



## **Committee for Agriculture, Environment and Rural Affairs**

# **OFFICIAL REPORT (Hansard)**

**Climate Change Bill: Ulster Farmers' Union**

**1 July 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 John Blair  
Mr Harry Harvey  
Mr William Irwin  
Mr Patsy McGlone

### **Witnesses:**

Mr David Brown	Ulster Farmers' Union
Mr Victor Chestnutt	Ulster Farmers' Union
Ms Aileen Lawson	Ulster Farmers' Union

**The Chairperson (Mr McAleer):** I welcome the representatives of the Ulster Farmers' Union (UFU) via StarLeaf: Victor Chestnutt, president; David Brown, deputy president; and Aileen Lawson, senior policy officer. I invite the representatives to brief the Committee, and members will then ask questions.

**Mr Victor Chestnutt (Ulster Farmers' Union):** Good morning, Declan and Committee members. Thanks for the opportunity to give evidence on an important issue for Northern Ireland's agriculture sector. I will introduce my team. On my right is David Brown, who is from that lovely place that Patsy talked about: Florencecourt. We heard that you enjoy popping up and down to that area. I am from the north coast, near the Giant's Causeway. Aileen is our environmental policy officer, and she is joining from home. Unfortunately, she has to isolate because of a schoolchild with positive symptoms. We are glad to be here today.

The UFU has 11,500 family memberships. That is not just a list of people who agreed to put their names on a page; they are paid-up members who have skin in the game. Our structure is such that people are democratically elected from every area across Northern Ireland to commodity and environment committees, which discuss and review UFU policy. We have a very democratic structure behind our organisation and policies.

I hope that you recognise Northern Ireland's dependence on the agri-food sector. The most recent Northern Ireland Food and Drink Association (NIFDA) report said that there are 113,000 jobs in the agri-food industry. There are about 24,000 farmers, about 11,000 of whom underpin all those jobs. This is worth £5.2 billion a year to the Northern Ireland economy. We are not a small or forgotten

industry in Northern Ireland; in fact, we are very important to the financial well-being of our little country, which we all love.

Farming is on the front line of climate change impacts. We are particularly vulnerable to extreme weather events, so we understand more than most that there is a need to address climate change. The UFU supports climate change legislation and the need to tackle emissions from agriculture, but proposals must be fair, credible, backed by relevant evidence and deliver a just transition for everyone.

While Northern Ireland must reduce its impact on the climate, we should not reduce our capacity to produce high-quality, affordable food to high environmental and animal health and welfare standards. Global demand for food is increasing. According to UN forecasts, the number of mouths to feed will rise to nearly 10 billion by 2050. The climate change agreement, the Paris agreement, set ambitious climate change targets but also recognised the importance of safeguarding food security and ending hunger. I urge the Committee to remember that that is part of our responsibility as a nation.

I turn to the particular vulnerabilities of food production systems to the adverse impacts of climate change. We are farming in a global environment, so we need to take a global view. Agricultural production will need to increase by an estimated 60%, according to the UN Food and Agriculture Organization, with strong future demand projected for commodities such as milk and meat. Northern Ireland's grass-based livestock production systems have among the lowest greenhouse gas emissions in Europe per unit of production. Therefore, I will say forcefully and will repeat that it makes sense to produce milk and meat here, rather than in other areas of the world.

Food security will become increasingly important. COVID-19 clearly outlined how sensitive the food supply chain is to global shocks. In 2021, the Climate Change Committee's (CCC) third 'Climate Change Risk Assessment' evidence report outlined that climate change is likely to exacerbate disruptive events that impact on global agricultural production and food supply chains, including droughts, storms, pests and diseases, with increased risks of disruptions associated with multiple production areas. In light of the increasing risk to the food supply chains and particularly food imports, removing the ability to produce high-quality food locally is irresponsible in the extreme. For example, Spain, is on all-bull beef systems, but, if the temperature rises, it may become too warm in northern Spain to produce cattle. In many of those countries, water availability is coming under severe pressure. We do not have those issues in Northern Ireland.

The UK is only around 60% self-sufficient on a calorific basis in milk, meat and eggs from domestic livestock production. There continues to be demand for milk, meat and dairy products. Therefore, the UK and Northern Ireland must not achieve its climate change ambitions by exporting production and our greenhouse gas emissions to other countries: that is commonly known as "carbon leakage". It makes no sense to import product from other countries where emissions are higher and standards are lower in order to meet climate change targets. Take the example of the Australian trade deals. We would be importing product from Australia, where CO<sub>2</sub> emissions per person are 22-ton equivalent, whereas we are at 10-ton equivalent in Northern Ireland. JBS Group, which is one of the largest protein producers in the world and operates mainly in Brazil, said in a statement that the target could become net zero but that it hopes to stop deforestation by 2035. It is absolutely horrendous that it would cut down trees for another 14 years.

Northern Ireland farmers are efficient meat and dairy producers. It is recognised that beef production in western Europe is two and half times more efficient at managing emissions than the global average. Take that into account. Between 1990 and 2017, dairy farming in Northern Ireland reduced its carbon intensity by 34%. Greenhouse gas emissions from beef in the UK are 52% lower than the global average. Our soils are in good shape for organic matter, i.e. carbon, because of the livestock density in Northern Ireland. That is unlike other areas of the world where soils are becoming depleted and low in carbon, which is increasing the use of artificial fertiliser.

We hear the stories of there being 30 harvests left and all the rest of it. Due to the organic matter produced by our livestock, that is not the case in Northern Ireland. I will not stand back and listen to accusations that Northern Ireland farmers are lagging behind and that we lack ambition when it comes to climate change. It has been proven that farmers here do a good job when it comes to tackling emissions. Yes, there is a lot more to be done, but we are up for that challenge. We are proud to feed the nation, and we do an excellent job in Northern Ireland. We can do better. We can learn different ways of doing things. There is always room for improvement.

**Mr David Brown (Ulster Farmers' Union):** Thank you, folks, for the opportunity to speak to you today. Looking back, the initial reason for the private Member's Bill was the absence of a Bill being brought forward by the AERA Minister. Thankfully, that is no longer the case.

First, I want to address the narrative of Northern Ireland being behind, which the president just spoke about. Within that narrative, the target of 82% by 2050, which the Climate Change Committee came out with, appears to be seen as Northern Ireland doing less than the rest of the UK. I will make a few points about the UK targets. As the first nation in the world to bring in climate legislation, we have been part of the implementation of a greenhouse gas programme since 2008. That work is ongoing for the UFU and the industry in Northern Ireland. In 2019, Theresa May's Government put the UK forward as the first major economy to have a net zero target in law. The UK is the only country in the world to have developed a pathway to net zero. The target of 82% by 2050 for Northern Ireland is ambitious, so much so that it asks more of our farmers and of this region than we are asking of the rest of the UK or of the Republic of Ireland (ROI).

I will make a simple analogy. It has already been mentioned that I live in Florencecourt in County Fermanagh. I am 90 miles from our headquarters in Belfast. I have further to go, it takes longer and it costs more. We need to understand that, in reality, this is a huge ask, given where Northern Ireland is and what is needed of its agriculture. If I were to take that analogy further, I would say that the private Member's Bill is the equivalent of asking everybody to live in Belfast in order to reduce emissions and saying that we should just rewild the countryside.

