



Northern Ireland
Assembly

**COMMITTEE FOR
ENTERPRISE, TRADE AND
INVESTMENT**

**OFFICIAL REPORT
(Hansard)**

**Renewable Energy Inquiry:
Department of Agriculture and Rural
Development**

2 December 2010

NORTHERN IRELAND ASSEMBLY

**COMMITTEE FOR
ENTERPRISE, TRADE AND
INVESTMENT**

**Renewable Energy Inquiry:
Department of Agriculture and Rural Development**

2 December 2010

Members present for all or part of the proceedings:

Mr Alban Maginness (Chairperson)
Mr Paul Frew
Mr Paul Givan
Mr William Irwin
Ms Jennifer McCann
Dr Alasdair McDonnell
Mrs Claire McGill
Mr Sean Neeson

Witnesses:

Mr Liam McKibben)
Ms Joyce Rutherford) Department of Agriculture and Rural Development

The Chairperson (Mr A Maginness):

As part of our inquiry into renewable energy, we welcome Mr Liam McKibben, assistant secretary, director of fisheries and climate change division in the Department of Agriculture and Rural Development (DARD), and Ms Joyce Rutherford, deputy principal in the climate change and renewable energy branch. You are very welcome this morning. We look forward to hearing what you have to say. We have had the benefit of receiving DARD's renewable energy action plan 2010, 'Renewable Energy in the Land Based Sector: A way forward', which is very helpful indeed. Please make an opening statement, and after that, members will ask questions.

Mr Liam McKibben (Department of Agriculture and Rural Development):

Thank you. We are grateful for the invitation to provide evidence and describe how we are encouraging the development of renewable energy in the land-based sector. We are also grateful that you agreed to defer our appearance last month; we were unable to attend due to Joyce's having been ill. I will take a few minutes to outline briefly the context of our approach to renewable energy, highlight our work with other Departments at local and national level and, hopefully, address some of the issues that, as part of the Committee's inquiry so far, have been brought to our attention.

Most of you do not need me to tell you that agriculture is one of the main indigenous industries in Northern Ireland and is the backbone of the rural economy. Meeting the demand for high-quality food supply against a background of climate change, as well as the need to reduce greenhouse gas emissions, presents a major challenge for the land-based sector. We believe that the promotion of renewable energy in the agriculture and forestry sectors can contribute to meeting those challenges and can play an important role in reducing greenhouse gas emissions. That can be done along with other measures that relate to nutrient management, more efficient livestock management and carbon sequestration.

We have acknowledged the rapid development of a renewable energy policy, particularly the ambitious targets that were set in the strategic energy framework. Our objective is to assist with the creation of a favourable environment that will enable the agriculture and forestry sectors to exploit those opportunities, which, in turn, will assist in contributing to the targets that have been set at local and national level. To meet that objective, our approach is set out in the renewable energy action plan, which was published in June 2010. That plan was informed by the recommendations of a stakeholder forum on renewable energy. The Minister of Agriculture and Rural Development set up that forum in late 2008 to review the previous action plan and provide direction on the way forward. The forum's report also took account of the Committee for Agriculture and Rural Development's report on its renewable energy inquiry.

The aim of our action plan is to strengthen and improve the capability of the land-based sector to adopt renewable energy technologies and activities and to help maximise the opportunities that the development of renewable energy has to offer. If you look at the plan, you will see that it contains 15 practical actions that range across research-based commercialisation of renewable

energy, sustainable scale anaerobic digestion, heat-based businesses, self-sufficiency in renewable energy, integrated business solutions and successful and effective implementation of the plan. We believe that we are delivering all those actions for the sector. We have provided an electronic copy of the action plan, and the agriculture forum's report is available on DARD's website.

I will take a few minutes to highlight a couple of the key areas that are covered by the plan, specifically in the area of research and development, education, training and grant assistance. We acknowledge that there is a continued need for research and development, which is essential to the future success of the sectors in contributing to the growth of renewable energy. We have a detailed programme of renewable energy research that focuses on biomass crops, anaerobic digestion, the economics of renewable energy, research into bioenergy technologies and the carbon footprinting of renewable energy. That research is under way at the Agri-Food and Biosciences Institute (AFBI). There are extensive facilities at the renewable energy centre on the AFBI site at Hillsborough. Similar facilities at the College of Agriculture, Food and Rural Enterprise (CAFRE) provide valuable demonstration opportunities for the sector and contribute to the heat and electricity demand at Hillsborough and the DARD estate, particularly that at CAFRE's Greenmount and Loughry College campuses.

