

December 2021

Progress in reducing emissions in Scotland 2021 Report to Parliament

Annex - Recommendations



Progress in reducing emissions in Scotland
2021 Report to Parliament

Annex - Recommendations

Climate Change Committee
December 2021

Report to the Scottish Parliament pursuant to Section 9(1) of the Climate Change (Scotland) Act 2009.

© Climate Change Committee Copyright 2021

The text of this document (this excludes, where present, the Royal Arms and all departmental or agency logos) may be reproduced free of charge in any format or medium provided that it is reproduced accurately and not in a misleading context. The material must be acknowledged as Climate Change Committee copyright and the document title specified. Permission from copyright holders must be sought before any photographs are reproduced. You can download this publication from www.theccc.org.uk/publications

Contents

| | |
|--|----------|
| Recommendations | 5 |
| Next steps for cross-economy policy | 6 |
| Surface transport | 7 |
| Aviation and Shipping | 8 |
| Manufacturing and construction | 9 |
| Fuel supply | 10 |
| Buildings | 11 |
| Agriculture and land use, land use change and forestry | 13 |
| Power | 15 |
| Waste | 16 |

Sector by Sector

Next steps for cross-economy policy

Table A1

New cross-economy recommendations

| Recommendation | Timing | Primary responsibility |
|--|---------|------------------------|
| Work closely with the UK Government to secure commitments around deployment of CCS infrastructure and greenhouse gas removals in Scotland. | 2022 | Joint |
| Identify a cut-off point, no later than 2023, beyond which efforts should be increased in other areas if commitments on CCS infrastructure and greenhouse gas removals are not secured. This cut-off point should be identified as soon as possible in 2022. | 2022 | Scottish Government |
| Publish quantified emissions abatement from policies and plans in each sector, demonstrating how the annual and interim targets will be met. | 2022 | Scottish Government |
| Efforts should be made to lock in behaviours beneficial to emission reduction that emerged in the COVID-19 lockdowns. Taxation and investment should be used, alongside improvements in broadband, to embed reductions in travel demand that have arisen during the pandemic, replacing business travel with videoconferencing and online collaboration. | 2022 | Scottish Government |
| Review Net Zero policies in light of the recent evidence from the Independent Assessment of UK Climate Risk, published in June this year, which identified increasing climate risks across all sectors with associated implications for achieving Net Zero. | 2022 | Scottish Government |
| Develop policies to drive more resource-efficient construction and use of existing low-carbon materials. This should include setting out a plan for phasing in mandatory whole-life reporting followed by minimum whole-life standards for all buildings, roads and infrastructure by 2025, with differentiated targets by function, scale, and public/private construction. | 2022 | Joint |
| Implement plans to make all public buildings and vehicle fleets zero-carbon in the long term and monitor emissions in the Scottish Government estate. | Ongoing | Scottish Government |
| Ensure that the education system provides people with knowledge of climate issues and actions to support the transition to a Net Zero economy and prepare for the risks of climate change. | Ongoing | Scottish Government |
| Incorporate workforce implications and skills requirements into all sectoral Just Transition Plans and rapidly implement actions identified in these plans, to ensure that skills shortages do not slow down progress. | 2021/22 | Scottish Government |