When the CCC came out with its sixth carbon budget in December, it talked about 46% of land in Northern Ireland being released from agricultural production and 150,000 hectares of peatland, which we have quite a bit of in Northern Ireland, being re-wetted to reduce carbon release, making it no longer farmable. I will point out that we came out last December and said that we accepted those recommendations from the Climate Change Committee. However, do not fundamentally misunderstand the challenge of that and what it would mean for agriculture in Northern Ireland.

In 2011, the Greenhouse Gas Implementation Partnership developed a plan for cutting greenhouse gas emissions. As the president said, there has been a 34% reduction in emissions in the dairy sector. That was due to action in four areas: nutrient management, livestock management, renewable energy and fuel efficiency. Alongside those was carbon sequestration; I am sure that we will have more on that later. Most recently, through environmental business development groups, we have begun carbon audits. It is topical among farmers and a focus for the agriculture industry. You may be aware of the recent roll-out of a soil health scheme that will have a carbon element. We trust that that will be world-leading in identifying the status of our soils and what will be needed going forward.

The UFU works with the other four UK unions highlighting those positive actions, and we will be involved in the UN Climate Change Conference of the Parties (COP26) later in the year. There has been a huge research agenda. We are blessed in Northern Ireland to have the Agri-Food and Biosciences Institute (AFBI) and Queen's University on our doorstep. They are to the forefront in that key research work. However, it is important to understand that the correct legislative framework is needed to allow that good work to continue. The private Member's Bill does not offer that. It should not be used to bring this legislation forward. That mechanism would not be used for other policy issues, and proper scrutiny has not taken place. You will be aware from your recent engagement with Lord Deben that, in his evidence, he commented that it is not achievable, it is not scientifically possible and it is morally wrong and incompatible with the recommendations of his expert working group. The CCC advice highlighted that, with even a 50% cut in livestock numbers and a substantial increase in forestry, we would not hit net zero by 2050.

There needs to be an understanding that biogenic methane and all the things that are natural processes in food production cannot be easily dismissed in the manner that might be available to other sectors. Even DAERA officials have pointed to their concerns about the fact that the private Member's Bill would deliver only a further 0.73% reduction and would have a massive economic impact on Northern Ireland's agriculture sector and, indeed, the Northern Ireland economy. You have probably heard in the past week or so that we, as an industry, have commissioned independent KPMG consultants to carry out an impact assessment. That will be made available to the Committee in due course.

It is important to understand that, while greenhouse gases and emissions from farms can be reduced, they cannot be eliminated. Cutting livestock numbers and reducing agricultural production in Northern Ireland would not solve what is a global challenge of feeding a growing population. As has been mentioned, that food production would be exported elsewhere.

The CCC recommended an 82% reduction by 2050. That is not an easy option. It is a huge challenge for us as an agriculture sector. Do not believe for one moment that, when I was rolled out for radio interviews in December, it was universally welcomed by our membership. It is a huge challenge to farmers and the agricultural sector.

Thus far, Northern Ireland is the only region to ignore expert advice when proposing a climate change target. When you have experts, such as the internationally renowned CCC, clearly spelling out concerns about the 2045 target and hear or see no credible counter arguments, how would that engage or instil confidence among the farming community? As the president said, our members have indicated clearly that they no confidence in that recommendation and those who support it. That is the challenge that we, as an organisation, have ahead of us.

**Ms Aileen Lawson (Ulster Farmers' Union):** Good morning, Committee, and thank you for the invite. Victor and David have set out some of the key issues for us, but I would like to make some additional points.

There are many aspects to the Bill that there is a lack of information on, which makes it difficult for us to provide you with detailed comments. Take, for example, the additional environmental targets on water quality and so forth. What do those mean? How do they link with existing legislation? How does that work? How do the reporting requirements tie up with each other? We do not know anything about what they mean. On the carbon usage tracker scheme, again, there is little information in the papers that have been presented to date to give us confidence to give you a further assessment of what that could mean.

The lack of accountability of the proposed climate change commissioner is also concerning. The powers that they will have to obtain documents and information seem excessive and should be removed from the Bill. A just transition commission should be established to ensure that there are no negative impacts on specific sectors or communities. That has been successful in Scotland, and our colleagues in the National Farmers Union of Scotland have reported positively about the commission's work there. Farmers in rural communities should not carry the burden of climate action. The private Member's Bill would result in significant consequences for rural communities and farming families and will not deliver a just transition.

Last week, you heard from industry representatives who had issues with how methane should be measured, including the use of GWP\* (global warming potential). That needs to be carefully considered and understood as part of your process, and we encourage you to bring in the experts to discuss it. New Zealand has gone down the route of having a separate target for biogenic methane, and there have been discussions about doing that in the South. That may be appropriate here too, given the similarities in our economies.

It is vital that the Committee understands the differences between accounting methods for greenhouse gas emissions. In the national inventory that is used in the legislative targets, agriculture is measured on its gross emissions. Those are emissions from livestock, fertiliser, farm machinery and things like that. However, the role that agriculture plays in sequestering carbon is not attributed to the agriculture inventory; instead, that goes into the land-use change inventory and is used to offset all of society's emissions.

It is possible for some farms to be at net zero, but there are lots of ways of calculating carbon on farms. Various assumptions can be made and different methodologies used. Those are not necessarily comparable to a legislative net zero target. You need to look at all of the detail before you can link any of those things. Agriculture needs to be measured on net emissions. We should take account of carbon sequestration, properly recognise it, accurately measure it on farms and attribute it to farmers first.

**Mr Chestnutt:** I want to pick up on Aileen's point about the sequestration that happens on our farms not being attributed to our outputs or our livestock. I will put this in layman's terms, as I am a fairly simple guy. My farm is no different from a lot of farms in Northern Ireland. During my farming career, I have planted about five miles of hedges. The sequestration of carbon in those hedges should be used to offset the emissions from my livestock; it is not for sending my neighbour or my local MLA on two foreign holidays a year. From talking to some of you, I know that you do not want to touch your holidays because you enjoy them, but I am sorry: I want to offset the emissions on my farm from my livestock first. If there is room left, society can have it, but, first of all, we must be allowed to use the sequestration that happens on our lands, with our grasslands and our hedges, to offset the emissions from our livestock. In my book, it is completely crazy to consider that as something else.

We are the only sector that can work on both sides of the balance of this. Yes, our livestock breathe out and create methane, which is broken down in the atmosphere over 12 years. The argument is that, if there is no increase in the numbers, we are not contributing to global warming. We have those emissions — they are a fact of life — but we can also sequester and improve sequestration on our farms. My farm is near the coast and was very bare when I took it over. It is my ambition to have a hedge around every field. That is some of the low-hanging fruit of things that we can do. Biodiversity is increasing on my farm. If I were to reduce my stocking rate in line with this Climate Change Bill, biodiversity on my farm would undoubtedly suffer.

Northern Ireland must reduce its impact on the climate, but we should not reduce our capacity to feed UK consumers with high-quality, affordable food that is produced to high environmental, animal health and welfare standards. The UK, including Northern Ireland, must not achieve its climate change ambitions by exporting production and our greenhouse gas emissions to other countries. That would have an adverse effect. We would add to climate change. The UFU is strongly opposed to a forced reduction in output from the agriculture sector. Food security will become increasingly important in the years ahead and needs to be a key consideration. While the Bill is a framework, it will set the policy direction — otherwise, what is the point of having a target? — and, therefore, cannot be looked at in isolation. Ensuring a profitable and productive agriculture sector while reducing emissions is challenging, but it is an essential task.

