



Northern Ireland  
Assembly

Committee for Agriculture, Environment  
and Rural Affairs

# OFFICIAL REPORT (Hansard)

Climate Change (No. 2) Bill: Agri-food Sector

14 October 2021

# NORTHERN IRELAND ASSEMBLY

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### **Members present for all or part of the proceedings:**

Mr Philip McGuigan (Deputy Chairperson)  
Ms Clare Bailey  
Mrs Rosemary Barton  
Mr Harry Harvey  
Mr Patsy McGlone

### **Witnesses:**

Dr Mike Johnston	Dairy Council for Northern Ireland
Mr Ian Stevenson	Livestock and Meat Commission
Ms Gill Gallagher	Northern Ireland Grain Trade Association
Mr Robin Irvine	Northern Ireland Grain Trade Association
Mr Conall Donnelly	Northern Ireland Meat Exporters Association
Mr David Brown	Ulster Farmers' Union
Ms Aileen Lawson	Ulster Farmers' Union

**The Deputy Chairperson (Mr McGuigan):** I welcome Mike Johnston from Dairy UK; Aileen Lawson and David Brown from the Ulster Farmers' Union (UFU); Ian Stevenson from the Livestock and Meat Commission (LMC); Conall Donnelly from the NI Meat Exporters Association (NIMEA); and Robin Irvine and Gill Gallagher from the Grain Trade Association (NIGTA). You are all very welcome.

Thank you for joining us, so soon, to talk about climate change again. The Committee very much welcomes your continued engagement and support, and it is a great help in the scrutiny of both climate change Bills. For today's session on the Climate Change (No. 2) Bill, I will ask one representative from each organisation to provide a brief summary of its views. I hope that you have designated one person to give a brief summary, for three or four minutes, of your organisation's views on the Climate Change (No. 2) Bill. We will start in alphabetical order by organisation. After we have heard from all the organisations, we will open the discussion for questions and answers.

**Dr Mike Johnston (Dairy Council for Northern Ireland):** Thank you very much, Philip. I am grateful for the opportunity to meet you and your colleagues today to discuss the Climate Change (No. 2) Bill. The dairy sector's commitment to working more sustainably can be demonstrated by the improvements that it has already achieved in the last three decades. During that time, we have reduced the carbon intensity of a litre of milk. We continue to invest throughout the supply chain to further reduce emissions, to improve our efficiency of energy usage and to reduce our use of fossil fuels. Your colleagues who have engaged in our seminars and virtual farm tours in recent years will have seen the evidence of our commitment in practice on farms and in processing plants.

We recognise that our journey still has a long way to go, and it will not be without pain. We will have to continue to invest on farms and in processing plants and to be open to changing the ways in which we produce milk. However, we can do that in a managed way that does not result in the transformation of our sector into little more than a cottage industry. Let me map out the drivers that will influence our journey over the next 30 years. The work that you and your colleagues are doing, in putting in place legislation, will have a massive influence. You have to decide between allowing the Northern Ireland agri-food sector to continue to produce the high-quality food that customers and consumers at home and around the world want to buy and consume while meeting challenging but realistic environmental targets or creating legislation that sacrifices farming and processing businesses and their jobs on the altar of achieving miniscule additional environmental benefit.

In addition to legislation, there is the fact that our customers take an active interest in climate change. That is a double-edged sword. It is good that that interest is being reflected in positive engagement with our supply chain, but we find that we are being pulled in different directions by different customers. At the moment, it happens in a vacuum, without legislative targets to act as a benchmark. We need our customers to work with us, but we need the leadership that only legislation can provide. In that regard, it is not helpful that Northern Ireland has two climate change Bills progressing through the Assembly. I urge you to provide the leadership that we need and to let us have a single Bill, fashioned on the Climate Change (No. 2) Bill, that we can work through to have legislation that we can help to deliver.

The third factor that will impact our journey is the action of our competitors. Increasingly, environmental criteria are part of the proposition to consumers and customers to buy and consume products from particular countries and companies. We need not only to make sure that our environmental credentials are as good as our competitors but to recognise that we have an opportunity to invest in our supply chain to create areas of environmental competitive advantage.

That is our vision of the journey that we are on, but we need you to walk the journey with us, by giving us a legislative framework that challenges but does not decimate our sector, opens opportunities but does not precipitate business closures and job losses, and creates an environment where supply chains, government and research can work together to deliver targets and create opportunities to underpin Northern Ireland as a world leader in sustainable food production. In our view, the Climate Change (No. 2) Bill has the potential to provide the sort of legislative framework that will address what we need for our journey over the next 30 years. It provides targets that are very challenging but achievable and are evidence-based, and it has the flexibility to allow us to adapt to the benefits that will flow from new knowledge to the evolving needs of customers and to maintain our competitiveness around the world.

We are fully committed to the journey of the next 30 years. As an indication of that commitment, I can tell you that we are working with the College of Agriculture, Food and Rural Enterprise (CAFRE) on a programme to start carrying out carbon audits on dairy farms early next year. In our view, the way forward is industry, government and research working together.

Our ask of you and your fellow MLAs is to give us a legislative framework that will facilitate that collaboration and that provides targets that are evidence-based and, even though they may be challenging, are achievable. You have the opportunity with the Climate Change (No. 2) Bill to reach out to industry to create the conditions to foster collaboration across government, industry and research in ways that will create opportunities and establish Northern Ireland as a world leader in dealing with climate change and in meeting the demand from a growing population for high-quality and safe food. I urge you to grasp the opportunity.

**The Deputy Chairperson (Mr McGuigan):** Thank you very much, Mike. We will continue to go through the presentations. The Ulster Farmers' Union is next. I am not sure whether Aileen or David will lead off. David, go ahead.

**Mr David Brown (Ulster Farmers' Union):** Thanks, once again, for the opportunity to give evidence. We have already presented to the Committee and highlighted our support for climate change legislation. It is vital that we get the right targets adopted. We know that there is a need to reduce emissions from agriculture and to increase carbon sequestration on our farms. However, that needs to be done in the context of fair and credible legislation, backed up by the evidence, that delivers a just transition for everyone. The KPMG report, which we commissioned with the industry and was published in August, clearly indicates the consequences to the agri-food sector if the wrong targets are selected.

The UFU has been actively promoting climate action for over a decade, encouraging members to take action on their farms. Since 2008, we have been part of the DAERA-led greenhouse gas implementation partnership along with other industry representatives and, indeed, representatives from DAERA and government. However, that group needs to be reinvigorated and plans updated. Many farms are already carrying out positive actions that will reduce emissions, with carbon audits being rolled out through business development groups and through supply chain initiatives from processors and companies that are all focused on this. Hopefully, we will have the ability to roll out a soil-health scheme shortly with a carbon element that will be world leading.

The UFU continues to promote measures that farmers should adopt to reduce their on-farm carbon footprint. We are working with UK farming unions to highlight positive actions to Conference of the Parties (COP) 26. This week, we were involved in daily countryside COP events, which raise awareness and highlight actions needed on climate mitigation and carbon sequestration.

We are already on this journey, and it is vital that the correct legislative framework is adopted to allow that work to continue and to deliver further reductions. Unlike the private Member's Bill, the Climate Change (No. 2) Bill has targets that are acceptable to the Ulster Farmers' Union because they are based on expert advice. As we have said, however, adopting those targets does not assume a lack of ambition, because they will be extremely difficult for Northern Ireland to meet.

