



Northern Ireland  
Assembly

Committee for Agriculture, Environment  
and Rural Affairs

# OFFICIAL REPORT (Hansard)

Climate Change Bill:  
Department of Agriculture, Environment and Rural Affairs

27 May 2021

# NORTHERN IRELAND ASSEMBLY

## Committee for Agriculture, Environment and Rural Affairs

Climate Change Bill: Department of Agriculture, Environment and Rural Affairs

27 May 2021

**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 John Blair  
Mr Maurice Bradley  
Mr Harry Harvey  
Mr William Irwin

**Witnesses:**

Mr Colin Breen	Department of Agriculture, Environment and Rural Affairs
Mr Anthony Courtney	Department of Agriculture, Environment and Rural Affairs
Ms Arlene McGowan	Department of Agriculture, Environment and Rural Affairs

**The Chairperson (Mr McAleer):** I welcome, via StarLeaf, Colin Breen, director of the Department's environmental policy division, and Arlene McGowan and Anthony Courtney, grade 7s from the Department's climate change branch. I invite the officials to brief the Committee, after which members will ask questions.

**Mr Colin Breen (Department of Agriculture, Environment and Rural Affairs):** Good morning. Today we will, hopefully, provide some assistance with the scrutiny of the private Member's Bill (PMB). I will start by saying that I genuinely want a Climate Change Bill that works for everyone in Northern Ireland. I am available to the Committee any time I am required throughout its scrutiny. I just wanted to put that offer in first.

You will have noted that the Minister has said that he will present the Department's draft Bill to the Executive for approval in the coming weeks. That is as much of an update as I have on the Department's Bill at this stage. Before I take your questions on the private Member's Bill, I will cover a few areas that have come up in the Committee, in the Assembly and in the media, just to help you with your scrutiny.

I have noted that there has been a lot of discussion about Northern Ireland doing less than its fair share and about other regions of the UK having to pick up the slack if Northern Ireland does not aim for net zero. That is not true. I just wanted to start with a quote from the Climate Change Committee (CCC) in relation to UK action to get to net zero:

*"these actions will get the UK as a whole to Net Zero in 2050, but Northern Ireland to a reduction of 82% compared to 1990 levels. This figure does not mean lower effort, ambition or policy action — it represents equivalent effort being applied to Northern Ireland's specific circumstances."*

As well as that, I am sure that you will be aware of the issues that were raised by CCC about going too far in relation to reducing emissions and, in particular, the impacts on agriculture, where even a 50% reduction in livestock over and above the already challenging changes that need to be made will still not get us to net zero by 2050. So here is the first question for your scrutiny: should the agriculture sector here be so negatively affected for no overall UK or global gain?

I will give you a bit more on that. Did you know that the difference between at least 82% and net zero for Northern Ireland, whilst likely highly damaging to the local economy on the basis of current evidence, would actually only correspond to a 0.73% reduction in overall UK emissions? I have to ask all of you to balance the economic impacts of aiming for net zero for Northern Ireland as opposed to the UK as a whole with the overall benefit to the UK being recognised in that we play a vital role in food production. As such, a reduction of at least 82% is a fair and equitable contribution. Should we not follow that expert advice? To put it another way, some of the other advice from the CCC indicates that there is a potential extra cost of £900 million per annum to help Northern Ireland to reach net zero by 2050 — not even 2045 — if engineered removal technologies are used. I really have to question whether that is really worth it for an extra 0.73% reduction in UK emissions, which can still be achieved in the UK as a whole without that cost? We have to ask: who would pay for those extra costs? I have done a bit of digging and used the Assembly research paper, and it appears that the HMT principle 10 for allocating funding indicates that any such cost would be borne directly by Northern Ireland and not funded through the UK Government. These are all very essential and important questions for you to consider during detailed scrutiny.

On the question of advice, I have heard some of the CCC advice being paraphrased and used as justification for significantly more stretching targets than the CCC has categorically advised. The particular bit that I am referring to is that the CCC has said that its land use modelling does not take account of the greenhouse gas impacts of using some land for less intensive farming, such as agroecology farming, or other uses, such as wild flower meadows. I did have to search quite hard to find this one, but page 171 of the 448-page 'Sixth Carbon Budget' report directs the reader to chapter 7 of the 340-page methodology report. In that report, there are over 50 pages of information on all of the modelling and scenarios that CCC used to take account of the land use sector. The agroecology bit was simply a paragraph identifying some areas which have not been included in a very comprehensive modelling exercise. It is just good practice to highlight any areas not taken into account in open and transparent modelling. The Committee should appreciate that some further actions which may sequester carbon are not a magic answer. They will all need to be weighed against possible unintended consequences, achievability and the potential other uses for the very limited land resource in Northern Ireland. It is a highly complex area. This is why the Department and, indeed, the other UK Governments rely on the CCC evidence and advice rather than going it alone.

To try and cover this off, I tried to further investigate the role of agroecology in reducing emissions. Whilst it is clear that the less intensive farming practices that agroecology promotes can reduce emissions, it is, as has been said a number of times, not a quick transition. To assume that it is the answer to agriculture also reaching net zero is a stretch. Like the CCC, after my research, I concluded that there simply is not enough information on this to draw reasoned conclusions. The CCC has been sound in its recommendations. Again, I question the argument that, just because an item has not been fully modelled, the CCC advice is somehow lacking in that respect. The explanatory and financial memorandum of the private Member's Bill states that it is informed by the best available science but in this instance, based on my research and that of the CCC, the best available science is that there is just not enough information on this area yet to make assumptions and set targets. Once more, the question is, do we follow the CCC advice in developing this Bill, as other jurisdictions have, or not?