Of course, research and development on its own is not sufficient. We need to ensure that we roll out the findings of that research through knowledge exchange and technology transfer. Last month, for example, we held a very successful renewable energy event at CAFRE, which comprised a series of seminars on different aspects of renewable energy technologies and how they could be used on farms. We had trade exhibitions and demonstrations of the facilities at Greenmount. Over 700 individuals with agriculture and forestry interests attended the event. That far surpassed our expectations, and we were very pleased with the outcome. Mind you, it was a rotten day for doing anything else, so perhaps that helped contribute to the attendance level.

Therefore, through CAFRE we are committed to ensuring that the sector is equipped with the necessary understanding and skills and that it has access to the appropriate information, knowledge and training to enable effective operation in the renewable energy environment. CAFRE has a series of targeted training sessions for the land-based sector on renewable energy technology activities. Those include workshops and benchmarking activities on farm-based energy efficiency and workshops on energy crop production, its harvesting and how it can be

utilised. I should also mention that we have strengthened our links with the National Non-Food Crops Centre, specifically with the aim of developing a Northern Ireland section on the national anaerobic digestion portal.

We provide capital grants for biomass processing both to farmers and land users, and, recently, our Minister, Michelle Gildernew, announced nine offers of grant totalling almost £1 million. That is co-funded by national money through us and by EU money through the European regional development fund (ERDF) under the biomass processing challenge fund. That grant will support the installation of biomass processing facilities to produce renewable energy on farms. The fund provides capital support on eligible expenditure of up to 40% to a ceiling of €400,000 for each project. Those projects will contribute to improvements in farm business efficiency, to improvements in competitiveness and to greater energy security through the processing of agriculture and forestry wastes and other biomass material. The projects represent a total investment of over £3.4 million and cover the installation of biomass boilers and anaerobic digesters on farms.

Looking ahead, we are keen to ensure that the agriculture community's interests are represented in the whole arena of renewable energy. We are committed to working with our stakeholder base to ensure that its views are incorporated as policy in that area evolves across the Executive. We are continuing to implement the actions in the renewable energy action plan, and work is continuing with other Departments and agencies to ensure that we are helping in the co-ordination of other activities. The next big thing that will happen under the renewable energy action plan is that we will establish an external stakeholder group to provide advice to the Department and to report to the Minister on how the action plan is going. That group will conduct a review of the first year's delivery of the action plan.

Finally, as I said, we are committed to working actively with other Departments and agencies to optimise and co-ordinate policy objectives. We are represented on the sustainable energy interdepartmental working group that the Department of Enterprise, Trade and Investment (DETI) set up. The purpose of that working group is to ensure that a co-ordinator reports across government on the promotion of sustainable energy. We are very keen to support DETI as far as possible in that work and to ensure that practices that relate to sustainable energy matters are in concert. We also sit on the DETI-led bioenergy interdepartmental group, and we expect that our renewable action plan for the land-based sector will form an important part of the revised

bioenergy plan, when it is brought forward.

We also contribute to the industry advisory panel on energy and waste. That is a subgroup that comprises Invest NI, the Department of the Environment (DOE), agrifood industry representatives and us. The purpose of the group is to look at the way that waste can be used to provide energy in the sector, particularly in the food processing sector. Other groups that we are involved with from a renewable energy perspective include the sustainable development group, which is led by the Office of the First Minister and deputy First Minister (OFMDFM). At national level, we are represented on the biomass sustainability implementation group, which is led by the Department of Energy and Climate Change (DECC). We attend meetings of the National Non-Food Crops Centre and of the Department for Environment, Food and Rural Affairs (DEFRA) and the other devolved Administrations, specifically in the development of anaerobic digestion in the agriculture context. We are also represented on the International Energy Agency's task 37 biogas group.

