

Addressing climate change in Scotland

A summary of key recommendations for public bodies



 AUDIT SCOTLAND

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1. Background

1. Climate change is the result of rising greenhouse gas emissions which cause global temperatures to increase. The impact of this is already being felt around the world. If emissions are not drastically reduced, severe widespread impacts are expected. In May 2019, the Scottish Government declared a climate emergency, legislating for a drastic reduction of greenhouse gas emissions in the next ten years.

2. In response to the global climate emergency, countries across the world are committed to reducing greenhouse gas emissions and adapting our world to live with the current and predicted future effects of global warming. There are global commitments to do this; the 2015 Paris Agreement is the biggest international commitment of this kind. Under this agreement the UK has committed to reducing greenhouse gas emissions by at least 68 per cent by 2030.¹

3. Scotland has set a legally binding target of becoming net zero² by 2045, five years earlier than the UK, and has set several interim targets including a 75 per cent reduction in greenhouse gas emissions by 2030.

4. COP26 in Glasgow in November 2021 crystallised the ambition of limiting global warming to 1.5 degrees but also made clear the amount of work still required. A strong theme that emerged over the two weeks, were issues around trust, credibility, and transparency. Climate justice was another key theme from COP26. That refers to a just transition to net zero which seeks to ensure that the benefits are shared, while supporting those most impacted by the change. For example, people affected by poverty and inequality are less equipped to deal with the impacts of the climate crisis. This chimes with Scottish Government and wider Scottish public sector ambitions.

5. Scotland has made good progress in reducing emissions. The UK Climate Change Committee (CCC) found that between 2008 and 2018, Scotland decarbonised at a faster rate than any G20 country. However, Scotland has failed to meet its annual targets in recent years. The CCC anticipates that the 2020 target will be achieved due to the Covid lockdown, but it expects its impact to be transitory.

6. The CCC has said that the 2020s will be the critical decade across society and the economy for the transition to greater sustainability and net zero, with a decisive shift from planning to action, implementation, and rapid progress.³

1 This is compared to 1990 levels.

2. Net zero refers to achieving an overall balance between emissions produced and emissions taken out of the atmosphere.

3 Progress in reducing emissions in Scotland, 2021 Report to Parliament, Climate Change Committee, December 2021.

About the review

7. Given the importance and urgency of addressing climate change, there have been a number of national reports in recent years from a wide range of experts and perspectives recommending action needed to make the shift to more sustainable living. We have reviewed the main national reports that have been published over the last two years ([Appendix 1](#)). All of them apart from one⁴ are Scotland specific and contain around 1,000 recommendations from experts within the field of climate change, from parliamentary scrutiny, and from members of the public.

8. The aim of this review is to draw out the key themes identified in the published recommendations for Scotland. This provides a high-level summary of the key improvements that need to be made across the public sector if Scotland is to reach its climate change ambitions of a just transition to net zero and adapting to improve resilience to the effects of the global warming we are already experiencing.

9. This review is a summary of the published recommendations. It is not based on additional evidence gathering or specific audit work undertaken by Audit Scotland. The published reports contain a range of recommendations for public and private sector bodies, policy makers, and citizens. We have focused this review on the key themes and improvement actions for the public sector in Scotland as they will inform the targeting of our future programme of climate change related audit work.

⁴ The following report applies to the UK as a whole: Climate Change Committee Local Authorities and the Sixth Carbon Budget, December 2020.

2. Key themes from published reports

Summary

10. Despite the number and complexity of the published recommendations, there is consensus around the areas where more work and most improvement is needed. These align with the [key themes](#) emerging from our roundtable discussion with climate change experts which we held in 2021 to help inform the targeting of our climate change-related audit work. From the published recommendations, we have identified the main areas where improvement is needed across the public sector to meet the challenge of a just transition to net zero and to adapt to increase resilience to climate change.

11. We do not under-estimate the challenges this agenda sets for the public sector. Work to achieve net zero by 2045 and build climate resilience is difficult and complex, requiring whole system change. The recommendations show that the scale and extent of the required transformation across the public sector, society, and the economy are unprecedented, particularly considering the urgency of the climate crisis. Coordinated and urgent action from all public-sector bodies and their partners is needed.

Leadership

12. Experts have highlighted that meeting the challenge of climate change requires a significant change in mindset and will not be easy. It requires leadership with net zero and climate resilience at the heart of strategic decision-making.

