



The Scottish Parliament  
Pàrlamaid na h-Alba

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**Rural Economy and Connectivity  
Committee**

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By e-mail only

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Dear Fergus, Michael and Roseanna,

I am writing on behalf of the Rural Economy and Connectivity Committee to provide the Committee's views on the Scottish Government's updated Climate Change Plan (CCP). I would like to take the opportunity of thanking you both for contributing to the Committee's scrutiny by giving oral evidence in February 2021.

As brief background, the Committee has focussed on the transport, agriculture and forestry sections of the CCP. Three other parliamentary committees have focussed on other policy areas within their remits. The Committee issued a call for views on the CCP, and received [46 responses](#). The Committee also considered oral evidence from stakeholders, and the UK Climate Change Committee in January and February 2021.

This correspondence contains a summary of issues raised in evidence that the Committee wished to highlight to you (attached in the Annexe). I understand that a Parliament debate will be held to consider the views of the four committees scrutinising the CCP before the end of this parliamentary session. I should be grateful if you would respond to this correspondence in full, although I acknowledge that it is likely that timings will be short between your receipt of this correspondence, and the date of the proposed debate.

Kind regards

Edward Mountain

Convener

## Annexe

### Transport

#### Anticipated transport emissions reductions 2020-2032

1. The CCPu predicts a 41% fall in transport emissions between 2020 and 2032, from 11 million tonnes of carbon dioxide equivalent (written as MtCO<sub>2</sub>e) to 6.5 MtCO<sub>2</sub>e. Many stakeholders questioned whether the CCPu would meet the transport emissions targets.
2. The Climate Change Committee's [2020 Progress Report to Parliament](#) highlighted to the Committee that:
  - The current trend on transport emissions is off-track for meeting Scotland's interim emissions reduction targets and net zero
  - The ambition in the 2019-20 Programme for Government to aim for zero emission or ultra-low-emission city centres by 2030 will require the provision of ultra-low-carbon public transport options, cycling routes, and extensive deployment of electric vehicle recharging infrastructure to support a shift away from the use of conventional vehicles.
3. Stakeholders said that the aspirations and targets were good in themselves, but the detail of how targets will be delivered and what they meant were not well defined. As well as a lack of coherence, they highlighted other substantial issues including lack of funding priorities and political leadership. Stakeholders said that there had been limited progress over the last ten years, and expressed concerns that this could continue.
4. A further important issue identified was that there are no interim annual figures measuring progress towards the eight policy outcomes set out in the CCPu. Progress is simply defined as either "Year-to-year change" or "Progress towards target". Cabinet Secretary TIC said that various unknowns around the rollout of low emission vehicles as well as other future technologies not available at present made it difficult to create interim progress figures.
5. Furthermore, there is a lack of clarity regarding the proportion of total reduction in transport emissions each of the eight policy outcomes – or, at a more detailed level, individual policy measures under those outcomes – is intended to deliver. It has further been noted that, while transport emission reductions under the CCPu are projected to occur by 2028, this timescale does not correlate with the anticipated timescales for implementation of a number of key transport policy measures including the "ban" on the sale of new petrol and diesel cars, the mass roll-out of zero emission buses and significant further decarbonisation of rail services.
6. **Given these views, the Committee is concerned at the lack of detail around targets, timescales and the means of measuring progress. The Committee recommends that the CCPu should be revised to include a transparent and robust means of measuring progress, together with details of how the proposed timescales for transport emission reductions will be aligned with those of key transport policy measures designed to**

**contribute to these reductions.**

- 7. The Committee acknowledges the Cabinet Secretary TIC's recognition that progress on CCP targets has not been sufficient to date, and suggests that enhanced monitoring combined with an increase in interim targets may assist in achieving and measuring progress in future.**

## **Travel demand management**

- 8. Relevant draft CCPu policy outcome: To address our over-reliance on cars, we will reduce car kilometres by 20% by 2030.**
9. The Committee heard that cars were the biggest generator of Scottish transport emissions (based on 2018 data), that car use has been continually growing for decades, and was predicted to continue in [Transport Scotland modelling](#). Cabinet Secretary TIC acknowledged the challenge of private car use in his evidence to the Committee.
10. Stakeholders also highlighted that motoring costs have reduced in relation to public transport costs; and will continue to reduce, because of electric car developments, thus disincentivising public transport use.
11. While the commitment to reducing car use has been widely welcomed, evidence given to the Committee was clear that this will require both carrots and sticks - improvement in alternatives to car travel (better public transport, better broadband/5G, car sharing/ pooling incentives) and measures to make car travel less attractive (taxation, charges, reallocation of road space).
12. Cabinet Secretary TIC said the carrot and stick approach would need to be cross-sectoral and not just in transport policies, and so the Scottish Government's approach would include policies such as 20 minute neighbourhoods, low emission zones, and consideration of new home working patterns in the pandemic.
13. The UK CCC said that the majorities of policies were carrots, and so a better balance was needed. Professor Anable said that, "Investing in alternatives to the car is not the same as dissuading people from using the car; hence, the modal shift benefits have not materialised".
14. The UK CCC also highlighted the 20% reduction in car miles as the biggest new element of the transport plan set out in the CCPu. However, in oral evidence to the Committee, Chris Stark added:  
  
"In our work, we have said that reducing car demand by that amount offers significant potential to cut emissions but it is interesting that, even in our very ambitious assessment, we do not get to that 20 per cent figure."
15. Professor Anable also said that there is too much focus in the CCP on short journeys in urban areas. She said that this focus needed to shift to longer journeys, as the majority of the miles are undertaken in trips that are more than 15 miles in length, which cannot be taken by walking and cycling. She also said

that more investment was needed in long-distance travel in rail networks, coach networks and longer-distance buses, and by reducing journey lengths through introducing concerted land-use planning.

16. Cabinet Secretary TIC said that he was prioritising investment in maintaining and upgrading existing infrastructure, which reflected recommendations from the Infrastructure Commission for Scotland as well as feedback from the consultation on the National Transport Strategy. He also said that improved digital infrastructure would be important in rural areas to allow people to reduce their car use.
17. The Chartered Institute of Logistics and Transport noted a skill shortage relating to new technologies across the board of transport and logistics professionals, saying that, “The skills agenda is completely missing from the update, but it is perhaps the most important issue”.
18. The Scottish Government has committed to publishing a “Route Map” for meeting the 20% target during 2021 (this will be based on 2019 levels and will assess what changing patterns of behaviour of car users might be in the context of the pandemic).