Overall, I hope that I have conveyed an impression that we are in regular contact with other relevant Departments and agencies here and at national level to ensure that the interests of the land-based sector are represented and that our activities are co-ordinated with those elsewhere. I hope that the presentation has been helpful in providing an insight into our activities. We are happy to expand on any points and to respond to questions.

The Chairperson:

Thank you very much, Mr McKibben. At this point in time, how many anaerobic digestion centres are functioning in Northern Ireland? You can comment at any stage, Ms Rutherford.

Mr McKibben:

At this point in time, the centre in Hillsborough is the only one that I am aware of that is functioning. However, as I said, we have a number of proposals for developments on farms under the biomass processing challenge fund.

The Chairperson:

Anaerobic digestion seems to be one of the most important initiatives for the farming community and for agricultural producers. It seems that it is central to what they can do where renewable energy is concerned, whether that is the generation of electricity or, probably more importantly,

renewable heat. It has been talked about for years. It was being talked about back in 2007 when the Assembly was re-established, and we had a report on renewables from the Committee for Agriculture and Rural Development that was published on 24 June 2008. That report also referred to the importance of anaerobic digestion. We also heard evidence from the Ulster Farmers' Union (UFU) stating that biomass and anaerobic digestion have "huge potential", but that farmers and landowners have been:

"extremely frustrated by the lack of progress on the issue."

Given all that, and given the success of anaerobic digestion and biomass in other European countries, why are we not really off the starting block? Why are we so behind in all this?

Mr McKibben:

That is one of the reasons that we developed a renewables action plan and why the Minister then set up the stakeholder forum. In response to the perceived need, we have used public funding to develop the facilities at Hillsborough, which include a research facility and a demonstration facility. They have been very well used by groups of farmers and other organisations that come to see what is going on. We have supplemented that by the training that we are providing through CAFRE. We also developed the biomass processing challenge fund. We recognise that there is a lack of knowledge and that there is a need for some pump-priming in the form of financial support. That is how we have responded to those particular needs.

The Chairperson:

Are you saying that financial support is the key to incentivising?

Mr McKibben:

We are at a very early stage in the development of renewable energy in the land-based sector. The incentivisation will hopefully come in time through the payment that people receive for electricity that is supplied to the grid and through renewables obligation certificates (ROCs) or whatever other system is used. To get it off the ground, we got agreement in Government to develop a scheme for capital assistance.

The Chairperson:

My understanding is that, at the moment, two ROCs are needed for anaerobic digestion, but there is a proposal to increase that to four. Do you sense that that has in some way excited the farming community or those who are interested in anaerobic digestion?

Mr McKibben:

Excited?

The Chairperson:

That is perhaps the wrong word.

Mr McKibben:

There has certainly been a fair amount of interest, particularly in the period since the stakeholder forum report was produced and as we developed the biomass processing challenge fund. I think that most of the projects we have received will stand on their own without ROCs, but ROCs will certainly make a significant contribution to the future development of anaerobic digestion in the land-based sector.

The Chairperson:

Do you see anaerobic digestion as a means either of generating renewable electricity or of creating renewable heat? On what aspect of anaerobic digestion is the Department's emphasis being placed?

Mr McKibben:

There is obviously potential for the development of both sources of energy. As far as we are concerned, the particular state aid approval that we had to get from Europe would point the development of anaerobic digestion in the direction of heat, because we have to abate the capital grant that we offer by any ROCs that projects would benefit from if they supply electricity to the grid. Ultimately, and particularly if groups of farmers can come together to develop anaerobic digestion, that should also focus on providing electricity to the grid.

The Chairperson:

I take your point about groups of farmers coming together. Do you agree that such things are better done in groups?

Mr McKibben:

The projects that we have been considering so far are of a reasonable scale. My understanding of the economics is that, over time, it would be desirable if scale could be increased further through

groups of people coming together.

The Chairperson:

I do not get from you, the Department or the documents that I have read the sense that renewable energy is given a central place in the Department's thinking. That may be changing, but I do not sense that, over the past three or four years, renewable energy has been at the heart of the Department's thinking. Do you agree or disagree that that may be the case?

Mr McKibben:

The matter has been of growing importance in the Department's thinking in recent years. The publication of the first renewable energy action plan in 2007, the establishment of the forum, the subsequent review, the publication of the new action plan and the fact that we were able to devote scarce national funding to the biomass processing challenge fund is an indication of renewable energy's increasing importance. We have also been responding to the growing interest in the land-based sector. The facilities at Hillsborough are excellent and are recognised as such throughout Ireland.