Surface transport

Table A2

New recommendations for surface transport

| Recommendation | Timing | Primary responsibility |
|---|---------------|------------------------|
| <p>Publish, and start to implement, a strategy setting out how Scotland will achieve a 20% reduction in car-kilometres by 2030 and deliver 20-minute neighbourhoods. This should be supported by:</p> <ul style="list-style-type: none"> Continuing to strengthen schemes to support walking, cycling, and public transport. Investment in infrastructure connectivity to lock in positive behavioural changes that reduce travel demand (e.g. home-working). | 2021/22 | Scottish Government |
| <p>Support the public transport and shared mobility sectors to recover from the COVID-19 pandemic. This should include providing positive communications and messaging to rebuild public confidence in the safety of public transport and maintaining financial support for the sector while confidence and demand are rebuilt.</p> | 2022 | Joint |
| <p>Where public transport services have been downgraded during the pandemic, a timetable should be published setting out when these will be restored to pre-pandemic levels or enhanced to support reductions in car travel.</p> | 2022 | Scottish Government |
| <p>Take concrete steps towards reducing costs of public transport in order to reverse the increasing relative price advantage of car travel over public transport. Providing free bus travel to those aged under 22 is a good step in this regard.</p> | 2022 | Scottish Government |
| <p>Support the delivery of Scotland's transition to electric cars and vans. This will require ensuring sufficient supply of and demand for vehicles in Scotland to ensure that sales rise throughout the 2020s to meet the 2030 phase-out commitment.</p> <ul style="list-style-type: none"> The Scottish Government should seek opportunities to influence consumers to choose fully electric vehicles over plug-in hybrids wherever possible. This transition should be supported by maintaining the provision of interest-free loans for EVs (now including second-hand EVs) on top of existing UK government grants. Plan for a transition to fiscally-neutral incentives as EV costs fall. | 2021-2030 | Scottish Government |
| <p>Continue to support the timely expansion of Scotland's public EV charge point network, to ensure the EV transition works for all road users in Scotland with well-maintained facilities, inter-operability between service providers and avoidance of market power.</p> | Now & ongoing | Joint |
| <p>Implement schemes to reduce use of internal combustion engine buses, HGVs and vans in urban areas (e.g. through use of electric buses, e-cargo bikes and urban consolidation centres), to reduce traffic, improve air quality and increase the safety of active travel.</p> | 2022 | Scottish Government |

Aviation and Shipping

Table A3

New recommendations in aviation and shipping

| Recommendation | Timing | Primary responsibility |
|---|---------------|------------------------|
| Assess airport capacity in the context of Net Zero. There should be no net expansion of airport capacity unless the sector is on track to sufficiently outperform its emissions trajectory and can accommodate the additional demand. A demand management framework will need to be developed (by 2022) and be in place by the mid-2020s to annually assess and, if required, control sector GHG emissions and non-CO ₂ effects. | 2022 | Joint |
| Take steps to address price imbalances between aviation and surface transport, once aviation taxation is devolved to Scotland, encouraging the low-carbon alternative (e.g. rail) for journeys where one exists. | 2022 | Scottish Government |
| Play a leading role in decarbonising the shipping sector by exploring opportunities to transition ferries operated by Transport Scotland to low-carbon energy and establishing appropriate business models to encourage their adoption. | Now & ongoing | Scottish Government |

Manufacturing and construction

Table A4

New recommendations in manufacturing and construction

| Recommendation | Timing | Primary responsibility |
|--|--------|------------------------|
| Continue to support innovation and demonstration of technologies for decarbonising manufacturing and construction; ensure that learning is disseminated as widely as possible within industry. | 2022 | Scottish Government |
| Implement policies to enable delivery of substantial improvements in industrial energy efficiency. | 2022 | Joint |
| Work with business to encourage and enable consumers to share, lease and use products for longer whilst discouraging 'disposable' business models. | 2022 | Scottish Government |
| Improve the collection and reporting of industrial decarbonisation data to allow for progress to be monitored more effectively, particularly on energy and resource efficiency. | 2022 | Scottish Government |
| Develop policies to drive more resource-efficient construction and use of existing low-carbon materials. This should include setting out a plan for phasing in mandatory whole-life reporting followed by minimum whole-life standards for all buildings, roads and infrastructure by 2025, with differentiated targets by function, scale, and public/private construction. | 2022 | Joint |
| <p>Renew efforts to improve resource efficiency, recycling and waste prevention, including by:</p> <ul style="list-style-type: none"> • Bringing forward the planned circular economy package for legislating within the forthcoming Programme for Government • Ensuring key policies, such as Extended Producer Responsibility are on track to be in place well before 2025 • Working with the waste sector and local authorities to set out a route-map detailing the policy and support needed to ensure the 2025 waste prevention and recycling targets (including the 70% recycling target) are delivered, and setting new ambitious targets for 2030. | 2022 | Scottish Government |

