



Northern Ireland
Assembly

Committee for Agriculture, Environment and
Rural Affairs

OFFICIAL REPORT (Hansard)

Climate Change (No. 2) Bill: Climate Northern Ireland;
Friends of the Earth; National Trust; Northern Ireland
Environment Link; RSPB

21 October 2021

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Mr Declan McAleer (Chairperson)
Mr Philip McGuigan (Deputy Chairperson)
Ms Clare Bailey
Mrs Rosemary Barton
Mr William Irwin
Mr Patsy McGlone

Witnesses:

Dr Jade Berman	Climate Northern Ireland
Mr Declan Allison	Friends of the Earth
Ms Laura Neal	Friends of the Earth
Ms Sophie Brown	National Trust
Ms Victoria Magreehan	National Trust
Ms Heather McLachlan	National Trust
Mr Malachy Campbell	Northern Ireland Environment Link
Dr Jonathan Bell	RSPB
Mr Daithí McKay	RSPB

The Chairperson (Mr McAleer): I welcome, via StarLeaf, Mr Daithí McKay and Jonathan Bell from RSPB; Dr Jade Berman from Climate NI; Mr Declan Allison and Ms Laura Neal from Friends of the Earth; Mr Malachy Campbell from NIEL; and Ms Heather McLachlan, Ms Sophie Brown and Ms Victoria Magreehan from the National Trust. You are all very welcome to the Committee. We very much welcome your continued engagement and support on this matter. It is a great help to our scrutiny of the Bill. We will ask one representative from each organisation to provide a brief summary — say, three or four minutes — of your organisation's view on the Climate Change (No. 2) Bill. After we have heard from all the groups, we will open the session for questions and answers with members. Following your opening statements, we will seek questions from members.

We will begin with Declan.

Mr Declan Allison (Friends of the Earth): OK. My colleague Laura will answer some of the more complicated questions later on that I will not know the answers to. You will have seen our previous written submission, which is a bit more detailed than this, but I will quickly reiterate our key findings, and we will then move on to additional evidence.

First of all, we think that the No. 2 Bill does not go far enough, for four primary reasons. First of all, it is not underpinned by the principles of a just transition. Secondly, it does not include a net zero carbon emissions target. Thirdly, it does not include an independent climate commissioner, and, fourthly, it does not include the requirement for departmental climate action plans. Those are four crucial points.

Moving on to our submission, we will do a little bit on the question of scientific evidence versus political decisions, a bit on fair share contributions, and, finally, something on agricultural emissions. The first point is scientific evidence versus political decisions. We argue that the 82% reduction target is political. The Minister and his officials have said many times that the 82% reduction target in the Bill is a scientifically based target. That is not strictly true. The science obviously supports the need for some sort of climate change legislation, but not specifically an 82% target. I will go into a little bit of science to clarify that point. It is generally agreed that, globally, 1.5°C is the target that we cannot really exceed. The UK Government argue that the UK Climate Change Act 2008 is compatible with 1.5°C. If that is our target, then, globally, we cannot emit more than 400 gigatons of carbon dioxide equivalent. We — the entire world — are limited to 400 gigatons if we are to stay below a 1.5°C increase. Given the world population, that equates to about 51 tons per person in total. That is not per year, over a decade or up to 2050; it is in total. Northern Ireland currently emits about 10 tons per person per year. That means that Northern Ireland's carbon budget will be exceeded in about five years. Interestingly, the scientific paper that that evidence comes from was published in 2016, which was five years ago. That means that Northern Ireland has already exceeded, or is close to exceeding, its total carbon budget, which means that we should be carbon zero now, within the next few years or, certainly, by the end of this decade. The idea of 82% by 2050 is therefore way outside the scientific realm.

These are political decisions. The Climate Change Committee (CCC) itself has pretty much said that. For example, it said that there is no technical reason why Northern Ireland cannot be net zero. If it is not a technical reason, what is it? The issues are structural, political and economic, not scientific. Lord Deben, when giving evidence to the Committee, did caveat the assertion that Northern Ireland cannot be zero carbon by 2050 by saying, "under the current circumstances". Again, what are those current circumstances? They are our economic model, political structures, infrastructure and structural barriers. Therefore, 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. The CCC has said that there is an advantage to having a net zero target, and that is that other sectors will not then lobby for the difference. When the CCC compared the 80% target of the UK Climate Change Act, it said that other sectors would not be lobbying for that spare 20%. It is the same here: sectors will not lobby for a disproportionate cut of that 18% shortfall. Again, those decisions are political, not scientific, and it is within the Assembly's remit and competency to deal with them.