Dr McDonnell:

Thank you very much for what you have done, and thank you, Joyce, for your civility when we need to talk to you. I have a number of questions that point in one direction. I detect a sense of disappointment in the matter, largely from people who want to be involved. One of your first comments today was about how you are encouraging the development of renewable energy. How well has that encouragement worked, and how well might it work going forward? What are the goals? How high up the mountain are we going to get?

Mr McKibben:

As I said, a large number of people attended the CAFRE event, and we get regular requests from groups of farmers and others in the sector to come to our facilities. We have trained some 2,000 people in different workshops at CAFRE. Therefore, I think that people are recognising that there is a need and that we are helping to fill that need. When we were developing the biomass processing challenge fund, there was a fair degree of uncertainty as to whether we would get any applicants at all. We were pleased that we got the number that we did. We know that a number of people have been saying that, although they are not ready to put in an application, they will continue to work up their proposals, and, if the scheme were to continue, they would be interested

in applying the next time round. We are reasonably satisfied that people have been responding to what we have been doing.

Ms Joyce Rutherford (Department of Agriculture and Rural Development):

We ask for feedback six months after each of our events, and we are dependent on people giving us feedback. We will start to assess the uplift and adoption of activities or technologies on the basis of that feedback. Therefore, we will get some degree of measurement. We will monitor the electricity and heat outputs of those who have accepted the biomass processing challenge fund grant.

Therefore, as I said, we will get some degree of measurement over the coming years. We know that there is a lot of interest out there. It is just a matter of pressing the buttons in the correct order to get the uplift. The interest has not diminished; rather, it is growing.

Dr McDonnell:

You mentioned a figure of £3.4 million invested — I think that was for only one aspect. How much has DARD invested overall, and what cost benefit is there? I raise that in the context of the feedback I get from a lot of operators, who say that the Department is helpful, but it is largely a process thing rather than a driven thing. From our perspective, the inquiry is about trying to create some driver in renewable energy. I will give you an example of where the difficulty lies. I know dozens of people who love to grow trees — I may even grow some myself — but there is no outlet for them. Nobody is building a wood-burning station or a woodchip operation, because there is nobody to supply woodchips, and there is nobody to supply woodchips because nobody is buying woodchips to any great degree, although I gather that we use some on the Stormont estate.

Off and on, I have been meeting around 20 various players in the renewable energy field, and we might even invite you to have a chat with us at some stage. The point is that there is frustration about the gap between production and consumption. I think what we are trying to define is how we can bridge those gaps and get a smooth flow so that the farmer who has a bit of initiative for diversification will switch from producing edible food to producing energy crops.

Mr McKibben:

As you are aware, we do provide incentives to grow energy crops, particularly short-rotation coppice.

The Chairperson:

If I may interrupt you, I remind people to turn their mobile phones off, because they are interfering with the recording of the evidence session. Please check your phones and turn them off completely, if you would not mind. I am sorry for interrupting you, Mr McKibben.

Mr McKibben:

That is OK. As I was saying, we do provide incentives to farmers, for the growing of willow in particular.

There is a growing commercial market. One company that we are in regular contact with has developed a significant number of outlets for purchasing and using woodchip. The type of work that we are doing — research, training and education — should help, but the existence of a commercial market is essentially a matter for the private sector. If we can help in any way, we are happy to talk to anyone to try to encourage that. We would welcome the chance to talk to the group that you are representing.

Dr McDonnell:

I am glad of that. Who is involved in the stakeholder group that you are setting up? From where will the members be drawn? Has it been set up yet? How will its membership be recruited?

Ms Rutherford:

The stakeholder group that we intend to set up will comprise individuals who have an interest in the land-based sector, have some degree of financial acumen and have a background in renewable energy. We have drawn up a list for ministerial selection. It will be a small group.

Dr McDonnell:

Five members? Ten?

Ms Rutherford:

Three, who will interface with our stakeholders.

