
TEO	The Executive Office
UCD	University College Dublin
UFU	Ulster Farmers' Union
UK	United Kingdom
UKCCRSC	United Kingdom Carbon Capture and Storage Research Centre
UN	United Nations

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1. Powers and Membership

1. The Committee for Agriculture, Environment and Rural Affairs is a Statutory Departmental Committee established in accordance with paragraphs 8 and 9 of Strand One of the Belfast Agreement 1998 and under Assembly Standing Order 48.
2. The Committee has a scrutiny, policy development and consultation role with respect to the Department for Agriculture, Environment and Rural Affairs and has a role in the initiation of legislation.
3. The Committee has power to:
 - consider and advise on Departmental budgets and annual plans in the context of the overall budget allocation;
 - consider subordinate legislation and take the Committee Stage of primary legislation;
 - call for persons and papers;
 - initiate inquiries and make reports; and
 - consider and advise on matters brought to the Committee by the Minister of Agriculture, Environment and Rural Affairs
4. The Committee has nine members, including a Chairperson and Deputy Chairperson, and a quorum of five. The membership of the Committee is:

Mr Declan McAleer MLA (Chairperson)

Mr Philip McGuigan MLA (Deputy Chairperson)

Ms Clare Bailey MLA

Mrs Rosemary Barton MLA

Mr John Blair MLA

Mr Tom Buchanan MLA

Mr Harry Harvey MLA

Mr William Irwin MLA

Mr Patsy McGlone MLA

2. Executive Summary

5. Climate Change is one of the most profound issues affecting society and it impacts on countries across the globe. The consequences of Climate Change have been apparent in recent years as the intensity and frequency of extreme weather events has exacerbated. The local environment has been affected by Climate Change with a significant increase in mean annual temperature since the mid-1950s and an increasingly mild and wetter weather pattern.
6. The overarching global ambition is to reduce the emission of greenhouse gases, which are known to cause global warming, in order to keep warming well below 2°C by 2050 compared to pre-industrial levels. However, recent international reports suggest that progress has been insufficient to deliver on this goal.
7. To date, Northern Ireland is the only part of the United Kingdom and Ireland without specific Climate Change legislation setting out a pathway for the reduction of greenhouse gas emissions.
8. The Bill, which is being sponsored by the Minister for Agriculture, Environment and Rural Affairs, seeks to address this legislative gap and deliver on the *New Decade, New Approach* agreement to bring forward local Climate Change law. The Bill was referred to the Committee for Agriculture, Environment and Rural Affairs in September 2021 for scrutiny.
9. The Committee undertook a range of consultation exercises with stakeholders to gauge their opinion and views, and also heard from world renowned experts in Climate Change policy.
10. In summary the Committee's key findings and conclusions are:
 - The Bill's emissions target, which ultimately aims to deliver "an at least 82%" reduction in greenhouse gas levels by 2050 is perceived by some stakeholders to be a reasonable, sensible and evidence-based goal as it is based on the recommendation of the United Kingdom Committee on Climate Change as to what is feasible and deliverable for Northern Ireland

- Many other stakeholders consider that the target is unambitious and insufficient to deliver the changes required to reverse Climate Change
- Given the disparity of views on the emissions target, the Committee did not come to a consensus opinion on this
- The Bill's proposed pathway for reducing emissions through a system of Carbon Budgeting is a well-established methodology
- In order to mitigate the concerns raised by stakeholders in its call-for-evidence the Committee engaged with officials to build in additional safeguards to the legislation that would preclude some of the powers being used to delay climate action
- The Committee recommended that Just Transition principles and transboundary considerations be enshrined in the legislation and the Department agreed to adopt according amendments
- The Committee on Climate Change has primacy within the Bill as the sole source of expert advice and independent oversight. Whilst the Committee acknowledges and supports the role and credibility of the Committee on Climate Change, it is recognised that having a locally-based entity would be of utility and therefore the Committee recommended that this be included within the legislation
- The provision within the Bill to enable a duty to be placed on public bodies in terms of Climate Change reporting is welcome and the Committee made some suggestions for amendment to strengthen this provision

3. Introduction

11. This report outlines the work undertaken by the Assembly's Committee for Agriculture, Environment and Rural Affairs (AERA) to scrutinise the Climate Change (No.2) Bill that passed Second Stage in September 2021, and the Committee's recommendations to support Members of the Legislative Assembly (MLAs) in their consideration of the Bill.

12. It provides an overview of:

- Contextual information relating to Climate Change and its effects globally, nationally and locally
- Legislative approaches to address Climate Change at multi-national, national and regional level
- The current status of Climate Change mitigation in the UK as reported by the Committee on Climate Change (CCC)
- A breakdown of the current greenhouse gas (GHG) emissions profile in Northern Ireland (NI)
- A summary of the advice provided by the CCC in terms of expectations for NI in relation to reducing emissions
- A synopsis of the salient aspects of the Bill
- The call-for-evidence activities undertaken by the Committee
- The Committee's deliberations and areas of requested amendment
- The Committee's clause-by-clause consideration

- Recommendations made by the Committee to facilitate wider policy development

4. Background and Context

Climate Change

13. Climate Change is an umbrella term used to describe transformations in the environment which are unrelated to natural variations in weather patterns and ecosystems.
14. While some individuals and organisations challenge the concept of Climate Change and others claim that its effects are overstated, it is widely accepted that human activity has had a profound impact on the environment and that this has compounded in recent decades.
15. The Intergovernmental Panel on Climate Change's (IPCC) August 2021 report *Climate Change: The Physical Science Basis* states that *"it is unequivocal that human influence has warmed the atmosphere, ocean and land."*
16. Climate Change has occurred as a direct result of "global warming", i.e., the earth's temperature has risen.
17. There is extensive evidence which demonstrates that this has been caused by the emission of gases such as carbon dioxide (CO₂), nitrogen dioxide (NO₂) and methane (CH₄) into the atmosphere that remain near the earth's surface and prevent sunlight and heat from escaping, thus causing a "greenhouse" warming effect across the globe – they are therefore referred to as "greenhouse gases" (GHGs).
18. Global warming has had a number of profound impacts, particularly the melting of the polar ice caps, subsequently leading to a rise in global sea levels. This ecological destabilisation has disrupted normal weather patterns and increased the prevalence of events such as floods, storms and fires that are becoming more intense and prolonged, along with significant changes in temperatures that are increasingly extreme and erratic:

"Every additional 0.5°C of global warming causes clearly discernible increases in the intensity and frequency of hot extremes, including heatwaves and heavy

precipitation as well as agricultural and ecological droughts in some regions” IPCC (2021)

19. It also affects ecosystems, endangering natural habitats for flora and fauna, and air quality with contaminate particulate matter circulating in areas of high-population density and concentration of industry.

20. While the gases that contribute to global warming occur naturally, the overwhelming bulk of harmful GHGs released into the atmosphere emanate directly from human consumption, behaviour and industry.

21. Particularly, the use of fossil fuels (oil, gas, coal etc), which are the primary source of CO₂, is a key contributor to global warming. Society relies on fossil fuels as its predominant energy source and they facilitate a wide range of activities including:

- Travel – oil and petrol are used as fuel for cars, trains and buses
- Domestic heating systems
- Manufacturing of products, clothes, and other items that are consumed by purchasers
- Shipping and aviation for personal travel or transit of goods across the globe
- Construction of buildings and other infrastructure
- Food production
- Electricity generation

22. As a result, intensified global warming has occurred over the last 150 years since the start of the industrial revolution when these fuels were first used to power new technologies and the means of mass production. It is estimated that human intervention has contributed to a rise in world temperature of at least 1.07°C from 1850-1900 compared to 2010-2019.

23. However, its effects on the environment have accelerated, and have been more clearly evident, in recent decades due to the fact that GHGs linger in the atmosphere causing a cumulative warming effect, thereby compounding the disruptive impact on weather systems.

24. The IPCC has found that **global surface temperature has grown at a faster rate since 1970 than in any other 50-year period over the past 2,000 years.**

25. Climate Change is a global problem as GHGs cannot be attributed to any particular nation or region of the world. There is an obligation both on developed economies, which retain a historical responsibility for industrialisation, and on developing economies that are advancing their productive and technological capabilities, to address it.

Impact of Climate Change Globally

26. As highlighted above global warming has contributed to the occurrence of ecological disasters and extreme weather events that are increasingly common. Some of the most high-profile examples in the past number of years are shown below:



Figure 1 - Flooding in Germany and Belgium in 2021

“The floods and destruction are unimaginable. We cannot even assess the scale of the damage yet.” **Mayor of North-Rhine Westphalia**



Figure 2 - Australian bushfires 2020

“There are a number of fires that are coming together - very strong, very large, intense fires that are creating some of these fire-generated thunderstorms”

New South Wales Rural Fire Service Commissioner



Figure 3 - Locust swarms in east Africa in 2020

“It is the locusts that everyone is talking about. Once they land in your garden they do total destruction. Some people will even tell you that the locusts are more destructive than the coronavirus.” **Ugandan Farmer**

27. It is impossible to quantify accurately the colossal societal and human cost of such events, but they do cause widespread destruction and loss of life. A 2021 study projected that just under 500,000 people living in the global south had died as a result of climate disasters since 2001, which is likely to be a significant underestimate.

28. Further, the economic cost to governments to support communities in the immediate aftermath of climate disasters, and to recover in the long-term, is immense and stark. The World Meteorological Organization estimates that the Top-10 most costly weather events recorded between 1970 and 2019 accounted for approximately **\$521 billion in economic losses**. In Europe alone, there were 1,642 reported disasters during this time period, resulting in 160,000 deaths and \$476.5 billion in economic damages.

Impact of Climate Change Nationally

29. The consequences of Climate Change are also evident in the United Kingdom (UK), with a higher number of floods, intense storms and cold snaps recorded since 2000 compared to previous decades.

30. The Met Office July 2021 report on the status of the UK's climate highlights some of the changes seen in the country's weather system in recent years:

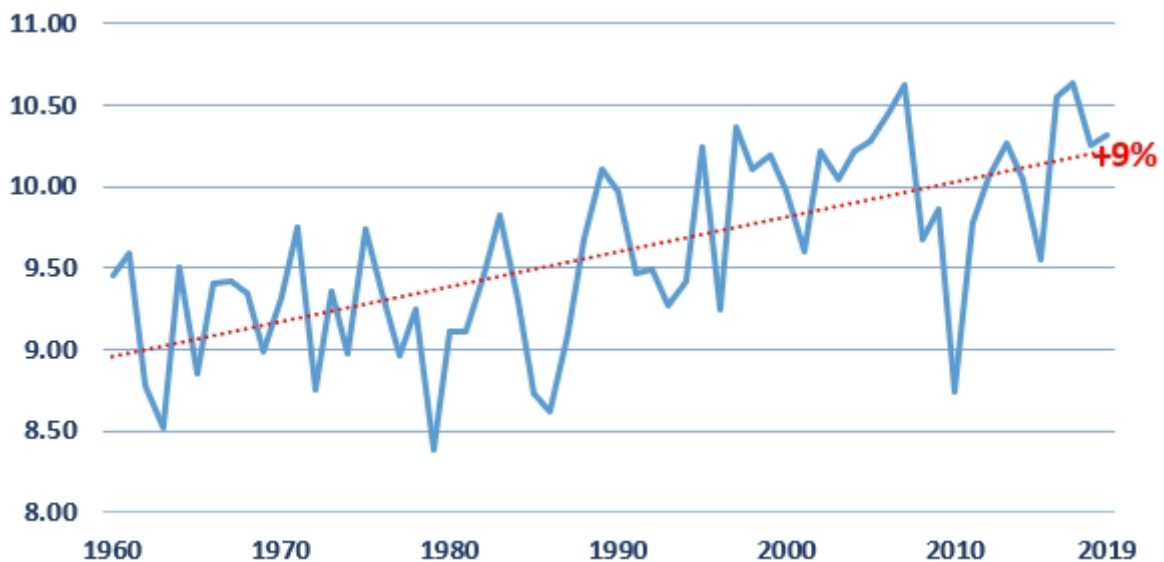
- **All of the Top-10** warmest ever recorded calendar years have occurred **since 2002**
- The **hottest ever temperature** was recorded in **2019** in Cambridgeshire—38.7°C
- Winters and Summers between 2009 and 2018 were on average **12% and 13% wetter** respectively than between 1961 and 1990
- The **mean sea level** in the UK has risen by approximately **17cm** since the start of the 20th Century

Impact of Climate Change Locally

31. The below charts provide an indication of how Climate Change has affected the environment and ecosystem in NI, highlighting that:

- There has been a rise in the mean average annual temperature since 1960
- The number of “warm” days recorded in NI each year (days with a minimum temperature of $>20^{\circ}\text{C}$) has increased over the last five decades with a decline in the number of recorded “frost” days per annum ($<0^{\circ}\text{C}$)
- There has been a significant decline in the wetland bird population at freshwater sites over the past two decades
- In some areas of NI, the air quality in terms of monthly NO_2 levels has worsened since the mid-1990s

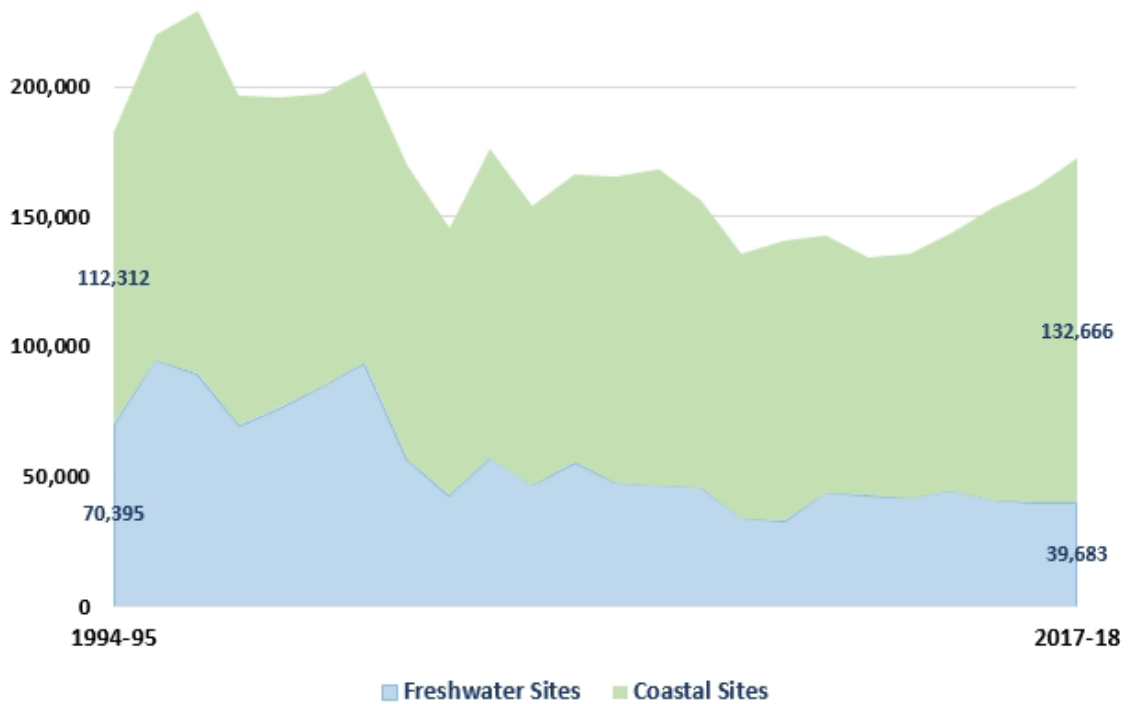
Northern Ireland Annual Minimum Temperature ($^{\circ}\text{C}$)