I will move on to the notion of a fair share. Again, the Minister would say that it is a fair Bill to deal with Northern Ireland's fair-share contribution to the UK's target. We have already covered what we think are the failings of the CCC's advice and assumptions and the parameters within which it is operating. I will not reiterate those, because they are in our previous submission. As I said, we are emitting 10 tons of CO₂ equivalent per year. Let us put that into perspective in order to get an idea of what is a fair share. The UK average is about 6-8 tons of CO₂ equivalent a year. China emits 7.1 tons of CO₂ a year. Bangladesh produces about 1.23 tons of CO₂ a year, and Kiribati, a small South Pacific island state, produces about 0.95 tons of CO₂ equivalent per year. So our 10 tons, in perspective, is way above a fair-share proportion.

Let us look a little bit at the scientific impacts and what we know from the science about the impacts of climate change. A 1-metre sea level rise, for example, would negatively impact or completely flood about a third of Bangladesh, affecting about 35 million people. Bangladesh's emissions are about 1.23 tons of CO₂ a year. The people of Kiribati, for example, already see their drinking water contaminated by seawater. They are already making drastic plans to evacuate the entire nation or, drastically again, to raise it higher. How you raise a small island or an atoll is beyond me. These are the impacts that we see on other nations whose contribution to the problem is minor compared to ours. Our contribution is 10 times what is being produced by these nations that see the biggest impact. Not only is Northern Ireland producing way above its global fair share of emissions, it produces more than its UK fair share. The argument that this is our fair-share contribution falls short. UK emissions have fallen by about 44% since 1990; ours have fallen by 18% over the same period. We are not pulling our weight. The UK ranks 124th out of 180 nations on emissions. As Northern Ireland's emissions are higher than the UK average, we can assume that we rank even lower. Clearly, this 82% is not a fair-share contribution. We are already producing way above our fair share. We have to ask the question: are the people of Northern Ireland due more of the atmosphere than people in England, Scotland and Wales, or the people in Bangladesh, China or Kiribati? The answer is clearly no. We do not deserve more of

the atmosphere than other people around the world, so why should we be allowed to produce more emissions than other people around the world?

We move on to agricultural emissions. Greenhouse gases from agriculture account for about 26% of Northern Ireland's total, and they are rising: they have risen by about 8% since 1990. Clearly, agriculture is not doing enough here. The principal component of agricultural emissions is methane, which, in the short term, is about 80 times more potent than carbon dioxide. However, it is relatively short-lived. Those two characteristics — being very potent and short-lived — are absolutely crucial. Agricultural emissions will, inevitably, have a long tail. That is the nature of agriculture: emissions from the land and livestock mean that there will be a long tail. When you factor that in, along with the potency and short-term effect of methane, it means that we have to front-load agricultural emissions, rather than allow agriculture to continue on a relatively business-as-usual model. We should front-load the reductions in agricultural emissions, rather than push them back to some later date. According to the global methane assessment from the Climate and Clean Air Coalition, cutting methane emissions will have not only positive impacts for climate change but health and productivity impacts. Members can reference that particular report: there is a link to it in my paper.

Agriculture is not only an emissions problem for the climate; it is a pollution and human health problem. Tackling methane and other agricultural emissions will have positive impacts across the board. We should sign up to the global methane pledge to cut methane emissions by 30% by 2030. That is a separate issue, but it could be incorporated in the Bill. We should also include nitrogen budgets in the Bill. We have carbon budgets, but we should include budgets for nitrogen, which are not being properly included. Nitrogen, ammonia and various oxides of nitrogen have impacts for both human health and pollution, and they should be considered.

To wrap up, more needs to be done in the Bill. The decisions that have been taken are not scientific but political. Northern Ireland has already done less than its fair share. To argue that we are a special case — that we are already behind, so we should be allowed to continue to be behind — is a non-starter. Northern Ireland is already a climate laggard, and we cannot continue with that. We need to catch up, and therefore we need to do more than this Bill allows for. I will leave it there.

The Chairperson (Mr McAleer): Thank you, Declan. We will move to Jade.

Dr Jade Berman (Climate Northern Ireland): Thank you for having me here and taking the time to scrutinise the Bill and to listen. I will focus on adaptation and reducing climate risk, with a bit of a sprinkle of the amendments as well.

We are in a climate crisis. Northern Ireland is already feeling the impacts of the baked-in climate change. We had record temperatures in August, and not just August: September was the warmest joint month on record for Northern Ireland. The climate crisis is not just an environmental problem; it impacts us economically, socially and on our health and every aspect of our future. That means it is up to all of us to treat it as an emergency across all Departments, the public and private sector and civil society. 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. There is a need to strengthen the language in the Bill, beginning with turning "may" to "will". That will strengthen the joints, and muscle can be added with amendments such as a just transition; nitrogen budgets, as in Scottish legislation; nature-based solutions, as in the Republic of Ireland; and clear non-regression principles in the Bill.

