Written Submission from WWF Scotland

Summary

Overall the Draft Climate Change Plan (Draft CCP) is a significant disappointment, and a missed opportunity to secure the benefits of a low carbon economy. WWF Scotland developed a set of criteria against which to judge the Plan (MATCH – Measurable, Ambitious, Transparent, Credible, Holistic). The Draft CCP particularly fails to meet our Measurable, Ambitious, and Credible criteria:

The Draft CCP is not CREDIBLE

Although the plan presents an often strong description of a low carbon economy in 2030 there is a consistent absence of sufficient specific policies to ensure we operate within the carbon envelopes required by each sector. Several sectors within the Draft CCP are weakened by a reliance on existing policy effort despite the Draft CCP assuming a step change in emissions reductions in the coming years.

The Draft CCP is not AMBITIOUS in the policy intentions it describes

Despite repeated advice from the Scottish Government’s independent advisors (the UK CCC) that more policy action is needed if future targets are to be hit, the Draft CCP does not present increased policy effort, apart from extensions to existing policy goals in forestry and peatland. In addition, in our view, the weakest sections of the Draft CCP are the Transport, Agriculture, Residential and Services chapters, these are the same sectors where emissions have reduced least since 1990, and where the CCC has repeatedly said the need for new policy is most urgent.

The Draft CCP does not describe Measurable change

The Draft CCP does not describe what contribution each individual policy and proposal is expected to make to the policy outcomes. In addition, many of the policies and policy outcomes are not SMART and cannot be monitored. This makes the plan very difficult to analyse, and, unless corrected, it will frustrate the ability of the Scottish Parliament and stakeholders to scrutinise its implementation.

Recommendations: The Scottish Parliament should recommend specific policies that would fill the policy gaps that exist in the Draft Plan. Priority suggestions include:

Energy Efficiency: a goal of supporting all homes in Scotland to reach at least a ‘C’ EPC standard by 2025, through increased Scottish Government funding, and regulation. This would also help tackle fuel poverty and its associated health impacts, whilst creating thousands of jobs.

Low-Carbon Heat: The Scottish Government must move from its very welcome consultation on district heating regulation to new and comprehensive legislation; building standards must be tightened so that all new buildings are connected to a low-carbon heat source, helping low-carbon heat & related industries in Scotland expand in the near term.

Transport: demand-side policies, such as Workplace Parking Levies, Low Emission Zones & freight consolidation should become firm commitments in the final plan.
These policies can help encourage modal shift, the faster growth of electric buses, taxis & cars, and help to tackle poor air quality in our cities.

**The final Climate Change Plan must also be complete.** All policy outcomes must be described according to the definition in the Plan, i.e. they should be a measurable change on the ground; it should be clear what role each policy is expected to play in achieving the policy outcomes included in the Plan; all policies should have an associated anticipated policy output indicator that is specific and measurable. Currently the Draft CCP contains incomplete tables and no cost data to inform implementation and allow for effective scrutiny.

**Credibility**

The Draft CCP does paint an often strong picture of what a lower carbon Scotland might look like in 2032 if we’ve met our climate change targets. However, the Draft CCP is a disappointment in that it fails to provide the confidence that we will secure that attractive future. In particular it does not provide a policy ‘paper trail’ that clearly demonstrates how we move from today’s energy and land use system to that of 2030. Some examples of these policy gaps are:

- e.g. The electricity sector is dependent on securing negative emissions from the commercial deployment of CCS technology fuelled by biogas. Given the failure to date to progress CCS at a commercial scale, the absence of any new policy or proposal to support the use of biogas this reliance appears high risk and optimistic.

- e.g. It is envisaged that the penetration of low-carbon heat technologies in the residential sector goes from 18% to 80% between 2025 and 2032. There is only a vague and unspecific proposal that a further proposal be included in the next RPP (effectively repeating the same proposal as in RPP2) to support this large change. It is not possible to be confident that the residential sector will deliver the proposed emissions reductions if there are no policies and only vague proposals.

- e.g. There is a doubling in the rate of home energy efficiency improvements from 2018, but there is no policy change introduced to bring that about: since the Scottish Government is committed to keeping energy efficiency funding frozen, any increase would need to be met through increased use of regulation, but this is not included as policy in the plan. Powers for Ministers to regulate energy efficiency in the private sector (private rented sector & owner-occupied) have existed since their inclusion in the 2009 Climate Act. Their use was proposed in both RPP1 and RPP2.

- e.g. Sales of EVs are envisaged to increase by over 100% between 2016 and 2017 and yet there is no new policy to deliver this acceleration. Instead, existing UK & EU policies are expected to deliver more change than they do currently.

