Draft Climate Change

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:

  1. **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.

  2. **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.

  3. **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 actions that would fill the many policy gaps that exist** in the Draft CCP. Priority suggestions within the EJFW Committee’s remit should include:

  1. **Energy Efficiency:** Set a transformational goal of supporting all homes in Scotland to reach at least a ‘C’ EPC standard by 2025 and commit to new policies to support it, including additional funding and
regulation. This would also help tackle fuel poverty and its associated health impacts, whilst creating thousands of jobs.

2. **Low-Carbon Heat**: Include new policies for early delivery, helping low-carbon heat and related industries in Scotland expand in the near term. The Scottish Government must move from its very welcome consultation on district heating regulation to comprehensive legislation; buildings standards must ensure all new developments are connected to a low-carbon heat source.

3. **Electricity**: The final CCP should avoid the current reliance on bioenergy and CCS. The UK CCC advice from March 2016 shows this reliance is not necessary and other sectors can do more (e.g. transport).

- **The final Climate Change Plan must also be complete.** All policy outcomes must be described according to the definition in the Draft CCP, i.e. they should be a measurable change on the ground and it should be clear what role each policy is expected to play in achieving the policy outcomes included in the Draft CCP. The final monitoring framework should ensure all policies are presented with the predicted policy output that is specific and measurable. The final CCP should present complete policy outcome tables and the necessary cost data to inform implementation and allow for effective scrutiny.

**ENERGY EFFICIENCY**

**Ambition: No transformational pace**

We are particularly concerned at the slow pace of energy efficiency improvements in homes, which does not amount to the transformation in approach and scale promised when energy efficiency was designated a National Infrastructure Priority by the Scottish Government in 2015. This doesn’t do enough to seize the multiple benefits from strong ambition, including a reduction in household bills, alleviating fuel poverty, improving health and creating up to 9,000 jobs a year spread across Scotland.²

In the Draft CCP the pace of energy efficiency interventions is set to hit 90,000 homes in 2018 before flat lining through to 2032.³ This is far short of the minimum 127,000 annual retrofits needed to bring all homes up to an EPC ‘C’ standard over a decade, which is supported by a wide alliance of civic and business organisations across Scotland. In total, the Draft CCP envisages only 1.35m interventions through to 2032, when we need to upgrade 1.5m homes to reach a C standard to tackle climate emissions and help to alleviate fuel poverty in 750,000 homes. The Scottish Fuel Poverty Strategic Working Group’s final report recommended that “To significantly reduce energy inefficiency as a root cause of fuel poverty, the energy efficiency rating of the
vast majority of Scotland’s housing stock should be brought up to a minimum of EPC band C and beyond. This has also been recommended by the National Institute for Clinical Excellence (NICE), in order that excess winter deaths and other health risks associated with cold homes are reduced.

Policy Gap: No new policies, continued under-funding undermines credibility

The Draft CCP is not credible on energy efficiency, as it contains no new policies to deliver even the inadequate scale of intervention detailed above. Existing policies will see a decline in home retrofit activity to 32,000 measures a year from 2018. The proposal to review energy standards in building regulations for new and existing buildings in the residential and services sectors is welcome but it lacks detail about the improvements required or timescale and must be expanded to encourage low carbon heat deployment alongside fabric improvements (see low-carbon heat recommendations below). In the services sector, although regulations to encourage improved energy efficiency were introduced last year, these only require an assessment, without a requirement to take action, and it is not clear that the increased energy efficiency activity anticipated to 2025 is justified.

Number of residential insulation measures delivered by ‘policies’ and ‘proposals’ in the draft CCP

[Graph showing the number of insulation measures installed per year]

