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Jim McManus
Clerk
Committee for Enterprise, Trade and Investment
Room 424
Parliament Buildings
Belfast
BT4 3XX

Dear Jim,

Following our conversation at the Agenda NI event at Dunadry, I am sending you the Ulster Farmers' Union submission to the request for written evidence.

1. Role of land-based sector in renewable energy

The Ulster Farmers' Union is the principal representative of the farming community in Northern Ireland with a base of 11,500 members. Farming has a central role to play both in the provision of renewable crops (biomass crops), utilisation of renewable technologies on-farm in the generation of energy and heat, both for consumption on-farm and also potentially to be exported onto the grid. Farmers are seen as pioneers as far as Anaerobic Digestion is concerned, as the principle feedstocks are either directly produced or are available in the form of "waste".

Aside from biomass, the NI farming community is a key provider of wind energy, with 70% of land in Northern Ireland classed as LFA. By its very nature is ideal for the siting of wind turbines, hence the interest amongst our members. This interest has been enhanced by the current enhanced financial incentives in the form of 4 ROCs for wind energy up to 250kw.

2. Barriers to the development of renewable energy/heat production in Northern Ireland

The UFU will present their perceived barriers under 5 headings;

- i. Legislation**
- ii. Existing Policies and operations**
- iii. Culture**
- iv. Finance**
- v. Maintenance**

i. Legislation

- **Northern Ireland lacks the relevant Primary legislation – DECC have successfully taken three Bills through Parliament in Westminster; Energy Act 2008, the Climate Change Act 2008 and the Energy Act 2010. The Climate Change Act 2008: Impact**

Assessment was updated in March 2009. Most recently, a new Energy Bill 2010 was announced in the Queen's Speech on 25 May 2010. The Bill implements some of the key measures required to deliver DECC's low carbon agenda, namely provisions on delivering a new financial incentive for carbon capture and storage, implementing mandatory social price support, and introducing a package of measures aimed at ensuring that the energy markets are working fairly for consumers and delivering secure and sustainable energy supplies.

NI does not have this primary legislation.

When raised at the end of 2009, the UFU were informed that it would take 3 years for this to go through the NI Assembly. Without this primary legislation, Feed In Tariffs (FITs) cannot be introduced in NI. Whilst the UFU are not saying FITs are better than NIROCs, they are more attractive to prospective creditor, as they are fixed in value, unlike the NIROCs which are determined by market forces.

UFU View – Legislation allowing the introduction of an Energy Act for NI will be need to be introduced as soon as possible, other wise our Renewables Sector will lag further behind and could stifle development.

- **Cross-departmental co-ordination** - there is a feeling that cross departmental co-ordination will be increasingly hard to achieve and co-ordinate with the possibility of far reaching cutbacks in the NI Civil Service.

UFU View - failure to achieve Cross-departmental co-ordination could further delay progress and crucial to the success of any renewable energy/heat sector in Northern Ireland.

ii. Existing policy and operations

- **Planning**

We will concentrate on Wind Power for this example. Planning Policy sets out what is permitted for the erection of a wind turbine. Whilst (correctly) some planning offices stipulate that permitted development would be judged on the square-metres surrounding the turbines, others are asking that the lane away is measured, taking what is usually a fee of £250 up to £1,300!

UFU View – the Planning policies and related rules and regulations must be rolled out to each regional office, ensuring that they are all in possession of the most up-to-date policies.

The UFU have been informed that planning permission for renewables projects will be given assessed as quickly as possible, yet we are hearing about significant time delays throughout the country. This is a concern because in many instances, applications are cost-sensitive in the sense that any delays could result in financial loss for applicants.

UFU View – in order to alleviate any log jam in the system, the UFU would urge planning to clear cases urgently and to prioritise accordingly.

- **NIE operations**

NIE Grid Connection Charges – The upfront set up and connection charges are substantial. Whilst these have been approved by the Utility Regulator, the concern is that there is currently no direct reference point to access these charges. So, a potential wind turbine owner would not know of the grid connection charges until such time that they have started the project and apply for a connection to the grid. This is not helpful when anticipating costs and drawing up budgets when a would-be generator is compiling a business case for financiers etc.

UFU View – the UFU are currently in discussions with NIE to get these problems resolved.

New Distribution Code – this was introduced on 1 May 2010 and is an additional charge to the grid connection. NIE have deemed it to be necessary that a telephone line is in place, to enable NIE to communicate with the operator. This will apply to privately owned generators (the majority of which will be on-farm wind turbines owned by our members). The owner will be responsible for arranging and pay for installation as well as rental costs. The main area for concern relates to the requirement for generators to provide SCADA and control facilities. SCADA stands for supervisory control and data acquisition and it is a computer system which monitors and controls a specific process.

