



Please find attached a 6 page (including annexes) routine submission on the recent publication of a Committee on Climate Change report on land use. This is for information.

[redacted]

Scottish Government

Directorate for Energy and Climate Change

Decarbonisation Division

3-F South

Victoria Quay

Edinburgh

EH6 6QQ

Tel: [redacted]

EMail: [redacted]@gov.scot

Website: [www.gov.scot/policies/climate-change/](http://www.gov.scot/policies/climate-change/)

From: [redacted]

Decarbonisation Division

21 November 2018

Cabinet Secretary for Environment, Climate Change and Land Reform

Cabinet Secretary for the Rural Economy

Minister for Rural Affairs and the Natural Environment

## **COMMITTEE ON CLIMATE CHANGE – REPORT ON LAND USE**

### **Purpose**

1. To advise that the Committee on Climate Change (CCC) published a special report assessing the role of UK-wide land use change in meeting climate change mitigation and adaptation objectives on 15 November.

### **Priority**

2. **Routine.** This is for information.

### **Background**

3. The CCC has published the first of two special reports on how to improve use of land to meet climate goals. This report identifies areas where changes can enable land-owners to deliver climate change mitigation and adaptation objectives, among the other priorities for land use. In a second report next year, the CCC will carry out a deeper assessment of the policy framework to mitigate climate change through land use.

4. The present report is linked to publication, also on 15 November, of a report assessing the role of biomass in tackling climate change. Separate advice on the biomass report has been

provided to the Energy Minister and Secretaries for Climate Change, the Rural Economy, and Transport by officials in the Low Carbon Unit.

### **Key messages**

5. Key findings from the land-use report are at **Annex A**. The report has been the subject of UK media coverage, but no specific Scottish coverage has been identified. A summary of UK Government and stakeholder responses to the report are at **Annex B**, and a summary of Scottish Government action in areas covered by the report is at **Annex C**.

### **Consultation**

6. Officials in Forestry Commission Scotland and in Directorates for Agriculture and Rural Economy, and Environment and Forestry, have been consulted on the content of this submission.

### **Conclusion**

7. **You are invited to note publication of the Committee on Climate Change report on land use, and the key findings (Annex A), stakeholder responses (Annex B) and Scottish Government action in areas covered by the report (Annex C).**

[redacted]

Directorate for Energy and Climate Change: Decarbonisation Division

Ext: [redacted] 21 November 2018

| Copy List: | For Action | For Comments | For Information    |                  |                   |
|------------|------------|--------------|--------------------|------------------|-------------------|
|            |            |              | Portfolio Interest | Constit Interest | General Awareness |
|            |            |              |                    |                  |                   |

DG Economy

Kersti Berge, Director ECC

Bridget Campbell, Director ENFOR

Elinor Mitchell, Director ARE

[redacted], FCS

[redacted], Decarbonisation Division

[redacted], Decarbonisation Division

[redacted], Decarbonisation Division

[redacted], Decarbonisation Division

[redacted], Agricultural Policy

[redacted], Ag & Rural Development

[redacted], Ag & Rural Development

[redacted], Env Quality & Circ. Econ.

[redacted], Env Quality & Circular Econ.

[redacted], Env Quality & Circular Econ.

[redacted], Env Quality & Circ. Econ.

[redacted], FCS

[redacted], FCS

[redacted], Environmental Quality

[redacted], Env & Land Use Strategy

[redacted], Natural Resources

[redacted], Consumers & Low Carbon

[redacted], Consumers & Low Carbon

[redacted], OCEA

[redacted], OCEA

Louise Dobson, Special Adviser

Kate Higgins, Special Adviser

Energy & Climate Change – Business  
Management

## ANNEX A

### COMMITTEE ON CLIMATE CHANGE – REPORT ON LAND USE

#### KEY FINDINGS

Key findings from the Committee on Climate Change (CCC) report [‘Land use: Reducing emissions and preparing for climate change’](#) published on 15 November 2018 include:

- New land-use policy must support deeper emissions reductions and improve resilience to climate change impacts. This includes increased tree planting, improved forest management, restoration of peatlands, and shifts to low-carbon farming practices, which improve soil and water quality.
- CCC analysis suggests that emissions reductions of as much as 35 - 80% (20 - 40 MtCO<sub>2</sub>e at a UK level) by 2050 compared with 2016 levels are possible, while maintaining current per capita food production.
- The analysis includes increasing forest cover from 13% of all UK land today to up to 19% by 2050, representing an increase from 9,000ha per year to 20,000ha by 2020, and 27,000ha by 2030, restoring 55 - 70% of UK peatlands by 2050, catchment-sensitive farming and agricultural diversification as contributions to meeting these reductions.
- The analysis assumes a reduction of demand of 20% to 50% by 2050 across beef, lamb and dairy consumption, noting that such reductions are actually lower, for beef and lamb, than those implied by the UK Government’s own “Eatwell Guide”.
- Assistance for farmers and land managers is needed with skills, training and information to implement new uses of land. Support for high up-front costs and financing to aid that transition are also required. Land managers must have better access to information about the impacts of a changing climate.

#### Findings related to Scotland:

- The report notes that in Scotland there is greater capacity to switch land use to create natural stores of carbon through afforestation and peatland restoration – requiring new devolved policies to maximise mitigation UK-wide.
- The report notes that although governments in England and Scotland are looking to encourage farmers to plant more trees (as set out in the Clean Growth Strategy and the Climate Change Plan), there are no specific planting targets for agro-forestry. The CCC’s analysis, assumes 5-10% of agricultural land area could be used for agro-forestry by 2050.
- The report finds that although Scotland has an ambition to restore 250,000 hectares of degraded peat by 2030, there has been “very little progress to date”.

**Directorate for Energy and Climate Change: Decarbonisation Division**

November 2018

## ANNEX B

### COMMITTEE ON CLIMATE CHANGE – REPORT ON LAND USE

#### UK GOVERNMENT AND STAKEHOLDER RESPONSE

**UK GOVERNMENT RESPONSE:** A Defra spokesperson said: “Our 25 Year Environment Plan commits us to improving the resilience of our infrastructure, housing and natural environment against climate change, and our forthcoming Environment Bill will build on this vision. Climate change is also explicitly among the ‘public goods’ listed in our Agriculture Bill that we want to pay farmers for outside the EU.” [Source: [Defra](#)]

#### **STAKEHOLDER RESPONSE:**

Industry broadly welcomed the findings:

- **Soil Association policy director Joanna Lewis** said: “The committee’s proposals are important and timely, and emphasise the urgent need for a radical transformation in the way we produce and consume food in the UK.” [Source: [Farmers Weekly](#)]
- **The Energy and Climate Intelligence Unit (ECIU) director Richard Black** said: “The report makes clear that bringing climate change into farming can generate real win-win options. In particular, increasing agricultural productivity to levels seen in France and the Netherlands would increase food output while also freeing up land for trees and energy crops.” [Source: [Energy and Climate Intelligence Unit Press Release](#)]

NFU and environmental interests gave a mixed response:

- **NFU President Minette Batters** said: "The NFU has been clear with its position on British farming's role in tackling climate change - reducing livestock numbers in the UK is not a part of that policy." "It would be a fundamental mistake to design a farming system solely around an approach that mitigates greenhouse gases without any regard to the wider impact of such a policy for our environment and our food supply. It risks producing a one-eyed policy." [Source: ['Cut lamb and beef' to fight climate change](#), BBC News]
- **Environmental campaigner George Monbiot** said: “This is a timid and inadequate report. Roughly four million hectares of uplands is used for sheep, yet sheep account for just 1.2% of our diet. “Allowing trees to return to a significant portion on this land has a far

greater potential for carbon reduction than the puny measures proposed in this report.”

[Source: ['Cut lamb and beef' to fight climate change](#), BBC News]

- **Friends of the Earth's Guy Shrubsole** said: "We need to reforest far more of Britain than the government's current puny tree-planting targets - going beyond what this report calls for and doubling forest cover to lock-up carbon and help prevent floods." [Source: ['Cut lamb and beef' to fight climate change](#), BBC News] "As the Committee on Climate Change says, we need to free up land from agriculture by eating much less meat and dairy, and stop landowners burning and degrading peat bogs - our single biggest carbon store." [Source: [Friends of the Earth Press Release](#)]