19. **While acknowledging the ambition behind the target of reducing car kilometres by 20% by 2030, the Committee is concerned that the UK CCC has indicated that, even in its most ambitious assessment, it has been unable to identify a set of policy measures that would achieve this level of reduction. The Committee therefore notes that, in order for this target to be met, the Scottish Government will need to set out radical concrete policy measures that address all four key factors identified by the UK CCC as playing a role in reducing car kilometres, namely: societal and technological changes, increasing car occupancy, modal shift to active travel and modal shift to public transport.**
20. **The Committee highlights the particular challenge of reducing car kilometres in remote and rural areas of Scotland where public transport provision is significantly more limited, resulting in increased reliance on the private car – and where the roll-out of electric vehicle charging infrastructure continues to be significantly slower than in urban areas. The Committee calls on the Scottish Government to give particular consideration within the CCPu to recognising and addressing this challenge when implementing policy measures to achieve the 20% target.**
21. **The Committee is concerned that those policy interventions available to date in the context of the devolved settlement have tended towards “carrots” in the form of incentives. However, the level of ambition in the targets will necessitate a more balanced, collaborative approach from both the Scottish and UK Governments encompassing both “carrots” and “sticks” to disincentivise private car use and achieve the necessary shift towards more sustainable transport modes.**
22. **The Committee calls for the CCPu to address the issue of a shortage of skills relating to new technologies amongst transport and logistics professionals.**

23. **The Committee notes the expected publication of a “Route Map” for meeting the 20% target during 2021 and will recommend that its successor committee should consider this document.**

### **Electric vehicles / vehicle emissions**

24. Relevant draft CCPu policy outcome: **We will phase out the need for new petrol and diesel cars and vans by 2030.**
25. This policy outcome is largely reliant on the uptake of electric (and other low carbon propulsion) cars and vans. The Committee also heard that the increasing popularity of Sport Utility Vehicles (SUV's is effectively negating emissions reductions from the sale of ultra-low emission vehicles due to the relatively lower fuel efficiency of SUV's.
26. The UK CCC told the Committee that the ban on petrol and diesel cars by 2030 should apply to hybrid vehicles, as hybrids will be relatively unappealing to consumers by that point due to relatively poor fuel efficiency and higher running costs compared to full electric vehicles. They recommended a move to 100% battery electric vehicles from 2030 onwards.
27. In his evidence, Cabinet Secretary TIC said that he thought that hybrids still have a part to play, when balanced against a need for electric cars to cost less.
28. A key concern expressed in evidence was the provision of adequate charging infrastructure, both across the road network and in residential areas, especially in urban areas with high concentrations of tenements/ flats. The UK CCC said that people must be able to have confidence in the infrastructure for it to work, and have access to both faster and slower forms of charging, for different needs.
29. On the need for home charging points and the range of possible homes including flats, Cabinet Secretary TIC said that insufficient capacity within the energy network was the current issue, and so the Scottish Government had been working with energy companies to identify need by location to improve grid infrastructure. In urban areas, the Scottish Government has been working with local authorities to create charging hubs through the Charging Scotland Network. Additionally, private companies are introducing schemes (which the Cabinet Secretary expected to increase), and the Scottish Government was working with them to ensure one scheme rather than multiple schemes, and to ensure investment was also spread to rural areas.
30. Professor Anable said although the provision is patchy, there is a great deal of innovation with respect to on-street parking charging points including utilising lamp posts and pop-up charging lanyard facilities, and initiatives for people to share their charging points. However, she recommended faster progress on changing public sector fleets to electric vehicles, a residential charging point scheme, and a more national and targeted approach to infrastructure roll out

(based on data of where electric vehicle uptake will be most rapid on the basis of demographics and current car ownership).

31. As regards the incentives for people to replace internal combustion engine (ICE) cars with the currently more expensive electric vehicles, Cabinet Secretary TIC said he understood from the car industry that the price differential between ICE and electric vehicles would disappear within a period of about 3 years. He also said that the Scottish Government was constrained by its current financial powers to offering loans, as it did not control VAT and other taxes associated with the purchase of vehicles.
32. **The Committee is of the view that if a significant increase in electric vehicle ownership is to take place, much more must be done to determine how charging infrastructure will match demand and be sufficiently widely available, particularly in highly concentrated urban areas.**
33. **The Committee is concerned about current constraints on vehicle charging imposed by capacity constraints on the electricity grid and is of the view that improvements to grid infrastructure must be urgently addressed if the CCPu outcome to phase out petrol and diesel cars is to be delivered.**
34. **The Committee further believes that, representing two key strands of policy to facilitate achievement of CCPu targets, greater efforts must be made to coordinate action across government to upgrade the electricity grid to support the transition to electric vehicles with corresponding activity to upgrade digital connectivity as a means of supporting, amongst other benefits, an increase in home-working.**
35. **Whilst acknowledging the current cost of electric cars, the Committee notes Scottish Government expectations that the cost differential with conventionally powered vehicles will reduce and disappear over time and agrees with the UK CCC that by 2030, hybrids will be less likely to appeal to consumers due to relatively lower fuel efficiency and higher running costs. The Committee therefore calls on the Scottish Government to include within the CCPu a timescale for the complete phase-out of new hybrid vehicles.**

## **Public transport and freight**

36. Relevant draft CCPu policy outcomes:
  - **To reduce emissions in the freight sector, we will work with the industry to understand the most efficient methods and remove the need for new petrol and diesel heavy vehicles by 2035.**
  - **We will work with the newly formed Bus Decarbonisation Taskforce, comprised of leaders from the bus, energy and finance sectors, to ensure that the majority of new buses purchased from 2024 are zero-emission, and to bring this date forward if possible.**