13. Public bodies should make responding to climate change a core value and key outcome. This will require a more value-driven than cost-driven approach to decision-making. Some have suggested a move from a GDP and growth focus to wider wellbeing outcomes is needed.

14. Making climate change a core value could be helped by legislation, making responding to climate change a core duty for public bodies.

15. The public sector must lead by example. For instance, public bodies can lead the way through developing procurement frameworks and contracts with economic, social, and environmental requirements and with developing and maintaining standards and regulation.

Governance

16. Our review identified a strong message about the essential need for climate change plans to have robust governance arrangements to ensure a clear approach to delivery which allows collaboration and integration and can address

and resolve any conflict between partners, priorities, and policies. It also needs to support fast-paced changes to plans, technologies, and policies.

17. Good governance ensures accountability and transparency. It requires:

- monitoring, evaluating, reporting, and verifying plans with clear timeframes:
 - public bodies should use monitoring frameworks and policy trackers, benchmarking, milestones
 - information on costs of policies and proposals should all be monitored and reported
 - reporting should be annual, accessible, and transparent; agreed standards for bodies to measure progress would allow consistency
- feedback mechanisms to review how things work as they are being implemented
- processes for how projects will be upscaled and alternatives proposed where projects are not delivering what is expected
- effective scrutiny, oversight, and challenge by elected members and non-executive board members.

Community empowerment to develop local solutions

18. Actions to address climate change could potentially have an unequal impact on some people and communities. The recommendations emphasise localism and placed-based action⁵ as key features of success by empowering communities to develop localised solutions to climate change. This will help build and develop local economies based on local skills.

19. With the increasing tangible impact of climate change on communities, all public sector bodies need to make sure that communities can actively participate in climate action planning and delivery. Climate change should become a priority issue that public bodies and their partners engage with local communities on.

20. Incorporating climate resilience⁶ and net zero targets into existing local plans and initiatives, such as city and regional deals and participatory budgeting, will make it easier for public bodies to work with communities and support faster progress.

⁵ Placed-based action is collaboratively designed around specific circumstances of a place.

⁶ Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.

21. Public bodies will need to continue using their existing local and regional networks to share good practice, lessons learned, and successful approaches, particularly when it comes to innovation. Collaborative working can help mainstream climate action across service planning and delivery.

Behavioural change

22. Clearer information on the environmental impact of people's choices is needed for all of us to make informed decisions, particularly around sustainable diet, waste, and travel. The recommendations go on to stress that awareness raising and active behaviour-shaping (eg, charging for non-recycled waste uplifts) are needed to help individuals and communities to develop low-carbon lifestyles.

23. There is a need for clear plans to influence societal change and help people to adapt to climate change and smoothly transition to net zero. Greener options need to be attractive in terms of quality and affordability.

24. Public bodies should make efforts to sustain some of the changes in behaviours beneficial to emission reduction that emerged in the Covid-19 lockdowns, such as remote working, replacing business travel with videoconferencing and online collaboration, and broader lifestyle choices including more walking and cycling.

Alignment of policy and spend

25. The type of leadership outlined above, where the aim of a just transition to net zero, adaptation, and building climate resilience is at the heart of decision-making, would support the alignment of all policy and funding decisions. However, the challenge is significant.

Policy alignment

26. Alignment and coherence are required across a vast number of policies for a just transition to net zero, adaptation, and climate resilience. Most policy areas have a direct or indirect relation to tackling climate change. [Appendix 2](#) details some of the main links between climate change and other policy areas at a national level.

27. The recommendations drew attention to the need for all policies to be reviewed individually and holistically to identify conflicts or incoherence with climate change ambitions and be amended as required. The complex landscape, and sheer number, of strategies and plans that will play a part in delivering net zero and reducing the impacts of climate change makes this challenge harder at all levels of the public sector.

Alignment of spend

28. Budgets and spend should align with climate change ambitions. This will require public bodies to review existing capital and revenue spend. Public bodies should demonstrate how their budgets will deliver climate change targets and ambitions for reducing emissions and adapting for the impacts of climate change.

29. Public bodies will also need to ensure all future funding and investment decisions are based on their contribution to climate change ambitions and an inclusive, net-zero carbon economy. This includes, for example, redeveloping existing buildings rather than constructing new properties.

