NFUScotland

Consultation

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Views sought from : Committee on Climate Change
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BUILDING A ZERO-CARBON ECONOMY – CALL FOR EVIDENCE

General remarks

Climate change presents us, as humanity, with one of the biggest collective challenges that we face and, given that agriculture is a source of greenhouse gas emissions, farmers and crofters have an important role to play in helping tackle that collective challenge. NFU Scotland acknowledges our joint responsibility to fight climate change and emphasises that we do want to play our part in helping reduce emissions from farming.

It will be important that a joined up approach is taken towards reducing emissions in order to avoid negative knock on effects in other areas such as the provision of ecosystem services e.g. biodiversity, and the maintenance of remote rural communities. Most importantly, while we will play our part in helping reduce emissions, those efforts must not be at the expense of producing food. We should avoid exporting our emissions by relying on food imports; instead we should support our farmers and facilitate the changes that might be required in the industry.

We believe that it is important to note that Scottish farming already plays an important role in reducing emissions. The representation of agriculture in the greenhouse gas inventory and reporting structures does farming a disservice. In those inventories, ‘agriculture’ is limited broadly to emissions from livestock and crop production, whereas in real life ‘farming’ includes a much wider set of practices such as renewable energy production and woodland and peatland management. The positive things that farmers are doing, such as avoiding larger emission levels in

energy production by undertaking renewable energy projects, do not count as 'agriculture'. Farming (as opposed to 'agriculture' as defined by the inventories) is already offsetting some of its intractable emissions from livestock and crop production. This is an important issue because if we want people to engage positively with an agenda such as this it is important that they believe their efforts will actually count and be fairly represented. As it stands farmers could be making many positive contributions to our efforts to reduce emissions (such as through renewable energy projects) and not receive the credit they deserve. Indeed, they could just be criticised because the 'agriculture' sector emissions have not declined enough. This is a poor place to start if seeking to secure buy-in.

Answers to specific questions

Question 2 (CO2 and GHGs): Carbon dioxide and other greenhouse gases have different effects and lifetimes in the atmosphere, which may become more important as emissions approach net-zero. In setting a net-zero target, how should the different gases be treated?

NFU Scotland understands that the treatment of 'short-lived climate pollutants' (SLCPs) such as methane in emissions budgets and modelling exercises is potentially problematic. Work by Allen *et. al* (2018) suggests that using conventional Global Warming Potentials (GWPs) to convert SLCPs to "CO_2-equivalent" emissions misrepresents their impact on global temperature. As we understand it, a steadily declining rate of emission of an SLCP could be seen as equivalent to a negative sustained rate of emission of CO2, which would allow sustained innovation in livestock production to play a meaningful part in moving towards a future zero-carbon economy. This suggests that the current analysis, upon which much of the criticism of agriculture is based, while being the best we have, is actually also rather crude. A more sophisticated analysis of the different gases would be welcome, especially if it means that we can develop more specific and targeted policies.

Question 6 (Hard-to-reduce sectors): Previous CCC analysis has identified aviation, agriculture and industry as sectors where it will be particularly hard to reduce emissions to close to zero, potentially alongside some hard-to-treat buildings. Through both low-carbon technologies and behaviour change, how can emissions be

reduced to close to zero in these sectors? What risks are there that broader technological developments or social trends act to increase emissions that are hard to eliminate?

There are a wide range of actions that can be taken by farmers, working with industry bodies and government, to reduce emissions, but also to increase sequestration and storage through farm woodland creation and upland management and through increased renewable energy production. There are measures to increase the productive efficiency of livestock management and crop nitrogen management, and there are measures to improve soil health to enhance soil carbon storage. These are all important, but it should be acknowledged that food production involves emissions from biological processes and that it will not be possible to reduce emissions to zero in agriculture.

We can and should move as far in this direction as we can without undermining our food production capacity and our farming and food industries, but we should also be realistic about what can be achieved. It will therefore be important to view agricultural emissions within the wider context of land use and forestry and other sequestration technologies. In other words, it may be necessary to accept that there will always be agricultural emissions (even if reduced from current levels) and that these have to be offset from elsewhere.

Question 7 (Greenhouse gas removals): Not all sources of emissions can be reduced to zero. How far can greenhouse gas removal from the atmosphere, in the UK or internationally, be used to offset any remaining emissions, both prior to 2050 and beyond?