- **We will work to decarbonise scheduled flights within Scotland by 2040.**
  - **Proportion of ferries in Scottish Government ownership which are low emission has increased to 30% by 2032.**
  - **By 2032 low emission solutions have been widely adopted at Scottish ports.**
  - **Scotland's passenger rail services will be decarbonised by 2035.**
37. The UKCCC said that freight should be moved onto rail, even before rail was decarbonised, as rail was more efficient. Overall, the UK CCC also commented that provisions relating to the freight sector were “pretty light” in the CCPu. Logistics UK said that the issue for freight was capacity of the energy grid. Several stakeholders supported electrification of rail as the path to net zero for the rail sector.
38. Logistics UK said that capacity is the biggest issue for getting additional freight rail routes, particularly in Scotland. They said that as rail freight stock is owned and operated by private sector companies, there are significant cost implications, but there is an opportunity to put some freight, particularly heavy goods that are not time sensitive, on to rail. Additionally, they said that road and rail should work together as access is needed for HGVs to where the train is loaded.
39. The Confederation of Passenger Transport described a spiral of issues that had caused a long-term decline in bus ownership including cost, congestion leading to less reliability and punctuality, increases in operational costs, and consequent increases in fares. They welcomed the Scottish Government's £500 million bus partnership fund to look at infrastructure improvements for bus transport but said that it must be accompanied by tough policy measures to discourage car journeys and use.
40. As regards improvements in public transport, CPT said more work was needed on concessionary ticketing and making ticketing easier. Professor Anable recommended integration across modes, smart ticketing, and minimum service levels for different-sized places, so that places with a certain population have a minimum number of services per hour and per day.
41. The Rail Delivery Group said there should be a fundamental fares reform that would simplify the fares system and make it more transparent. Operators should be given more flexibility, so that they can adapt fares to reflect how people want to travel and work.
42. The Sustainable Aviation coalition said that many solutions for decarbonising aviation (such as sustainable fuels or new aircraft technologies) were at a relatively early stage, therefore more effort and support was needed to bring these opportunities into the commercial arena and to scale them up.
43. The Sustainable Aviation coalition also highlighted the potential risk of unexpected consequences if the wrong approach to meeting CCPu targets was



taken. An example given was mandatory use of sustainable fuel or taxing flights in Scotland, thus penalising people who wish to fly in Scotland compared with people who fly elsewhere, which would encourage those passengers to fly outside of Scotland, thereby exporting the problem rather than resolving it.

44. Cabinet Secretary TIC said he was confident about reaching bus emissions targets given the ongoing roll-out of various schemes including hydrogen buses and the existing Scottish Government funding schemes. However, he outlined greater challenges with HGVs given the scale of new technology needed, such as new electric vehicles, and said the Scottish Government was investing in these areas to support the sector and academics developing the technologies.
45. The Committee asked Cabinet Secretary TIC for further detail on the policy outcome on ferries (which is: Proportion of ferries in Scottish Government ownership which are low emission has increased to 30% by 2032). In supplementary written evidence, Cabinet Secretary TIC said currently 3/36 of the Scottish Government owned ferry fleet are low emission vessels, which are the three diesel/electric hybrid vessels which came into service between 2012 and 2016. He said that the Northern Isles vessels had increased the fleet size and so decreased the proportion, but he had retained the 2032 target.
46. He also said that the Glen Sannox and Hull 802 were “the next step in lower emission ferries by utilising Liquid Natural Gas (LNG). The inclusion of these two vessels increases the numbers of low emission vessels within the fleet to 5/36.”

47. **The Committee regrets the overall lack of focus in the CCPu on addressing carbon emissions from the freight transport sector. The Committee recommends that the CCPu should be revised to highlight the huge potential for a significantly greater reduction in transport emissions by shifting more freight from road to rail.**
48. **In particular, the Committee notes that to achieve the outcomes on public transport and freight there is a significant dependency on the development and implementation of new sustainable technologies. The Committee is of the view that technological advances alone will not be sufficient to deliver these outcomes and calls on the Scottish Government to identify and develop policy interventions that can drive forward the necessary changes, particularly in relation to public transport.**
49. **While noting recent positive announcements about the launch of a new small vessel replacement programme for the Clyde and Hebrides network, the Committee is of the view that more progress needs to be made towards increasing the proportion of low emission ferries in the Scottish ferry fleet moving forward. Whilst acknowledging their positive contribution towards reduced emissions, particularly in relation to improved air quality, the Committee further questions the future role of LNG-powered ferries in reducing carbon emissions, given that LNG is a carbon-emitting fossil fuel.**

## Active and sustainable travel

50. The Committee notes that encouraging modal shift from car to public transport, walking and cycling has been a part of Scottish Government transport policy since the publication of the [first National Transport Strategy](#) in 2006.
51. However, evidence given demonstrates limited progress. The Climate Change Committee's [2020 Progress Report to Parliament](#) highlighted to the Committee that:

“Despite policies such as Smarter Choices Smarter Places and the Cycling Action Plan, there has been no significant behavioural shift away from cars towards public transport, walking and cycling in Scotland in the last decade.”
52. Since the publication of the first Climate Change Plan, the proportion of trips made by car has increased, while the proportion of trips made by bike has remained roughly stable at just over 1%, and the proportion of trips made by bus and foot have declined. The proportion of trips made by rail has increased but remains at just 2.3% of all journeys.
53. Previous versions of the Climate Change Plan referred to the Cycling Action Plan for Scotland, which set a “shared vision” of 10% of everyday trips to be made by bike by 2020. No reference is made to this goal in the CCPu.
54. No detail of the level of modal shift required to achieve the CCP targets is set out in the updated CCP.
55. The UK CCC told the Committee that confidence in public transport needs to be re-established. Stakeholders recommended a need for different models of ticketing, given that season tickets may not be used so regularly as a consequence of the shift to more home working.
56. Some stakeholders such as Transform Scotland said that there had been insufficient investment in active travel, and that the Government has a “continuing bias towards high-carbon capital expenditure plans, such as for new road building”. They said this has led to very little progress being made in active travel over the last 10 years since the first version of the CCP was published.
57. Sustrans Scotland said that although good work was being undertaken in infrastructure, active travel infrastructure was patchy and not coherent or safe, and therefore did not attract people out of their cars.
58. On e-bikes and e-cargo bikes, Sustrans Scotland welcomed the active travel budget, which is £100 million a year for the next five years, but highlighted that its own budget was at capacity, so that it will find it increasingly difficult to meet demand from local authorities and other statutory agencies. On e-cargo bikes specifically, Sustrans Scotland said that there was a huge opportunity for public agencies and the private sector to work together, particularly on last-mile deliveries, but that current examples were patchy due to the budgetary issues.