There needs to be an equal weighting of adaptation, as it is vital for Northern Ireland to be climate-ready. Currently, we are simply not ready. We are exposed to multiple climate risks, according to the most recent independent climate risk assessment. We are also not investing enough time and research into any potential opportunities. Adaptations should be mainstreamed across all sections of society and be fundamentally place-based. Local authorities and communities have a critical role to play in developing community resilience. Adapting to climate change is a whole-of-government challenge that requires a collaborative, joined-up approach, and that should be reflected in the legislation. Adaptation reporting powers should be mandatory for public bodies after a co-design process, rather than it being imposed. There should also be reporting from all Departments and arm's-length bodies and voluntary reporting, with support, to civil society, so that we can have a resilient net zero future.

Uganda published its Climate Act in September. I am not suggesting that we copy every aspect of that legislation, but it reflects the need to consider the climate in a more holistic fashion. Uganda has legislated to take regard of the available scientific and indigenous knowledge on climate change and

the specific resilience and adaptation needs of vulnerable and marginalised communities. They have included gender and human rights issues, food security, sustainable development and the loss and damage of ecosystem, communities and humankind by climate change. Climate change has also been integrated into the national curriculum, and there is financing and incentives for climate action. There are things that we could learn from Uganda. Those things have not just been plucked from thin air; they have taken them from the Paris agreement. Article 7, section 4, of the Paris agreement states:

"Parties recognize that the current need for adaptation is significant and that greater levels of mitigation can reduce the need for additional adaptation efforts, and that greater adaptation needs can involve greater adaptation costs."

Section 5 states:

"Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions".

That should be included in the climate Bill. It comes from the Paris agreement, and the UK, the Republic of Ireland, the EU and 197 countries around the world have signed up to that agreement.

In the last few days, the Government have stated, in their response to the CCC's independent review of the UK's progress on adaptation:

"policies supporting net zero should be made resilient to current and future climate change risks, to prevent locking in future vulnerabilities, unintended consequences and maladaptation."

We are here to help you to make those amendments to make the Bill the ambitious Act that we need for the future.

The Chairperson (Mr McAleer): OK. Thank you, Jade. We will move to Jonathan Bell.

Dr Jonathan Bell (RSPB): Good afternoon, Chair and everybody. Thank you for the invitation. We welcome the opportunity to offer our views on the Climate Change (No. 2) Bill. We are delighted to see the Committee put such a focus on climate change. I will start by giving a brief overview of some of the key points that we want to raise, and then Daithí will conclude the presentation.

In our evidence submission, we raised a number of fundamental issues with the Climate Change (No. 2) Bill. In short, we feel that the Bill is not ambitious enough, does not reflect the urgency of the situation and contains a number of weaknesses. Its lack of mention of biodiversity, nature and nature-based solutions is a major oversight. I will come back to that after I have discussed some other issues.

First, we feel that the 82% target is not ambitious enough. The 'Sixth Assessment Report' by the Intergovernmental Panel on Climate Change (IPCC) issued "a code red for humanity". In that context, we feel that the Executive should aim for a net zero Bill at the very least. 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.

Secondly, clauses 4 and 5 give substantial power to the Department to change the emissions target years baseline. We see no reason why the Department should be allowed to revise targets down in the future. The Bill should be amended to ensure that targets can be revised only upwards; ie become more ambitious.

Thirdly, the No. 2 Bill, as drafted, does not set out adequate governance arrangements. We know that, historically, environmental governance has been weak in Northern Ireland. We simply cannot afford to repeat those governance flaws in a climate context. To ensure that there is robust scrutiny of how we deliver on our climate ambitions, Northern Ireland legislation should include provisions to establish a climate office with a climate commissioner.

Fourthly, the Bill is not underpinned by just transition principles. We cannot just assume that there will be a just transition; it needs to be explicit in the legislation. A just transition principle would help to reduce the human and economic costs of climate disruption.

Finally, I will major on the lack of mention of nature, nature-based solutions and biodiversity in the Bill, which we feel is a major oversight. The IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Service (IPBES) are united in their view that climate change and biodiversity are interconnected, and that neither can be addressed without effectively addressing the other. A report that was published recently by the joint statutory agencies, including the Northern Ireland Environment Agency (NIEA), called 'Nature Positive 2030', states:

"We need to go high nature and low carbon, tackling the twin crises of biodiversity loss and climate change together ..."

"The crises of biodiversity loss and climate change share many of the same causes and solutions. We need to tackle both crises or we will tackle neither."