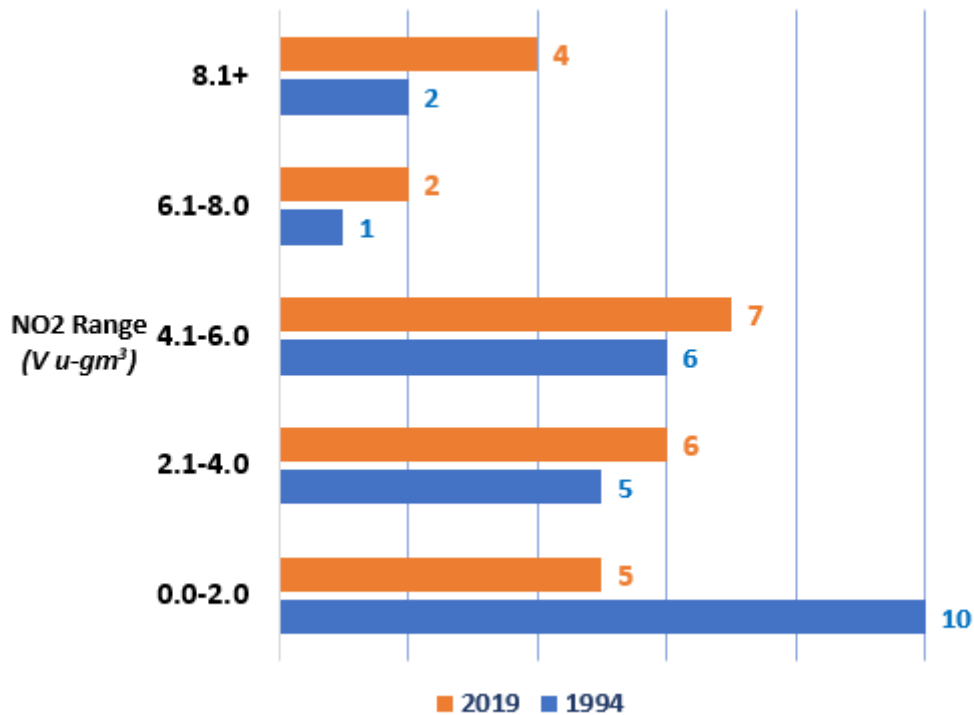
Average Number of Annual Frost and Warm Days by Decade

Decade	Number of Frost Days Per Year (<0°C)	Number of Warm Days Per Year (>20°C)
1970-1979	44	33
1980-1989	44	36
1990-1999	29	30
2000-2009	37	39
2010-2019	37	42

Northern Ireland Wetland Bird Population Trend 1994-95 to 2017-18



Monthly Nitrogen Dioxide (NO₂) Reading Range at Lough Navar and Hillsborough, 1994 and 2019



Paris Agreement (2015) and International Approaches to Mitigate Climate Change

32. Over the past 15 years there has been a concerted effort by governments across the globe to engage multilaterally to advance initiatives to mitigate the effects of Climate Change, as it cannot be effectively tackled by countries working in isolation.

33. The 2015 Paris Agreement marked an important milestone where 196 nations pledged to:

“Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of Climate Change”

34. The signatories to the Agreement included leaders from countries across the world, including 55 parties of the United Nations (UN) Framework Convention on Climate Change that account for 55% of global emissions.

35. The Paris Agreement established a political consensus to encourage countries to reduce GHGs in order to reverse global warming and precipitated the introduction of legislation by individual nations setting out how they would achieve this.

36. The IPCC reported on the effectiveness of global mitigation strategies in August 2021 and determined that, based on a range of modelling analyses, it is more likely than not that global warming will **exceed 1.5 °C by the early 2030s** and that deep, and extensive, CO₂ removal via engineered technology is required, along with attainment of net-zero emissions, to stabilise global warming.

37. An international stocktake of progress will take place in 2023 in order to assess what further action governments may need to take to deliver on the Paris Agreement.

38. In November 2021 the UN Climate Change Conference (COP 26) was held in Glasgow with the overarching goal of intensifying international support to address Climate Change.

39. A number of multi-lateral agreements spanning various aspects of mitigation and adaptation were made at COP26 including:

- A pledge to **end and reverse deforestation** by 2030
- The United States and European Union agreed to **cut methane emissions by 2030**
- Forty countries committed to **reducing coal consumption** as a primary energy source
- The United States and China agreed to work together throughout the 2020s to **limit global temperature rise to 1.5 °C**

- The **Glasgow Climate Pact** which places a number of obligations on signatories, including:
 - An international agreement to “phase down” the use of coal
 - A pledge to cut international GHG emissions by 41.9 gigatons by 2030
 - A request to adopt more ambitious targets: “[Parties must] *revisit and strengthen the 2030 targets in their nationally determined contributions as necessary to align with the Paris Agreement temperature goal by the end of 2022.*”
 - Increase support to developing countries by mobilising \$500bn of finance for mitigation and adaptation by 2025

National Approach to Mitigate Climate Change

40. In 2008 the UK Government passed the Climate Change Act, a seminal piece of legislation which set out a framework for how the constituent jurisdictions of the UK should work towards reducing the harmful effects of Climate Change by lowering GHG emissions.

41. The core elements of the Act included:

- A long-term statutory target for the UK to reduce its GHG emissions by 80% by 2050 (compared to 1990 levels). This target was subsequently revised in 2019 to legislate that the UK should reach **net-zero GHG emissions by 2050**
- A system of **carbon budgeting**, where prescriptive emission levels for the country are set on a 5-yearly basis
- The establishment of the **Committee on Climate Change (CCC)** comprising scientific experts to provide independent advice to the government on the UK’s Climate Change policy and progress

The CCC has subsequently established itself as a highly-respected, world-leading authority and provides advice to organisations and countries across the globe

- Imposition of the **National Adaptation Programme (NAP)** that requires the government to publish every 5 years the policies that it intends to introduce to manage the effects of unavoidable Climate Change

42. Since 2019 the Conservative government has made a number of high-profile policy announcements as part of its overarching drive to meet the net-zero target, including:

- Ending direct government support for the fossil fuel energy sector overseas
- Ending the sale of new petrol and diesel cars by 2030
- Spending at least £3 billion of climate finance on nature-based solutions
- Climate-related disclosures will be mandatory by the year 2025
- Ambition to create 2 million green-based jobs across the UK by 2030

43. Whilst the Climate Change Act 2008 applies to all regions of the UK in terms of meeting the net-zero target, both the Welsh and Scottish governments have developed independent legislative pathways to mitigate GHG emissions in their respective localities:

- In 2016 the Welsh Assembly passed the Environment (Wales) Act which introduced a duty on the government to set carbon budgets specifically for Wales. This has been followed by subsequent regulations setting GHG emissions targets as follows:
 - By 2030 emissions will be 63% lower than 1990 levels

- By 2040 emissions will be 89% lower than 1990 levels
 - By 2050 emissions will be net-zero compared to 1990 levels
- The Scottish government passed the Climate Change (Scotland) Act in 2009 that aimed to be more ambitious than the 2008 Act and the emissions target has been revised to deliver net-zero GHG emissions by 2045. Under the Act, Scottish Government Ministers are required to produce annual targets in order to help monitor progress in terms of emissions

44. In the Republic of Ireland (ROI), legislative progress was first established via the Climate Action and Low Carbon Development Act (2015). This legislation, whilst not setting binding GHG emissions targets, established a framework to support ROI to transition to a carbon neutral economy through creation of an independent Advisory Council and placing a responsibility on the government to produce a National Mitigation Plan for emissions reduction and a National Adaptation Framework.

45. In July 2021 the Climate Action and Low Carbon Development (Amendment) Act 2021 was passed. This amended the 2015 Act in order to:

- Commit the Irish Government to moving “*to a climate resilient and climate neutral economy by the end of 2050*”
- Establish a system of Carbon Budgeting
- Place a responsibility on local authorities to produce Climate Change Action Plans every 5 years

46. There is presently no specific Climate Change legislation in NI. However, as part of the 2020 *New Decade, New Approach* agreement, the NI Executive made a commitment to bring forward a Climate Change Act to give environmental targets a strong legal underpinning, as well as developing a new Energy Strategy and reviewing policies in light of the Paris Agreement.

5. Current Status: UK CCC's Progress Report June 2021

47. As part of its responsibilities under the Climate Change Act 2008, the CCC reports periodically to the UK Government on its progress in terms of meeting its obligations on mitigation, adaptation and reducing GHG emissions.

48. In its most recent report in June 2021 the CCC outlined that the UK has made significant advancements: GHG emissions are 50% lower compared to 1990 and certain sectors of the economy including electricity supply, waste management and manufacturing have enacted substantive changes to their operating models to reduce their carbon effect.

49. However, the report highlighted that the UK still faces significant challenges and that *“we continue to blunder into high-carbon choices”*, noting that some industries such as transport, shipping, aviation and agriculture are yet to implement changes to the extent and intensity required to reach net-zero by 2050.

50. The CCC acknowledged the ambitious pledges made by the Conservative Government since 2019 with regards mitigation policies, but cautioned that these statements of intent need to be delivered via credible, well-thought-out policies supported by targets, appropriate funding and plans for job transition.

51. The report warned that if the UK government, and other nations, failed to act on their ambition in this *“decisive decade”*, it will be impossible to meet the Paris Agreement and more robust, extensive and possibly disruptive action will have to be taken in the future to avoid further climate damage.

52. The CCC identified Seven Priority Areas for the UK Government to focus on in order to ensure it has the best opportunity possible to meet the net-zero 2050 target:

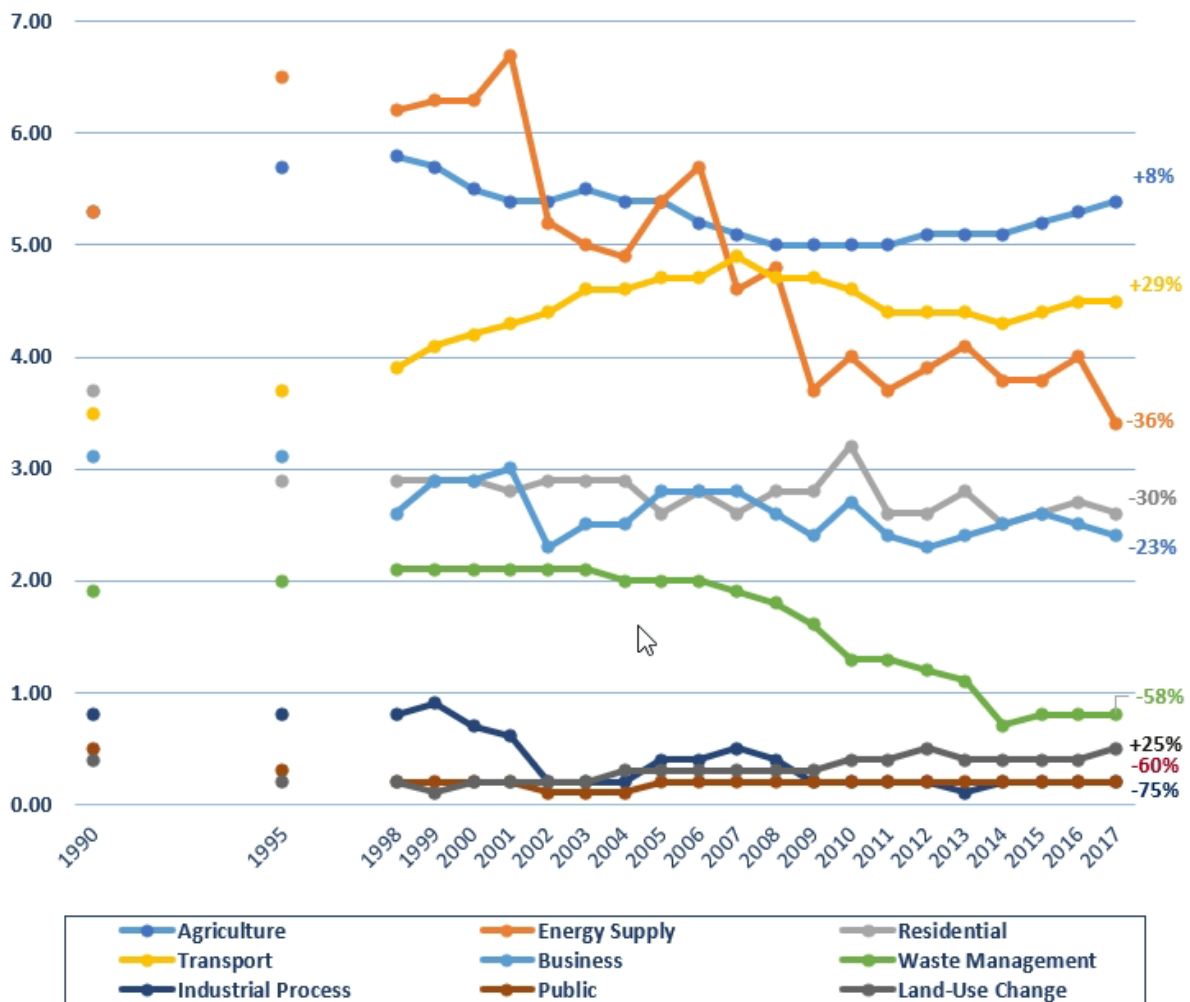
Area	Priority
1	Delivery of the 2030 transition to electric vehicles
2	Accelerating decarbonisation of building construction
3	Land-Use Change through extensive reforestation and peatland restoration along with delivery of low-carbon farming practices
4	Decarbonisation of manufacturing through incentive mechanisms that support fuel switching and implementation of carbon-capture technologies
5	Low-carbon power generation
6	Development and implementation of a Hydrogen Strategy as an alternative power source
7	Investment in domestic-engineered GHG removal

6. NI Greenhouse Gas Emissions Profile

53. Over the past 30 years there has been an overall reduction in the GHG emissions from NI industry, with particular improvements evident in energy supply, waste management and business.

