

# Scottish Government Response to

Scotland's Climate Assembly:  
Recommendations for Action



**Net Zero  
Scotland**  
Scottish  
Government

Laid before the Scottish Parliament (SG/2021/379), 16th December 2021

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## First Minister's Foreword



**It is a privilege to present the Scottish Government's response to Scotland's Climate Assembly, our second national assembly in Scotland and the first to focus solely on the climate emergency.**

The Scottish Government remains committed to ending Scotland's contribution to climate change. We will do so by 2045, in a way that is just and fair. As we embrace the significant changes needed to meet our ambitious targets, we must bring Scottish society with us. As representatives of our nation, Scotland's Climate Assembly told us how the Scottish public want us to meet net zero. The diversity of members from across Scottish society is reflected in the cross-government approach we have taken in our response, and the cross-party approach we must take to implement these changes.

Against the backdrop of the COVID-19 pandemic, Assembly members have learned from experts and each other, developing ambitious recommendations for Scotland to change to tackle the climate emergency in an effective and fair way. These recommendations have challenged us, in government, to do more, setting out a vision for our shared future.

This response sets out the actions we are taking to meet those recommendations, and where we will go further in those areas where the Assembly has encouraged us to be bold.

The recommendations will support us in addressing the fundamental challenge that faces all countries - to transition from fossil fuels to renewable and low carbon alternatives as quickly as possible while ensuring that the transition is a just one.

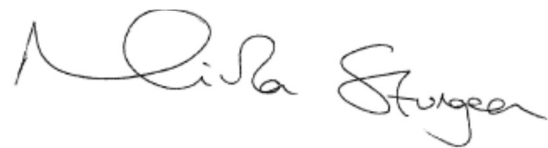
We are taking action across the board. We will roll out support for a new network of sharing libraries across Scotland, enabling people to reduce consumption by borrowing rather than buying items and making these services accessible for our communities. We will work with landowners in Scotland, increasing woodland creation and peatland restoration. We will integrate emissions and emission reduction topics into our education programmes across the country, ensuring people of all ages have access to climate change learning.

It is critical that we get this right. We must act urgently and decisively, but in the right way. We have set out the need to explore feasibility or consult further where necessary, and as we work towards net zero, we will ensure the Assembly's recommendations continue to guide our decision-making as a statement from the people of Scotland.

These recommendations show strong support for leaders to act with urgency, and make the difficult decisions needed for Scotland to become a net zero nation. In the wake of COP26 in Glasgow, and the new Glasgow Climate Pact, it could not be more critical to hear from the people of Scotland. As the Scottish Government acted as a bridge between those outside of the negotiations, and those inside, so too can the Assembly provide a bridge between government and the rest of society.

To the Assembly members – thank you. I hope you are encouraged to see that the Scottish Government's climate action is strongly aligned with the recommendations. You have been part of something truly historic which will guide the future of our country. Through a tremendous amount of hard work you have demonstrated what can be achieved when people from across Scotland come together to learn, discuss and deliberate on the challenges that face us as we tackle the climate emergency. You have set an example that we, as a nation, must follow.

**I am delighted to support this package of recommendations from Scotland's Climate Assembly.**

A handwritten signature in black ink, reading "Nicola Sturgeon". The signature is fluid and cursive, with the first name "Nicola" written in a larger, more prominent script than the surname "Sturgeon".

**Rt Hon Nicola Sturgeon MSP  
First Minister of Scotland**





# Section 1: Context

Let's Celebrate

Let's Celebrate

PEOPLE  
MAKE  
GLASGOW

PEOPLE  
MAKE  
GLASGOW

Let's Celebrate  
PEOPLE  
MAKE  
GLASGOW  
Explor  
MachIntos  
program





## Introduction

In September 2019, the requirement for a citizens' assembly on climate change to be held in Scotland was included in the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. Building on the work of the Citizens' Assembly of Scotland, Scotland's Climate Assembly was the second national citizens' assembly to take place in Scotland, and the first to focus specifically on the climate emergency.

The Assembly operated independently of the Scottish Government, organised by a core secretariat and design and facilitation team, with input from a Stewarding Group and Evidence Group. Meeting against the backdrop of the COVID-19 pandemic, the process was held entirely online. It comprised a group of over 100 people, selected to be broadly representative of the Scottish adult population<sup>1</sup>. This group of people met online over seven weekends from November 2020 to March 2021, hearing expert evidence, discussing and deliberating on how to answer the question:

**How should Scotland change to tackle the climate emergency in an effective and fair way?**

In March 2021, the Assembly published an [Interim Report](#) which included a Statement of Ambition from Assembly members and outlined 16 overarching goals. Their [Full Report](#) (Recommendations for Action) was published on 23<sup>rd</sup> June 2021 and included 81 recommendations for the Scottish Government to consider in response to the Assembly question.

In accordance with section 32A(9) of the Climate Change (Scotland) Act 2009 ("the Act") (as inserted by the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019), the Scottish Government had six months to respond to the Full Report. Each goal and recommendation received strong support from Assembly members, agreed by an overwhelming consensus of Assembly members.

"As a nation we have the opportunity to be pioneers, by taking immediate action to empower our next generations to lead sustainable lives by setting up the framework now."

**Statement of Ambition,  
Scotland's Climate Assembly**

In October 2021, the Assembly launched a Civic Charter, a note of support signed by more than 100 organisations and individuals, ranging from academic institutions, private and third sector organisations. In agreement with the Assembly, the

<sup>1</sup> Assembly members were selected to be broadly representative of the Scottish population (aged 16 and over), in terms of age, gender, household income, ethnicity, geography, rurality, disability and attitude to climate change. More information on the recruitment process is available at: [www.climateassembly.scot/how-it-works/how-are-members-selected](http://www.climateassembly.scot/how-it-works/how-are-members-selected)

Charter calls for immediate action from government, industry, non-governmental organisations (NGOs), civil society organisations (CSOs), and communities across Scotland. It describes the Assembly recommendations as innovative and ambitious, noting they are also realistic and achievable if they are matched by political will.

In a world-first approach, Scotland's Climate Assembly also involved children from across Scotland in a unique partnership with Children's Parliament. This inclusion of children has been a significant realisation of children's right to participate in decision making processes, and reflects our commitment to taking children seriously in Scotland, and to respect, protect and fulfil their rights.

In the context of the COVID-19 pandemic, and this year of COP26 in Glasgow, it could not be a more pertinent time to hear from the people of Scotland.

The Assembly's recommendations give the Scottish Government a unique perspective on what people in Scotland want and the changes they would like to see.

This response from the Scottish Government sets out the existing and proposed actions that government will take in order to address each of the Assembly's recommendations. It makes clear the importance of implementation when it comes to climate action, and outlines some of the next steps for Scotland as we tackle the climate emergency. We are committed to promoting children's rights and to continuing to hear from and engage with children and young people. The co-design process for our Just Transition Plans will demonstrate our enduring commitment to this principle.

We are listening to the people of Scotland so we can ensure that, in the future, Scotland is doing politics differently.

“Scotland's Climate Assembly has been an invaluable opportunity to directly involve citizens in our transition to net zero. The Assembly sets a powerful message for Scotland's future climate change policy and I am proud that the recommendations align so closely with our ambitions. We have also rightly been challenged by Assembly members to go further and faster, and we will continue to consider these recommendations as we develop our approach in Scotland. Meeting members from the Assembly and Children's Parliament was a highlight of my time at COP26, and I am grateful to them all for their hard work and commitment.”

**Cabinet Secretary for Net Zero, Energy and Transport,  
Michael Matheson MSP**





## Overview of the Scottish Government Response

This document is structured to mirror the Assembly's Full Report – Recommendations for Action. Each section details the government response to the 16 goals and the 81 recommendations that underpin them. For ease we have numbered the goals and recommendations, and they are addressed in the same order they appear in the Assembly report.

We have welcomed the challenge put to us by Assembly members, the challenge to do more and to think more deeply about how we tackle the climate emergency.

As the Assembly members called for actions that leave no one behind, we will ensure the principles underpinning a just transition are embedded throughout our response. Our commitment to co-design sectoral and regional Just Transition Plans will also look to build on the participative process exemplified by the Assembly.

In responding to the recommendations, we must also recognise the scale of the climate emergency and how essential it is for the implementation of any actions to be right. The Scottish Government does not currently have the powers required to act in all of the areas recommended by Assembly members, with many areas reserved to the UK Government. Where possible, we will work with the UK Government to achieve action, or suggest alternative options that we feel meet the aim of the recommendation.



Members of Scotland's Climate Assembly and Children's Parliament present their reports to Scottish Parliament party leaders.

## About Scotland's Climate Assembly

Scotland's Climate Assembly was established following the enactment of the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. It operated independently of government and was organised by a core secretariat, and design and facilitation team. As was required by the Act, the Assembly featured two Conveners who were independent of both Parliament and Ministers. Roseanna Cunningham, then Cabinet Secretary for Environment, Climate Change and Land Reform appointed Ruth Harvey and Josh Littlejohn to fulfil these roles.

A [Scottish Government report](#) was published in September 2020, which outlined the arrangements for the Assembly. The Assembly process was also guided by a Stewarding Group consisting of 22 individuals who were independent of both the Scottish Government and the secretariat.

The Stewarding Group consisted of representatives with a broad range of interests and included academics, cross-party MSPs, youth and sectoral representatives, including energy, housing, farming and businesses. An Evidence Group of nine leading academics oversaw the development of the Assembly's evidence base, ensuring it was balanced, accurate and comprehensive.

Initially scheduled to meet over six weekends, Assembly members voted in favour of an additional weekend to hear more evidence and deliberate further. In total, Assembly members heard from over 100 speakers who presented a range of perspectives and ideas on how to tackle the climate emergency.

For more information on Scotland's Climate Assembly, visit their website: [www.climateassembly.scot](http://www.climateassembly.scot)



Assembly members and children from Children's Parliament meet Cabinet Secretary for Net Zero, Energy and Transport, Michael Matheson MSP at COP26 in Glasgow.



## About Children's Parliament

Established in 1996, the Children's Parliament is Scotland's centre of excellence for children's participation and engagement. It takes a children's human rights-based, creative approach to engaging children up to 14 years of age from diverse backgrounds across Scotland. Its mission is to inspire greater awareness and understanding of the power of children's human rights and to support implementation of the United Nations Convention on the Rights of the Child (UNCRC) across Scotland.

As the minimum age of Assembly members was 16, the Children's Parliament was invited to support the participation of younger children across Scotland in a parallel process to the Assembly. From October 2020 to March 2021, while the Assembly was in progress, over 100 children aged seven to 14 from across Scotland underwent a similar learning journey.

They engaged with expert evidence, discussed what they had learnt, communicated directly with Assembly members, and – led by a core group of 12 'investigators' – developed a set of 42 Calls to Action for tackling the climate emergency.

These Calls to Action were integrated with the Assembly's recommendations throughout their report and this approach has been mirrored by the Scottish Government as part of this response.

With the children's participation in Scotland's Climate Assembly recognised as the first time children have directly been involved in a climate assembly, there has been much interest in the approach taken and the children's contribution. This work has led to the development of Climate Changemakers, a programme to support children's meaningful participation in climate action. To find out more about the Children's Parliament work with Scotland's Climate Assembly and Climate Changemakers, see <https://climatechangemakers.childrensparliament.org.uk/>.

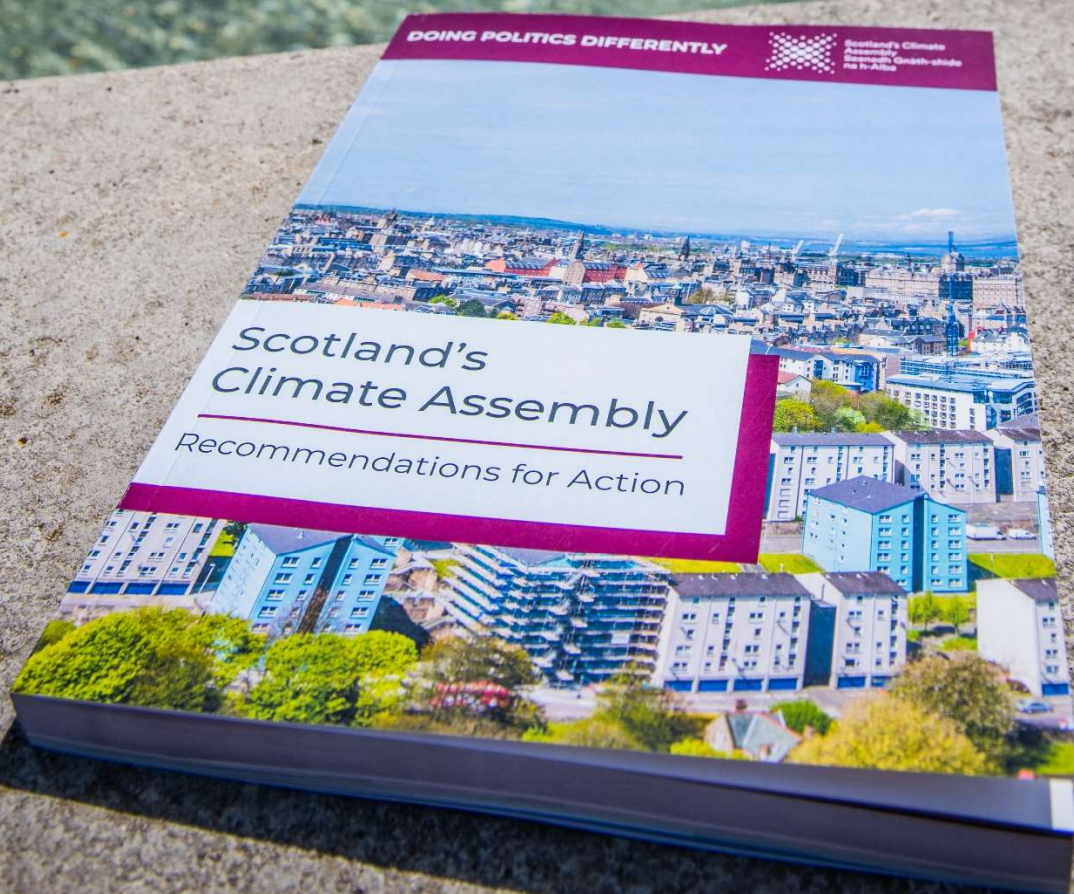


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# Section 2: Response





## Goal 1:

# Resources

## Reduce consumption and waste by embracing society wide resource management and reuse practices.

Scotland's statutory emissions reduction targets are based on emissions from sources located here in Scotland. According to a [report from Zero Waste Scotland](#), consumption of products and materials accounts for an estimated 74% of Scotland's carbon footprint, making tackling consumption and waste a crucial part of our action on climate change.

The Scottish Government is committed to continuing to take action on reducing waste and supporting initiatives that seek to encourage reuse and recycling of products wherever possible. We will do this through a number of initiatives including a ban on some of the most problematic single-use plastic items, Extended Producer Responsibility (EPR) legislation and our new commitment to provide support to a network of sharing libraries across Scotland. Through our work on a Circular Economy Bill we are investigating how further reuse and repairs could be encouraged and incentivised, and will ensure the Assembly's recommendations are considered as part of this.

Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:

- Regulations to ban some of the most problematic single-use plastic items will come into force on 1 June 2022.
- Based on new research from Waste and Resources Action Programme (WRAP), we will explore how reducing both packaging and food waste can be achieved, taking account of the Assembly's recommendation as we develop policy.
- We will bring forward a Circular Economy Bill and consider the Assembly's recommendations as part of this.
- We will legislate for an EPR system for packaging in partnership with other UK administrations, and will consider the inclusion of lifetime product emissions as recommended by the Assembly.
- We will help fund a new national network of community sharing libraries and repair cafes across Scotland.

## Recommendation 1:

# Support Sustainable Manufacturing

Strategically support the development of new manufacturing businesses in Scotland that are innovating in low carbon, high quality, built to last, product design.

Children's Parliament: Speak and listen to all the people who grow, make, produce and sell things in Scotland. This is to understand what help they need to make their businesses better for the environment.

## Scottish Government Response

The Scottish Government supports the recommendation and call to action to support the development of new manufacturing businesses in Scotland that are innovating in low carbon, high quality, built to last, product design.

We have an integrated programme of support called '[Making Scotland's Future](#)', which brings together our partners across the support landscape for manufacturing in Scotland. This is intended to deliver a more collaborative and joined up approach to supporting the sector. The Programme has specific objectives across eight workstreams, each of which have Low Carbon and Sustainability at their heart. We aim to boost productivity; drive innovation; and develop the skills of our current and future workforce to ensure Scotland is world-renowned for our manufacturing capabilities.

Central to the success of this programme is investment in a range of support measures:

- The National Manufacturing Institute Scotland (NMIS);
- The Michelin Scotland Innovation Parc (MSIP);

- The Scottish Manufacturing Advisory Service (SMAS);
- The Advancing Manufacturing Challenge Fund (AMCF); and
- The Low Carbon Manufacturing Challenge Fund (LCMCF).

The latter specifically recognises the need to support manufacturers as recommended by the Assembly. Announced in the 2020 Programme for Government, it will support innovation in low carbon technology, processes and infrastructure through the allocation of £26 million of funding. It will be designed to build on Scotland's existing expertise, encouraging partnerships to come forward with bids that will encourage the adoption or development of low carbon technologies or processes. By making the Fund competitive we will drive up project standards and the need for collaboration. The Fund will be open to any business in the manufacturing sector and provide research and development funding



for projects that result in increased product circularity, reduced waste during the manufacturing process and reduced carbon.

We are also particularly proud to be sponsoring a low carbon CivTech challenge for the sector which targets a technological solution to help manufacturing businesses decarbonise, while building resilience and strengthening competitive advantage. That process is currently working towards a minimum viable product (MVP). Whilst it is early in the process and there is substantial development work to be done, the Scottish Government and its Programme partners will work closely with the shortlisted company to maximise the opportunity for success.

NMIS, supported by our investment of £75 million, will also play a crucial role in supporting the just transition to low carbon markets for the manufacturing sector in Scotland. Recognising that 97% of the sector in Scotland are small or medium-sized enterprises (SMEs), NMIS has dedicated SME business engagement advisers who will work directly with companies on their innovation needs.

SMAS' 25 practitioners are also available across all of Scotland to support continuous improvement and efficiency, whilst the AMCF's 12 projects provide free support to SMEs across the country in technology and skills interventions.

NMIS has specific research and industrial capability in a number of emerging markets vital to the low carbon transition including lightweighting, re-manufacturing and digitisation. The MSIP in Dundee also has ambitions to be a global reference for collaboration in sustainable mobility and decarbonisation. Its clear focus is matched with a strong offer including space to manufacture and innovate; business, skills and innovation support; and access to green energy from sustainable sources.

In summary, we share the Assembly's desire for innovation, circularity, skills development and SME support within the manufacturing sector. We remain committed to building and developing the infrastructure and expertise to support businesses to achieve these goals.

**Recommendation 2:****Ban Single Use Packaging**

Reduce plastic and electronic waste by banning the use of single-use plastics (unless there is no viable alternative) and increasing regulation to prevent the supply of products in non-recyclable packaging and to stop retailers providing plastic bags to customers.

Children's Parliament: Ban plastic packaging and single-use plastic (especially cutlery, bottles and plastic bags).

**Scottish Government Response**

The Scottish Government supports this recommendation from the Assembly and Children's Parliament to reduce plastic and electronic waste. We have laid Regulations before Parliament that ban some of the most problematic single-use plastic products.

The Scottish Government is committed to matching and where possible exceeding the standards set out by the EU Single-Use Plastics Directive. Earlier this year, draft Regulations proposing market restrictions (effectively a ban) on some of the most problematic single-use plastics were made available for public comment. The Regulations, covering expanded polystyrene beverage cups, expanded polystyrene food containers, single-use plastic beverage stirrers, plastic cutlery, straws, balloon sticks and plastic plates have now been laid before Parliament and will come into force on 1 June 2022. We also intend to explore further market restrictions on a wider range of items.

To reduce the supply of products in non-recyclable packaging, Extended Producer Responsibility (EPR) creates a financial incentive to increase recyclability and encourage design

for reuse and long life. We will legislate for an EPR system for packaging in partnership with the UK Government and other devolved administrations, with further schemes being developed for waste electrical and electronic equipment (WEEE) and batteries. The system will fund end-of-life management, and by applying a cost burden to producers will encourage them to improve environmental performance. Eco-modulation of fees will incentivise producers to integrate increased product longevity, design for re-use and recyclability.

In addition to our single-use plastics ban and work on EPR, we are committed to reducing and where possible, eliminating, the use of unnecessary plastics elsewhere. We are encouraging the UK Government to introduce a ban on wet wipes containing plastic, building on the voluntary Water UK 'Fine to Flush'

Certification, to stop the use of plastic as an ingredient and support design for easy disintegration in the sewage system. We have introduced legislation to ban the manufacture and sale of plastic-stemmed cotton buds and plastic microbeads in cosmetics and personal care products. We continue to promote behaviour change by encouraging new parents to try reusable nappies through discounts and incentives included in our Baby Boxes.

Our 2019 Trial Period campaign in partnership with Zero Waste Scotland helped to promote the use of reusable period products. In addition, the Guidance we have published for bodies with responsibilities under the Period Products (Free Provision) (Scotland) Act 2021 sets out an expectation that these bodies should make at least one type of reusable period product available for free under their duties. It also asks them to consider making sustainable or plastic-free products available as part of the choice of products.

### Recommendation 3: Food Packaging

**Reduce food waste by increasing public pressure and regulation on supermarkets (and other outlets) to change how fruit, vegetables and other perishable products are packaged, so that people can buy only the amount they need.**

#### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to reduce food waste including by changing how products are packaged. We will explore how reducing both packaging and food waste can be achieved, taking account of the Assembly's recommendation as we develop policy.

