

**Environment, Climate Change and Land Reform Committee****Climate Change (Emissions Reduction Targets) (Scotland) Bill****SUBMISSION FROM****Quality Meat Scotland (QMS)**

Quality Meat Scotland is the Red Meat Levy Body in Scotland and operates as a Non Departmental public Body. We are funded primarily through a statutory levy on all bovine, porcine and ovine animals slaughtered in Scotland. We use these funds to promote our world renowned Scottish Red Meat Brands and also assist the red meat sector with measures to improve profitability, efficiency and productivity whilst maintaining or enhancing our already world leading environmental and animal welfare standards.

This response will focus on the red meat aspect of Scottish agriculture, (Beef, Lamb and Pork) which make up around 38% of Scottish agricultural output. To further emphasise the importance of animal production in Scotland, when dairy and poultry are added to the figure, animal agriculture in Scotland is responsible for 58% of total economic output at farm level. (Scottish Government figures for 2017)

Crucially, the majority of this production takes place on land which is only fit for livestock grazing, due to its soil depth, topography, rainfall or other disadvantages “enjoyed” or “endured” by around 85% of Scotland’s agricultural land.

It is far too easy to forget that agriculture is about food production and that food production is a non-discretionary activity. It is also important to recognise the role of food production in sustaining employment in rural areas, and its contribution to the wider Scottish economy and balance of trade. The wider food and drink industry has set itself the ambition of more than doubling its turnover by 2030. Setting a net zero GHG emissions target year would have significant consequences for this ambition which is recognised on page 8 of the “Information and analysis to support discussion of the Climate Change Bill” publication. We fully support this analysis.

While considering climate change targets we also need to reflect on the targets impact on other key resources, like water and landscape, and the relationship between climate change targets and economic activity.

By reducing food production in Scotland to meet climate change targets, we are simply exporting the emissions and the economic activity associated with that production to other countries with less stringent climate policies or lower agricultural efficiencies. The risk of landscape degradation that would accompany the end, or even the substantial reduction, of livestock production in Scotland similarly cannot be ignored.

Less than 0.5% of global water consumption is drinking water. Over 60% of global water consumption is water embedded in the growing and production of our food, with livestock products being particularly consumptive, when measured on a whole of life basis.

The movement of food around the world is therefore the movement of the water embedded in that food, very often from water deprived areas to areas of plentiful water supply.

We note the UK Committee on Climate Change's recommendation that "*A net-zero target should not be set now, but the possibility to set one in the future should be allowed in the bill*". We also draw attention to the recommendation that the "*overall accounting framework shift to one based on actual emissions*". We support these recommendations because of the difficulties that currently exist in estimating emissions from the agricultural sector.

The emissions from Scottish agriculture reported in the annual Scottish Greenhouse Gas Emissions Estimates have already fallen by a large percentage since 1990, but not because we are more efficient, though we undoubtedly are, and not because we have reduced our emissions per unit of production, although we undoubtedly have.

Our emissions are down because the current blunt instruments for assessing emissions from food production only measure livestock numbers and fertiliser use, and these are both markedly lower.

For these reasons we consider the system we currently have for measuring emissions from agriculture is not fit for purpose. They work on the basis of standard coefficients being applied to key agricultural indicators (e.g. stock numbers, crop areas, estimates of fertiliser use) rather than considering emissions on the basis of output. Furthermore, they do not recognise the role of grassland and crop management in the sequestration of carbon as part of the natural growing cycle.

If we used the current agriculture and food method for measuring emissions from transport for example, instead of measuring emissions at the car exhaust pipe in grams of CO<sub>2</sub> per kilometre travelled which takes account of the cars efficiency, we would simply be saying "how many cars are there?" No account would be taken of whether they were electric, petrol or diesel or V12 or 1.0 litre.

Scottish Government has the opportunity to lead the world by commissioning research from our world leading Scottish research institutes to develop a system of properly measuring emissions from food production, taking into account emission intensity as well as the availability of water, the carbon being sequestered in the growing of grass and forage on our upland livestock farms, and the conversion of inedible forage protein into high quality red meat protein through the medium of the rumen.

Until we have a much better means of assessing agricultural emissions we cannot support a move to a zero emissions target. Instead we would support the view of the Committee on Climate Change that "*A target should be set now for emissions reduction of 66% by 2030 on 1990 levels*" and that an "*interim target for 2040 to be set at a later date as part of a review of 2050 ambition*" hopefully when a better method of estimating agriculture's emissions has been established.

If targets are to be set though we consider that at the same time a programme of detailed guidance and support will be needed to help the red meat supply chain to make its fair contribution to the target. Nevertheless, in assessing performance against targets for red meat production, and agriculture, it will be important to recognise the natural variation in animal and crop production due to climate variation, as illustrated by the climate of 2018 and its impact on livestock productivity and crop yields, and we would urge that some form of averaging is used when assessing emissions.