If Northern Ireland agriculture is appropriately equipped and empowered with the right tools and support, it will play a key role in tackling climate change. However, the Bill would not allow that to happen. The Bill would have an adverse effect globally and may well increase worldwide problems with climate change. As legislators, you need to be honest. If you want 2045 as a target, that will require radical action, such as devastating livestock cuts. It will require radical action not just by farmers but all of society. To date, no one has presented any credible evidence that that drastic approach will not be needed to deliver this target. It is time to turn away from orange and green issues. There is no such thing as an orange cow or a green cow. Take the politics out of the debate and deliver credible legislation for all of Northern Ireland that we all can have confidence in and can work together to deliver.

The Bill would have a more detrimental effect on Northern Ireland than any trade deal. The food that we produce is of a high quality and high standard and is grass-fed. Many areas of the world would give their right arm to have our sustainable farming systems; in fact, an American speaker who was over at a cereals conference highlighted Northern Ireland's system of farming as the most sustainable in the world. We have heard that ROI is not taking this approach. Our counterparts, the farmers in the South, have been outside the Dáil with a cow [*Inaudible owing to poor sound quality.*]. The Irish Farmers' Association (IFA) is on the streets. Our farmers will not be found wanting in getting the public's attention. We will not be made scapegoats for society. Net zero by 2045, under the current accounting methods, is complete nonsense.

**The Chairperson (Mr McAleer):** Thank you, Victor, David and Aileen, for your detailed presentation. A number of members want to ask questions, but I will kick off. You referred to the role of the commissioner. I know that having various groups that perhaps are not accountable or are like quangos has caused challenges, certainly for farm development applications. How should any climate legislation that comes about be overseen and implemented? How should the Department be held to account for climate change mitigation and the implementation of any Act that comes about?

**Mr Chestnutt:** I will pass over to Aileen to answer that one.

**Ms Lawson:** Thank you, Declan. You alluded to the fact that we have shared concerns about the Shared Environmental Service (SES) and the lack of what would appear to be accountability to any public representatives. On the issue of a climate change commissioner, we want to see some sort of public accountability brought into the Bill. Whether that is to the Assembly, the Executive or whatever, you need to examine that. The Climate Change Committee already holds each of the devolved Administrations and the Westminster Government to account, so, effectively, there is a degree of accountability already there. However, we encourage you to make sure that that is included in the Bill, given our previous experiences with other organisations. It needs to be developed and tightened up in the proposals.

**The Chairperson (Mr McAleer):** Aileen, you mentioned the Just Transition Commission in Scotland. What shape should such a commission take here? What is your vision for having one here? What

form would it take? To whom would it be accountable? Where would it be located in government, for example?

**Ms Lawson:** From what I understand, it does not have any statutory powers in Scotland at the minute, but, given the success that it has had, that is being re-examined under the new Administration in Scotland. From what I understand, it is an independent organisation that takes evidence from various groups and so forth and provides reports to the Government. We need to consider providing that here. From what we have heard from colleagues in Scotland, they are clearly able to spell out their key concerns, as we are doing today, about the impact of climate change legislation on farmers and rural communities. That has helped to ensure that those genuine concerns are listened to and included in various reports, before recommendations, targets, legislation and so forth are made.

**The Chairperson (Mr McAleer):** Finally, all three of you mentioned the issue of methane and the fact that New Zealand has a separate target. Do you think that we should consider including that in climate change legislation here?

**Ms Lawson:** It needs to be looked at, Declan. We do not have any strong opinions on it. Certainly, we need to look at the accounting methods, such as GWP\*, and how those link into the inventory and at whether that sits as a separate target or whether it is a separate target for agriculture. All those things need to be looked at in the round. It needs a lot of further debate and discussion. What we suggest is that you talk to the experts at the University of Oxford, for example, and look into that in a lot more detail. Certainly, it needs to be considered further. The same is happening south of the border, and New Zealand has that in its legislation.

**The Chairperson (Mr McAleer):** Thank you, Aileen.

**Mr McGuigan:** I have written down three things: just transition, climate commissioner and methane. *[Laughter.]* It is important that I declare an interest. I am a co-sponsor of the Bill. One of the successes of the Bill, thus far, is that it has been able to attain cross-party and cross-community support. The Ulster Unionist Party, the Green Party, the Alliance Party, the SDLP and us in Sinn Féin all co-sponsored the Bill. I was a wee bit disappointed by what was said, because I have not heard green and orange politics being talked about in relation to the issue. I am not sure that anybody has brought green and orange politics into climate change, which is one of the most important issues that any political party, politician or legislature faces. It is important that I make that point. My role as a legislator and as a co-sponsor is to ensure that we get the best possible Bill to ensure that people, businesses and sectors in the North play their part in the most important issue that faces us, so that we can hand on a clean, healthy and sustainable environment to our children.

As I said, I wrote down a number of issues, and some of the points have been covered. I will not ask about the just transition and the climate commissioner, because they have been dealt with. On methane, I note that the CCC's letter to Minister Poots of 1 April said that, in our balanced pathway, methane emissions in the North fall by 42% from 2020 to 2050. What is the Ulster Farmers' Union's view of that target? You mentioned that you need a target. The CCC has suggested a target of 42% with regard to methane, so I am interested to hear the Ulster Farmers' Union's view of that potential target.

**Mr Chestnutt:** We have a different way of measuring it. At the minute, we are measuring it by GWP100, which is global warming potential, and agriculture is seen as being 28 on that scale. GWP\* measures the global warming potential, taking into account the lifetime of that gas. As I said, while methane is a potent gas, it breaks down in 12 years. In effect, we can move to that, unless there is an increase in livestock numbers in Northern Ireland. I will make this point to tackle some of the very uninformed ideas of some of your Bill sponsors in thinking that livestock numbers have increased: livestock numbers in Northern Ireland peaked in 1998 in the cattle world. I will bring in David to give the exact figures on that.

**Mr Brown:** We are aware of the conversation around intensification and those, I suppose, emotive words. I took the figures on breeding suckler cows from the 1990 baseline, off the back of the fact that that is obviously where the whole climate change discussion comes from. There were almost 269,000 suckler cows, beef cows and breeding cows, and that was at 247,000 last year. Admittedly, the number of dairy cows has increased to counterbalance that. The number of breeding sheep has decreased from 1.367 million to 938,000 over that 30-year period. On the pig side, the number of breeding sows has decreased by 40% from 78,000 to 47,500. The other point to make on

intensification, which seems to be pointed towards the pig and poultry sectors, is that they are small contributors to greenhouse gas emissions.

Chair, picking up on the point about methane, I have made the point to you in the past that we very much wish that the Committee would hear that information and have it explained at first hand, because, while we have been on numerous webinars and so forth and have listened to speakers who have explained to us the accounting methodology, it would be of benefit of the Committee to invite them. We are happy to share the names of some of the scientists who are involved in it. They are the experts who have brought forward those accounting methods, which, they believe, are a more accurate reflection of how agriculture and, I suppose, methane more widely should be measured.

**Mr Chestnutt:** Thanks for that, David. Coming back to your point on targets and how we will achieve it, we hope that technologies will come forward that will help us to achieve it, but we are not there yet. That is why we are opposed to putting too many targets in place that we cannot meet.