That 82% target will bring considerable change across society. The Climate Coalition (CC) outlined some of those: around 46% of agricultural land being taken out of livestock production and freed up for forestry, agroforestry, energy crops and the restoring of peatland. It talks about 150,000 hectares of peatland being re-wet. That is less-favoured area (LFA) land, so that pressure will be very much on those beef and sheep farms that may be marginal in their profitability in the first place.

It is important that tackling greenhouse gas emissions does not lead to other environmental trade-offs, exacerbating other environmental issues. We are opposed to any forced reduction in livestock numbers. Previously, we indicated our concern about carbon leakage; basically, where we offshore the food production that is needed. The UK, at 60% self-sufficiency, needs that food to feed the people. Ireland, in its entirety, supplies a lot of that food. If we were to export that production to other parts of the world, we would need to keep in mind that climate is global and not just a little bubble over Northern Ireland. We need the capacity to continue to feed consumers with the high-quality food that we produce.

It is recognised that knowledge and science will evolve, and the Climate Change Committee (CCC) target could be amended. The Climate Change (No. 2) Bill allows that flexibility and provides safeguards for that to happen. Before any changes are made, careful analysis and expert advice are required on the impact that those would have, not just on agriculture but on wider society and the economy. A just transition should be established and included in the Climate Change (No. 2) Bill. Farmers and rural communities should not end up carrying the burden of climate change. They are part of the solution and are very much up for delivering their fair share.

Carbon budgets are useful in setting out a balanced pathway to targets outlined in this Bill. Five-year cycles are sensible to allow policies to be adopted and implemented to help to deliver those budgets. Independent monitoring will be important in assessing the effectiveness of the budgets and delivery against the targets. That will allow the Northern Ireland Assembly to monitor progress and to review those policies.

Throughout the world, the UK Climate Change Committee is considered to be an expert in the area. The CCC has played a vital role in developing that pathway and reporting progress across the UK. It is fair to say that we should not underestimate the challenge that Lord Deben and his team brings to the agriculture sector and farmers. However, the UK Climate Change Committee must ensure that it obtains relevant advice from Northern Ireland. We propose that sector-specific advisory committees are established to report and advise on specific economic, environmental and social circumstances that are particular to each sector in Northern Ireland. The greenhouse gas implementation partnership that I mentioned could effectively carry out that role for agriculture and the land-use sectors. The partnership represents a wide range of organisations from the agri-food and environmental sectors alongside DAERA, and it develops its work through four specialist subgroups.

Considerable research has already taken place. The Agri-Food and Biosciences Institute (AFBI), Queen's University and others are working on research. It is essential that the programme of research is funded and has long-term support. It is not the case that the research can be funded for five years and then we move on, because we need to develop innovative technologies. It is vital that, in tackling

emissions from the agriculture sector, a partnership approach is developed with government and academia working alongside the agri-food industry to deliver for both the sector and the environment. The approach must ensure that there is a profitable and productive agriculture sector while reducing emissions, which is a challenging but essential task. Northern Ireland's agriculture needs to be appropriately equipped and empowered with the right policies and research. We wish to emphasise the need for the research to be well funded and to play a key role in tackling climate change.

Our fellow farmers across the border are on the streets protesting about what might be imposed on them. I believe that that can be avoided here, if we get a sensible, evidence-based approach. This morning, the Minister and his officials stated that they are open to compromise. We urge politicians to get around the table and to work on this. We need good climate change legislation with sensible targets that do not decimate farming and rural communities. We need our politicians to work together to deliver that. In conclusion: get the targets right from the start.

**The Deputy Chairperson (Mr McGuigan):** Thank you, David. Ian is up next.

**Mr Ian Stevenson (Livestock and Meat Commission):** I thank the Committee for the opportunity to attend today's joint session with the industry. It emphasises the issue's importance to the whole agri-food industry. The LMC works in the Northern Ireland beef and lamb industry to support the marketing and development of livestock and livestock products from our region.

At the moment, taking all other industry challenges aside — there is no shortage of those — the climate change and sustainability agenda is at the centre of the industry's conversation and action on the ground. It is worth emphasising that, as an industry, we are not just out of the starting blocks on the journey to UK net zero. For the last 11 years, we have done some excellent work under the guise of the greenhouse gas implementation partnership to reduce the carbon intensity of farm outputs. We will continue to do that, as David rightly mentioned.

The success of the greenhouse gas implementation partnership initiative was in raising awareness of climate change at the farm level. Driving more efficient and sustainable practices and joining up supply chain thinking has been predicated on bringing everyone in the chain on a journey of continuous improvement. For the sake of the next generation of young people who want to come into our industry and to shape its future direction and prosperity, it is critical that the Committee takes the necessary time and evidence to get the decisions right on any climate change legislation for Northern Ireland.

The LMC is pleased that the Climate Change (No. 2) Bill has made it through the Assembly to Committee Stage. In our view, it is a well-crafted Bill. The Bill sets out an approach for Northern Ireland to contribute to an overall UK-wide initiative to deliver net zero by 2050, and, in our view, that is the correct approach.

The level of ambition is high for our region and should not be undervalued. The approach recognises Northern Ireland's important role in the domestic food supply of the UK. The output of the food industry here delivers enough high-quality calories to feed at least 10 million people.

The targets in the Bill for reductions in the emissions account for Northern Ireland in 2030, 2040 and 2050 are challenging, but they are informed by the expertise of the UK Climate Change Committee and based on sound principles of science, economics and deliverability. Delivery, certainly of the targets in this Bill, will still be a monumental challenge. The first target for 2030 is only nine years away. Whilst our industry is willing to play its part, it will need major investment in technology. We need to look at how we use the land to generate output and sustain livestock numbers. We also need to look at how we can help to offset carbon emissions and to sequester greater amounts of carbon. Government and other actors must work in partnership with our industry to provide whatever support and investment is needed on the journey. We cannot allow a situation to develop where targets are achieved through the offshoring of our domestic food production base to less carbon-efficient producers overseas.

Without getting into specific clauses in this short introduction, I will say that the flexibility that has been built into the Bill to enable the amendment of targets and approach over the period to UK net zero is welcome. It allows for new science and advice that may develop to be taken on board in the years ahead.

From our perspective, it is vital that government works closely and in partnership with industry on this. The first carbon budget period that is envisaged in the Bill is due to commence in less than 15 months from now. It is imperative that careful thought is given to the process for developing and consulting on

the carbon budgets, so that all relevant sectors are given adequate time and support to adapt their practices and to make any necessary investments to stay within the budgeted emissions in the targets.

That is a short introduction from the perspective of the LMC and the beef and lamb industry.

**The Deputy Chairperson (Mr McGuigan):** Thanks very much, Ian.

**Mr Conall Donnelly (Northern Ireland Meat Exporters Association):** Chair, thanks to you and the Committee for having us back. Like the others, I am grateful for the opportunity to explain our position. You might not be surprised that some of the points that I will make will not be much different from what others said. Mike struck a really good tone with his comments. That is the positive way that everybody would want to approach this.

I do not want to repeat the detail that I gave you in June, but it is important to set the context. Grass-based farming is the primary agricultural enterprise in Northern Ireland. That is down to geography and climate. Our geography is more suitable for beef, dairy and sheep farming than other agricultural enterprises.

We have talked about the contribution that we make to the rural economy. A total of 50% of agri-food industry turnover comes from the ruminant livestock sector. That is £2.7 billion per annum. Given that the industry as a whole supports 113,000 local jobs in the food sector and that the ruminant livestock sector is 50% of that, the importance of that sector to farming, processing, veterinary, haulage, warehouses and government is immense.