54. The below graph shows the annual GHG emissions broken down by economic sector between 1990 and 2017 with the percentage change over this timeframe:

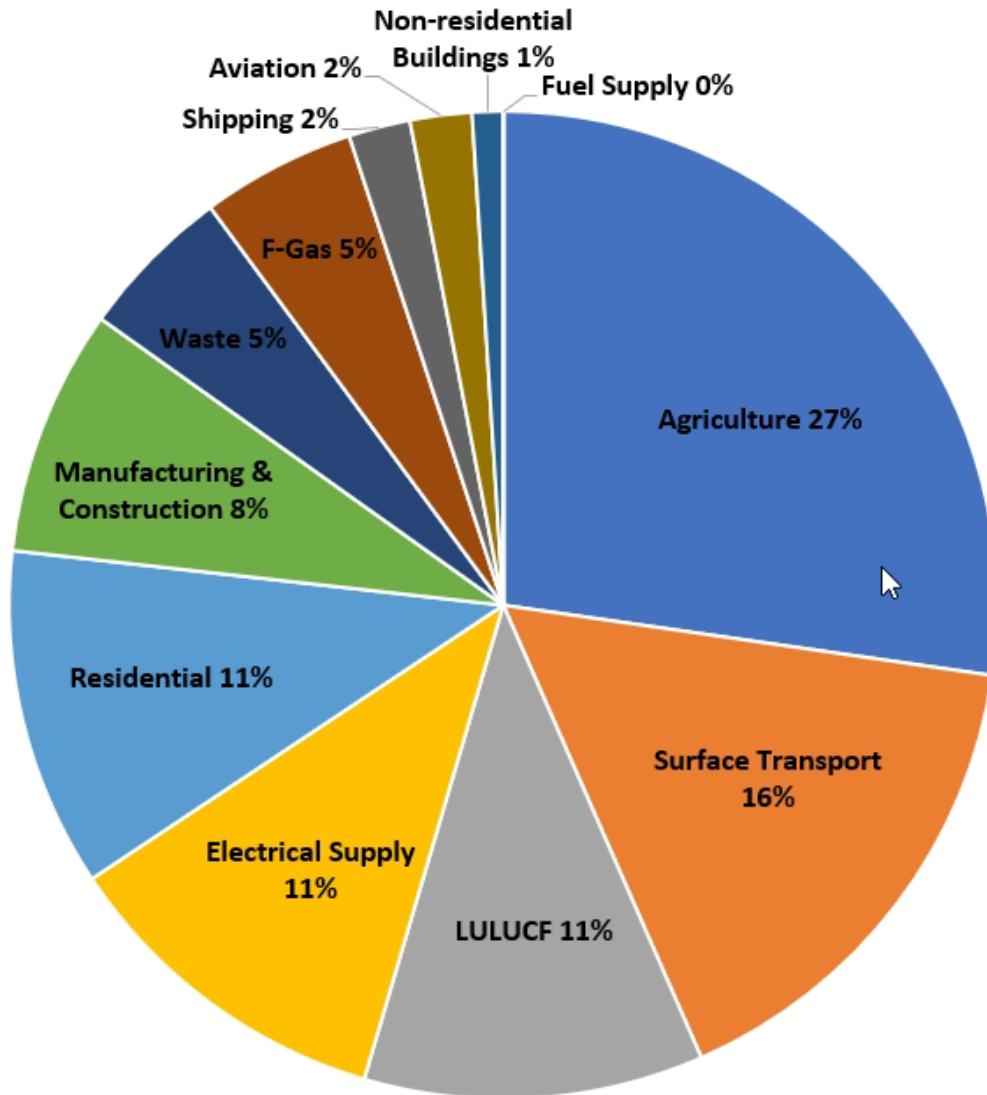
NI Greenhouse Gas (GHG) Emissions Per Year by Sector (MtCO₂e)



Please Note – the above data does not encompass a change enacted in June 2021 with regards accounting for GHG emissions arising from peatlands/wetlands introduced by the Department for Agriculture, Environment and Rural Affairs (DAERA) and other responsible departments across the UK

55. The biggest contributions to NI's GHG emissions are from agriculture (27%), surface transport (16%) and Land-Use, Land-Use Change & Forestry (LULUCF) (11%). Emissions from agriculture and LULUCF are disproportionately higher than the UK averages of 10% and 2% respectively due to NI's status as an important agri-food producer with high-levels of ruminant livestock that are known to contribute to methane emissions and the comparatively low-level of forest cover and relatively poor health of peatlands in NI, which limit the ability for carbon sequestration. Conversely, emissions from fuel supply (0%), manufacturing (8%) and aviation (2%) are much lower than the UK-wide averages, reflecting the specific characteristics of NI's economy:

NI Greenhouse Gas (GHG) Emissions by Sector 2018 (taken from the Committee on Climate Change's (CCC) 6th Carbon Budget Report 2020)



7.CCC Advice on NI Climate Change Mitigation

56. As part of its Sixth Carbon Budget (2020) the CCC developed a range of potential pathways for the UK to mitigate GHG emissions by 2050 including “Headwinds” and “Tailwinds” scenarios that assumed progress on a lesser and more ambitious scale respectively.

57. As part of the “Balanced Net-zero Pathway” which is considered to be an achievable and credible route to deliver the emissions targets with an expectation of reasonable public engagement, behavioural change and policy development, the CCC envisages the following for NI:

- **At least an 82% reduction in GHG emissions** from baseline levels by 2050 to encompass net-zero CO₂ emissions, i.e., NI will not achieve “net-zero” overall
- Annual GHG emissions will fall from around **23 MtCO₂e in 2020 to 5 MtCO₂e** in 2050
- Emissions will **fall by 54%** compared to current levels **by 2035**
- The biggest reductions will come from the transport, residential building, LULUCF and electricity supply sectors
- Methane emissions from agriculture will dominate the NI emissions profile by 2050
- **All GHG emissions** must be reduced in NI to contribute to the UK-wide net-zero target and reductions must be made in terms of methane, as well as CO₂ and other gases

58. In a letter to DAERA in April 2021, the CCC corroborated its recommendations for NI and explained why, in its estimation, it was not deemed feasible at this time to envisage an overall net-zero GHG position in NI by 2050:

“Net-zero for the whole of the UK by 2050 does not necessitate that every sector or area of the UK reaches absolute zero emissions by that date. Some parts of the UK will be net sources of greenhouse gases by 2050 with emissions offset in other parts of the UK that are net sinks.

Our analysis shows that Northern Ireland’s position as a strong agri-food exporter to the rest of the UK, combined with more limited capabilities to use ‘engineered’ greenhouse gas removal technologies means that it is likely to remain a small net source of greenhouse gas emissions – almost entirely for agriculture- in any scenario where the UK reaches net zero in 2050. It is fair that those residual emissions should be offset by actions in the rest of the UK.”

8. Climate Change (No.2) Bill

59. The Climate Change (No.2) Bill that was introduced by the Minister for DAERA on 5 July 2021 and passed Second Stage on 27 September 2021 sets GHG emissions targets for NI, establishes a system of Carbon Budgeting, describes how progress will be reported and confers various powers and responsibilities on Executive Departments.

60. The Bill comprises five Parts and 41 Clauses. The composition of the Bill, as drafted, is set out in the table below:

Section	Purpose
<i>Clauses 1-3</i>	Set out that Executive Departments must ensure the delivery of the following GHG emissions targets in NI: <ul style="list-style-type: none"> • The emissions account for the year 2050 is at least 82% lower than the baseline • The emissions account for the year 2040 is at least 69% lower than the baseline • The emissions account for the year 2030 is at least 48% lower than the baseline
<i>Clause 4</i>	Enables DAERA to amend the emissions target year and percentage through regulations
<i>Clause 5</i>	Defines the list of GHGs that are to be reduced and the baseline years for each gas. It also provides for DAERA to amend the GHG baseline year.
<i>Clauses 6 and 7</i>	Define the meaning of “net emissions account” for NI and how this should be calculated for a particular period of time
<i>Clause 8</i>	Gives DAERA authority to incorporate emissions from international aviation and shipping within the overall emissions account through regulations
<i>Clauses 9 and 10</i>	Provide for DAERA, through regulations, to credit or debit carbon units from different accounting periods. Clause 9 defines what is meant by “carbon unit” and Clause 10 provides for a scheme to be established to monitor and track carbon unit transactions

Section	Purpose
Clause 11	<p>Gives DAERA authority to establish a maximum level of permissible GHG emissions for NI for a period of time: a “Carbon Budget.”</p> <p>The first Carbon Budget will cover 2023-2027 and every 5 years thereafter. It also provides for DAERA to adjust a Carbon Budget period.</p>
Clause 12	<p>Sets a duty on Executive Departments to ensure that the emissions account does not exceed the Carbon Budget for any period</p>
Clause 13	<p>Outlines that Carbon Budgets must be set at a level designed to meet the overarching emissions targets for 2030, 2040 and 2050 (as per Clause 1)</p>
Clause 14	<p>Carbon Budgets for the first three periods must be set before the end of 2023 and subsequent Budgets must be established at least 12 years before their commencement year</p>
Clause 15	<p>Enables DAERA to carry up to 1% of a Carbon Budget to a previous budget period and to carry forward “unused” parts of a budget to a future period. Before enacting such a decision DAERA must consult other Executive Departments and the CCC.</p>
Clause 16	<p>Requires DAERA to lay a report that outlines the policies/strategies that will be implemented to deliver a Carbon Budget with the Assembly before the end of Year 1 of each Carbon Budget. All Executive Departments are required to provide DAERA with information to facilitate completion of this report.</p>
Clause 17	<p>Requires DAERA to lay an interim progress report with the Assembly that outlines progress made with regards policy implementation before the end of Year 3 of each Carbon Budget.</p> <p>All Executive Departments are required to provide DAERA with relevant information to facilitate completion of this report before the end of the first 33 months of the Carbon Budget period.</p>

Section	Purpose
Clause 18	Sets out that within two years of the end of each Carbon Budget, DAERA must prepare a final statement and lay it with the Assembly. The final statement must state if the GHG emissions level has or has not been exceeded, the amount of carbon units credited/debited, outline any decision to carry elements of the budget forward or backwards and an explanation on the attainment, or otherwise, of the budget.
Clause 19	Requires DAERA, if the final statement confirms that GHG emissions exceeded the Carbon Budget for that period, to lay a report with the Assembly within 3 months outlining proposals to compensate for the excess emissions in future periods
Clause 20	Obligates DAERA to lay a statement of compliance 2030, 2040 and 2050 outlining the overall net emissions accounts for these years. This must be laid within 24 months of the end of each respective year and Executive Departments must provide DAERA with relevant supporting information within 21 months to inform the report.
Clause 21	Provides for DAERA to impose climate change reporting duties on specified public bodies following consultation with the body concerned.
Clause 22	Establishes that the CCC will report to DAERA by the end of 2027 with its views on the progress made on mitigating emissions and the viability of the Carbon Budgets that have been set (as per Clause 11)
Clause 23	Provides for the CCC to report to DAERA within 6 months of a final statement on a Carbon Budget period, with its assessment of the attainment of that Budget and the relevant actions taken by government Departments. DAERA must lay a copy of this report with the Assembly as soon as is practicable.

Section	Purpose
<i>Clauses 24 and 25</i>	<p>Provide for the CCC to report to DAERA within six months of the compliance statements being laid for years 2030 and 2040. These reports must outline the CCC's view on whether the emissions targets for 2040 and 2050 respectively are the most ambitious they could be and what additional measures may need to be implemented.</p> <p>DAERA must lay a copy of the reports with the Assembly as soon as is practicable.</p>
<i>Clause 26</i>	<p>Obligates DAERA to submit responses to reports submitted by the CCC to the Assembly within six months of receipt.</p>
<i>Clause 27</i>	<p>Provides for the CCC to report to DAERA on its consideration of the progress made, and any relevant recommendations, against an adaptation programme laid by a Department with the Assembly under section 60 of the Climate Change Act 2008.</p> <p>The report must be sent within 3 years of the programme being laid and DAERA must send the Assembly a copy of the report as soon as is practicable.</p>
<i>Clause 28</i>	<p>Obligates DAERA to submit a response to adaptation reports under Clause 27 to the Assembly within six months of receipt.</p>
<i>Clause 29</i>	<p>Obligates government Departments to ensure that the net emissions account is not exceeded by exercising their functions in a manner that is consistent with this objective and developing such plans or projects as may be necessary to deliver this.</p>
<i>Clause 30</i>	<p>Outlines DAERA's ability to amend aspects of the Act through regulations.</p>

Section	Purpose
<i>Clauses 31 and 32</i>	Establish criteria that must be met before the laying of regulations pertaining to the amendment of the Act: <ul style="list-style-type: none"> - Clause 31: an amendment of the emissions target or Carbon Budget emissions level can only be made if DAERA is satisfied that it is justified on the basis of significant developments in UK or international law/policy, scientific knowledge or technology relevant to Climate Change; OR it has been recommended by the CCC (or is not substantially different to a CCC recommendation) - Clause 32: an amendment to a GHG baseline year or Carbon Budget period may only be brought forward as a result of significant developments in UK or international law/policy
<i>Clauses 33-35</i>	Obligate DAERA to seek formal advice from the CCC pertaining to any proposed amendment as per Clauses 31-32 (with the exception of any change that has been explicitly recommended by the CCC).
<i>Clauses 36-38</i>	Provide further details on the meaning of carbon units, greenhouse gases and measurement of emissions respectively
<i>Clause 39</i>	Outlines other definitions
<i>Clauses 40 and 41</i>	Commencement and Short Title

9. Committee's Consideration of the Bill

Bill Timeline

61. The Bill was introduced to the Assembly and passed First Stage on 5 July 2021.
62. At its meeting on 8 July 2021 the Committee considered and agreed a proposal for a call-for-evidence from stakeholders in advance of the Bill being formally referred to the Committee for scrutiny. This decision was taken in the context of the Committee's anticipated legislative workload in the Autumn and the strong likelihood that the Bill would pass Second Stage.
63. The Committee's call-for-evidence template was made available on the Citizen Space platform between 16 August and 30 September 2021, supported via signposting ads placed in local newspapers and extensive social media messaging.
64. Second Stage of the Bill was completed on 27 September and Committee Stage began on 28 September 2021.
65. The Committee commissioned a research paper from the Assembly's Research and Information Service (RaISe) on the salient aspects of the Bill, comparing it to legislation in other jurisdictions and issues that the Committee may wish to consider throughout its scrutiny. This was presented on 30 September 2021.
66. At its meeting on 8 October 2021 the Committee agreed to submit a motion to the Assembly seeking approval to extend Committee stage to 28 January 2022 in accordance with Standing Order 33(4). This motion was approved by the Assembly on 1 November 2021.
67. The Committee received an oral briefing from DAERA officials on 8 October 2021 in respect of the Bill's policy intentions, its overarching aims and the obligations it will place on Departments and other bodies.
68. On 14 October 2021 the Committee facilitated a virtual stakeholder event with representatives from the local agri-food sector to provide them with the opportunity to give their views. Attendees included the Ulster Farmers' Union (UFU), the

Northern Ireland Meat Exporters Association (NIMEA), the Dairy Council, the Livestock and Meat Commission (LMC) and the Northern Ireland Grain Trade Association (NIGTA).

69. A similar forum was held on 21 October 2021 with representatives from the environment sector to enable them to brief the Committee and take questions from Members. Participants included Friends of the Earth (FOE), Northern Ireland Environment Link (NIEL), Climate NI, the National Trust and the Royal Society for the Protection of Birds (RSPB).