My next point is on the concept of just transition and how the legislation will ensure a just transition. As the Bill is drafted, I cannot understand how there can be a guarantee of a just transition when the current evidence suggests that NI net zero by 2050 will have excessive costs and impacts. We do not have any real information on the impacts of net zero by 2045, but it is reasonable to assume that they will be even higher. It has been highlighted that climate action plans will have rural needs assessments done, but ultimately they will be bound by the 2045 net zero target. If the rural needs assessment says that there will be too great an impact on rural communities, what can actually happen? This needs to be much clearer in the Bill. Likewise, although the cap is subject to a 16-week consultation, if, for example, during the consultation, the energy sector says that net zero by 2045 is not possible, again, what can happen? We are stuck with a legally binding target, and TEO is not

permitted to reduce this target under the legislation. What will the consultation exercise around these actually achieve, and how can there be a just transition when the evidence suggests that a balanced pathway and a credible Northern Ireland contribution would be at least 82% by 2050? The legislation, as drafted, gives no leeway. That needs to be looked at because, if it is working on using emerging evidence and science, it needs to have some ability to take that into account, not just make the target stricter than what has already been advised.

On a final point, I have had some discussion with the CCC that has raised a couple of points. I am sure that you will bring the CCC to the Committee for scrutiny and can get some further detail at that stage. First, the CCC questioned its ability to fulfil the advisory role envisaged in the private Member's Bill, as its advice has clearly been disregarded for the headline targets. It also said that the 2045 net zero target is so far beyond anything that it has modelled, or could model on a sound basis, that it appears likely that Northern Ireland would simply have to buy carbon credits from elsewhere in the UK to meet the target. To me, that means costs with absolutely no benefits. Is that really the way that we want to get to net zero? Is it the best use of resources? Those are questions for you. I probably do not have all the answers, but I am happy to take any questions.

**The Chairperson (Mr McAleer):** Thank you very much, Colin, for that briefing on the Department's Bill and for your analysis of the PMB.

I want to raise a couple of points before I turn to members. I know the UK CCC's position on the matter, but a lot of people are confused. How come the South of Ireland can move towards carbon neutrality by, say, 2050 and its Department of Agriculture, Food and the Marine has set out a series of on-farm actions for farms and farmers to achieve that, but it does not reference the need for herd cuts? In fact, the Irish Farmers' Association (IFA) and other experts and people on the ground say that on-farm measures, rather than herd cuts, are the immediate answer. Have you looked at any other experts in Ireland — in this country — in relation to the matter? I ask that because we are seeing different pictures from different parts of the same island. I am also concerned about taking a less ambitious target. Bearing in mind that the overwhelming majority of our food is produced and processed across the island of Ireland, what would the implications be for our international reputation if one part of the island were to achieve net zero by 2050, in line with the Paris Accord, whereas this part of the island did not? Have you thought of any implications for our trade and agri-food sector?

**Mr Breen:** First, I want to raise a few questions about the Irish Climate Action and Low Carbon Development (Amendment) Bill 2021. The Bill does not commit to net zero. It commits to a "national climate objective" and talks about "a climate neutral economy", which is defined as:

*"a sustainable economy and society where greenhouse gas emissions are balanced or exceeded by the removal of greenhouse gases".*

There is no standard definition of "climate-neutral", but a related term, "carbon-neutral" — this does ring minor alarm bells — simply means the offsetting of emissions through other means without actually reducing emissions. For example, climate neutrality could simply mean that the South of Ireland counts the emissions related to food produced there but sold elsewhere as emissions in the country to which it is sold. I do not say that it does mean that; that will be worked out through scrutiny. Alternatively, it could mean buying back carbon credits. The wording is very odd, so there needs to be a bit more clarity on it. The Bill does not mention net zero anywhere.

Regarding other experts, the UK CCC is the statutory advisory body, and it is probably world renowned in its field of expertise. We take information from other bodies, but we do not have a similar level of detail from them as we have from the CCC. The CCC says what is achievable. While we take scientific evidence from a range of other people, at the end of the day the CCC is the independent advisory body for the UK, as set out in legislation, and it has provided significantly more information than any other bodies. The CCC also draws on all the other available scientific evidence and advice.

I am not sure that you could call the target of "at least 82%" in Northern Ireland less ambitious or unambitious; it is highly ambitious and, on the basis of current evidence, it will be incredibly stretching to get to it. We are not even a quarter of the way there, and we have only another 30 years to get there. Big changes and big reductions are required, so I am not sure that I would call it less ambitious. It is possible that the Irish target is overambitious, given that Ireland's emissions have increased rather than decreased over the last number of years.

In terms of the implications, the UK are selling net zero for the UK, and I do not think there will be any presentational issues with Northern Ireland playing its part in that. There will be more presentational issues if, due to arguments over what target we can reach, we do not come forward quickly enough to get action started. My position is that we want a target that is achievable, but that we ultimately need a climate change Bill, because, if we do not start to do something, we could very quickly be left behind on the world stage, especially with all the food production in the North and South.

**The Chairperson (Mr McAleer):** We are making good progress towards achieving protected geographical indication (PGI) status for our Irish grass-fed beef. If the northern part of the island, where the beef is produced, does not achieve its targets in line with the Paris agreement, do you believe that there will be no differential impact? The South will have achieved it, but the North will not. Wales, England, Scotland and the South of Ireland are moving ahead towards having carbon neutrality by 2050, but we are not. Does that not have implications? Is it not sending out the wrong message about Northern Ireland to the rest of the world?

**Mr Breen:** Under the Paris agreement, the UK as a whole needs to get to that. What has essentially been said is that, for Northern Ireland to continue to play its part as a food producer for the rest of GB, it will have a lower target that takes its specific circumstances into consideration, but it is net zero for the UK overall. I do not see there being any implications, because the alternative is that we move Northern Ireland's food production elsewhere. The CCC has been quite clear on that. On the basis of the paths to net zero and given the current livestock numbers in Northern Ireland, it does not appear that there is a credible pathway to reach net zero by 2050, and yet the private Member's Bill aims to reach that by 2045.

As an official, I can go only by the evidence and advice that I have. I want to be as ambitious as possible, but, in an official capacity, I have to report on the evidence and advice that we have been given and give my assessment of that. My assessment is that, on the basis of all the current evidence and advice, Northern Ireland cannot get to net zero by 2050 but we should certainly aim high. That is why we have said "at least 82%". That does not stop us at 82%. As evidence and science emerges, those targets can be increased. That is probably the only question that I have about the private Member's Bill. There is no leeway or ability to move. The target of net zero by 2045 is set in stone, even though we do not have evidence to back it up. Even if there was a target to be reviewed in a few years or something like that, the question is why we are aiming for a target that does not give any overall benefit to the UK. As I said in my opening remarks, it possibly brings a lot of financial hurt to Northern Ireland when money could probably be better used elsewhere. It makes a relatively small contribution to UK emissions. For Northern Ireland, the difference between "at least 82%" and net zero is a 0.0073% impact on global emissions.