**Directorate for Energy and Climate Change: Decarbonisation Division**

November 2018

## ANNEX C

### COMMITTEE ON CLIMATE CHANGE – REPORT ON LAND USE

#### SCOTTISH GOVERNMENT ACTION IN AREAS COVERED BY THE REPORT

##### AGRICULTURE

- The agriculture chapter of the Scottish Government’s Climate Change Plan [Feb 2018] sets out the pathway for increasing the uptake of low carbon farming practices in Scotland. This will lead to a 9% reduction in total emissions from the sector over the period of the Plan (2018 to 2032). The agriculture chapter sets out five overarching policy outcomes :
  - Policy outcome 1: More farmers, crofters, land managers and other primary food producers are aware of the benefits and practicalities of cost-effective climate mitigation measures and uptake will have increased.
  - Policy outcome 2: Emissions from nitrogen fertiliser will have fallen through a combination of improved understanding, efficient application and improved soil condition.
  - Policy outcome 3: Reduced emissions from red meat and dairy through improved emissions intensity.
  - Policy outcome 4: Reduced emissions from the use and storage of manure and slurry.
  - Policy outcome 5: Carbon sequestration on agricultural land has helped to increase our national carbon sink.

Examples of initiatives currently running within agriculture.

- **Farming for a Better Climate** - works with farmers to find and demonstrate practical ways to move towards a more profitable, low carbon future, adapt to a changing climate and secure farm viability for future generations.
- **The Agri-Environment and Climate scheme (AECS)** - promotes land management practices that protect and enhance Scotland's magnificent natural heritage, improve water quality, manage flood risk and mitigate and adapt to climate change. A total of £137 million has been committed since 2015 to activities that help to maintain and enhance our rich and varied natural environment.
- **The Beef Efficiency Scheme (BES)** - aims to establish a superior genetic and more productive national herd whilst reducing GHG emissions through a more efficient herd and improvements in on-farm management practices.
- **Agricultural Technology Group** – launched in 2018, this Group will share, disseminate and encourage adoption of advances in agricultural science and technology as widely as possible. The first meeting was held on 30 July 2018.

- **Knowledge Transfer & Innovation Fund (KTIF)** - supports projects that provide vocational training, skills development and knowledge transfer projects focused on agriculture. Project such as;
  - the Scottish Soil Associations Future Farming Scotland – which aims to showcase the use of low input and sustainable approaches; building financial and environmental resilience in a changing climate.
  - ANM Group: Livestock Development Programme – which aims to deliver technical information, building individual capacity with a focus on developing profitable, sustainable livestock, environmentally friendly and climate smart production systems

### **TREE PLANTING**

- Scotland’s forests play a vital role in our transition to being a carbon neutral country. In the Programme for Government we commit to plant more trees and make more of our forestry resources. It says we will meet our target of planting 10,000 hectares of woodland every year, and increase this by a further 50% by 2025.
- The most recent planting figures show that 7,100 hectares of new woodland was established in Scotland last year [2017-18]. Scotland delivered 78% of new woodlands in the UK in 2017-18, up from 73% the previous year.

### **AGROFORESTRY**

- Agroforestry is part of the programme to meet target of planting 10,000 hectares of woodland every year, and increase this by a further 50% by 2025.
- The practice of agroforestry has little tradition or expertise in Scotland, however we seek a more integrated approach to land use where tree planting is designed to complement and enhance other land uses. An agroforestry grant is available as part of the Forestry Grant Scheme and efforts continue to engage with the forestry and the agricultural sector to promote the benefits of agroforestry grants.
- Forestry Commission Scotland is also working closely with farming stakeholders as part of the ‘Sheep and Trees Initiative’ to increase the area of farm woodland to improve whole-farm carbon budgets and farm productivity.

### **PEAT**

- A National Peatland Plan, published in August 2015, sets out a vision for protecting and managing our peatlands, and where required supporting their restoration.
- Scottish Government created a National Peatland Group, chaired by SNH to support delivery of the Plan and a separate Science and Monitoring group to support an evidence based approach.
- The SNH-led peatlands action project, whilst slow to start, has increased progress over the last year and is currently projected to deliver c10,000 hectares in 2019/20. Ministers

recently received a separate submission on the 2019-20 ECCLR portfolio budget allocation, which includes peatland action funding.