We are exploring how reducing both packaging and food waste can be achieved. Recent research has identified that the balance of impact will vary according to different product types, store management and home storage behaviour. Re-usable airtight containers could offer similar benefits to single use plastic bags, and plastic free packaging, such as recycled paper pulp, can also be

utilised. Further work is needed to fully quantify wastage rates of pre-packaged versus loose fruit and vegetables (in-store and at home), as well as the food waste implications of alternative approaches.

The Scottish Government is a signatory to the Waste and Resources Action Programme's (WRAP's) UK-wide Courtauld commitment on food



waste reduction. WRAP is currently conducting new research on household food waste and packed and loose uncut fresh produce, including: consumer research; laboratory assessments of product life; and modelling impacts. The results of this new research will be published in 2022, with recommendations about selling loose as well as for date labels and storage

advice. We will also legislate for an EPR system for packaging in partnership with other UK administrations. EPR places obligations on producers to ensure material is managed properly at end-of life and is a potent tool to change habits of production and consumption. It incentivises further benefits such as increased recyclability and reduced packaging.

#### Recommendation 4:

### National Reuse Charter

Introduce a National Reuse Charter to establish; best practice standards and targets; timetables for implementation; and reporting mechanisms, in order for Local Authorities to transform recycling centres into reuse centres where items can be repurposed by skilled workers, and allocate funding equal to the National Recycling Charter (£70 million) to provide for implementation.

Children's Parliament: Improve recycling in Scotland. This would include having more recycling points, even for things like clothes and toys, and having better, fun instructions for everyone to follow.

### Scottish Government Response

The Scottish Government support the principle of the Assembly's recommendation for a National Reuse Charter.

The Scottish Government is committed to building a fully circular economy as part of our work to tackle the climate emergency. We know reuse has a big part to play as part of Scotland's circular economy, where we reduce the demand for raw material in products; encourage reuse and repairs through responsible production; and recycle waste and energy to maximise the value of any waste that is generated.

With this in mind, we welcome the Assembly's focus on what more can be done to encourage reuse, and can confirm that we are actively delivering several initiatives that align with the recommendation to promote and embed reuse across Scotland. We also welcome the Children's Parliament's focus on what more can be done to encourage recycling.

Firstly, the existing [Scottish Household Recycling Charter](#) has been designed to cover and encourage reuse. By signing up to the Charter, 31 of 32 Scottish Local authorities have directly committed to an intent to provide services that deliver local and national benefits, and to encourage citizens to participate in reuse services to ensure that they are fully utilised. The Charter's associated Code of Practice includes specific best practice recommendations for encouraging reuse.

Our [Programme for Government 2020-21](#) committed to evaluate the Household Recycling Charter with COSLA, and review its Code of Practice to ensure it reflects current best practice and makes it easier for households to recycle and reuse. This is a key step in developing a future model of recycling collections and reuse services.

As the Assembly has noted, we have also launched our £70 million Recycling Improvement Fund. One of the underpinning objectives of this Fund is to support initiatives that tackle our throwaway culture, encourage a circular economy, and provide enhanced opportunities to reuse.

In November, we made our first investments through the Fund, with over £7.1 million awarded to local authorities to increase the quantity and quality of recycling. In line with the Assembly's recommendation, this landmark investment included funding for one council to extend reuse services at Household Waste Recycling Centres (HWRCs), and facilitated a new initiative to reuse bed mattresses in partnership with a third sector reuse partner.

This marks the beginning of one of the biggest investments in recycling and reuse in Scotland in a generation, and we continue to work with all partners to bring forward further bold ideas for future funding to make sure that our infrastructure supports increased reuse, and the delivery of a truly circular economy in Scotland.

Finally, through our work to bring forward a Circular Economy Bill and develop a route map to achieving our waste and recycling targets to 2025 and beyond, we are investigating how further reuse and repairs could be encouraged and incentivised, including through more responsible production as part of our transition to a fully circular economy in Scotland. We will ensure that the Assembly's recommendation and children's call to action is considered carefully as part of this work.

## Recommendation 5:

# Extended Producer Responsibility Legislation

Introduce Extended Producer Responsibility Legislation to regulate product design e.g. materials, production processes, so that the full costs of lifetime product emissions and disposal/repurposing are included in the price - including imported products.

## Scottish Government Response

The Scottish Government supports this recommendation and will legislate for an Extended Producer Responsibility (EPR) system for packaging in partnership with other UK administrations. As the system develops, we will consider the inclusion of lifetime product emissions as recommended by the Assembly.

EPR is a potent tool to change our habits of production and consumption. EPR incentivises further benefits, such as increased recyclability and design for reuse and long life. The Scottish Government is working closely with the UK Government and other devolved administrations on the introduction of an EPR scheme for packaging, with further schemes being developed for WEEE and batteries.

An EPR approach could be applied to a range of products, and others being actively considered include textiles, mattresses and bulky waste. The system will fund end-of-life management, and by applying a cost burden to producers will encourage them to improve environmental performance. Eco-modulation of fees will incentivise producers to integrate increased product longevity, design for re-use and recyclability.

We have pursued a UK-wide approach to reflect our integrated supply chain. This approach will have significantly higher impacts, and will help with imports and ensure a consistent labelling approach.



## Recommendation 6: Resource Libraries

Provide government support to Local Authorities to establish a network of 'Resource Libraries' across the country, where people can 'borrow' high quality tools and equipment that are maintained and repaired by the library, rather than buying seldom used items themselves.

**Children's Parliament: Create sharing libraries in communities for toys, clothes, food, tools, books...and more!**

### Scottish Government Response

The Scottish Government supports the recommendation from the Assembly and Children's Parliament to establish a network of 'Resource Libraries' across the country.

A 2020 survey identified 24 repair cafe and sharing library projects already in operation across Scotland. Through a new initiative established in response to the Assembly's recommendation, the Scottish Government aims to increase this number to 100 over the next three years. The reuse and repair scheme, supported by the Scottish Government and Zero Waste Scotland, will enable people to borrow items such as high quality tools, equipment, clothes and toys rather than buying these items themselves. This is a vital step in the Scottish Government's efforts to reduce consumption and cut waste.

The scheme will be overseen by Circular Communities Scotland (formerly Community Resources Network Scotland, a key contributor to the Assembly's evidence base), in collaboration with the Edinburgh Tool

Library and Edinburgh Remakery. Other partnerships may include working with local authorities and housing associations. In addition to resource libraries, the scheme will support the establishment of repair cafes, where people can learn how to repair existing items rather than replacing them with something new.

New and existing sharing libraries and repair schemes will be able to access a range of support to set up, meet standards, train staff, mentor new projects and establish relationships with local authorities and housing associations. The network will also encourage groups to share donations. For example, Edinburgh Tool Library is due to receive 450 tools from a local housing association and provides regular support to other tool libraries across the UK.

## Case Study: Edinburgh Tool Library

The Edinburgh Tool Library is a charity that shares donated equipment to avoid the unnecessary manufacture of seldom used tools. This saves their members money, reduces their carbon footprint, and supports them to develop valuable new skills. Since they opened in 2015, they have saved their membership over £1.3 million on tools and reduced their carbon footprint by 160 tonnes through sharing rather than consumption. They believe in access over excess.

As well as their two libraries of DIY, gardening, and repair tools, they also have two wood workshops where members access reclaimed materials, gain confidence in using tools and machinery, and become a community. Their outreach programmes work with other diverse charities, from women's support groups to refugees, and young to older makers. Their large volunteer base contributes to communities across the city through volunteer build weekends, and place-based projects for other charities and community groups.



Photo © The Edinburgh Tool Library



Photo © The Edinburgh Tool Library

## Goal 2:

# Building Quality

**Adopt and implement clear and future-proofed quality standards for assessing the carbon impacts of all buildings (public and private) using EnerPhit/Passivhaus standards (as a minimum) and integrating whole life carbon costs, environmental impact and operational carbon emissions.**

Currently, heat in buildings accounts for 20% of Scotland's greenhouse gas emissions. Reducing emissions from our homes and buildings is one of the most important things we can do to help end Scotland's contribution to climate change. Energy efficiency and zero emissions heating investments are long term decisions that require certainty. Clear, future-proofed regulations will help provide that.

Our [Heat in Buildings Strategy](#) (published on 7 October 2021) sets a common direction of travel with the Assembly's full report, including how regulation and other measures will drive the improvement of our existing building stock. The Scottish Government will strengthen energy standards in building regulations in 2022 to improve both the energy efficiency and emissions from heating in Scotland's buildings, and by 2025 introduce further regulations to align them with our net zero objectives. We are developing our own approach

(rather than using existing commercial standards) to meet these objectives.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will ensure the recommendations on standards made by the Assembly are included within the response to a consultation on proposed improvements to the energy standard within Scottish building regulations.
- We will investigate the feasibility of legislation on the design of buildings for recycling and reuse and provide an update on this before the end of 2022.
- We will investigate opportunities for whole life emission reporting and will provide an update on this before the end of 2022.



### Recommendation 7:

## Passivhaus Standards for New Build

Update building standards to ensure that, within the next 5 years, all new housing is built to Passivhaus standards (or an agreed Scottish equivalent), to create healthy homes for people while also taking into account whole life carbon costs and environmental impact.

**Children's Parliament:** Make sure new houses are built to be environmentally-friendly. This would involve making them energy efficient.

### Scottish Government Response

The Scottish Government agrees that review of regulation should continue to drive improvement in energy and environmental standards for new homes and is consulting on this for implementation in 2022.

We are completing a consultation on proposed improvements to the energy standard within Scottish building regulations. This seeks to identify the scope for further improvement to reduce energy demand, particularly for heating, and support our intent to introduce a New Build Heat Standard from 2024. It also puts forward proposals to address both ventilation provision and overheating risk in response to improving energy standards.

The proposals for new homes within the consultation include an option which approaches, but is not the same as, the performance associated with the Passivhaus standard. We are seeking views on what is achievable at a national level in Scotland at this time and agree that further capacity for improvement remains. We are not proposing adoption of an existing standard, such as Passivhaus, but are investigating how good practice from such very low energy standards can

support improved compliance with building regulations and more assurance on performance in practice.

We will publish a consultation response early in 2022, and intend to introduce revised standards later that year. We will ensure the recommendations on standards made by the Assembly are included within the response to this consultation.

Whilst the issue of whole life carbon costs is not currently addressed by building regulations in Scotland or, indeed, anywhere in the UK, we recognise the benefit of any action which raises awareness of the broader environmental impact of development and influences development decisions. We will investigate opportunities for whole life emission reporting, through building regulations or by other means. We will provide an update on this before the end of 2022.

### Recommendation 8:

## Planning Decisions Consider Climate

Local authorities and planning departments need to ensure carbon sequestration, well-being, adaptation to manage extreme weather risk, and biodiversity are all considered in planning decisions for urban areas and buildings.

Children's Parliament: Protect wildlife and native species. This would involve a ban on hunting animals and making sure no new homes are built in places where there are habitats.

### Scottish Government Response

The Scottish Government supports this recommendation and is clear that the planning system must embrace and deliver radical change so we can tackle and adapt to climate change, restore biodiversity loss, improve health and well-being, build a well-being economy and create great places.

The draft fourth National Planning Framework (NPF4) will have the status of development plan for planning decisions once adopted. [Development plans](#) set out the long term vision for where development should and shouldn't happen and can include policies for the development and use of land. The status of the Framework is important because, along with Local Development Plans, it will form part of the development plan and broadly where planning applications are made for new development they should be approved where consistent with the development plan and refused where they are not.

The draft NPF4 sets out how our approach to planning and development will achieve a net zero,

sustainable Scotland by 2045 in a way that also tackles longstanding inequality. The policies included set out a requirement to give significant weight to the global climate emergency in plans and decisions; that development proposals should contribute to the enhancement of biodiversity and expanding blue and green infrastructure to build resilience and improve our health and quality of life; and ensure we adapt to future climate impacts by considering flood risk, infrastructure resilience, temperature change and coastal vulnerability. We welcome comments on the draft at this time and currently anticipate the finalised version will be adopted in 2022. Further information is available from [www.transformingplanning.scot](http://www.transformingplanning.scot).

## Recommendation 9:

**Building Standards Non Residential**

Within the next five years, update Building Standards Regulations to make it mandatory to apply EnerPhit/Passivhaus standards (or agreed Scottish equivalent), with an assessment of whole life/embodied carbon costs and the environmental impact of the materials used in construction, to all work on new and existing non-residential buildings.

**Scottish Government Response**

The Scottish Government agrees with the ambition of the recommendation, and is developing its own comparable standards covering both energy efficiency and zero direct emissions heating to meet our objectives in Scotland.

Overall, our [Heat in Buildings Strategy](#) sets out how regulation and other measures will drive the improvement of our existing building stock. As with the response to Recommendation 7, we support the aims of this recommendation, but rather than using existing commercial standards we are developing an own approach covering both energy efficiency and zero direct emissions heating to meet our objectives in Scotland. The cited commercial standard is focussed solely upon reducing energy demand whereas our Heat in Building Strategy seeks to both reduce energy demand and move to low or zero carbon heat sources. We are therefore seeking practical, balanced and affordable action through regulation.

In respect of energy standards and whole life carbon costs for new buildings, the response to Recommendation 7 also applies here to recommendations for new non-

residential buildings. We are taking forward a review of building standards for 2022 and opportunities for whole life emission reporting, through building regulations or by other means, will be investigated in the coming year.

The Scottish Government is also currently developing regulations which will require all new buildings (including non-residential where technically feasible) to use zero emissions heating (and cooling) where a building warrant is applied for from 2024. This will have the effect of ensuring zero direct emissions from the building's heating system.

For existing buildings, Scottish building regulations only apply where construction work is proposed by a developer or building owner, and set minimum standards applicable to such work. As set out in the Heat in Building Strategy, we intend to introduce regulations by 2025 for all



existing non-domestic buildings for energy efficiency and to convert to zero emissions heat by 2045. We are currently investigating the most effective regulatory approach to tackle the diversity of non-domestic stock.

We intend to introduce a bill during this parliament to provide the powers to regulate for energy efficiency and zero emissions heat in all existing buildings (both domestic and non-domestic) from 2025.

**Recommendation 10:**

## **Building Design for Recycling and Reuse**

**Introduce appropriate legislation that requires all new buildings to be designed from the outset using techniques that enable demountability, disassembly, material recycling and reuse at end of life.**

### **Scottish Government Response**

**The Scottish Government will investigate the feasibility of legislation on the design of buildings for recycling and reuse.**

At present, for new homes Scottish building regulations ([standard 7.1 - 'statement of sustainability'](#)) identify voluntary action on designing for deconstruction. These apply where a developer chooses to demonstrate that a building achieves a defined higher level of sustainability.

Over the next year, we will investigate the feasibility of mandating assessment and reporting on this issue for new homes, and whether prescription on the construction solutions implemented would also be beneficial. We will provide an update on this before the end of 2022.

**Recommendation 11:****New Environmental Impact Assessments**

Within the next five years, introduce a new environmental impact assessment for existing and new homes which adapts SAP/EPCs to measure all aspects of sustainability - combining energy efficiency measures; whole life/embodied carbon costs; and the environmental impact of the materials used in construction. This should also be used in the assessment of Council Tax bands.

**Scottish Government Response**

The Scottish Government recognises the need for robust assessment of the energy efficiency of homes and is consulting on EPC reform. We are engaging with the UK government on its plans to revise SAP, and will investigate opportunities for whole life emission reporting. A citizens' assembly will consider the issue of a replacement to the present Council Tax system.

The Heat in Building Strategy sets out the Scottish Government's intention to regulate all housing tenures for both energy efficiency and zero emissions heat by 2045. We are clear that this has to be underpinned by a robust assessment of homes' standards of energy efficiency and how to improve them. We consulted in the Summer 2021 on reforms to the Energy Performance Certificate (EPC) that would be used as the basis for energy efficiency regulations. We consulted specifically on changing the EPC metric from one based on energy cost, to one based on energy in kWh, to provide a more robust basis for improving energy efficiency. This consultation also set out our intention to review the energy efficiency recommendations generated by EPCs to improve their accuracy. We are reviewing the responses to the consultation, and plan to consult further in 2022 on EPC reform, EPC

standards and zero emissions heating. We are also working with the UK Government on changes to the Standard Assessment Procedure that is used to generate EPCs. EPCs will continue to focus on energy used in the operation of buildings, and not the wider embodied carbon or environmental impacts of construction.

The assessment of whole life/embodied carbon is separate from and requires a different dataset than is used in the production of EPCs. In our response to Recommendations 7 and 9, we set out that we will investigate opportunities for whole life emission reporting, be this through building regulations or by other means. Whilst the focus of this will be on new buildings and new building work, we will also consider the benefits of reporting on existing dwellings. However for existing

dwelling our focus remains on reducing emissions from their use, by improving energy efficiency and converting to zero direct emission heating. We will provide an update on this before the end of 2022.

As set out in the [Heat in Buildings Strategy](#), as part of our work to develop a long-term market framework we will also consider how our local tax powers, such as council tax and non-domestic rates, could be used to incentivise or encourage the retrofit of buildings.

The Bute House agreement commits the Government to a deliberative process to inform reformation of Council Tax to develop a fairer, more inclusive and sustainable form of local taxation.

Linking Council Tax liabilities with the EPC rating for a property would require the legislation that defines Council Tax to be changed, but achieving cross-party consensus on a replacement to the present Council Tax has proven to be difficult. We will therefore be establishing a working group and will engage with COSLA to oversee the development of effective deliberative engagement on sources of local government funding, including Council Tax, culminating in a Citizens' Assembly process.



Newly built energy efficient housing in Scotland.



## Goal 3:

# Retrofit Homes

**Retrofit the majority of existing homes in Scotland to be net zero by 2030, while establishing Scotland as a leader in retrofit technology, innovation and installation practice.**

Our [Heat in Buildings Strategy](#), published in October 2021, sets out an ambitious policy package to deliver energy efficiency and zero emissions heat to ensure our homes and buildings are cleaner, greener and easy to heat, and no longer contribute to climate change. We have committed to invest at least £1.8 billion over the course of this Parliament to kick-start market growth and support people who are least able to pay. We have committed to phase out the need to install new or replacement fossil fuel boilers and will regulate as far as we are able to within devolved competence, to help stimulate the market for zero emissions systems – in turn, supporting green jobs and driving down costs for households. We are already supporting households to improve their energy efficiency and transition to zero emissions heating in across various schemes, including [Warmer Homes Scotland](#), our local authority-led Area Based Schemes, and [Home Energy Scotland](#) interest-free loans and cashback grants. We are working towards a longer-term market framework that will help consumers overcome the upfront investment costs and help to attract private investment to help meet the

costs of the transition. We also recognise that it will be important to understand the need of passive cooling measures to respond to increased summer temperatures, such as ventilation and shading, and opportunities to apply these during the course of improving buildings' fabric efficiency.

We agree with the Assembly's observation that energy efficiency retrofit will make an important contribution to lifting people out of fuel poverty. We also recognise there are challenges to achieving our decarbonisation and fuel poverty objectives together, as the running costs of zero emissions heating can, in some cases, be higher than fossil fuel heating.

We therefore published a set of guiding principles in the [Heat in Buildings Strategy](#) to ensure we will only take forward actions to decarbonise heat where they are found to have no detrimental impact on fuel poverty rates, unless additional mitigating measures can also be put in place. This is fundamental to ensuring heat decarbonisation contributes to a just transition to net zero.

The [Heat in Buildings Strategy](#) aims to reduce emissions from buildings by 68% from 2020 to 2030. Achieving this will require a large majority of homes reaching a good standard of energy efficiency (at least equivalent to EPC C) by 2030, and we want all homes to reach this standard by 2033. In addition, we need over a million homes to switch from fossil fuels to a zero emissions heating system, which will need conversion rates to peak at over 200,000 per year later this decade. To put that into context, there are around 2.2 million homes in Scotland that currently use fossil fuel heating, and around 120,000 of these replace their boiler each year. Recent years have seen zero emission heat installation rates around 3,000 per year, so we need to see substantial growth in supply chains, particularly in the

availability of skilled heating and energy efficiency installers. We will work with industry to co-produce a new 'Heat in Buildings Supply Chain Delivery Plan' by Summer 2022.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will co-produce a new 'Heat in Buildings Supply Chain Delivery Plan' by Summer 2022 which will set out further detail on support for workforce development and retraining, in line with the Assembly's recommendations.
- We will keep our fuel poverty targets under review, and in 2025 will identify whether it is possible to bring the target dates forward.

"A fifth of our emissions come from heating buildings - I agree with the members that reducing this whilst also tackling fuel poverty is one of the most important things we can do to help end Scotland's contribution to climate change."

**Cabinet Secretary for Housing and Social Justice,  
Shona Robison MSP**



Recommendation 12:

## Workforce Development and Retraining

Invest in workforce development and retraining to deliver retrofitting and construction work to high standards and ensure we have the ability to implement an ambitious retrofit plan across Scotland.

### Scottish Government Response

The Scottish Government supports the Assembly's recommendation that investment in workforce development and retraining is required to ensure we have the ability to implement an ambitious retrofit plan across Scotland.

We anticipate that the heat in buildings transition will require a substantial growth in supply chains, particularly in the availability of skilled heating and energy efficiency installers. The specific scale and timing of the required workforce growth will depend on a range of factors including the demographics of the existing workforce and supply chain demand across the construction sector.

To understand the skills demand better, we have partnered with Scottish Renewables and Skills Development Scotland to undertake a 'Heat in Buildings Workforce Assessment Project' which will help us define the timing of workforce growth and how best to support people transitioning into key roles. This work will report back in Spring 2022. This will improve our understanding on how best to support workforce investment and ensure that jobs will be available for people to move into as they complete their training.

We know that, ultimately, investment in the supply chain must start with clear demand for its products and services. Our investment of at least £1.8 billion, as outlined in the [Heat in Buildings Strategy](#), aims to strengthen demand for zero emissions heating and energy efficiency, and support an increase in jobs and skilled workers. We will work with the sector to ensure that this demand stimulus unlocks private sector investment in workforce development, and will work with partners including Skills Development Scotland and the Scottish Funding Council to scope any requirement for public funding. Our commitment to a skills guarantee for those in carbon intensive sectors will provide targeted support where needed.