**The Chairperson (Mr McAleer):** Thank you for that, Colin. I am sure that other members will want to pick up on some of the issues that you have raised.

**Mr Blair:** Thank you to Colin and his colleagues for the information. I will ask this so that we have a picture of what preparation the Department did prior to the introduction of the private Member's Bill, with all of the information that was apparently available. What stage was the Department at in bringing forward its own Bill when the private Member's Bill was launched? In addition, you referred to the —.

**Mr Breen:** Sorry, John. Do you mean at the time the Bill was introduced?

**Mr Blair:** Yes.

**Mr Breen:** OK. Thank you. Go ahead.

**Mr Blair:** That will give us a clearer picture and, perhaps, a better understanding of why the private Member's Bill was brought.

The other issue is the Climate Change Committee's sixth carbon audit, which I have referred to at the Committee. I understand the information that you gave us around the detail and information that it had to have in order to reach conclusions. However, if some of that information and evidence gathering was omitted — that is not to criticise the Committee, with its limited resource availability — does it not bring us to a reasonable conclusion that the outcome was an underestimation of the picture?

**Mr Breen:** On your first question, the Bill was introduced at the start of May. The Department's Bill was largely drafted. It is now fully drafted, but we have to get the explanatory and financial memorandum signed off by the Departmental Solicitor's Office (DSO) and by legislative counsel and tidy up some of the impact assessments. My understanding is that the policies proposed by the Minister have sat in the Executive since 24 March and were not discussed or tabled at the Executive. While that went on, we continued to develop the Bill in the expectation that they would be discussed. On Tuesday, the Minister announced at Question Time that he intends to present that draft Bill to the Executive in the coming weeks. Over the past few days, Anthony, Arlene and I have been working hard to dot the i's and cross the t's. A lot of approvals are needed to produce an Executive Bill, even a draft Bill. It is more or less complete. If it is tabled at the Executive, you should be able to see it very soon.

Your other question related to the CCC and what was omitted. I would not say it was omitted. The CCC has said that it has looked at it and there is not enough information and evidence to model with it. As I said in my opening remarks, my feelings are similar, having researched it. There is not enough available science to say what reduction there will be by changing land to wild flower meadows, for example. The end point is whether we have underestimated what can be done. There is also the question of whether we have overestimated what can be done. I do not know if you are aware that, from next year, or possibly this year in Scotland, the UK degraded peatland emissions are going to be included. In Northern Ireland, that is over 2 megatons of carbon, which is about 50% of the agriculture sector, for example. In fact, we are probably going to be in a worse position in six months to a year's time than we are now, because we will have more emissions as more emissions are being counted. That is where my argument is around the Bill having the flexibility to take into account emerging evidence, advice and science. As the private Member's Bill is drafted, there is not enough leeway. I do not think that it is a massive deal to change it to allow a bit more flexibility. You want flexibility with something like this, because we do not have all the answers and are nowhere close to having them. I am not wedded to anything. I am just saying what the official evidence and advice is. That is all I can do. I do not wish to make any political or emotional points on any of this. I am laying out what we have at the minute, and I would like to see more flexibility in the Bill to enable us to take more account of all of those issues.

**Mr Blair:** Thanks for that, Colin. Finally, will the Bill have, built within it, arrangements to assist farmers financially or otherwise in getting to the targets?

**Mr Breen:** No. The Bill that we have drafted and, indeed, the private Member's Bill will require other policies to be made in other sections. Once you start opening up primary legislation to assisting farmers, for example, it is open season on amendments to assist every other sector. It would take a very long process, over several years, to get in all the amendments for all the sectors. The Bill aims, as the private Member's Bill does, to set a framework for legally binding emissions reductions targets and a pathway for how that might be achieved through carbon budgets, reporting etc.

Neither Bill will set that financial assistance. The common agricultural policy is coming up; Sir Peter Kendall is doing his review. There are lots of other things and other mechanisms, and there will, of course, be drivers such as supermarkets wanting less carbon-intensive meat. All those things will help on the financial side, but, no, neither the departmental Bill nor the private Member's Bill provides for that sort of financial assistance. It would be too complex, John.

**Mr Blair:** OK. Thanks for that.

**Ms Bailey:** Thank you, Colin and the team, for being here today. Apologies for the lack of visibility; there are technical problems. Colin, on your first point, I share your sense of alarm bells about the Republic's carbon-neutral terminology, and I am glad to hear that that is being picked up. I will try to be as neutral as possible about the private Member's Bill. As you know, it is in my name and there is cross-party support. This Bill was laid in the Speaker's Office in September 2020: where was the Department's Bill at that point?

**Mr Breen:** I was not even part of the Bill team in September 2020, but I understand that — if I am wrong, Arlene will correct me — a consultation was being drafted and that the CCC was being engaged to give us an idea of what Northern Ireland's equitable contribution would be. That came in December, and the consultation launched around then. Arlene, shake your head if I am wrong.

**Ms Arlene McGowan (Department of Agriculture, Environment and Rural Affairs):** That is correct.

**Mr Breen:** That is where we were at that stage, Clare.

**Ms Bailey:** OK. When the private Member's Bill was submitted, we did not even have the CCC report. We did not have its carbon budget report, which came in December. It was from that, after the Minister had requested of the CCC what Northern Ireland's fair share of the UK's contribution to net zero would be, that the 82% came up. The 82% came up months after the private Member's Bill was laid in the Speaker's Office. Am I right?

**Mr Breen:** I am sorry. I did not realise that the Bill was laid in September; I thought that it was laid more recently. The sixth carbon budget report and the letter — I believe that Minister Poots had already written to the CCC about what Northern Ireland's contribution would be — came at the same time. The carbon budget report came, and then the letter to Northern Ireland came. The two coming at the same time caused a bit of confusion, and the terms were used interchangeably. I have to confess that I used them interchangeably for the first couple of months. They were two separate things that dealt with essentially the same thing: what the UK could do. The sixth carbon budget was very much about 2033-37, whereas the letter to Northern Ireland was about what Northern Ireland's equitable contribution to UK net zero would be.