70. The Committee also received an oral briefing from representatives of the CCC specifically on the core components, implications and viability of the provisions as set out in the Bill on this date.

71. Further, Members were provided with an overview from the Committee team in relation to the analysis of its call-for-evidence returns including the aspects of the Bill that were received positively by stakeholders, and amendments that were suggested to enhance its provisions.

72. Additional stakeholder events were held on 4 and 11 November 2021 so that the Committee could hear the views of different industries and a briefing was facilitated with the Scottish Just Transition Commission on 16 December 2021.

73. The Committee undertook informal deliberations throughout December 2021 and January 2022 with the Department Bill Team and completed its clause-clause consideration on 13 January 2022.

Call-for-Evidence Responses August to September 2021

74. The Committee received 1,004 responses to its call-for-evidence encompassing:

- 54 returns via its call-for-evidence template that was made accessible on the Citizen Space platform (10 of these were from members of the public)

- 15 other “free format” responses
- 935 messages from individuals through the Friends of the Earth website

75. The full details of the themes arising from the call-for-evidence are outlined in a separate report and the key messages are summarised below:

- The **majority of respondents welcomed the Bill’s introduction** but many highlighted concerns about its scope and ambition
- Only 40% of returnees felt that the Bill will deliver on its objectives due to:
 - An insufficient provision for Just Transition
 - Ability to secure the necessary significant resources to deliver it
 - The scale of behavioural change needed to address Climate Change
- The majority of returnees expressed a negative **opinion about the emissions targets** and considered that they were insufficiently ambitious
- Many respondents advocated for a **“net-zero”** position in NI
- Some returnees welcomed the emissions measures as they are in line with the advice provided by the CCC and take account of the make-up of the local economy and high reliance on agri-food output
- **The vast majority of respondents** thought that the targets were both **achievable** and the **timescale** to meet them was **deliverable**
- The Agri-Food and Energy sectors were more receptive to the emissions targets than other industries

- There was a **mixed response** to the provisions that will enable DAERA to **amend the baseline years, percentages and targets**
- The **majority of respondents welcome** the proposed **Carbon Budgets** and consider that they will be effective in helping to deliver on the emissions goals
- A high proportion of returnees felt that the scope of the Carbon Budgets could be expanded
- There was **significant concern** expressed about DAERA's power under Clause 15 to **carry emissions forward/back** between Carbon Budget periods
- There was a mixed response about the proposed reporting framework contained in the Bill with many respondents considering that the timescales for laying reports was **too lengthy**
- A large number of stakeholders advocated for an **independent office** to be established in order to carry out effective scrutiny of government action in relation to climate policy
- **Only 20%** of returnees to the call-for-evidence template felt that the provisions for **independent oversight in the Bill are appropriate** and almost half desire the **creation of a local advisory body**
- The majority of respondents considered that DAERA should not be the lead government department
- There was **overwhelming support** for the provision outlined in Clause 21 to obligate **public bodies to report** on climate change action but that this should be mandatory

- Virtually all returnees recognise that significant public investment will be required to mitigate climate change
- It was strongly argued that **appropriate Just Transition financial mechanisms** need to be put in place
- **Only 22%** of respondents considered that having the CCC as the **sole body of expert advice was appropriate** and that local government should not be bound to this
- Over **90% of returnees** considered that there should be a **transboundary approach** to Climate Change and just under two thirds felt that there should be greater emphasis on cross-border harmonisation in the Bill

Oral Evidence Sessions

76. The Committee invited a wide range of organisations representing different sectors of the economy to present their views between October and November 2021.

77. Officials from **DAERA** attended the Committee on 8 October 2021 and gave an overview of the Bill's provisions, reflecting that it is a tight and focussed piece of legislation designed to meet the *New Decade, New Approach* commitment and to enshrine local GHG emissions targets in law. The duty that will be placed on all government Departments to meet these targets was highlighted as a relatively unique feature of local legislation and an important means of driving policies to change practice.

78. DAERA has followed the CCC's recommendations because it considers the CCC to be the pre-eminent advisory group in terms of Climate Change policy. The Bill's targets are therefore based on a credible, scientific evidence-base and an "at least 82%" reduction by 2050 will support global food security by enabling NI to maintain its agri-food output through avoiding excessive livestock cuts that would be necessitated by a more stringent target.

79. DAERA officials discussed the potential merits of pursuing a more aggressive target and outlined that, given that the UK comprises only 1% of global emissions, it is important to take a holistic view of what can be achieved locally. DAERA estimates that reaching a net-zero position in NI by 2050, as compared to an 82% reduction, would contribute an additional 0.73% to the lowering of UK emissions, and 0.0073% of the global account. In this context, DAERA officials questioned the efficacy of seeking to deliver net-zero, given the significant impacts on the local agri-food sector and economy, should this be legislated for.

80. Officials reflected that the Bill enables DAERA to amend emissions targets in the future if it is identified that NI can reasonably attain a more ambitious position.

81. Further, the Committee heard that the targets will mitigate the chance of unintended “carbon leakage”, and the associated negative environmental impacts, that could be resultant from importing produce from other parts of the globe, to offset a decline in output locally.

82. In relation to the provisions to adjust Carbon Budgets and amend emissions targets, officials stressed that there are robust preconditions to ensure that relevant bodies are consulted before any such amendment is enacted, and that the intention would never be to dilute Climate Change mitigation.

83. Members questioned officials on how a Just Transition would be delivered via the Bill and DAERA articulated that the emissions targets in and of themselves are designed to facilitate a fair, reasonable and sensible transition for the NI economy to low-carbon practice.

84. In relation to how Departments would be held accountable in respect of the emissions ceilings, DAERA reflected that all Departments would potentially be subject to judicial review proceedings for failing to meet the goals, and that there would be a significant reputational risk for Departments that consistently missed targets, as these would be reported on publicly.

85. The Committee sought clarity as to why a general duty on public bodies was not included in respect of Climate Change reporting. It was advised that Clause 21 was

drafted to enable future consultation with bodies before imposing such a duty given that this is generally considered to be best-practice and that DAERA had limited time to engage with stakeholders on the prospect of establishing a general duty.

86. A number of organisations representing the local **agri-food sector** attended a stakeholder event hosted by the Committee on 14 October 2021 to provide their views.
87. The **Dairy Council** articulated that the Bill provides an appropriate, reasonable legislative framework for the industry to engage in Climate Change mitigation, as well as deal with the multiple demands from customers and suppliers in the ever-changing global market.
88. The Council believes the emissions targets will present significant challenges for the industry but they can be achieved and are grounded in sound, evidential projections. The provisions that enable flexibility are welcome in that they will give the opportunity in future years to respond to new technologies, understanding and policy.
89. The Committee was urged to support the Bill as a means of “*reaching out*” to the industry to engage them as part of the solution to climate action.
90. Representatives from the **UFU** referenced work that the industry collectively commissioned from KPMG that assessed the economic and social impact that could be manifest if a more stringent emissions target is pursued for NI than that recommended by the CCC (net-zero by 2045).
91. The key findings of the report were as follows:
- By 2045 there would be a residual GHG emissions account in the NI agriculture sector of 1.19 MtCO_{2e}, compared to 6.40 MtCO_{2e} in the Baseline – an additional reduction of 81%

- Only around 8% of the required emissions mitigation in agriculture could be generated through greater efficiencies and improvements, with the vast bulk arising from reductions in livestock numbers
- It is projected that cattle and sheep herd numbers would fall by 86% from 2021 levels, with an 11% reduction in pig and poultry livestock
- Given the composition of local farms, with the vast majority being small, family-owned holdings, and slim profit margins, any decline in output over 10% for many beef farms, 30% for sheep and 50% for dairy sites presents significant viability challenges
- It is estimated that there would be a decrease of 21,150 operational farms (compared to 2021), with beef and sheep farms in less favoured areas being most profoundly impacted

92. In light of these considerations the UFU support the Bill's emissions targets while recognising that they will necessitate significant changes. The CCC has recommended that approximately 46% of existing agricultural land be re-purposed for forestry and the re-wetting of peatlands to support carbon sequestration. This will present fundamental challenges for how local farmers operate, but the UFU stressed its commitment to meeting climate action and delivering on-farm solutions to mitigate the sector's emissions.

93. In order to support farmers' efforts, the UFU advocated that an appropriately resourced Just Transition mechanism needs to be legislated for to ensure that the industry can access funding to enhance, develop and implement new ways of working. Further, the government must commit to a long-term programme of research to identify innovations and new ways of working that can be introduced on farm holdings.

94. The proposed Carbon Budgets are welcomed as a clear mechanism of tracking progress and the CCC's establishment as the primary source of expertise and advice

is considered to be appropriate. However, it was suggested that the CCC's local insight could be enhanced through bodies such as the agri-sector's Greenhouse Gas Implementation Partnership, which could provide cross-organisational advice on matters affecting particular industries.

95. The **LMC** highlighted the significant work that has been undertaken by the industry in recent years to reduce its GHG impact and to support environmental health.

96. The Bill, in LMC's view, is well crafted and recognises NI's important role as a producer of high-quality food and the need to sustain current output levels which facilitate the calorific requirement for approximately 10m people.

97. LMC urged the government to work closely with the local agri-food sector in the development of the Carbon Budgets in order to ensure that the salient challenges, and potential pitfalls are addressed before embarking on new policies: *"It is imperative that careful thought is given to the process for developing and consulting on the carbon budgets, so that all relevant sectors are given adequate time and support to adapt their practices and to make any necessary investments to stay within the budgeted emissions in the targets."*

98. **NIMEA** highlighted NI's role in meeting the future demand for meat consumption which is expected to rise by 76% by 2050 (compared to levels in 2005). NI's proficiency in producing high-quality agri-products with a relatively low carbon outlay compared to other nations was discussed and the need to avoid "offshoring" agri-food activity to more emissive jurisdictions.

99. The emissions targets are welcomed as a fair contribution to the overall net-zero ambition of the UK. Through a combination of measures such as enhancing livestock genetics, producing better feeds, improving grassland management and slaughtering younger animals, as well as the emergence of new scientific approaches, the local sector can meet the emissions targets.

100. Representatives from **NIGTA** re-affirmed the work undertaken throughout the sector to reduce its emissions profile for example by making improvements in feed

conversion which has enhanced productivity and reduced the amount of feed required on farmlands, thereby helping to lower emissions:

“Our key message is simple: a more efficient farm is a more profitable farm with a lower carbon footprint.”

101. NIGTA welcome the Bill’s evidence-based targets as recommended by the CCC and consider that they represent a reasonable and deliverable goal for NI.

102. However, the importance of enshrining Just Transition in the legislation was underlined to ensure that the sector and rural communities are supported appropriately. NIGTA also stressed the need to ensure that any subsequent secondary legislation brought forward under the Act is subject to appropriate rural and regulatory impact assessments.

103. Like other stakeholders, NIGTA supports the reinvigoration of the GHG Implementation Partnership as a forum to bring farmers, producers, researchers and exporters together to help deliver on climate action:

“The scale of that challenge should not be underestimated. It is important to emphasise again that the agri-food sector wants to be part of the solution and is playing its part in the fight against climate change.”

104. A number of key points were raised by stakeholders during a plenary-style question and answer discussion with Committee Members:

- The agri-food sector needs **clarity on the overall emissions goal** in order to begin necessary work programmes
- A local advisory group such as the GHG Implementation Partnership could play a **crucial role in supporting the CCC’s considerations** and advice to DAERA

- There have been achievements delivered in the local sector in recent years and the industry needs to build on this momentum through **optimisation of research** into on-farm solutions and methods of carbon sequestration
- The legislative framework should be reasonable and fair and not suppress the output of the agri-food sector: *“Help us on that journey. Do not pull the feet out from under the industry by setting unrealistic targets that cannot be achieved”*
- **Just Transition** schemes and funding will be absolutely central to delivering success and new ways of working
- There should be proper recognition for carbon sequestration on farm holdings and incentivisation for farmers to engage in greater sequestration: *“The question is how to achieve those targets, how to get proper recognition at farm level for the positive actions that farmers take to grow more efficient livestock and capture more carbon in the soil and how to incentivise those processes”*
- The **risk of carbon leakage must be avoided** at all costs, especially in the context of free trade agreements that have recently been signed by the UK Government with Australia and New Zealand and the potential prospect of importing agri-products from these countries
- Producers are facing ever-increasing demands from their customers to **demonstrate “green credentials”** which will only incentivise and encourage carbon-friendly practice
- There needs to be policy harmonisation to ensure, for example, that the Energy Strategy, Food Strategy Framework and future Agricultural Framework are aligned to the same overarching climate goals

105. Lord Deben from the **CCC** presented evidence on 21 October 2021, explaining the background to the CCC’s Sixth Carbon Budget projections which, in every scenario

evaluated, concluded that it was not possible to facilitate net-zero GHG emissions in NI by 2050.

106. Therefore, it was strongly advised that the Balanced Pathway projection of an “at least 82%” emissions reduction be pursued as a reasonable but very challenging target. Lord Deben stressed that this will not be easy and will require significant effort. The potential risk of setting an overly stringent, and unattainable, emissions goal which could stymie action was highlighted: *“I am not prepared to suggest something I know that you cannot do.”*
107. When questioned on the potential for increasing the ambition of NI’s projections, Lord Deben reflected that this could be possible if there are significant future breakthroughs, but that currently it is important to pursue what is known to be deliverable: *“if, over the next years...we can see that you can do better, then the Climate Change Committee will...increase what should be the target.... However, at the moment, I would stick to that target and really fight for it. I think that you will find it tough to ensure that people do what they have got to do, because it ain't easy.”*
108. Further, when asked if the CCC could envisage a situation whereby its Tailwinds scenario (most ambitious) could manifest in NI, Lord Deben reaffirmed that it was highly unlikely this could be delivered and even if maximal progress was made, NI would still only deliver a 95% net position under this projection. Therefore, it was suggested that it was more important to legislate for a sensible and credible pathway.
109. Lord Deben reflected on the proposed reporting framework and while, ultimately, this will be a decision for the Assembly, the CCC’s view is that the provisions, on balance, are appropriate. Further, the possibility of sanctions that could fall on a Department for failing to meet the emissions goals were discussed and it was explained that having an emissions target enshrined in legislation opens the possibility of judicial review proceedings being brought against government.
110. The Committee raised that the emissions targets for both Wales and Scotland have been revised to be more ambitious than those initially outlined by the CCC. Lord

Deben explained that this occurred because the CCC gathered further information and data on the emissions profile in each jurisdiction and the relevant action taken by the devolved administrations to tackle specific challenges in their localities.