The key point in all this is that our ruminant livestock convert inedible grass to high-quality protein, and that is to feed 10 million consumers in the UK every year with beef and two million with lamb. It is a global issue, and, with the global population expected to exceed 10 billion by 2050, global meat demand is expected to have increased by 76% since 2005 by that stage. That production will be essential from a food security perspective. With our carbon footprint in Northern Ireland being 250% lower than the global average, it is essential that our productive capacity is maintained; that is not just from an economic perspective but from a global climate agenda perspective. We do not want to create a vacuum that will be filled with beef that is less climate friendly and has a higher carbon footprint.

We are quite positive about the Bill's objectives. We support climate legislation, as we said before. We need to reduce emissions. We are already on that pathway. At this stage, certainty around legislation is critical, because, as Mike said, we are looking at targets in the commercial realm as well.

We support the fact that the emissions reduction targets in the Executive Bill are in line with the CCC targets of 82%. We understand the importance of stretching targets that will challenge industry and society to make innovations and to drive the kind of change that is required, behaviourally and technologically. The targets in the Bill are really challenging, but they are grounded in evidence. They certainly do not lack ambition.

The proposed targets also appear to us to be fair, given the alternative approach of every UK region setting a net zero target. That is the other way in which it could be done. The critical thing to remember about the UK CCC approach is that it proposes UK carbon budgeting that allocates responsibility for the different devolved regions in a way that means that each UK region takes its fair share of the pain. That is a responsible approach.

As an industry, we are certainly up for change. We are on the road with it. You have seen our agriculture policy proposals to government, which set targets and ambitions on emissions reductions. NIMEA's three largest members have made science-based targets undertakings, with targets to reduce greenhouse gas emissions from direct sources on-site from energy and on raw materials from the supply chain, including in beef and sheep production. The science-based targets initiative that they have signed up for is a partnership between the United Nations Global Compact, the World Resources Institute and the World Wide Fund for Nature. It is a global benchmark and is verified independently. Some 340 UK companies have made commitments under that. Only 136 have set targets that have been signed off and approved, and that means that those businesses are locked in to the global climate agenda and the Paris Accord. Notably, only a handful of Northern Ireland businesses have committed to such targets, and three of them operate in our sector.

Our supply chains are fragmented, and it is difficult to affect change. The core of our approach is to get win-wins on-farm, and that is about improving efficiency and reducing emissions at the same time.

There is a lot of work going on and a lot of initiatives from our members on having better genetics and grassland management, the use of feed additives, improved livestock management and, ultimately, slaughtering cattle younger. We believe that, through a combination of those measures and the emergence of new scientific approaches, we can meet the targets in the Bill without any of the draconian measures that some people talk about, such as livestock reductions. Progress in a sector like ours will depend on the application of new and emerging science. Agriculture probably has a greater challenge than many other sectors, because it is not like a factory where you can change the specification to manufacture a machine. We deal with natural, biological processes and a large, fragmented industry, and we will rely on the adaptation and application of new science. Any interim target that is set for agriculture must take account of those challenges. As the representative of the UFU said, farmers and the industry need support to make those changes.

We also welcome the flexibility in the Bill to change targets when there is scientific evidence to support it. That is a humble approach that recognises that the science is evolving and that targets and policies that seem OK today might need to be changed in the future. In our previous evidence session, we had a long discussion about the global warming potential (GWP\*) methodology that recognises the differences between short-lived and long-lived gases. I will not go into it again; that is more for the scientists. However, it is clear that the science is not standing still and that the policy and carbon-counting methods need to keep pace with the science. There is also the question of accounting for sequestration on farms from hedgerows, trees and grassland. That is critical, and farmers' emissions should be measured in net rather than gross terms. That is another important consideration for the Bill.

To summarise, we are part of the solution. Our members are actively working on the agenda, the willingness is there, and, with the right legislation in place, our members and the suppliers can reduce emissions and continue to feed the growing global population. We need to do both.

**The Deputy Chairperson (Mr McGuigan):** Thank you very much, Conall. Between Robin and Gill, I am not sure who will make the contribution, but tear away.

**Ms Gill Gallagher (Northern Ireland Grain Trade Association):** It is me, thank you very much, Chair. Good afternoon, and thank you very much for the invitation to appear before you today to provide evidence on the Climate Change (No. 2) Bill. I start by offering our condolences to the Chair of the Committee, Declan McAleer, on his sad bereavement.

Just to introduce myself, my name is Gill Gallagher, and I have recently been appointed chief executive of the Northern Ireland Grain Trade Association. We represent businesses that support local farmers. There are around 60 feed manufacturing businesses and 200 merchants across the Province who are an essential part of the fabric of rural communities, creating employment and delivering crucial services.

Climate change is one of the biggest and most complex challenges facing us all globally. NIGTA recognises the need for climate change legislation in Northern Ireland and is committed to helping to reduce emissions in the agriculture sector. We recognise the challenge and are already part of the solution, applying local research and the best available science to reduce the phosphate and nitrogen emissions of feeds. We have also been very proactive in developing a training programme for Northern Ireland's feed advisers which equips them to guide farmers as to best practice in reducing greenhouse gas emissions and nutrient losses on-farm. That module was widely consulted on and welcomed by all stakeholders, and it is co-delivered by NIGTA and CAFRE. Our key message is simple: a more efficient farm is a more profitable farm with a lower carbon footprint.

The principle of precision nutrition very much underpins feed efficiency. That involves ensuring that the nutrient requirements of the animal at each life stage are understood and met properly and precisely to minimise emissions. Improvements in feed conversion have led to less feed being consumed overall, thus lowering the carbon footprint of livestock production. That will very much continue to be a key focus of our industry. To date, 116 ruminant feed advisers have been trained. Content for a similar module for pig and poultry advisers has been developed and is due to be rolled out in the coming months. It is estimated that our registered feed adviser members provide advice to around 40% of all farm businesses in Northern Ireland. That covers all poultry, most of pig, most of dairy and the major beef operations.

NIGTA is a member of the greenhouse gas implementation partnership, a voluntary partnership between the local agri-food industry, science, government and environmental organisations. We reiterate what others have said before us: we would very much welcome a reinvigoration of the

partnership so that this excellent collaboration can continue to deliver results for the Northern Ireland agri-food industry, and, indeed, for wider society.

NIGTA supports the Climate Change (No. 2) Bill. We certainly welcome it. As others said, we would also welcome the amalgamation of both Bills into this and proceeding with the second climate change Bill. We are pleased that there was proper public consultation prior to the Bill being brought forward, to which we responded. We acknowledge that the explanatory and financial memorandum provides for impact assessments of the Bill insofar as is practical. What is critical is the fact that the Bill is evidence-based. It is grounded in science and takes account of Northern Ireland's unique circumstances by following the advice of the renowned climate change experts, the Climate Change Committee.

Like others, we accept that the targets detailed in the Bill are evidence-based. We also realise that reaching that 82% reduction in greenhouse gas emissions by 2050 still poses a significant challenge for the agri-food sector. The scale of that challenge should not be underestimated. It is important to emphasise again that the agri-food sector wants to be part of the solution and is playing its part in the fight against climate change. This afternoon, you have heard of various ongoing initiatives. It should also be understood that mitigations on-farm often involve significant investment and changes to management practices, which can take time not only to implement but to deliver an impact. We do not have all the answers yet, so we really do need investment in research and effective collaboration between industry, government and academia to identify and develop the most cost-effective technologies and strategies, as well as communicating directly with farmers.