- e.g. The agriculture section continues to be over reliant on voluntary measures despite the fact the evidence suggests that to date this approach has delivered only modest emissions reductions.
**Recommendation:** The final CCP must address the many policy gaps that exist; we have made specific suggestions in evidence to other Committees and at the start of this evidence. Particular areas for increased policy action are Energy Efficiency, Low-Carbon Heat and Transport.

**Policy Ambition**

In our view, the weakest sections of the Draft CCP are the Transport, Agriculture, Residential and Services chapters. These are also the sectors that have delivered the smallest emissions reductions against the 1990 baseline, for example emissions from the terrestrial transport sector have fallen by less than 1% in comparison to the 1990 baseline. These are also the sectors that the CCC has regularly highlighted as those being most in need of new policy action from the Scottish Government.

The Draft CCP does not act on the CCC’s advice that additional policy effort over and above what we see today is needed to meet future targets, and instead presents a description of existing Scottish Government policy. Other than the welcome increases to policy targets for forestry and peatland it is difficult to identify other significant new policies initiatives.

**RECOMMENDATION:** The final CCP must include transformational new policies in Heat, Energy Efficiency, Transport and Agriculture if it is to be credible. Priority suggestions should include:

**Energy Efficiency:** a goal of supporting all homes in Scotland to reach at least a ‘C’ EPC standard by 2025, through increased Scottish Government funding, and regulation. This would also help tackle fuel poverty and its associated health impacts, whilst creating thousands of jobs.

**Low-Carbon Heat:** The Scottish Government must move from its very welcome consultation on district heating regulation to new legislation; building standards must be tightened so that all new buildings are serviced from a low-carbon heat source, helping low-carbon heat & related industries in Scotland expand in the near term.

**Transport:** demand-side policies, such as Workplace Parking Levies, Low Emission Zones & freight consolidation should become firm commitments, and be used to encourage the faster growth of electric buses, taxis & cars, helping to tackle the health effects of air pollution in our cities.

**Measurable & Monitoring**

In each sector of the Draft CCP there is a lack of detail about what change individual policies are expected to deliver. This breaks the ‘paper trail’ between the policies (e.g. the existence of the District Heating Loan Fund) and policy outcomes (e.g. ‘By 2032, 80% of domestic buildings’ heat is supplied using low carbon heat technologies’). As a consequence it is only possible to make an informed guess about how much of that change in heat supply is expected to come from that particular policy intervention. This will make scrutiny very difficult. It will also not be possible for the Scottish Government and others to see where policies are not being effective and delivering the anticipated outcomes, and to use learning to improve policy delivery.
The final CCP must present measurable policy output indicators\textsuperscript{vi} for each policy, as is illustrated by the forestry and peat monitoring examples\textsuperscript{vii}. Without this information Parliament and stakeholders will not know whether a particular policy is delivering at the rate anticipated by the Scottish Government. The description of policy outputs is essential to ensuring that the monitoring framework supports learning and allows for better informed decision making.

Within the Draft CCP there are large inconsistencies in how policy outcomes (and associated tables) are presented in different sections of the Draft Plan. For example, there is a clear table in the Transport section for the rate of take up of Electric Vehicles\textsuperscript{viii}, with an annual % target for proportion of new car sales presented for each year between now and 2032; this is clearly a SMART target\textsuperscript{x}. At the other end of the spectrum the agriculture section includes a policy outcome that simply states ‘farmers are aware of the benefits and practicalities of cost effective climate mitigation’ for each year between now and 2025\textsuperscript{x}. This is clearly not a SMART target, against which progress can be monitored in any meaningful way, and it unclear why no effect is anticipated beyond 2025.

The Draft CCP does not describe what the Scottish Government anticipates needing to invest, in order that policies deliver at the levels Scottish Government has assumed in the plan. This absence will limit future parliamentary scrutiny of Scottish budgets, as Parliament will struggle to determine whether the right investments are being made in the right places.

RecommendationS:

- The final CCP should provide measurable policy outcomes for each sector according to the definition in the Draft CCP\textsuperscript{xii}. These should connect ‘policies’ to ‘policy outcomes’ and make it possible to see the scale of contribution each policy is making to each policy outcome.

- To ensure the final monitoring framework is fit for purpose, policies should be SMART and should be matched by policy output indicators. These should also be complemented by policy implementation indicators to ensure it is possible to have an explanation for progress, as well as a description of progress.

- The final CCP should provide descriptions of the level of investment required from Scottish Government to deliver its intended policies and proposals.