In the RSPB's view, there is no better way in which to achieve that supposed ambition than to integrate those two factors through the draft legislation. Therefore, in our view, the Climate Change (No. 2) Bill should be amended in two fundamental ways. The first way is the inclusion of a biodiversity duty to take account of and mitigate the likely impact of carbon targets on the conservation and enhancement of biodiversity. The rationale for that is that there is a risk that deployment of actions to reduce emissions and adapt to climate change may worsen the existing drivers of biodiversity loss. A similar duty is enshrined in the Scottish climate legislation.

Secondly, a nature-based solutions clause that emphasises the importance of high-quality nature-based solutions to address the climate and nature crises should be incorporated. The rationale for that is that we need more than passive benefits to biodiversity from climate change action to ensure that we maximise the contribution of biodiversity to climate change mitigation and adaptation. Active protection and restoration of biodiversity is a nature-based solution. If done well, it reduces emissions of greenhouse gases, enables carbon capture and storage and enhances resilience to the disruptive effects of climate change on land and sea.

Given the growing awareness of the vital role of nature-based solutions to climate change, specific provisions have been incorporated into the Republic of Ireland's Climate Action and Low Carbon Development (Amendment) Act 2021. The clause in that legislation reads:

"to support nature based projects that enhance biodiversity and seek to reduce, or increase the removal of, greenhouse gas emissions or support climate resilience in the State".

Again, it says:

"enhance biodiversity"—.

The Chairperson (Mr McAleer): You have frozen, Jonathan.

Dr Bell: Sorry? Can you hear me? *[Pause.]* Can you hear me, Declan?

The Chairperson (Mr McAleer): Our IT person has suggested that you log out and log back in again, Jonathan, because you are frozen on our screen.

Dr Bell: OK. Can you hear me OK; no?

The Chairperson (Mr McAleer): You are still frozen. You are intermittent, Jonathan. Can Daithí pick up until you log back in again, Jonathan? We are picking up that other members can hear you OK, so the problem might be here in the Building. We are all frozen now. Nothing is happening here. *[Long Pause.]* Daithí, can you see and hear me OK?

Mr Daithí McKay (RSPB): I can, Declan, yes.

The Chairperson (Mr McAleer): Do you want to continue? Sorry; we are having trouble on this side.

Mr McKay: No problem at all.

We feel that the Bill is greatly lacking in both urgency and ambition. As previous contributors said, there is almost universal recognition now that we are living in a nature and climate emergency and that our climate is breaking down. Statistically, these islands are some of the worst in the world for nature loss. The question for us is whether the Climate Change (No. 2) Bill appears to rise to that challenge or not. We argue that, as presented, it does not. The number of potential get-out clauses and holes in the Bill is a concern. There are positive aspects to it as well, which we recognise, but, overall, the emissions reduction target is a major concern. If you look at the other Assemblies and Parliaments, you will see that Edinburgh has a net zero target, Cardiff has a net zero target and Dublin now has a net zero target. Therefore, we are very concerned that we will be setting a very poor example and will be seen as the climate laggard of these islands if we do not set a net zero target, as the bare minimum, in a climate change Act. As Jonathan said, on this piece of draft legislation, we urge the Committee to do two things of interest to the RSPB: one, accept in principle the need for a biodiversity duty; and, two, ensure that a nature-based solutions clause is explicitly included in climate legislation, as was done in the South.

Finally, it is also worth saying that there is a great opportunity for Committee members to consult further with members of the public, especially young members of the community, in two weeks' time. On Saturday 6 November, major rallies will take place in Belfast and Derry. Of course, that is to coincide with the COP26 events in Glasgow. A central theme of the rallies in Belfast and Derry will be the need for a strong and ambitious climate change Act to be passed by the Assembly. RSPB's position is that we should aim for net zero for 2045. Obviously, the CCC produced its report. Since then, we have heard from the IPCC with the release of its report. It is sure to be said that it does not look like things are getting any better.

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 can do the numbers. They look at the statistics, probabilities and possibilities, which are based on the science, and see their chances of having a future of decent standards and a decent quality of life. They also see the threat that climate change poses to the economy. If we continue the way that we are going, with industries continuing to set their face against science, and if we do things slowly rather than fast, there will be no economy comparable to what we have today, either internationally or locally. That will detrimentally affect many industries — especially, it has to be said, agriculture. There is a real need for us to put our long heads on. We may not see the short-term impacts that greatly at a local level — although, arguably, we do — but we face a dangerous situation over the coming decades, so we need to see leadership from the Assembly on this issue.

The Chairperson (Mr McAleer): Thank you, Daithí.

Mr Malachy Campbell (Northern Ireland Environment Link): Thank you, Chair. I thank the Committee for inviting NIEL to give evidence on the Climate Change (No. 2) Bill.