Meanwhile, meeting the transformation in land use that has been suggested by the Climate Change Committee in terms of freeing up agricultural land for other uses following reductions in UK meat and dairy consumption could have far-reaching consequences for the agriculture sector and be difficult to achieve. There is also potential for that type of policy to lead to unintended consequences for human health, as animal-sourced foods contribute a large proportion of the key nutrients in the diets of children, adolescents and adults. Furthermore, if consumption patterns do not change as anticipated, that demand will still need to be fulfilled, and it is important that it continues to be fulfilled from a low-carbon production base in Northern Ireland, compared to more carbon-intense imports. As others have said, that would simply lead to carbon leakage and end up defeating global climate change objectives. Any policy that leads to a forced reduction in livestock numbers or output from the agriculture sector cannot be supported, and, given the global challenge of an increasing population, the question really does have to be asked: should Northern Ireland, with an efficient and low-emission agriculture sector, be forced to reduce food production? A Northern Ireland-centric policy that forces our farmers out of business will actually defeat global climate objectives.

It is also important to note that the consequence of reducing livestock numbers is not simply a reduction in the national herd. It will have far-reaching consequences throughout the agri-food sector, which employs 113,000 people, with knock-on effects on subsidiary businesses, such as agri supply merchants, meat processors and veterinary services. It will risk the viability of rural communities, as well as creating additional social and economic pressures for wider society. Therefore, the principle of a just transition must be enshrined in the second Bill as a safeguard to guarantee that the benefits of the green economy transition are shared widely. In that respect, the Scottish model of a just transition should be considered in Northern Ireland. While the Bill provides the broad framework, the delivery and success of the Bill will very much depend on secondary legislation. It is therefore imperative that any secondary legislation and policies undergo thorough regulatory, economic and rural-needs impact assessments and also guarantee that just transition. Policies must facilitate innovation and avoid stifling business opportunities for reducing carbon. Collaboration with industry will also be key for delivering outcomes, and commitment to long-term funding for research into climate mitigation and adaptation solutions is very much needed.

Finally, our industry is underpinned by science, and our members have a proven track record of delivering environmental solutions and disseminating key messages on the farm. As we have said, we in the industry are all very much committed to playing our part in the fight against climate change, and we welcome the opportunity to be involved in the discussions on the forthcoming climate change legislation for Northern Ireland.

**The Deputy Chairperson (Mr McGuigan):** Thank you very much. We will open it up for members to ask questions, so I remind everybody again, if you are not speaking or asking a question, put yourself on mute. When you are finished asking a question, put yourself on mute. There are, I think, six organisations here and a number of members, so if you are asking a question, you should specify

whether it is for a particular individual or a specific organisation so that we are not all repeating ourselves on the same subject. I am just going to throw it open.

**Mrs Barton:** Thank you, contributors. It is interesting to hear your thoughts on the Climate Change (No. 2) Bill. You have all spoken about and been fairly supportive of the Bill. I want to refer to the first Climate Change Bill in a minor way. As you know, the two climate Bills are progressing together. Do you see a future in which the two Bills could perhaps be merged into one Bill? The Ulster Farmers' Union can start.

**Mr Brown:** Aileen, do you want to go ahead? I said my piece at the start.

**Ms Aileen Lawson (Ulster Farmers' Union):** Hi, Rosemary. It is vital that the two Bills come together and that a compromise is found. I think that all the organisations here have indicated that they support climate change legislation. If we want to get it through in this mandate, it is important that we find a compromise that works for everybody. We have made it clear that the private Member's Bill will decimate the agri-food sector. The main reason for that is the targets. We can work with the targets in the Climate Change (No. 2) Bill. There are other issues in both Bills that can perhaps, in our view, be merged or on which a compromise can be found. From UFU's point of view, we urge the MLAs to get round the table and start trying to find where those compromises may be and where they may work the sooner the better, so we all can get on with delivering on climate change and getting the policies out on the ground to allow action to be taken and the research to be done and so forth. Our message to you is: please find those compromises, and do so quickly.

**Mrs Barton:** Thank you. Are there any other comments?

**Dr Johnston:** I will jump in to say that we entirely support what Aileen said, Rosemary. It is crazy that we have two Bills that are trying to do the same thing going through the Assembly and the Committee at the same time. The sooner we get a single Bill that we can start to work around, work through and work with, the better. As I said in my opening comments, we are being pulled in all directions by customers, and our competitors are gathering momentum in the sort of activities that they are undertaking. We want to get on and start making things happen in a new and different way, but we need this.

Everybody says that we have to have a strategy. The nature of a strategy is that you have to know where you are starting from and where you are wanting to get to. At the minute, we do not know where we want to get to. We need to know that. We absolutely support what Aileen said. We need a single evidence-based Bill, and it is up to you, the MLAs, to take on board the comments that you hear, the concerns that we have and the opportunities that we see and to give us one Bill that we can start to work with you on to try to deliver what we all want: to make sure that Northern Ireland plays its fair and reasonable part in getting the UK towards net zero by 2050.

**Mrs Barton:** I have just one other question. The UK's CCC will be the sole source of expert advice on climate change policy and the provision of independent oversight under the Climate Change (No. 2) Bill. Will that be an effective enough framework for accountability and the scrutiny of performance in the Bill? Gill?

**Ms Gallagher:** Thank you, Rosemary. It is important that the Climate Change Committee is a source of expert advice for the Bill. It is the renowned climate change expert, but a mechanism that can feed in Northern Ireland perspective into that advice would also be worthwhile. A useful mechanism already exists with the likes of the Food Standards Agency (FSA). There is a Northern Ireland committee set up that is able to feed in to the FSA, and perhaps, if there was a similar mechanism on a climate basis, that would enable expert opinion from a Northern Ireland perspective to be fed in. From an agriculture perspective, there is the greenhouse gas implementation partnership. That is a collective of industry, government, academic and environmental organisations working together. It may also be a useful vehicle for feeding in specific advice on the agri side. There are opportunities to involve additional advice, but we are very supportive of the Climate Change Committee.

**Mrs Barton:** Thank you. This final question is to Conall. Do you think that there is a need for additional independent oversight in relation to the Bill?

**Mr Donnelly:** I concur with Gill. The authorities already have a responsibility and an obligation to report to the CCC, so it is about providing the local flavour for that, if that is required. Again, there

have been discussions about the concept of a climate change commissioner. One of the big considerations has to be cost — obviously, there would be a cost to the taxpayer — as well as the benefit that it would provide over and above what the CCC provides through its oversight. I suspect that that is what you are getting at, Rosemary.

**Mrs Barton:** Yes.

**Mr Donnelly:** Where is the value for money? What will that cost over and above the service that is provided by the CCC, which, as I understand it, has already been paid for by the Department? That is the key question. As it stands, the CCC has oversight powers, so I think that that provision would have limited value. Maybe others want to chip in on that.

**Mrs Barton:** Thank you.

**Mr McGlone:** First, my apologies; I have another meeting that is due to start at 2.15 pm, but I want to make sure that I ask you a number of questions. We have heard quite a bit, even during evidence sessions, about sustainable measures, and we heard today about a balanced approach from the Department and working in partnership. I am glad to hear that things are starting to evolve to the stage of practical measures, as you said, Gill. I want to challenge the perception that nothing can be done until legislation is in place. I am sure that each of you, individually or collectively, is doing things that will form part of the links that are required to help to mitigate and prevent the climate change that is so perceptible to us. It would be helpful for me and, I am sure, the other Committee members to hear about what measures you are already engaged in.

This morning, we heard about the issues and problems on-farm and the big issues that are going to have to be dealt with at farm level, but there is nothing to prevent businesses —. Sorry, my mobile is ringing. Somebody else is looking for me. Sorry about that. Conall, you mentioned that, I think, 106 businesses have already moved on and are taking measures and the like. I would like to hear what those are, just so that the impression does not go abroad that people here are sitting static and are not looking ahead. Clearly, it is good for businesses and it is a marketable thing if they are seen to be doing that, because there is clearly a market for it. People are, rightly, buying into the environmental arguments and want to see how responsible the commercial aspects of life are, such as yourselves.