Presentation of the Draft CCP

Sectoral breakdown
The pathways for several sectors are significantly different to pathways recommended or modelled by others. The chart above compares emissions in 2030 by sector in the Draft CCP and the CCC’s latest advice to the Scottish Government. The most striking differences are:

- The Draft CCP expects the Electricity sector to achieve net negative emissions, with electricity emissions reducing much further than expected by the CCC. However, this relies on the successful commercialisation of bioenergy CCS, and there are not supporting policies.

- The Draft CCP expects much greater reductions in emissions from the residential sector than the CCC. However, there is not a strong policy basis provided in the Draft CCP to explain how the Scottish Government expects this to happen.

- The Draft CCP allows the Transport sector to reduce emissions much less, in comparison to what is expected by the CCC. This suggests that the CCC has adopted policy options in its scenario development that the Scottish Government has chosen not to adopt.

- The Draft CCP does not anticipate as large reductions in emissions from the Land Use sector, in comparison to the CCC. The CCC anticipates the Land Use sector continuing to be a net sink for climate change emissions.

**Recommendation:** If the final CCP continues to present a significantly different pathway to other published low carbon scenarios it should provide an explanation as to why this particular path has been adopted in preference to others, including the UK CCC advice.

**Back-loading of Effort**

There are certain sectors where it appears that action to reduce climate change emissions is delayed, despite clear evidence that putting in place policy now to reduce emissions would be beneficial for climate emissions and other social and economic outcomes.
economic considerations. For example, pathways proposed for low-carbon heat in residential and services sectors delay action until 2025, even though there are existing buildings (and therefore consumers) that could benefit from low-carbon heat sources now, with appropriate policy support. This in turn would benefit low-carbon heat manufacturers in Scotland, such as Mitsubishi Electric, STAR Renewables & SunAmp.

**Recommendation:** In sectors where there is currently back loading of policy effort, such as Heat (Residential & Services), new policies should be included for early implementation in the plan, with resulting anticipated earlier outcomes.

**The TIMES Model**

The adoption of the TIMES Model approach is a welcome development. It has resulted in an important improvement over RPP2, specifically it has allowed a holistic approach that has exposed the trade-offs that must be made between sectors. In addition it has offered a more detailed description of what the Scottish Government intends Scotland will look like in 2032. For example, carbon envelopes for each sector can now be broken down to some extent into measurable societal changes, such as numbers of energy efficiency installations or numbers of EVs. However, it is clear from our own experience of working with a similar all energy model (MARKAL) that that the technology specific outputs from the TIMES model have not been included in the Draft Plan. Instead we often have high level, aggregated policy outcomes such as the percentage of homes connected to low carbon heating. It would be very useful for these outputs to be published in the final CCP, this would allow policies to be seen in the context of the change they are seeking to contribute to, and would allow for greater learning in policy delivery.

Some sectors were inputs to the TIMES Model, specifically Agriculture and Land Use (these areas are difficult to include in an energy model), and Transport. There is only limited explanation as to how these sectors interacted with the TIMES model, this is especially important as between them they make up more than 50% of Scotland’s emissions in 2030.

**Recommendation:** The Final CCP should provide more detailed description of the changes in technology measures identified by TIMES between 2017 and 2032. In particular this should include descriptions of the anticipated changes to the heat technology mix.

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1 The full criteria is downloadable online here: [http://www.wwf.org.uk/sites/default/files/2017-02/A%20Plan%20to%20Match%20Scotland%20Ambitions%20to%202050%20%28FINAL%20Copy%29.pdf](http://www.wwf.org.uk/sites/default/files/2017-02/A%20Plan%20to%20Match%20Scotland%20Ambitions%20to%202050%20%28FINAL%20Copy%29.pdf)

2 Described in Table 8-7 on page 59, “Develop and identify best approach to the long-term decarbonisation of the heat supply, to commence after 2025”

3 Described in “Table 8-4: Policy outcome 1 over time” on page 56 of the Draft Plan


v Policy outcome 2 on page 50 of the Climate Plan.

vi Paragraph 6.1.4 of the Climate Change Plan explains what Policy Output Indicators are. It says: “These indicators will address the question: Is implementation of the Climate Change Plan on track?”

vii These are provided in Table 6-1 and Table 6-2, on pages 33 and 34 of the Draft CCP.

viii ‘Table 9-8: Policy outcome 2 over time’, page 79.


x “Policy outcome 1: Farmers, crofters, land managers and other primary food producers are aware of the benefits and practicalities of cost-effective climate mitigation measures” on page 140.

xi Text box 1-1 on page 5 of the Draft CCP states:

“A policy outcome is a measure of change on the ground, resulting from a policy or combination of related policies. An example policy outcome from land use would be the commitment to support an increase in the annual rate of peatland restoration from 10,000 hectares to 20,000 hectares per year.”