**Ms McGowan:** The Minister wrote to the Climate Change Committee in February 2019 to ask what an equitable contribution by Northern Ireland to net zero would be. That committee, due to its work on the sixth carbon budget, held off on providing the information until it had published its advice on the sixth carbon budget. That is why we received both in December. The Minister had requested it practically as soon as he became Minister. It was within a matter of weeks.

**Ms Bailey:** OK. Thank you for that. Was that February 2020?

**Mr Breen:** It was 2019.

**Mr Anthony Courtney (Department of Agriculture, Environment and Rural Affairs):** I think that it was February 2020.

**Ms McGowan:** Apologies.

**Ms Bailey:** We did not have the Executive or Ministers then.

**Ms McGowan:** Apologies, it was 2020.

**Mr Breen:** The years and months blend into one another these days.

**Ms Bailey:** That is the problem; time moves so fast, and we have so much to do.

I want to be clear. In February 2020, the Minister wrote to the CCC, but we had not seen anything coming forward from the Department. We know that a climate Bill and an independent environment protection agency were part of the New Decade, New Approach (NDNA) agreement. There have been a number of dates at the Assembly, and, by the way, the Minister has explicitly told us that we are not getting an independent environment protection agency. Anyway, the private Member's Bill was laid with the Speaker's Office back in September. That was before the CCC report and before the figure of 82% came up. I know that the Minister was aware of that, because I did some media engagements with him at the time. He might not have had sight of the Bill, because it was not a public document, but he knew that it had been laid with the Speaker's Office. Were there any discussions in the Department or with the Minister about engaging with the parties that were laying the Bill, or was there, maybe, a desire not to engage at all?

**Mr Breen:** I will cover that. The Minister decided that there would not be an independent environment protection agency during this mandate, because of the level of work that is involved in scoping that out etc. It is a very large piece of work. You are talking about our current environment agency with, maybe, 500-plus staff. Moving to an independent agency is not an overnight thing.

I do not think that we were engaged in discussions about the private Member's Bill. There really has not been much of that. In my time, we were not engaged with it anyway.

**Ms McGowan:** The Department was not officially made aware of the private Member's Bill or given sight of it until it was introduced to the Assembly.

**Ms Bailey:** Thank you very much. Colin, I want to go back to what you said about the CCC. You said that the CCC did not have enough information available to base further modelling on. What information is missing? What information does the CCC require, and what is the Department doing to try to collect that information?

**Mr Breen:** All I mentioned was that there was a paragraph with a caveat, which said that the CCC had not included the role of agroecology or changing to wildflower meadows in its modelling. However, that is a fairly small area, and there just is not enough science there, so it is not something that the Department is moving on. Indeed, I do not believe that it is something that the CCC is currently looking at, because I am sure that it is waiting on further emerging evidence. I have spoken to the CCC recently, and it has said that it believes that its modelling is sound. If you look at the methodology report, as I said, there are over 50 pages of items that it has modelled in relation to land use. Not all of those options are even going to be possible. In any scenario, choices have to be made. The CCC have looked at the best available evidence on the best things that can be done. You could never go through the full CCC methodology report and do everything that it suggests, because there is simply too much. There are seven or eight headings and significant numbers of actions in each. That is the point. There is a balanced pathway, but there are different ways to get to that pathway. The land use and agriculture sector is not a big part of that pathway. The electrification of the United Kingdom is probably the biggest single part of the UK reaching net zero. If you look at that balanced pathway in the 'Sixth Carbon Budget' report and in the letter from Lord Deben to Minister Poots, we are talking about land use and agriculture as part of the solution. However, I do not want to overly focus on land use and agriculture, because there are much bigger challenges on a UK basis.

**The Chairperson (Mr McAleer):** OK—.

**Ms Bailey:** The focus is — sorry, go ahead.

**The Chairperson (Mr McAleer):** I was going to ask if you wanted to come back in again, Clare, because I want to get round the room. You can come back in again if you want.

**Ms Bailey:** OK, Chair, thank you.

**Mr Irwin:** Thank you, Colin, for your clear guidance and advice. The experts in the rest of the UK regions have taken on board the advice of the Climate Change Committee. I will just read one comment:

*"In every scenario for achieving UK Net Zero that we have constructed, Northern Ireland would not get to Net Zero greenhouse gas emissions by 2050."*

Never mind 2045. The Climate Change Committee recommendations ensure that the UK as a whole reaches net zero by 2050. Is that right?

**Mr Breen:** Yes, that is right. All the other jurisdictions in the UK have taken the CCC advice on board to set their targets. Most of them set lower targets and have since moved the targets as things started to improve and as emerging evidence and advice has come.

We are at the same stage with advice as the other jurisdictions. For example, Scotland has been told that it can get to net zero by 2045, albeit with a tailwind scenario. That is a stretching scenario, but it is still a model scenario. Wales has been advised that getting to net zero by 2050 is just about achievable. England has been given its targets, and, as you said, Northern Ireland has been told that there is no credible pathway to net zero by 2050 by the CCC. England, Scotland and Wales have taken the CCC advice into account in legislation; currently, as drafted, the private Member's Bill has not. That is probably my main concern as an official providing evidence.

**Mr Irwin:** It would be totally reckless and silly to ignore the clear guidance of the Climate Change Committee. I have been a farmer all my life, and I understand agriculture. It is a massive contributor to the agri-food sector in Northern Ireland, and we need to be careful how we manage this issue. Even if we were to do what the private Member's Bill proposes, it would reduce the overall reduction by a

minimal amount overall. I urge all those who support the private Member's Bill to be cautious and sensible about it.