**Mr Donnelly:** Patsy, I am that glad you asked that question. It is not the case that we are waiting for the legislation. For anybody operating in the commercial world at the minute, there is no question that this is a huge driver from domestic customers in particular, but also internationally. That has been increasingly so over the last 10 years. In our sector, there is and has been a particular focus on red meat in the broader *[Inaudible.]* Commercially, there has been an onus on us in the sector to address emissions as part of our corporate and social responsibility, and that is happening. The most difficult place to address those challenges is on-farm, because, as I said during my presentation, it is a very fragmented industry. You are talking about biological processes, and it is not just like changing a specification of a manufacturing machine or changing an energy supplier. It is a much more complex thing to change. There are no silver bullets, and lots of small measures are required to make the kind of progress that we need. Down the line, we will probably also need scientific advances to meet our targets. Those are coming, and a lot of investment is coming into that area.

However, that is not to say that progress has not been made. When you look at the work that was done —. Apart from me, everybody has talked about the greenhouse gas implementation partnership. That has been a fantastic model over the last 10 years. If you look at what is going on there, we have carbon footprinting on farms. We have 3,200 farmers participating in the business development groups, and there is a detailed and dedicated focus on resource use and sustainability in a number of those groups. Some 12,000 farmers have been trained under the farm family key skills programme, including in soil analysis, animal health and business planning. As part of the ARCZero project, there have also been 29 new technical demonstration farms set up in the cattle and sheep sectors, with a target of reaching 40 such farms. It would be worth getting John Gilliland here to talk about that. It involves DAERA's agri-research division and QUB, and it has brought farms together to investigate practical ways to measure, manage and reduce carbon emissions. There is all sorts of research going into reducing emissions and on nitrous oxide, carbon sequestration and grasslands. There is also all the work that CAFRE is doing on farm efficiencies and, as I said, through the farm family key skills programme.

All of that is happening on farms, but probably the easier wins for processors in our sector are in the factories, in terms of how we source our energy, deal with packaging and improve our carbon footprint

in the processing sites. Processors are extremely active on that front. They are buying energy-efficient technologies and investing in anaerobic digestion (AD). There are so many programmes ongoing on regenerative technologies, and I provided evidence on that in my previous evidence to the Committee, Patsy. Even something like bovine viral diarrhoea and the progress that has been made there has made a huge contribution to carbon emission reductions. The *[Inaudible]* reports showed that if you reduce bovine viral diarrhoea, you can reduce the carbon footprint of an animal by 130%. A huge amount of work is going on in that space, and we are very much on this. We are probably more on it than a lot of other sectors, yet perhaps we are taking the brunt of the focus in many respects. We are not complaining about that and are getting on with it, but there needs to be a focus on other sectors as well.

**Mr McGlone:** Yes.

**Mr Stevenson:** I might add one short point to that from a beef and sheep meat perspective. It is not just about what we are doing now. The industry has focused quite a bit on what more it can do and how government can incentivise it to do it. Looking at future agriculture policy, for example, can we incentivise animals getting to slaughter at an earlier age? Can we get more cows to calve at 24 months of age and reduce the calving interval? Can we get more use of low-emission slurry-spreading equipment on the ground? All those things really help to drive efficiency and productivity and cut greenhouse gases, which was really the theme of the work of the greenhouse gas implementation partnership. It was built on a strategy of efficient farming cutting greenhouse gases.

The industry has been active. It has been brought on a journey, and I suppose that what we are all trying to say is, "Help us on that journey. Do not pull the feet out from under the industry by setting unrealistic targets that cannot be achieved". That is the partnership approach that, everyone says, we need.

**Mr McGlone:** Just on that point, the issue of slurry is a palpable and realisable one that can be spotted very quickly. A lot more effort needs to be made. I do not know whether the science has reached some of the practitioners on the ground, shall we say. It is frequently an issue that comes up with me from non-farming people who talk about the smell, but they have clearly done their research. They contend that the smell is a problem that is associated with the climate change and the like. It seems that quite a bit of work needs to be done on that front without a shadow of a doubt.

**Mr Donnelly:** Patsy, if you go down to the country these days, you will often see slurry being piped into the field rather than being spread with a splash plate.

**Mr McGlone:** Sometimes, yes.

**Mr Donnelly:** That is extremely common now, and it is one of the mitigation measures that have been promoted by the greenhouse gas implementation partnership. Government policy can help with all of that stuff as well. As an industry, we can see that more can be done. We are trying to reduce fragmentation in the industry where there are so many different schemes and programmes. We want to pull all that together, and we have a focus on that as well. Change will not happen overnight, but the key message is that we are very much on this.

**Mr McGlone:** Conall, I live in the country on a family farm. Of all the slurry tanks that I have seen out over the last number of weeks, I have seen only one of the kind that you are talking about. I will leave it there; maybe we are just not as far advanced or up there scientifically as other parts of south Tyrone might be. That is the way it is, and you know that better than me.

I have to dart to another Zoom meeting, and I am way behind. If anyone has anything to add, I can stay for a couple of minutes.

**Dr Johnston:** May I jump in, Patsy? Your point about slurry is a fair one, but as far as I know, the use of splash plates will come to an end next year or in 2023. That is where legislation is helping us. However, look at what has been achieved in the Upper Bann water quality project, where quite a bit of work was done with individual farmers. They were encouraged to soil test and given advice on how and when to spread fertiliser, and the water quality has improved enormously. That is what can be achieved if we have the research, the Government and farmers working together. There is a willingness there. It would be different if you were having to pull people along screaming. People want

to get out and do their bit. It is a case of giving us the right environment now where we can work together. The evidence is there that it works.

**Mr McGlone:** Aye, and the incentive for them is a green, good product for the consumer. That is where the commercial incentive is.

**Dr Johnston:** The farmers who have been involved in that project have seen that their profitability has increased.

**Mr McGlone:** Exactly.

**Dr Johnston:** They are using their slurry resource in a much more efficient way. They have been able to reduce the amount of artificial fertiliser that they have to buy in and use, and the environment is benefiting. Everybody is a winner here. The big motivation, for farmers in particular, is that improving efficiencies delivers benefits for the environment.

**Ms Gallagher:** The efficiency message is absolutely crucial in that respect. However, in order to take us a bit further, there will also be mitigations that will have associated costs. Where that happens, the question is this: who bears that cost and who can support that? Again, it goes back to the point that has been made, which is about making sure that the targets that we set are sensible. Yes, they have to be ambitious, but they also have to be achievable and policy needs to support that. Investment is necessary, whether in research or in new technology uptake, but we need policy to incentivise that. To date, the market has been driving all this, which is great; that is very important. You have heard every one of us who has spoken today outline different ongoing initiatives in all parts of the agri-food sector. We are being proactive, but we welcome the second Bill. It sets a stretching target, and we cannot be under any illusion that that is not a big challenge, but it is based on sound scientific advice, and we are up for the challenge of trying to meet it.

**Mr McGlone:** Thank you very much, everybody. My apologies that I have to nip on, because I am way behind for my other meeting. Thank you for your valuable contributions and for your hard work on behalf of the sectors.

**Mr Harvey:** I was going to direct my question to Mr David Brown, but David said that he had done enough today. Maybe I will just go to Aileen.