Table A5

New recommendations in fuel supply

| Recommendation | Timing | Primary responsibility |
|--|----------------|----------------------------|
| <p>As part of the planned update to the Energy Strategy, and supported by the proposed new National Public Energy Agency, formalise the planning process, governance framework and timeline for decisions on infrastructure for the conversion to hydrogen of the gas transmission and distribution networks. Alongside this, identify priority candidate areas for hydrogen conversion and areas which are unlikely to be suitable to hydrogen conversion (such that electrification and alternatives can be prioritised), ensuring consistency with least-regret forward views on demand for hydrogen within Scotland and across the rest of the UK.</p> | <p>Q4 2022</p> | <p>Scottish Government</p> |
| <p>Together with UK Government, review existing – and, if necessary, develop new – schemes that support the sustainable production of biomass feedstocks and conversion of bioenergy in a way consistent with Net Zero. This should include dates beyond which new facilities should be built with CCS, and dates for when CCS will need to be retrofitted to biofuel facilities already in operation.</p> | <p>2023</p> | <p>Joint</p> |

Table A6

New recommendations for buildings

| Recommendation | Timing | Primary responsibility |
|---|-------------|------------------------|
| Clarify the allocation of the £1.8 billion of funding, making clear what amounts will go towards heat networks, heat pumps and energy efficiency measures and how these relate to the targets set in the Heat in Buildings Strategy for low-carbon heating and heat pumps. | 2022 | Scottish Government |
| <p>Publish a monitoring and evaluation framework for the Heat in Buildings Strategy by summer 2022, or provide additional indicators in the annual climate change plan monitoring reports. These should include clear indicators for annual heat pump and low-carbon district heat network roll-out across residential and non-residential buildings. Use the development of the framework to identify data gaps and make plans to address them. Track implementation and its costs and use information in updates of the Strategy.</p> <p>For data on heat networks, BEIS should provide relevant data until implementation of the Heat Networks (Scotland) Act.</p> | Summer 2022 | Scottish Government |
| <p>Make concrete progress on implementing the roadmap for energy efficiency and low-carbon heating improvements set out in the Heat in Buildings Strategy in 2022. This should include:</p> <ul style="list-style-type: none"> • Developing EPC regulations for the private rented sector and owner-occupiers • Reviewing the EESSH2 standard for the social housing sector • Developing an ambitious plan for zero-emission heating and energy efficiency in large non-residential buildings, based on the consultation(s) planned for 2022 on strengthening regulations for non-residential building heat supply and demand • Setting out clear plans for how the late backstop date (2040-45) for mixed tenure buildings energy efficiency will be consistent with wider heating emissions targets for Net Zero. | 2022 | Scottish Government |
| Ensure recommendations on buildings are implemented from the Adaptation Committee's upcoming report on adaptation progress in Scotland, due to be published early 2022. | 2024 | Scottish Government |
| Following the publication of the UK Heat and Buildings Strategy in October 2021, UK Government and Scottish government should now coordinate on harnessing UK proposals for a market-led mechanism for heat pump roll-out. The UK Government should confirm how Scotland will be enabled to appoint a regulator for heat networks. | 2022 | Joint |
| Ensure that Scottish Government Buildings Standards enable monitoring and compliance and ensure that local authorities are properly funded to enforce buildings standards. | 2023 | Scottish Government |
| Develop plans for in-use performance rating of buildings. Make accurate performance testing and reporting widespread, committing developers to standards. This can be achieved in homes by rolling out digital Green Building Passports across the stock. | 2023 | Scottish Government |
| Roll out Local Heat and Energy Efficiency Strategies (LHEES) across all local authorities, providing sufficient capacity and financial support to local authorities to ensure LHEES delivery plans are produced based on meaningful engagement with stakeholders, are | 2022 | Scottish Government |

| | | |
|--|------|---------------------|
| effective tools in coordinating planning and investment for low-carbon heat, and are based on an evidenced assessment of priority local low carbon heating technology for the area. | | |
| Move into full implementation of decarbonising public sector buildings. Monitor and report improvements in emissions reduction across the public sector, including in schools and non-CO ₂ emissions in the NHS. | 2022 | Scottish Government |
| Publish the implementation plan for the Climate Emergency Skills Action Plan, outlining in more detail how skills for green construction and zero emissions heating will be developed and communicated to the construction sector. | 2022 | Scottish Government |
| Publish the Fuel Poverty Strategy in 2021, setting out targeted advice on how to ensure those at risk of fuel poverty are not adversely impacted by decarbonisation efforts. | 2021 | Scottish Government |