59. Professor Anable said that infrastructure for e-bikes should be focused on maximising the associated benefits. She said that the greatest e-bike potential is for 5 to 10-mile journeys, which do not necessarily go into urban centres but often go between smaller towns. Focusing on longer-distance cycling networks would support these journeys.
60. The Committee notes that the Scottish Government will invest a £50 million fund for ‘active travel freeways’, but that the Scottish Government has not defined what those freeways are. Sustrans Scotland queried whether this investment was a standalone fund, and recommended that this funding should be invested in a high-quality network, rolled out in a partnership between local authorities, regional transport partnerships, other statutory bodies and Sustrans, and be built on the back of the existing national cycle network.
61. Cabinet Secretary TIC said there were a number of different ways in which the Scottish Government intended to encourage modal shift including incentivising public transport use (through schemes like the under 19’s concessionary scheme for bus use) and decarbonisation. He also highlighted a “record investment” for active travel of £0.5 billion and the additional £50 million for ‘active freeways’ for walking and cycling, and schemes for cycling such as the e-bike loan scheme, which includes e-cargo bikes. He noted that e-cargo bikes were an opportunity for private sector investment, and the Scottish Government was in discussions with that sector. He said e-cargo bikes could be used by delivery companies particularly for last mile deliveries, and noted that the Scottish Government provides loan funding, and also funding for local initiatives to purchase e-bikes.

- 62. The Committee recommends that the Scottish Government should outline more clearly in the CCPu what ‘active travel freeways’ are, how they will operate, and provide more clarity on their funding.**
- 63. The Committee welcomes the funds so far committed towards active travel but notes Sustrans Scotland’s concerns about sufficient capacity and resources. The Committee also highlights stakeholders concerns about a lack of coherence in the approach towards infrastructure investment and development, and a bias towards road building, and recommends that the Scottish Government develops a less contradictory overall approach in the CCPu.**
- 64. The Committee also notes the failure to reach the targets to increase active travel set out in previous versions of the CCP, particularly the target set out in the Cycling Action Plan that 10% of everyday trips should be made by bike by 2020. It is of the view that policies to encourage active travel need to be given much greater priority to ensure that future targets are not missed and to embed for the longer term the progress in the uptake of active travel options witnessed during the COVID-19 pandemic.**

## Impact of COVID-19

65. [Transport Scotland travel statistics](#) show that travel by all modes has been running well below normal levels since March 2020. Evidence to the Committee reflected on what changes in travel patterns, combined with possible increases in working from home, might mean for the longer term. Stakeholders said that there is a clear need to manage demand for car travel as Scotland exits the pandemic.
66. Cabinet Secretary TIC noted the challenges of fully knowing what the scale of potential changes in travel behaviour might be, and highlighted that the updated CCP had been written before the pandemic. He said that the Scottish Government was working on policies that aim to mitigate any bounce back in transport emissions in the years following the eventual lifting of coronavirus travel restrictions, some of which were set out in the recently published STPR2 report relating to decarbonisation of public transport.
67. In summary, the Committee heard in evidence that the main policy objectives for the Scottish Government in the context of Covid-19 should be:
- Investment in digital infrastructure, particularly high-speed broadband and 5G, and continued support for working from home. It seems likely that people will continue to work from home, or in a hybrid of office and home working, in a post pandemic Scotland.
  - Car restraint, through the reallocation of road space from cars to buses, cyclists and pedestrians, parking restraint, and road pricing.
  - Greater focus on addressing longer journeys made by car, rather than the present focus on short journeys.
68. Cabinet Secretary TIC said that STPR2 sets out investment plans relating to changing behaviour due to the pandemic. Regarding the temporary active travel infrastructure for the pandemic funded by the Scottish Government, he said that the Scottish Government was in discussions with local authorities to consider how some of it could be made more permanent, and to simplify the associated processes.
69. Specifically, on rail, he said that Scotrail and the Scottish Government were considering how to incentivise people back onto public transport, which included various possible ticketing options and flexibility to changing work patterns, for example, revisions to time limits for flexi passes.
- 70. The Committee acknowledges the challenges of knowing the full impact of the pandemic at this stage, but highlights to the Scottish Government the stakeholder recommendations outlined above as key asks for exiting Covid-19.**

## **Agriculture**

71. Although the increased ambition for agriculture expressed in the CCPu has been welcomed, uncertainty remains for many stakeholders regarding the link between the policies and proposals in the plan, and the anticipated emissions

reductions. The UK CCC notes that, to date, there has been the least progress with reducing carbon emissions in agriculture, compared to transport or forestry.

72. There is also criticism regarding a lack of leadership, urgency and clarity on future policy.

### **Leadership**

73. Stakeholders have almost universally expressed a need for overall policy leadership from the Scottish Government in setting out the shape of future rural policy, which is now one of the key mechanisms for achieving emissions reduction in the agricultural sector set out in the CCPu.
74. The CCPu highlights the development of farmer-led working groups as part of a process to develop future policy. However, stakeholders have told the Committee that, whilst the groups are important, there is a need for overall policy leadership to ensure integrated policy and that the outputs from stakeholder engagement processes are sufficient to achieve the emissions reduction.

### **Urgency**

75. The Scottish Government has made a commitment to bring forward a new rural policy in 2022 which would take effect at the end of the current period of 'stability and simplicity' in 2024, as set out in the Scottish Government's 2018 policy on a rural funding transition period and enabled by the Agriculture (Retained EU Law and Data) (Scotland) Act 2020. There has been criticism from many stakeholders that this timetable lacks the requisite urgency to enable agriculture to play its role in meeting the 2030 target for reducing climate change emissions by 75%.
76. In its written submission to the Committee, RSPB Scotland highlighted as "odd" that the CCPu makes no reference to the Farming and Food Production Future Policy Group which was specifically set up to develop this new rural policy.
77. In relation to the timetable for development of the new rural policy, Chris Stark told the Committee:  
  
"I think that 2022 is a long time to wait for that big change... Every month that we delay a policy to incentivise and encourage that change is a month that we will not get back – the clock is going tick-tock on this stuff. Although some progress has been made on policy development, I am still critical of it, because it is far too slow if our agricultural sector is to be properly wired up to the goal of net zero by 2045."
78. The Scottish Government is also criticised for conflicting messaging on tackling climate change in the agricultural sector. For example, while the new rural policy for Scotland is envisaged to deliver better outcomes for climate and nature, there has been a 20% cut to the agri-environment climate scheme (AECS) budget, which is the only one of the existing CAP schemes where the purpose is to deliver targeted management for biodiversity and climate change.