**Mr Brown:** Just do that, Harry.

**Mr Harvey:** You were going to send me there anyway, so I thought I would just get there first. Aileen — I would like LMC or some of the other sectors to answer this as well — what are the main challenges for the agri-food sector associated with the target of at least an 82% reduction by 2050?

**Ms Lawson:** It sounds like I am second best, Harry.

**Mr Harvey:** *[Inaudible owing to poor sound quality.]*

**Ms Lawson:** A lot of us have outlined the measures that are being taken up on farms across Northern Ireland, but we know from a UK report that they will probably only get us to about a 20% reduction in emissions by 2030 in the agri sector. Similar figures have been quoted in the South of Ireland by Teagasc, the advisory body. There is low-hanging fruit that you can pick now, but, after that, things begin to get tougher.

The Climate Change Committee has set out clearly that, to get beyond what the current technologies can do, you are potentially looking at a change in land use. That will be very difficult for people in the industry to get their heads around, but we are looking at forestry, energy crops, re-wetting peatlands and things like that. It is about, potentially, a change in land use. We need to find a way of doing that and also maintaining our food production in Northern Ireland.

That is from what we know today. It is important that we look at the science that is coming down the line. There is a considerable amount of investment across the world, particularly in addressing methane that comes from ruminants through diet and whatever. There is a huge need for that research to be given the space and time to develop so that the drastic and forced reduction in livestock, which some of the evidence at this stage points towards, will not be required.

We are hopeful that that science will evolve, but it needs long-term commitment, with Governments committing to it, and it needs time to be developed and brought into commercial reality. That is where we see things going.

**Mr Harvey:** Thank you very much. Maybe Ian could give me something on the LMC's main challenges.

**Mr Stevenson:** When you talk to farmers — David and Aileen do that on a regular basis — one of the key challenges that is always put back to policymakers is to get proper recognition for issues such as carbon sequestration with regard to what farmers are doing and to locking carbon in the soil. That is another area where the science of the approach is still catching up, but we know, through trials at Hillsborough, that, after 50 years, soils are still sequestering carbon. There was conventional wisdom in the debate that said that soils somehow got to the point of being saturated with carbon, but that does not appear to be the case.

It is about how we can incentivise those types of practices that do not lead to reduction in livestock numbers. That is one of the biggest challenges that we all fear, certainly from the private Member's Bill that we talked about earlier, because one of the big economic impacts of that was that you could not achieve the target unless you decimated livestock populations. Nobody in our industry wants to see that.

The question is how to achieve those targets, how to get proper recognition at farm level for the positive actions that farmers take to grow more efficient livestock and capture more carbon in the soil and how to incentivise those processes. It is a long, hard road to an 82% reduction, certainly when you are dealing with biological processes and methane. Livestock are biological systems: unless feed ingredients or changes to genetics come along in the future, given the current knowledge and science, there will still be a significant challenge in that space.

**Mr Harvey:** Do you agree that we do not want to do anything that would affect the quality of our food here? It is second to none. It is world renowned. We really do not want to do anything to affect that; if we did, people's health would be affected as well. Do you agree that we need to be careful that way as well?

**Mr Brown:** If you are happy enough, Harry, I will come in on that one. It relates, in particular, to the trade deals that are being discussed currently. Indeed, I was speaking at another meeting this morning about standards. Ultimately, it comes down to this: we have world-leading standards in not only the quality of the product but the level of emissions. For beef, we produce less than half that of western Europe and, indeed, Ireland, and we have among the lowest emissions in the world. As I said at the start, which you may have missed, if we export food production, we do exactly what you are concerned about: we not only reduce standards but, from a climate perspective, go in exactly the opposite direction to where we should go. Food should be produced in the regions of the world that have those low emissions.

**Dr Johnston:** Harry, may I jump in there? The other aspect of the issue that you raise is food poverty. The evidence suggests that, if we were to start to facilitate carbon leakage, one of the unintended consequences would be to increase food poverty in Northern Ireland, simply because the imported product would be much more expensive than the locally produced product.

To come back to your previous question, one of the greatest challenges that we will face concerns data collection and data use. It is the old adage: if you don't measure you can't manage. We are in a position now to grasp the issue of data collection and data management in a way that will give Northern Ireland a major competitive advantage that I am not aware of anybody else in the world having. We should be able to invest in knowledge gathering — a knowledge hub — that brings together the disparate sources of knowledge and data that we have into one place. We will then be able to leverage and use that knowledge for the benefit of agri-food and, indeed, for policy development and policy review. The whole issue of data gathering and data analysis is a big challenge, especially to enable farmers to manage the data. If we can get it right, however, there are massive opportunities for us.

**The Deputy Chairperson (Mr McGuigan):** Hello, Harry?

**Mr Harvey:** My connection dropped out there, but I got most of that. Thank you all very much. Those were excellent answers, which I appreciate.

**The Deputy Chairperson (Mr McGuigan):** OK, thank you. Sorry, I was not sure. My internet is poor in this room, so I was not sure whether you were cutting out.

No other members have indicated. I am keen to expand on carbon leakage. It is not the primary focus of any of the Bills or of what we are doing, but it is useful to have the conversation. A couple of times, Mike mentioned being pulled in different directions by customers.

I also remember reading, prior to the summer, that a lot of the larger supermarkets across the water wrote to the Brazilian Government about the fact that they would not source products from Brazil if they continue to decimate the forest and ignore climate change. That is an example of how, even without legislation being in place, businesses, and specifically supermarkets, are responding to consumer demand. Do you think that the Assembly can do anything to legislate for that? Can it put anything in place, in either of the two Bills or anywhere else, that would negate carbon leakage, or is that related to trade and, therefore, beyond our remit?

**Mr Donnelly:** Will I pick up on that, Mike? We discussed this last time that I was here, in June. That is a big concern of ours. You mentioned Brazil. People talk about Brazil a lot in relation to emissions, deforestation and all of that, but Australia is a really interesting example. We have seen a trade deal between the UK and Australia whereby, based on commitments made around equivalent standards and things like that, you would expect there to be a requirement for Australia to sign up to a net zero target in the same way that the UK as a whole has. That was missing from that deal. There is no commitment on the Australian side, and yet a deal whereby Australia has access to the UK market for 170,000 tonnes of beef. Nobody would even think about talking about Australia in this context; you only read about Brazil. That 170,000 tonnes is the equivalent of 700,000 slaughtered cattle. That is huge. We only slaughter 450,000 cattle in Northern Ireland so, in the scheme of things, that is huge. Australia has also been given access to 125,000 tonnes of lamb and mutton. That is the equivalent of eight million sheep. In Northern Ireland, we slaughter about 400,000 sheep. What is that? That is 20 times the difference into the UK market. That is the risk around this.

We are starting from a better position. Looking at the difference between emissions from western Europe and emissions from Oceania, taking Australia as being represented by Oceania and Northern Ireland as being represented by western Europe, Oceania has 154% of our emissions from beef and 110% from sheep. We are therefore starting from a better position. In the UK, as a whole, there is a net zero Bill. Northern Ireland has very stringent targets, and there is no equivalent legislation or target in Australia. The real risk is that we will end up offshoring production to Australia. We would then get into the question of what we can do about it and what our influence is over UK trade policy. From that perspective, our influence is very limited. What power does the Assembly have to legislate for carbon leakage? None. Even from the perspective of Northern Ireland there is none, because it is a reserved competency. I struggle to see what can be done to influence the UK Government on that.