As mentioned earlier, we are also working with industry to co-produce a new 'Heat in Buildings Supply Chain Delivery Plan' by Summer 2022, specifically focussed on strengthening the broad supply chains needed to deliver at the pace and scale required. We will use the plan to set



out further detail on support for workforce development and retraining, in line with the Assembly's recommendation.

A principle aim of the [Covid Recovery Strategy](#) is to ensure a cross-cutting approach to delivering good green jobs and fair work. The Strategy will

actively support recovery plans for Manufacturing and Construction in addition to the Zero Emissions Affordable Homes Strategy, co-ordinating partnership working with business, the public and third sectors to provide upskilling and retraining opportunities that support people into work.

#### Recommendation 13:

### Implement Fuel Poverty Strategy by 2030

Ensure the Fuel Poverty Strategy, as required by the Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act (2019) but currently still in its 2018 draft form, is implemented immediately and is effective by 2030 not 2040.

#### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to ensure the Fuel Poverty Strategy is implemented immediately and for it to be effective as early as possible.

Today in Scotland, a quarter of households are in fuel poverty with around half of these living in extreme fuel poverty. Our goal, as set out in the Fuel Poverty (Targets, Definition and Strategy) (Scotland) Act 2019, is to address the four drivers of fuel poverty so it can be eradicated. Eradicating fuel poverty is crucial to achieving a fairer, socially just and sustainable Scotland. As the Assembly recommendations recognise, tackling fuel poverty will improve people's lives, provide support to people who need it most, creating jobs and driving industry confidence to invest in energy efficiency and low carbon heating.

Our Fuel Poverty Strategy, due to be published by the end of 2021, sets out our new and ambitious approach to tackling these drivers. However, it will not be easy. We have legally devolved powers to promote and support energy efficiency in buildings, one of the four drivers of fuel poverty, and we set out in our [Heat in Buildings Strategy](#) in October how we intend to decarbonise Scotland's buildings, including our commitment to fuel poverty principles. The independent Scottish Fuel Poverty Advisory Panel (a non-departmental public body established as a requirement of the Fuel Poverty Act) will have a crucial role in advising on and supporting the

actions we will take to meet our statutory fuel poverty targets and holding us to account for making the progress required. Legal powers relating to the other drivers: income, energy costs, and how energy is used in the home are either reserved or, for example with the welfare system, only partially devolved. We will continue to work with the UK Government and where necessary raise our concerns in relation to reserved matters.

As we decarbonise our homes, we must ensure that our guiding principle, that no one is left behind, is met. The process of decarbonising our homes must not increase the fuel

poverty rate nor the depth of existing fuel poverty, and it must not have an adverse impact on people in, or at risk of, fuel poverty.

Our Fuel Poverty targets are incredibly ambitious and what we have set out is a credible and realistic plan to deliver those targets. We do, nevertheless, understand the challenge set by the Assembly and will therefore keep the timescales under review. As part of our ongoing monitoring and evaluation of the fuel poverty strategy, we will review progress again in 2025 and identify whether it is possible to bring these target dates forward.

#### Recommendations 14:

### Retrofit All Existing Homes by 2030

Develop an ambitious plan across Scotland to enable the retrofitting of all existing homes by 2030 to be net zero.

#### Scottish Government Response

The Scottish Government supports the Assembly's recommendation to ensure we have an ambitious plan to enable the retrofitting of all existing homes and to achieve this as soon as possible.

We recognise the scale of the challenge of reducing emissions from our homes and buildings in a way that leaves no one behind. The actions we've committed to in the [Heat in Buildings Strategy](#) set out the steps required to invest, regulate and innovate, ensuring that action to decarbonise heat also tackles fuel poverty and social inequality. We are clear these actions are only the beginning. We must act with urgency,

ensuring we put effective policies and programmes in place to deliver a just transition and minimise the risks of unintended consequences. For example, respondents to the consultation on our draft [Heat in Buildings Strategy](#) identified a shortage of those with the necessary retrofitting and heat installation skills as a risk to the delivery of our existing ambitions. Therefore a more stretching target would not

necessarily secure greater impact. As mentioned in Recommendation 12 we have plans in place to address supply chain readiness and skills shortages through our commitments on workforce and the Supply Chain Delivery Plan.

In addition, while we are maximising activity in devolved areas, we recognise that there are limits to what we can achieve on our own. We are continuing to urge the UK Government to take urgent action across a number of reserved policy areas, for example rebalancing gas and electricity prices so that the running costs of zero emission systems are comparable to fossil fuel incumbents. The UK Government's Heat and Buildings Strategy gives helpful signals, but the commitments lack the urgency and clarity needed. We will continue to work with the UK Government, seeking a cross-government approach to reforming our energy markets – one that puts consumers first and is aligned with our shared, net zero objectives.

For these reasons, we have not adopted 2030 as the target date for all homes to be retrofitted with zero emissions heat. However, as set out in our [Heat in Buildings Strategy](#), we need over one million homes in Scotland to convert from fossil fuels to zero emissions alternatives, contributing to a 68% reduction in emissions from heat across the whole building stock this decade. This is a very ambitious pace – twice the pace of the UK Government's aspiration to reduce emissions from heating by 25-37% over the same period – and our policy package is accordingly bold, including significant investment and plans for new legislation.

We are developing a monitoring and evaluation framework which we will publish to help us track progress on our pathway to zero emissions heating. This will help assess the scope to bring forward the date by which we aim for all homes to reach a zero emission heat standard from our current backstop of 2045, ensuring Scotland's existing homes no longer contribute to climate change.



Recommendation 15:

## Robust Retrofit Quality Standards

Ensure immediate development of robust quality standards for assessing what needs to be done to retrofit existing homes to become net zero.

### Scottish Government Response

The Scottish Government supports the Assembly's recommendation to ensure development of robust quality standards for assessing what needs to be done to retrofit existing homes to become net zero.

The Heat in Building Strategy sets out the Scottish Government's intention to regulate all housing tenures for both energy efficiency and zero emissions heat by 2045. This is underpinned by a robust assessment of homes' standards of energy efficiency and how to improve them. As set out in our response to Recommendation 11, we are reviewing the underpinning assessment to ensure it provides a robust basis for regulations that will drive homes to become net zero.

The Scottish Government has also agreed to adopt the latest British Standards Institution (BSI) energy efficiency retrofit standards as a requirement for Scottish Government funding for retrofit work in Scotland. These standards cover the entire retrofit process in homes from initial assessment and design, through to installation and evaluation. A core part of these BSI standards is to ensure that any retrofit work delivers on the clients' needs, both in terms of carbon savings and cost savings. These standards will continue to evolve over time and we are working

with BSI to ensure the standards are fit for purpose for Scotland.

We are also considering using the UK Government endorsed [TrustMark](#) quality assurance framework to ensure compliance with these BSI standards when using Scottish Government funding, and will shortly publish a policy statement covering quality assurance for our [Heat in Buildings Strategy](#).

Recommendation 16:

## Decarbonise Heating by 2030

Scotland should lead the way in reducing to net zero the carbon emissions caused by domestic and non-domestic heating systems, by investing in the exploration and early adoption of alternative fuel sources for buildings, aiming to decarbonise the gas grid and heating systems by 2030.

Children's Parliament: Make sure new houses are built to be environmentally-friendly. This would involve making them energy efficient.

Children's Parliament: Make using only smokeless fuel a law in Scotland.

### Scottish Government Response

The Scottish Government agrees that exploration of alternative fuel sources for buildings is an important component of the path to decarbonised heat, and that different approaches will be suited to different parts of Scotland.

Significant and urgent action must also be taken by the UK Government in reserved areas to decarbonise the gas network, reform electricity and gas markets, support deployment of zero emissions heat technologies and protect consumers.

The [Heat in Buildings Strategy](#) sets out strategic technologies as near term priorities in buildings where they are known to be low and no regrets. These technologies (energy efficiency, heat pumps and heat networks) are supported through our existing delivery programmes. We are supporting the deployment of these technologies both through our delivery programmes and market development policies, including working towards a Heat Pump Sector Deal and implementation of the regulatory framework provided for by the Heat Networks (Scotland) Act 2021, which will underpin confidence and boost growth in the sector.

We are working with industry, energy network companies and the regulators to put the right enablers in place for the heat transition in Scotland. This includes forming a new Heat Electrification Strategic Partnership, working with the gas network operators on greening Scotland's gas grid, and building the evidence base on where hydrogen is most likely to play a role for heating. Our Low Carbon Infrastructure Transition Fund also provides innovation funding to support this agenda.

Hydrogen has the potential to help decarbonise key parts of the energy

system in Scotland including the provision of heat to homes and buildings. We have invested £6.9 million in the H100 Fife project which we expect to be trialling hydrogen for heat in 300 domestic properties in Leven, Fife by 2022/23. We will continue to support the development of evidence on the potential role of hydrogen in decarbonising heat including the potential expansion phases of the H100 Fife project, along with close working with the UK Government. We also expect hydrogen to be providing decarbonised heat for parts of industry by the mid-2020s.

As set out in our response to Recommendation 14, our targets are ambitious, requiring us to achieve heating system replacement rates well above the natural boiler replacement rate. However, our assessment is that the conversion of parts of the gas network to 100% hydrogen is unlikely to play a large part in reducing emissions from buildings before the late 2020s, and we do not think it is feasible to fully decarbonise all heating by 2030 in line with a fair and just transition.

The [Heat in Buildings Strategy](#) set out that, by 2030, we would like at least 20% of the volume of the gas in the GB gas grid to be alternatives to natural gas. Given that the gas grid is

under reserved UK powers we will work with the UK Government to further advance this aim.

In relation to alternative fuels derived from biomass, we agree with the UK Climate Change Committee's recommendation that these resources should only be used in those applications across the economy where their carbon reduction impact is maximised or where alternative options are not available. There may be a small minority of buildings for which bioenergy may play a role for home heating, for example where it displaces fossil fuels in the small number of off-gas-grid buildings which are unsuitable for a heat network, electric heating or a heat pump. We have established an internal Bioenergy Working Group, and will set up an Expert Panel to consider and identify the most appropriate and sustainable use of bioenergy resources within Scotland. This will inform a Bioenergy Action Plan which we will publish in 2023.

In relation to smokeless fuels, an issue raised by Children's Parliament, restrictions on the sale of coal, wet wood and manufactured solid fuels for burning in the home were implemented by the UK Government on 1 May 2021.



## Recommendation 17:

## Grants to Retrofit Homes

Make a grant available to ALL homeowners in Scotland by 2025 to bring their houses to zero emissions standards by 2030, starting by prioritising houses in fuel poverty.

Children's Parliament: Give money and help to people who struggle to heat their homes.

### Scottish Government Response

The Scottish Government recognises the importance of continuing to provide financial support to retrofit homes.

We are increasing our investment over the next five years and will allocate at least £1.8 billion over the course of this Parliament to support the accelerated deployment of heat and energy efficiency measures in homes and buildings across Scotland.

The Scottish Government continues to invest in energy efficiency and zero emissions heating, supporting people living in fuel poverty, and encouraging others to retrofit their properties to reduce their energy costs and emissions. We are committed to ensuring that no one is left behind in the heat transition and this is underpinned by the principles in our [Heat in Buildings Strategy](#). We will set out our wider approach to tackling fuel poverty in the Fuel Poverty Strategy by the end of 2021.

We continue to provide additional support through [Warmer Homes Scotland](#) – the Scottish Government's national fuel poverty scheme – and our Area Based Schemes, which help fuel poor households to benefit from low emissions heating and improved

energy efficiency at little or no cost. This year we have increased funding for these schemes, allocating £50 million for [Warmer Homes Scotland](#) and £64 million for our local authority led Area Based Schemes, supporting approximately 15,000 households.

We offer cashback grants to homeowners as part of the [Home Energy Scotland](#) (HES) Loan Scheme. The scheme offers cashback of up to £6,000 (up to 40% of the cost) for energy efficiency improvements and up to £7,500 (up to 75%) for new renewable heating. These are available to all homeowners.

From 2022/23, we will replace current cashback arrangements with a new grant scheme to support energy efficiency and zero emissions heat improvements.

The [Heat in Buildings Strategy](#) sets out the scale of investment needed, which we estimate could be as much as £33 billion between now and 2045. This cannot be fully funded by

government alone so it will be important that the heat transition is underpinned by an appropriate market framework, which helps consumers overcome the upfront investment costs and attracts private investment and finance.

We are establishing a Green Heat Finance Taskforce this year, to advise on ways in which the Scottish Government and private sector can collaborate to scale up investment.

The Taskforce will provide an interim report by March 2023 and final recommendations by September that year. To complement this work, we will also look at additional options, such as how our local tax powers could be used to incentivise or encourage retrofit, or opportunities for market actors, such as suppliers, retailers and manufacturers to drive investment.



Traditional tenement buildings in Scotland.

## Goal 4:

# Standards and Regulation

**Lead by example through government and the public sector implementing mandatory standards, regulations and business practices that meet the urgency and scale of the climate emergency.**

The Scottish Government has a vital role to play in leading by example and providing clear standards, regulations, and guidance over future government policy, regulations, and the path of public investment. We are laying the ground for new sustainable markets in net zero products and services that will stimulate private investment over the coming years.

Scotland's public sector bodies have a strong leadership role in delivering the transition to net zero. Strengthened legislation requires public bodies to report on any targets they have for achieving zero direct emissions and reducing indirect emissions.

The Climate Change (Scotland) Act 2009 makes provision for targets for the reduction of greenhouse gases emissions and also makes provision about advice, plans and reports in relation to those targets, with the objective of Scotland contributing appropriately to the world's efforts to deliver on the Paris Agreement. Business action will be crucial in order to meet Scotland's emissions reduction targets in a way that is just

and fair, capturing the economic and social benefits of a net zero economy.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will consult on measures to support businesses in transitioning to net zero including, for large businesses, annual public disclosure of how climate change will affect their business.
- We will consult on requiring a published carbon management plan for achieving emissions reductions at a level consistent with Scotland's 2045 net zero target for businesses receiving grant or loan / equity funding of over £500,000 and for major contracts.
- We will review our public sector food procurement guidance document *Catering for Change*, alongside other work, considering how to integrate healthy, nutritious, plant-based and low carbon foods including sustainably produced fruit, vegetables, fish, seafood and meat, into public sector canteens.



Recommendation 18:

## Building and Trading Standards

Strengthen building and trading standards to quality assure energy efficiency work carried out by private companies, to make sure it actually delivers emission reductions to homes.

### Scottish Government Response

The Scottish Government supports this recommendation and is taking action to strengthen standards.

We are currently [consulting on a new Compliance Plan](#) approach for our building regulations. This should increase assurance that building work meets the requirements of building regulations, through more detailed evidence on the design and construction process.

For retrofit work funded by Scottish Government, we will adopt the British Standards Institution (BSI) Publicly Available Specification (PAS) 2035/30 standards. As well as ensuring Scottish Government funds high standard works, this will help to raise standards across the supply chain more broadly. Earlier this year, we also consulted on proposals to ensure that people involved in retrofit (assessors, installers, designers) have the appropriate skills to carry out

works to the appropriate standards. Our proposals span qualifications and career paths, greater clarity in roles and responsibilities, and boosting skills in heat networks.

We are also considering the potential for the [TrustMark](#) scheme to be used in Scotland as a way of helping consumers ensure works are carried out to required standards. As well as technical standards, [TrustMark](#) requires compliance with a Code of Conduct and Customer Charter. It helps consumers navigate the market by providing a list of registered businesses. Should we adopt [TrustMark](#) in Scotland, we will ensure that Trading Standards Scotland plays a key role. We will publish our analysis of this and the response to our skills consultation shortly.

Recommendation 19:

## Greenfield and Brownfield Development

Strengthen planning restrictions immediately so that development on greenfield sites should not be permitted until all other development options, such as brownfield and existing building repurposing, have been considered and legitimately rejected.

Children's Parliament: Create more nature parks and stop green spaces from being built on. In towns and cities, create green, traffic free areas for children and adults to play.

### Scottish Government Response

The Scottish Government supports this and is clear that the planning system can proactively support the re-use of vacant and derelict land and buildings.

As set out in response to Recommendation 8 alongside an explanation on the importance of the development plan, the draft NPF4 has been published for consultation. It will have the status of development plan for planning decisions once adopted. The draft sets out six spatial principles to build a climate-conscious and nature-positive future. One of those principles is 'compact growth', this limits urban expansion where brownfield, vacant and derelict land and buildings can be used more efficiently. This prioritises the re-use

of vacant and derelict land and redundant buildings. The draft also sets out that development proposals on greenfield sites should not be supported unless the site has been allocated for development or the proposal is explicitly supported by policies in the development plan, and there are no suitable brownfield alternatives. As set out in response to other recommendations, including Recommendation 8, we welcome comments on the draft at this time, and further information is available from [www.transformingplanning.scot](http://www.transformingplanning.scot).

Recommendation 20:

## Net Zero Public Sector by 2030

Require all public sector buildings, vehicles and supply chains to be net zero by 2030 with an interim target of 75% by 2027 and a target for absolute zero by 2035.

Children's Parliament: Help schools to be environmentally-friendly. Schools can be places for planting trees.

### Scottish Government Response

The Scottish Government agrees with the Assembly on the importance of rapidly decarbonising public sector buildings, vehicles and supply chains.

It is vital that the public sector takes the lead in decarbonising its estate. On 29 October 2021, the Scottish Government issued guidance for the public sector, entitled '[Public Sector Leadership on the Global Climate Emergency](#)'. The public sector is tasked with reducing emissions close to zero without offsetting, to support Scotland meeting its national climate change goals. Public bodies are expected to drive down emissions as close to zero as possible, as quickly as possible, and this includes addressing supply chain emissions.

While we are unable to commit to the timescales in the recommendations, we are committed to developing and agreeing, through consultation, a series of phased targets for the decarbonisation of public sector buildings starting in 2024, with the most difficult buildings like hospitals being decarbonised by 2038, and for all publicly-owned buildings to meet zero emission heating requirements, with a backstop of 2038. This is seven years earlier than the backstop

of 2045 for the rest of the building stock. Accelerating delivery further will be extremely challenging and is likely to drive up costs and create supply chain shortages, particularly in the short term. Many parts of the public sector estate, including the NHS estate are technically complex to make fit for a net zero economy and may not currently be suitable for using available renewable heat technologies such as heat pumps. It will take time to design and develop other solutions, such as heat networks. For these parts of the public estate any work to convert the buildings to zero emission heating systems will need to be carefully planned to minimise disruption to health services and patients. Costs will need to be assessed on a building by building basis but these are expected to be significant and will need to be spread over a period of time. NHS Scotland purchases a wide range of goods from international suppliers and cannot ensure that suppliers in other countries operate with net zero emissions by 2030.

The Scottish Green Public Sector Estate Decarbonisation Scheme will distribute £200 million of capital support pledged over the next five year period to aid the decarbonisation of Scotland's public sector estate. NHS Scotland's £10 billion programme of investment in new hospitals and healthcare facilities is guided by a commitment that all new buildings and major refurbishments will be designed to produce net zero emissions and use renewable heat. The £2 billion Learning Estate Investment Programme, managed by the Scottish Futures Trust, aims to benefit around 50,000 pupils across Scotland by the end of the next Parliament by delivering digitally enabled, low-carbon schools and campuses.

Furthermore, Transport Scotland's Switched on Fleets programme is supporting the transition of the public sector fleet to zero emission vehicles.

The 1140 Early Learning and Childcare (ELC) expansion programme continues to support the design and delivery of low carbon investment and infrastructure across the ELC estate by following a hierarchy of investment to use what we have, buy what we can and create only what we need. Whilst Net Zero was not a key target of the expansion at the outset, we have increasingly sought to embed the importance of Net Zero in investment decision making. The approach taken to ELC service design during the expansion programme ensured that we made the best use of the existing public sector estate and reduced the carbon footprint of the investment.

"I was delighted to meet Assembly members to explore the recommendations. As representatives of Scotland's citizens, hearing concerns first-hand and understanding the Assembly's expectations has been invaluable in considering how to decarbonise the NHS as quickly as possible, whilst improving public health."

**Cabinet Secretary for Health and Social Care,  
Humza Yousaf MSP**





## Case Study: Balfour Hospital, Orkney – Scotland's first net zero hospital

NHS Balfour Hospital is the first to operate as an all-electric acute services healthcare facility. Heating and hot water are provided by twin air source heat pumps. Green electricity is provided by an array of solar photovoltaic cells which powers low energy LED lighting and high frequency low loss fluorescent lighting in clinical areas, with lighting control software managing demand according to occupancy levels. The building fabric and components all contribute to reduced energy demand due to insulation properties, high construction standards and thermal efficiencies.



Balfour Hospital, NHS Orkney, Scotland's first net zero hospital.  
Photo © Keppie Design and David Cadzow

## Recommendation 21:

# Sustainable Public Sector Procurement

Introduce a public sector procurement requirement for companies to provide details of their sustainability performance (measured against agreed standards) in any tenders for work, and for this to be used alongside costs in making the final decision on whom to select.

## Scottish Government Response

The Scottish Government supports sustainable procurement and mechanisms are already in place to deliver on this recommendation.

The Scottish Government is committed to action on the climate impact of the £13.3 billion of annual public procurement in Scotland. The Scottish Government's approach to sustainable public procurement is encapsulated in national legislation that encourages procurement to make the best use of public money by driving access to contracts for business; jobs and training; and reflecting climate change goals. The [Procurement Reform \(Scotland\) Act 2014](#) introduced the Sustainable Procurement Duty, requiring public bodies to consider how they can improve the economic, social and environmental well-being of their constituency, and act in a way that secures the improvements identified.