### **CLEANER AIR FOR SCOTLAND**

- Ministers recently announced an independent review of Scotland's air quality strategy- 'Cleaner Air for Scotland – The Road to a Healthier Future', to explore the progress and impact of the strategy to date; make recommendations for future air quality policy; and outline actions needed to meet targets. The review will cover emissions, including those produced by agriculture.

**Directorate for Agriculture and Rural Economy: Agriculture & Rural Development**

**Directorate for Environment and Forestry: Environmental Quality and Circular Economy**

**Forestry Commission Scotland: Land Use and Climate Change Policy**

November 2018

From:

[redacted]

Decarbonisation Division

11 June 2019

Cabinet Secretary for the Rural Economy

Minister for Rural Affairs and the Natural Environment

## **2017 SCOTTISH GREENHOUSE GAS EMISSIONS STATISTICS**

### **Purpose**

1. To provide a summary of the key portfolio messages from the 2017 greenhouse gas emissions statistics.

### **Priority**

2. **Routine.** This is for information.

### **Background**

3. Official Statistics published this morning show the greenhouse gas emissions reduction target for 2017 set under the 2009 Climate Change Act has been missed and Scotland is no longer exceeding the level of the 2020 target.

4. The target was missed for two main reasons. Firstly, technical reasons associated with the adjustment for the EU Emissions Trading System, and revisions to forestry data. Secondly, a lack of progress in some sectors. Emissions from transport, business and industrial process, and waste management all increased over the year.

5. Actual emissions which, subject to agreement by Parliament, future targets will be measured against, fell by 3.3% since 2016. This was mainly due to the closure of Longannet Power Station. Since the 1990 base year, total emissions are down 46.8%. The Energy Supply sector alone accounts for 38% of the decline in emissions since the base year.

6. Cabinet Secretary for Environment, Climate Change and Land Reform will make a statement to Parliament on 12 June reiterating commitments to respond to the global climate emergency, put climate change at the core of our next Programme for Government and Spending Review, and to update the Climate Change Plan. While the statistics predate the current Climate Change Plan and do not reflect recent action, increased calls for sector specific measures to be included in the Climate Change Bill are expected. ECCLR Committee sessions on Stage 2 Bill amendments begin next week.

### **Key messages for the Rural Economy Portfolio**

7. Agriculture and related land-use: Total emissions in 2017 were 9.7MtCO<sub>2</sub>e (24% of the total). Emissions are down -1.9% from 2016, and down -29.4% from 1990. The largest factor in the decrease in 2017 is grassland converted to cropland.

8. Forestry: Forestry is the only sector that is a net store of carbon. The size of the sink was down -1.6% from 2016, but since 1990 the size of the forestry sink has increased +34.9%. Technical revisions to historic forestry data, including improvements in models of carbon stock in trees and soils, have increased estimates of net emissions from this sector across the time series, making statutory targets relatively harder to meet.

### **Conclusion**

9. You are invited to note the key messages from the 2017 greenhouse gas emissions statistics.

[redacted]

Decarbonisation Division

Ext: [redacted] 11 June 2019

| Copy List:  | For Action | For Comments | For Information    |                  |                   |
|---|------------|--------------|--------------------|------------------|-------------------|
|   |            |              | Portfolio Interest | Constit Interest | General Awareness |
| Cabinet Secretary for Environment, Climate Change and Land Reform |            |              | X                  |                  |                   |

DG Economy

Kersti Berge - Director for Energy and Climate Change

[redacted]– Agriculture and Rural Economy

[redacted]– Environment and Forestry

[redacted]– Decarbonisation Division

[redacted]– Decarbonisation Division

[redacted]- Decarbonisation Division

[redacted]- Decarbonisation Division

[redacted]– Decarbonisation Division

[redacted]– Decarbonisation Division

[redacted]– Decarbonisation Division

[redacted]– OCEA

[redacted]- OCEA

[redacted]– Natural Resources

[redacted]– Scottish Forestry

[redacted]– Scottish Forestry

[redacted]– Scottish Forestry

**[redacted]**– Environment & Land Use Strategy

**[redacted]**-McDermott – Environment & Land Use Strategy

**[redacted]**– Agriculture & Climate Change

**[redacted]**– Agriculture & Climate Change

Leanne Dobson – Special Adviser

Kate Higgins - Special Adviser

**[redacted]**– Communications

Communications Rural Economy & Environment

Energy and Climate Change BMU