111. The prospect of a similar change in NI was suggested and Lord Deben reflected that this was unlikely because the primary limitation on NI's ability to reduce emissions is the disproportionately high number of livestock which will be extremely challenging to off-set without cutting herd numbers, and must be done slowly and incrementally.
112. It was noted that it is fundamentally impossible to achieve net-zero emissions from the agricultural sector given that most of its GHGs arise from the natural digestive processes of animals. As a consequence, in order to deliver net-zero as a whole, other sectors have to achieve a net-negative GHG position and opportunities for carbon sequestration and large-scale CO₂ capture need to be exploited. NI does not have the requisite geographical infrastructure to facilitate this and therefore its ability to "off-set" agricultural emissions through other means is limited.
113. NI's unique position of sharing a landmass with a different jurisdiction was discussed and the potential implications for NI's environmental reputation should a different emissions target be legislated for in NI, compared to ROI. Lord Deben expressed that, in his opinion, this should not be a concern as NI will be contributing to the overall UK goal of achieving net-zero by 2050.
114. When asked about the consequences for NI should it decide upon an emissions target that is not recommended by the CCC, Lord Deben felt that there could be a reputational risk by pursuing a target that is unrealistic and that people may not engage with mitigation action as they know it is not achievable.
115. The Committee sought the CCC's view on whether it was necessary to include a commitment never to weaken the emissions measures. Lord Deben articulated that, given the extent and intensity of the climate crisis, it would be entirely inappropriate to make targets more accessible, and that in order to gain support from all stakeholders it would be of utility to outline a commitment to strengthening

the climate targets in the future, if it is feasible to do so: *“I can’t conceive of any scenario in which it would be reasonable to lower the target.”*

116. A number of organisations representing the local **environment sector** attended an oral evidence session with the Committee on 21 October 2021.

117. Representatives from **FOE** advised that, in their view, the Bill lacks ambition and has a number of fundamental limitations:

- There is no provision for Just Transition
- There is no net-zero emissions target
- There is no proposal for an independent Climate Commissioner
- The Carbon Budget pathway is limited in scope and there should be wider sectoral-based Climate Action Plans included

118. FOE reflected that there are sources of advice and expertise which suggest that attaining net-zero in NI is possible. Therefore, the overarching emissions target should not be justified on the basis of one particular source of scientific evidence or another, and this is ostensibly a political decision.

119. Given that NI currently has a disproportionately high level of emissions per capita than many countries, and in particular its neighbouring jurisdictions, FOE consider that local government should commit to a very ambitious emissions target as a fair contribution to the global effort to mitigate Climate Change:

“Northern Ireland cannot be zero carbon by 2050 by saying, “under the current circumstances”..., again, the question is not scientific but political. The Northern Ireland Assembly has the authority and competency to deal with those political, economic and structural obstacles, and really all that it takes is leadership.”

120. **Climate NI** reflected on the changes to the local climate and weather systems in recent years including the extremely hot temperatures recorded in the Summer of 2021 – this is indicative of the effects of Climate Change. These are likely to have profound consequences and it was noted that Climate Change is not simply an

environmental challenge, but one that affects wider society, the economy and population health.

121. As a result, Climate NI welcomes the introduction of the legislation but considers that the Bill could be strengthened significantly by making explicit reference to ensuring adaptation is given equal merit to mitigation – this is a core element of the Paris Agreement, and is often overlooked by legislators and those developing policy.
122. Introduction of the Bill will provide a framework for Departments, public bodies and civic society to take forward actions to mitigate environmental harm: *“Climate legislation provides us with the skeleton to hang all the supporting policy and action on. We need a strong skeleton, and the legislation needs to be ambitious and brave, as we have an opportunity to be a leader.”*
123. In Climate NI’s view it is essential to embed adaptation reporting as a mainstream activity for Departments and Arm’s Length Bodies, and therefore the Bill should be amended to include this.
124. Additionally, Climate NI called for additional amendments to give some provision for a Just Transition and to reference the potential utility of nature-based solutions.
125. The **RSPB** explained that, in their view, the Bill lacks urgency. In particular the “at least 82%” target will not be sufficient to address the harm caused by Climate Change and a net-zero position needs to be legislated for to achieve parity with other countries and meet the Paris Agreement.
126. Without a net-zero target, RSPB considers that NI may be considered a “climate laggard” which could have adverse knock-on effects for the wider economy: *“Every legislator around the world should do their utmost to ensure that preventing nature and climate breakdown is their top priority. The Northern Ireland Executive are no exception.”*
127. Further, RSPB advocate for inclusion of a biodiversity duty to ensure that public bodies take account of eco-system health when carrying out their duties, and an

amendment to commit to the use of nature-based solutions to mitigate Climate Change.

128. The provisions that enable amendment of emissions targets/years and Carbon Budgets are perceived negatively by RSPB as they could be used as “get out clauses” to excuse poor performance and circumvent failures to meet emissions levels.
129. Overarchingly, RSPB consider that the Bill’s governance framework has significant shortcomings and that a locally-based, entirely independent entity is needed to provide advice and reporting functions. This is particularly important in the context of NI’s track record of environmental governance which RSPB considers to be lacking both in terms of its scope and effectiveness.
130. The challenges that worsening Climate Change will present for future generations was discussed, with RSPB highlighting that for many young people, the protection of the environment is the most important and pressing issue that they face:
- “The reaction from young people especially is that they believe that even 2045 may not be enough. There is a rise in climate anxiety among young people. They... see the threat that climate change poses to the economy.”*
131. **NIEL** reflected on the IPCC’s August 2021 report and recent events which demonstrate that the climate crisis is worsening, thereby necessitating urgent climate action. In NIEL’s view the Bill is lacking in a number of key areas:
- There should be a net-zero target
 - Climate Action Plans that set out sectoral policies should be included
 - Establishment of a locally-based independent scrutiny body is essential
 - Just Transition principles should be explicitly included in the legislation
132. Additionally, NIEL considers that the emissions targets are essentially groundless given that they can be amended via regulations and could lead to a risk of inaction on the part of government.

133. The potential benefits that could flow to NI from a more ambitious Climate Change framework were discussed, with NIEL reflecting that there is an opportunity for NI to harness its natural capabilities to be a world leader in terms of green energy production, and to enhance, develop and re-pivot the economy towards green growth.

134. The **National Trust** articulated the underlying importance of engaging in Climate Change mitigation and highlighted that it has set its own target of reaching net-zero by 2030.

135. With respect to the Bill, the Trust raised the following issues:

- Emissions targets should be ambitious and aim for net-zero
- Carbon Budgets: this methodology is broadly supported as a clear and effective mechanism of managing emissions reduction, but the provision to carry a proportion of emissions backwards or forwards should be removed:

“We very much welcome the five-year carbon budgets and interim targets.... However, we believe that those should be strengthened further. Unused emissions should not be allowed to be carried forward to the next carbon budget.”

- Reporting: an entirely independent body needs to be established to provide an adequate review mechanism of climate action locally
- A commitment to non-regression should be included to prevent the dilution or delay of Climate Change mitigation
- Explicit reference should be made to the role that nature-based solutions can play in supporting climate action and addressing the holistic range of damage done to the environment

136. The Trust advocated that the Committee should explore the inclusion of an amendment that would establish a legal duty on Departments to monitor and assess climate risks when making plans to tackle Climate Change.
137. In open discussion with Members, stakeholders highlighted a number of further issues for consideration:
- The system of **Carbon Budgets** as proposed is a **useful tool** for driving change, but the scope could be expanded to address wider environmental impacts, for example by including Nitrogen targets
 - The technical drafting of the Bill is sound, but the level of ambition is out-of-step with current international thinking and drive for increasing ambition as advocated by many leaders in the International Community: *“We do not want to perpetuate our position as a climate laggard by bringing in standard legislation that was applicable and useful five years ago.”*
 - The facilitation of **independent reporting from the CCC on adaptation programmes laid to the Assembly is welcome**
 - The **lack of Just Transition** either theoretically in terms of policy setting or materially via establishment of funding schemes is a major oversight
 - The provision that will obligate Departments to take appropriate action to meet the emissions ceilings is well-received as a means of facilitating **collaborative responsibility** across government for taking forward climate policy
 - The challenges for the local agri-food sector were discussed and it was highlighted that the Bill presents an opportunity to **change how farmers have been incentivised** to improve the health of the land and environment, rather than focussing on output:

“This is a great opportunity and a great moment in time for agriculture. We have moved out of the European Union, and there will be an opportunity to repurpose what we do with agricultural subsidy. We still want to see £300 million a year go to the agricultural community, but we can repurpose that and deliver more for climate and nature. We have a major opportunity on our hands. That is where we need political leadership. We cannot continue with the status quo and business as usual; we need to transition and change. That is where agricultural policy can play a major role in helping us to deliver the low-carbon transition in an agricultural context.”

- It was articulated that much of the Climate Change debate has focussed on the impact to the agri-food sector of engaging in mitigation measures. However, the **potential damage that could be caused by taking insufficient, or no, action** could be much more devastating – for example increases in local temperature could give rise to the proliferation of new pests and parasites not seen before in the local ecosystem and these could destroy large parts of farmland holdings
- There will undoubtedly be **enormous financial costs** to facilitate Just Transition schemes but this will pale in comparison to the societal and economic costs of not taking action
- **Transboundary considerations** are vital and given that NI shares water and groundwater sites, as well as a geographical landmass, with ROI, there should be enhanced provision for cross-border working

138. On 4 November 2021 the Committee heard from representatives of the Northern Ireland Local Government Association (NILGA), Environmental Justice Network Ireland (EJNI) and the Rural Community Network (RCN).

139. **NILGA** welcomes the Bill as an important step in enshrining legislation to avoid further damage to the environment. Whilst some NILGA representatives advocate for a more ambitious emissions position, the majority support the commitment to

deliver an at least 82% reduction in GHGs by 2050 as this is in line with advice provided by the CCC.

140. However, NILGA articulated concerns about Clauses 4 and 5 that could theoretically be used to prolong the emissions goals, thereby delaying action and risking further environmental harm.
141. Another shortcoming was highlighted in relation to the scope of the Carbon Budgets which, while being a useful mechanism to control overall emissions levels, do not go far enough in NILGA's opinion in respect of setting specific targets for different sectors of the economy: *"NILGA is not particularly confident that the departmental Bill informs sectoral targets. Instead, it passes responsibility on to Departments to take this work forward. This Bill is much more arm's-length than we would like."*
142. Relatedly NILGA is concerned that the reporting framework is overly focussed on the output of government Departments, rather than on large emitting sectors and would prefer to see obligations placed on businesses and civic society in terms of meeting their climate action responsibilities.
143. In relation to Clause 21 that enables DAERA to impose a reporting duty on public bodies, NILGA is strongly opposed to the wording of this provision as drafted, given that local councils are already heavily involved in Climate Change mitigation and therefore should be engaged with proactively to "co-design" any such duty.
144. **EJNI** highlighted a number of fundamental concerns with the Bill, considering that it is both outdated and insufficiently ambitious. EJNI advocate that NI should pursue a net-zero position in order to align with neighbouring jurisdictions and that the absence of a net-zero target departs from the prevailing scientific and political opinion across the globe in relation to the urgency of action required to tackle Climate Change.
145. Further, EJNI consider that there are some fundamental elements missing from the Bill including:

- A robust, independent reporting mechanism which is essential given NI's track record of weak governance and environmental regulation that has eroded public trust in this area
- A commitment to ensuring Just Transition in order to provide unequivocal safeguards for those who will be most profoundly affected by change
- Transboundary Considerations and a specific obligation on NI bodies to work with counterparts on a North-South axis and further afield. It was highlighted that a divergence of Climate Change policy on the island of Ireland could leave NI behind both environmentally and economically

146. The role that rural communities can play in helping to restore the health and vibrancy of the local environment and biodiversity was highlighted by **RCN**, but in order to do this the specific challenges facing rural communities need to be addressed including, for example, the disproportionately high levels of fuel poverty which may preclude the roll-out of green domestic heating systems in these areas, and the lack of green travel infrastructure.

147. RCN welcome the Bill but do not believe that it will deliver on its aims without significant funding and an active commitment to Just Transition.

148. In addition, RCN advocates that an extensive education programme needs to be undertaken to help inform local people as to what Climate Change will mean for them in practical terms: *“we require a much wider and deeper engagement with individual citizens, communities and businesses to develop a collective understanding of what moving to a low carbon or zero carbon society will mean.”*

149. RCN also supports the establishment of an independent office in order to ensure that government is held to account for its actions in respect of meeting the Bill's targets.

150. A number of key themes emerged through discussion between stakeholders and the Committee:

- A Just Transition is essential and its exclusion is a significant shortcoming which could potentially send a signal to the public that government will not support them through the changes that will be necessary.

Just Transition principles should be central in order to obligate Departments to support jobs and economic growth.

It was acknowledged that conveying the concept of Just Transition to the general public is challenging and it needs to be explained in practical terms. Some specific examples were discussed such as supporting people living in fuel poverty in rural areas to access grants to install green domestic heating and how workers in peat extraction could be retrained if this activity is downturned to support carbon sequestration:

“In order to halt that extraction, there has to be support for people to transition out of that employment and into other sustainable employment. Whether they will be involved in re-wetting bogs or restoring peatland...consideration needs to be given to how the transition is made away from economic activity that is producing carbon and degrading an ecosystem to activity that prevents that and restores the ecosystem.”

- The importance of **transboundary working** should not be underestimated and there are risks associated with divergence between NI and ROI. For example, the Committee heard that councils in border areas are involved in cross-border decarbonisation projects with their local government counterparts, but NI councils have fewer resources and a lesser ability to contribute given that there is presently no legislation in place, supported with relevant funding.

Further, the potential risks associated with disparity on the island in terms of emissions targets were discussed which could potentially delay the

development and roll-out of green infrastructure in NI. This could have a knock-on effect for the economy, trade and the ability to attract investment.

“If we enshrine meaningful transboundary considerations into a really robust piece of climate legislation...that requires us to cooperate on an all-island basis, we would be able to avail ourselves of the benefits of working together on either side of the border to meet targets. That would also take away some of the problems that could be created if we do not cooperate.”

151. Stakeholders representing the Federation of Small Businesses (FSB), Ulster Wildlife, Sustainable NI and the Chartered Institute of Wastes Management (CIWM) attended the Committee on 11 November 2021 to discuss the Bill.
152. **FSB** welcome Climate Change legislation for NI and highlighted that a recent survey revealed that small local businesses desire policy certainty regarding their climate obligations. The important role that these enterprises can play with regards reducing emissions and facilitating green innovation was discussed and that there is an opportunity for business growth in the transition towards a green economy.
153. However, FSB stressed that there needs to be a mandatory and effective means of engaging with the industry and therefore called on the Committee to include amendments in the Bill that would obligate the Department to carry out a Small and Micro Business Impact Test (SAMBIT) on any strategies brought forward under the legislation.
154. Speakers from the **CIWM** explained that there are opportunities to improve green practices and reduce emissions. Whilst the sector comprises a relatively low proportion of overall emissions, it is an important player in terms of harnessing methane that emanates from waste going to landfill sites.
155. CIWM advocate that the sector’s emission profile could be significantly improved by introducing a ban on biogenic waste being sent to landfill and increasing the

capture of gas from these locations and re-harnessing it as a form of green energy.