Agriculture and land use, land use change and forestry

Table A7

New recommendations for agriculture, land use, land use change and forestry

| Recommendation | Timing | Primary responsibility |
|---|---------------|------------------------|
| Ensure options for future agriculture and land use support through the proposed Bill to replace the current Common Agricultural Policy in 2023 provide a framework to deliver climate mitigation and adaptation as well as wider environmental objectives. This should cover support for measures to reduce on-farm emissions and strategic land use change away from traditional agriculture to reduce and sequester carbon. | 2023 | Scottish Government |
| Plans for Environmental Conditionality should clearly set out milestones and timelines for full implementation that align with the emissions path set out. | 2022/23 | Scottish Government |
| Legislate and strengthen the regulatory baseline to promote take up of low-cost, low-regret options. This should include: | | Scottish Government |
| <ul style="list-style-type: none"> • Deliver the commitment under National Planning Framework 4 not to support applications for planning permission for new commercial peat extraction for horticultural use. Strengthen controls to restrict development on peat and support its restoration. | Now & ongoing | |
| <ul style="list-style-type: none"> • Retain designations of Nitrate Vulnerable Zones and extend these where needed to protect water quality. | 2022 | |
| <ul style="list-style-type: none"> • Enact in law a 'Nitrogen Balance Sheet'. | 2022 | |
| <ul style="list-style-type: none"> • State clear timeframes to end domestic peat extraction and the phasing out of its use in horticulture and as a fuel, and end burning management of peatlands. | 2022 | |
| Raise ambition and introduce measures to deliver increased tree planting in the next decade, building towards at least 18,000 hectares of trees planted per year per year by 2024-25. Identify and address financial and non-financial barriers to implementation. | Now & ongoing | Scottish Government |
| Raise ambition and introduce measures to restore peatlands in the next decade, building towards at least 20,000 hectares of peatland restored per year by 2024-25. Identify and address financial and non-financial barriers to implementation. | Now & ongoing | Scottish Government |
| Set out a pathway and implement policies to address on-farm emissions (e.g. through the Sustainable Agriculture Capital Grant Scheme and Agricultural Transformation Programme). Ensure there is a robust monitoring and verification system in place to track progress on: | | Scottish Government |
| <ul style="list-style-type: none"> • Delivering a high take-up of low-carbon farming practices covering soils, livestock and manure management. | 2022/23 | |
| <ul style="list-style-type: none"> • Decarbonising energy use in farm buildings and machinery. | 2022/23 | |
| <ul style="list-style-type: none"> • Measures to encourage on-farm sequestration e.g. through agro-forestry and hedges, which deliver wider benefits such as improved biodiversity. | 2022/23 | |
| <ul style="list-style-type: none"> • Planting biomass crops where appropriate. | 2022/23 | |
| <ul style="list-style-type: none"> • Fully implement regional land use partnerships to identify where resources have most positive climate impact. | 2022/23 | |