There is a lot of work on seaweed. Let us hope that that bears fruit. Initially, it looks encouraging. They are seeing that incorporating a small amount of seaweed into our livestock's diets reduces methane output by up to 85%. If it is anything close to that, an industry will develop to do that, but we are in the early days. AFBI is world-leading in its expert measurement of methane and — I am not just picking out figures — Northern Ireland is world-leading in its research on that. We hope that there will be measures that we can use in our livestock production that can reduce that. We feel that to base [*Inaudible*] use on the hope factor is dangerous, but we hope that measures will be introduced. Farmers are always learning a bit more about our soils. One of the things that I see around the world is that other areas are bringing livestock back to help the carbon intensity in their soils by putting organic matter back. Is it not ironic that, in Northern Ireland, we are looked at by the rest of the world as having that, but we are trying to reduce it? That does not make sense. We need to move slowly on that, otherwise we could get an adverse effect.

**The Chairperson (Mr McAleer):** Thanks for that, Victor.

**Mr Blair:** I apologise for losing my connection for a while. I hope that I will not repeat anything that may have already been covered. I will fire through a couple of things quickly, so please correct me if someone else has asked the question.

Thank you for the presentation. My first question is about carbon sequestration, which we have discussed previously with the UFU. There is an issue about information not being captured for the maximum benefit to farmers. Has any progress been made in that regard in the union's discussions with government? The basis for the question is that we will always be supportive in trying to achieve that.

My second question is on the climate change commissioner. Many of us accept that the current position, despite an outstanding commitment to an independent environmental protection agency, in which one Department polices the other Department's implementation of rules and regulations, is unsatisfactory. Is the UFU able to present an alternative to the climate change commissioner to ensure that regulatory control will be implemented impartially?

**Mr Chestnutt:** I will ask Aileen to answer the last point, and David will deal with the first question.

**Mr Brown:** We have raised the issue of carbon sequestration at governmental level, given the Government's inventories and the calculations that are done. The president mentioned our hedges and grasslands earlier. If new woodland is planted, it is being counted as part of carbon audits. In reality, we are fighting a battle to get that recognition. For example, going back to my earlier point, when it comes to the comparison with the National Farmers' Union's (NFU) position on 2040, it has taken that position off the back of saying that they do not have the levels of livestock emissions that Northern Ireland has. On the other side of that, it is taking into account what is being sequestered in that equation. Unfortunately, under the Government's current inventories, we are not allowed to balance that out. The president made the point about the hedges that he has planted being allocated to the wider benefit of society. I would say, in fairness, that that is probably seen as being unfair to the farmer who has livestock, where all those emissions are being added, totalled and calculated. In terms of sequestration, we want that to be calculated and to see further progress on each of our farms being able to have that measurement. At present, however, there has been no advancement on the part of the Government to recognise that.

**Mr Blair:** David, I am sorry to come in on that. What you are saying is the position that you already hold, which is that individual auditing of that would be beneficial to farmers who are making a greater effort.

**Mr Brown:** Well, yes, and, indeed, not just for individual farmers but for the whole of the agriculture industry. There are two sides to the equation: not negating entirely but certainly reducing the level of emissions, which would be balanced against the level of sequestration, and that is currently not happening.

**Mr Blair:** OK, thank you for that.

**Mr Chestnutt:** The first part of that question has been covered, John, but I will ask Aileen to briefly comment on the climate change commissioner.

**Ms Lawson:** We have not said that we are opposed to a climate change commissioner. We are saying that the level of accountability needs to be looked at carefully to make sure that there is accountability to public representatives. We have no strong views on the role of the commissioner; we are more concerned about the accountability position and how that links with the Climate Change Committee. Is there an overlap?

All those things have to be teased out, and there is not enough information, as far as I am aware, in the public domain that explains that to us. We need to ask those questions of you and the supporters of the Bill, so that you can further explain to us how you envisage the Climate Change Committee linking with other organisations such as your Committee, how the commissioner reports and so on. It is hard to provide comment when there is not a lot of information. For example, the Bill provides powers to obtain information from anybody who receives public money. That could mean farmers. What information will the Climate Change Committee be able to get? Will the climate change commissioner go onto a farm and demand records, for example? Again, we would like clarification on that. I have not been able to find that in any text that is available at the minute.

**Mr Blair:** You are looking for clarification of the structures around the commissioner, but you are not necessarily opposed to the idea of a commission.

**Ms Lawson:** Yes, absolutely.

**Mr Blair:** Thank you for that.

**Mr McGlone:** It is good to see everybody. Thank you for coming along and giving your valuable time and help. Leading on from what Aileen said about exploring the role of the commissioner, should the accountability chain lead to the Climate Change Committee by way of a reporting mechanism? You have given it a bit of thought, but only now have you stimulated that type of conversation.

**Ms Lawson:** We have not given it a lot of thought, Patsy, simply because there is not a lot of information within [*Inaudible owing to poor sound quality*] as an organisation, it has probably raised more questions than it has given answers. We ask you, as part of your scrutiny process, to delve into that a lot more. We have a lot of concerns about the powers that the Bill would give to a climate change commissioner, such as to obtain or seize information. We encourage you to look at that and see whether it is suitable. I highlight the fact that we are raising our concerns.

**Mr McGlone:** That is grand. I am working through a number of issues. I will come back to Victor about MLAs jetting off on holidays: he might need to have a word with his local MP in particular about that.

We will move on to the level of emissions. Victor, I think that you said that the level of emissions per unit of production is a lot lower in the North than it is elsewhere in the world. What facts and science are the basis of that calculation, and where did the conclusion come from? It would be helpful to the Committee to know.

**Mr Chestnutt:** The figure is for western Europe, so it is not just for Northern Ireland. It is based on emissions per kilogram of beef produced. Emissions from beef production in western Europe are 52% lower than those in the rest of the world. That figure is widely used; we did not come up with it. David, do you want to come in?

**Mr Brown:** The comparison was also made with Brazil, where emissions are 4·5 times those produced in the UK or Ireland. The figure that is internationally recognised is that, in western Europe, our emissions are 2·5 times less than the global average. Those are not UFU figures.

**Mr McGlone:** I get that. I wondered where the figures came from. They do not make a case specifically for Northern Ireland, and other countries in the EU are probably at stages of advancement on climate change measures too. I presume that a similar argument would be made by similar representative agriculture and farming groups across the EU. That is grand.

**Mr Brown:** I will take a moment to comment on that. In reality, as I said at the start, the UK is the only country to have taken the position and provided the pathway that it has. There is a bit of an art or a game of comparing the North with our friends in the Republic of Ireland. In reality — this needs to be understood — they have not yet got to the point of having those detailed calculations or having carried out those investigations; indeed, the message that is coming out from Teagasc about the pathway that it is talking about is an indication of a very modest reduction in the agricultural sector of in or around 15%. It would then allow other sectors to carry the weight of the target.

**Mr McGlone:** Yes.

**Mr Brown:** We are in a different place on that comparison.

**Mr McGlone:** That is grand. I want to ask about the sequestration measures, carbon audits and stuff like that. Do you feel that those would be a hindrance or problem? How do you see that being rolled out?