Mr Neeson:

I welcome 'A way forward', which I find very helpful indeed. What I really want to ask is whether attitudes are changing. I remember that, in 2002, the then Committee for Enterprise,

Trade and Investment Committee produced a report on energy. Shortly after that, the Fivemiletown project on biomass seemed to fall through. Therefore, are attitudes changing? How important is the availability of ROCs to the take-up of projects and their progress?

Ms Rutherford:

I will deal with the question on ROCs first. ROCs have been very useful in encouraging renewable energy in Northern Ireland. In particular, the proposed increase to having four ROCs for under 500 kW will break the economic ice on a lot of the projects in the land-based sector and will make them much more economically viable. The incentivisation of heat will have supply chain implications and will, hopefully, pull through and move us away from fossil fuel-based technologies to more renewable technologies. That is to be welcomed, as it will increase energy security on farms and farm competitiveness. Therefore, ROCs are very important, and the fact that they are banded means that it is more advantageous to pull through some of the technologies that are not as popular here or that have not been taken up here.

Mr McKibben:

Mr Neeson asked about attitudes. All the measures that we have been talking about have been introduced since 'A way forward'. That is evidence of DARD's recognition of it and response to it. I should supplement the answer that I gave in response to the Chairperson's question. The rural development programme that exists at present is being used to support a variety of energy-related activities on, for example, farm modernisation, and some of the criteria reflect energy efficiency on farms. Moreover, two of our focus farms have a particular focus on renewable energy. The attitude in the Department has certainly changed, and it, and the sector itself, now recognises the importance of renewable energy.

Mr Neeson:

I welcome the document. Will there be a follow-up to the document or a report on its impact?

Mr McKibben:

We have asked the stakeholder group that Joyce talked about to review how we have been implementing the report and to advise whether we can do more through the action plan and with future available resources. We will not keep that in the Department but will consult stakeholders on it.

Mr Irwin:

I welcome 'A way forward'. As Mr Neeson said, it is important that government drives that forward. We have had a problem in the past, and I do not believe that the public are that concerned about renewable energy. The Government have not pushed it fully from the word go. There undoubtedly needs to be a more joined-up approach.

As a farmer, I know about farm waste, and anaerobic digesters could be a way forward. However, I am aware of two major farmers — one of whom is a major pig farmer — who have digesters. I am not sure whether the pig farmer's digester is operational yet, but, since July, he has been in the process of building it. For those major farmers, that represents an investment of about £1.5 million. Even with grant aid, that is still a very large investment. I know that farmers are very independent, and it is very difficult to get a group of farmers together to push something forward.

Do you not believe that there has to be a more joined-up approach in government to make the public fully aware of the importance of renewable energy? In a survey of 500 households, 41% of people were completely unaware of or unable to name any renewable energy technology. Is it true that almost half the population are unaware of renewable energy?

Mr McKibben:

I cannot doubt the findings of that survey. There is an issue around the way in which the message is communicated. I know that DETI is very much aware of the fact that the public perceive the messages to be mixed, and we are contributing to work to ensure that those messages become more co-ordinated and consistent. I hope that that addresses the difficulties to which you referred.

Mr Irwin:

That is vital for the way forward.

Mr Rutherford:

DARD was involved in the Switched on Schools initiative, in which renewable energy technologies, such as wind and solar, were installed in schools. However, that initiative was designed to raise awareness among school children, and, along with DARD, it involved Northern Ireland Electricity (NIE) and the education and library boards. It was quite a nice initiative,

because it provided information from the bottom up, was educational and provided some energy for schools. Moreover, children could go home and talk to their parents about it. Little initiatives such as that can go a long way.

Ms J McCann:

Thank you for your presentation. My question follows on from William's. I do not think that the benefits to households, businesses, land developers and farmers have been set out clearly. Many people are not aware of the benefits, particularly the longer-term ones, financial or otherwise.

Another problem with developing renewables seems to be the barriers that people come up against, and that is across the board. The problem might be with accessing support from government, or with getting financial investment, such as loans, from banks. We hear, and I think that we all agree, that those difficulties are spread across Departments: DARD is responsible for a bit; DETI for another; and the Planning Service for yet another. Would having a one-stop shop for those matters drive things forward? It has been said that, unless someone champions a policy, there can be no long-term, strategic overview of where it is going. Would it be better if people had one place to go, even in a Department, where someone could champion the policy?