Public bodies must set out in their Organisational Procurement Strategy how they will use procurement to drive local environmental well-being, and report progress in their annual Procurement reports.

The Scottish Government has developed the Sustainable Procurement Tools, to help public

bodies adjust to a more resource-efficient and sustainable procurement practice. Launched in June 2020, this platform offers a one-stop shop for sustainable procurement guidance, tools, good practice examples, and e-Learning. Use of the Sustainable Procurement Tools has increased since the e-Learning was launched. A month prior to the launch, 350 users were enrolled on the Tools website. Currently, there are 1506 users from 293 organisations around the globe, demonstrating the success of this resource in engaging procurement professionals in climate action.

The Scottish Government established the cross sectoral Climate and Procurement Forum, providing leadership and direction for public bodies across Scotland to help address the Climate Emergency through their procurement activity. The Forum has identified and commissioned targeted activities which will help influence and empower buyers, suppliers and key stakeholder communities. The Forum will continue to take action to embed climate considerations in a 'whether',

'what', 'how' and 'how much' we buy approach through procurement and contract and supplier management activities, ensuring that Scottish

private and third sector businesses are involved in this work, preventing barriers to participation.

### **Case Study: Driving Climate Literacy to Enable Local Action**

The Scottish Government is driving low carbon procurement across the public sector. To achieve this we need a 'climate literate' workforce that can confidently embed sustainability into their spending decisions. We developed Climate Literacy e-Learning and revamped the Scottish Sustainable Procurement Toolkit to build understanding of the climate emergency across the public sector. Buyers, department directors, sustainability managers and facilities staff from 56 public sector organisations have used our eLearning, and have reported increased confidence that procurement can reduce carbon emissions. Our Sustainable Tools platform is also being used across the globe, driving innovative climate change solutions in public tenders locally.

## Recommendation 22:

# Public Sector Vehicles

Make it mandatory for all public service vehicles (ambulances, police cars etc.) to have zero tailpipe emissions, extending to delivery vans and public transport where possible.

## Scottish Government Response

The Scottish Government supports all public sector vehicles reaching zero tailpipe emissions as soon as possible.

The public sector is, and must remain, at the forefront of the shift to zero emission mobility, leading by example and contributing to change required to achieve our net zero emission ambitions. The [Programme for Government 2019](#) set out the ambition for the public sector to decarbonise its fleet vehicles in stages, removing the need for all petrol and diesel vehicles, starting with cars and new light commercial vehicles by 2025 and all new vehicles by 2030, applying flexibility and pragmatism for front line, specialist and emergency service vehicles where required.

Public sector organisations have been procuring an increasing number of zero emission vehicles, supported by Transport Scotland's Switched on Fleets programme. Significant progress has already been made across the public sector and many organisations have set target dates for their fleets to have zero, or close to zero, tailpipe emissions, for example:

- Ultra-low emitting electric vehicles make up 53% of the Scottish

Government's current road fleet and our ambition is for a rationalised, fully electric fleet by 2025.

- We have supported decarbonisation of fleets in local authorities since 2014 and in public bodies since 2019, with over £50 million invested to date, enabling the procurement of over 3,450 zero and ultra-low emission vehicles as well as charging and refuelling infrastructure.
- Police Scotland's Fleet Strategy aims to have the UK's first ultra-low emission blue light fleet by 2030.
- NHS Scotland aims to decarbonise their fleet of small and medium vehicles by 2025 and stop the purchase of all large fossil-fuelled vehicles by 2030.
- We are working with the Bus Decarbonisation Taskforce to ensure that the majority of new buses purchased from 2024 are zero-emission, and to bring this date forward if possible.
- Scotland's passenger rail services will be decarbonised by 2035.



Whilst technology is not currently sufficiently developed for all frontline, emergency service and specialist vehicles to mandate the fleet to have zero tailpipe emissions immediately, urgent work is underway with manufacturers to develop zero emission vehicles.

Switched on Fleets continues to support the Emergency Services, providing support and grant funding to assist the Police, Scottish Fire and Rescue Service and the Scottish Ambulance Service with the procurement of zero/low carbon vehicles to decarbonise their fleets.

“All parts of society need to take action to reach net zero. I’m particularly proud that Police Scotland's Fleet Strategy aims to have the UK's first ultra-low emission blue light fleet by 2030.”

**Cabinet Secretary for Justice,  
Keith Brown MSP**



### Recommendation 23: **Benchmarked Standards**

Establish strengthened benchmarked standards and set a requirement for public organisations and private companies to measure their annual progress on the path to net zero and publish this in a clear and transparent way.

#### **Scottish Government Response**

The Scottish Government supports the principle of the Assembly’s recommendation that there are strong benchmarked standards for public organisations and private companies to measure their annual progress on the path to net zero and for this information to be published.

The public sector has a crucial role to play across climate policy. The Scottish Government has enacted secondary legislation to strengthen the reporting duties of public bodies on their compliance with climate change duties. The new requirements,

which came into force on 9 November 2020, require specified public bodies to demonstrate their contribution towards our national target of net zero emissions by 2045 by including in their annual reports on compliance with climate change

duties, where applicable: a target date for achieving zero direct emissions; how the body aligns its spending plans and use of resources to contribute towards delivering its emissions reduction targets; how they will report on the progress it is making towards those targets; and how they are contributing to [Scotland's 2019 Climate Change Adaptation Programme](#).

The Scottish Government is committed to working in partnership with businesses to develop effective net zero transition planning, and to showcase progress and investment opportunities.

As part of the agreement between the Scottish Government and the Scottish Green Party, and influenced by the Assembly's recommendations, we will consult on: the role of Just Transition Plans and the annual public disclosure of how climate change affects large businesses; and a commitment for all businesses receiving grants or loans in excess of £500,000 to reduce their greenhouse gas emissions and for this to be set out through a published carbon management plan. We anticipate this consultation will take place in the first half of next year. In the same time period we will be working with businesses to develop of guidance on Just Transition Planning, which will support businesses in transitioning to net zero.

For SMEs there are already a number of tools published with which businesses can measure their emissions and climate impact. This

includes [guidance from Zero Waste Scotland](#), a link to which is provided in our [greener business guide](#).

As the Assembly acknowledges in its other recommendations, our approach needs to be balanced and flex as required given the differing nature of Scottish Businesses; responsibilities of a large cooperation will be very different to those of a small firm. In addition, our action will need to take into account ongoing developments at a UK level, in particular with regards to Climate Risk Disclosures and changes to the UK Companies Act, to avoid conflict, confusion or unintended consequences.

We will keep this work under review as it progresses in order to ensure we are being as ambitious as possible and meeting the spirit of the Assembly's recommendations.

Recommendation 24:

## Electricity Generation

Produce a green paper contrasting different methods of electricity generation focusing on capacity to meet baseload, £ per KWH, embodied carbon, safety and environmental impact and use this paper to plan Scotland electricity generation in the future.

Children's Parliament: Create more wind farms and solar panels so all energy in Scotland is renewable.

### Scottish Government Response

The Scottish Government supports the ambition to ensure that plans for Scotland's future electricity generation capacity is evidence led, and based on a clear understanding of the value that each technology brings to a net zero energy system.

The [Scottish Government's updated Climate Change Plan](#) includes an ambition to ensure that electricity generation in Scotland is completely decarbonised by the end of the decade. In response to the Assembly's recommendation, we will explore what this means for Scotland's electricity generation mix, including the current portfolio, future make-up, influence on security of supply, climate change commitments, and economic and supply chain goals. This will be set out in our Energy Strategy and Just Transition Plan which will be the first of our sectoral Just Transition Plans. We will publish a

draft of this document for consultation in Spring 2022, with the co-design process for that Plan commencing at the start of 2022.

Electricity generation and security of supply policy are reserved to the UK Government, and implemented by the National Grid, via regulation delivered by Ofgem. The Scottish Government continues to work closely with UK Government and wider sector to ensure that decisions about electricity markets, regulation and governance reflect Scotland's needs.

Recommendation 25:

## Climate Change Business Bill

Introduce a 'Climate Change Business Bill', to be enacted within the next five years, which sets climate impact standards and requires all businesses to assess the carbon emissions of their business practices on climate change (against variable criteria depending on the size of the business). Establish an independent climate change regulatory authority to inspect, audit and ensure compliance.

### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to set out climate impact standards and require businesses to assess the carbon emissions of their business practices on climate change.

UK legislation requires businesses over a certain size (most companies over 250 employees) to disclose their greenhouse gas emissions annually through their annual report and accounts. Provision for Streamlined Energy and Carbon Reporting (SECR) is made under the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. The Conduct Committee of the Financial Reporting Council is legally responsible for monitoring compliance of SECR reporting. If company annual reports do not meet the SECR requirements, the whole annual report can be rejected and a penalty applied for late compliance. In addition, on 3 November 2021, the UK Government announced that financial institutions and listed firms will also be required to publish net zero plans from 2023.

As a result of the Assembly's recommendations, the Scottish

Government will also encourage and incentivise SMEs to report on their greenhouse gas emissions, energy consumption and efficiency.

In addition, as set out in Recommendation 23, and agreed in the Scottish Government and Scottish Green Party shared policy programme we will also consult on measures to support businesses in transitioning to net zero including, for large businesses, annual public disclosure of how climate change will affect their business. We will also consult on requiring a published carbon management plan for achieving emissions reductions at a level consistent with Scotland's 2045 net zero target for businesses receiving grant or loan / equity funding of over £500,000 and for major contracts.

The Scottish Government welcomes the Assembly's acknowledgement that there is an important distinction



between large and small businesses and that criteria ought to be flexible enough to recognise differences in resources and emissions. A significant proportion of Scotland's business base is made up of sole traders and very small enterprises with fewer than 100 employees, many of which operate in sectors such as retail and leisure that were hardest hit by the pandemic, and taking on debt finance to survive. Our approach therefore needs to focus on support, guidance and incentivisation to lower carbon emissions as part of our just transition to our net zero target.

The Scottish Government will keep this work under review, particularly in light of our commitment to consult on Just Transition Plans and annual disclosure of climate change impacts, with a view to encouraging greater transparency and reporting as we transition to a net zero nation.

#### Recommendation 26:

### Plant-Based and Low Carbon Food

**Immediately require government and public services to procure plant based and low carbon food for all public sector catering and canteens.**

**Children's Parliament: Make more plant-based, animal-free options available in schools, nurseries and places where people work.**

#### Scottish Government Response

The Scottish Government partially supports this recommendation and will review its public sector food procurement guidance document *Catering for Change*, alongside other work to make Scotland a Good Food Nation.

This updated guidance will help public bodies make sustainable choices when procuring food and catering services, including how to provide more locally produced and locally sourced food. As part of this review, we will carefully consider the Assembly's recommendation and identify how we can integrate healthy, nutritious, plant-based and low carbon foods, including sustainably produced fruit, vegetables, fish, seafood and meat, into public sector canteens.

All public bodies in Scotland have a legal duty to take account of how they can improve the social, economic and environmental well-being of their area, acting to ensure

improvements are made where identified. They can, and do, include criteria such as nutritional value and fresh and seasonal produce when procuring food. Menu planning helps

to promote these factors. For example, the Scottish Government places an emphasis on healthy eating and nutrition, and promotes fresh and seasonal produce. We will continue to work with Public Health Scotland, Food Standards Scotland and other agencies to evaluate the evidence base surrounding diet, health and climate impacts and use that to inform future policy.

Education authorities also have a statutory duty to consider sustainability guidance published by Scottish Ministers as they procure food, drink and catering services in schools. 'Better Eating, Better Learning' guidance was produced to support this duty, alongside the public sector food procurement guidance document 'Catering for Change'.

Food Standards Scotland have developed 'Eat Well Your Way', an online resource that helps consumers understand what a healthy balanced diet looks like by translating the 'Eatwell Guide' into meaningful, practical advice and tips to help people make healthier food and drink choices when planning, shopping and eating out. The resource contains a number of sustainability messages including reducing food waste and eating less meat. It is due for public launch in January 2022, and we will increase the sustainability messaging as it develops.

The Healthy Living Award, although suspended since the pandemic, has transformed the wider public sector in its provision of food, including

mandating 70% healthier options in hospitals. The Prisons Service, the Scottish Government and the Scottish Parliament have also adopted the criteria. These will be strengthened further through the 'Eat Out Eat Well Framework' announced in the 'Out of Home Action Plan'.

In addition, the Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2020, were introduced in April 2021. These requirements are based on scientific evidence and dietary advice, and are designed to ensure children and young people are provided with an appropriate amount of energy and key nutrients. They are flexible enough to cater for all diets, including animal free. These regulations introduce a required increase in the amount of fruit and vegetables offered as part of school meals, and across the whole school day, and align the provision of red and red processed meat with the advice in the Scottish Dietary Goals to limit consumption of such foods to 70g per day.

The Food for Life Programme is currently operating across 17 local authorities in Scotland, supporting the provision of more locally sourced, healthier food being served throughout schools. The Scottish Government is continuing to support the programme and we are in discussions with the Soil Association around options for expanding into other settings within the public sector.

## Goal 5:

# Public Transport

**Implement 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.**

In order to meet our ambitious climate change targets, it is crucial that we reduce private car use in Scotland. Transport is Scotland's largest carbon emitting sector, accounting for 29% of carbon emissions in 2019; of these, cars accounted for almost 40% of transport emissions. We will continue to improve and promote active travel and sustainable public transport options as an alternative to car use.

The Scottish Government is committed to taking action to implement an integrated, accessible and affordable public transport system. We are actively

considering the cost of using public transport through our Fair Fares Review and from the end of January 2022, free bus travel will be available for 40% of the Scottish population. From April 2022, we will take over direct management of the ScotRail franchise and between 2019-2024 we will provide £4.8 billion to Network Rail to continue to decarbonise and increase the resilience of our rail network. We are making progress on smart ticketing, our vision is a Scottish public transport network where all journeys can be made using smart ticketing or payment.

“The Assembly’s recommendations were clear on supporting zero emission technologies whilst also prioritising walking, cycling and integrated public transport to support the shift to sustainable transport and reduce emissions from the most polluting modes. Our vision is to deliver a sustainable, inclusive, safe and accessible transport system and the recommendations have helped shape how we will achieve this. We will shortly publish a route map to support our world leading commitment to reduce car km in Scotland by 20% by 2030.”

**Cabinet Secretary for Net Zero, Energy and Transport, Michael Matheson MSP**



Recommendation 27:

## Public Transport Cheaper or Free

Make public transport cheaper, or free, by reviewing tender processes to focus government subsidies into nationalised public/private partnerships or not for profit public transport providers.

Children's Parliament: Make public transport more environmentally friendly. This would involve making it easier and cheaper for children and adults and making buses and trains electric or hydrogen powered.

### Scottish Government Response

The Scottish Government partially supports this recommendation. We support making public transport more affordable and recognise the importance of not for profit and publically owned operators as well as commercial transport providers, local authorities and regional transport partnerships in achieving that. We are taking forward our Fair Fares Review to ensure a sustainable and integrated approach to public transport fares. This will look at the range of discounts and concessionary schemes which are available on all modes including bus, rail and ferry and will look at both cost and availability of services.

The impact of COVID-19 on travel demand and resultant demand for public transport has had a significant impact on public transport fare box revenue. To date, over £1 billion of support has been provided to support public transport operators during the pandemic to ensure that services remained in place for those who depend on them.

The COVID-19 recovery, supported by a safe and confident return to public transport, is crucial to ensure there is a viable and sustainable public transport system for the future. The fare box revenue of our public transport operators, the on-going impact of recovery from the pandemic and the potential budgetary consequences of pressure on fare box revenue highlights the

fragility of our public transport system and the need to do everything to protect it.

Bus is the most used public transport mode and is expected to remain so, notwithstanding the impact of the COVID-19 pandemic. During the pandemic the Scottish Government has substantially increased its support for services to sustain the network, despite reduced income from passengers and rising costs. We will keep our support under review as restrictions ease and demand returns.

We are reducing the cost of bus travel for young people by establishing a new free bus travel scheme for people aged under 22 and resident in Scotland. This new scheme will operate from 31 January 2022 and



will complement the existing Older & Disabled Persons Free Bus scheme. Between them, the two schemes will provide over 40% of Scotland's population with access to free bus travel.

We have also committed to long term investment of over £500 million in bus priority measures, and as part of this are implementing a [Bus Partnership Fund](#) (BPF). The Fund supports local authorities' ambitions around tackling congestion's impacts on bus journeys so that they are quicker and more reliable, and therefore more people make the choice to take the bus. The [Transport \(Scotland\) Act 2019](#) includes a range of improved tools for local transport authorities to improve bus services in their area. This approach recognises that buses are a local service and should be tailored to meet the needs of local communities. The tools available to local transport authorities include a new partnership model (the Bus Service Improvement Partnership or BSIP), franchising and allowing local transport authorities to provide local bus services. Following public consultation, we are working with partners to implement those provisions of the Act through regulations and with associated guidance. However, partnerships that have been funded via BPF are already working towards establishing BSIPs. In this way the BPF funding will leverage further action and

investment from all partners to improve bus services.

We will also establish a new Community Bus Fund to support local authorities to improve services in their areas, including through the new tools provided by the 2019 Act.

With regards to rail, from April 2022 the Scottish Government will take over direct management of the ScotRail franchise, currently owned by Abellio. ScotRail and Caledonian Sleeper services are currently almost entirely subsidised by Scottish Government and therefore by the taxpayer, for example the Scottish Government provided £1.8 billion of support between 2015-20. This investment makes a major contribution to keeping fares lower than they may be otherwise. ScotRail is also required to cap fares increases on the majority of the fares on offer, and in addition ScotRail offers a series of lower fares schemes targeting, as an example, young people and students, ensuring they are affordable.

Across Scotland, 75% of rail journeys are made on electric trains, and we have committed to make rail passenger services net zero by 2035. As outlined in Recommendation 29, we will also support ongoing electrification and decarbonisation of our rail network through our [Rail Services Decarbonisation Plan](#) and Rail Investment Strategy.

Recommendation 28:

## Oyster Card for Scotland

Introduce standardised smart ticketing for public transport across the whole country – an 'Oyster card for Scotland'.

### Scottish Government Response

The Scottish Government supports this recommendation in principle. Our vision is that all journeys on Scotland's public transport networks can be made using some form of smart ticketing or payment, and progress is already being made towards this ambition.

Scotland is the first country in the UK to offer smartcard compatibility across modes – where multiple tickets for different modes can be loaded onto one smartcard – and contactless payment is now being accepted on over 95% of buses in Scotland.

Looking ahead, Transport Scotland is working towards all journeys on Scotland's public transport networks being able to be made using a form of smart ticketing or payment.

Whilst we recognise the original ambition of the London Oyster, we already note that many passengers are transferring to the convenience of contactless payment. This reflects research undertaken in 2018 in Scotland which indicated that, rather than a 'one size fits all' system, passengers wanted choice for their smart travel options.

Over the next year we will be looking to deliver provisions in the [Transport \(Scotland\) Act 2019](#) ('the 2019 Act') that will further accelerate and standardise smart uptake, reflecting

customer requirement. The 2019 Act makes provision for using one technological standard for ticketing schemes – this will ensure everyone is using the same standard and should drive forward a coordinated approach, schemes and consistency, improving the customer experience. It also strengthens the powers local government have to introduce multi-operator, multi-modal ticketing, to meet the needs of people in their area.

As noted in the response to Recommendation 27, from 31 January 2022 we will be enabling young people resident in Scotland to travel free on buses up to and including the age of 21. This complements our Older and Disabled Persons Free Bus Scheme, which has over 1.4 million cardholders and provided 140.4 million journeys in 2019/20. These schemes together will provide nearly half of Scotland's population with access to free bus travel.

Recommendation 29:

## Integrated Network Rail

Place rail travel at the core of an integrated transport system, by subsidising rail infrastructure to make it more affordable and resilient than air travel, particularly for mainland journeys in the UK.

Children's Parliament: Create better railways to link up people in rural areas.

### Scottish Government Response

The Scottish Government supports this recommendation, and places rail services at the heart of a greener, sustainable and integrated transport and active travel vision, as set out in our [National Transport Strategy](#).

Scotland's Railway is already almost entirely subsidised by the Scottish Government, and therefore by the taxpayer. Over the period 2019-2024, the Scottish Government will provide £4.8 billion to Network Rail to maintain, renew and enhance railway infrastructure in Scotland. This will support continued improvements to the resilience of the network against the increased frequency of extreme weather as a result of climate change.

This also includes supporting on-going electrification and decarbonisation through our [Rail Services Decarbonisation Plan](#) and Rail Investment Strategy which will support greater modal shift of goods and passengers from road to rail.

An integrated rail network also requires investment by the UK Government and we are calling on them to provide further investment in high speed rail connections to Scotland, connecting communities and decreasing the need for single occupancy car journeys and air travel.



## Goal 6:

# Travel Emissions

**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.**

The Scottish Government aims to reduce emissions from transport in ways that promote sustainable environmental and socio-economic well-being. Whilst a key focus will be on technological advances to green vehicles in Scotland, it is evident that managing transport demand and embedding behaviour change will also be of vital importance. The [National Transport Strategy](#) is clear on the need to reduce demand for less sustainable transport modes and that the Sustainable Travel and Investment hierarchies inform our transport investment decisions, promoting walking, wheeling, cycling, public transport and shared transport options in preference to single occupancy private car use. Our world-leading commitment to reduce car kilometres by 20% by 2030 is aligned with the [National Transport Strategy's](#) priorities to take climate action and reduce inequality.

By 2032, transport emissions should have reduced by 4.2 MtCO<sub>2</sub>e or more compared to today and ultimately, by 2045 Scotland will be free from

harmful tailpipe emissions from land transport, with other transport modes decarbonising at a slower pace, resulting in a healthier, more active population.