**Mr Breen:** We go on advice, and the advice, at the minute, is that there is no credible pathway to net zero. That is all that I can report. The important thing in the climate change debate is to get everybody to buy in and come along with us. I fear that the agriculture sector has been particularly vocal about not coming along with us. The energy strategy is talking about net zero carbon by 2050. That is something that the CCC has modelled to get to the figure of "at least 82%". However, 2045 poses challenges: is there a possibility of increased fuel poverty? Is there a possibility of early scrapping of assets? As technologies emerge, the modelling currently suggests that 2050 would be the time to aim for net zero for carbon. It is really about getting buy-in from all sectors. That is what I would like to do through whatever Bill comes forward.

**Mr McGuigan:** Given some of the stuff that Colin has said, I will just start by reading from the Climate Action and Low Carbon Development (Amendment) Bill 2021, which is from the South. The official departmental website says:

*"The Climate Action and Low Carbon Development (Amendment) Bill 2021 will support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050. It will establish a legally binding framework with clear targets and commitments set in law, and ensure the necessary structures and processes are embedded on a statutory basis".*

That is what the Irish Government say on their website about their Bill. We can quibble about language, but I do not think that there is any dispute that the intent of the Bill is to achieve net zero by 2050.

This is a very important discussion that we are having today, and it is important that we get things right. I note that Colin, in his answer to William, said that the important thing in the climate debate is to bring people along. That is important, Colin, but I think that the important thing in the climate debate is to ensure that we produce laws and take action that provides for a sustainable world for our children, because there is no point in bringing people along if we are not prepared to set ambitious targets and deal with the science of the situation. We are in danger of reaching a point where global warming is irreversible and does untold damage to the environment that we live in. There are two narratives here, and it is important that both are given equal access. We have to get this right.

There has been talk today about the consultation, and I know that the Minister leant heavily on that in the Chamber the other day. Can I ask for clarification? From the Department's point of view, what will happen if the majority of the respondents to the consultation advocate for a Bill that shows ambition and has a target of net zero by 2045?

It is also important to put on record — we could not challenge the Minister the other day in the Chamber — how insulting his comments were about the private Member's Bill. He described it as a "Disney World Bill". That is really insulting, particularly coming from a Minister from a party that gave us the renewable heat incentive (RHI) scheme. It is even more insulting to hear a party that gave us Brexit talking about Disneyland politics. If we were to follow the DUP and the Minister, we would end up, in 20 years, with a scene from 'Apocalypse Now'. I am always mindful of comments that the Minister made less than a year ago about not believing that we were in a climate emergency. All of that needs to be in the background of our thinking when we look at the Bill.

The Bill has been narrowed down to agriculture, but it should not be. Agriculture is an important sector here in the North, and it is important, Colin, as you say, that people and sectors are brought along. However, the Bill is about much more than agriculture; it is about economy, infrastructure and energy, and it is about the North playing its part and being ambitious. Science is evolving, and I note that you talked about other places and regions following the science and the CCC. Scotland has shown more ambition and has set a target of 2045. Wales has also set more-ambitious targets on net zero. In a world where this is becoming the focal point, places will be setting the agenda. The Chair talked about the South. The South, on this island, has said that it wants to achieve net zero at least by 2050 and has set out a road map for agriculture to meet that target. Throughout this process, we will look at the science and take advice from all the people.

Can I ask about the work that you have done? Whilst it should not be focused on agriculture, it has been. Agriculture in the North has evolved over the last 30 to 50 years without any action on climate change, and it will evolve in the next 50 years without any action on climate change. Has there been

any analysis of the impact on climate change, such as the numbers who will be farming and the impact on farming and our economy, if we do not take measures? That is an important argument that we need to have.

**Mr Breen:** I will probably need you to remind me of a few of those questions. I ran out of paper, Philip.

On the Minister's comments, I am not touching any of that. I am here as an official to provide official advice. I am not even getting involved.

Your first question was about the Irish Bill. The Bill does not say "net zero" anywhere in it. I know the website that you are talking about, and it starts off talking about Ireland and net zero, but then, as far as I know, from looking at it, none of the quotes from the officials mentions net zero. I just wanted to raise that as a question. I am sure that their Committee will raise the same question, and Clare has noted the same thing. All I am saying is this: why would you not say it? It is a convoluted way of setting a target. I am not saying anything against the Irish Bill; I am just raising the question of why it does not mention net zero and wanted to make you aware of that. I do not know enough about it to say whether it does or not. "Carbon neutrality" is a term that worries me. It is a good way for businesses etc to greenwash; sometimes, they say that they are carbon-neutral, but, essentially, they buy carbon units from someone else. The term sparked a bit of worry in me. I have had an issue with it for a while. It does not really mean enough.

**Mr McGuigan:** It says "climate neutrality".

**Mr Breen:** "Climate neutrality" does not have any definition anywhere. A definition is given in the Bill, but it is the word "neutrality" that concerns me rather than "net zero". As I said —.

**Mr McGuigan:** "Climate neutrality" refers to:

*"reducing all GHG to the point of zero while eliminating all other negative environmental impacts that an organisation may cause."*

I have just given you a definition of "climate neutrality".

**Mr Breen:** Is that not the definition of "carbon neutrality"? That, again, means that you can buy carbon credits to offset your emissions. You do not actually have to reduce your emissions at all under "carbon neutrality". Let us not get into an argument about this, Philip; I am just raising an issue that I have with the whole neutrality side of things. Clare agrees with me. She and I might not have agreed too often in the Committee, so it is a win for me today. We will not fall out over that. It is something that I wanted to raise about the wording. I do not have the answer to it. It may be perfectly fine and might be changed during the Oireachtas Committee Stage to something a bit more towards net zero. It is just something that I wanted to raise.

What other questions did you have?

**Mr McGuigan:** The consultation results.

**Mr Breen:** There was not an option of net zero by 2045 in the consultation. It was net zero by 2050 or following the evidence. We have been through this one before. There was a large campaign response, which, you told us at the previous meeting, was from Ulster Wildlife. A lot of people just sent in a standard email. As is standard in our consultations, that is taken as a campaign response. The person did not put across their own views on the questions. Many of them may not have read the consultation. Those are grouped. That is to stop people frustrating a consultation response by doing a campaign. I am not saying that this was true in this case, but there can be nefarious reasons for doing that, particularly from people who have a vested interest in a consultation towards something that can make them some money, for example. It is a standard practice. I am happy to defend the way in which we did that.