**Mr Chestnutt:** On a farm basis, I have carbon all but done. What grates with me is that the sequestration provided by my grasslands or hedges is not counted. The few areas of trees that I planted around the farm are counted, but my hedges are not. I cannot get my head around that. What is the difference between planting half an acre of trees or growing half an acre in length of hedges? It does not make sense and is completely unfair. I am happy to reach over to society any sequestration or reduction in carbon that I do not need after my livestock emissions are covered but not before that. There is a fundamental problem in the accounting on carbon. There is almost no point in doing a carbon audit until we sort that problem out. What is the point in counting one side of the balance and not adequately counting what goes on within the farm gate?

**Mr McGlone:** I get that and appreciate all the work that you have done on hedge planting. To throw in a wee tricky thing, what about the landowner who marches you? Is that taken into account as his, yours or what?

**Mr Chestnutt:** Do you mean the march hedge?

**Mr McGlone:** Yes.

**Mr Chestnutt:** It is 50:50.

**Mr McGlone:** OK. That is grand. Going back to the other issue, do you see the way that New Zealand uses measurement levels and exceptions and gives added estimations to agricultural production or the agri-food sector as being a helpful or useful project that could or should be lifted for the North? Do you feel that that route would be preferable or useful?

**Mr Chestnutt:** Carbon is one thing in a series of challenges that we face. There is also biodiversity and the environment in a much bigger way. I looked at an article from 'The Guardian', on 29 June 2021, headlined, "Eat this to save the world!". It refers to sustainable foods "from seaweed to venison", but grass-fed beef and lamb are right at the top of that [*Inaudible owing to poor sound quality.*] Grass-fed beef and lamb [*Inaudible owing to poor sound quality*] and milk are basically what Northern Ireland farming is based on.

The New Zealand system treats methane separately. We would probably like that. I will bring in Aileen to give her views on that, but I think that it would be an advantage. We need to listen to the professors from Oxford University and examine GWP\* instead of GWP100.

**Ms Lawson:** New Zealand has a similar structure to ours and that in the South of Ireland, so that needs to be considered. However, regardless of how you set the targets, it will be hard. We also hear real concerns from farmers in New Zealand about their struggles in meeting their climate change targets and about livestock reduction. Over there, land is being bought up for forestry, and rural communities and people are being displaced as their jobs and farms disappear.

Whatever way the targets are set, we need to be honest and say that they will be difficult for farmers to achieve. That is why it is so important to get those targets right and to spend time making sure that they are correct and fair for farmers and rural communities in Northern Ireland.

**Mr McGlone:** On that point, Aileen, I take it that it is not new for big, intensive farming units to be set up in New Zealand and for, if you like, the small person to be displaced.

**Ms Lawson:** I cannot comment on the detail of what is happening in New Zealand, but we have concerns about that here. We have to consider the perverse outcomes of aspirations to hit climate targets and so forth. I will also give you an example from closer to home. Every organisation now wants to be seen to be doing something on climate change, and we hear of corporates in London buying land in Wales to plant trees, which is displacing farms. Farmers who have rented that land for years are being put off the land. That is having an impact. Our colleagues in NFU Wales are looking at putting together a paper on that. They say that farmers in those areas tend to be Welsh speakers who are linked more closely to traditional Welsh culture. That is being lost, and they are starting to see that already.

We need to think carefully about all the implications that climate change legislation can have. That is why it is important to take the time to look at expert advice that is relevant to this region and to think carefully before you set targets that could have damaging consequences for the rural community.

**Mr McGlone:** Thanks very much, Aileen.

**Mr Chestnutt:** May I come in there? Patsy, you are right: herds are getting bigger. That is because they do not have as much housing throughout the winter. In some areas, they winter their cows outside, and there is a lot of soil damage. Water quality is one of the big issues that farmers in New Zealand face. The family farm structure in Northern Ireland has a lot to offer. We are minute compared with the rest of the world. In Australia, there are 30,000 or 50,000 beef lots. You simply do not get that in the UK.

An increasing number of small farms are disappearing, and our farms are getting bigger. We need to watch that and not push that for efficiency or for the carbon footprint to the detriment of our rural economies. We hear from Wales that people are worried about the corporates and their effect on rural communities where the Welsh language is in danger of dying out. There can be an effect on other areas that you would not initially think about. We need to go carefully on this one.

**Mr McGlone:** Thanks very much, Victor.

**Ms Bailey:** Thank you very much for the presentation. You made a comment at the start that you get upset when you hear Northern Ireland farmers being accused of lagging behind. I could not agree with you more on that. I think that they are being held back. You gave the example about carbon sequestration not even being accounted for in what is being sequestered from planting hedges. We just do not have that body of evidence and that research. That is a fundamental flaw as a starting point.

At the start, you gave us your membership numbers. You said that 11,000 farmers are members. Does the UFU have any corporate membership?

**Mr Chestnutt:** Yes. We have 11,500 farming family memberships. My farm is typical of that. I have a farm and a farm business. My wife works in the farm business, and my son has a farm business. We have one UFU membership. We did a survey in some of our groups, and it showed that there are 2·6 members per membership. We have 11,500 farming family memberships.

With the structure of Northern Ireland farming and farms closing, the number of farmers is going down every year. We are a membership organisation, and we get our funds from our members. That is why I said at the start that we were committed. When you want to become a member of some organisations, they say, "Give us your name; that's all that we need". To me, if there is no cost, that does not deliver

much commitment to the cause. As the pool that we take our membership from is decreasing all the time, we have had to look at other ways of getting members. We have corporate members, but those members were told clearly that their membership does not preclude the UFU from lobbying against any of their practices. They are there to recognise that their businesses depend on farmers doing well, and their corporate membership shows that, because of the lobbying of Northern Ireland UFU, that keeps farmers farming and, therefore, keeps their businesses going. For instance, we can have a corporate member who has a meat plant, and we can publicly slag them for something that we think is malpractice, as far as our farmers are concerned. They are clearly told that when they join up as corporate members.

**Ms Bailey:** That is great. Thank you. This has been covered, but you raised concerns about the powers of a climate commissioner. I want to point out for the record that the Northern Ireland Assembly will appoint that commissioner, so that accountability level is definitely there, and powers given in the Bill to the climate commissioner are based on exactly the same as those of other existing Northern Ireland commissioners. Of course, under the Bill, the commissioner has absolutely no enforcement powers.

Concerns were also raised about Northern Ireland moving beyond the recommendations of the CCC when no one else in the UK is. Again, I want to point out for the record that other GB regions have moved beyond what the CCC recommended as its targets and are setting their own net zero targets in primary legislation. Under the CCC's balanced pathway, in the scenario given, methane emissions in Northern Ireland would fall by 42% from 2020 — that is, last year — until 2050. That is even lower than the New Zealand split target for methane, which is 24% to 47% by 2050. That is proving disastrous for New Zealand's biodiversity and for its non-dairy farmers. The CCC does not support the idea of a split target. Do you?

**Mr Chestnutt:** I will go over to Aileen to answer the middle part of that question, and then I will come in.

**Ms Lawson:** Clare, you said that other regions have not followed climate change advice when setting their targets, but my understanding is that they have followed a Climate Change Committee pathway, so the targets that they have selected are maybe more extreme or are different to the routes in the pathway, but they are still part of the overall climate change advice.

We have clearly said that we need to look further at a split target for methane. Our organisation has not taken a firm policy position. Our position was that, initially, we need to follow the Climate Change Committee advice in determining targets for Northern Ireland. If you choose to go down a different route and not follow that advice in setting the private Member's Bill target, we need to look at methane separately. As an organisation, we need to sit down and go through that carefully, but we suggest that you bring in the experts and have that discussion. We will listen to that, take all that information together and come back to you with a position on it, but it certainly needs to be considered as an alternative option to what is in the private Member's Bill at the minute.