The Committee's recent Biomass report comprehensively covers this area. NFU Scotland would simply acknowledge that there will be a range of methods for greenhouse gas removals within farming. These may include:

1) Enhancing soil carbon – There is scope to increase the carbon stored in soils and then maintain that store as much as possible. No-till techniques and manures can enhance organic matter in soils, but it is important to recognise

that there is no one-size solution and that different businesses will find different measures that fit with their operation and farming model.

2) Increasing tree planting on farms / Agroforestry – NFU Scotland has been supportive of initiatives to increase tree planting on farms. There is a long way to go to see the widespread adoption of agroforestry; this would need much more high profile demonstration and knowledge exchange over an extended timeframe to facilitate change in current practice.
3) Domestic production of sustainable biomass – an increase in fast growing biomass crops for use in energy production is likely to be required. We would like to see detailed examination of how this might work in Scotland with regard to the land use and possible consequent impacts on established sectors. It will be essential that any move in this direction is properly examined and planned so that negative unintended consequences are avoided.
4) Peatland restoration – much of the peatland in Scotland is managed by farmers and so working with them to restore peatlands could result in enhanced removals and deliver co-benefits such as enhanced biodiversity and improved water quality.
5) New technologies such as Bio-Energy with Carbon Capture and Storage is likely to be required, but again we would like to see detailed examination of how this might be developed and the consequences for existing businesses in Scotland.

Question 9 (Behaviour change): How far can people's behaviours and decisions change over time in a way that will reduce emissions, within a supportive policy environment and sustained global effort to tackle climate change?

With regard to behaviours within the farming industry, we believe that they can change a great deal. However, we acknowledge that the Committee believes that behaviours in agriculture have not changed enough. In recent reports the Committee on Climate Change has said that cost-effective reductions of agricultural emissions are not being delivered with emissions unchanged in 2016 and that agricultural emissions are above all indicators that would be needed to ensure the appropriate reductions path.

We believe that there has not been sufficient emphasis from the government on this issue and that with much greater effort change can be achieved. The main mechanism that the Scottish government utilises to achieve behaviour change amongst farmers is the Farming for a Better Climate (FFBC) initiative which raises awareness of climate friendly farming methods. We very much support this initiative, but the government currently only spends £375,000 each year on it. While there are other strands of activity that the government could point to through which climate advice is delivered, if climate change is such a high priority for the government and society as a whole, surely there is a strong justification for enhancing this funding and the capacity of the initiative substantially. There are also other options such as government/industry-led market-oriented approaches focusing on enhanced returns based on environmental performance e.g. Origin Green in Ireland.

With regard to changes in consumption behaviour, we believe that farmers will ultimately follow the market. If there is a shift in consumer preferences away from red meat, then farmers will follow market trends over time, but the geography of Scotland is such that in many places farmers have very few options beyond cattle and sheep and we have concerns that we would see many farmers in more remote and upland areas severely challenged. With the NFU in England & Wales, NFU Scotland does not support a deliberate reduction in livestock numbers as a policy aim. Deliberately reducing livestock numbers and directly targeting upland grazing with the idea of land use change would risk losing many of the environmental benefits of grass-fed beef and sheep production and present new challenges to our remote rural communities.

Question 10 (Policy): Including the role for government policy, how can the required changes be delivered to meet a net-zero target (or tightened 2050 targets) in the UK?

In light of the Committee's findings in terms of the lack of emissions reductions in agriculture, the Committee has questioned the voluntary approaches utilised by the Scottish Government to date and suggested that a new approach based around mandatory measures may be required.

NFU Scotland believes that while the voluntary approach is criticised by the Committee, we have not really given it a proper chance to work. This is partly because of the resources devoted to it and the emphasis put on the issue by government in Scotland. To make progress we need more resources and leadership, not simple recourse to mandatory measures.

We believe that it will be possible to achieve much better outcomes in the long run if people are encouraged to tackle emissions rather than be forced to through the use of regulation. By taking a voluntary approach we are encouraging farmers to change practice in a way that potentially also enhances their business; tackling climate change can be seen as a positive. Forcing change through regulation invariably leads to people in any walk of life simply reluctantly doing the minimum required. That is not the way to achieve the step change required.

The Scottish Government currently has a Bill in the Scottish Parliament which will set new targets. Once those targets are set a revised Climate Change Plan will be produced. The emphasis must be, however, on action and devoting sufficient resources to helping deliver change.