30. Funding should be prioritised against climate outcomes. Assessment frameworks could be developed and adapted to assist this process (eg, a new infrastructure assessment framework and methodology).

Robust planning for net zero, mitigation, and adaptation

31. Robust cross-sector plans are essential, but experts recognise that the challenge is colossal:

- As urgent action is required, climate change plans need innovative thinking to address the inherent tension between doing things thoroughly and doing things quickly. Lessons could be learnt from the public sector's response to the Covid-19 pandemic.
- Climate change planning needs to happen collaboratively. Effective plans need to be developed with a range of private and public sector bodies, third sector organisations, and communities. Climate experts should also be involved in planning.
- Apart from the need for aligned national plans, climate change planning needs to be done simultaneously in different geographical areas. Local plans developed by communities to solve local problems are crucial, but some decisions also need area wide planning, for example, transport networks. Regional and local flexibility is essential.

32. The recommendations in the published reports are clear. Plans should provide clarity in delivery and implementation with sufficient detail and clear timelines.

33. Plans should set clearly:

- what commitments are in place
- where responsibilities lie – budgetary alignment with responsibilities is vital
- specific timescales for delivery and key milestones, be SMART – specific, measurable, achievable, relevant, and time-bound
- full costs with details of how they will be funded, what mitigating actions will be taken, and how emissions will be reduced in practice.

34. Climate change plans should also contain:

- contingency measures, particularly for those areas of activity where there is less certainty around future technologies and success

- a communication plan – this is essential for community engagement and transparent reporting of progress.

3. Action required across various parts of the public sector

35. The published national recommendations by climate change experts also contained a number of more practical suggestions often focused on specific policy areas or parts of the public sector. We have summarised the key findings by sector below, pulling out the key themes which apply more widely across the whole of the public sector in Scotland. There are a lot of links between sectors, for example, education, skills, and green jobs will affect all the sectors. For the further details of these recommendations by sector please see [Appendix 3](#).

Education, skills, and green jobs

Education, skills, and green jobs is perhaps one of the most important and overarching sectors. The changes required from public bodies to adapt to climate change and meet the net zero target include: universal access to climate education, literacy, and learning; identifying opportunities for green job creation; identifying skills gaps for just career transition; working with businesses and enterprises; public engagement and campaigns to aid the societal change; and creating green apprenticeships for school leavers.

Investments

In the Investments sector the key issues for the public sector are prioritising low carbon investment; front-loading spending on retrofitting and energy efficiency models; supporting nature-based solutions; considering natural capitals, carbon emission reduction, and adaptation in investments.

Research and innovation

In the context of research and innovation, the main issues for public-sector bodies are reviewing research and evidence to inform plans and decisions; engaging with research institutions; building on the skills and expertise from the Covid-19 pandemic; leading the way by using new technology and innovation to support the transition and supporting businesses and enterprises in the process.

Digital

Digital infrastructure will play a key part in the net-zero transition. Some of the key issues for the public sector are investment in digital infrastructure, digital skills, and innovative use of data; universal access to digital public services for all; and locking in positive behaviours from the Covid-19 pandemic.

Strategic land use, planning, and nature-based solutions

There are wide-ranging issues that public-sector bodies need to consider, such as making net-zero transition a priority in all planning decisions; developing measures and targets to reverse biodiversity loss and reduce carbon emissions; supporting communities to deliver against net-zero target through land ownership; identifying and sharing best practice in the management of the natural capital assets; and creating more green spaces and woodlands.

Blue Carbon⁷

Where applicable, public bodies should support enterprises that maximise carbon sequestration (the process of capturing and storing atmospheric carbon dioxide) and support coastal protection and sustainable marine food production.

Waste and circular economy

The circular economy is an economic model which will play a significant role in the transition to net zero and adapting to climate change. As part of this change, public-sector bodies will need to consider the following:

- reducing the amount of waste going to landfill
- supporting communities in reducing waste and learning green skills
- stopping using single-use plastics and non-recyclable materials
- investing in circular economy skills, training, and careers
- supporting businesses in identifying circular economy technologies
- setting and regularly reporting against the waste prevention and recycling targets.

Travel and transport

Travel and transport emissions will need to be radically reduced to allow Scotland to meet its net zero target and mitigate the impacts of climate change. Public-sector bodies should lead in the required changes such as: supporting and implementing an integrated, accessible, and affordable public transport system; creating '20-minute neighbourhoods'⁸; providing education for all to support the transition from car use to public and active transport; supporting the delivery of Scotland's transition to electric cars and vans; implementing networks of safe walking and cycling routes; and reducing emissions from aviation.