## Clarity

79. There has equally been criticism of the lack of policy detail in the plan to demonstrate how the anticipated emissions reduction for agriculture will be achieved in practice, and the reliance on policies and proposals to consult with stakeholders, review policies, explore new options and undertake research, without clear timescales attached, and without clarity around how the findings will be used and translated into new policies or into action to reduce emissions.

80. Giving evidence to the Committee on behalf of the UK CCC, Chris Stark commented in relation to the agricultural sector:

“...the plan is not clear about any of the tools for the delivery of the big change in land use that we think is necessary for Scotland to get to net zero”

81. Chris Stark told the Committee:

“There is nothing in the report that tells me...whether the policies are sufficient; I cannot tell you what the emissions reductions associated with those policies and proposals are. There are all sorts of things that lead me to be dubious about whether the objectives – especially those for agriculture – will be achieved.”

82. Chris Stark later remarked:

“...there is no detail about how future rural policy funding will develop to replace the common agricultural policy. Surely that is a major priority, as we need to understand that.”

83. He further suggested that the Scottish Government could learn useful lessons from the operation of DEFRA’s environmental land management scheme (ELMS) in England:

“ELMS has many issues, too, but at the heart of it is the idea that the public money that goes to the sector should deliver a set of public goods, including environmental outcomes and a saving from carbon. That idea is there. I know that officials in the Scottish Government have looked extensively at that; Fergus Ewing has looked at it, too, so I hope that something similar to ELMS emerges that has the same motivation at the heart of it.”

84. This view has been supported by other stakeholders, who have suggested that a similar scheme in Scotland would be beneficial in incentivising greater cooperation between farmers.

85. Stakeholders also questioned the lack of clarity with regard to the Agriculture Transformation Programme, which has been recently announced to support a transition to low-carbon agriculture. Organisations such as the Climate Emergency Response Group have welcomed progress on the Agriculture Transformation Programme but describe that progress as slow and lacking detail on interventions and measurement against outcomes.

86. In its report published in November 2020, the Climate Emergency Response Group specifically calls for a:

“Clear package of policies and proposals for emissions reduction from agriculture, prioritising key interventions and support by tailored advice, funding through Agriculture Transformation Programme and monitoring to measure outcomes.”

### **Diversification**

87. Linked to the issue of clarity around future policy and the discussion around what land managers could be paid for, is the issue of diversifying land uses on agricultural holdings.
88. Chris Stark told the Committee that the agricultural sector still tends to be very focused on traditional food production whereas there would be a benefit to farmers and to the environment from broadening land use options, coupled with appropriate incentives reflected as part of new land use policies.
89. Chris Stark said:

“...we see the opportunity to change land use as an economic gain for the farmer or landowner. We need to embed the idea that professional change is good and, when it comes to climate policies, developing new land management skills so that we are storing more carbon in that land is adding to the skill set that the farmer will have. I would like to see the idea embedded that carbon is a crop and that farmers should be rewarded for storing carbon in the right way.”

### **Pilots**

90. The importance of piloting new approaches was also highlighted to the Committee, including soil health and soil management for production, carbon and biodiversity, animal genetics and animal health, nitrogen uptake in plants, and whole farm approaches for how ecosystems and biodiversity can work for sequestration.

### **Regulation and conditionality**

91. More broadly, the Committee has heard calls from a number of stakeholders, including the CCC, for stronger regulatory measures to drive change in the agricultural sector, although other stakeholders have equally emphasised the importance of ensuring such measures provide a just transition for farmers. The Committee has heard that there are a number of existing measures which could form part of new regulatory requirements, and which may also be cost-saving for farmers.
92. Linked to the issue of regulation is the issue of conditionality on payments.
93. The new proposal in the draft CCPu to introduce environmental conditionality from 2021 has been broadly welcomed by stakeholders, though it has also been raised that the effectiveness of conditionality will depend on the conditions

and the detail of the requirements to ensure that conditions deliver positive outcomes.

### **Biodiversity / Regional land use planning**

94. There has been widespread support for proposals in the plan to create regional land use partnerships as a mechanism for achieving an integrated land use approach in the agricultural sector. However, stakeholders have criticised the perceived regression in commitments in the draft CCPu, which states that regional land use partnerships will be piloted in 2021. A policy to encourage the development of regional land use partnerships has been set out since 2016 in the second Land Use Strategy. Two pilots – one in Aberdeenshire and one in the Borders – have already been carried out and evaluated, and there has been a policy to roll out partnerships across Scotland since the 2019-20 Programme for Government, which aimed for each partnership to have developed a framework by 2023.

95. On this same point, Professor Deb Roberts said:

“We had a commitment in the programme for government to roll out regional partnerships across all Scotland this year. We now have a commitment to run a couple of pilots. We are going backwards.”

96. Many stakeholders have also highlighted the importance of giving equal focus in the development of future climate change policy on addressing the current biodiversity crisis. Professor Deb Roberts of the Scottish Environment, Food and Agriculture Research Institutes told the Committee:

“To focus purely on climate change targets would be a really big mistake; we would just find ourselves revisiting biodiversity very soon. The sooner we reconcile the two, the better.”

97. Stakeholders have suggested that regional land-use planning would be helpful in achieving better integration of climate change and biodiversity policy goals.

### **Bioenergy**

98. The UK CCC has also expressed concerns to the Committee that the practical challenge of meeting the stricter 2030 target for Scotland set out in the Climate Change (Emissions Reductions) (Scotland) Act 2019 has resulted in an over-reliance on the use of negative emissions technologies, such as bioenergy with carbon capture and storage as a means of achieving that target. Whilst acknowledging that such technologies present opportunities, the CCC also notes that growing bioenergy crops should not be at the expense of food production, and highlights risks and challenges, in particular competition for land use, the need to have indigenous sources of biomass, and getting the infrastructure in place.

99. Other stakeholders have raised similar concerns and have pointed out that the creation of biomass energy will be in direct competition with other uses of land, which is a finite resource.