156. Further, there is an opportunity for the industry to transition away from its predominantly diesel-based machinery and vehicle fleet to hydrogen and electric power. However, this will require investment and government support is sought to help facilitate such a transition: *“there needs to be some consideration given to how that can be funded...because everything in the public sector comes at a cost, and that cost is not directly attributable to and recoverable from consumers.”*
157. The importance of nature-based approaches was highlighted by **Ulster Wildlife** that advocated for an amendment to be included with regards prioritising nature-based strategies which are known to help reduce the emission of GHGs, or enhance their removal from the atmosphere.
158. The local opportunities of such initiatives were discussed including the prospect of protecting and exploiting the abilities of coastal areas and blue marine as natural carbon capture sources. Further, the need to restore soil-rich grasslands, forests and woodlands was highlighted and that investment should be prioritised for this: *“They all require long-term, significant investment in order to yield the maximum benefits as a climate action and as a biodiversity action.”*
159. The prospect of restoring the health of NI’s peatland was discussed, as it is well-acknowledged that healthy peatlands can be a significant carbon sink. However, given that a significant proportion of local peatland is in private ownership, there is a need to ensure that such restoration is facilitated through, for example, a new farm payment scheme that acts as an incentive.
160. **Sustainable NI** consider that the Bill will not deliver positive benefits for the environment or the local economy given that, in its opinion, it lacks ambition and falls short in a number of areas. In particular it fails to provide for net-zero which undermines the extent of harm already caused to the environment.
161. The “at least 82%” reduction position could potentially preclude private investment locally which would limit the opportunity to grow a local green economy: *“investors*

in renewables might get cold feet about investing in Northern Ireland because of a perceived lack of Government commitment.”

162. While Sustainable NI welcome the public body reporting duty in the Bill, it considers that this should also require adaptation reporting, similar to what is provided for in Scottish legislation.
163. Further, the Bill could be strengthened, in Sustainable NI’s view, via enhancing the Carbon Budgets to set targets for different economic sectors, providing for an independent reporting office and including a specific reference to Just Transition.
164. Several other key messages arose through the discussion with Members, including:
- The importance of the local agri-food sector was acknowledged but it was reflected that the industry’s model of output needs to be re-profiled to respond to the changing climate. Farmers will be profoundly impacted by seasonal changes associated with Climate Change and so it is in their interests to engage in green practices to restore the health of the land
 - Across sectors there is a strong desire for legislation to be put in place so that businesses, public bodies and members of the public are **certain about the policy direction** regarding climate action. The on-going delay and deliberations about legislative passage are a source of frustration: *“The long and the short of it is that there is far too much talk going on and far too little action being taken to pass legislation to enact things going forward.”*
 - It would be beneficial to review the systems and infrastructure in place locally to support recycling rates that will reduce the waste going to landfill, and ultimately reduce emissions
 - There are significant opportunities for NI as a **centre of green energy infrastructure development** and roll-out given its natural landscape and tidal

patterns. However, appropriate policies need to be embedded to attract private firms and investment in manufacturing

- NI is **already falling behind other jurisdictions** in terms of engaging in projects to enhance the health of blue carbon areas and this underpins the urgency to have appropriate legislation in place
- Local businesses will increasingly have to demonstrate their “green credentials” in order to win contracts, export goods and attract investment and therefore it is essential that there is certainty regarding local policy position

165. Professor Jim Skea, Chairperson of the **Scottish Just Transition Commission**, briefed the Committee on 16 December 2021 on the work of the Commission, both in relation to its scoping activities when it was set up for a fixed period of two years in 2016 to examine Just Transition issues in Scotland, and its recent re-establishment in September 2021.

166. The Commission undertook an extensive range of engagement exercises between 2016 and 2018 with various industries and organisations to scope the sectors of the Scottish economy which would be most profoundly affected by Climate Change targets. The Commission subsequently produced a report on its findings which included 24 recommendations for the Scottish government to take forward, with a particular focus on re-skilling workers in the oil and gas extraction industry.

167. In its reinvigorated guise, the Commission will have an advisory role to government based on on-going stakeholder engagement and will also scrutinise annual Just Transition plans which will be produced outlining the steps to be taken by Departments to facilitate Just Transitions across various sectors.

10. Informal Deliberations

168. The Committee commenced its informal deliberations on 18 November 2021 on a thematic basis, considering in turn the provisions relating to:

- The Emissions Targets
- Carbon Budgets
- Reporting Framework
- Independent Oversight
- Duty on Public Bodies
- Climate Change Adaptation
- Miscellaneous Provisions

169. In the course of its deliberations, the Committee considered the main themes arising from its call-for-evidence as well as the evidence it received orally from stakeholders and information provided by DAERA officials in respect of the legislation's policy intent.

The Emissions Targets

170. Clauses 1-3 set interim targets for the years 2030 and 2040 and an overarching goal of reaching at least an 82% reduction in local GHGs by 2050. The Committee noted that the vast majority of respondents to its call-for-evidence, and many stakeholders that gave oral evidence, consider these targets to be unambitious and insufficient to address the damage to the natural environment: there is a strong lobby that supports a net-zero GHG legislative position.

171. Conversely the targets align with the CCC's Sixth Carbon Budget Balanced Pathway scenario which projects what is reasonably attainable in NI. As part of its analysis the CCC recognises NI's role as a large agri-food producer and the associated challenges of reducing emissions in this sector without significant decreases in livestock. The Bill's targets are therefore seen by some stakeholders

as constituting a fair and reasonable contribution to the UK's overall emissions goal, whilst enabling NI to maintain a high degree of agri-food output.

172. The Committee noted that, notwithstanding the anticipated decrease in demand for meat and dairy products that is expected to manifest over the next 10-20 years in the UK, there will be an increase in global calorific requirements associated with an ever-growing population. It is therefore important that NI maintains its ability to generate high-quality agriproducts which are grown within an environmentally sustainable context, rather than imported from other parts of the globe with potentially less stringent regulations and an associated carbon outlay.
173. The Committee discussed the different emission targets across the UK and it was noted that while Scotland has legislated for a net-zero goal by 2045, its geographical topography is very different to NI with large areas of land that are unsuitable for agriculture and therefore can be exploited for carbon sequestration. Therefore, the particularities of each jurisdiction need to be considered when setting GHG reduction targets.
174. Ultimately the Committee could not come to an unanimous position on the emissions targets, with some Members viewing them as sensible and reasonable as part of the UK's overall net-zero by 2050 pledge, and others advocating a more ambitious local position.
175. The Committee did note however that it would be prudent to **amend the provisions** to specifically state that as part of the overall reduction of GHGs by at least 82% by 2050 there will be **a net-zero reduction in CO₂ levels**: this is part of the CCC's advice and aligns with recent reports from the IPCC and other advisory bodies as to what level of action is needed to deliver the Paris Agreement.
176. The DAERA Bill Team was willing to consider such an amendment and brought forward proposed wording to the Committee on 16 December 2021 to Clause 1 (and consequential amendments throughout) that would document that the local CO₂ emissions account will be 100% lower than the baseline by 2050.

177. The strength of opinion from stakeholders in respect of Clauses 4 and 5 which enable DAERA to amend the emissions targets/years and GHG baselines respectively via regulations was discussed. Many respondents articulated a concern that these provisions could potentially be used to delay progress on climate action and therefore considered it was important to explicitly outline a commitment that they would not be used for this purpose.
178. The Committee was minded to support such **an amendment in respect of enshrining a principle of “non-regression”** in this regard. The DAERA Bill Team agreed to consider this and confirmed that the intent of these clauses was to ensure there was sufficient flexibility within the legislation to respond to future changes in Climate Change policy and accounting mechanisms, and not to delay action.
179. The Bill Team discussed the proposals with the Committee on 16 December 2021 and put forward a suggested amendment that Clause 4 could only be used to specify an earlier year or higher percentage in respect of the emissions target: the Committee was content that this effectively ensured that the power could not be used to weaken emissions reduction.
180. However, the Bill Team advised that it would not bring forward an amendment to Clause 5 to adjust the baseline year(s) for different GHGs due to the fact that:
- The baselines are consistent with international GHG accounting practice and are used throughout jurisdictions in the UK
 - Clause 32 stipulates that the powers under Clause 5 can only be used in the context of significant developments in UK or international law/policy relating to Climate Change
 - Restricting Clause 5 further could potentially leave NI in a position where it is measuring, and reporting on, GHG emissions differently to the approach followed across the UK and out with international practice

- The Department is obligated to consult with the CCC before enacting Clause 5 and it is highly likely that the CCC would recommend a change in the overall emissions targets should there be any decision to amend the baseline year for a particular GHG

181. The Committee considered this rationale and did not seek any further clarity or suggest additional amendment.

182. Further, the Committee noted the overwhelming feedback received through its call-for-evidence that there should be explicit reference to transboundary considerations in the Bill, given the unique situation of NI sharing a landmass with a different jurisdiction in ROI, and the potential risks that could flow from having Climate Change policy divergence across the border.

183. The Committee discussed the extent of cross-jurisdiction working in respect of research and development on climate solutions, as well as in specific areas such as the Single Electricity Market. Consequently, the Bill Team agreed to consider an **amendment that would facilitate due regard to cross-border harmonisation** in terms of policy provision and opportunities for collaboration in science, research and knowledge-sharing.

Carbon Budgets

184. On 25 November 2021 the Committee discussed the clauses relating to Carbon Budgeting that will set maximal GHG emissions levels for NI on a 5-yearly basis to ultimately achieve the overall emissions targets leading up to 2050.

185. In terms of Clause 11 the Committee considered suggestions put forward by stakeholders that the scope could be widened to include additional environmental targets such as Nitrogen efficiency, Ammonia emissions and biodiversity targets. The Bill Team advised that such targets would not fall naturally within the remit of

Climate Change legislation and may be better suited to separate law covering biodiversity and ecosystem health: on balance the Committee was content with the clause as drafted.

186. The potential merit in amending Clause 11 to provide a legislative basis for the production of Climate Action Plans outlining the policies to be taken forward across the economy was discussed. Members reflected that there is provision for this under the auspices of the draft Green Growth Strategy that is in development and therefore did not consider it necessary to seek an amendment in this regard.
187. The policy intent of Clause 12 which obligates all Departments to meet the emissions levels set in Carbon Budgets was welcomed by the Committee and Members sought further assurance from DAERA officials regarding the sanctions that would be enforceable for repeated breaches of this responsibility.
188. The Department advised, both orally and in writing, that it is not legally possible for Executive Departments to create penalties and offences against each other and that sanctionable poor performance would be highlighted through the Bill's reporting framework and the associated reputational damage for a Department in the case of repeated breaches:

“There are a number of reporting requirements placed on the Department around the meeting, or otherwise, of targets and carbon budgets. Within these reports or statements the Department will have to identify why a target or budget has or has not been met. Each Northern Ireland department will also have to provide the department with an explanation as to what it considers the reasons to be for why a target has, or has not been met.”

189. The Committee was content with Clauses 13 and 14 which set out detail on the scope and setting of Carbon Budgets and acknowledged that this is a well-established methodology applied in numerous jurisdictions to reduce emissions.

190. Members discussed at length the significant concerns raised by stakeholders about the potential use of the powers under Clause 15 to delay climate action. This clause, subject to Clause 35, enables the Department to carry up to 1% of a Budget back to a preceding period and to carry forward any “unused” part of a Budget forwards.
191. The Bill Team explained that the intent of Clause 15 is not to dilute progress on emissions reduction, but rather to facilitate flexibility in the legislation to adjust Carbon Budgets in the future should there be significant progress in respect of emissions goals or substantive changes in policy/GHG accounting.
192. It was further clarified that there are a number of safeguards built into the legislation regarding Clause 15 which may not have been readily apparent to stakeholders, leading to the manifestation of concerns. The amendment of Carbon Budgets can only be facilitated following:
- Consultation with other Executive Departments; and
 - Consultation with the CCC that **must**, as per Clause 35, provide the following advice in the context of UK/international law and policy, scientific knowledge and technology covering:
 - The appropriate level of the Carbon Budget for the period;
 - The extent to which the Budget should be met by emissions reduction or crediting of carbon units;
 - The contributions of relevant sectors of the economy; and
 - Particular areas of opportunity to contribute to the emissions ceiling
193. In this context the Bill Team advised that it is extremely unlikely that the carry forward of a Budget surplus would be pursued as a means of reducing action as the CCC would in all likelihood advise against this.

194. Nevertheless, given the extent of concerns raised by stakeholders the Committee requested that the Department **consider an amendment in terms of a commitment to “non-regression” with the use of Clause 15.**

195. The Department reported back to the Committee on 16 December 2021 regarding its consideration, following liaison with the Office of the Legislative Counsel (OLC). The Bill Team informed Members that, based on OLC’s advice, the Department was not inclined to amend Clause 15 due to the fact that:

- As drafted Clause 15 does not allow emissions targets to be changed and there could be unintended and undesirable consequences if an amendment was included intimating that Clause 15 could be utilised to do this
- Clause 13 explicitly states that Carbon Budgets must be set at a level to reach the overarching emission targets for 2030, 2040 and 2050 and therefore there is a legal obligation on government to ensure that Carbon Budgets are appropriately constructed to deliver on the emissions targets
- The relevant reports setting out the policies and strategies that will be brought forward to meet a Carbon Budget will have been agreed, committed to and will be in the process of being implemented before any consideration is made to carry forward part of a Budget. Therefore, the use of the power under Clause 15 would not affect any actions being taken to meet the Budget

196. Whilst the Committee was content with this explanation, Members sought DAERA’s assurance that they understood the sentiment expressed by stakeholders for a commitment to non-regression given a perceived lack of trust in the Department and some of its Arm’s Length Bodies in respect of delivering on Climate Change commitments. Officials advised that they understood the concerns and that they considered that there were appropriate legislative safeguards built into the Bill to prevent any action to weaken action to mitigate Climate Change.

197. Clause 16 outlines that DAERA must publish a report detailing the policies and proposals that will be delivered by each Executive Department to meet a Carbon Budget and lay this with the Assembly.
198. In response to the overwhelming feedback from stakeholders, the Committee requested that the Department **consider inclusion of an amendment at Clause 16 that would commit government to considering Just Transition** when setting its plans to deliver on the Carbon Budgets, and ultimately the emission targets.
199. Further, given the distinct importance of the agricultural sector to the local economy and the potential profound impact to small businesses that could be manifest as a result of the legislation, the Committee suggested that specific regard be given to these industries within the Bill.
200. The Bill Team agreed to consider an according amendment and presented a proposal to the Committee on 16 December 2021 that would insert a new Clause 16A with a “just transition principle” as follows:
- Obligating Executive Departments to have regard to a number of considerations when deciding policies/proposals including, but not limited to, supporting environmentally and socially sustainable jobs, low-carbon investment, maintaining consensus through stakeholder engagement and creating decent, fair and high-value work that does not negatively affect the current workforce
 - Supporting the agriculture sector and other industries which are likely to be most affected by action to reduce emissions
 - Reports laid under Clause 16 must explain how the policies and proposals take account of the Just Transition principle

- Reports must also include an assessment of the effect of policies and proposals on small businesses

201. Additionally, the Department proposed that Clause 16A facilitate the Committee's request for transboundary policy harmonisation and suggested inclusion of an obligation on Executive Departments to "*have regard to the desirability of co-ordinating*" policies and proposals with those in place in the UK, ROI and elsewhere, and to consult with appropriate bodies in other jurisdictions as required.