**Ms Lawson:** I will just add that I agree with all that Conall said. That is trade policy, and we have no influence over that. The EU is looking at the carbon border adjustment mechanism; however, that is purely to protect the EU market from the issue of carbon leakage. It is starting in certain sectors, and it is expected to be widened out to cover most trade policy, but the EU is very concerned about the issue around carbon leakage as it brings in stringent targets to most member states. I suppose that mechanisms are being discussed, but not at a UK level. How that EU policy impacts us here, through the protocol or whatever, is unclear at this time. It is still in its infancy at an EU level, so it is hard to know how it will work out. Certainly, the EU is considering that.

**Mr Donnelly:** The one issue there is that 80% of our product goes into the UK, so it does not fall under that. If the UK had a carbon border adjustment model, you would be a lot more reassured.

**The Deputy Chairperson (Mr McGuigan):** I am not being political about the issue, but I am concerned that we are spending so much time producing climate change legislation, and, in all honesty, the focus of both of these Bills, even though they affect all sectors, has been on agriculture because of the importance of the agriculture industry here in the North. However, things that we have no influence over could be more devastating to the agriculture industry than anything that we would do here on climate change. I am trying to square that circle or see whether there is anything or potential —. Obviously, there is COP26, so, internationally, you would like to think that targets will be set down that nations right across the world will abide by. It is a concern for me that, regardless of what we do here in the North to try to accommodate agriculture in a climate change environment, your industry will be impacted more by trade policy as a result of Brexit. That was initially in response to Mike, because he used the phrase, a couple of times, being "pulled in different directions" by customers. I was hoping

that he maybe could elaborate a bit more on what he meant by that and about what we could possibly do in the Bill to ensure that that was not the case.

**Dr Johnston:** At the moment, Philip, customers, obviously, are taking quite a bit of interest. They are asking for evidence of what is being done. They are asking what [*Inaudible owing to poor sound quality*] are doing to mitigate their emissions and reduce their carbon footprints. At the minute, they are not saying that they want us to produce milk with x amount of carbon per litre of milk, but they are looking for the evidence. You will have seen that various companies have now sampled a number of their suppliers. That is to provide reassurance to their customers, but, equally, they are trying to get a competitive advantage.

That is the environment that we are currently in. The drivers at the minute are customers and the competitive advantage, but it would help us if we could get the legislation in place that sets the targets so that we then have that benchmark where we can say to customers, "That is what we are working towards, here is how we are going to achieve it and this is what we have achieved so far". It would be a big, big help to us to be able to do that.

**Ms Gallagher:** One of the challenges in the market at the minute is, as Mike has said, that customers are being asked to provide evidence of carbon footprints and reductions. At the minute, there are different calculators that you can use to measure your carbon footprint, and there is not yet, I suppose, a harmonised methodology to do that. For example, in Europe, they are looking at a product environmental footprint as a way of trying to harmonise the methodology behind that. That would be very much, I suppose, more at a market level. It is not necessarily directly compatible with the national inventory and how it works, which, obviously, is what the Climate Change Bill is based on. Certainly, it would be useful to have some form of harmonised standard for carbon reporting at farm level and at business level. It is not just an agri-issue; it spans all sectors. It makes sense because we can all calculate carbon footprints with different tools and get different results, which makes it very hard to compare. Is that specifically needed in this Bill? It might be something for another time in trying to create more of a green market, which is what Europe has done.

**The Deputy Chairperson (Mr McGuigan):** OK, thank you. I do not know if you were listening when the Minister was before the Committee earlier, and, not surprisingly, we veered towards this subject. He is very enthusiastic about the possibility of using biomethane from cattle in anaerobic digestion, and creating energy from that source. Is there the same enthusiasm within the agri-industry for that to be expanded to reduce emissions from that source?

**Dr Johnston:** The Dairy Council website has a couple of case studies on it. Six or seven years ago, a dairy farm up in Aghadowey invested in an anaerobic digester. Currently, the farm is milking about 270 dairy cows. It has a couple of broiler houses with about 35,000 birds. The waste from those is used to feed the anaerobic digester. The methane from that provides all the energy usage on the farm, and the farm is now a net contributor of energy to the national grid.

At processing level, we have, at Ballyrashane, an anaerobic digester, the methane from which produces 40% of the plant's energy usage. We have dairy companies supplying waste material to Granville in Dungannon. Lakeland Dairies in Newtownards uses liquefied methane to power about 40% of the plant's energy usage. It is already happening, and it is very effective. We are seeing a move towards some vehicles being powered by methane as well. In the future, you could see the output from cattle being not just in the primary product, whether meat or milk. The waste could be also of value if we can develop anaerobic digester technology to produce methane that can then feed into the national grid.

**Mr Brown:** Within the Ulster Farmers' Union, I have responsibility for the rural enterprise committee. These approaches came to us; we did not go looking for them. The gas companies Phoenix and Firmus are very much in that frame, talking about the possibilities and opportunities for biomethane. It is a discussion that is certainly ongoing in the industry — and, when I say industry, I mean the gas industry as well as the agricultural industry.

**Ms Lawson:** While the technology exists, there is a considerable cost. It will not work for every farm. It is probably only for the larger farms. You may be looking at more collective or cooperative-type approaches between smaller farms. The other thing is that you run into hurdles around planning, waste licensing, siting and other legislative issues that quite often stall or prevent those types of projects from gaining any traction. There is a need for joined-up government to ensure that this happens. It is the way forward, and certainly part of that circular economy that everybody talks about,

but collective working at government and policy level is needed to ensure that those types of positive projects can happen.

**The Deputy Chairperson (Mr McGuigan):** I think that Clare is online but having difficulties with her Wi-Fi. I do not see her but she has put this question on WhatsApp, which I will ask on her behalf: do any of the organisations have suggestions or ideas for policy that would accelerate transition? I know that some of you are keen on the Scottish model for a just transition. Could you give us any ideas or suggestions for policies that would help?

**Ms Lawson:** The key issue is this: what target are we aiming for? If we are talking about the target in the private Member's Bill, it is, as Lord Deben has indicated, unachievable with what we know at the minute. If we are talking about the 82% by 2050, we are looking at future agri-support schemes, and what they can deliver; energy policy; planning; capital grant schemes; and long-term research. It is a high-level question, and it is hard to give you policies.

Certainly, tomorrow, we could look at trying to build on the work that has been done to date. All of us around the table were involved in the greenhouse gas partnership. We want to get back around the table and start to work actively on looking at, and progressing, what schemes, measures and research are needed in the short term to get quick wins, because there are things that we can do, and do more of, that will achieve change at farm level. We are keen to do that. The current rural development programme funds a lot of those measures, but it will run out in the next couple of years. It is, therefore, about what its replacement will be to allow the knowledge transfer and give the agricultural support and so forth to allow the positive works that have taken place to continue.

**Mr Donnelly:** I agree. A lot of investment will be required on farms. The ambition has to be to maintain our productive capacity and reduce our emissions in line with the targets in the Executive Bill. If we can get there, we will want to ensure that we can have a just transition to it. That means support for farmers to introduce various technologies on farms. We talked about biomethane, for example. Capital grants might be needed for such an initiative on a farm, and support for knowledge transfer will be required. As we see it, every farm will have to calculate a carbon footprint — there will be a cost to that — and a lot of training will be needed. That is how I see a just transition. It would mean something entirely different if you were looking at the net zero targets in the other Bill.

**The Deputy Chairperson (Mr McGuigan):** OK, thank you. It would be useful to know your views on duties being put on public bodies.

**Mr Brown:** I will start, and give the rest of them time to think. This is part of the difficulty. Others have mentioned the need for joined-up government. Sometimes, the policies that appear in one sector or Department have some element of conflict, if not direct conflict, with a policy in another sector or Department. Last night, I went to a meeting with NIEA representatives and an anglers association at which concerns were expressed about pollution and so forth. All these things need joined-up thinking. The difficulty — and I am not pointing at any particular party or politician — is that, at times, an awful lot of the thinking appears to be done in silos. Then, when the communication comes out to the industry or to us, it begs a question. We have had this in the last few weeks around generational renewal: it is one the purposes of the future agriculture policy, and the other aspect is coming from planning.