**Ms Bailey:** OK. Do you not have a position on split targets at the minute?

**Ms Lawson:** We are saying that we are still open to looking at that. We have no firm view on it, but it needs to be considered if we continue to go down the line of a private Member's Bill target of 2045.

**Ms Bailey:** If we were looking at something else, would you be in favour? Sorry, I am getting a bit confused.

**Ms Lawson:** If we are looking at sticking with the target of 82% by 2050, we are happy enough.

**Ms Bailey:** Without a split target?

**Ms Lawson:** Without a separate target.

**Ms Bailey:** OK. Are you aware of the Farm Zero C project in the Republic of Ireland? It aims for 5,000 dairy farms to have zero-carbon emissions in the next five years, and it has just received a €2 million prize for scientific innovation. Have you had any communications, or are you aware of the work that is going on there?

**Ms Lawson:** I will come in there. I am not entirely aware of it because it is fairly recent, Clare, but I can say that we have a similar project in Northern Ireland called ARCZero, which is much further on than the project in the South of Ireland. It involves only a small number of farms. The other thing is that the soil scheme, which has a carbon element, that the Minister is bringing forward will take us far further ahead than anything they are doing in the South of Ireland in terms of the baseline measurements that we will have on carbon on farms; in fact, I hear that there is nothing like it anywhere else in the world. We have the potential to be a world leader in this region with our measurement and baseline data on farms in Northern Ireland. That does not mean that it will make it any easier for us to hit a net zero target by 2045, but it does mean that we will have sound information on which to base decisions.

Certainly, even with that and even with all the known science, technologies and mitigation measures that are on the ground, it will still be almost impossible — it will be impossible to hit net zero by 2045 without drastic livestock cuts in Northern Ireland. We can do all those positive things, but we need the right legislative framework, the right time and the right space to allow us to get there and to start us on the journey. At the minute, the way things are looking, there is almost no point in doing that work because we just cannot deliver what you want us to do within the time that has been given.

**Ms Bailey:** It is great to hear that that work is being done, because baselines are absolutely fundamental, and the lack of them is exactly what holds back many sectors, including yours.

If you will allow me a final question, Chair, I would love to know whether you have any concerns about the ability of the Northern Ireland agri-food sector to compete at an international level if we should fail to reach net zero, especially when other jurisdictions, GB and ROI, are moving forward with really high levels of climate ambition. We know that global food corporations have committed themselves to reaching net zero not just in their operations but in their supply chains.

**Mr Chestnutt:** I will reach that one over to David, but the short answer is no, because we are ahead in many instances.

**Mr Brown:** Yes. I will go back to the comparison that I made earlier, when Patsy asked a question, on that discussion about the different place. As I said at the outset, the UK has basically had that net zero pathway for a number of years. Take, for example, the Republic of Ireland. Since 2008, for the past 13 years, the UK has been on that pathway, and, in reality, it has not been an issue or a disadvantage to ROI in those 13 years. The difficulty that we have is that the comparison is, perhaps, being made on aspirational wishes. At the end of the day, I fully appreciate that campaigns are well and good, and, obviously, many countries, not just the South of Ireland, are saying what they want and would like to do, but those objectives have not been costed, and they have not identified a pathway to delivering them, which the UK has done. Therefore, I have no fear whatever, because, in reality, where Northern Ireland has been asked to go by the CCC panel is much further ahead than what is being asked of agriculture in ROI at present.

**Ms Lawson:** May I come in on the corporate point? A lot of corporates are making lots of proposals to hit net zero and so forth. Look at the small print: that is not comparable to an overall legislative target. They are looking at things that are within their own small, narrow agendas in their own businesses and so forth. You need to look at the detail of what they are doing. Are they offsetting emissions in countries overseas? Are they buying up farmland and displacing farmers in Wales, as I mentioned? It is not just that simple, and it is not comparable to a legislative target either. You need to look at all the detail that is underneath those corporate actions as well.

**Mr Chestnutt:** We have heard of corporates buying up land for afforestation in India. To me, if that is how you achieve it, that is crazy.

*(The Deputy Chairperson [Mr McGuigan] in the Chair)*

**Mrs Barton:** Thank you, Aileen, Victor and David, for your presentation this morning. I want to query something. Perhaps, Aileen, you are best placed to answer this. It relates to comments. I think that there is a bit of confusion out there. The NFU made the comment that zero carbon could be reached by 2040. The Bill is talking about being zero-carbon by 2045; the CCC is talking about Northern Ireland being 82% zero-carbon by 2050. Can you explain the 2040 date and timeline that the NFU has mentioned?

**Ms Lawson:** The NFU has set itself an aspirational net zero target for its farms. It is aspirational; it is not a legislative requirement. The target is based on measuring the net emissions on farms. Therefore, it goes back to the difference between gross and net emissions. The national inventory measures agriculture's gross emissions, and that is where the legislative targets come in.

The NFU wants to measure the emissions produced and to offset those against the carbon in hedges and grass, as Victor mentioned, and renewable energy. However, that is not how the national inventory and legislative targets work. The two things cannot be compared; they are completely different. The NFU is very aware of the situation in Northern Ireland, and it is supportive of our position. The NFU is concerned about the direction of travel, particularly on livestock numbers. All the UK farming unions have the common opinion that there should be no reduction in the ability to feed UK consumers with quality locally produced food. We do not support livestock cuts to meet climate change targets to the extent that has been mentioned.

We share the NFU's objective on how to deliver its aspirations using a three-pronged approach. The NFU wants to improve productivity, increase carbon sequestration on farms and bring in renewable electricity production and other bioeconomic measures. The NFU's approach is identical to the measures supported by the UFU through the greenhouse gas implementation partnership. We have been on that journey. In fact, where we are going with the soil health scheme that we are supporting, and that the Minister is developing, will probably take us ahead of the NFU baseline for actions on farms. The NFU has that target in place. The point to make is that it is not comparable with the legislative target and the pathway to achieving that target. We are very much on the same page and taking similar action.

**Mr Brown:** I will quickly add to the point that Aileen raised about renewable energies, which is not well known. I have to admit that it is probably not even well known in our agriculture industry. However, on-farm renewable energy in Northern Ireland is providing the energy for 150,000 homes. The renewable energy piece in Northern Ireland is very much part of our farming infrastructure. Obviously, it is not on every farm, but we have wind turbines, anaerobic digestion (AD) plants and all the different means to generate electricity. I note that 150,000 homes in Northern Ireland are already supplied with energy from farms.

**Mrs Barton:** Thank you. The private Member's Bill talks about zero carbon by 2045. We have had the CCC documentation that talks about being 82% zero-carbon by 2050. Can you explain why the United Kingdom will reach zero carbon by 2050 but Northern Ireland has agreed to reach only 82%?

**Mr Chestnutt:** Hello, again, Rosemary. I will start to answer that question.

**Mrs Barton:** There are a lot of misunderstandings out there, and that is why I ask about it.

**Mr Chestnutt:** Northern Ireland produces a lot of food for the UK. We feed 10 million people, and most of them are UK consumers. The Climate Change Committee took that figure into account. The UK reaching net zero by 2050 includes Northern Ireland. However, on a farm-by-farm basis, one farm may be able to sequester more carbon and help the farmer next door. Probably because of the Highlands of Scotland and the less intensive livestock regions in other areas of the UK, they are saying, "OK, we cannot hit those targets in Northern Ireland because we need them to produce beef, milk and sheep". That is why the 82% figure was given for Northern Ireland.