- 100. The Committee welcomes the increased ambition for addressing climate change in the agricultural sector in the CCPu. However, to enable the sector to meet its 2030 climate change target, the Committee believes that the timetable for bringing forward a new rural policy for Scotland needs to be significantly accelerated, and that the Scottish Government must show leadership on the direction of travel on rural policies and what will be required in the future, to give confidence to land managers.**
- 101. The Committee believes that these proposals should be brought forward as quickly as practically possible and should draw appropriate lessons from the design of DEFRA's environmental land management scheme (ELMS) in England. The Committee notes that such a scheme would be particularly beneficial in encouraging greater cooperation between farmers on tackling climate change.**
- 102. The Committee notes stakeholder concerns about the Scottish Government's decision to cut the budget for the agri-environment climate scheme by 20% and emphasises the importance of adequate funding provision to enable CCPu targets as these relate to agriculture to be successfully met.**
- 103. The Committee calls on the Scottish Government, as a matter of some urgency, to publish the available evidence that demonstrates what contribution individual policy measures will make towards meeting the 24% anticipated emissions reduction for agriculture (including, the estimated abatement associated with each policy and proposal, and where not available, a clear explanation of where judgments have been made and what the evidence base was for these decisions). The Committee further believes this evidence needs to demonstrate that, cumulatively, the measures proposed will be sufficient to allow that target to be met.**
- 104. The Committee calls on the Scottish Government to highlight as part of the final CCPu where new regulation will be required to meet the target, and a plan for bringing this forward as part of a just transition for farmers, crofters and other land managers.**
- 105. With regard to all policies and proposals which undertake to e.g. explore new options, pilot new approaches or engage with stakeholders, the Committee calls on the Scottish Government to specify, as part of the final CCPu, clear timescales, and a process to monitor and report on findings and outline next steps for each policy and proposal. This is crucial to ensuring a clear and transparent pathway for translating all policies and proposals to concrete emissions reductions.**
- 106. The Committee urges the Scottish Government to bring forward practical proposals as part of the final CCPu that will apply conditionality to public funding for the agricultural sector which deliver positive, tangible, and measurable environmental outcomes and a reduction in carbon emissions.**
- 107. In relation to the Agriculture Transformation Programme, the Committee**

**calls for greater clarity on the individual policy interventions that will make up a “scaled up” programme and how these will be monitored and measured and a timeline for faster implementation of the programme as part of the final CCPu.**

- 108. While acknowledging the impact on policy implementation of the COVID-19 pandemic, the Committee is disappointed by the current rate of progress in rolling out regional land use partnerships as a key mechanism for achieving an integrated land use approach that effectively balances climate change and biodiversity policy goals. The Committee questions whether the current rate of progress will allow frameworks to be in place across Scotland by 2023, ahead of the anticipated start of Scotland’s new rural policy in 2024, and as per the Scottish Government’s 2019-20 Programme for Government commitment.**
- 109. The Committee recommends that the final CCPu sets out specific and detailed plans for an urgent roll-out of RLUPs, including the tools and resources that will be available to the partnerships, and how it will ensure inclusive participation. If the Scottish Government is committed to further pilots, the CCPu should also set out how it will ensure that areas not covered by the pilot schemes are not left behind.**
- 110. The Committee is concerned by an apparent over-reliance on the use of bioenergy with carbon capture and storage to achieve the new more stringent 2030 target and the additional pressure this will create to use areas of land for the cultivation of bioenergy crops, in direct competition with other potential land uses such as forestry, food production and habitat for biodiversity. The Committee urges the Scottish Government, in bringing forward a policy implementation model for meeting the 2030 target, to examine alternative mechanisms for meeting the target that are less reliant on bioenergy with carbon capture and storage.**

## **Baseline data, research, training and advice**

### **Baseline data**

111. A number of stakeholders have emphasised the importance of establishing reliable and comprehensive baseline data to be able to evaluate progress towards meeting emissions reduction ambitions in the agricultural sector.
112. On behalf of the Farming for 1.5°C Independent Inquiry, Nigel Miller told the Committee:  
  
“A mapping exercise needs to be carried out to find out what is on farm and to define the sequestration and biodiversity assets, and we need an accounting tool that takes those things into account.”
113. Professor David Reay from the University of Edinburgh supported this view and argued:

“The conditionality around data collection and provision needs to be looked at before 2024, so we could get going faster on that.”

114. Stakeholders have further argued that farmers should be offered additional incentives to provide good data to enable changes to be effectively monitored and evaluated and that there are existing policies in Ireland which would provide a useful model to follow in this regard.

## Research

115. Stakeholders have made a particular plea for clear guidance from the Scottish Government to the research community on future policy and how research might help to inform its development.
116. The Committee has also heard that there is a need to ensure that research is effectively communicated to land managers, to ensure that there is a clear process for translating research into practical action and policy development.

## Training, education and advice

117. The Committee has also heard calls from a number of stakeholders for investment in training and education to build capacity within the agricultural sector for climate change mitigation. In particular, stakeholders have expressed strong support for expansion of the Farm Advisory Service and have suggested that it could have a particularly important role to play in encouraging more farmers to carry out – and to receive associated funding for – a carbon audit, where take-up has so far been extremely low.
118. Some stakeholders have gone so far as to suggest that carbon audits should be made mandatory.
119. On training and advice, WWF Scotland’s written submission suggests:

“Effective rural advice requires an estimated £20 million investment each year, which would support employment of 460 FTE advisors across Scotland.”

- 120. The Committee calls for the CCPu to outline accelerated action to establish comprehensive and reliable baseline data to enable effective monitoring of progress towards meeting the CCPu targets for agriculture, including appropriate incentives to encourage farmers to collect and share good quality data.**
- 121. The Committee believes that the Scottish Government needs to set out clearer guidance for Scotland’s research community regarding the specific types of research required to inform future development of climate change policy for the agricultural sector, and that the CCPu should set out how any policies and proposals for further research will be communicated to translate into policy developments or practical actions for farmers, crofters and other land managers.**
- 122. The Committee urges the Scottish Government to bring forward detailed proposals and an appropriate funding package for the expansion of the**

**Farm Advisory Service as part of the final CCPu including a specific aim to encourage much wider industry take-up of carbon audits.**

**123. The Committee further calls on the Scottish Government to explore other available policy mechanisms to achieve a rapid and significant increase in the take-up of carbon audits, including the option of making these mandatory.**

## **Forestry**

124. Evidence to the Committee highlights that there is considerable nuance to forestry which is not evidenced in the CCPu and argues there should be a focus on “nature of the target as opposed to the level of the target”. Issues include:

- The mix of trees planted, including conifer and broadleaved, and native and non-native. The mix has implications for biodiversity, productivity, resilience to pests and to climate impacts, and amenity value. Beyond carbon storage, evidence heard suggests that getting this balance right is important.
- Where trees are planted, including what soils to avoid planting on, is important to make sure that trees are planted where benefits are the greatest.
- The need to break down barriers between productive and native forestry and overcome the sense that one delivers biodiversity and the other delivers jobs.
- The need for integrated and joined-up forestry research, including on forestry on different soil types, biodiversity value of different woodlands and woodland activities, cultivation methods required on different soils to prevent emissions, impacts of planting trees on shallow peat, etc.
- The need for native woodland planting targets to keep up with overall planting targets and for policy coherence to address the nature emergency, and a concern that current targets for native woodland are lagging behind the overall target.
- The need for better integration with forestry on farmland. The draft CCPu highlights a new on farm and croft tree integration demonstrator network and awareness-raising among farmers and crofters for agroforestry. Stakeholders note that this needs to go alongside changes to the grants scheme, which is currently not well designed to support agroforestry.

## **Target**

125. Giving evidence to the Committee, Chris Stark was particularly complimentary about the Scottish Government’s efforts to date and future ambitions on new forestry, woodland creation and peatland restoration. He welcomed the overall approach to forestry in the plan and what he described as a “steady ramping up of woodland creation over the 2020s to 18,000 hectares a year by 2025”. At the same time, Chris Stark expressed a view that there is scope to do even more, suggesting that a longer term target of 24,000 hectares of new forestry per year should be feasible.

126. In connection with this point, other stakeholders have emphasised the importance of achieving a smoother profile of tree planting based on steady, predictable growth, leading up to the annual target of 18,000 hectares by 2025.

### **Management of existing woodlands**

127. Stakeholders have highlighted that there are no policies in the CCPu to protect the carbon stores in Scotland's existing woodlands through policies to support good management alongside new woodland creation.

128. In their written evidence, Confor highlighted that:

*“One important gap in Scottish Government policy is bringing native woodland into active management. The Committee on Climate Change 6th carbon budget requires 67-80% of broadleaf woodlands in the UK to be managed sustainably by 2030, a significant increase from present levels.*

*“...Consideration should be given to increasing the incentives to manage Scotland's existing native and broadleaf woodland resource. This would require a substantial increase in the grant budget.”*

### **Agro-forestry**

129. Arina Russell from Woodland Trust Scotland told the Committee that an overhaul of current forestry grant schemes for agro-forestry should have been included in the CCPu, arguing:

*“They are not suitable and we need to see well-planned agro-forestry benefits, including for timber biomass, but there also needs to be shelter for livestock, business resilience and crop water efficiency.”*

130. Stakeholders have also emphasised the need to recognise the efforts of farmers and crofters to protect and enhance carbon stores on their holdings, for example in planting and managing trees and hedges. One way that stakeholders proposed to recognise this effort is to expand the woodland carbon code to include areas such as agro-forestry, hedges and wood pasture. agro-forestry

### **Types of woodland**

131. Stakeholders have emphasised the importance of achieving a sustained 50:50 split in new tree planting over the long term between native and commercial woodland. In connection with this point, Arina Russell told the Committee:

*“Native woodland covers only 4 per cent of Scotland's land area. That is not acceptable in a climate and nature emergency.”*

132. Stakeholders have also argued that achieving this 50:50 split would enable climate change targets to be met while also delivering on other policy priorities such as amenity value, genetic diversity, resilience, flood management and, crucially, biodiversity.

133. Evidence to the Committee also points to the particular benefits of regenerating Scotland's ancient woodlands, which have 30% higher average carbon stocks than the overall average carbon stock in Scottish woodlands.
134. Meanwhile, certain stakeholders have also highlighted the benefits of a more integrated approach across productive and native forestry, including the provision of mixed woodlands.

### **Timber in construction**

135. Evidence to the Committee has highlighted the potential for increased use of timber in the construction sector and the benefits this could provide as a long term carbon store.

### **Nurseries**

136. Stakeholders have also emphasised the increased demand for seedlings and young tree plants the forestry aspects of the CCPu will create and the consequent need to invest in Scotland's nursery sector to increase its resilience.

- 137. The Committee strongly welcomes the level of ambition for the forestry sector in the CCPu and acknowledges the relatively high level of confidence amongst stakeholders that the targets set for new tree planting are realistic and achievable.**
- 138. The Committee draws the Scottish Government's attention to indications from the UK CCC that, longer term, an even more ambitious target of 24,000 hectares of new forestry per year should be achievable and calls on the Scottish Government to investigate further how this longer term target might be achieved, while maintaining a pathway of steady and predictable growth in new tree planting towards achieving that longer term target.**
- 139. The Committee calls for the Scottish Government to evidence a nuanced approach to forestry in the final CCPu in addition to the overall planting target. This should highlight: that a 50:50 split in new tree planting between native and commercial species will be sustained in the long term; the role of mixed forestry; and that the Scottish Government is committed to research, including on soil types, cultivation methods, and biodiversity value of different types of woodlands, with a clear implementation plan for translating findings into policy to ensure not only that targets are met, but that carbon and biodiversity benefits are maximised.**
- 140. The Committee calls on the Scottish Government to set out plans for improving current grant schemes for agro-forestry as part of the CCPu with a view to encouraging well-planned agro-forestry projects and maximising the associated benefits.**
- 141. As part of existing commitments in the draft CCPu to expand the Woodland Carbon Code by 50% the Committee further calls on the**

**Scottish Government, as part of the final CCPu, to commit to undertaking a review of the woodland carbon code with a view to giving more appropriate recognition to farmers and crofters for the climate benefits of specific on farm and croft measures in areas including agro-forestry, hedges and wood pasture.**

142. **The Committee also calls on the Scottish Government to outline in further detail its plans and associated targets for the regeneration of Scotland's ancient woodlands given the significantly greater impact this will have in storing carbon compared to other types of woodland, and, more generally, for the good management of Scotland's existing woodlands, with appropriate support and incentives as part of rural and forestry policies.**
143. **The Committee further calls on the Scottish Government to set out a detailed vision as to how it intends to encourage greater use of domestically grown timber in the Scottish construction sector as a long-term carbon store and a sustainable alternative to other high carbon traditional building materials.**
144. **The Committee welcomes the financial commitments so far made by the Scottish Government to increase funding for Scotland's tree nurseries and stresses that such commitments must be sustained in future years to enable forestry targets in CCPu to be successfully met.**

