Draft Climate Change Plans

Institute for Sustainable Construction

Further to the evidence provided at the Economy, Jobs and Fairwork Committee’s session on the 31st January and the request from the convenor and members to also provide a written response, please find below our comments, suggestions and recommendations.

Forestry

We strongly support the planned increase from a target of 10,000 to 15,000 hectares per annum. This sector supports over 16,000 jobs in Scotland. With the reduction in forest harvesting later this century it is important for carbon capture but also the future rural economy and greater adoption of home grown timber resources that this sector is supported and receives such investment.

Transport

The intention to support the increase in take up and use of ULEVs is highly welcomed. We would recommend that the Scottish Building Standards Section 7: ‘Sustainability’ for new homes also includes encouragement of the installation of ULEV charging points in new homes.

Residential

P48: Figure 7

The forecasted reduction in carbon emissions from 2025-32 will require a transformational shift to achieve such a reduction. It is recommended that the preceding years 2017-2025 have an accelerated targeted reduction in carbon emissions than is currently planned. Otherwise this will place considerable pressure and stress on emission reductions to be undertaken between 2025-32.

The RPP1, RPP2 and RPP3 planned reductions for “residential sector” and the original business as usual in RPP1 and actual reductions so far recorded are shown in the graph below.
As can be seen, the current ‘Residential’ reductions of the draft climate change plans (RPP3) are significantly higher (worse 2017-2025) than the originally proposed in the RPP1 and RPP2 for the period. (Black line RPP3 is higher than the orange line RPP2). This may be due an error in the calculation software used in the RPP3 estimates and would be worthy of checking.

**Residential Milestones 8.2.3 p48: Loft Insulation – 200mm**

We support the installation of loft insulation to at least 200mm. This was proposed to Scottish government staff during 2008-09 instead of 100mm, as the cost differential was limited for the materials and the workforce and access requirements were already being planned for 100mm. Thus if the advice had been followed some years ago there would not have to be the secondary visits to the same homes now.

From recent studies the optimum depth is 270mm mineral wool insulation in loft spaces. Perhaps considering an optimum depth or closer to the optimum depth (e.g. 250mm) may be of more benefit going forward. Given such materials are also manufactured in Scotland (from recycled glass) this would also help sector growth and jobs.

**Recommendation: insulate lofts to 250mm**

**Residential Milestones 8.2.3 p48: 60% target of external walls insulated**

We welcome and support the developments in cavity external wall insulation. However, our figures and statistics suggest that the 60% target has already been achieved (Data below of insulated external walls), when considering occupied homes.
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Cavity walls 1,420,000 (71% cavity walls – SHCS 2015 & RPP3’2017)
Solid walls 48,000 (11% solid walls – RPP3’2017)
Total 1,468,000
Total occupied stock 2,434,000
Insulated Ext walls 60%

Recommendation: A revised target of 65% of external walls insulated by 2020 would be more ambitious and reduce later year pressures on carbon emission reductions.

Residential Milestones 8.2.3 p48:
2032: 80% domestic buildings heat using Low Carbon Technologies
The changes required between 2025-32 will place enormous efforts to deliver the low carbon technologies and the required reductions. Potential large scale low carbon technology projects where prototypes and full evaluations could be undertaken is via the South East Scotland City and Regional Deal proposals for new housing developments. This could provide an essential source of data, assessment, innovation and development to assist with the future 2025-32 challenges.

Recommendation: The SES City & Regional Deal could potentially be an innovation pathway for housing and low carbon technologies (2017-2022) to source, test, develop and identify such solutions and optimise in time for national roll out during 2025-32.

8.3.3 Policy development milestones
This could be augmented to include how EPC certificates could be used to encourage private renters and owner occupiers to raise the EPC rating of their home, via:

- Incentives via reduced council tax
- Setting a future tax on homes that don’t have minimum band C – but giving the sector time to improve. For example if the sector knew that in 4-5 years ahead a tax would be applied to those with EPC less than Band C (unless listed building) this would stimulate manufacturing and installation activity, support SMEs and support jobs. This would also give time to comply.
- Reduced land and buildings transaction tax if home is Band C or better

The EPC link to the home, which is currently published when homes are sold or rented, if a tax linkage was formed (similar to vehicle emissions ratings) would then place a “functional value” of the EPC and encourage home owners and private rental sector to improve their homes to Band C or higher.

EPC inputs and categories
The current EPC methods do not fully account for latest technologies, insulations, household energy improvement measures and renewables effectively. The EPC is in need of an overhaul to capture such upgrade
activities so households and owners see benefit to their rating by investing in energy improvements.

RPP3 follow on from RPP2 (Actions stated in RPP2)
In RPP2 (section 5.4.21) the previous proposals for low carbon technologies and advancements in technologies for housing and communities it stated “we intend to produce a detailed proposal on how we may realise this potential in the RPP3”. This has not been delivered in the RPP3.

p51: 8.4.4. Job Creation and support
Scot Gov analysis suggests “1,000 jobs full-time are supported for every £100 million spent”. Could the reference to this analysis be provided? We would suggest this figure is low and is likely to be higher and nearer 1,500 to 2000 jobs supported, therefore the report may have undervalued the impact of such policies and measures have on jobs and the Scottish economy.

Low incomes and fuel poor households
We are highly supportive of government ambitions and targets to support these key groups.

p56: Table 8-3 – new housing regulation changes for energy
We would recommend to review for the future, but not to implement any increase in building fabric performance for new build homes for at least for 4-5 years. The industry is still bedding in 2015 standards and Section 7: Silver level for energy. Also the marginal returns of advancing the building fabric further would not fully offset the carbon used in materials for the marginal gain. The sector is currently nearing the fabric envelope limit.

Recommendation: It would be more beneficial in terms of emission reductions to encourage greater use of offsite construction (where possible) and to install ULEV charging points in new homes.

Table 8-4 – Policy outcome over time
We would suggest that further details or information describing the measures should be provided. This was not provided in Table 8-4 and would then lead to lack of clarity at the next RPP4 as to progress made.

p61: Warm Homes Fund
It would be useful to know why the “take up of the loans was lower than expected”. This was not provided within the document.

Finally, we are very supportive of the climate change reduction ambitions but a considerable amount of innovation, R&D and pathway pilot developments will be required over the next 5 years if we are to achieve structured pathways towards such ambitions by 2032.

Professor Sean Smith
Institute for Sustainable Construction