Mr McKibben:

In our Department, we have established a cross-departmental co-ordination group to make sure that the message is joined up and that activities through AFBI, CAFRE and ourselves are complementary. Outside the Department, sustainable energy is a cross-cutting issue that affects almost every Department, and that is why DETI set up the interdepartmental group — to ensure that there is a co-ordinated approach to sustainable energy.

As I said, we sit on and contribute to that group, and we sit on its subgroups. We are certainly committed to maintaining as integrated an approach as possible within existing structures. Having a single Department with responsibility would not necessarily solve the problems, because, for example, renewable energy has an important contribution to make to our work on climate change and the need to reduce greenhouse gas emissions. We are creating a strategy for reducing greenhouse gas emissions, and that will be ready to go out to consultation by March next year, and renewable energy is a measure that we will talk about. Therefore, even if there were a separate Department for renewable energy, other Departments would probably still have to

be involved.

Ms J McCann:

I am not advocating a separate Department. I am advocating somewhere in one Department in order to achieve a more joined-up approach.

Mr McKibben:

The people whom you will see next, from DETI, have the lead role in ensuring good co-ordination across Departments. DARD has the group that I talked about, and its activities are recognised as being in the lead on renewable energy.

Mrs McGill:

Thank you for your briefing. 'A way forward' is very welcome. In her statement in that document, the Minister of Agriculture and Rural Development says:

"I have committed in excess of £9m to drive the development of renewable energy within the local land based sector."

That is a sizeable sum of money. We asked earlier how much money the Department had committed to that aim, and that is very welcome. How much has been spent? Is that £9 million intended to take us up to the end of the comprehensive spending review (CSR) period?

Ms Rutherford:

That £9 million was used up until the end of 2009. The majority of that money was spent on demonstration facilities and the anaerobic digester at AFBI. A lot of money was spent on information, training and technology transfer in the sector, as well as some grant funding for the establishment of short-rotation coppice willow production facilities and energy-efficiency equipment for farms. A range of finance was made available for different measures.

Mr McKibben:

The biomass processing challenge fund grants were additional to that money.

Mrs McGill:

Was that £9 million used in the two years from 2007?

Ms Rutherford:

It was used between 2006 and 2009.

Mrs McGill:

Action 13 in 'A way forward' is to:

“Formalise links with Invest NI (Energy team) to explore potential integrated business solutions.”

That was to have been achieved by early 2010. How is that progressing?

Ms Rutherford:

We participate in a subgroup of the industry advisory panel, which is a DARD/Invest NI initiative. We are looking at different waste streams and at how they can be best utilised to provide energy.

Mr McKibben:

The industry advisory panel was set up in response to the calls for a food board and to help government to deliver the actions in the food strategy.

Mrs McGill:

Action 10 is a:

“Scoping exercise to establish a baseline of those farms/forestry enterprises meeting their own energy needs.”

That was to have been achieved by the middle of 2010. That would be very welcome. Is that action aimed at establishing where those enterprises are already meeting their energy needs?

Ms Rutherford:

Some work is under way on that action point. At the renewable energy event that was held in November, attendees were issued with a questionnaire and were asked what technologies they had on their farm. That will give us a baseline, to a certain extent, of what currently exists, after which we will canvass those attendees again to determine what, if any, adoption they have had since the event.

Mrs McGill:

Is there a list of the farms and forestry enterprises that are meeting their own energy needs?

Ms Rutherford:

There is no definitive list, but we will have an indicative list of what is out there.

Mrs McGill:

Such a list might be informative and helpful.

The Chairperson:

Do you know of any biomass schemes that are currently fully operational?

Mr McKibben:

Yes. For example, there is John Gilliland's scheme in Derry.

The Chairperson:

It would be helpful if you could supply a list of schemes that are operational. You feel that only one anaerobic digestion scheme is operational at the moment. If there are any others, you could let us know.

Mr McKibben:

We could give the Committee a summary without naming people who have got letters of offer of grants.

The Chairperson:

I just want to know where we are at.

Dr McDonnell:

We might want to visit some of them.

The Chairperson:

That might not be a bad idea.

Thank you for coming along. If we write to you about any other matters, you could kindly reply. Thank you very much for your evidence.