SEEP is the centrepiece for delivering energy efficiency across the residential and services sectors and has the potential to fill some of the Draft CCP’s credibility gaps. Although the consultation on SEEP was published alongside the draft CCP, it asks a host of open ended questions rather than setting out the clear delivery model that is urgently required. Without clarity on the relative importance of different aspects of SEEP in reducing emissions, it makes it hard to assess credibility or scrutinise programme delivery.
We welcome some indication of policy timelines in the consultation, but much more is needed on the package of measures and funding to support SEEP, including commitments to the regulation of minimum standards in the private rented and owner occupied sectors, clarity on the role of new building standards, and clarity about the scale and structure of public and private funding. Regulation of the private rented and owner occupied sectors has been long-promised, but remains undelivered, despite the relevant Ministerial powers having been created in 2009 in the Climate Change Act. It featured as a potential enabling measure as far back as RPP1, was included as a concrete proposal in RPP2, and developed with stakeholders to detailed pre-consultation phase through the REEPS working group in the last Parliament. The Scottish Government makes clear that £10bn of total private and public funding will be needed to retrofit Scotland’s buildings through SEEP, but the Scottish Government budget for energy efficiency, which is at best frozen over the next four years (at £0.5bn to 2021) is an inadequate public sector investment to drive the pace of change required.

Energy Efficiency Recommendations:

1. The final CCP should commit to new policies that will support the transformation – proposing firm dates for the regulation of all private sector housing in relation to energy performance, establishing dates for implementation and setting out what carbon reduction (or installation of measures) is expected to be delivered from each element of the SEEP programme.

2. Include the objective of improving the vast majority of homes to EPC band C or above by 2025, as recommended by the Scottish Fuel Poverty Strategic Working Group, to eliminate poor energy performance as a driver of fuel poverty. This will both drive change in the housing market, and ensure that decisions on Government funding and new regulations are forthcoming.

3. Increase the future budget for energy efficiency for the remainder of this term.

LOW CARBON HEAT

Ambition: Stretching pathway but policy effort delayed until the late 2020s

The overall policy outcomes for heat in homes and non-domestic buildings are stretching – to deliver 80% low carbon heat in homes (from around 14% today) and 94% low carbon heat in non-domestic buildings by 2032 (Policy Outcome 2, Residential and Services chapters). Although the steeper decarbonisation in the services sector mirrors other analyses like the CCC’s that suggest the pace of decarbonisation will be quicker in non-residential buildings (due to the more rapid replacement of these buildings), this is still a highly challenging pathway. Overall, the pathways go much faster on heat decarbonisation than other published scenarios for Scotland. Independent research for WWF Scotland by Ricardo and UCL showed a penetration of
40% renewable heat by 2030, while the Committee on Climate Change envisages a 39% fall in emissions from buildings by 2030, around half of which will be from low carbon heat.  

Embedding such an ambitious pathway for heat means other sectors are required to pull less weight to reduce emissions. It is hard to assess the credibility of this pathway in the absence of information on the technology mix foreseen by 2032 – we don’t know the respective roles of heat pumps, district heating or to what extent the Draft CCP relies on hydrogen commercialisation. By contrast, the CCC scenario envisages that heat pumps will be installed in 18% of homes (compared to 28-40% in the Ricardo report), with 2.6TWh of district heating generated by 2032 (compared to 4.4TWh in the Ricardo report).

Crucially, efforts to decarbonise heat are heavily backloaded to after 2025, at which point there is a scale up from 18% to 80% in homes and from 65% to 94% in the service sector. This means retrofitting the vast majority of heating systems over the course of just seven years. This sets the Draft CCP up to fail and sends an unhelpful signal to the low carbon heat supply chain. It is not clear why the CCP cannot present a more gradual expansion, which is likely to be more cost-effective, help with public acceptability and support gradual supply chain growth. The CCC recommends activity that should be carried out as a priority now: electric heat pumps in off-gas grid areas and heat networks in urban areas, with a slower pace for on-gas grid homes to allow time for solutions to be trialled.

**Policy Gap: No new policies to deliver transformational change**

We have no confidence that the policy outcomes on heat will be achieved, as the rapid scale up in low carbon heat from the mid-2020s has no new policy to underpin it. Even the modest increase in activity to 2020 has no changes to existing policy (new build standards, the RHI and heat network support) to underpin it. The bigger change in the 2020s relies on a vague proposal to develop a detailed proposal for future Climate Change Plans, which repeats the historical commitment in RPP2 to produce a proposal for low carbon heat deployment in RPP311.

