### Name

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#### **Organisation**

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### Question 2 - CO2 and greenhouse gas emissions

Agricultural emissions are largely made up of methane and nitrous oxide, which have different effects and lifetimes in the atmosphere, compared to carbon dioxide.

Rapid emissions reductions are required across all sectors and all greenhouse gases, and whilst it might seem reasonable to treat different greenhouse gases differently, it is more important to look at the practical issues, timescales of effect, costs of mitigation and co-benefits. Agriculture is a 'hard-to-reduce' sector, specifically due to the importance of food production, so this should be taken into account when setting a net-zero target.

#### Question 6 - Hard-to-reduce sectors

Agriculture and land use

It is recognised that the agriculture sector in the UK has not reduced emissions to the same degree as other sectors in recent years. There has been progress on individual holdings where business need (market requirements, costs of production etc) has driven positive change in practice to reduce emissions. However, the sector is dominated by SMEs that do not necessarily have the knowledge or capacity to understand and make appropriate changes. The sector is also dogged by conflicting and often incorrect information on what is a complex subject.

The change in agriculture policy post-Brexit presents opportunities to incentivise behaviour change in the sector through payments for public goods and good information and advice. Examples include the Scottish Beef Improvement Scheme where farmers are paid to submit their carbon foot print data which is then benchmarked against others in the scheme and provides valuable evidence for developing best practice. Other incentives for the use of sustainable farming and forestry practices could also be incentivised through annual payments or capital grants such as precision farming methods to use fertiliser and manures more accurately and effectively, and adoption of improved feeding regimes to reduce methane emissions from cattle. However further research is needed in these areas along with knowledge exchange programmes to support rapid adoption. The new Livestock Identification System that is being developed will involve electronic identification of all farm animals which if used correctly can improve management, resource efficiency and reduce emissions per output.

The barriers for land use change into forestry, mean that woodland creation grants are available but they have had limited appeal. They are under-funded and provide little incentive for farmers to convert land to woodland. Under a new payment for public good where the multi-functional nature of woodland can provide carbon sequestration, water regulation and habitats for wildlife, proper natural capital valuations should allow higher payments which will provide greater incentives for new woodland. Similarly, incentives to manage existing woodland will improve management and greater sequestration.

# Rural housing

Much of the rural housing stock is of traditional nature, often with valuable heritage features. This is often challenging for fuel efficiency. Current regulation on EPCs based on heating costs is driving homeowners to using less efficient fuel because it is cheaper as a result. For example, switching from LPG to oil. Moving from a measure of heating costs to carbon efficiency would help resolve this.

# Question 7 - Greenhouse gas removal

There are opportunities in the agricultural sector to remove greenhouse gases from the atmosphere with carbon sequestration.

Releasing some agricultural land and converting it to woodland, restored peatland or natural habitat will have significant carbon sequestration benefits, as outlined in the Committee on Climate Change Land-Use Report published in November 2018.

Land-use change can be achieved while maintaining current standards of production through increased productivity, efficiency gains, diet change, and food waste reduction. However, it is important that food production remains the priority when considering the potential uses of land. Significant land-use change will have economic impacts on individual farm businesses, but there is an opportunity to design incentives targeted at climate change which will balance environmental, economic and social needs. Land-use change must happen gradually and sustainably.

The Committee on Climate Change Land-Use Report lacked specific ways this land-use change can be achieved on-farm. The CLA looks forward to seeing more thinking in this area.

### Question 9 - Behavioural change

Behaviour change and decisions will become increasingly important in relation to food production. If consumers replace red meat with pork and poultry there will be a market incentive for farmers to reduce their stocking rates and produce lower-emissions intensive protein.

There has been significant public interest in this area and a number of reports outlining the health and environmental benefits of reducing red meat consumption. Re-framing the conversation to promote pork, poultry and fresh produce (fruit and vegetables) may influence diet change further. The policy environment must support production of lower-emissions intensive produce, potentially through the Environmental Land Management Scheme.