We are revolutionising our transport system, from creating a greener, more affordable and publicly owned railway to reducing car kilometres by 20% and providing free bikes for all children of school age who cannot afford them. We have invested heavily in active travel infrastructure through the creation of "Active Freeways". To support electric vehicle users, we have invested over £32 million since 2011 in ChargePlace Scotland, which now has over 2,500 publicly available charge points. We also invested £94 million in 2020/21 to infrastructure, place making projects and e-bike grants, with the remaining funding delivering behaviour change and education projects. We are also reducing carbon emissions by investing in electric trains: 75% of existing rail passenger journeys use zero emission, electric trains.



## Recommendation 30:

**Ferry and Vessel Emissions**

Improve regulation about emissions from ferries (and other vessels used to transport goods around Scotland) so that high carbon emitting vessels are replaced with low carbon, modern alternatives, and ensure that the Scottish public sector fleet achieves a 50% cut in total carbon emissions by 2030.

**Scottish Government Response**

The Scottish Government supports this recommendation in part. We are committed to significantly reducing emissions from ferries, but at this time we do not believe that the technology exists that would allow the Scottish Government Ferry fleet to achieve a 50% reduction in fleet emissions by 2030.

Our [updated Climate Change Plan](#) includes a commitment to have 30% of the national ferry fleet consisting of low or zero emission vessels by 2032. Reducing emissions is very much a priority when new vessels are being considered. In hull design, energy saving/requirement technologies, as well as operational techniques, are all taken into account during the design process. Consideration is also being given to the possible retrofitting of zero emission propulsion systems once the technology is available, to enable ferries to meet 2045 zero emission target.

Scotland has also led the world with the introduction of three diesel-electric hybrid vehicle-carrying ferries. Furthermore, our Small Vessel Replacement Programme will see smaller “Loch” class vessels that have reached or exceeded their operational life expectancy replaced with electric/diesel hybrid engine

vessels. The first phase of this programme will see the replacement of up to seven of the smaller ferries operating as part of the Clyde and Hebrides Ferries Network.

Battery and charging technology has developed very rapidly since the introduction of hybrid vessels to the Scottish Government Ferries fleet. The Scottish Government has taken the opportunity to capitalise upon this now proven technology when our vessel replacement programme has allowed us to.

We are also committed to supporting the decarbonisation of shipping globally. Scotland is one of the few nations which includes international shipping and aviation in our emissions inventory. The [updated Climate Change Plan](#) sets out our commitment to work with the UK Government to support proposals at the International Maritime Organisation (IMO) to significantly

lower shipping carbon emissions in the global sector. This includes the option of introducing a global levy on

marine fuel to fund research in cleaner technologies and fuels.

Recommendation 31:

## Invest in Alternative Fuels and Green Incentives

Reduce the number of petrol and diesel vehicles in Scotland by investing in the development of alternative green fuels and increasing awareness of, and the level of, incentives available to support the transition to zero tailpipe emission vehicles.

Children's Parliament: Ban diesel and petrol cars from being made and sold in Scotland. Instead, we can help make electric cars in Scotland.

Children's Parliament: Lower price of electric cars and have a renting scheme until people have saved up enough money to buy them.

### Scottish Government Response

**The Scottish Government supports this recommendation and we have already made significant commitments to remove the need for new petrol and diesel cars and vans from 2030.**

There are currently a range of incentives available for individual consumers and for businesses, including interest-free loans to support the purchase of new and used electric vehicles, and grants for the installation of charging infrastructure. Since 2011 we have provided over £140 million in loan funding, and have recently expanded our Low Carbon Transport Loan to cover used electric vehicles. In addition, we have provided almost £1 million in funding to registered social landlords and community transport groups for electric vehicle car clubs and electric community transport vehicles, which provide affordable access to zero emission vehicles in a range of communities.

We continue to work with a number of stakeholders to develop resources that promote the uptake of electric vehicles (EVs) and the development of the associated infrastructure. This includes the Energy Saving Trust providing support for the public sector and Arnold Clark establishing an EV Innovation Centre.

Transport Scotland has provided over £50 million of funding to support fleet decarbonisation in local authorities since 2014, and in other public bodies since 2019. These programmes support and enable the transition of the Local Authority and Public Body car and van fleets from petrol/diesel to zero emission. This funding has supported zero emission

vehicles, charging and refuelling infrastructure and trials of zero emission heavy duty vehicles.

We will continue to raise awareness of the incentives available to support the transition to zero tailpipe emission vehicles. We also recognise that reducing emissions from transport is not just about transitioning to low emission vehicles, but about reducing the number of journeys made by car and encouraging active travel. This is why we have also committed to reducing car kilometres by 20% by 2030, and we intend to publish a route-map setting out how we will achieve this.

In August 2020, we established the Hydrogen Accelerator at St Andrew's University. This will increase the speed and scale of hydrogen transport deployments in Scotland by providing expert advice on technology assessments, business models and opportunities to connect research with application.

Last year we invested over £50 million, and leveraged in over £70 million from the private sector, in 272 battery-electric buses (of which 207 are being built in Scotland). We are also supporting the hydrogen bus projects in Aberdeen and Dundee, and have committed to a further £120 million for zero emission buses over the coming 5 years. We have also launched the Hydrogen Action Plan setting out how we will reach five gigawatts of installed hydrogen production capacity by 2030 and 25 gigawatts by 2045. The plan includes developing our supply chain,

establishing international partnerships, and strengthening innovation, including a £10 million Hydrogen Innovation Fund to accelerate progress and reduce costs.

We continue to work with the Michelin Scotland Innovation Park to establish the site as a leading centre for innovation in sustainable mobility.

We are establishing a Zero Emission Mobility Academic network with the Energy Technology Partnership, so Scottish industry can draw on its world-class pool of academic knowledge and expertise. In doing so, the aim is create an improved environment for co-ordinated research activities, leading to new areas of innovation and opportunities for commercial spill-over.

Through our Bus Decarbonisation Taskforce, Scotland's energy network distributors and bus operators have collaborated to produce a guide to converting fleet depots to electric charging hubs, which will support all road fleet managers, not just those in the bus sector. We are also working with the haulage sector to co-design a pathway to zero emission heavy goods vehicles (HGVs).

Through work with Scottish Enterprise we are considering the place of low carbon fuels (LCFs), such as biomethane, in our transport policy, including road transport, as well as harder to decarbonise non-road modes of transport. This will support the development of the Scottish Government Bioenergy

Update and Energy Strategy Refresh and seeks to:

- Establish which sub-sectors are likely to require non-electric decarbonisation routes for Scotland to reach overall net zero targets.
- Establish which fuels are most appropriate for these areas and

what forms of support may be required to see their timely adoption.

- Quantify a range of expected demand for LCFs in order to stimulate investment in the LCF supply chain, and assess the potential for economic benefits for Scotland

Recommendation 32:

## Research & Development for Zero Carbon Air Travel

Help Scottish industry to become a leader in sustainable short-distance plane technology by increasing research and development into zero-carbon fuel for air travel.

### Scottish Government Response

The Scottish Government supports this recommendation and, in response, we are restating our commitment to support research and development into low emission technologies.

Scotland has included international aviation and emissions in its statutory climate targets, showing global leadership as the first country to do so. We are also aiming to create the world's first zero emission aviation region, in the Highlands and Islands.

The Scottish Government's ambition to establish the world's first zero emission aviation region is being pursued in collaboration with Highlands and Islands Airports Limited (HIAL), through a new programme of activity to decarbonise airport operations, infrastructure and flights across the Highlands and Islands. As part of this work HIAL, in

partnership with a number of other organisations, have created a sustainable aviation test environment at Kirkwall Airport. Ampaire successfully tested their hybrid-electric aircraft there in August, flying between Kirkwall and Wick.

Our ongoing consultation to develop a Scottish Government aviation strategy will consider the further actions needed to accelerate the transition to low and zero emission aviation, including seeking views on how the Scottish Government could help increase the use of sustainable aviation fuels and the potential for the Scottish Government to purchase zero/low emission aircraft for lease



back to operators. This is in line with our commitment to work with the aviation sector to help restore the connectivity that is so vital for our economy and society, but in a way that reduces the environmental impacts of aviation, both in the air and on the ground.

The funding and development of the aviation strategy will also be informed by actions in the Scottish

Government's hydrogen action plan - which will involve producing forecasts for hydrogen and electricity demand across all transport modes, including aviation - and commitments arising from our Bioenergy Policy Working Group. This group comprises all relevant policy areas within the Scottish Government, and is guided by an Expert Panel consisting of NGOs and pressure groups as well as sectoral representatives.

### **Case Study: Hybrid-Electric Aircraft, Kirkwall Airport, Orkney**

In August 2021, the UK's first hybrid-electric test flight took place at the sustainable aviation test environment at Kirkwall Airport. Ampaire's Electric EEL aircraft successfully made the journey across the Pentland Firth between Kirkwall Airport and Wick John O'Groats, demonstrating the potential for these type of aircraft to be used on intra-Scotland routes.

Upgraded to run on both battery power and a conventional combustion engine, this aircraft has significantly lower emissions than a conventional Cessna 337.

With both inter-islands routes and routes to the mainland, Kirkwall Airport is the perfect testground for trialling innovative approaches to low carbon aircraft. Orkney's hydrogen and renewables expertise also contributes to the success of the aviation test environment, helping to put Scotland at the forefront of the transition to low carbon aviation.

Recommendation 33:

## Electric Vehicle Charging

Create convenient electric vehicle (EV) charging infrastructure by 2025, focussed around community demand and lifestyle, in balance with other needs for use of space.

Children's Parliament: Make lots of electric car, scooter and bike charging points available for people to use.

### Scottish Government Response

The Scottish Government supports this recommendation and is committed to continuing to invest in EV charging infrastructure and growing the existing network.

We have already invested over £50 million since 2011 in ChargePlace Scotland (CPS), Scotland's public EV charging network, which now has over 2,000 publicly available charge points. Drivers in Scotland benefit from the highest proportion of chargers in the UK outside of London, with 49 public charge points per 100,000 people, and over 12 rapid chargers per 100,000 people, compared to the overall UK figure of just over seven.

We are aware that more charge points are required in order to support the continued uptake of EVs and we remain focussed on accelerating the availability of charging infrastructure in Scotland, building upon investment which has already been made in the CPS network. To enable the extension of the network at scale and at speed, we have been working with Scottish Futures Trust to progress a new programme of work aimed at leveraging commercial investment in

public charge point provision and to ensure that none of Scotland's communities or regions are left behind.

We are currently consulting on our plans to establish requirements for the installation of EV charge points and enabling infrastructure in car parks of larger residential and non-residential buildings.

We are working with the Energy Savings Trust to develop guidance documents that will support future planning of electric vehicle charging infrastructure across Scotland. This will encourage regional approaches and ensure that future development of the public electric vehicle charging network meets the needs of Scotland's diverse range of organisations and individuals.

In spring next year, we will publish demand forecasts for electricity, by vehicles type, regionally, and until 2045, in order to support investment

and planning into charging/refuelling networks across the country. We will publish a framework for enabling and delivering infrastructure

to underpin Scotland's move to a zero emission transport system by 2023.

Recommendation 34:

## Decarbonise Internal Flights

Commit to working to decarbonise all internal flights within Scotland by 2025.

### Scottish Government Response

**We support the principle of this commitment to work to decarbonise scheduled passenger flights within Scotland – our target to do this is by 2040, including by supporting the trialling and introduction of low and zero emission aircraft.**

The Scottish Government is committed to decarbonising all internal flights in Scotland. This timescale reflects our analysis of what will be required to achieve this, in particular the nature and scale of technological advance required. Our assessment suggests that there is insufficient advancement of the technology at this stage that would allow internal flights within Scotland to be decarbonised by 2025. We will keep this under regular review and would welcome any evidence garnered by the Assembly on this topic.

As highlighted in our response to Recommendation 32, our ambition to establish the world's first zero emission aviation region is being pursued in collaboration with HIAL through a new programme of activity to decarbonise airport operations, infrastructure and flights across the Highlands and Islands.

## Goal 7:

# Carbon Labelling

**Provide clear and consistent, real and total carbon content labelling on produce, products and services (showing production; processing; transport; and usage emissions) to enable people to make informed choices.**

Estimates suggest that over 80% of Scotland's carbon footprint comes from all the goods, materials and services which we produce and use. Often, we throw away these goods after only using them once or a small number of times. Examples of this include fast fashion and single-use plastics. The Scottish Government agrees that carbon labelling is a way of helping individuals to fully understand the carbon content of the goods and services they purchase and consume. Providing people with this information will help them to make more informed choices about their purchasing habits, and encourage more sustainable consumption.

There are a number of issues with carbon labelling, particularly for products that arrive in Scotland from other UK nations or abroad, given current trading agreements and laws. The other key issue is to ensure consistency in the methodology of carbon measurement across the whole lifetime of goods and services. Some of these issues are explored further in this section.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will explore the feasibility of implementing food carbon labelling in Scotland.
- We will undertake a feasibility study to explore implementation options for product carbon labelling in Scotland, and the benefits and challenges associated with each.



### Recommendation 35:

## Food Carbon Labelling

Within 5 years, to have fully implemented food carbon labelling, similar to nutritional labelling, that shows real and total carbon content - not the offset carbon footprint.

Children's Parliament: Label all food and everyday items with where they are made and their impact on the environment.

Children's Parliament: Make environmentally friendly things in shops cheaper and easier for people to choose. This would involve making sure shops promote and display environmentally friendly options instead of non-environmentally friendly options.

### Scottish Government Response

The Scottish Government supports the principle of this recommendation and we commit to exploring the feasibility of implementing food carbon labelling in Scotland, both in terms of determining the most effective mechanism and related timescales.

We agree it is critical that individuals are provided with the necessary information to make informed choices about the food they eat. This recommendation aligns closely with the Children's Parliament Call to Action to 'label all food and everyday items with where they are made and their impact on the environment'. As an example, recently, the food menus at the COP26 Blue Zone in Glasgow included labels showing the amount of carbon emissions associated with each meal.

Currently in the UK, food labelling has a voluntary 'traffic light' system for calorie, fat, saturates, sugars and salt content information. Our understanding of this proposal is that there would be a similar mandatory system for the carbon emissions

associated with food production, processing and transport.

The recommendation calls for food carbon labelling to be fully implemented within five years. It is not possible to assess the viability of this timescale until we have fully considered the range of evidence and investigated which approach would secure the greatest impact. At this stage, we are working through a number of challenges that have been identified in relation to this activity:

- Similar schemes proposed in other nations have come under criticism for the costs to business;
- The UK Internal Market Act could render regulations in this area ineffective. While the regulations would apply to goods produced in

or imported directly into Scotland, the market access principles of the Act mean we could not impose those standards on goods coming into Scotland from other parts of the UK, nor could we prevent those goods from entering the Scottish market, provided these satisfy regulations set elsewhere in the UK;

- The most appropriate methodology to measure carbon emissions (e.g. through a carbon calculator app) would need to be assessed, given different farming practices;
- The impact of adding a carbon label to the existing traffic light legislation or as an additional label would need to be explored; and
- The reach of the scheme would need to be decided, for example whether it covers food served in restaurants and cafes.

To secure a full assessment of this, we have committed to undertaking a feasibility study which will look at the Assembly's recommendation and potential impact and implications of implementing it, including the

challenges outlined above. Significant consultation with stakeholders will be undertaken before key decisions are made.

Wider work is already underway which is also of direct relevance to this recommendation. For example, the SNP manifesto committed to introducing a 'Sustainably Scottish' brand for food producers to showcase their green credentials. Work on this brand is still at an early stage. It will work slightly differently to carbon labelling, in that it will be voluntary and the brand will be available to all food producers, manufacturers and suppliers that can meet standards on provenance and low carbon operations.

To support the brand's development, we have commissioned consumer research into attitudes towards sustainability and the interest of Scottish businesses of being involved, as well as exploring how other nations have implemented similar schemes.

Recommendation 36:

## Declare Travel Carbon Impact

Immediately make it easier for people to make informed choices about how they travel, taking carbon emissions into consideration, by requiring transport providers to declare the carbon impact of flights and train journeys in a clear and meaningful way at the time of booking.

### Scottish Government Response

The Scottish Government supports this recommendation in part, but does not have the required powers to enact such a measure.

The Scottish Government is committed to encouraging modal shift to low carbon forms of transport. However, consumer protection and standards relating to airlines is a matter reserved to the UK Government. We are aware that some airlines already disclose the emissions associated with their flights, and that various independent applications provide this information, but since much of Scotland's air connectivity is provided by airlines registered and based in other countries, Scotland has limited scope to influence airline operators to voluntarily disclose such information.

While we are not able to require transport providers to declare the carbon impact of flights, we continue to increase the availability of low carbon forms of travel. For example, 75% of rail journeys across Scotland are made on electric trains, and we have committed to make rail passenger services net zero by 2035, five years ahead of UK ambitions.

Further commitments that seek to encourage a shift to low emissions transport are included in Goals 5 and 6.

### Recommendation 37:

## Product Carbon Labelling

Require businesses to label products to show the carbon footprint of the production process.

Children's Parliament: Label all food and everyday items with where they are made and their impact on the environment.

Children's Parliament: Make environmentally friendly things in shops cheaper and easier for people to choose. This would involve making sure shops promote and display environmentally friendly options instead of non-environmentally friendly options.

### Scottish Government Response

The Scottish Government supports this recommendation and welcomes moves to explore the feasibility of a carbon labelling standard for consumer products.

As with Recommendation 35, this aligns closely with the Children's Parliament Call to Action to 'label all food and everyday items with where they are made and their impact on the environment'. Again, the Scottish Government agrees with the principle of ensuring individuals have information on the carbon impact of items they purchase and consume, so that they can make informed decisions. International consumer research completed by the [Carbon Trust](#) in 2020 found that two thirds (67%) of consumers were in support of the carbon labelling of products, with the level slightly lower in the UK (63%).

We recognise the need to promote sustainable consumption. This will require a range of measures, potentially including product carbon labelling.

Some of the challenges relating to Recommendation 35 are still relevant here, including the potential cost to businesses, the carbon calculator methodology used and the interplay with international trade agreements. Also, unlike food labelling, product labelling is a matter reserved to the UK Government. As such, any such labelling system would benefit from widespread, international uptake.

This type of activity has been trialled in the UK in the past. In 2007, the Carbon Trust piloted a carbon labelling initiative with a number of retailers with limited success. Other retailers such as Tesco have piloted this but found it too costly. Where other businesses are now using carbon labelling, approaches are inconsistent, meaning it is less useful for consumers.



The recommendation asks for labelling to include the total carbon footprint across the whole lifecycle of a product. For the true carbon impact of a business to be measured effectively, a number of experts are increasingly focussed on the need to include Scope 3 emissions (those that occur in the business's value chain). This adds a sizeable degree of complexity for many sectors e.g. manufacturing where supply chains can be complex, diverse and multi-national.

At the moment, as with food carbon labelling, this type of labelling is entirely voluntary. The Carbon Trust leads on measuring and labelling products with a [variety of labels](#), such as 'CO2 Measured', 'Reducing CO2', 'Carbon Neutral', and 'Carbon Neutral Packaging', to show their sustainability credentials.

Any action against this recommendation will be a long-term goal and will require UK Government and international co-operation. In the short term, we are therefore committing to undertaking a feasibility study to explore implementation options and the benefits and challenges associated with each. The study will also include a benchmarking exercise to understand what similar work has been undertaken elsewhere, and how successful it has been. Stakeholder consultation will again be crucial, including with the British Standards Institute, in particular to discuss the continuity of any scheme.

“Following on from the inspiring events at COP26 in Glasgow, we must use these recommendations to call on the UK Government to do more on reserved matters. We will therefore press the UK Government to act in order to release Scotland's full emissions reduction potential.”

**Cabinet Secretary for the Constitution, External Affairs and Culture, Angus Robertson MSP**



## Goal 8:

# Education

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.

Children's Parliament: Help people understand what they can do to tackle climate change. This would involve having adverts on TV and social media about creating less waste, buying less things, buying local products, travelling less to different countries, and saving energy.

Children's Parliament: Help children to play, learn and have hobbies outside. This is so when children grow up, they go outside more often and want to look after our nature.

Children's Parliament: Involve children in decisions being made about tackling the climate emergency. This could be in school, in communities or at a national level - like the Climate Assembly!

We have published our [Net Zero Nation: Public Engagement Strategy for Climate Change](#). This strategy outlines our overarching framework for engaging the people of Scotland in the national effort required to successfully realise the ambition included within the [updated Climate Change Plan](#). It puts people at the heart of our decision making, and we are clear that, in order to achieve our goals, we must move from incremental changes to supporting a society-wide transformation. Climate change education is a key part of this - as part of formal curriculum, and wider society engagement.

Our vision is: Everyone in Scotland recognises the implications of the global climate emergency, fully understands and contributes to Scotland's response, and embraces their role in the transition to a net zero and climate ready Scotland. To achieve this we are taking forward our Public Engagement Strategy including:

- Addressing climate change in the school, early learning and childcare curriculum, including through the cross-cutting theme of Learning for Sustainability as well as implementing our Learning for Sustainability Action Plan. We will continue to work collaboratively

with partner organisations to support education leaders, practitioners and learners develop the skills and knowledge to learn and teach about climate change.

- We continue to deliver outdoor play and learning as an integral, everyday part of ELC in Scotland, supported by the Health and Social Care Standards and the National Standard for funded ELC providers. We are working with practitioners to develop their understanding of outdoor pedagogy and to grow strong communities of practice
- Delivering a national marketing campaign, “let’s do net zero” to raise awareness of the global climate emergency and the need for action. This is supported by our website, [netzeronation.scot](https://netzeronation.scot), which aims to help everyone understand how they can play their part in the global climate emergency; provide resources to individuals, communities, and organisations; and become a hub for Scotland’s collective response to the climate emergency.
- Working to develop community led climate action by supporting communities to play a role in supporting our green recovery and shaping and driving forward our just transition to a net zero nation. This includes a range of new initiatives such as the development of regional action hubs and climate action towns, as well as supporting Scotland’s Climate Festival Programme. More information on community led climate action can be found under Goal 10.