I think that there were 430 responses that were taken as campaign responses. There may have been some other responses from that same organisation, where the people took time to answer all of the questions and did not just use the standard template. That would not have been flagged up as a campaign response. I cannot say for definite whether that was, because we do not know what the background to everybody was, but, clearly, it is a way to stop that; otherwise, every consultation would

be bombarded with campaign responses. What was to stop another group that had a different view from getting all of its members to do the same thing? You then get into silly territory. That is why we do that.

**The Chairperson (Mr McAleer):** Colin, you said that you are there as an official to present the evidence, but that is conjecture on your part; you are speculating that many may not have read the consultation. That is insulting to people who responded to the consultation.

**Mr Breen:** It was a standard email that was forwarded on, so it is —.

**The Chairperson (Mr McAleer):** Yes, but what are the facts in terms of the responses? Did the majority of the respondents want net zero by 2050 or not?

**Mr Breen:** Once the consultation was weighted, they did not. On the basis of that campaign, yes, more respondents said that they wanted that. I will stick very strongly on this one: if we were to accept that, every consultation that any Department did would just be frustrated by campaign responses from people with vested interests wanting to skew a consultation. Any personal views over and above what was included in the campaign email response were logged and mapped against the questions.

**The Chairperson (Mr McAleer):** OK. Thank you.

**Mr Breen:** I have a few more answers for Philip. Philip talked about the ambition of Scotland and Wales to go for net zero, and that was also dealt with in an earlier question, but it was based on updated CCC advice. Yes, it is more of a stretch. Again, my official advice is to go with the CCC but build enough leeway into the Bill to give flexibility.

There was a question on the need for climate laws to be sustainable laws. Yes, I agree with that. Again, is the definition of sustainability about both the environment and the economy or is it purely environmental? Based on the current evidence, there are too many economic impacts on net-zero for 2045 for Northern Ireland to say that it could be fully sustainable. That is my reading of the situation at present.

**Mr Harvey:** Thank you, Colin. It was nice to hear the sensible approach in your opening statement. I have a few questions that I will go through one at a time. Is the 82% target for 2050 overambitious, especially as we are coming out of COVID?

**Mr Breen:** As I keep saying, we have been advised about the target of at least 82%, and that is where I am coming from. I try not to get my personal thoughts and feelings involved in an official capacity. It is important to do that. I know there are Committee members who are passionate about all the sectors and elements; I am simply trying to convey the advice that we have been given to the Committee. I apologise if the last point on the consultation sounded like conjecture. It was to get across the fact that we try to run every consultation in a standard way. I apologise for making it sound as though I was giving any personal feelings on the matter. I do not want anyone to feel that their response was not valued or counted. However, it is about how we count that to send out the right message in the consultation.

To go back to your point Harry, the information is that we should aim for at least 82%. Therefore, 82% is the bottom line we are aiming for, but we want to aim much higher. The legislation will probably set an achievable target, and then the ambition comes as we develop the policies. At my last Committee appearance, I talked about the greenhouse gas projections. The projections say that Northern Ireland is not well placed with policies, outside of energy policy, to have a lot more emissions. I want to see a Bill get through, and I want to get us on the path. Working in DAERA, I fully expect to be heavily involved in working on that path. I do not want to be too critical of anyone or any Bill, but I want a Bill that works.

**Mr Harvey:** Is the rationale for that to acknowledge the higher agriculture levels in Northern Ireland per head of population in comparison with other parts of the UK?

**Mr Breen:** Yes. The CCC recognised that in its advice. To allow Northern Ireland to continue to provide protein for GB and beyond, the target was set at a lower level than in England, Scotland and Wales. Agriculture still has to do a lot even at that at least 82% target, and it is by no means getting a

bye ball. However, it is about not just shifting emissions elsewhere, and that was one of the important points made by Lord Deben in his letter.

**Mr Harvey:** Will growth in the sector be achievable in tandem with the implementation of the Bill? Will the outworking of the Bill shrink the economy and impact on jobs in the sector?

**Mr Breen:** It depends on how you look at growth. There are lots of types of growth. Growth in livestock is probably the most difficult area, as that is the main cause of emissions in agriculture. However, there are lots of other ways. It is worth looking at the agriculture aspects of the methodology report: low-carbon farming practices, agroforestry, hedging and bioenergy crops. A whole range of other things and other land uses could be considered.

I still think that we need, to some extent, to protect our meat and dairy production in this country because of our welfare standards and the fact that emissions will just be shifted elsewhere as that demand will still be there. To allow for growth in other parts of agriculture, you need to change *[Inaudible owing to poor sound quality]* and we are not quite there yet. We need to work on that. Setting a target that reduces livestock here does not have an overall benefit. Really, that is what the advice tries to get across. Based on that advice, I would agree.

**Mr Harvey:** OK. I appreciate that. Thank you, Colin.

**Mrs Barton:** Thank you. Colin, I want to ask you two questions. You said something about peatlands. I am sorry, but I did not hear it all. Can you repeat what you said about the benefits of peatlands in reaching zero carbon?

**Mr Breen:** Yes, of course. Rosemary, I will put my hands up and say that I am no expert on peatlands. Peatland emissions from highly degraded peatlands across the UK will be counted in our emissions figures for the first time, either this year or next year. The estimate is that Northern Ireland will have an extra 2 megatons of carbon emissions a year from peatlands. That is significant considering that we only have 19-point-something megatons of emissions in total in Northern Ireland. That will put up our emissions.

The answer to that is obviously to repair all of our peatlands, but it is important to realise that repairing peatlands is more about stopping emissions than sequestering a lot of carbon. As I understand it, carbon sequestration from peatlands takes hundreds if not thousands of years, but you need to keep them in a good condition at all times. It is about the amount of emissions that they emit by being damaged, rather than the amount of emissions that they, if you like, suck in by being in good condition. The peatland strategy is due to go out shortly. An important point is that, right now, there is a lot of risk with the emissions coming from peatlands rather than an opportunity because more emissions will be added to our greenhouse gases inventory.

**Mrs Barton:** OK. Thank you for that clarification.

My other question is about the possibility of a second Bill being introduced. I presume that the two Bills will run side by side. Will one take supremacy over the other, or can the two be merged into one? What is the procedure?