It is estimated by NIE the communication line and the SCADA will cost between £20K plus VAT. This is a big up-front cost and is causing much concern on the ground.

UFU View – as stated above, we are currently in direct discussions with NIE and will keep a close eye on developments in relation to SCADA, seeking the best financial outcome for our members.

Grid Connection time delays – I have been receiving calls from UFU members complaining about the lengthy time delays in submitting an application for a connection, the slow administrative process (with members of NI in some instances allegedly not processing applications for 3 months). I am starting to hear of wind turbines still not connected 12 months after the initial application being submitted.

UFU View – the applicants will need to be aware of all requirements before embarking on any renewables project. In the case of Wind installations, should they have all the facts, it will ease and speed up the application procedure. The UFU are communicating with NIE on this.

iii. Culture

- **Traditional farming ethos -** The underlying problem as far as agriculture is concerned relates to the market forces which drive the price of farming. When times are good for a

cereal farmer for example, they reap the benefits from good prices on the open market. However, when the market is subdued and a poor farmgate price is being returned, some farmers may seek an alternative use for their crops. In the case of the latter there could be a drive towards making graves available for renewable energy

- **Food Security** – it is anticipated that there will moves amongst member states on food security, with a growing global population and the belief that food security may become a crucial issue on account of this. Particular attention currently focusing on the rocketing grain prices.

Food security will be pitched against a desire/demand of making crops available for renewable purposes.

- **Heating oil use in Northern Ireland** – with the absence for so long of natural gas, NI established a reliance upon heating oil as source of heat. This culture will be hard to change as many people still view it as the best way to heat their homes. This is partly the case because the high capital cost of changing boiler etc is seen as an obstacle to switching to alternative/renewable sources of heat.

iv. Finance

Capital grants are not necessarily the answer to encourage uptake in the installation of renewable heat technologies or indeed to encourage the growing of biomass crops. There have been many examples where this has been a waste of time. In many cases the grants have been paid when there is no supply chain or working market place to encourage market development.

v. Maintenance

There are only a limited number of colleges offering course for training in the maintenance of renewable technologies, in particular wind turbines. We are currently experiencing a major economic downturn, with many potential installers being made redundant from their current jobs, in particular electricians. Several electricians have approached me about re-training in the maintenance of wind turbines, but there is a severe shortage in courses and which courses there are, they are often being held in remote places.

UFU View – the number of Renewables courses at local colleges should be widened to all of Northern Ireland. For example, currently these courses only seem to be held in the west of NI.

vi. Quality

- **Wind** – there are concerns being raised about the quality of some re-furbished and second hand wind turbines being sold in NI. The UFU has learnt that in some instances, the poor quality turbines cannot be connected

UFU View – Farmers should be aware of what they are buying and we considering the best way to address our members, however, statutory quality certificate affiliation might be one option.

3. Grid Concerns

The UFU have been quoted on the current state of the NI Electricity Grid Infrastructure in recent years. We have highlighted that the Northern Ireland energy market is unique within UK and Ireland. “Availability Charges” play a crucial role in NI, but they are largely irrelevant in GB. This is mainly due to the levels of flexibility in grid infrastructures which exist in GB compared to here.

When we responded to the Strategic Energy Framework (SEF) and Bio-energy Action Plan (BAP) consultations in September and October, we highlighted the need for expenditure on an alternative grid in order to transform our grid network to one of the most modern, efficient, cost effective green and open networks in the world. We urged the Government to investigate intelligent grid alternatives in order to overcome the inefficiencies which exist in the current system which maintain our over reliance upon imported fossil fuels.

Action – the UFU are calling for a review of the grid infrastructure, without this any further policies which are implemented will be simply “papering over the cracks”. With the sale of NIE to ESB, the UFU will be lobbying for urgent investment be made on the Grid Infrastructure.

4. Impact of drive towards Wind

The UFU does not support one single form of renewable technology. On the same hand, we will not dismiss any technology without concrete evidence. We recognize that many of our members have been incentivized to install wind turbines on their land with the prospect of 4 NIROCs. However, we are conscious that this enthusiasm is matched by a multitude of companies wanting to offer assistance and managed services in the drive towards wind power. With this drive comes the prospect of unscrupulous companies who might want to make “a quick buck” out of this and provide poor quality advice and equipment.

