

Making our buildings fit for the future: what we want to see in the update to the Climate Change Plan

Amelia Guy-Meakin, WWF Scotland

A quarter of Scotland's climate emissions come from heating our homes and buildings. This is because most are heated using fossil fuels, with 81%¹ of Scottish households relying on natural gas for warmth and 200,000 others in off-grid or rural areas using coal, oil and liquefied petroleum gas. What's more, many of our homes and buildings are draughty, cold, and leach out energy due to poorly insulated roofs, walls and floors, and inadequately glazed windows.

We need to make changes and start now. Responding to the climate emergency and achieving net zero emissions means replacing fossil fuelled heating systems and retrofitting our buildings to be more energy efficient. This will be crucial over the next decade to help Scotland play its part in holding global temperature rise to 1.5C and to avoid having to make disruptive, deep and costly emissions reductions later on.

There hasn't been enough progress yet to green retrofit our homes and buildings. We have seen the Scottish Government step up action this year – by nearly-doubling public cash for energy efficiency and heat in their 2020 Programme for Government to £1.6 billion over the next five years. But this remains less than half of the total public funding likely required for our buildings to be climate friendly. A bolder plan of action is therefore needed to complement the Government's recent moves.

As the Scottish Government looks to update its Climate Change Plan (CCPu) out to 2032, it must not miss the opportunity to bridge the gap between what it's doing already and what's ultimately required to decarbonise our buildings and meet our climate targets. Additional policies and investment are needed to deliver energy efficiency measures and switch to low-carbon heat sources.

More specifically, the CCPu should commit to all homes and buildings in Scotland reaching at least the level of EPC Band 'C' by 2030. Around 1.4 million homes in Scotland are currently below this standard. Getting them up to scratch will have multiple benefits. As well as cutting emissions, it would make homes warmer and more comfortable, and would lift many people out of fuel poverty. It would also create thousands of new jobs, support a more efficient economy and free up money previously spent on heating bills for other uses. These all add up to supporting the Scottish Government's aim for a green recovery from COVID-19.

An aspiration in the CCPu for our buildings to achieve EPC Band 'C' by 2030 must also be backed up with supporting measures. These include regulations requiring implementation of minimum energy standards at point of sale or rental and a doubling of annual spending on fuel poverty schemes to around £240 million – toward achieving a just and fairer Scotland along the path to net zero emissions.

Improved energy efficiency will reduce the amount of heat generation required to stay warm and will prepare our buildings to be fitted with low-carbon heating. But the CCPu must also prescribe options for low-carbon heating – in both on-grid and off-grid areas of Scotland. It should prioritise 'low regrets' and existing technologies that are ready to be rolled out for the benefit of climate and people. We should be cautious about continuing to spew out emissions while waiting on other solutions, such as relying on hydrogen for heat in future when other opportunities are already available to us.

¹ Scottish House Condition Survey, 2019. <https://www.gov.scot/collections/scottish-house-condition-survey/>

So, what are the more climate friendly options available to heat our homes and buildings? In built-up cities and towns, heat networks should replace individual gas boilers in existing buildings. These networks work by using a single, large source of renewable heat – such as from rivers, geothermal energy or waste – to carry hot water via pipes in the ground to multiple buildings efficiently. The Scottish Government has begun to bring together the policies needed to grow their use in a Heat Networks Bill, but clearer ambition will be key to help ensure their deployment at the scale required.

Heat networks aren't suitable and won't be economically viable everywhere. In these cases, we should install electric heat pumps to warm up our buildings and phase out current high carbon heating like oil and liquified petroleum by 2025. Electric heat pumps work by taking a small amount of power to extract heat from the air, ground or water. This means they'd make use of Scotland's abundant renewable resources and help end our reliance on polluting fossil fuels.

[In summary, SCCS is calling for the following policies and proposals to be included in the CCPu:

- *A firm policy that building standards will be revised to deliver high energy efficiency and low carbon heating.*
- *Ensure that all homes in Scotland reach at least Energy Performance 'C' by 2030, supported by regulations to require renovation at point of sale or major refurbishment, for owner occupiers from 2024, and new minimum standards for the rented sectors.*
- *Revise building standards so all new buildings meet the highest energy efficiency standards from 2021*
- *Phase out high carbon heating like oil and LPG in off-gas areas by 2025 and set a date for the phase-out of replacement gas boilers in existing homes on the gas grid*
- *Support and invest in skills and training programmes as part of a Just Transition*
- *Double annual spending and activity on fuel poverty schemes to match delivery of home insulation upgrades to the net-zero pathway and accelerate progress on eliminating fuel poverty.]*