**Mr Breen:** That is a massively complicated question, Rosemary. I will probably not do it justice without a solicitor being present.

There is nothing in Northern Ireland to stop two Bills running alongside each other. There is in other jurisdictions. If two things are mutually incompatible, the newer one may usurp the older one. During the legislative passage, one Bill will likely pass before the other. Therefore, you would expect the second Bill to be amended in such a way that it works with the first. It is a confused and odd situation, but, unfortunately, there is nothing in Standing Orders to prevent two Bills. It gets confusing. You would expect the Speaker to work with the right amendments to make sure that the two Bills are compatible. There are probably positives in both Bills, but the ultimate aim is to get a climate change Act in line with New Decade, New Approach.

As I keep repeating, I am just here to give the advice and evidence that we have currently. We will provide a more detailed response to the Committee's call for views to highlight some of the drafting issues with the private Member's Bill that will need to be fixed to make it more operable. That will be at an official level. It is a confusing situation. We keep trying to take legal advice because of the

confusion around it. I do not believe that it has ever happened before in Northern Ireland, but it is not prevented from happening.

**Mrs Barton:** In essence, the two could run parallel to each other for some time.

**Mr Breen:** They could run parallel to each other until the end of the mandate, when, if neither were passed, both would fall, or, if one passed, the other would fall etc. The mandate is short, and the need for climate legislation is clear. It is a confusing situation, I have to say. I do not know whether Anthony or Arlene want to add any more to that; no? That is it, Rosemary. The simple answer is this: yes, the two of them can run alongside each other, and then it is up to the Committee and the Assembly and all of the rest to ensure that they can work with each other or that they do not contradict each other.

**Mrs Barton:** Thank you, Colin.

**Mr M Bradley:** Thanks, Colin, for your information this morning. The UK Climate Change Committee is a renowned organisation. Is its expertise relied on globally and external to the UK, or is it just in the UK?

**Mr Breen:** Its advice relates to the UK only, but I would say that it is a world-renowned and respected body. I imagine that all of those advisory bodies look at each other's evidence. I say that at an unofficial level. I do not know enough about the inner workings. I am sure that the CCC will be coming to brief you at some stage. It is essential that it would brief the Committee. That is probably a good question to ask the CCC too.

**Mr M Bradley:** Thanks very much, Colin. I have no political mindset, just a desire to ensure the best possible outcome for Northern Ireland and the rest of the UK. I strongly believe in a Climate Change Bill for the benefit of our children coming after us. I also make no apology for thinking that successive Governments have not given proper protection to our environment over the past decades. It has been indicated that the cost of the private Member's Bill could be in the region of £900 million. That cost will be borne by the Northern Ireland Budget, if I have picked you up right. That money could go a long way towards other budgets, such as for health, etc. The overall benefit to the UK is a 0.73% reduction, if I have picked you up right, and globally, a 0.0073% reduction.

Just for information, will you clarify something that the Chairperson mentioned? He said that our neighbours in Southern Ireland will achieve their net zero targets by 2050 and that Northern Ireland will not. Is that a factual statement or an aspirational one?

**Mr Breen:** Let us cover the costs first. The extra £900 million per annum is for Northern Ireland to get to net zero if we used engineered removal technologies. We do not actually have any economic impacts for net zero by 2045 yet. The CCC has not been able to model them because they are so far outside of what it feels is possible. As I said in my opening remarks, it thinks that we will just be buying carbon credits from elsewhere in the UK to do it, which, again, is costly.

You are correct. My reading of Her Majesty's Treasury principle 10 on funding is that in something like this, where Northern Ireland is, essentially, deciding to do something against the wider advice, we will bear the costs ourselves. It is fair to assume that it may be more than £900 million. There are costs there already, although it is fairly clear on the basis of the evidence that the costs are outweighed by the benefits of the UK getting to net zero. That is my answer to your first question.

Net zero by 2050 is, as with all legislation, just an aspiration. We have a pathway for UK net zero by 2050, but it is still an aspiration. There are still an awful lot of big changes needed. When I think of some of the changes, they frighten and excite me at the same time. All cars going electric; enough charging points to charge all those cars; all public transport going to hydrogen or something like that; all our heating moving away from gas and oil; "superinsulated" houses; heat pumps: those are big, big changes. I know that 30 years feels like a long time, but is it really a long time to do all that, plus an awful lot more? Changing diets; changing how we work; changing how we live: those are aspirational, but they are a very good aspirations to have. I share in your first comment about wanting to do right by the environment and do right for climate change. That is my ultimate aim. As an official, I will have to work with whatever I am given. I have to provide the advice that net zero by 2045 for Northern Ireland does not appear achievable on present information, but we all need to have climate ambition.

**Mr M Bradley:** Thanks very much for that, Colin. My final point is about something that Rosemary touched on. My concern is that the private Member's Bill and the Department's Bill could be incompatible in some aspects and not complementary in others, but both have the same desired effect: to reduce emissions by 2050. Can we, as a Committee — you might not be able to answer this — scrutinise both Bills at the same time?

**Mr Breen:** I think that the Chair would be better than me at answering that one. Generally, you would scrutinise one piece of legislation, then the next. These are so similar. The Bill still has to be tabled with and agreed by the Executive, introduced and voted on at Second Stage, so there are still a lot of ifs. It would be such an exceptional circumstance. I am sure that, for example, the Assembly researchers could do a paper comparing and contrasting the two Bills and say in which areas they are compatible and incompatible. I will turn that one over to the Chair to see what he thinks.

**The Chairperson (Mr McAleer):** As you said earlier, Colin, we are in unprecedented territory. I know that, for the next six months, the Committee will have an ongoing robust and challenging consultation process and scrutiny process. It would be extremely challenging to graft on another Bill at the same time.