If we did it in Northern Ireland on a farm-by-farm basis, one farmer may be reducing his emissions to 82% and another may be doing 120%. Overall, we can reach net zero by 2050. We should not put ourselves down in Northern Ireland. We are reaching net zero as the UK by 2050. It is just the accountancy divisions within that. There will be areas in south-west Scotland that will be less than 82%, and areas in the north of Scotland, for instance, that will be well over 100% simply due to the intensity of livestock. It is no different in Northern Ireland if you take it on a UK basis.

**Mrs Barton:** Thank you. I want to ask about carbon audits. I do not know whether you read the 'Irish Farmers Journal', but, a week ago, there was an investigation of soils on a farm in Tullamore. The degree of difference in fields on the farm was interesting. Would you advocate a policy for individual farms to have an audit? There is such a variance on farms.

**Mr Chestnutt:** Thanks for that question. Technology is increasing all the time. For instance, with our arable guys, when the combine goes down the field, it maps the yield. When they spread fertiliser or slurry, there is monitoring equipment on that slurry so that the areas of the field that need more

nutrients get a variable rate according to the yield of the crop before. Greenmount has purchased a system for its slurries whereby it will be able to spread a field and a higher rate will go on to the areas of the field that need it. That is the new technology that is coming in, and that will increase carbon storage on our lands.

In my presentation, I touched on how good our soils are with that core carbon. I read a book about sustainable farming in America, and they are bringing back livestock into the dust bowls. They cleared the livestock away, and now their organic matter is suffering. They are having to grow their crops with purely artificial fertiliser. The soil health and microbes are being killed by the artificial fertiliser. Worm counts and soil samples are big things now on Northern Ireland farms, and we are increasing those.

The project for our soils will include light detection and ranging (lidar), which identifies areas where fertiliser may have run off. Technology is increasing. If you get nothing else out of today, you can know that Northern Ireland agriculture is stepping up to the plate. We are heading in this direction, and we are responsible. We are not burying our heads in the sand and not tackling the issues.

**Mr Brown:** Specifically with regard to carbon audits, we have sent papers to the Committee about the work that different sectors have done with the Andersons Centre of independent consultants in looking at future agricultural support. Whether it is the meat, sheep, dairy or arable sector, all recognise that a large element of future agricultural support will be about delivering outcomes. We are not blind to the fact that those outcomes will be about reducing our emissions and carbon sequestration.

Carbon audits are very much part of what the UFU has suggested as being part of that. I do not think that our farms fear carbon audits. We are recommending to DAERA that, in terms of future support, they are a mechanism by which we can determine the level of sequestration and emissions on individual farms.

We have brought to the attention of the Climate Change Committee — the president mentioned this — work that has been going on around manures. AFBI has had trials at Hillsborough for 50-odd years. I would describe it bluntly as a slurry project, a manure project. In truth, as part of that, it has been measuring the level of carbon in the soil, and that has proven to be of great benefit to us. It has that historical data that has shown that it is able to sequester and increase the level of carbon in the soils over that period. The CCC was unaware of that. It believed that soils reached a point at which they were saturated and could take on no more carbon. The work at AFBI seems to indicate otherwise, and we have drawn that to the attention of the CCC. In conclusion, we have no fear of carbon audits.

**Mr Chestnutt:** To add to that, we as farmers are developing new technologies. For instance, we used to go out to the field to spread our slurry. We used to blow it up into the air, which caused a lot of air contamination. We are moving on a trajectory to do away with that completely. Some areas of the country now have well over 50% spread by low-emission spreading, which means that those nutrients are not being lost in the air. If you smell that flying by a field, those are nutrients that are being lost. It is a loss to the farmers and a loss to everything. We are on a trajectory to have all farms spread by low emission by 2025. It shows that, if you give us the timescale and the tools, we will get there.

**Mr Irwin:** I thank Victor, David and Aileen for the presentation. I declare an interest as a farmer, a partner in a farm business and a member of the UFU. I am disappointed that there are still members of the Committee who are wedded to the private Member's Bill, against all the expert advice from the Climate Change Committee right down to the industry. I believe that, in any scenario, it is important that we listen to expert advice.

Last week, Conall Donnelly from the Northern Ireland Meat Exporters Association attended the Committee. He said that the private Member's Bill could reduce livestock numbers in Northern Ireland by up to 80%. That is up to 80%, but that could have a massive impact on our local farmers. Also, 100,000 jobs depend on the agri-food sector. Has any work been done in the union to look at possible job losses due to going ahead with the private Member's Bill?

**Mr Chestnutt:** Yes, William, we have commissioned KPMG to do that work; indeed, the figures are starker than those that you gave. We have interim figures from KPMG, and I must qualify that these are its first look at the figures. It reckons that, to comply with the private Member's Bill, we could be looking at a reduction of up to 85% in livestock numbers in Northern Ireland. Make no mistake: this would completely wipe out the Northern Ireland industry. You would have to find another £5.2 billion for the economy, and you would have to look for the guts of 113,000 jobs in the economy. Make no mistake about what this would do to Northern Ireland. It is completely ludicrous to continue down this

route without taking a better look. We are not coming up with those figures; it is not scaremongering by the UFU. It is KPMG, a reputable company that has been asked to look at this, and those are the figures that it has come back with. They have shocked us — I hope that they will also shock you — to realise that we need to take this forward with a more sustainable approach; otherwise, we will wipe out our industry.

**Mr Brown:** William, you asked about job losses. I do not have the detail, but I think that Mike Johnston from the Dairy Council referred to this. Apologies if I repeat what he may have told you last week. In reality, if we consider the milk sector, which, I know, you are involved in, we are talking about 15% of the milk going to the liquid market. In effect, that would basically say to the dairy sector that we do not need processing, we do not need cheese and we do not need all the products that are manufactured from milk. We would not have the milk. It is hard for us to quantify the job losses. The processing sector and the industry are perhaps better able to quantify the potential for job losses. In reality, it would be pretty stark if we were to face reductions on the levels that have been indicated.

**Ms Lawson:** I will add to that to highlight the fact that the impact will be concentrated on our ruminant industry — our beef, our milk and our sheep — as opposed to pig and poultry. Over 90% of greenhouse gas emissions in the livestock sector come from ruminants, because of their biology, so those sectors will be hit hardest by the consequences of the legislation going forward.

**Mr Chestnutt:** If we spin that forward, our rural communities will die, our countryside will no longer be pretty for tourists and we will end up with wildernesses. Is that really what MLAs want? I urge you to consider carefully the starkness that will come from that 85% target. I have seen nothing so crazy in all my life. The industry has been built up over years. Farming has kept Northern Ireland on its feet, and it keeps going. Younger farmers are keen to develop and grow our industry. We have to do that sustainably. I want to pass my farm on to my son. Hopefully, it will go on for generations. We have been there for generations.