⁷ Blue Carbon refers to organic carbon that is captured and stored by the oceans and coastal ecosystems, particularly by vegetated coastal ecosystems: seagrass meadows, tidal marshes, and mangrove forests. Global interest in Blue Carbon is rooted in its potential to mitigate climate change while achieving co-benefits, such as coastal protection and fisheries enhancement.

⁸ A neighbourhood where daily services can be accessed within a 20-minute walk.

Construction

In construction, public-sector bodies can do a lot to influence the shift to net-zero: ensuring a focus on reusing existing buildings rather than new construction; ensuring new building design and construction is environmentally friendly and energy efficient; front-loading expenditure on housing retrofits and energy efficiency schemes; developing and implementing the infrastructure resilience measures; adopting and implementing clear and future-proofed quality standards for assessing the carbon impacts of all development; ensuring carbon capture and storage, wellbeing, adaptation to manage extreme weather risk, and biodiversity are considered in planning.

NETs and industrial decarbonisation

Regarding the Negative Emissions Technologies⁹ and industry decarbonisation, public sector bodies should consider the following: measuring their annual progress on the path to net zero and publishing this in a clear and transparent way; strategically supporting the development of new low-carbon manufacturing businesses; developing just transition plans for high-emitting industrial sectors.

Energy

As for energy, public-sector bodies should: favour renewables projects in their planning and decision making; make Just Transition funding and support for oil and gas workers a high priority; make concerted and urgent effort to support the development of a hydrogen economy¹⁰; support the use of clean heating.

Industry

In the context of industry, public bodies should: support long term, sustainable business models where people and the environment are considered before profit; strategically supporting the development of new low-carbon manufacturing businesses; and developing just transition plans for high-emitting industrial sectors. Climate change experts also suggest public bodies should support introducing a tax on producers that use high carbon resources.

9 Negative Emissions Technologies remove greenhouse gases from the atmosphere.

10 Hydrogen economy is an economy that relies on hydrogen as the commercial fuel that would deliver a substantial fraction of a nation's energy and services.

Appendix 1

The national reports used in this review

The reviewed reports are:

- [Committee on Climate Change: Scottish Climate Change Adaptation Programme: An independent assessment for the Scottish Parliament](#), September 2016.
- [Infrastructure Commission for Scotland: Phase 1: Key Findings Report. A Blueprint for Scotland](#), January 2020.
- [Infrastructure Commission for Scotland: Phase 2: Delivery Findings Report. A Blueprint for Scotland](#), July 2020.
- Scottish Parliament's Environment, Climate Change and Land Reform Committee's Green Recovery Inquiry [Report](#), November 2020.
- Scottish Parliament's Environment, Climate Change and Land Reform Committee's Pre-Budget scrutiny 2021-22: [Report](#), November 2020.
- [Climate Change Committee Local Authorities and the Sixth Carbon Budget](#), December 2020.
- [Just Transition Commission A national mission for a fairer, greener Scotland](#), March 2021.
- Scottish Parliament's Environment, Climate Change and Land Reform Committee's [response](#) to the draft updated climate change plan (CPU), March 2021.
- [Scotland's Climate Assembly: Recommendations for Actions](#), June 2021.
- [Climate Emergency Response Group: Delivering on Scotland's response to the climate emergency](#), September 2021.
- [Climate Change Committee: Progress in reducing emissions in Scotland 2021 Report to Parliament](#), December 2021.

Appendix 2

Climate change links to key policy areas at a national level

This list is not exhaustive and will change over time. It demonstrates the interconnection between policies and the need for alignment. It is based on analysis of a number of national policies and plans and the published recommendations.