I invite you to cast your minds back to the exceptionally hot July of 2021. On 17 July 2021, a temperature of 31.2°C was recorded in Ballywatticock, near Newtownards. That was hotter than Northern Ireland's previous record temperature of 30.8°C. On 21 July 2021, 31.3°C was recorded at Castledearg. On the following day, a temperature of 31.4°C was recorded in Armagh, although that was not ratified as an official record. According to the Met Office, the average July temperature in Northern Ireland is around 18-19°C. In July 2021, there were 12 days on which the temperature was above 20°C. On three of those days, the temperature was above 31°C, which is more than 12°C above average. Also, in 2021, eight Northern Ireland weather stations recorded their highest ever July temperature. If anyone is not sure of what summer temperatures that are up to 12°C above the average could mean, the wildfires that raged in July in Greece, where temperatures were up to 8°C above the average for that time of year, provide a frightening indication of what the answer might be.

We must remember that this is relevant to Northern Ireland. According to the Fire and Rescue Service, there were more than 1,000 wildfires in the Mournes between 1 April 2016 and 31 March 2020. That, therefore, does not include the major wildfire on Slieve Donard in April of this year. Despite this record-breaking heat, according to the Met Office, the mean temperature for July 2021 in Northern Ireland was approximately 1.9°C above the average. Thinking about how hot July 2021 was compared to other years will help to convey that extremes can be hidden behind averages, and what the Paris agreement's targets really mean.

Climate change poses many other threats, as illustrated by the catastrophic floods in western Germany, Belgium and the Netherlands in August 2021, which caused the death of 242 people and economic losses of over €10 billion. We also need to consider the issues of climate justice and growing inequality, which earlier contributors referred to. The World Bank Group, which has produced a 'Climate Change Action Plan 2021-2025', states:

"Left unchecked, climate change will push 130 million people into poverty over the next decade ... we must go beyond just green projects to support the greening of entire economies."

In 2020, global average temperatures were around 1.2°C above the pre-industrial average. Since 1981, the annual global temperature has increased at an average rate of 0.18°C per decade. Therefore, as the IPCC concluded in its 'Sixth Assessment Report', it is more likely than not that the world will reach the 1.5°C threshold sometime between 2021 and 2040. As the UN Secretary-General stated in the UN's 'State of the Global Climate 2020' report:

"time is fast running out to meet the goals of the Paris Agreement. We need to do more, and faster, now."

The evidence suggests that the public, especially our young people, very much share that view. Therefore, I urge all MLAs to support an appropriately ambitious climate change Bill for Northern Ireland that has, as a minimum, the following four components: first, a net zero target for greenhouse gas emissions, preferably by 2045 or earlier but no later than 2050; secondly, a requirement for climate action plans and carbon budgets for all sectors; thirdly, a mechanism for independent Northern Ireland-based scrutiny through a climate office and climate commissioner; and, fourthly, provision for a just transition to help to support sectors to move to net zero.

Unfortunately, the Climate Change (No. 2) Bill does not have all those components. Furthermore, not only do the Bill's targets for 2040 and 2050 fall short of what NIEL believes that Northern Ireland needs to achieve, but clause 4(1) in Part 1 of the Bill gives the Department the authority to change the targets for the level of emissions reductions and the date by which those are to be achieved. In effect, the Bill's targets are not fixed. For that and other reasons, NIEL does not support the Climate Change (No. 2) Bill.

I will finish by highlighting some of what the Climate Change Committee has stated about the risks of inaction on climate change. The Climate Change Committee's letter to the AERA Minister, dated 1 April, stated:

"Long-term decarbonisation can also bring substantial co-benefits, particularly for the natural environment, climate change adaptation, and public health."

"The greatest risks are associated with failing to act quickly enough."

"a failure to act decisively could have distributional impacts if the rest of the UK accelerates action, with Northern Ireland missing out on the growth and job-creation benefits of low-carbon investment."

"Business models that are not compatible with a Net Zero future are increasingly risky."

I remind the Committee that the AERA Minister stated in the foreword to DAERA's 'Discussion Document on a Northern Ireland Climate Change Bill' earlier this year:

"tackling climate change should be viewed not just as an environmental challenge, but also as an economic opportunity. "

NIEL believes that Northern Ireland should make the most of those opportunities. I urge our political representatives to take appropriately ambitious action and to do so with positivity and optimism, confident that that is the right thing to do. Thank you for your attention.

The Chairperson (Mr McAleer): Thank you very much, Malachy.

Ms Heather McLachlan (National Trust): Good afternoon, everybody, and thank you for the invitation to provide evidence on the Climate Change (No. 2) Bill. The primary role of the National Trust, as a conservation charity, is to look after and provide access to some of Northern Ireland's most

special natural, built and cultural heritage assets. In Northern Ireland, we look after 46 square miles of countryside and manage 108 miles, or 22%, of the coastline. Tackling climate change is one of our key goals as an organisation, and we have our own target of reaching net zero by 2030. This really matters to us.