This is not about ripping the backside out our farms and not having sustainable farms going forward; it is about feeding the world. The fact of the matter is that, if that were to go ahead and our ruminant sector was reduced by 85%, the first place to be hurt would be our hills. That would be completely adverse to another private Member's Bill for less-favoured areas (LFAs). There is no point in supporting a private Member's Bill for LFAs and supporting this Climate Change Bill. The two are incompatible. We would decimate Northern Ireland as an industry, and we would aid climate change. We would be pushing the thing in the wrong way. What will the UK do? The UK will import that food from other areas in the world. As we heard, we can produce that food from the red meat industry here at 52% of the carbon of the rest of the world. Are you really saying that it is sensible to cut that production out in Northern Ireland in order to reach a self-imposed target that is not agreed by scientists and then to import from an area of the world with 2·5 times our carbon footprint, increasing the problem with our climate?

**Mr Irwin:** Just let us hope —

**The Deputy Chairperson (Mr McGuigan):** I will let you come back in. Sorry for interjecting. Victor, I believe that it is important that there is some balance. We appreciate your giving your evidence. It will be useful to the Committee. I understand that this is an emotive subject, but I have to pull you up for using words such as "decimate rural communities" and "killing the industry". None of that is in the Bill. We are talking to you as representatives of the Ulster Farmers' Union. I know that a lot of the Bill has been dialled down to the potential impact on the agriculture industry. This is a Climate Change Bill for the whole of the North, across all sectors: industry, infrastructure, travel, agriculture, transport and so on. I listened to a lot of the stuff that you said this morning, and I agree with a lot of it. For example, Sinn Féin is fully supportive of a just transition to ensure that there is a negligible impact on all sectors, including agriculture. I listened to you on the issue of the climate commissioner, and, to be frank, I think that you have picked up the role of the climate commissioner incorrectly. The climate commissioner is there to offer advice and produce reports. As Clare pointed out, the accountability of the Bill will be with MLAs.

As I said, I will allow William in again, but I would like to ask a question, given all the stuff that you said this morning and all your concerns for what you view as potential impacts. Bearing in mind that there is not a single target in the Bill relating to agriculture, I look forward to seeing KPMG's report and seeing what it is based on. The Bill does not contain any target for agriculture. Clare and I have asked about that, but I am not sure that we have got an answer. The only target that exists around agriculture is from the CCC, which talked about a 42% reduction in methane. I have not seen the

Minister's Bill and do not know what is in it, but I know that the private Member's Bill contains carbon action plans, whereby five-yearly reports will come to the Assembly. On the basis of advice from the Department of Agriculture, MLAs, who are accountable to rural communities and others, will get to discuss and decide what plans and targets are produced over the following five years, using the best available science for the agriculture industry. We need to keep the conversation based on the reality of what is in the Bill and not scaremonger about what is not in it. I am interested to hear your view, as an industry, on what could be the benefits of the five-yearly carbon action plans and the accountability of the Assembly in producing those targets.

**Mr Chestnutt:** Thanks for that, but I cannot let this go. Your target is set to be net zero by 2045.

**The Deputy Chairperson (Mr McGuigan):** Not for agriculture. We have not produced a target yet for any of the sectors in the Bill.

**Mr Chestnutt:** KPMG is looking at the economic impact on agriculture of getting to net zero by 2045. Those are the figures it came up with. They are not made up by the UFU to scaremonger or anything else. It will take an 85% reduction in ruminant livestock. You come from an area local to me, Philip. Can you imagine the devastation that will cause to your area? I can tell you that the whole rural landscape will be devastated. I do not back down from saying that. If we follow that trajectory, that is what will happen, and it will happen first on marginal land, hill land and the high farms. I am not backing down on the claims I make about figures that are not made up by the UFU. They shocked us, but they came from KPMG.

David, do you want to pick up?

**Mr Brown:** You make the point that you will listen to DAERA and the advice that it will bring. That is a sad reflection for us, as an organisation, that advice from DAERA to date has not been listened to. I said this in the opening statement: there is no confidence among the agricultural community in the private Member's Bill. That is why so many of our members wrote, phoned and contacted their MLAs with the concerns that they had. I have been on radio interviews with the chair of the Climate Change Coalition, who said that it is lies and scaremongering. I say that it is fact. We are not involved in lies and scaremongering. We are bringing forward the facts of what the implications of all this will be for Northern Ireland and our economy. Quite frankly, if the proposers and supporters of the Bill have not to date listened to the DAERA advice, it does not give us any confidence that they will.

**The Deputy Chairperson (Mr McGuigan):** William, you recognised that this is an evolving situation. Technology that currently does not exist will come into being. You said in answer to the previous question that you have identified and given advice to the CCC that it was not aware of. This will be an evolving situation, and that is why I am interested in your views on the five-yearly carbon plans. Some of the heavy lifting in the first number of years will not be taken up by agriculture, which will allow time for preparation, new technology and science and greater measurements.

**Mr Chestnutt:** Certainly, I hope that that science will evolve and that it will be our saviour, but how do you create a policy based on something that might be or hopefully will be rather than is? I want to bring Aileen in on that point.

**Ms Lawson:** That is the difficulty, Philip. We are told by the scientists that, with the known technologies and mitigation measures, it is nowhere near enough to get us to the net zero target by 2045 or even 2050. Yes, science will evolve, but we need time and room to allow that to happen. Given the trajectory that we would need to be on to hit the 2045 target, we would have to take action sooner and harder, and that would obviously have huge consequences for our agricultural community.

I will add to that. My job in the union is to present our members with facts and to set out both sides of the argument so that they can take a policy position based on the evidence that is in front of them. It would be a lot easier for us to just go along with what is in the private Member's Bill. There would be no hassle or criticism, and we would not have to do all those radio interviews. We have tried to look for light at the end of the 2045 tunnel, but what I see is a train coming down the line. It is not possible, it is not fair and it will have massive consequences. For the sake of farming families, we really urge you to listen to what we tell you. Take the advice you have been given and do the right thing when it comes to the targets that are being looked at.

**The Deputy Chairperson (Mr McGuigan):** The Chair is back. I appreciate that. The conversation will certainly evolve. The engagement has been good. I interrupted William, so he can come back in.

*(The Chairperson [Mr McAleer] in the Chair)*

**The Chairperson (Mr McAleer):** Go ahead, William.

**Mr Irwin:** I hope that common sense prevails in this. Irrespective of what some MLAs say, the Climate Change Committee said that, under the very scenario it looked at, it was not possible for Northern Ireland to reach net zero by 2050. Given that advice and the reality that, even if Northern Ireland went for the private Member's Bill, the difference in emissions to the UK as a whole would be only 0.73%. We would decimate our industries to achieve practically nothing. That is not common sense. I hope that our MLAs do not bury their heads in the sand and that they listen to the expert advice.

**The Chairperson (Mr McAleer):** Thanks for that, William. Folks, we will have to move on, because Professor Thorne and Dr Jackson are waiting. I thank you, Aileen, Victor and David, for your evidence this morning and for your wide-ranging commentary. Thanks very much for that. We will, no doubt, see and hear from you on this and a range of issues in the time ahead. Thank you very much.

**Mr Chestnutt:** Before I go, I repeat our invitation to you, as members of the AERA Committee, to come out to a farm to see some of the good work we are doing. We are setting a date in August to go to Jessica Pollock's farm, which is in the Omagh direction. I encourage you all to make the effort to get out there to see what is happening on Northern Ireland farms. Thank you.

**The Chairperson (Mr McAleer):** OK, folks. Take care.