Policy area	Links to a just transition to net zero and climate resilience
Economic growth	Sustainable employment, sustainable and shared growth, putting sustainability at the heart of the business, making business more resilient to climate change, opportunities in circular economy (that is one with more focus on reusing and recycling), investing in energy efficiency measures, reducing energy consumption, switching to renewable energy, active travel and planning for the use of green energy.
Skills	Green skills as part of the curriculum, green apprenticeships for school leavers, skills for new, green jobs in emerging roles, re-skilling to support those in jobs affected by transition to net zero (eg, oil and gas), more opportunities for skills for existing jobs that will be needed in greater numbers.
Education	Green skills as part of the curriculum, redeployment and reskilling from high-carbon jobs, digital skills, raising awareness about sustainability issues, using available research on sustainable solutions.
Energy	Decarbonisation of heat and energy efficiency, energy transition and renewables (heat pumps, heat networks, hydrogen, local energy, offshore wind); links to skills and jobs, supporting local communities, investment, and innovation.
Transport	Change people's travel behaviour (eg, encourage rail over air travel), increase use of active travel, phase out diesel and petrol cars, decarbonise public transport – electric buses, ferries, and trains, safe walking and cycling route networks.
Infrastructure	Enabling the transition to net zero emissions and environmental sustainability, building resilient and sustainable places, focus on re-using buildings rather

than new builds, investing in nature, enhancing technology, electricity infrastructure, and digital infrastructure.

Digital	Access to digital infrastructure in all areas, digital skills, locking in positive behavioural shift from the Covid-19 pandemic, using data capability to address climate change.
Housing	Energy efficiency in homes and non-domestic buildings, decarbonising heat supply, zero emissions heating in new and existing homes.
Planning	Sustainable and low-carbon places, facilitate adaptation to climate change including considering the flood risk, protecting the natural capital.
Agriculture	Reducing emissions of three main greenhouse gases: carbon dioxide, methane, and nitrous oxide, optimising land use, using best practice and technology (eg, Methane Capture and/or Reuse Scheme).
Rural affairs	Creation and management of woodland, restoring and maintaining and the natural capital, access to sustainable services (eg, digital infrastructure and transport), sustainable economic activity, delivering peatland restoration, halt decline in biodiversity, improving quality of water and soils and contribute to natural flood management, involving communities in landscape management, land ownership.
Community empowerment	Green participatory budgeting, sustainable asset transfers, creating sustainable growth for empowered communities, involving more communities in landscape management, community resilience.
Human Rights	Climate justice, the right to a healthy environment, just transition, human rights budgeting, embedding a human rights-based approach to a green recovery and using international human rights standards to ensure that people's human rights are put at the very centre of policies and practice.
Equality	Climate change exacerbates existing inequalities, particularly for those already in poverty; just transition to net zero to promote fairness and equality, promoting gender equality in climate change policies, programmes and initiatives, community empowerment.

Inclusion	Community empowerment, just transition, tackling inequalities and exclusion, reskilling into green jobs, inclusive economic growth, improving health and wellbeing, accessible services (eg, transport and digital infrastructure).
Industry	Engaging with businesses and supply chains, green technologies, and innovation, just transition, the development of Negative Transmission Technologies (that is technology which removes greenhouse gases), low carbon manufacturing, energy transformation, green jobs.
Trade	Sustainable international trade, eg, in bioenergy, just transition, emission trading – creating a carbon market to incentivise decarbonisation, energy and low carbon companies, fair trade and trade justice, digital trade, green jobs and skills.
Procurement	Green recovery, collaborating across the public sector, circular economy, working with the supply chain, building on the existing sustainable procurement duties placed on public bodies through the Procurement Reform (Scotland) Act 2014, energy efficiency.
Construction	Just transition, green jobs and skills, energy efficiency, zero emissions heat, sustainably sourced products, eg, wood.

Source: Audit Scotland

Appendix 3

Summary of key published recommendations by sector

This is a summary of the key recommendations made in the reports listed in Appendix 1 by specific sector. We have focused on the high-level messages that apply more generally across the public sector. Importantly, these are not Audit Scotland's recommendations, and we did not undertake any additional evidence gathering or audit work when preparing this summary. The full recommendations are available in the published reports.

Education, skills, and green jobs

Public bodies should:

- provide everyone with accurate information, comprehensive education, and lifelong learning across Scotland to support behavioural, vocational, and societal change to tackle the climate emergency, and ensure everyone can understand the environmental impact of different actions and choices
- act with urgency to identify opportunities for green job creation, including maintaining existing jobs and reskilling these for more environmental management to deliver nature-based solutions
- identify any skills gaps to ensure just career transition and green job creation in collaboration with local communities, particularly those that lack capacity and resources
- initiate public information campaigns to support the shift in behavioural and societal change, eg, local, organic, and plant-based diets, active transport, and other carbon emission reduction topics
- ensure their Covid recovery plans include upskilling and reskilling training to help people in the transition to net zero, while addressing inequalities in the labour market, eg, offering upskilling and reskilling to the unemployed
- support enterprises and businesses in their transition to net-zero with skills, training, and advice, particularly in carbon-intensive markets, eg, farming, crofting, and land management
- create new green pathway apprenticeships and flexible low-carbon work-based opportunities for school leavers.