Reporting Framework

202. The Committee discussed at length the proposed system of facilitating progress reports, ostensibly under Clauses 17 to 20, which is that DAERA must:

- Submit progress reports to the Assembly before the end of Year 3 of each Carbon Budget regarding the proposals/policies underway
- Lay a Final Statement regarding the achievement, or otherwise, of a Carbon Budget within two years of that period ending
- Lay a Compliance Statement outlining achievement, or otherwise, of the emissions targets for the years 2030, 2040 and 2050 within two years of the end of each target year

203. Given that a sizeable proportion of stakeholders suggested that there should be more frequent reporting, the Committee discussed the merits of amending the Bill to deliver more regular assessments.

204. The Bill Team advised that there are a number of challenges associated with requiring more frequent reporting obligations including:

- A 24-month time lag from the end of a calendar year and publication of the official GHG emission accounts for that year via the UK GHG Inventory, i.e., the emissions levels for 2021 will be published in 2023
- It will take a period of time for the policies/proposals to have a noticeable effect on emissions and annual changes are likely to be iterative: the utility of more frequent reporting is therefore questionable
- There will be additional resource requirements to facilitate enhanced reporting activities which could otherwise be directed to delivering Climate Change mitigation policies

205. Members were concerned as to how failures to meet Carbon Budget obligations would be remedied speedily under the proposals. Given that Departments will be reviewing progress of their respective Climate Change policies continually and that unofficial GHG emissions levels are published and shared with Departments annually, it was considered that areas of under-performance will be identified before publication of the formal reports as set out in the Bill.

206. In this context the Committee was content with the proposed reporting frequency and did not seek an amendment in this regard.

Independent Oversight

207. Clauses 22-25 make provision for the CCC to submit periodically to DAERA independent reports regarding its assessment of the attainment of Carbon Budgets and emissions targets.

208. While the Committee welcomed the proposed role of the CCC in terms of independent reporting, Members **considered that there was merit in exploring the provision of an additional, locally based oversight and advisory body**, given the strong feedback from stakeholders that this would enhance scrutiny of local policy.

209. The Bill Team advised that it would not be feasible to make prescriptive provision in the Bill for establishment of such a body as the requisite preparatory work has not been completed.
210. Further, it would be prudent to carry out a consultation on the various models that could be adopted to deliver locally based scrutiny and to scope the role of this entity with other structures.
211. To this end the Bill Team suggested an amendment to place a duty on DAERA to carry out a consultation on the options available for a locally-based scrutiny/oversight entity within a reasonable timeframe.
212. The Bill Team presented a suggested addition to the Bill, Clause 28A, to the Committee on 7 January 2022 that would require DAERA to carry out a public consultation within 2 years of the Act being given Royal Assent on the potential models for establishing a body based in NI to deliver advice and scrutiny on Climate Change policy. This will specifically include the potential option of creating an Office of the CCC in the province, following establishment of such an entity in Scotland.
213. The Committee questioned the suggested timeline for completing the consultation and whether this would cause undue delay in implementation of a local oversight entity. The Bill Team clarified that Clause 28A will require DAERA to carry out a consultation, analyse the responses and prepare and publish a report on the outcome within the 2-year timeframe. This will also enable officials to undertake the necessary preparatory work for establishment of such an entity including scoping the staffing and resource needs of the service, and securing additional investment as required.
214. Further the Committee discussed the potential interaction of a newly established entity with the mooted creation of a local Office for Environmental Protection. The

Bill Team advised that this would likely be addressed as a potential option within the consultation process.

Duty on Public Bodies

215. The Committee considered, and was broadly supportive of, the policy intent behind Clause 21 that gives DAERA the authority to impose Climate Change reporting duties on specific public bodies.
216. However, in light of the overwhelming feedback from stakeholders that this should be a general duty implicit in the Bill from the outset, the **Committee requested that the Department consider an according amendment.**
217. The Bill Team advised that they felt that it was important to engage with public authorities in order to determine which organisations the duty should apply to, its scope and any associated additional resource requirements.
218. However, the importance of being more prescriptive with regards implementation of the public duty was acknowledged and the Department suggested that Clause 21 could be amended to require the regulations for the duty to come into effect to be laid with the Assembly within 18 months of the Act's Royal Assent: this would compel the Department to carry out the necessary consultative work.
219. The Committee agreed that there is a need for appropriate stakeholder engagement and co-design of the duty to be placed on public bodies and was content with the Department's suggestion.
220. Further, the Bill Team put forward a suggested amendment to Clause 21 that would follow-through on the request for transboundary considerations made at Clause 16A, requiring public bodies, to which the duty would apply, to consider the desirability of co-ordinating policies with other jurisdictions: the Committee was content to support this amendment.

Adaptation Reporting

221. Clauses 27 and 28 provide for the CCC to report on Adaptation Programmes brought forward by an Executive Department under the Climate Change Act (2008). The Committee considered that this was a welcome aspect of the Bill that will facilitate independent expert assessment of these schemes that have hitherto been evaluated only by local Departments and scrutiny by the Assembly.

Government Department Responsibility

222. In relation to Clause 29 which sets a duty on all Executive Departments to carry out their duties in a manner which is consistent with delivering the emissions targets, the Committee was advised that issues which have arisen regarding broad, less explicit, duty provisions in the Climate Change Act 2008, and other pieces of legislation, were considered in the development of this clause.

223. Placing a duty on all Departments is relatively rare in local legislation and, while there was no formal consultation with other Executive Departments on this specific provision, the Bill Team advised that there was broad consensus that the Bill needed to identify that all Departments have a role in contributing to emissions reduction.

224. The Committee was content with Clause 29 and the provisions as drafted in relation to Department responsibilities.

225. Members discussed the suggestion put forward by stakeholders that there should be a realignment of Executive Departments in order to facilitate a specific Ministerial portfolio for Climate Change. Whilst this is beyond the Committee's remit, Members recognised the potential need for a new governance structure to both deliver the Climate Change agenda, given its far-reaching and cross-cutting scope, and to scrutinise government policy and performance.

Miscellaneous Provisions and Supplementary Matters

226. Clauses 36 to 41 are supportive or consequential in nature outlining definitions to support interpretation of the Bill, its commencement and short title. The Committee was content with these clauses and did not request any related amendments.

227. At its meeting on 9 December 2021 the Committee considered the following issues which had been raised by stakeholders via its call-for-evidence activities that do not relate to any of the specific provisions:

-Inclusion of a “**Biodiversity Duty**” for public bodies to consider the protection of eco-system health when carrying out their functions: the Committee agreed that, on balance, this may not sit appropriately within Climate Change legislation

- Commitment to using **nature-based** solutions to mitigate Climate Change: The Committee agreed **to seek an amendment** in this regard and while the Bill Team reflected the challenges associated with a lack of a generally-accepted definition of what constitutes “nature-based”, agreed to explore options for an amendment.

It subsequently put forward a suggested addition to Clause 16A that would require government Departments to have regard to the desirability of utilising and supporting nature-based projects defined as those which “*protect, restore or sustainably manage ecosystems in order to promote both human well-being and biodiversity or provide other environmental, social and economic benefits*”, when developing their proposals for meeting emissions targets.

-Inclusion of a duty to produce a **Land Use Strategy**: The Committee considered that this may form the basis for a recommendation to the relevant Department(s)

-Inclusion of a need to undertake **gender-proofing** measures with regards policies brought forward to mitigate Climate Change: The Committee considered that this may form the basis for a recommendation to the relevant Department(s)

-Declaration of a **Climate Emergency**: The Committee did not seek an amendment to the Bill in this regard but acknowledged the important signalling effect of such an action from public bodies with regards the extent of the climate crisis

Examiner of Statutory Rules Advice

228. The Committee referred to the Examiner of Statutory Rules (ESR) on 1 October 2021 for consideration of the delegated powers contained in the Bill.

229. The ESR reported on 1 November 2021, concluding that the delegated powers provisions were not inappropriate and did not draw the Committee's attention to any particular Clauses.

Financial Implications

230. It is widely accepted that the transition to a low carbon society will require significant investment and realignment of current economic activity. Ultimately the resources required will be drawn from a number of sources, both private and public, and macroeconomic changes such as taxing green energy, development of the UK's Emissions Trading Scheme and carbon pricing are likely to be necessitated, as outlined in The Treasury's October 2021 *Net Zero Review* report.

231. The Explanatory and Financial Memorandum (EFM) that accompanies the Bill is ostensibly based on an analysis conducted by the CCC, at the Department's request, in terms of the projected costs of pursuing an "at least 82%" emissions target and the key points are as follows:

- The required annualised resource cost peaks at around £300m in the early 2030s

- The resource costs are projected to be less than 1% of 2018 GDP every year through to 2050
- The net cost of the Bill between 2022 and 2050 is estimated to be £4,065,433,780
- As per the Department's draft Regulatory Impact Assessment, the annual cost is projected to be £140m per annum

232. In order to help inform its considerations the Committee wrote to the Department of Finance for its view on the financial implications, and to the RaISe Public Finance Scrutiny Unit for its advice.

233. The Minister for Finance replied on 26 October 2021 and explained that it is within The Executive's devolved authority to allocate funding based on local needs and priorities and therefore it can agree to resource NI's Climate Change programme as it deems necessary out of its total spending allocation.

234. It was further explained that should the UK Government provide any specific funding that is conditional for use specifically for Climate Change policy, then The Executive would be responsible for resourcing any additional costs out of its overall budget.

235. The RaISe Public Finance Scrutiny Unit briefed the Committee on its considerations on 26 November 2021 and the key findings are highlighted below:

- The UK CCC has undertaken the most comprehensive economic modelling associated with Climate Change mitigations
- This modelling assumes "total economic costs" encompassing both public and private expenditure, as well as incurrence of costs for businesses and

households adapting to new technologies, i.e., the resource should not be interpreted as entirely drawn from public expenditure

- While the CCC has not produced a scenario that sees NI reach net-zero by 2050 it is estimated that pursuing this target will incur an additional cost of **up to** £900m per annum by 2050 to facilitate the engineered removal of the 18% gap in emissions (from the 82% projection).
- The CCC has advised that it is reasonable to assume that this additional cost would be incurred on a phased basis over approx. 20 years from 2030 increasing by £45m per annum: **this equates to an annual average additional cost of £326m per year between 2022 and 2050 over and above the costs associated with delivering an 82% reduction**

This information differs markedly from figures produced by the Department in its draft RIA and in the course of its engagement with the Committee in respect of the costs of pursuing net-zero by 2050 which they project to be £900m per annum. The Committee raised this as a concern with the Department and suggested that it would be prudent for the draft RIA to be revised in light of this information

11.Clause-by-Clause Consideration

236. Having considered the range of evidence and information collated through its call-for-evidence and deliberations, the Committee undertook formal clause-by-clause decision making on 13 January 2022.

Section	Committee Consideration
<p style="text-align: center;">Clause 1: The Emissions Target for 2050</p>	<p>The Committee considered Clause 1 as drafted including the proposed areas of amendment.</p> <p>The question was put that the Committee is content with the Clause as drafted.</p> <p>The Committee divided: Ayes 6 Noes 3; Abstain 0</p> <p>AYES: Mrs Rosemary Barton, Mr Tom Buchanan, Mr Harry Harvey, Mr William Irwin, Mr Patsy McGlone, Mr John Blair</p> <p>NOES: Mr Declan McAleer, Mr Philip McGuigan, Ms Clare Bailey</p> <p>Mr Patsy McGlone and Mr John Blair outlined that the wording could be clarified around the pledge to reduce CO₂ emissions by 100% compared to the baseline by 2050 and how this relates to the overarching target to reduce overall greenhouse gas emissions by at least 82%.</p> <p>Ms Clare Bailey requested that the Committee seek legal and policy guidance as to the potential impact for NI should it pursue an emissions target of an at least 82% reduction position by 2050, when other jurisdictions across Great Britain and Ireland have legislated for net-zero. Mr Philip McGuigan, Mr John Blair and Mr Patsy McGlone agreed with this view.</p>

Section	Committee Consideration
	<p>Ms Bailey also requested that the Committee seek legal advice as to whether the UK Climate Change Act 2008 would have to be amended should an at least 82% position be legislated for.</p> <p>The Committee agreed to make the legal requests in order to inform Members for the next legislative phase.</p> <p>Mr Philip McGuigan noted that the vast majority of respondents to the Committee’s call-for-evidence activities expressed support for an overall net-zero greenhouse gas position.</p> <p>Clause 1, Page 1, Line 6 At end insert— ‘(2) The Northern Ireland departments must ensure that the net Northern Ireland emissions account for carbon dioxide for the year 2050 is at least 100% lower than the baseline for carbon dioxide.’ <i>[change to “emissions targets” in the heading to clause 1]</i></p>
<p>Clause 2: The Emissions Target for 2040</p>	<p>The Committee was content with the Clause as drafted.</p> <p>Mr Philip McGuigan outlined reservations about the ambition of the interim emissions target for 2040, which is aligned with the aim of achieving an at least 82% reduction position by 2050.</p>
<p>Clause 3: The Emissions Target for 2030</p>	<p>The Committee was content with the Clause as drafted.</p> <p>Mr Philip McGuigan outlined reservations about the ambition of the interim emissions target for 2030, which is</p>

Section	Committee Consideration
	aligned with the aim of achieving an at least 82% reduction position by 2050.
<p>Clause 4: Power to Amend Emissions Targets</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 4, Page 2</p> <p>Leave out lines 1 and 2 and insert ‘specify—</p> <p>(a) for a particular emissions target, an earlier year than that for the time being specified,</p> <p>(b) for a particular year, a higher percentage than that for the time being specified.’</p>
<p>Clause 5 : Meaning of “baseline”</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 5, Page 2, Line 21</p> <p>At end insert—</p> <p>‘(1A) The baseline for carbon dioxide is the amount of net Northern Ireland emissions of carbon dioxide in 1990.’</p> <p>Clause 5, Page 2, Line 22</p> <p>After ‘amend’ insert ‘(a)’</p> <p>Clause 5, Page 2, Line 23</p> <p>At end insert ‘or</p> <p>‘(b) subsection (1A) so as to specify a different year in relation to carbon dioxide.’</p>
<p>Clause 6: Meaning of “net Northern Ireland emissions account” for a year</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 6, Page 2, Line 36</p> <p>At end insert—</p>

Section	Committee Consideration
	<p>‘(2) Subsection (1) does not apply in relation to the net Northern Ireland emissions account for carbon dioxide for 2050 (see subsection (3)).</p> <p>(3) The net Northern Ireland emissions account for carbon dioxide for 2050 is determined as follows—</p> <p>(a) take the amount of net Northern Ireland emissions of carbon dioxide for 2050 (which is to be determined in accordance with sections 7 and 8),</p> <p>(b) deduct the amount of carbon units that are to be credited to the net Northern Ireland emissions account for carbon dioxide for 2050 (in accordance with regulations under section 9), and</p> <p>(c) add the amount of carbon units that are to be debited from the net Northern Ireland emissions account for carbon dioxide for 2050 (also in accordance with regulations under section 9).’</p> <p>[remove “for a year” from the heading for clause 6]</p>
<p>Clause 7: Meaning of “net Northern Ireland emissions”</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 8: Meaning of “Northern Ireland emissions”: international aviation and shipping</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 9: Crediting and Debiting of Carbon Units</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 9, Page 4, Line 16</p> <p>At end insert—</p> <p>‘(5) The regulations may make provision about the crediting of carbon units to, and the debiting of carbon units from, the net</p>