To be effective, we believe that Northern Ireland's climate change legislation should include four key elements. The first is ambitious targets. Northern Ireland needs to reach net zero as soon as possible. The Bill follows the CCC's recommendation to reduce all greenhouse gases by at least 82% by 2050. That is the absolute minimum target that we should have. We would like to see a more ambitious target and one that we think is achievable, but we can do that only if we have the right policies and funding interventions in place.

The second key element that should be included is appropriate milestones, including five-year carbon budgets. We very much welcome the five-year carbon budgets and interim targets in the Bill and its provisions of setting a cap on emissions and measuring progress against the target. However, we believe that those should be strengthened further. Unused emissions should not be allowed to be carried forward to the next carbon budget. Also, a requirement for detailed climate action plans should be included to ensure that the implementation of the policy and the policy decisions will drive progress forward.

The third key element that is required is an independent reporting and reviewing mechanism. A separate independent reporting and reviewing body should be established in Northern Ireland to champion climate action and report on the effectiveness of any climate change legislation and the plans that are being implemented.

The final and most important element is the principle of non-regression. We are concerned by the provisions in the Bill that allow changes to the targets without suitable limits on how they should be used. A non-regression clause must be added to the Bill. If new evidence indicates that emissions could be reduced more quickly, the target should be able to be strengthened accordingly. However, the Bill must not be allowed to be amended to slow down Northern Ireland's progress to net zero.

More broadly, we want to ensure that the legislation provides a framework for the action that follows. Further amendments should be made to drive action in two key areas: adaptation and nature-based solutions. I pass over to my colleagues Victoria and Sophie, who will go through those briefly.

Ms Victoria Magreehan (National Trust): Thank you for having us today. I will do about two minutes on climate adaptation and the coast. Given how much coast and countryside the National Trust looks after, we are particularly interested in this area of how we plan to adapt to live with climate change risks.

We welcome that the Bill makes provisions for the Department to engage with the existing adaptation reporting power. That is a good thing, but reporting is not enough. To embed the scale of transformation that is needed, we need to go further than just the reporting powers. Reporting powers have been in place for some time, yet the most recent assessment of climate change risk paints a bleak picture of inadequate action and missing knowledge in our devolved setting. The most recent climate change risk assessment — CCRA3 — says that adaptation at governmental level in all Administrations is not occurring at a speed and scale to match the climate change risk, present and future. Priority habitats and species continue to be lost and ecosystem services degraded. It is not a good picture.

As for what we do have in place, the Northern Ireland climate change adaptation plan sets out priorities for urgent adaptation over five years. That is a good piece of work, but having strategies and delivery plans will only go so far without legislative underpinning, which is what is needed. We ask the Committee to consider how to best set a legal duty for government bodies and Departments to monitor and assess the relevant climate risks and then embed adaptation into climate action plans.

I will very quickly say a bit on the coast. In Northern Ireland, the National Trust has been really vocal about the need for a new policy guide to coastal erosion risk-management planning. It is estimated that 19.5% of Northern Ireland's coastline is either eroding or at risk of erosion. We require policies to allow government, communities and businesses to adapt, work with the forces of nature and prepare for the future climate scenarios in which we will live. Northern Ireland lacks historical coastal change data and baselines to monitor the impacts of erosion. We live on an island and the sea level is rising.

The Committee should consider whether, as part of our adaptation response, a legal responsibility to establish a Northern Ireland coastal observatory could be put in the Bill. A coastal observatory would monitor and advise on rates of coastal change, the effects of storms and seasonal behaviour at the coast. In other jurisdictions, coastal observatories enable understanding of climate risk at the coast and allow for informed adaptation by coastal economies, communities and the natural environment.

On that note, I will hand over to Sophie, who will talk about nature-based solutions.

Ms Sophie Brown (National Trust): As part of the National Trust's commitment to achieving net zero emissions by 2030, we have ambitious plans to capture more carbon on the land that we look after, whilst restoring habitats. We want to find the best solutions that, where possible, deliver for people, heritage and biodiversity as well as for the climate. Leading biodiversity and climate experts agree that climate change and biodiversity loss are interconnected and that the twin crises must be tackled together. The recent 'Nature Positive 2030' report, which was prepared by the UK's five environmental agencies, states:

"We need to go high nature and low carbon ... We need to tackle both crises or we will tackle neither."

Restoring the natural environment has a key role to play in climate change mitigation and adaptation. For example, in addition to increasing carbon capture, the restoration of peatlands and woodlands will help to improve biodiversity through habitat creation and provide better natural flood management in a changing climate. Blue carbon solutions, such as the creation of salt marsh, will contribute to coastal adaptation, whilst sequestering carbon and providing valuable habitat. Measures that are taken to reduce carbon must avoid doing further harm to our environment and, where possible, should prioritise nature-based solutions.