**Mr M Bradley:** Sorry for putting the Chair on the spot.

**Mr Breen:** It was kind of me who did that. Sorry. *[Laughter.]*

**Mr M Bradley:** Thanks very much, Colin.

**The Chairperson (Mr McAleer):** Colin, just before I move on, I want to ask a question. A figure of £900 million per annum for engineered removal technologies was mentioned, and I know that that will make the headlines. Has any analysis been done of the cost of other solutions? Your colleagues who were at last week's Committee meeting talked about on-farm solutions, such as the calving intervals, the finishing times for cattle and the use of clover, minerals and even seaweed in their diets. Has anything been considered outside engineered removal technologies? I mentioned earlier that the South has its marginal abatement cost curve, with 26 action points that include a lot of solutions, which I do not believe are as costly as what is being suggested here. Has any consideration been given to knowledge sharing and that sort of approach as well as to the engineered solutions?

**Mr Breen:** I need to go back a few steps on that one. The original at least 82% target includes all the things that are modelled, such as low-carbon practices, more agroforestry, more hedging, putting some land over to other uses, changing our diets so that there is a 20% reduction in beef and a 35% reduction in dairy — it is possibly the other way about; I cannot remember — and using some land for "biocrops".

A whole range of things have already been modelled in the balanced pathway. That extra £900 million for engineered greenhouse gas removal technologies is to help bridge the gap between the at least 82% and net zero by 2050. That was an extra thing. A lot of the things that you mentioned have already been included, and I suggest that you have a look at the "Agriculture and land use" chapter of 'The Sixth Carbon Budget Methodology Report'. There is a lot modelled in that. That is really where those interventions came in.

We wrote to the CCC to ask how we would get from at least 82% to net zero. It said that it could model not for 2045 but for 2050. It said that every sector could do more than it had thought possible through the tailwind scenario, plus there could be a further 50% reduction in beef and livestock. That would not quite get us to net zero by 2050. Another solution to get us there by 2050 was engineered greenhouse gas removal technologies of about £900 million per annum.

Those are just other options to fill that gap between at least 82% and the net zero for Northern Ireland, from which, as I have said, even with those staggering costs, you are still only getting an extra 0.73% reduction in UK emissions. The greenhouse gas removal technologies would be much more optimally placed elsewhere in the UK. I believe that Scotland is being highlighted as the best location because of all the land it has, etc. That is where those figures come from.

**Mr Irwin:** For me, this is quite simple. We all want to see emissions reduced, and, at the end of the day, the Climate Change Committee's recommendations ensure that the UK reaches net zero by 2050. We are part of the UK, so we are achieving that. Why should we risk wrecking our agri-food

sector to try to reach it by 2045, which will have no real impact? Under the guidelines and recommendations of the Climate Change Committee, even for Northern Ireland, we will reach net zero in the UK by 2050. For me, it is very easy: you accept the Climate Change Committee's recommendations and be sensible about it. It is very simple to me.

**The Chairperson (Mr McAleer):** Thank you, William. That is a comment. Do you want to respond to that, Colin?

**Mr Breen:** I took it as a comment. I made a similar comment in my opening remarks. Do we want to bear those extra economic impacts? That is question for the Committee and not for me.

**Ms Bailey:** Colin, it was good to hear you say that there are probably good things contained in the Bill; that was encouraging.

I want to go back to a few things in there, such as the carbon tracking scheme and the nitrogen budgets. Recent reports show that Northern Ireland ranks 12th worst in the world for biodiversity and that 95% of our lakes do not meet water framework directive standards. The PMB includes indicators for biodiversity, soil quality and water quality. Does the Department agree that there is a need to include those as indicators? The Bill also provides for nitrogen budgets similar to the provisions found in the Scottish Bill. Have officials had any interaction with their Scottish counterparts on how to manage those nitrogen budgets? Lastly, is DAERA content with the duty contained in the Bill to create a tracking scheme for carbon usage, including the carbon units purchased? What type of work would be required to set that scheme up? Is one envisaged? Is that being worked on through the Department's Bill?

**Mr Breen:** With regard to carbon budgets and carbon tracking, the issue — we will say this in the call for views — is that there is probably not enough information in the private Member's Bill to make an assessment of exactly what that would entail. A carbon tracking scheme and the setting of carbon budgets are both pretty essential to any climate change legislation, but we would need more information to make an assessment of how that would be done. We have carbon accounting provisions in the Department's Bill. We will probably feed into the call for views and explain what extra bits you might need in the drafting to make that work.

I have had a few unofficial conversations with Scotland about nitrogen budgets. We have not looked at it in any great detail, because I do not know if we have the infrastructure to fully track all of that; that was raised in the Assembly research paper as well. There probably needs to be more detail on that in the private Member's Bill; some detail on how the secondary regulations might work or something like that. It is difficult for me to comment on that.

Biodiversity, water quality and soil quality are the other areas. I will never say that improving all of those things is not a good thing. The reason that we did not consider those for our Bill is that that would widen the scope of the Bill well beyond a Climate Change Bill and into an environment Bill. Some of those are already governed by retained EU legislation and other legislation, so how they interact with each other would need to be considered. The private Member's Bill probably needs to give a bit more thought to that. They are all things that we need to improve on. Nobody from the Department of Agriculture, Environment and Rural Affairs will ever say that we do not need to improve on those things, but a bit more work needs to be done on the drafting and what that would entail. There is a question of whether the CCC could provide expert advice on biodiversity, water quality and soil quality. At present, it is not set up to do that. A conversation probably needs to be had, in advance of this Bill being passed, to make sure that you are not putting a duty on a body that cannot deliver it or that it would not cost so much to deliver that we could not afford to pay it to do it. I hope that has answered all your questions, Clare. A lot of investigation still needs to be done on some of these points.

**Ms Bailey:** Thank you very much.

**The Chairperson (Mr McAleer):** OK. Colin, Arlene and Anthony, thank you very much for joining us this morning and for your detailed and comprehensive answers to our questions. We are very grateful. Undoubtedly, we will meet you again as the Climate Change Bill or Bills roll out. Thank you. I hope you have a nice day.

**Mr Breen:** Thank you, Chair. I am happy to contribute at any time, as required. I apologise again for my comment on the consultation. I was referring to reports that consultations in other jurisdictions

have been attacked by bots, with not actual people sending in multiple of the same responses. That was one of the reasons that we changed that. I did not mean to offend anybody. I apologise profusely if it might have offended anyone.

**The Chairperson (Mr McAleer):** No problem. Thank you very much, Colin.