As we develop our approach and implement our strategy, we will ensure that the Climate Assembly’s recommendations are taken into account. We will also continue to identify opportunities to ensure that our children and young people have a voice in our future, and can further influence policy design in Scotland, such as in our Just Transition Plans.

**Following analysis of the Assembly’s recommendations, the Scottish Government will take the following actions:**

- We have established a Climate Emergency Skills Action Plan Implementation Steering Group to drive activity and develop an Implementation Plan to set out a route map for skills provision in Scotland, supporting the retraining and upskilling needed for the transition to net zero.
- We will publish a bespoke public engagement strategy for heat in buildings.
- We are updating and strengthening our Learning for Sustainability Action Plan and will ensure the content of this takes full account of the Assembly’s recommendations.

Recommendation 38:

## Change Energy Efficiency Culture

Drive culture change to enable the public to understand that improving energy efficiency in homes is the responsible thing to do.

### Scottish Government Response

The Scottish Government supports this recommendation and will publish a bespoke public engagement strategy to raise the profile of energy efficiency and zero emissions heat.

The [Heat in Buildings Strategy](#) commits to implementing a bespoke public engagement strategy for heat in buildings. This will build on the Scottish Government's Net Zero Nation campaign (which highlights home energy as a key area), and the guiding principles of the [Scottish Government Public Engagement Strategy for Climate Change](#), as well as the Assembly's recommendation.

The strategy will focus on raising the profile of energy efficiency and zero emissions heating options so that people are aware of the benefits and begin to see them as a positive choice, enabling people to actively participate in shaping the development of Scottish Government policy and incentives, as well as local level heat and energy efficiency planning, and promoting the support that is on offer from both the Scottish

and UK Governments to maximise take up over the five years of this strategy.

Further to this, Local Heat and Energy Efficiency Strategies will also form a basis for local public engagement, and will be in place for all local authority areas by the end of 2023. There is also ongoing Scottish Government supported activity to encourage uptake of low and zero emissions heating, for example through [Warmer Homes Scotland](#) and [Home Energy Scotland](#).

The relaunch and expansion of our Green Homes and Business Network will also support people to learn from households, businesses and organisations who have already taken action to make their property warmer, greener and more efficient.



Recommendation 39:

## Sustainable Diet Public Information Campaigns

Initiate public information campaigns, including education for children and families, that deliver accessible advice and information on transitioning to a sustainable diet.

Children's Parliament: Teach children and adults about environmentally-friendly diets and reducing food waste.

Children's Parliament: Make community gardens and allotments for everyone. This would involve teaching children and adults about growing their own food, and using schools for giving out saplings, seeds and tools. Have a special day in Scotland where everyone works in their gardens to grow food.

Children's Parliament: Launch a national plant-based diet week to raise awareness.

### Scottish Government Response

The Scottish Government supports this recommendation and will continue to provide advice and information on the benefits of healthy, nutritious, plant-based and low carbon foods, including sustainably produced fruit, vegetables, fish, seafood and meat.

The Scottish Government has a number of existing programmes of work that support people to increase their consumption of fruit, vegetables and fibre. The Healthy Living Programme operates in over 2,300 convenience stores and helps to increase fruit and vegetable purchases through signage and training. Parent Club promotes tips and skills for healthier eating for families living on a budget and includes over 200 recipes, based on healthier eating criteria and aimed at increasing the intake of fruit and vegetables.

Funding for Community Food Networks helps groups to provide access to healthier, affordable and culturally appropriate food and drink, especially those experiencing socio-economic disadvantage. These groups are also closely linked to community growing groups.

Our national climate change marketing campaign, Let's Do Net Zero, included food as one of four main areas for messaging. As part of the work to promote this campaign, Scotland's national chef, Gary Maclean, developed a number of healthy recipes and posted them on social media. We also engaged a team

of social media influencers, some of whom were food bloggers and focussed their content on healthy eating and sustainable diets. Our Net Zero Nation website also includes a section on [eating sustainable foods](#), and links users to Food Standards Scotland advice, guidance and a seasonality calendar.

A report from the Carbon Trust found that if more people in Scotland adhered to existing dietary guidelines, it would result in health benefits and reduced greenhouse gas emissions. Food Standards Scotland have developed Eat Well Your Way, an online resource that helps consumers understand what a healthy balanced diet looks like in real life by translating the Eatwell Guide into meaningful, practical advice and tips to help people in Scotland make healthier food and drink choices when planning, shopping and eating out.

The resource contains a number of sustainability messages including reducing food waste and eating less meat. The resource is due for public launch in January 2022, and we will increase the sustainability messaging as it develops.

The Scottish Government funds a number of schemes that support children and adults to learn about growing their own food. In 2022 this will include [Dandelion](#) (part of Unboxed, a celebration of creativity taking place across the UK in 2022), a Scotland-wide initiative aiming to make 'grow your own' easy and accessible to people of all ages across Scotland. As part of this, 100,000 children and young people will be invited to participate in the Dandelion School Growing Initiative, aiming to engage the next generation of growers.



In addition, the Royal Highland Education Trust have, since 2012, run a programme in schools to help ensure children can explore where food comes from and [Education Scotland's Food for Thought Education Fund](#) (now in its eighth year) gives financial support to schools to enhance food education that children and young people already receive through Curriculum for Excellence. Focusing on all aspects of food and drink, skills such as growing, harvesting and cooking food can be developed along with learning about the environmental impact of our food choices. Schools are also involved in the Community Climate Asset Fund, where over £3 million of Scottish Government funding was provided to community groups to promote a range of measures including food growing.

The Children's Parliament call to action suggests the creation of a national week to raise awareness of the emissions associated with different diets. Scotland's Climate Week is a week-long programme of events and initiatives organised by businesses, organisations and communities across the country to celebrate Scotland's actions on Climate Change. In recent years themes have included diet alongside energy and transport. We encourage everyone to think about how they could use Climate Week to run their own events focussed on the climate issues they are most passionate about.

## Recommendation 40: Education Programmes

Include carbon emissions and reduction topics in all relevant education programmes.

**Children's Parliament:** Make sure children and young people have information about the climate emergency in Scotland.

**Children's Parliament:** Make sure all children and adults learn about climate change. This would involve hearing from experts in climate change and helping children and adults learn green skills that will help tackle the climate emergency like: How to grow food and compost; How to recycle properly; How to repair and mend things; How to have a climate friendly diet; How to plant trees and protect wildlife.

## Scottish Government Response

The Scottish Government supports the Assembly's recommendation that carbon emissions and reduction topics should be included in all relevant education programmes.

Learning for Sustainability is an approach to life and learning which enables learners, educators, schools and their wider communities to build a socially-just, sustainable and equitable society. In light of the campaigns by groups such as Teach the Future, the various school-related recommendations from the Climate Assembly and the strong focus on climate education at COP26, the Scottish Government is currently working to update and strengthen its [Learning for Sustainability Action Plan](#). This plan sets out how we will help to support Learning for Sustainability as a cross-curricular and cross-age group concept in schools, and ELC settings.

We commit to ensure that the content of this strengthened plan takes full

account of, and responds to, the Climate Assembly Recommendation for Education Programmes as well as the Children's Parliament calls to action to "make sure children and young people have information about the climate emergency in Scotland" and to "make sure all children and adults learn about climate change". The details of the strengthened plan will be developed in partnership with stakeholders, but its key themes will likely focus on whole school approaches, a stronger focus on climate education as part of the broader Learning for Sustainability concept and on supporting children and young people's voice. An entitlement to Learning for Sustainability is already embedded in Scotland's curriculum and the Scottish Government continues to work with

partners across the education system to promote and implement our [Learning for Sustainability Action Plan](#).

As to broader education, alluded to in the Children's Parliament calls to action, to ensure that wider society including adults learn about climate change, the Scottish Government is developing the plans for implementing our [Net Zero Nation Public Engagement Strategy](#). This Public Engagement Strategy sets out our vision: for all of Scotland to understand the challenges we face and embrace their role in our transition to a net zero and climate

ready Scotland. The Scottish Government will incorporate the Climate Assembly's and the Children's Parliament calls to action when developing these plans. This will be in addition to: current efforts including though the Scottish Government's national marketing campaign, Let's Do Net Zero; our new website, [netzeronation.scot](https://netzeronation.scot) (which is a one-stop shop for individuals, communities, and organisations looking for information about what they can do to address the climate emergency in all aspects of their life); and work to support community-led climate action.

“The recommendations made it really clear how important it is to teach our young people about the climate emergency. I'm proud that the government is responding to this by revising our programmes to give them the skills they will need.”

**Cabinet Secretary for Education and Skills,  
Shirley-Anne Somerville MSP**





## Recommendation 41:

## Employment Training Campaigns

Run a public information campaign about training opportunities, in order to attract people into greener industries, including targeted information for people currently working in 'brown' sectors such as oil and gas and in sectors that are dependent on oil and gas.

Children's Parliament: Make sure all children and adults learn about climate change. This would involve hearing from experts in climate change and helping children and adults learn green skills that will help tackle the climate emergency like: How to grow food and compost; How to recycle properly; How to repair and mend things; How to have a climate friendly diet; How to plant trees and protect wildlife.

### Scottish Government Response

The Scottish Government supports the Assembly's desire to increase the attraction for people to work in greener industries including those currently working in, or dependent on, oil and gas sectors.

As part of a national mission to create new jobs, good jobs and green jobs, the Scottish Government will continue to ensure that our workforce has the skills required to support Scotland's transition, and seize the opportunities presented by the transition. The [Climate Emergency Skills Action Plan](#) (CESAP), published at the end of 2020, is central to achieving this aim. The principles of a just transition have been embedded throughout the development of the CESAP and will be at the heart of its implementation. Going forward, we will work closely with sectors to ensure that the interventions meet the needs of both the people and places who will be affected by the jobs and skills implications of the transition in that sector.

Following the recommendations from Scotland's Climate Assembly and the Just Transition Commission, an Implementation Steering Group has been established to drive activity and to develop an Implementation Plan to set out a route map for skills provision. Part of this includes working with Skills Development Scotland and partners to design the Green Jobs Workforce Academy which will be a national long term programme to support the retraining and upskilling needed for the transition to net zero. We will ensure that this work considers promotion and outreach of this scheme, as well as other related programmes, to increase the number of skilled individuals in green jobs as well as to increase attraction to green roles. We will also develop a skills guarantee

for those in carbon intensive sectors as part of this work.

We are also working with the Energy Skills Alliance (ESA) which is a cross energy collaborative group. It was established to develop an integrated skills strategy for a vibrant net zero energy industry. Further information on the work of ESA can be found [online](#).

We recognise that the energy transition will require the creation of a more flexible, agile and diverse energy workforce. Through our Energy Transition Fund, we are also

supporting the development of the National Energy Skills Accelerator (NESA) which will play a critical role in ensuring the industry has access to the key skills and capabilities required.

As part of a refreshed Scottish Energy Strategy, we will also deliver our first Just Transition Plan. This will set out how the economic and social impacts of the transition will be managed. It will have co-design at its heart, meaning those who stand to be most impacted by the transition to net zero are given the loudest voice in determining their future.

#### Recommendation 42:

### Education on Sustainable Transport

**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.**

#### Scottish Government Response

**The Scottish Government supports this recommendation, recognising the importance of education to encourage a shift towards more sustainable modes of transport.**

We will continue to promote public and active transport in Scotland. Our public information campaign, [Net Zero Nation](#), launched in June 2021, includes a wealth of information about the benefits of active travel and public transport, and how to transition from car use. The site aims to help the public to play their part in tackling the global climate emergency, provides resources for community action, and is a hub for

Scotland's collective response to the climate emergency.

In August 2021, we published our updated School Transport guidance which placed increased emphasis on promoting greener and healthier travel choices. The guidance set out advice to local authorities given their statutory responsibility for providing school transport.

Topics included:

- Increased focus on active travel, such as through greater use and access to safer walking routes, increased use of cycling, public transport and car sharing to reduce the environmental impact of travel to school.
- Promotion of the Eco-Schools Scotland programme.
- Highlighting clean air legislation and other local/national initiatives.
- Emphasising the importance of moving to the use of zero emission vehicles.

We have committed to produce a route-map that will set out how we will reduce car kilometres driven in Scotland by 20% by 2030. As the route-map develops, we will consider interventions that will help people to reduce car use. We have already begun engagement with young people and pupils – such as the ‘Greener Transport Future’ primary school competition we ran recently alongside COP26. We were delighted to involve the child investigators from the Assembly’s work with Children’s Parliament, and will look to build on that as we move forward.

Recommendation 43:

## Local Living and Four Day Week

Raise public awareness on the value that can be achieved for climate change by embracing localised living and a 4-day, or reduced, working week.

### Scottish Government Response

The Scottish Government supports the recommendation to raise public awareness on localised living and a reduced working week.

We recognise the environmental, health and well-being benefits and efficiency gains that a four-day working week could bring, and are working with local government to develop 20 minute neighbourhoods. Through a £10 million pilot scheme, we will support employers to explore the benefits of moving to a four-day working week. To develop this pilot, we have been engaging with a wide variety of organisations including businesses, trade unions, think-tanks, academics, campaign groups,

voluntary organisations and other governments who have piloted, or are considering piloting, these approaches. This work is helping to raise awareness of a shorter working week and its benefits.

In our [2021-22 Programme for Government](#), and as mentioned earlier, we have committed to revitalising local communities through the development of 20 minute neighbourhoods, bringing together a number of policies and

investments that are already Scottish Government priorities. This includes investment in town centres and a new focus on 'place', which will aid our ambition to 'live well locally'. Implementing localised living will cut across themes of active travel, regeneration, local working and access to greenspace and local services. Raising public awareness will form an essential part achieving this ambition.

Rethinking how our places are lived in, planned, delivered and adapted will help to futureproof our villages, towns, cities and regions from the more extreme and costly impacts of climate change. We will work with local government and other key stakeholders to take forward our ambitions for 20 minute neighbourhoods through investment programmes, planning reform, policy development and delivery, a place and digital strategy, and with hands on support for communities. Place Demonstrators are included in a number of programmes across Government, designed to address a range of policy areas e.g. Climate Action, Community Wealth, Public Health, and Work Local. As part of the Place Based Investment Programme we now have funding available to support place, town centre and 20 minute neighbourhood demonstrator projects and are working with partners to support pathfinders. In addition, Architecture and Design Scotland's Climate Action Towns programme, will test, develop and promote effective place-based investment, approaches and partnerships that deliver benefits

across multiple policy areas. Such activities will promote good practice, facilitate conversations, and offer resources and a route-map for other places to pursue their own climate change goals.

The draft NPF4 sets out how our approach to planning and development will help achieve a net zero, sustainable Scotland by 2045. It promotes local liveability through 20 minute neighbourhoods, reducing the need to travel, and an infrastructure-first approach by directing development to existing city, town and neighbourhood centres and supporting sustainable rural communities. As highlighted in earlier recommendations, we welcome comments on this draft and further information is available from [www.transformingplanning.scot](http://www.transformingplanning.scot).

For sustained longer-term renewal for our cities, towns and villages, we have established a Place Based Investment Programme backed by £325 million over five years. The Programme will ensure that investments in a place are relevant to that place and for the benefit of all the people in that place, and effectively progress our 20 minute neighbourhood ambitions. We have also established a Place Implementation Working Group which brings together key areas of government to facilitate more effective collaborative working on place and connected policy areas such as regeneration, planning, active travel and 20 minute neighbourhoods along with key external stakeholders.

## Goal 9:

# Land Use

**Balance the needs of the environment, landowners and communities across Scotland for sustainable land use that achieves emission reductions.**

**Children's Parliament: Allow only sustainable ways of farming, fishing and crofting. This would include using natural fertilisers and reducing the numbers of animals being farmed or fished.**

**Children's Parliament: Protect wild spaces, coastlines and ancient woods. This would involve creating special sea defences to protect the coastline, cleaning up beaches and rivers, and stopping cutting down trees.**

Scotland's land, its marine environment, and the natural capital it supports have a fundamental role to play in our response to the twin crises of climate change and biodiversity loss, and our green recovery from COVID-19. The way land is managed is one of the most important drivers of biodiversity loss in Scotland. Ministers have defined two key milestones in developing our new biodiversity strategy: halt biodiversity loss by 2030; and restore and regenerate biodiversity by 2045.

Achieving our net zero target, alongside restoring our natural capital will need fundamental changes in the way we use, think about and manage our land and seas. It will require significant changes in land use to deliver substantial increases in forestry and peatland restoration and sustainable land management practices must become standard in all

sectors. It will require balancing the increasing demands on our sea space with growth in renewable energy development, marine protected areas and supporting sustainable harvesting of marine products. These changes must be managed and delivered in a just manner, ensuring this transition helps to provide an economic and environmentally sustainable future for those involved. Following the recommendations from the Just Transition Commission we have committed to a Just Transition Plan for Land Use and Agriculture. As set out in Scotland's Third Land Use Strategy, determining the sustainable mix of land use is and will continue to be a complex task and one that varies throughout Scotland. We will need to work closely with all farmers, crofters, land owners, land managers, stakeholders, the public and delivery partners to reach our goals.



To achieve this, we are taking action to transform our land including:

- Incentivising the maintenance of ancient woodlands and expanding both our native and productive woodlands. We have already created almost 33,000 hectares of new woodland over the last three years and are committed to delivering upon our commitment to plant 18,000 ha a year by 2024/5 increasing new planting, expanding Scotland's national forests and land, and increasing nursery capacity.
- Restoring our peatlands. We are already committed to invest over £250 million to restore 250,000 hectares of degraded peatland by 2030, with over 30,000 ha already restored.
- Supporting our farmers, crofters and land managers to cut emissions, improve efficiencies, and integrate more trees on farms, helping to deliver wider biodiversity and environmental benefits. We have committed £51 million of investment in the National Test Programme over three years to support and encourage farmers and crofters to learn about how their work impacts climate and nature and support carbon audits and nutrient management.
- Establishing five [Regional Land Use Partnership \(RLUP\)](#) pilots during 2021/22 and committing to a second phase from 2023, if the current pilots meet expectations. The pilots are presently setting up their partnership structures, and will develop their Regional Land

Use Frameworks by 2023, taking a natural capital approach.

We are also taking action to transform our coastlines and seas including:

- Changing the way we manage the marine environment, introducing a Blue Economy approach, setting out how the marine environment and marine sectors support climate, biodiversity and wider sustainability outcomes in the Blue Economy Vision, due in 2022.
- Continuing to take a marine planning approach to managing Scotland's marine resources. Scotland's National Marine Plan (NMP) was reviewed in 2021, and Scottish Ministers continue to support the implementation and development of a marine planning framework for the sustainable management of our resources out to 200 nautical miles. The NMP supports development and activity in Scotland's seas while incorporating environmental protection into marine decision-making to achieve sustainable management.
- Leading research to build the evidence base for the inclusion of saltmarsh and seagrass habitats in the UK Greenhouse gas inventory, which will help leverage investment for habitat recovery.
- Stepping up marine protection by designating at least 10% of our seas as Highly Protected Marine Areas by 2026, and putting in place the necessary fishery management measures in our Marine Protected Area network by 2024.

## Recommendation 44:

## Marine Carbon Sequestration

Fulfil the carbon sink potential of the marine environment to establish an holistic enterprise that maximises carbon sequestration and supports sustainable marine food production.

Children's Parliament: Protect wild spaces, coastlines and ancient woods. This would involve creating special sea defences to protect the coastline, cleaning up beaches and rivers, and stopping cutting down trees.

### Scottish Government Response

The Scottish Government supports the recommendation to fulfil the carbon sink potential of the marine environment and is funding a programme of work through the Scottish Blue Carbon Forum to develop our understanding of Scotland's blue carbon systems to enable policy action.

Blue Carbon research is a developing area of growing importance. Scotland recognised this early, establishing the Scottish Blue Carbon Forum (SBCF) in 2018 and, through the SBCF's research, developing the evidence base for blue carbon. The SBCF is also investing in early career researchers to grow the research capacity and the skills base for blue carbon in Scotland. To date we have invested over £650,000 to support research by the SBCF, leveraging additional funding from partnerships.

The focus of the publications of the forum to date, have been on establishing where and how much blue carbon stocks are in Scotland's sediments, saltmarshes and other blue carbon habitats, highlighting hotspots for blue carbon in Scottish inshore and offshore waters. We are also working to understand how blue carbon cycles through, or is stored in these dynamic ocean systems,

including how human and environmental factors impact the ability of the ocean to sequester and store blue carbon.

Other live focus areas of the SBCF include investigating blue carbon in coralline algae beds, blue carbon contribution from seaweed detritus and bivalve shellfish beds, blue carbon sequestration in saltmarshes and seagrasses, blue carbon in Scotland's sea lochs, intertidal environments and sedimentary blue carbon on the Scottish continental shelf and coastal sea and blue carbon land to sea connections.

The next stage in our work on blue carbon is translating the outcomes of this research, as they become available, into policy action, to inform our approaches for integrating ocean ecosystems into current climate mitigation, adaption and resilience policy and where appropriate inform

marine management and marine protected area policy to protect and enhance Scotland's blue carbon habitats. Specific areas of consideration are highlighted below.

We have established that Scotland's shelf and coastal seas hold large quantities of sedimentary carbon but the stability of this carbon is poorly understood, especially where there are increasing anthropogenic pressures from fishing. The SBCF is currently taking forward research to examine and quantify the potential impacts of management practices, particularly the impacts of mobile benthic fishing gear on the long-term stability of Scotland's marine sedimentary blue carbon stores, refining research already undertaken in this area. This work, alongside other research will inform future policy actions under the Futures Fisheries Management Strategy, launched in December 2020 which confirms that sustainability, support for biodiversity and consideration of the wider ecosystem is at the heart of how we manage Scotland's fisheries. The Strategy sets out a vision for Scotland to be a world class fishing nation delivering responsible and sustainable fisheries management, which provides access to a high protein, low carbon food.