It is not clear why the Scottish Government would choose to delay action on heat now given the opportunities for companies already active in Scotland (e.g. Star Renewables, Mitsubishi Electric, SunAmp) and the benefits to consumers in reduced bills. We do not need to wait for UK decisions on the future of the gas grid, for instance, to install heat pumps in the 20% of often fuel-poor off-gas-grid homes predominantly reliant on expensive oil fired or old resistive electric heating systems. Nor do we need to wait to scale up the roll out of more efficient urban district heating networks, especially in new developments. We welcome the recently published consultation on the regulation of district heating and local heat planning, which is essential to accelerate this market and give confidence to consumers. Clarity is needed on the timeline for translating this into legislation.
Low Carbon Heat Recommendations:

1. Maximising the efficiency of low carbon heat requires will require a ‘fabric first’ approach whereby buildings are insulated to the maximum possible level in parallel – this means going harder on energy efficiency (see previous section).

2. Publish the TIMES pathways on heat to enhance transparency, credibility and measurability.

3. New and accelerated policies should be included for early implementation, initially focussed on low regrets options such as off-grid homes and new developments. This should ensure that fuel poverty schemes within SEEP prioritise low carbon over gas heating.

4. Building regulations should require all new developments to connect to a low carbon heating source and the proposal to review building regulations in both the residential and services sectors should also apply to policy outcome 2 (low carbon heat) in the draft CCP.

ELECTRICITY

Sectoral Ambition: More robust but reliance on CCS not credible

The electricity section of the Draft CCP is more robust than others but still contains weaknesses. Policy Outcome 1 envisages a near wholly decarbonised electricity system by 2020 (below 50g CO₂/kWh) which is a significant step forward from the Scottish Government’s previous position to achieve near decarbonisation by 2030. This target is well within reach and is an acknowledgement of de facto progress made in the rollout of renewables, which are already meeting nearly 60% of our electricity needs, and the closure of Longannet in 2016, which represented 85% of Scotland’s power sector emissions. We also welcome the focus on flexibility, storage and demand side response to ensure system resilience, which also features in the draft Energy Strategy.

We are very sceptical, however, of Policy Outcome 2 to remove emissions from the atmosphere by 2032, with -1.1MTCO₂ reached through bioenergy fitted with CCS. This allows other sectors such as transport and agriculture to make less effort to reduce emissions. While the CCC envisaged that CCS could contribute around a fifth of Scottish generation in its 2030 scenario with Scotland expanding its role as a net exporter, it did not rely on this coming forward and assumed that wind or other renewables could equally provide the same amount of power. The move to utilise biomass for electricity at scale runs counter to previous Scottish Government policy which was for bioenergy to be used in heat only or good quality combined heat and power, and then only at small or community scale. This raises sustainability concerns.

Policy Gap: No policies to deliver on CCS assumptions or biogas

The Draft CCP contains no new policy to deliver emissions removals technology despite the fact that CCS development is in its infancy, is not commercially proven and no longer has financial support from the UK Government. Relying on CCS commercialisation is wishful thinking given the
limited powers for Scotland to deliver, the only policy is for the Scottish Government to press the UK Government to produce and fund a CCS strategy. While there is a proposal to explore the potential for small scale CCS demonstration with bioenergy and for carbon utilisation in the draft Energy Strategy, it contains almost no additional detail to give confidence that this goal will be realised. The Draft CCP also contains no policies to support the roll out of bioenergy with CCS, other than a proposal to develop a Bioenergy Action Plan in the draft Energy Strategy. WWF Scotland supports the continued research into CCS technology for industrial processes.

Electricity Recommendations

1. The final CCP should not include a leap of faith on negative emissions, when there is scope for other sectors (e.g. transport, agriculture, residential) to do more. Policies and proposals should be set out in other sectors out to deliver more abatement.

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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%20Climate%20Ambitions%20FINAL%29%20%28Working%29.pdf
3 While the SPICE briefing reference 87,000 homes already being delivered through ECO and HEEPS in 2014/15 http://www.parliament.scot/parliamentarybusiness/CurrentCommittees/103066.aspx, ECO activity will tail off from 2018, leading the Scottish Government to assume only 32,000 interventions as a result of policy from 2018. 58,000 interventions are expected as a result of proposals.
8 Consultation on Scotland’s Energy Efficiency Programme, p 2
9 Counting 12% of homes that have electric heating systems
12 RPP2, p124