Section	Committee Consideration
	<p>Northern Ireland emissions account for carbon dioxide for 2050.</p> <p>(6) The amount of carbon units that are to be credited to the net Northern Ireland emissions account for carbon dioxide for 2050 must not be greater than— $\frac{\text{Total credits} \times \text{CO}_2 \text{ emissions}}{\text{Total emissions}}$</p> <p>(7) If—</p> <p>(a) carbon units are credited to the net Northern Ireland emissions account for carbon dioxide for 2050, and</p> <p>(b) carbon units are debited from the net Northern Ireland emissions account for 2050,</p> <p>carbon units must be debited from the net Northern Ireland emissions account for carbon dioxide for 2050; and the amount of carbon units so debited must not be less than— $\frac{\text{Total debits} \times \text{CO}_2 \text{ emissions}}{\text{Total emissions}}$</p> <p>(8) In subsections (6) and (7)—</p> <p>“Total credits” is the amount of carbon units that are credited to the net Northern Ireland emissions account for 2050;</p> <p>“Total debits” is the amount of carbon units that are debited from the net Northern Ireland emissions account for 2050;</p> <p>“CO₂ emissions” is the amount of net Northern Ireland emissions of carbon dioxide for 2050;</p> <p>“Total emissions” is the aggregate amount of net Northern Ireland emissions of each greenhouse gas for 2050.’</p>
<p>Clause 10: Carbon Units: Accounting Scheme</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 11: Carbon Budgets</p>	<p>The Committee was content with the Clause as drafted.</p>

Section	Committee Consideration
<p>Clause 12: Emissions Not to Exceed Carbon Budget</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 13: Setting of Carbon Budgets: Principles</p>	<p>The Committee was content with the Clause as drafted.</p> <p>Clause 13, Page 5, Line 24 Leave out 'target' and insert 'targets'</p>
<p>Clause 14: Setting of Carbon Budgets: Principles</p>	<p>The Committee was content with the Clause as drafted</p>
<p>Clause 15: Carrying Amounts from One Budgetary Period to Another</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 16: Policies and Proposals for Meeting Carbon Budget</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 16A: Proposals and Policies: Transboundary, Just Transition and Small Businesses</p>	<p>The Committee was content with the new Clause as drafted by the Department as follows:</p> <p>16A.—(1) In deciding its proposals and policies for the purposes of section 16, each Northern Ireland department must—</p> <p>(a) have regard to the desirability of co-ordinating those proposals and policies with corresponding proposals and policies in other parts of the United Kingdom, in the Republic of Ireland or elsewhere;</p> <p>(b) consult such persons as it considers appropriate (including, where appropriate, any public body responsible in any other jurisdiction for providing advice or making recommendations in connection with adaptation to, or the mitigation of the effects of, climate change).</p>

Section	Committee Consideration
	<p>(2) In deciding its proposals and policies for the purposes of section 16, each Northern Ireland department must also have regard to— (a) the just transition principle (see subsection (3)), and (b) the desirability of using and supporting nature-based projects (see subsection (4)), whether alone or together with other types of action.</p> <p>(3) The just transition principle is the importance, in taking action to reduce Northern Ireland emissions and increase Northern Ireland removals, of doing so in a manner which, so far as possible, achieves the objectives of— (a) supporting environmentally and socially sustainable jobs, (b) in particular, supporting the agriculture sector and other sectors of the economy in Northern Ireland that are likely to be most affected by action to reduce those emissions and increase those removals, (c) supporting low-carbon investment and infrastructure, (d) developing and maintaining consensus through engagement with (among others) workers, trade unions, communities, non-governmental organisations and representatives of the interests of business and industry, (e) creating decent, fair and high-value work in a way which does not negatively affect the current workforce, (f) contributing to a resource-efficient and sustainable economy, (g) supporting persons who are most affected by climate change, particularly those who may have done the least to cause it or may be the least equipped to adapt to its effects, and (h) reducing poverty and inequality.</p> <p>(4) “Nature-based projects” are projects to protect, restore or sustainably manage ecosystems in order to promote both human well-being and biodiversity or provide other environmental, social and economic benefits.</p>

Section	Committee Consideration
	<p>(5) The duty under subsections (2) and (3) is in addition to, and does not limit, the duty under section 25 of the Northern Ireland (Miscellaneous Provisions) Act 2006 (sustainable development).</p> <p>(6) Each report under section 16 must explain how the proposals and policies set out in the report take account of the just transition principle.</p> <p>(7) Each report under section 16 must include an assessment by the Department of the effect of the proposals and policies set out in the report on small businesses.</p> <p>(8) In subsection (7), “small business” means a business that employs fewer than 50 persons.</p> <p>(9) The Department may by regulations amend subsection (3) or (8).</p> <p>(10) Regulations that amend subsection (8) may define a small business by reference to such matters (or combination of matters) as the Department considers appropriate (including, in particular, the number of its employees, its turnover and its balance sheet).’</p>
<p>Clause 17: Interim Progress Reporting for Budgetary Period</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 18: Final Statement for Budgetary Period</p>	<p>The Committee was content with the Clause as drafted.</p>

Section	Committee Consideration
<p>Clause 19: Proposals and Policies where Carbon Budget Not Met</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 20: Statements on Compliance with Emissions Targets</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 20, Page 9, Line 19 At end insert— '(4A) The statement for 2050 must also state— (a) the total amount of carbon units (if any) that have been credited to or debited from the net Northern Ireland emissions account for carbon dioxide for that year, and (b) the amount of the net Northern Ireland emissions account for carbon dioxide for that year.'</p> <p>Clause 20, Page 9, Line 20 After 'target' insert '(or targets)' After 'has' insert '(or have)'</p> <p>Clause 20, Page 9, Line 22 After 'target' insert '(or each of the targets) for the year'</p> <p>Clause 20, Page 9, Line 24 After 'target' insert '(or each of the targets)'</p> <p>Clause 24, Page 11, Line 27 Leave out 'either' and insert 'any'</p>
<p>Clause 21: Climate Change Reporting by Public Bodies</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 21, Page 9, Line 33</p>

Section	Committee Consideration
	<p>Leave out 'may by regulations' and insert 'must make regulations that'</p> <p>Clause 21, Page 10, Line 30 At end insert— '(8) The first set of regulations made under this section must come into operation before the end of the period of 18 months beginning with the day on which this Act receives Royal Assent.'</p> <p>Clause 21, Page 10, Line 18 At end insert— '(c) the desirability of co-ordinating the proposals and policies referred to in subsection (3)(b) with corresponding proposals and policies in other parts of the United Kingdom, in the Republic of Ireland or elsewhere.'</p>
<p>Clause 22: Progress Report during First Budgetary Period</p>	<p>The Committee was content with the Clause as drafted.</p> <p>Ms Clare Bailey requested that the Committee seek legal clarification as to whether the proposed role of the UK CCC as included in the Bill would necessitate amendment to the UK Climate Change Act 2008. This was included in the request for legal advice referenced in the comments for Clause 1.</p>
<p>Clause 23: Progress Reports after Statement about each Budgetary Period</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 24: Progress Report after Statement about Emissions Target for 2030</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 25: Progress Report after Statement</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p>

Section	Committee Consideration
<p>about Emissions Target for 2040</p>	<p>Clause 25, Page 11, Line 36 For ‘target for 2050 is the highest achievable target’ substitute ‘targets for 2050 are the highest achievable targets’</p> <p>Clause 25, Page 11, Line 37 Leave out ‘not’ and insert ‘either of them is not the highest achievable target’</p>
<p>Clause 26: Response to Progress Reports</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 27: Adaptation Programme Reports</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 28: Response to Adaptation Reports</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 28A: Consultation on Further Oversight</p>	<p>The Committee was content with the new Clause as drafted by the Department as follows:</p> <p>After Clause 28 insert— ‘CHAPTER 2 CONSULTATION ON FURTHER OVERSIGHT</p> <p>Consultation on Northern Ireland based oversight</p> <p>28A.—(1) The Department must consult such persons as it considers appropriate as to whether a body should be established, or a person should be appointed, to exercise in Northern Ireland functions that relate to the making of policy, and taking of action, by public bodies in relation to climate change.</p> <p>(2) In this section, references to a “climate adviser” are to any such body or person.</p>

Section	Committee Consideration
	<p>(3) The consultation must include consultation as to the functions that a climate adviser should exercise, including in particular consultation as to whether the adviser should— (a) provide advice or make recommendations to public bodies in connection with adaptation to, and the mitigation of the effects of, climate change in Northern Ireland; (b) report on— (i) the operation of this Act, (ii) the exercise of functions under it, or (iii) the outcome of the exercise (or the failure to exercise) such functions.</p> <p>(4) The consultation must also include consultation as to- (a) how a climate adviser should, in the exercise of its functions, co-operate with other public bodies that exercise functions that relate to climate change or the environment; (b) the status of a climate adviser (and, in the case of a body, its membership); (c) the staff and resources that should be made available to a climate adviser; (d) whether the establishment or appointment of a climate adviser would be an effective and efficient use of resources in connection with adaptation to, and the mitigation of the effects of, climate change in Northern Ireland.</p> <p>(5) The consultation must also include consultation as to whether— (a) an office for any of the staff of the Committee on Climate Change should be located in Northern Ireland; (b) what functions of the Committee should be exercised by any staff based at such an office.</p> <p>6) The Department must prepare a report on the consultation and— (a) lay the report before the Assembly, and (b) publish it in such manner as the Department considers appropriate.</p>

Section	Committee Consideration
	<p>(7) The Department must lay and publish the report under subsection (6) before the end of the period of 2 years beginning with the day on which this Act receives Royal Assent.'</p> <p>Mr John Blair expressed significant concerns about the provisions for governance and oversight as drafted in the Bill and that the wording in relation to Clause 28A could be made more prescriptive to make specific commitments to the enactment of locally based oversight. Mr Patsy McGlone agreed with this view.</p> <p>Mr Philip McGuigan outlined that whilst it is welcome that DAERA has brought forward the new clause at the request of the Committee, it could be further strengthened through a greater commitment to implementation of a locally-based entity to provide scrutiny and oversight.</p>
<p>Clause 29: Duties to Ensure that Targets etc are Met</p>	<p>The Committee was content with the Clause as drafted subject to the following areas of amendment:</p> <p>Clause 29, Page 12, Line 33 After 'amount' insert 'and that the net Northern Ireland emissions account for carbon dioxide for 2050 is below a certain amount'</p>
<p>Clause 30: Regulations: General</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 31: Regulations that Amend or Add an Emissions Target or Amend a Carbon Budget</p>	<p>The Committee was content with the Clause as drafted.</p>

Section	Committee Consideration
<p>Clause 32: Regulations that Specify a Different Baselines Year or Change a Budgetary Period</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 33: Requirement to Obtain Advice About Proposals to Make Regulations</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 34: Advice About Proposed Regulations Relating to Targets</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 35: Advice About Proposed Regulations Relating to Budgets</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 36: Meaning of “Carbon Unit”</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 37: Meaning of “Greenhouse Gas”</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 38: Meaning and Measurement of Emissions</p>	<p>The Committee was content with the Clause as drafted.</p>
<p>Clause 39: Other Definitions</p>	<p>The Committee was content with the Clause as drafted.</p> <p>Ms Clare Bailey raised a concern that subsection (b), which enables DAERA to consider accepted carbon practice via other international agreements, is unnecessary given that the UN Framework Convention on Climate Change, referenced at subsection (a), is the primary guiding source of reporting practice. This could enable DAERA to be selective with regards future emissions reporting guidance.</p>

Section	Committee Consideration
Clause 40: Commencement	The Committee was content with the Clause as drafted.
Clause 41: Short Title	The Committee was content with the Clause as drafted.

12. Recommendations

237. Following consideration of the wide range of evidence it has collated and subsequent to analysing the issues related to the Bill, the AERA Committee makes the following recommendations and will engage with the relevant Executive Department(s) accordingly:

- Executive Departments should carry out a Small and Micro Business Impact Test (SAMBIT) during the development of proposals or policies enacted to meet the first Carbon Budget, should the Bill receive Royal Assent, to ensure that the needs of small businesses are taken into account when developing policy
- A request should be submitted to DAERA to scope options for the facilitation of a comprehensive Land Use Strategy in NI, with a view to identifying areas for carbon sequestration
- DAERA should be asked to ensure that appropriate mechanisms, and resources, are put in place to educate, and communicate with, the general public and civil society about Climate Change strategies
- DAERA should consider the establishment of a specific fund or support scheme for the agricultural sector in order to facilitate and incentivise local farmers to engage in carbon-friendly practices
- Executive Departments should ensure that gender-proofing is carried out with regards to policies and strategies that are implemented in relation to Climate Change mitigation
- DAERA should consider the role of the GHG Implementation Partnership and how this model of local collaborative stakeholder working can be enhanced to support delivery of the Bill's outcomes

- DAERA, and other Executive Departments, should ensure that the risk of unintended carbon leakage is considered in the development of any plans/policies that are deployed to meet a Carbon Budget

- The Executive Office and Assembly Commission should consider the most appropriate mechanisms for ensuring that there is cross-Department co-ordination and harmonisation of policy direction in terms of Climate Change, and scrutiny of same

- DAERA should develop an operational policy setting out details as to the sources of scientific knowledge and new technology which may influence a decision to bring forward regulations under Clause 31

13. References

- Averchenkova, Fankhauser and Finnegan, 2021, “The impact of strategic climate legislation: evidence from expert interviews on the UK Climate Change Act”, *Climate Policy* 21 (2), pp 251-263
- [Her Majesty's Treasury: Net Zero Review report](#)
- [Intergovernmental Panel on Climate Change, Sixth Assessment Report for Policy Makers, August 2021.](#)
- Lacobuta et.al, 2018, “National climate change mitigation legislation, strategy and targets: a global update”, *Climate Policy* 18 (9), pp 1114-1132
- [Met Office, State of the UK Climate, July 2021](#)
- [Northern Ireland Environmental Statistics Reports](#)
- University College London Research Paper Series, *Probing the Hidden Depths of Climate Law: Analysing national climate change legislation*, 2019
- [UK Committee on Climate Change, Progress Report to Parliament, 2021](#)
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- UN Office for Disaster Risk Reduction, 2020, *Human Costs of Disasters: An Overview of the Last 20 Years 2001-2019*
- [World Meteorological Organization, The Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes 1970-2019, 2021](#)

14.Appendices

[Minutes of Evidence](#)

[Minutes of Proceedings](#)

[Written Submissions](#)

[Consultation Responses and Analysis](#)

[Research Papers](#)