The Scottish climate legislation includes a duty to take account of the likely impacts of targets on conservation and the enhancement of biodiversity. The new climate legislation in the Republic of Ireland includes a clause that underlines the importance of high-quality, nature-based solutions to address the climate and nature crises in tandem.

We believe that the Climate Change (No. 2) Bill should be amended to reflect the need to tackle the nature and climate crises together, with an explicit mention of nature-based solutions. If a requirement for climate action plans is added to the Bill as we have suggested, that clause should include provisions to ensure that the plans make use of nature-based solutions.

The Chairperson (Mr McAleer): Thank you very much, Sophie. We will go straight to questions.

Mrs Barton: Thank you to the various contributors. I have listened to each one of you and you certainly have a lot of concerns about the Climate Change (No. 2) Bill, which you have all expressed very well. Can you give me something positive? In your presentations, you have told us exactly what the problems are with it but you have given very little indication of what you see as positive in the Bill. Can each of you give me something positive about the Climate Change (No. 2) Bill?

Ms Laura Neal (Friends of the Earth): The carbon budgeting mechanism in the Bill is OK, but we would suggest that it needs a nitrogen budgeting mechanism to complement it. In general terms, I would suggest that the Bill is OK for about five years ago. We need something that is much more sophisticated. 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, when that legislation has been amended and built on by comparative jurisdictions. We have a different starting point. We really need to explore that further.

The Chairperson (Mr McAleer): Most of the contributors have mentioned the importance of a just transition being enshrined in the Bill. Indeed, we picked up on that earlier when we spoke to the promoters of the first Bill. What shape might that take in this Bill?

Ms Neal: A virtue of us being late to bring forward climate change legislation is that we can see what forms a just transition has taken in comparative legislation. Among neighbouring jurisdictions, Scotland has been clear about what a just transition means and has set that out clearly. We have that precedent and precedents like it. The fact that it is not in the Climate Change (No. 2) Bill at all is a major oversight, given that there is so much literature about its importance to climate adaptation and mitigation. The Scottish example is probably a good one to follow, because it is clear. We should

consider elaborating on it, to reflect NI's unique circumstances. It could be a theoretical application of what a just transition means and who it applies to, it could be something material such as a fund, or it could be both. However, not to have any reference to it at all is a major oversight.

Mrs Barton: Declan, I would like to hear something positive on the Climate Change (No. 2) Bill from the other contributors.

Dr Berman: It is good that the Bill has included adaptation and that the climate adaptation plan will go to independent review, because that does not currently happen. That is an improvement on where we are now.

Dr Bell: The Bill is reasonably strong on carbon budgeting, and the climate adaptation stuff is covered in quite a bit of detail. The technical drafting of the Bill is reasonably strong, as is the structure. However, as we have pointed out, its ambition could be strengthened in a number of areas. For example, the climate adaptation side of things could be strengthened through the inclusion of something on nature-based solutions. There are some strengths in the technical detail and structure of the Bill, but it comes down to ambition and the urgency of the situation that we face.

Mrs Barton: You say that it comes down to ambition. You are all looking for zero carbon by 2050 or 2045. Have you considered the agricultural community? For example, a lot of you referred to the Republic of Ireland and its climate change Bill. We see in the press the discontent among the agricultural community in the South and that they are protesting in various towns around the countryside. We do not want to see a situation like that in Northern Ireland.

Dr Bell: Rosemary, the ambition that I referred to is a net zero target enshrined in law. It is removing the power to amend targets downwards, so that they can only be revised upwards to become more ambitious. It is having the independent oversight in governance. It is including stuff about just transition and nature-based solutions.

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.

Dr Berman: There is a lot of talk about how much cutting greenhouse gases will cost the agricultural community, but there is not a lot of talk about the need to invest to build climate resilience. There are a lot of factors that will cost the agricultural community a lot of money in future. For example, a 4°C scenario could cost Northern Ireland 10% of its present land production, because the likely increase in heat is likely to increase the amount of parasites such as the barber's pole worm.

There are lots of specific examples that we have not properly costed for Northern Ireland. The impact of climate change on soil has been costed at £40 million a year unless we build in adaptation. We need to take into account the cost of not doing something. The Bill should not just be about cutting those greenhouse gases, although that is vital. It must be about building in that adaptation side and making sure that we prevent the costs of not doing something in the future.

Dr Bell: Rosemary, we know that farmers will be critical to this transition. We cannot tackle climate change without them given the landmass that they control or manage. It will require the right mix of investment and support to unearth the untapped potential that we have in our farming community to deliver that low-carbon, nature-friendly transition. Having ambitious climate legislation will be the key driver in realising that.