In Scotland, we have already exceeded proposed targets under the Convention on Biological Diversity with 37% of Scottish waters being designated as Marine Protected Areas (MPAs). All necessary fishery management measures for these MPAs will be in place by 2024 at the

latest. The current MPA network includes representation of habitats known to be carbon stores, and we are working to better understand the extent and importance of these stores. In addition, the Scottish Government has also committed to designating at least 10% of Scotland's seas as Highly Protected Marine Areas (HPMAs) by 2026, with the protection of blue carbon to be considered in the site selection process.

In Scotland we have three native oyster restoration projects underway, showing the benefit of academic, private and public sector partnerships. Their focus is to improve biodiversity and water quality, and to stabilise the fragile remnant populations of native oysters in Scotland but research is also underway to assess the blue carbon storage capability of native oyster beds and how these restoration projects may contribute to climate adaptation.

As part of our 21/22 Programme for Government, we committed to developing a Blue Economy Vision for managing Scotland's marine environment. This approach recognises the interconnectedness of social, economic and environmental outcomes. Through the Blue Economy Vision, we will set long term outcomes for Scotland's marine space up to 2045, which will include protection and restoration of marine nature, resilient communities, ocean literacy, innovation and entrepreneurship in marine sectors, decarbonisation and support for Net

Zero commitments. Development of Blue Carbon policy actions will support the long term outcomes set out in the Blue Economy vision.

Seagrasses and saltmarshes meet the criteria for inclusion in climate mitigation policy and are already recognized for their climate mitigation value by the Intergovernmental Panel on Climate Change (IPCC). Scotland's indicative Nationally Determined Contribution, published in July 2021, includes blue carbon. Through the research of the Scottish Blue Carbon Forum and work across the UK, we are building the evidence base so that saltmarsh and seagrass can be included in the UK Greenhouse Gas inventory. There is still a lot of work to be done to achieve this but the addition of saltmarsh and seagrass would see a step change in how blue carbon is viewed and will be critical to attracting future investment and driving restoration.

We are also aware of the climate adaption and resilience contribution blue carbon habitats can make in terms of the ecosystem services they provide and their importance as areas of high biodiversity. For example, there is growing recognition that blue carbon habitats are valuable for coastal protection, and act as nursery grounds for commercially important species such as cod and numerous other services. These multiple benefits of blue carbon habitats are also being factored into our decision making.

Globally, market-based approaches are now being trialled for blue carbon, including carbon credits for blue carbon projects and biodiversity credits for blue carbon habitat protection and restoration. Enabling innovative financing models will be essential for scaling mitigation actions for the protection and enhancement of blue carbon ecosystems in Scotland. Through the SBCF we are considering the international examples of financing models and actions required to support development of these approaches in Scotland.

Across the UK Scotland has been leading the way on blue carbon research, and there is now increasing recognition of the importance of blue carbon, with two new UK groups, the UK Blue Carbon Forum and the Blue Carbon Evidence partnership launched during COP26. The SBCF is working with both of these groups to share our learning and help support coordinated activity across the UK.

In recognition of the SBCF's work on blue carbon, it has become the newest member of the United Nations Educational, Scientific and Cultural Organisation, International Partnership for Blue Carbon (UNESCO-IPBC). During COP26 the SBCF brought together the international community for a workshop, Blue Carbon: Beyond the Inventory to share knowledge and build new collaborations. Illustrating our commitment to our new partnership with the IPBC and international leadership on Blue Carbon, the Scottish Government

announced the [Blue Carbon International Policy Challenge](#) which will be led by the Scottish Blue Carbon Forum and provide seed funding for up to five blue carbon policy challenge projects in 2022. These projects will seek to establish blueprints for international and domestic policy action post-COP26, building the momentum to turn research findings into action on the ground which will help protect and restore our seas and oceans, and forge strong relationships with our international partners.

In addition to the marine protected area commitments highlighted above, we are also taking action to reduce marine litter and plastics entering the marine environment through actions committed to in Scotland's Marine Litter Strategy. We also continue to support action by others to reduce marine litter, with £180,000 announced in October 2021 through Marine fund Scotland for the Fishing for litter scheme which has to date removed 1,844 tonnes of marine litter since 2005.

“Assembly members have made clear the importance of tackling the twin crises of climate change and biodiversity loss. That’s why, during COP26, I was delighted to announce our support to six Scottish islands in their journey to be carbon neutral by 2040.”

**Cabinet Secretary for Rural Affairs and Islands,  
Mairi Gougeon MSP**





Recommendation 45:

## Peatland Restoration and Native Woodlands

Commit to higher levels than in current Scottish Government plans of restoring peatlands and native woodlands for carbon sequestration and improving biodiversity.

Children's Parliament: Create more woodlands and peatlands. This would involve helping people who own land to use their land to do this.

Children's Parliament: Create a national tree planting day in Scotland. Everyone would plant a tree, every year.

### Scottish Government Response

**The Scottish Government supports the Assembly recommendation, and commits to increased action on peatland restoration and native woodland creation.**

As a result of a number of calls for an increase in native woodland creation, including the Assembly's, the Scottish Government and Scottish Green Party shared policy programme committed to an increase in our annual native woodland creation target from 3,000 to at least 4,000 hectares for the next 2 years. It also commits to exploring opportunities to go further than this by setting new evidence-based targets for both native woodlands and natural regeneration as part of the 2022 Biodiversity Strategy. Any increase to our existing woodland creation targets will be dependent on further funding being made available.

Woodland expansion is a critical element of our plans to address climate change and help achieve net zero and our updated [Climate Change Plan](#) included new and increased woodland creation targets, rising in steps from 12,000 hectares last year, to 18,000 hectares by 2024-25.

Despite the impact of COVID-19, Scotland's woodland creation continued at pace last year with around 89% of the 12,000 hectares target being achieved by 31st March 2021. This means that 10,660 hectares of new woodland were created – the equivalent of over 21 million trees in the ground, roughly four trees per person in Scotland. Around 40% of this new woodland was native – as was the case in preceding years – with native woodlands being created at varying scales across Scotland, from large landscape-scale projects to small community woodlands.

We are supportive of all types and scales of appropriate tree planting and woodland creation, assisting a range of individuals, organisations, businesses and sectors to do this and encouraging delivery partners to involve children and young people in tree planting.

As woodland creation continues at pace across Scotland, there is a need to balance planting of both faster-growing coniferous trees, and slower-growing broadleaf trees. Both types of trees have a role to play in tackling the climate emergency. Faster-growing coniferous tree species sequester carbon very quickly in the short-term up until harvesting, and in the longer-term provide a carbon store in wood products, avoiding greenhouse gas emissions by substituting materials that involve high greenhouse gas emissions in their manufacture and use, such as concrete and steel. Wood products produced here in Scotland also substitute for imported wood products, including from natural forests elsewhere in the world.

Slower-growing broadleaf tree species can accumulate high carbon reserves, within the woodland itself, in the longer term. Recent research suggests that, typically, for every tonne of carbon sequestered in a new wood product, about one tonne of carbon is also “saved” by avoiding the use of alternative materials. Home grown wood products will also reduce carbon miles to import the wood we use. The forest industries in Scotland support around 25,000 jobs and generate £1 billion every year. Peatland restoration also has an important role as a nature-based solution to the twin crises of the climate emergency and loss of biodiversity and to achieving a just transition to net zero by 2045. As a key component of Scotland's natural capital, alongside their role in capturing and storing carbon and

supporting unique ecosystems and biodiversity, peatlands also deliver a number of other benefits including improvements in water quality, contributing to natural flood management and offering spaces for community amenity.

The Scottish Government began funding peatland restoration in 2021 to reduce greenhouse gas emissions from degraded peat. Since then over 30,000 hectares of degraded peatlands have been set on the road to recovery. In the 2020-21 budget we announced funding of £20 million for peatland restoration with a commitment to invest more than £250 million over 10 years to support restoration of a total of 250,000 hectares by 2030. This level of commitment is recognised internationally and will help to support SMEs that deliver restoration projects, often in remote or rural areas, as well as having wider economic benefits through supporting ancillary businesses such as hospitality, accommodation, and food services providers. It is estimated that by 2024, our investment in peatland restoration will support over 200 full-time equivalent (FTE) jobs.

We are committed to significantly increasing annual rates of peatland restoration in Scotland above current levels of around 6,000 hectares per year, up to and beyond our current annual target of 20,000 hectares per year. New total and annual targets for peatland restoration will come through work next year towards our next full Climate Change Plan,

informed by new sectoral envelopes and on-going scenario analysis on what combinations of peatland restoration, agricultural change, and forest and energy crop planting are needed, and where, in order target our investment to achieve the greatest benefits from each hectare of land and meet any new emissions targets.

In the meantime, we have recently launched a new Scottish Government-led Peatland Programme that, with a wide range of interested parties, will take a holistic approach to protecting, restoring and managing Scottish peatlands and will focus our work on a number of fronts to overcome the barriers to upscaling peatland restoration beyond current levels. This includes streamlining the way our funding flows to a pipeline of

multi-year projects, linking with the new Regional Land Use Partnerships, boosting the confidence of contractors to invest in the people and machinery needed to deliver at scale, and facilitating the flow of private finance into restoration projects to significantly supplement our investment from the public purse.

Peatland ACTION is the Scottish Government-funded peatland restoration programme. Land owners and managers can apply to Peatland ACTION for funding and technical and project management advice to support peatland restoration on their land. The Scottish Government is also committed to helping interested crofting communities play a role in peatland restoration on common grazing land as part of our just transition to net zero.

## Case Study: Native Woodland Creation, Sutherland and Isle of Eigg

Native woodland creation is already happening at varying scales in Scotland, from large landscape-scale projects to small community woodlands.

- The biggest woodland creation scheme in a century was approved by Scottish Forestry last year. The scheme in Sutherland will cover 933 hectares from end to end and will stretch over 12km along Strath Carnaig.
- Nearly all the new trees - 1.4 million in total - will be native species, mostly scots pine and birch, with rowan, oak, aspen and alder. The plan will also see natural regeneration to help grow the woodland over time. The scheme will strengthen the current native woodland networks on a landscape scale.
- At the other end of the spectrum, the Isle of Eigg Heritage Trust took ownership of the island in 1997 and in 2020, in partnership with the Woodland Trust Croft Woodlands Project, they created a new 13 hectare native woodland. This was achieved entirely locally - all the trees were grown in the Eigg tree nursery and the team of planters were all residents.



Cambusmore, Sutherland  
Photo © Scottish Forestry

Recommendation 46:

## Incentivise Land Use to Support Net Zero

Fulfil Scotland's carbon sink potential by incentivising landowners to maximise the land available in order to meet net zero targets.

### Scottish Government Response

**The Scottish Government supports this recommendation and commits to incentivising landowners to increase carbon sequestration and protect carbon stores in Scotland's land.**

This will require a cross-government approach and collaborative working with stakeholders across Scotland.

Regional Land Use Partnerships (RLUPs) can potentially play a part in supporting this collaboration. The five pilots being established this year will test approaches to engagement that help enable stakeholders, including communities, land owners and managers, to work together to identify ways to optimise land use and meet our goals in a fair and just way.

We will continue to encourage and support land use change through grants to support afforestation and peatland restoration. The land use change required to meet our statutory targets presents opportunities for farmers, crofters and land managers to access new income streams. We will work with these sectors to ensure that they as well as local communities share the benefits that come from these opportunities.

We will also seek opportunities for upskilling which will need investment and support to ensure such opportunities are maximised.



Recommendation 47:

## Farming Subsidies to Support Transition

Given the exit from the EU (and the end of the Common Agricultural Policy funding model), the government should work with the farming community to develop a subsidy regime that encourages farmers to transition to more sustainable land management practices, to be fully implemented in the next 5 years.

Children's Parliament: Allow only sustainable ways of farming, fishing and crofting. This would include using natural fertilisers and reducing the numbers of animals being farmed or fished.

### Scottish Government Response

**The Scottish Government supports this recommendation, and we are working with the farming community to develop a subsidy regime that supports sustainable land management practices.**

Our vision for farming and crofting in Scotland is based on producers contributing value to our nation by; producing high quality food, being custodians of the countryside and forming the backbone of our rural communities.

We are committed to working with industry and partners to best enable the sector to contribute to our world-leading emissions targets and ensure a just transition for all involved. We have established an Agriculture Reform Implementation Oversight Board, and launched the Agriculture Transition in Scotland consultation, based on recommendations from Farmer-Led Groups, to inform work on the development of agricultural policy to replace the Common Agricultural Policy (CAP).

We have announced a National Test Programme which will begin in Spring 2022, with up to £51 million of investment over three years. This Programme will support and encourage farmers and crofters to learn about how their work impacts on climate and nature, including offering financial support to carry out carbon audits and nutrient management plans, establishing a clear baseline and options for action for all who participate.

The Programme will also help to understand how sustainable farming can be supported and rewarded in future, through work with a focus group of farmers and crofters. This will ensure the right tools and support are in place when, from 2025, the climate and biodiversity performance of businesses will

determine the level of agricultural support payments.

It will also put in place livestock data and performance systems for businesses in the beef sector with the aim of improving both business and emissions performance.

This will build on work to date such as the pilot Sustainable Agricultural Capital Grants Scheme which offered £17 million funding to over 3,700 farmers and crofters for low emissions farming equipment to support them in the delivery of direct and indirect greenhouse gas reductions. NatureScot is currently piloting a range of approaches, including a farmer-led outcomes based approach with a small number of farmers, to inform what rural support could look like after CAP (see case study).

We have also run a consultation, "Agricultural Transition in Scotland: first steps towards our national policy". It will ensure everyone can play their part in shaping the future of farming, food production and land use in Scotland.

We will bring forward a further consultation on the options for future agriculture and wider land use support, and through a Parliamentary Bill to replace the current CAP framework, provide a support structure that will deliver climate mitigation and adaptation, nature restoration and high quality food production.

## Case Study: Piloting an Outcome Based Approach with NatureScot

Piloting an Outcomes Based Approach in Scotland (POBAS) is an established NatureScot-led project working with 70 farmers and crofters in seven clusters across Scotland (Outer Hebrides, Shetland, Skye, Argyll, Strathspey, East Lothian, and Dumfriesshire) to test innovative approaches to delivering environmental outcomes on farms and crofts in Scotland. The project is testing the implementation of a less prescriptive, results-based approach in Scotland where the level of payment received is dependent on the quality of the outcome delivered.

Phases 1 & 2 ran from April 2019 to March 2021 and received positive support and feedback from participating farmers, crofters, and stakeholders. This initial work focussed on working with farmer clusters to identify outcomes that could be delivered for different farm types in their region; developing habitat scorecards for measuring quality of outcomes and monitoring, and setting out the basis for trialling actual payments and management on the ground in future years.

Phase 3 is due to run from April 2022 and beyond to 2024. This involves individual farmers and crofters working with NatureScot to test the score cards on their farms/crofts, trial use of a Natural Capital App, explore management required to improve their scores, and explore payment rationales that would incentivise positive action.



Islay Farmland

© Lorne Gill/NatureScot

NatureScot is the operating name of Scottish Natural Heritage.

## Goal 10:

# Communities

## Empower communities to be able develop localised solutions to tackle climate change.

A just transition puts people, communities and places at the heart of our approach to climate change action. Delivering our vision successfully by 2045 will mean that our places and communities will support well-being and healthier lifestyles for people, while driving regional inclusive and sustainable economic growth. Communities, therefore, have a fundamental role to play in our response to the global climate emergency and to achieving our net zero target and we are committed to ensuring they are at the forefront of our green recovery and a just transition to net zero.

The Scottish Government is committed to taking a place based approach addressing the needs of communities and realising their potential. We will work with local communities in order to improve people's lives, support economic growth, and create more successful places, and communities are uniquely placed to play a critical role in shaping and driving forward climate action. As underlined in our [Public Engagement Strategy on Climate Change](#), we will take a participatory approach to policy making to ensure that people are shaping just, fair and

inclusive policies that promote the mitigation of and adaptation to climate change. Communities will have a key role in this; the transition to net zero will affect our day-to-day lives in all sorts of ways and we are committed to ensuring that people, places, and communities are empowered to play a decisive role in shaping these changes.

Encouraging transformational change across all of our communities and supporting them to be climate ready is vital in our just transition to net zero. As highlighted under Goal 8, encouraging community climate action is a key part of our activities and initiatives to engage the public on climate change. With that in mind, we are continuing to provide funding and support for community climate action to enable people to, collectively, explore and adopt low carbon behaviours and build local capacity for continued bottom-up change. This includes supporting communities to make the transition to low carbon and climate resilient living through:

- Community Climate Action Hubs, which will provide a vehicle for communities to come together and engage in collective climate action,

empowering them to develop local solutions to making the transition to net zero and climate resilient living.

- Working with Architecture and Design Scotland to deliver a network of Climate Action Towns, targeted at small towns with little historical engagement in climate action and complementing other placed based initiatives
- Delivering peer to peer networking and learning through Scottish Communities Climate Action Network (SCCAN)
- Working to embed climate objectives into all mainstream funding
- Improving community involvement in the planning system, including through community led Local Place Plans, which were introduced by the [Planning \(Scotland\) Act 2019](#).

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will be working with the Scottish Community Development Centre (SCDC) to explore and develop Green Participatory Budgeting initiatives.
- We will consider the Assembly's recommendations as we review the Land Rights and Responsibilities Statement, and as part of the new Land Reform Bill.



**Recommendation 48:****Community Low Carbon Heating**

**Provide government incentives for local authorities and social housing providers to work with communities to develop low carbon heating systems in neighbourhoods.**

**Scottish Government Response**

**The Scottish Government supports providing incentives for local authorities and social housing providers to work with communities on low carbon heating systems.**

We will continue to work closely with councils and social landlords through the Heat in Buildings programme. We are supporting the development of Local Heat and Energy Efficiency Strategies, as well as ongoing delivery through our Area Based Schemes, and Scottish Cities Alliance. We are also funding local action, engagement and leadership in the development of low and zero emissions heating systems through our Community and Renewable Energy Scheme (CARES), Social Housing Net Zero Heat Fund and the Low Carbon Infrastructure Transition Programme.

Local Heat and Energy Efficiency Strategies (LHEES) will be in place for all local authority areas by the end of 2023. They will set out the long-term plan for decarbonising heat in buildings and improving their energy efficiency across an entire local authority area, and form a basis for local community engagement.

Community engagement should not just be linked to the consenting process. We believe it has a strong

role to play in decisions to designate heat network zones. As set out in the [Heat in Buildings Strategy](#), LHEES will form a basis for local public engagement, awareness raising and involvement in decision making at the local level, and will facilitate extensive engagement with local communities. The heat networks aspects of LHEES will be the first phase in heat network zoning, as such we propose that we embed community engagement into the heat network zoning process as we develop a more detailed methodology.

The Area Based Schemes (ABS), funded by the Scottish Government, provide a locally planned and targeted approach that works well for communities. ABS target the 'hardest to treat' properties requiring external wall or complex cavity wall insulation, making homes warmer and less expensive to heat. By leveraging investment by private and social landlords, Energy Company Obligation finance and Scottish Government funding, ABS projects have been successful in delivering

these improvements for mixed tenure and multi-occupancy properties (e.g. flats, terraces, council estates/projects). Since 2019 we have expanded the scope of ABS projects to include provision of zero/low carbon heating and microgeneration (solar PV etc.), where this is technically feasible and will help to reduce fuel poverty.

In line with our commitments in the Programme for Government, the Scottish Government has increased our annual investment in local ABS projects to £64 million in 2021-22. We plan for many more projects to include whole house retrofits and expect to see up to 600 fuel poor households benefitting from new Air Source Heat Pumps in 2021-22. ABS has also supported the expansion of District Heat Networks and we work closely with our local delivery partners to improve and expand programme delivery.

Our current Community and Renewable Energy Scheme (CARES), with an annual budget of around £8 million, will give priority to support community-led projects to address and champion heat decarbonisation at a local level. Through CARES we will work to understand further the funding models and solutions most appropriate for the delivery of community-led renewable heat projects in Scotland.

The [Heat in Buildings Strategy](#) also commits to explore the opportunity to work together to integrate these community renewable heat models with emerging community climate action initiatives such as Climate

Action Towns and Community Climate Action Hubs, where there are real opportunities for citizens to shape the future development of their communities.

In the second half of 2020, we launched the Social Housing Net Zero Heat Fund, to support social housing landlords across Scotland to take forward projects to deploy zero emissions heat, improve energy efficiency and reduce fuel poverty. We have committed to extend the fund over the next five years with a total value of £200 million over this Parliament. The fund is a capital grant fund that has been designed to accelerate the delivery of energy efficient, zero emission heat provision to social housing projects across Scotland.

As the current Low Carbon Infrastructure Transition Programme (LCITP) draws to a close in 2021, we are developing a successor programme as the primary mechanism for deploying zero emissions heat at scale, co-ordinating our support for the roll-out of heat networks and heat infrastructure. To achieve this, we will invest £400 million over the next five years in large-scale heat decarbonisation infrastructure. The successor to the LCITP will offer a comprehensive package of financial and wider support across capital and development needs to large-scale heat decarbonisation projects. This funding will be made available to a wide range of organisations including Local Authorities and Registered Social Landlords.

We are committed to working with the sector to assess the impact of funding to date and ensure that our funding effectively supports further acceleration of decarbonisation of our housing stock.

In relation to heat networks, Part 2 of the [Heat Networks \(Scotland\) Act 2021](#) requires community engagement reports to accompany applications for heat network consent. We intend to publish guidance to support community engagement in the heat networks

sector. There are a number of existing community engagement models, including the model used in the Planning System, as well as best practice guides such as the Citizens Advice Scotland's "Engaging Heat and Minds" report.

We are seeking views in our Draft Heat Network Delivery Plan on how best to ensure effective and meaningful community engagement and are interested in what models could be adopted for heat networks.