UFU View – a possible form of regulation could be introduced to protect land owners from poor advice and equipment.

The Committee should also consider recent evidence which has raised doubts about the impact of Wind, both as a green source of energy and its effectiveness in meeting the Renewable targets. The UFU is keen to point out we are not dismissing wind, rather the debate has opened and wind is no longer seen the unquestionable way forward. For example, one recent study has found that in Germany actual CO2 savings from Wind Power are only 1%! Should wind turn out to be a “white elephant” as some reports indicate, there is a danger that our countryside could be littered with worthless steel constructions, impacting both landowners and the environment as a whole.

UFU View – the UFU will advice would-be wind enthusiasts would be to tread carefully and seek legal advice on any contract, with specific detail given to de-commissioning redundant or defunct wind turbines.

5. Going Forward

The UFU have seen calling for the presence of the NNFCC (National Non Food Crops Centre) in Northern Ireland. IN GB, the role of the NNFCC is to help to introduce renewable materials into the marketplace, providing independent information and advice to agriculture, academia, Government, industry, the media and the general public. The aim of the NNFCC is to build sustainable supply chains for products made from plants. So far, NI is lacking this presence.

Many of the barriers highlighted in this submission could be addressed and hopefully overcome if the NNFCC had a presence in NI. However, the UFU spoke to DARD on this matter and despite the support being there in theory, in reality, the finances are not, unless private equity was to be found. Should the NNFCC have been in NI at the time of the Limavady Hemp example (case study highlighted below), it would have not ended up the way it did. NNFCC would have provided help and support, in fact its track record in these type of projects is clearly demonstrated in GB.

The UFU do acknowledge that there has been contacted made between DARD and NNFCC. This has been through the ongoing implementation of the Departmental Renewable Energy Action Plan, DARD have established links with the NNFCC to include information specific to Northern Ireland agriculture on the web through the Official Anaerobic Digestion Portal. The website acts as a gateway to a wide range of publically available information on anaerobic digestion from a wide range of sources.

However, this does not go far enough. NI requires the NNFCC to have a full time presence in Northern Ireland to co-ordinate key activities and projects.

UFU View – we will continue to work closely with CAFRE and Supply Chain Development Programme. The latter is funded under Axis 1 of the RDP and aims to improve co-operation and collaboration in the agri-food and forestry sectors leading to more effective and sustainable supply chains. However, this covers many areas whereas the NNFCC would provide a dedicated Renewables service.

6. Conclusion to UFU submission

Despite there being many barriers as highlighted in this submission, it should not detract from the progress which has been made, in particular by Joyce Rutherford and her team at DARD and CAFRE. However, there would be a danger of standing still and to do could be critical for the sector. Therefore, it is imperative that we build upon the successes and address the barriers highlighted.

7. Actual Case Study Highlighting Barriers in NI - Limavady Hemp

A couple of years ago a grower group in the Limavady area started growing hemp, about 300 acres. Hemp has a multitude of uses and it is ideally suited to NI. It can be used for industrial purposes including paper, textiles, biodegradable plastics, construction, health food, fuel, and medical purposes and to date there has been modest commercial success in GB.

In the past three years, commercial success of hemp food has grown considerably. Hemp is one of the faster growing biomasses known, producing up to 25 tonnes of dry matter per hectare per year, and one of the earliest domesticated plants known. For a crop, hemp is very environmentally friendly, as it requires few pesticides and no herbicides.

Growers involved said that Hemp was a very easy crop to grow, with little or no chemical fertiliser requirement. The crop has the added advantage of being seen as an excellent "break-crop", which means that the ground is opened up and has added nutritional content for whatever crops is planted the following season. Oil seed rape is seen as the best "break-crop" but according to our members hemp is actually better. It has added environmental benefit as it "locks-out" carbon dioxide.

This project was driven by a firm of processors, who had no guidance on business plans, market engagement or support from government. Once the hemp was dried and baled it was stored, several thousand tonnes was produced. The hemp should have been worth £15 per bale, the processors had to sell the bale for £4 each as there was nowhere the hemp!

There was no support from government, no supply chain in place and a lack of guidance for what is an ideal crop to grow in NI. Had a supply chain/marketing route been available, the hemp could have added several thousand uses, and the shame is that it almost had to be given away in the end.

The Ulster Farmers Union would welcome the opportunity to provide evidence in front of the Committee for Enterprise, Trade and Investment, and if you have any further queries do not hesitate to contact me.

Yours sincerely,



Chris Osborne
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