### **Deer Management**

145. Evidence to the Committee has highlighted that it is notable that the CCPu is silent on deer management and fails to recognise the grazing of deer and other wild herbivores as a potential challenge to the successful implementation of climate change mitigation policies in the LULUCF sector.
146. Stakeholders refer to the strong recommendations in the Deer Working Group's report regarding improved deer management practices in Scotland and have called for new deer legislation to be brought forward early on in the new parliament and for sustainable deer management to be integrated with regional land use partnerships and frameworks.
147. Some stakeholders have suggested to the Committee that there should be a policy in the CCPu to focus on reducing deer numbers to sustainable levels to make natural regeneration of forests possible, with benefits for forest resilience and establishment cost.

148. **The Committee regrets the omission of an integrated and sustainable deer management plan in the CCPu. It urges the introduction of new legislation on sustainable deer management to be brought forward as a priority and strongly supports the integration of sustainable deer management practices into regional land use partnerships and frameworks. The Committee wishes to see these commitments reflected in the final CCPu.**

## Peatland

149. The targets set out in the CCPu for peatland restoration have been acknowledged as ambitious – against a peatland restoration target of 20,000 hectares per year, it has been pointed out that only around 6,000 hectares are currently being restored each year. At the same time, stakeholders have also pointed out a considerable focus within the CCPu on large blanket-bog areas whereas they argue that the contribution of small agricultural peatland areas should be given greater attention.
150. Stakeholders have also pointed to the need for more long-term research into the impact of planting trees on shallow peat.

**151. The Committee believes that more work is required to measure and account for the potentially substantial contribution small agricultural peatland areas could make towards meeting the CCPu target, and recommends that steps to achieve this be outlined as part of the final CCPu.**

**152. The Committee calls on the Scottish Government to commit to commissioning research into the impact of planting trees on shallow peat as part of the final CCPu.**

## Food

153. Witnesses have highlighted the need for a ‘whole food system approach’ to support required changes in agriculture, and a recognition of the importance of diet. The UK CCC highlighted a trend away from meat consumption, suggesting that, in their modelling, they have looked at a 20% reduction in meat consumption overall. Chris Stark highlighted that the absence of policies on diet in the plan was disappointing, and stressed the importance of sourcing more meat locally and reducing meat imports and the need for trade policy to be aligned towards that goal.
154. Meanwhile, Nigel Miller of the Farming for 1.5°C Independent Inquiry told the Committee that the CCC’s vision for farming could result in there being “no future for a lot of farmers with ruminants” in Scotland and that this raises some fundamental questions that Scotland’s policy-makers will need to grapple with:
- “What is Scotland’s vision? Does it buy into the UK CCC’s vision, or does it take a more diverse view that includes nature value farming, diverse pools of sequestration and moderate forestry?”
155. The role of public procurement and local food supply chains in supporting an agricultural transition has also been highlighted in evidence, specifically that a market can be created for low-carbon farming through leveraging public procurement, with £150 million spent on food by the public sector in Scotland each year. Specific measures suggested by stakeholders to achieve this have included looking at procurement tendering practices, including ingredient origin, establishing mandatory targets for central and local procurement and requiring



public bodies to report on their procurement. Stakeholders have further highlighted the importance of education and the need for a greater policy focus on what eating locally means.

156. Evidence to the Committee highlights concerns that the draft CCPu does not provide more detail on how the achievement of climate change targets for the agricultural sector will be successfully combined with the Ambition 2030 target of doubling the value of the food and drink sector to £30 billion by 2030 and fails to make clear whether a net-zero pathway to Ambition 2030 has been developed.
157. Stakeholders have emphasised the importance of having an integrated food policy and whole food system policy, a framework for which they argue would have been provided by the delayed Good Food Nation Bill, which they have suggested should be brought forward this year.

- 158. While accepting the challenges associated with the COVID-19 pandemic, the Committee regrets ongoing delays to the publication of the Good Food Nation Bill and recommends that, as a critically important enabling policy for achievement of CCPu targets, this must now be published early in the new parliamentary session and no later than the end of 2021.**
- 159. The Committee urges the Scottish Government, as part of the final CCPu, to provide greater clarity on the interaction between CCPu targets for the agricultural sector and the corresponding Ambition 2030 target of doubling the value of the food and drink sector to £30 billion by 2030 and to set out in detail a net-zero pathway towards meeting the Ambition 2030 target. This should include a clear long-term vision for sustainable ruminant-based farming in Scotland, compatible with meeting climate change goals.**
- 160. The Committee recommends that the final CCPu should address the challenges of dietary change and commit to explore and engage with farmers, crofters, and the general public on the future of agriculture, diets, and local food in Scotland.**
- 161. The Committee urges the Scottish Government to bring forward specific proposals as part of the final CCPu to make optimal use of food procurement practices by Scotland's public sector as a means of supporting the agricultural sector to meet its climate change targets.**

### **Blue carbon and fishing**

162. There is an emerging evidence base indicating that significant amounts of carbon is stored in Scotland's coastal, offshore and sea loch sediments. In particular, research by the Scottish Blue Carbon Forum shows that certain areas of Scottish sea bed are carbon 'hotspots' – particularly in close proximity to the coast and in sea lochs. Physical disturbance to these stores holds the potential to release large quantities of carbon that have accumulated over millennia. Meanwhile, Scotland's Marine Assessment 2020 identified that the majority of Scotland's sea bed has been physically disturbed to some degree

with bottom trawling and dredging identified as the main seabed disturbance within the wider UK EEZ.

163. In this context, while the draft CCPu focuses on the Scottish Government's upcoming Blue Economy Action Plan and related upcoming policy documents such as the strategy on future fisheries management, it is not clear what this is expected to deliver in terms of protection or enhancement of blue carbon stocks.

**164. The Committee calls on the Scottish Government, as part of the final CCPu, to provide much greater clarity regarding the nature and extent of blue carbon stored in the Scottish marine environment, the impact physical disturbance of the sea bed has so far had on these stores and specific policy measures to be taken to protect and enhance blue carbon stocks.**