Investments

Public bodies should:

- front-load funding and investment where possible on, eg, retrofitting and energy efficiency models
- consider natural capital and understanding of natural assets in investment plans and explicitly support nature-based solutions
- prioritise all new infrastructure investment decisions based on their contribution to the delivery of an inclusive net zero carbon economy
- in large scale transformation plans for buildings, transport, and green spaces, business cases should specifically set out how these will contribute to reduction of carbon emissions and adaptation.

Research and innovation

Public bodies should:

- review the research and evidence used by the Climate Change Committee to inform their plans and decisions to meet net zero
- liaise with research institutions and be included in the discussions of strategic and resilience issues considered by the Scottish Government
- build on the use of skills and expertise necessitated by the Covid pandemic to further foster resilient communities in preparation for any future shocks
- support businesses and enterprises in transitioning from lockdown innovations to long-term post-pandemic models that build on the innovative approaches developed during the pandemic
- lead the way in reducing carbon emissions from high carbon travel, transport (petrol and diesel vehicles and air travel), heating sources and explore alternative fuel sources.

Digital

Public bodies should:

- invest in digital infrastructure to support their transition to net-zero and green recovery, for example, in the development of sustainable travel options
- ensure that every citizen has the ability to access to digital public services, regardless of the geographic location
- invest in the efficient and innovative development and use of data for the infrastructure sector

- identify skills and training requirements and review current digital and data management with partners to establish the most effective approach
- lock in positive behaviours and further develop the skills necessitated by the COVID-19 pandemic.

Strategic land use, planning, and nature-based solutions

Public bodies should:

- develop measures to reverse biodiversity loss and habitat declines and, where applicable, consider more holistic, landscape scale restoration projects with contractors
- provide support mechanisms for more communities and individuals to deliver public and community climate benefits through land ownership
- identify best practices in achieving multiple objectives in the management of their natural capital assets
- ensure that the communities which live on and adjacent to natural capital should retain its economic and wider social value for their wellbeing alongside the delivery of wider public benefits
- align their workforce and job creation plans with the nature-based solution and natural capital plans
- provide free advice to landowners, crofters, farmers, and affected communities to support a green recovery and transition to net zero, eg, on innovative land use practices along with climate mitigation and adaptation approaches
- commit to creating communities that embed low-carbon lifestyles, while improving public health and wellbeing
- ensure that more green spaces, woodlands are created, and peatlands restored, while existing wild spaces, coastlines, woods etc are protected, eg, from planned development or against flood risk
- make climate emergency a guiding principle in all planning decisions
- collaborate with each other to ensure the 'one public sector' approach to planning on the local and regional level
- set out targets to reduce food waste
- balance the needs of the environment, landowners, and communities across Scotland for sustainable land use that achieves emission reductions

- in their approach to land use, public bodies should consider that land is a finite resource and make sure that land is available for biodiversity, sustainable food production, and nature-based solutions
- for rural Scotland, public bodies should develop specific plans to reduce emissions in the fisheries and agricultural sectors as well as land use, land-use change and forestry (LULUCF)
- building on the positive behaviours developed during the pandemic, public bodies should further support local provision, eg, local food provision.

Blue Carbon

Public-sector bodies should:

- where applicable, public bodies should support enterprises that maximise carbon sequestration and support sustainable marine food production.

Waste and circular economy

Public-sector bodies should:

- work together to identify priority sectors to deliver their circular economy strategies
- further reduce the amount of waste going to landfill and increase the amount of waste that is recycled and/or reused
- set out a route-map detailing how they are planning to deliver the waste prevention and recycling targets
- stop using single use plastics and non-recyclable products (unless no other alternative available)
- help citizens reduce consumption and waste by embracing society wide resource management and reuse practices
- work with business to encourage and enable consumers to share, lease and use products for longer whilst discouraging 'disposable' business models
- develop policies to drive more resource-efficient construction and use of existing low-carbon materials
- support businesses and enterprises in identifying and progressing circular business models and technologies
- ensure measures to support investment in circular economy skills and training are included in their upskilling and reskilling plans

- work together to develop a career ladder, or an incentive, for people not in education, training, or work to contribute to rewilding, land restoration and adaptation projects
- help citizens learn green skills as part of the transition to circular economy, eg, how to grow food and compost, how to recycle waste properly, how to protect wildlife.