There are things that are in conflict with one another, certainly when it comes to working together towards addressing climate change. We have come along here as representatives of agriculture, which is responsible for 26% or 27% of carbon emissions. Maybe it is because we were vocal in our responses, but I do not hear that level of conversation from transport, which is responsible for 23% of emissions, and all the other sectors. I assume that, when it boils down to it, government will be working in all those areas.

I will leave it to others to comment on the specifics of the public bodies that are relevant to their areas of expertise or sectors.

**Mr Donnelly:** Government is one of the biggest purchasers of food in the economy. As Mike said, we see ourselves on a journey to being capable of verifying that we are producing some of the most sustainable food in the world. We share an ambition with government to do that. What better way would there be for government to demonstrate a commitment to that ambition than aligning public procurement rules to favour food from Northern Ireland that is produced to a high environmental standard? As the guys have said, in the commercial world, there are lots of different measurement

types, standards and whatnot. Down the line, when we settle on a single acceptable measure, that could be government's way of leading the charge.

**Mr Stevenson:** To add to what Conall was saying, the Northern Ireland food strategy framework, which is out for consultation, sets out the obligations on the various Departments. It puts food at the centre of health, food poverty and other things that have been mentioned throughout today's discussions. How do you get government to act in a more joined-up way? That is a key issue. Look at some of the items on the agenda for each day of COP26. Transport, energy, land use and nature are all focal points for discussion, and all of them impact on the agri-food industry. There needs to be joined-up thinking to make sure that whatever we go forward with does not cause perverse outcomes elsewhere for society in terms of health and well-being or economic health. All these things must come into it.

On reporting, different public bodies will have different duties and requirements. LMC is a public body, but we are such a small organisation that there will probably not be much need for us to report our carbon targets, although the sector that we work in is an important one. The general thrust of getting joined-up thinking across government is essential in this whole agenda.

**Mr Brown:** Hopefully, the Minister or DAERA has made representations on the recently launched Northern Ireland food strategy framework that Ian referred to. It gives us an opportunity in Northern Ireland to look towards local procurement for schools, hospitals and so forth. The likes of Conall and our industry have been calling for that for years. It moves us away from the attitude of, "Just go for the cheapest cuts, and bring them from wherever is cheapest." That has been the approach because of budgets, and I understand that. However, if we are to have a healthy population, produce food to the environmental standards that we wish to, and then feed our nation, including Northern Ireland obviously, with safe, healthy and environmentally produced food, that future strategy framework will be a positive.

**The Deputy Chairperson (Mr McGuigan):** My last question is on the all-Ireland approach. It is hard to imagine there not being problems, as regards practices and an all-island approach, if agriculture in the North is working to an 82% target and the agriculture industry in the South is working to net zero by 2050. I mentioned to the Minister this morning that there are farmers who have farms that straddle the border. There will be issues with products travelling up and down, or maybe there will not. Are there transboundary issues that need to be tightened up, particularly in the Climate Change (No. 2) Bill?

**Mr Brown:** I did a presentation to the Institute of International and European Affairs yesterday. My counterpart from Irish Farmers' Association (IFA) talked about the fact that the level of emissions from agriculture in the Republic of Ireland is sitting at around 35%. The challenge that exists there is greater than the one that we are looking at. I will bring Aileen in to talk about the differences in approach that have been taken.

I mentioned the requirements from Lord Deben in my presentation. He is not in any way shy when it comes to the demands and requirements that he and the CCC is placing on us — by "us", I mean the agriculture community and farmers. I suspect that, when many of our farmers fully understand the requirements of the 82% by 2050, they will realise that it is not a walk in the park and, indeed, will be hugely challenging.

Aileen, do you want to come in on the difference of approach that Charlie McConalogue and the Irish Government have taken?

**Ms Lawson:** I do not have any real concerns about it, Philip. We are operating under different rules at the minute. For example, I am sitting in County Down; as I look across Carlingford lough, I see County Louth, where the closed period for slurry spreading is different. We already work under different rules that aim for the same thing: an improvement in the environment, whatever that might be. I understand that they are starting from a worse place than our industry here in the North is, so there is a bit of catch-up to be done in the South. As long as we are all on a pathway to delivering for climate change, reducing emissions and so forth, that is the important thing. At a farm level, our farmers who work on the border are used to operating different rules and measures. That has always been the case. I do not see any issues at a practical level, but perhaps some of the others will comment about trade.

**Dr Johnston:** There are certainly areas where an all-island approach is absolutely essential, the obvious one being research. We have at least two excellent research establishments on the island:

Teagasc and AFBI. Look at the work that our universities, North and South, are doing. We need to foster and encourage that collaboration. If research is going to be of value, it needs to have industry input. Maybe we should be thinking about an all-island research forum, where we can bring together the various research institutes and industry at an island level. I see no harm in that sort of thing. Once you start to go further, it becomes more problematic. For example, it is difficult at this point to imagine customers saying, "We want you to have milk at a certain emission level". I may be wrong, but, at the moment, I do not see that.

As I said earlier, we have to be able to demonstrate that we are on a journey and making progress. I see trying to achieve competitive advantage as being the biggest driver. Individual businesses and countries are actively working to have competitive advantage. For example, the New Zealand Government, in conjunction with industry, are investing huge amounts to be able to get the data and demonstrate what is happening on their farms and in their supply chains, so that they can go out and tell the story and get that competitive advantage. Individual companies are now doing the same to get a competitive advantage.

From an industry point of view, we will be obliged to meet whatever legislative requirements you put in place but, equally, we have to keep an eye on what our competition is doing. The likelihood is that those two will not be the same. We may have to do things that take us beyond the legislation to be able to get a competitive advantage. It is just the same with aspects of quality: we go way beyond the quality standards to get a competitive advantage. Competitiveness in the marketplace will be a major driver.

**Mr Donnelly:** I probably agree with all of the above, but I will give a note of caution. The targets could be the same North and South, but the legislation will not be exactly the same. There will be plenty of nuances in the legislation and its implementation that could lead to significantly different outcomes. For example, from what we have read in the last few weeks, we get the impression that, in certain quarters in the South, there is an intention to ensure the stabilisation of the herd, to make a special case to put agriculture at the heart of Irish society and whatnot. You could have the same targets North and South but two completely different outcomes for the sector. Even if you have the same targets, the legislation around them will be very different, which will have a huge impact. I would not get bogged down in that. I do not think that it will not have any real implications for trade.

**Ms Gallagher:** To follow on from Conall and to echo Mike's points, I do not think that it will not have any impact on trade. My experience of working with various retailers is that they all like to have their own point of difference, and that point of difference will be regardless of policy. Retailers are doing it at the minute. Every retailer has its own climate policy and its own emissions targets that it wants to meet and its supply chain to meet. That will continue, because they all want a competitive edge. As customers in that market, we will have to adapt to those different requirements. That will not have any impact on policy. Retailers will continue to do that regardless.

**The Deputy Chairperson (Mr McGuigan):** Thank you very much. No other member has indicated that they have any more questions, so we will wrap up. The session has been really useful. I appreciate you all giving up your time to come along this afternoon. We all want to get to one Bill, as you have asked us to. Let us hope that progress can be made on that. I am sure that this will not be our last conversation with you and your industry on climate legislation. Once again, thank you very much.