| | | |
|---|---------------|---------------------|
| Implement mechanisms for private and public financing of agricultural and land-based solutions to deliver the level of ambition set out: | | Scottish Government |
| <ul style="list-style-type: none"> • Deliver current commitments of support for leveraging of private finance to incentivise woodland creation and diversification of the forest estate in Scotland. | Now & ongoing | |
| <ul style="list-style-type: none"> • Set out how public and private funding for peatland restoration will be aligned, how opportunities to attract increased private finance for peatland restoration will be developed, and support use of the Peatland Code as the verifiable standard. | 2022 | |
| <ul style="list-style-type: none"> • Define financial mechanisms to incentivise land-based approaches, such as low-carbon farm practices, agroforestry, hedgerows and energy crops, to support the scale of transition required. | 2022 | |
| <ul style="list-style-type: none"> • Current and future incentives for mitigation must also consider the wider co-benefits for environmental goals such as climate change adaptation and biodiversity. | 2022 | |
| Identify and address the non-financial barriers that prevent changes to land use and management, including. | | Joint |
| <ul style="list-style-type: none"> • Maintain and enhance programmes and initiatives for advice and knowledge exchange for Scotland's farmers, crofters and land managers. | Now & ongoing | |
| <ul style="list-style-type: none"> • Support tenant farmers in making the long-term commitment and investment required to reduce emissions and sequester carbon on the land they manage. | 2022 | |
| <ul style="list-style-type: none"> • Continue to raise awareness and promote the development of skills in sustainable agriculture, alongside those needed at scale for restoration of semi-natural habitats such as peatlands and woodlands. | 2022 | |
| <ul style="list-style-type: none"> • Address tax treatment of woodlands where they are acting as a barrier to change. | 2022 | |
| <ul style="list-style-type: none"> • Explore the need to reform legislation to support woodland creation on agricultural holdings and publish recommendations. | 2022 | |
| Set out plans to deliver Scotland's guidelines on healthy eating, to encourage a healthy, balanced and sustainable diet. This should include measures to encourage a reduction in the consumption of meat and dairy products e.g. through better information and labelling, the public sector taking the lead and development of an evidence-based strategy on diets. | 2022 | Scottish Government |
| Set out a target to reduce food waste and a comprehensive plan to deliver it. This should include reporting of food waste by businesses across the food supply chain, public sector and households. | 2022 | Scottish Government |

Table A8
New recommendations for power

| Recommendation | Timing | Primary responsibility |
|--|--------|------------------------|
| Set out an updated assessment of how much renewable and low-carbon electricity generation will be required to meet Net Zero in Scotland and contribute cost-effectively to Net Zero in the UK, with a clear trajectory to 2045. | 2022 | Scottish Government |
| Complete the definition and enforcement of a planning and consenting scheme for onshore wind and other low carbon generation in a manner that is consistent with other policies on land use, supporting repowering and life extension of existing wind power in Scotland, and aligning with adaptation priorities under the Scottish Climate Change Adaptation Programme. Ensure treatment of network developments that is consistent with ambitions for development of low carbon generation. | 2022 | Scottish Government |
| In conjunction with the network owners and system operator, outline what will be required to ensure adequate electricity supply resilience across Scotland in the late 2020s and into the 2030s as thermal generation in Scotland is retired. | 2024 | Scottish Government |

Table A9

New recommendations for waste

| Recommendation | Timing | Primary responsibility |
|---|---------|------------------------|
| Complete and publish the planned review into the role of Energy from Waste and incineration in meeting Scotland's ambition to become a zero-waste nation, prioritising efforts to improve resource efficiency. | Q1 2022 | Scottish Government |
| Work with the UK Government to develop a policy and funding framework to retrofit existing Energy from Waste plants with CCS from the mid-2020s, and ensure any new Energy from Waste plants are all built 'CCS-ready'. | 2022/23 | Joint |
| Bring forward the planned circular economy package for legislating within the forthcoming Programme for Government. | 2022 | Scottish Government |
| Ensure key policies, such as Extended Producer Responsibility are on track to be in place well before 2025. | 2022/23 | Scottish Government |
| Work with the waste sector and local authorities to set out a route-map detailing the policy and support needed to ensure the 2025 waste prevention and recycling targets (including the 70% recycling target) are delivered, and setting new ambitious targets for 2030. | 2022 | Scottish Government |
| Confirm that the 2025 ban on biodegradable waste is extended to cover commercial/ industrial waste and implement measures to ensure the ban is delivered primarily through improved waste prevention, resource efficiency and recycling. | 2022 | Scottish Government |
| Start reporting emissions from Energy from Waste as a separate source within the Scottish GHG inventory. | 2022 | Scottish Government |

December 2021

Progress in reducing emissions in Scotland
2021 Report to Parliament
Climate Change Committee

1 Victoria St, Westminster
London SW1H 0ET

www.theccc.org.uk
[@theCCCuk](https://twitter.com/theCCCuk)