Mrs Barton: I am not against ambitious climate targets; not at all. I represent a rural area in the west, in Fermanagh and South Tyrone. A lot of my constituents have a farming background. They are not against ambitious climate targets, but those people need to be considered, and what they can achieve needs to be considered. The financial consequences of what is being asked for to have zero carbon by 2050 could annihilate part of the economy in Northern Ireland. That needs to be considered.

Dr Bell: That is why just transition needs to be embedded in climate legislation: to ensure that no sector, community or group is left behind. Just transition principles, potentially the setting up of a just transition commission as we are seeing in Scotland, and an adequate fund to enable a just transition, are the mechanisms that need to be put in place to ensure that no sector, like agriculture, is left behind.

Mr Allison: The problem is that there are assumptions built into the predictions of the destruction of the agricultural sector. The assumptions here are that the agricultural sector will continue with the current model with some tweaking; so, they will change feedstuffs a bit, maybe change some operating things, change the bit of machinery that they use to spread slurry, or things like that. However, it needs to be much more fundamental. There is a fundamental problem with the way that we are producing food. In fact, there is a fundamental problem with pretty much every aspect of our economy and the way that we structure our communities.

There needs to be radical reform across the board, including in agriculture. The principle of a just transition, which needs to be embedded in any legislation, would mean that we do not simply abandon agricultural and rural communities but put in place policies and measures to ensure that they do not get left behind. For example, we have a farming model that is driven towards growth, export and driving up profits. We simply cannot continue in that way.

What we should do is recognise some core, fundamental services that agricultural and rural communities provide. Growing food is one of them, but looking after the land is another. We should recognise that and pay farmers to look after the land. A basic job that they do is looking after the land and environment for everybody, and we should recognise that. We should also recognise that the current industrial model is not good for rural communities.

One of the authors of the Going for Growth strategy said that all we need are 6,000 farms. The Ulster Farmers' Union immediately came back, and said, "No, no, no. We distance ourselves from that", but that is the natural and inevitable outcome of the model that we are following. We suggest that we have a different model that nurtures and supports rural communities, allows for diversification of income streams, and allows for farmers to be recognised as custodians of the land. We say that they are custodians of the land but we do not treat them as custodians of the land. Let us treat them as such and pay them for that vital job that they do, which is not just to produce food but to protect the environment for everybody else.

Mrs Barton: OK, thank you.

The Chairperson (Mr McAleer): Thank you very much for attending this afternoon and giving your evidence on the Bill. It has been very helpful and informative. It was very detailed; I have taken loads of notes, which will give me great food for thought.

Before I sign off, I will say that around 90% of respondents to the consultation indicated that they recognise the importance of having a trans-boundary element. What are your views on the importance of a trans-boundary element to the Bill, given the fact that nature and our climate know no boundaries?

Dr Berman: I am working on a trans-boundary project that looks at best practice with the South and the rest of the UK. There are gaps at the moment. Obviously, we share our water, but there is not currently a groundwater-sharing agreement, so that needs to go in. There needs to be a bit more cohesiveness between policies in the South and the North, especially on how we share things. Bringing that in to the Bill will ensure that it is recognised and that those things are strengthened.

The Chairperson (Mr McAleer): One of the other things that was highlighted is the importance of better preparedness among different sectors. What are your views on achieving that sectoral planning?

Dr Berman: You need climate action plans across all the sectors. In GB, there was one recently from the Prison Service and another one from schools. We are not even at the stage of considering that. At the moment, we are thinking a lot about agriculture, which is vital, but every sector needs to be thinking about it. The reporting power is important because it gets people thinking — everyone from our digital and IT to electrics needs to be thinking about adaptation and mitigation. Those climate action plans are vital. They need to be in the Bill.

Ms McLachlan: Rosemary asked what is good about the Bill. At least it has regard across all public bodies and each of the Departments. That will be crucial. The question is how you make that happen, which goes back to the climate action plans, and how you bring that to the councils and arm's-length public bodies. It would be really helpful to have that in the Bill to see how it will be transferred and deferred, and how we look at incentives in the wider sector and industry to embrace it. It is one of the things that people are talking about, but how do we create action and measure that? This is a great opportunity. It is absolutely crucial for Northern Ireland to have at least one Bill that takes us forward on climate change.

The Chairperson (Mr McAleer): Folks, that is brilliant. We are looking at both Bills and at amendments from the Committee.

Jade, Jonathan, Daithí, Declan, Laura, Malachy, Heather, Sophie and Victoria — I apologise if I have missed anybody — thank you very much for coming here this afternoon and giving us the benefit of your widespread knowledge and views to help us with our scrutiny process. All the best. Take care.