Travel and transport

Public bodies should:

- support implementing an integrated, accessible, and affordable public transport system and improved local infrastructure throughout Scotland that reduces the need for private cars and supports active travel
- develop and implement comprehensive, uninterrupted networks of safe walking and cycling routes in cities, towns, and villages
- better integrate land-use and transport planning to reduce and ultimately eliminate high emission travel, facilitate travel by active and sustainable modes, with the goal of creating '20-minute neighbourhoods'
- lead the way in minimising the carbon emissions caused by necessary travel and transport by investing in the exploration and early adoption of alternative fuel sources across all travel modes
- provide education for all to support the transition from car use to public and active transport, so people recognise the climate impacts and change behaviours willingly
- 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
- support the delivery of Scotland's transition to electric cars and vans
- efforts should be made to lock in behaviours beneficial to emission reduction that emerged in the COVID-19 lockdowns; particularly, replacing business travel with videoconferencing and online collaboration
- all public service vehicles (ambulances, police cars etc.) should have zero tailpipe emissions, extending to delivery vans and public transport where possible
- transport providers should declare carbon impact of train, bus journeys, flights etc. to allow citizens to make informed decisions about their travel.

Construction

Public-sector bodies should:

- ensure that place, greenspace, and wellbeing are at the heart of decision-making
- ensure that new building design and construction is environmentally friendly and energy efficient
- front-load spend on housing retrofits and energy efficiency schemes – and the skills and training needed for this – as a priority, delivering job creation stimulus and numerous social, health, and economic co-benefits as part of the green recovery
- bring Scotland’s existing housing stock up to an improved and sustainable level of energy efficiency in line with the recommendations of the Climate Change Committee
- adopt and implement clear and future-proofed quality standards for assessing the carbon impacts of all buildings public and private using Passivhaus¹¹ standards (or an agreed Scottish equivalent) and integrating whole life carbon costs, environmental impact, and operational carbon emissions
- develop and implement the infrastructure resilience measures and to allow improvements in resilience to extreme weather events to be measured over time
- there should be a focus on the reuse of buildings making it easier to change the use of existing long-vacant buildings so they can have a viable future, and the reuse of building materials – particularly traditional building materials such as stone and slate
- public-sector bodies and planning departments need to ensure carbon sequestration, wellbeing, adaptation to manage extreme weather risk, and biodiversity are all considered in planning.

NETs

Public-sector bodies should:

- measure their annual progress on the path to net zero and publish this in a clear and transparent way

¹¹ Passivhaus refers to buildings created to rigorous energy efficient design standards so that they maintain an almost constant temperature.

- strategically support the development of new manufacturing businesses in Scotland that are innovating in low carbon, high quality, built to last, product design
- develop just transition plans for high-emitting industrial sectors of the Scottish economy and include clear milestones out to 2045.

Energy

Public bodies should:

- favour renewables projects in their planning and decision making
- support the development of the infrastructure for the conversion to hydrogen of the gas transmission and distribution networks
- Just Transition funding and support for oil and gas workers should be a high priority, alongside the development of a hydrogen economy
- support the use of clean heating.

Industry

Public bodies should:

- support the development of just transition plans for high-emitting industrial sectors, including clear milestones to 2045
- support long term, sustainable business models where people and the environment are considered before profit, and the carbon footprint of working practices are reduced
- reduce the number of flights taken for business, encouraging the use of alternatives like video conferencing for meetings
- support introducing a tax on producers that use high carbon resources in their manufacturing processes
- strategically support the development of new manufacturing businesses that are innovating in low carbon, high quality, built to last, product design
- support innovation and demonstration of technologies for decarbonising manufacturing and construction
- work with business to encourage and enable consumers to share, lease and use products for longer whilst discouraging 'disposable' business models
- improve resource efficiency, recycling, and waste prevention.

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Audit Scotland, 4th Floor, 102 West Port, Edinburgh EH3 9DN
Phone: 0131 625 1500 Email: info@audit-scotland.gov.uk
www.audit-scotland.gov.uk