#### Recommendation 49:

### Community Engagement

**Provide government support for community engagement, to empower local people to make decisions around their needs and conduct transparent consultations.**

#### Scottish Government Response

The Scottish Government supports the Assembly's recommendation to provide government support for community engagement, to empower local people to make decisions around their needs and conduct transparent consultations.

An expert working group has been established to set out how the use of deliberative processes can be made a routine part of policymaking and public service processes in Scotland. These recommendations will help guide the Scottish Government's approach to future citizens assemblies and other engagement, and will reinforce the need to consider how this will support engagement within a community setting.

The new [Open Government Action Plan](#) will set out a continued commitment to improving participation and engagement across the Scottish Government, as well as establishing a Network for Participation which will aim to support grassroots participation within communities across Scotland.

The Scottish Government is committed to a Scotland in which everyone can play a full part in society, with empowered communities able to shape their

individual and collective futures, and we have backed this aspiration by introducing the [Community Empowerment \(Scotland\) Act 2015](#), enabling communities to have more control over the decisions that affect them, and to develop their own economies, well-being and environments.

We have introduced Participation Requests, which help people start a dialogue about the things that matter to their community; to have their voice heard in policy and service development through contributing to decision-making processes, and to challenge decisions and seek support for alternatives, which improve outcomes.

Our Asset Transfer legislation gives community organisations a right to ask to take over control of land or buildings owned by local councils, the Scottish Government, and other public authorities, and is designed to encourage and support the ownership and control of assets by communities and should be considered in situations that recognise the public benefits that the community use will bring.

Outwith legislation the Scottish Government supports [participatory budgeting](#) as a tool for community engagement and as a way to build on the wider development of participatory democracy in Scotland. Our national support programme is delivered in partnership with local authorities, communities and third

sector organisations, and implemented across policy areas from policing to health and social care, transport and education. Over the last few years this enabled over 122,000 voters to have a direct say on the dispersal of more than £6.6 million, with around 47,000 people attending events across the country. We will continue to work with the National Participatory Budgeting Strategic Group, which includes representatives from Scottish Government, the public sector, community and third sector groups, academia and participatory democracy. The Group will help deliver on the new [Participatory Budgeting Strategic Framework](#) for Scotland with a particular focus on health and well-being, education, housing and climate justice.

Scotland's planning system plays an important role in engaging people in considering the future of their places. We are continuing to strengthen and broaden public involvement in the planning system. We have brought forward new regulations to support the introduction of Local Place Plans into the planning system and will prepare statutory guidance on effective community engagement in local development planning.

Our Just Transition Plans will ensure communities are partners in the design process, providing targeted support for capacity and capability building where most impactful.

## Recommendation 50:

**Community Land Ownership Reform**

Empower local communities to manage underused, unproductive, and/or unoccupied land around them in ways that address the climate emergency through rapid and decisive movement on land ownership reform.

**Scottish Government Response**

The Scottish Government supports this recommendation and is already delivering against it through enhanced action over the course of this Parliament.

It is important that local communities are supported to make the best use of underused land to help tackle climate change, whether that be for carbon sequestration, energy generation or food production.

The powers required to implement this recommendation are devolved, and, as such, we are already undertaking work in Scotland, through a sustained commitment to land reform that addresses this recommendation.

The Scottish Government has a long running programme of land reform activity. The pre-emptive community right to buy was established in the early days of devolution, in the [Land Reform \(Scotland\) Act 2003](#). The community right to buy was extended to urban communities through the [Community Empowerment \(Scotland\) Act 2015](#). There are also community rights to buy abandoned, neglected and detrimental land, and a right to buy land to further sustainable development.

The Programme for Government 2021/22 commits to further land reform and supporting community ownerships by introducing a new Land Reform Bill by the end of 2023 (following wide-ranging public consultation) and doubling the Scottish Land Fund to £20 million over the course of this Parliament.

The new Land Reform Bill will aim to ensure that the public interest is considered on transfers of particularly large-scale land holdings. We aim to introduce a pre-emption in favour of community buy-out where the public interest test applies and where it is appropriate to do so. The proposals for the new Bill will complement existing community right to buy mechanisms in Scotland.

Through the [Scottish Land Fund](#), the Scottish Government supports communities to become more resilient and sustainable through the ownership and management of land and land assets. The Fund offers grants between £5,000 and £1 million to help communities take ownership



of land and buildings and provides practical support to develop their aspirations.

Scotland also has a long history of supporting regeneration through our well established programmes. The Place Based Investment Programme builds on the relationships and experience of delivering the Regeneration Capital Grant Fund which has been a transformative part of supporting community ownership, enabling communities to bring land and assets into positive and productive use, benefitting local economy and well-being through creation of jobs and delivery of community services. We continue to progress our action on town centre revitalisation, building on the world recognised Town Centre First approach, supporting the reimagining of our high streets. The Vacant and Derelict Land Programme provides a further route to supporting the transformation of persistent derelict

land, enabling sites to become viable for new use that can improve the lives and prospects of communities.

The Empowering Communities Programme complements the wider place based investment by providing support to community anchor organisations to build their capacity, resilience and sustainability through enabling them to take ownership of land and buildings. This is achieved through for example our sponsorship of the Community Ownership Support Service (COSS) providing advice and guidance to community organisations seeking to manage, own or buy land or building assets and the support delivered through the Strengthening Communities Programme to build core organisational skills and capacity.

Regeneration programmes are delivered through a place based approach which support our ambition toward a just transition to net zero.

#### Recommendation 51:

### Funding for Community Climate Action Projects

Introduce a pot of money for community projects (this could be ring-fenced money collected from Land Carbon taxes) to be used to invest in community-based climate action projects e.g. rewilding, peatland restoration, growing projects.

#### Scottish Government Response

The Scottish Government supports the Assembly's recommendation that funding be available to be used to invest in community-based climate action projects.

Communities are uniquely-placed to play a critical role in shaping and

driving forward climate action. We want to empower people to take

action in their own communities and in their own lives.

Climate objectives are being embedded across all Scottish Government community funding streams as demonstrated by the Scotland Loves Local and Island Communities Funds launched earlier this year. The next phase of the Investing in Communities Fund anticipated for 2023-26, which has a focus on community-led regeneration, has integrated climate criteria in order to support a just transition to net zero. This builds further momentum on the current phase of Investing in Communities Fund, which is already supporting many projects focussed on tackling poverty and disadvantage, while supporting climate change through for example re-use projects, energy advice through to local growing projects.

In our Programme for Government, we committed to explore the use of Participatory Budgeting (PB) as part of our wider support for community-led climate action and in response to recommendations from the Just Transition Commission to implement green participatory budgeting (Green PB) with agreed target levels of funding and to develop new methods for funding a just transition to net zero that mobilises finance towards local projects. We will work with the Scottish Community Development Centre (SCDC) in 2022 to explore and develop Green PB initiatives. With SCDC's support, we will seek to embed climate principles into participatory budgeting initiatives undertaken by local authorities,

building on the agreement between the Scottish Government and COSLA that at least 1% of council budgets will be subject to Participatory Budgeting by 2021/22.

In addition to the mainstream community funding streams, a number of Scottish Government funds are available for specific areas of climate action. For example we are committed to significantly increasing peatland restoration in Scotland, and through our new Scottish Government-led Peatland Programme, we are working on a number of fronts to overcome the barriers to upscaling peatland restoration. The Peatland Action project, being delivered through NatureScot and other partners, is a multi-annual investment in peatland restoration, committing £250 million over 10 years to support restoration of a total of 250,000 hectares of peatland by 2030.

Alongside funding we are building a new model to support community climate action via a developing network of regional climate action hubs, providing a vehicle for communities to come together and engage in collective climate action. Two pathfinders hubs were launched in September 2021 and we are aiming to have national coverage of hubs in the next 12 months. In order to support communities to take climate action and to build capacity until the network is in place, we will fund 10 local support officers across 10 regions. This will be led by the Scottish Communities Climate Action Network (SCCAN). There are a number

of funding streams available to communities in addition to Scottish Government funding. We recognise it can be challenging to identify all available funding streams. The climate action hubs will seek to support communities to identify suitable funding. The Scottish

Community Alliance's website also seeks to list all available funding.

The Scottish Government will continue to review available funding and any additional steps required to support community led climate action.

#### Recommendation 52:

### Enhance Community Right to Buy

Enhance Community Right to Buy legislation to make it easier for communities to take ownership of unproductive land for climate action, alongside providing clear policy guidance on how community owned land should be managed.

#### Scottish Government Response

**The Scottish Government supports the Assembly's ambition for communities to take ownership of unproductive land for climate action.**

The Scottish Government believes land reform can play a key role in our just transition to net zero. Scotland has a long history of land reform and communities across urban and rural Scotland can acquire land and buildings via the statutory Community Right to Buy. As mentioned in Recommendation 50, this gives communities a wide range of options including buying abandoned, neglected or detrimental land and land for sustainable development. Communities will be supported to do so through the enhanced Scottish Land Fund, which, as previously mentioned, will be doubled to £20 million by the end of this Parliament.

We have an ongoing and unwavering commitment to progressive land reform. The Land Reform (Scotland) Act 2016 brought in further land reform measures, including the world's first Land Rights and Responsibilities Statement. This statement is due for review and on 5 November 2021, we launched a consultation on any updates required to the statement, including to reflect the twin challenges of climate change and COVID-19 recovery. We will ensure we consider the Assembly's recommendation as part of this process.

The new Land Reform Bill will build on existing land reform measures to achieve greater equity and help deliver a just transition. We remain

committed to working with all stakeholders, including land owning interests, community representatives and the public to develop policy and legislative solutions for inclusion in the Bill, and will undertake a programme of stakeholder engagement as these proposals are developed. We will ensure we consider the Climate Assembly's recommendation as part of this process.

The Scottish Government provides guidance online to communities and individuals on the right to buy, and on engaging communities in decisions related to land. We also provide guidance, via email, phone or face-to-face, to community bodies wishing to acquire land (or bring land back into productive use), as well as owners and interested third parties. We also provide funding to [Community Land Scotland](#) and [Development Trusts Association Scotland](#) to enable them to support communities to achieve their objectives. Ultimately we believe individual communities are best placed to determine how to use land they acquire to meet their local aspirations.

## Goal 11:

# Circular Economy

**Strive to be as self-sufficient as possible, with a competitive Scots circular economy that meets everyone's needs in a fair way.**

A circular economy is one where resources are kept at as high a value as possible, for as long as possible. The circular economy represents an enormous economic and industrial opportunity for Scotland and contributes directly to a green recovery from COVID-19. It tackles emissions through influencing product design, manufacturing and waste and resource management, and is a vital part of sectors delivering their net zero aspirations.

The COVID-19 pandemic impacted the Scottish Government's legislative agenda and as a result, we did not introduce a Circular Economy Bill in the last session of Parliament. We remain committed to achieving circular economy outcomes and will continue to work with stakeholders to pursue these. We are committed to introducing a Circular Economy Bill later in this parliamentary session and legislative plans will be set out in future Programmes for Government. As we continue to develop the Bill, we will ensure the Assembly's recommendations are considered.

Ahead of the introduction of the Bill we are working with our enterprise agencies to support Scottish businesses to introduce circular

economy principles. Our partner, Zero Waste Scotland, administer the Circular Economy Business Support Service which offers investment for SMEs based in Scotland. The Extended Producer Responsibility scheme will help to create market opportunities for businesses to reduce packaging and invest in reprocessing.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We will consider the Assembly's recommendations as we develop plans for our Circular Economy Bill.
- We will consider the Assembly's recommendation to incentivise the use of Scottish grown and produced materials in house construction as we develop our construction sector Recovery Plan.
- Our Retail Strategy will promote local production and a reduced carbon footprint in response to the Assembly's recommendations.



## Recommendation 53:

**Sustainable Business Loans**

Introduce government backed sustainable business loans for companies and start-ups to invest in innovation in reuse and reprocessing in Scotland and creating commercial demand for repurposed/remanufactured materials.

**Scottish Government Response**

The Scottish Government supports the Assembly's recommendation that government backed sustainable business loans should be available for companies and start-ups to invest in innovation in reuse and reprocessing in Scotland, and creating commercial demand for repurposed/remanufactured materials.

Our enterprise agencies - Scottish Enterprise, Highlands and Islands Enterprise and South of Scotland Enterprise - support companies to introduce circular economy practices. The agencies provide advice and connections to companies through their Sustainability Specialists and Scottish Manufacturing Advisory Service (SMAS) teams. As part of its [Net Zero Framework for Action](#), Scottish Enterprise has committed to working with businesses and supply chains to scale-up the adoption of circular business models, building extended life, re-use and remanufacture into the design of products and services. This will be delivered through grant programmes supported by the Green Jobs Fund and the Low Carbon Infrastructure Transition Programme. South of Scotland Enterprise is co-sponsoring a CivTech Sprint Challenge with Zero Waste Scotland ([How can we use technology to support the circular economy and Net Zero ambitions?](#)) which is designed to stimulate private sector solutions that promote circular

economy business models and help cross-sector organisations to work more collaboratively.

In addition, a range of government support is also available through Zero Waste Scotland for businesses looking to develop circular business models under the guise of the Circular Economy Accelerator. This includes the Circular Economy Business Support Service, administered by Zero Waste Scotland, which offers investment for SMEs based in Scotland and supports work that will deliver circular economy growth. It also includes the £18 million Circular Economy Investment Fund designed for small and medium sized businesses and organisations in Scotland working in all business and social economy sectors who are helping to create a more circular economy. It's also the case that through polluter pays policies such as Extended Producer Responsibility, of which the Deposit Return Scheme is the most visible example, market opportunities are created for

businesses to reduce packaging and invest in reprocessing.

In addition, the Scottish National Investment Bank offers long-term, patient finance on commercial terms to projects and businesses that can have potentially transformative impacts in Scotland's society and economy. The Bank can offer both debt and equity, and looks to attract

private capital to its investments. It can also operate alongside capital from other public sector bodies. The Bank is a mission-led investor with three strategic missions focussed on: the just transition to net zero; building communities and promoting equality of opportunity; and harnessing innovation.

#### Recommendation 54:

### Reduce High Carbon Construction Materials

Incentivise the use of Scottish grown and produced materials in house construction by setting targets to reduce the use of high carbon construction materials and increase the use of carbon neutral materials.

#### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to reduce the use of high carbon construction materials and increase the use of Scottish grown and produced sustainable/carbon neutral materials in house construction.

The construction industry will deliver a significant element of Scotland's net zero commitment. The Scottish Government supports plans for a more sustainable, productive, innovative and diverse construction industry. Working through the Construction Leaders Forum's (CLF's) Transformation sub-group, we are building on existing work to prepare the industry to deliver a net zero carbon built environment. This is an ongoing action in the [Recovery Plan](#), which sets out our overall vision of a safe, productive, profitable, digitally-enabled, low-carbon, and socially responsible construction industry

which offers quality jobs and fair work to a highly skilled and diverse workforce, and a quality and life-time value product to its customers. The recovery plan recognises that wide-ranging changes will be needed across the industry to prepare for the new decarbonisation workload, constructing and refurbishing our net zero carbon built environment, and transforming the industry in response to the well-being economic recovery.

Reducing the embodied carbon of the products and materials the construction industry uses to deliver net zero by 2045 will be one element

of this, and work has already taken place to encourage increased use of local, sustainable and recycled materials to minimise embodied carbon. This includes consideration of a specified minimum content of sustainable natural materials or recycled materials in new buildings.

Work is still ongoing through the recovery plan to achieve: low embedded carbon materials as a central feature of life-cycle net zero assets; prioritisation of local supply

chains which support a whole life net zero sector, and development of clusters including for timber products and recycled materials. This includes working closely with the Construction Scotland Innovation Centre (CSIC) who are exploring alternative solutions to traditional methods and materials used for construction. The Scottish Government will consider carefully the Climate Assembly's recommendation above as the work on the recovery plan progresses.

Recommendation 55:

## Targets to Sell Local Produce

Set targets for supermarkets and other shops to buy and sell local produce at a fair price to farmers and consumers, and consider systems of grants for supporting more localised markets.

Children's Parliament: Make and sell more food locally in Scotland. Support environmentally friendly small businesses, organic farmers and butchers. Choose to stock foods from Scotland over foods from abroad.

### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to encourage and support local production and localised markets.

The Scottish Government understands the need to decarbonise the retail sector. Goods sold in the UK currently account for 30% of total greenhouse gas emissions, and we want to help Scottish retail to play its part in ending Scotland's contribution to climate change and meeting our net zero target. We know that many retailers have already begun extensive work to drastically speed up the decarbonisation of their supply chains, achieve their own targets of net zero emissions and encourage consumers to lead low carbon lifestyles. However, like all aspects of our economy, more must be done to reduce environmental impacts and deliver more sustainable products and services. Therefore, the Scottish Government is considering how it can support Scottish retailers to develop sustainable products and operations and to reduce their carbon footprint in stores and across retail operations, including logistics and supply chains.

The Scottish Government has considered the detail of the Assembly's recommendation to set specific targets for supermarkets and other shops to buy and sell local produce. Our assessment is that it would interfere with basic commercial principles and, for a number of reasons, including seasonality and availability of supply, it would prove difficult to implement. There are a number of other viable activities underway supported by the Scottish Government that are encouraging retailers to facilitate the sourcing of local produce, and so we will continue to explore the viability of any forthcoming ideas that may be designed to help in this area.

Our Retail Strategy, which is currently being drafted, has sustainability as a founding principle and as such will contribute to our climate change and net zero goals. In response to the Climate Assembly's recommendation, the strategy will promote local

production and reduced carbon footprint. It will set out our overall approach to work together to sustainably grow Scotland's retail sector, to play a critical role in creating a fairer, greener and stronger Scotland.

The strategy will support a place-based approach, including encouraging local supply chain and local markets to help retail increase sustainability and contribute to our just transition to net zero. We aim to publish the Retail Strategy by the end of this year.

With specific reference to local produce, which is referenced in both the Assembly's recommendation and the Children's Parliament Calls for Action, Scotland was the first national government to sign the Glasgow Food and Climate Declaration, recognising the links between food and climate and the role of sustainable food systems in combating climate change. However, it should be noted that there is a complex relationship between food production and supply and emissions, and that a range of factors contribute to the environmental impact of goods, not just local production.

We are undertaking scoping work on a single marketing brand for all Scottish food and drink produce, 'Sustainably Scottish', which would be available to all Scottish-based

producers, manufacturers and suppliers who can satisfy stringent criteria on provenance and low carbon operations. This will incentivise additional investment in low carbon operations and build on consumer demand for sustainable products, and allow the many Scottish businesses with a strong story to tell about sustainability to capitalise on that demand. We are also working to develop our local food strategy, focussed on encouraging more locally-based production to reduce the distance food travels, promote circular supply chains and enable more people to grow their own food. The consultation on this closed on 2 December 2021 and we are now considering the responses.

In addition, there are already a number of programmes in place to support local produce including funding to the Scottish Grocers Federation for a second phase of a "Go Local" programme in 2021/22 to help drive sales of fresh, affordable local produce in convenience stores throughout Scotland and a further £200,000 of funding to our Regional Food Fund to 42 community groups and regional food groups to support a wide range of local activities to raise the profile and sales opportunities of local producers. The funding is supporting new food trials, farmers markets and local online directories.



Recommendation 56:

## De-Incentivise Imports

Grow and adapt our local economies by de-incentivising imports and establishing more innovative businesses and low carbon manufacturing industries in Scotland.

### Scottish Government Response

The Scottish Government supports in principle the Assembly's recommendation to grow and adapt our local economies by establishing more innovative businesses and low carbon manufacturing industries in Scotland.

As mentioned in Recommendation 55, there is a complex interaction between emissions, the environment and trade. Local production does not always mean more environmentally friendly production. A range of factors contribute to the environmental impact of goods at every stage of their life cycle, not just the number of times that a product crosses a border; including design, production methods, trade logistics, connections with other supply chains, and their environmental sustainability.

Manufacturing accounts for 169,000 jobs, over half of Scotland's international exports, and 47% of businesses' expenditure on research and development. The Scottish Government's ambition is for Scotland to become the home of manufacturing innovation, to be seen as an inventor and producer, not just a consumer of goods – innovative, thriving, and with an international perspective.

As a result, the Scottish Government (working closely with industry, public

sector partners and academia) has established a single and integrated programme – Making Scotland's Future. This programme brings together our partners across the support landscape for manufacturing in Scotland in order to deliver a more collaborative and joined up approach to supporting the sector. Through collaboration, the Programme aims to boost productivity; drive innovation; and develop the skills of our current and future workforce to ensure Scotland is world-renowned for our manufacturing capabilities. In line with the Programme for Government and the Assembly's above recommendation, we are committed to helping manufacturing businesses make the technological and just transition to net zero. The opportunities presented by a low carbon economy are at the heart of this Programme.

As referred to in Recommendation 1, central to its success is investment in a range of support measures including: the National Manufacturing Institute Scotland (NMIS), the Michelin Scotland Innovation Parc (MSIP), the

Scottish Manufacturing Advisory Service (SMAS), the Advancing Manufacturing Challenge Fund (AMCF) and the Low Carbon Manufacturing Challenge Fund (LCMCF).

NMIS is working to transform manufacturing skills, productivity and innovation right across Scotland by enabling manufacturing companies to trial and test new processes, applications and technologies. Focusing on net zero solutions for manufacturing is at the heart of NMIS, as it seeks to find circular solutions which will bring materials back into manufacture at the end of life by focusing on the circular economy. It is also the first UK member of a new global trade group to advance sustainability in additive manufacturing. It is led by a team of industry-leading engineers and researchers, and, as highlighted in Recommendation 1, backed by £75 million of Scottish Government funding.

Also highlighted in Recommendation 1, MSIP will be an international location for innovation in sustainable mobility and low carbon energy with a strong focus on hydrogen. It will cater to a mix of start-up, high growth and more mature companies, both inward investors and indigenous; research/innovation organisations and facilities; and include a Skills Academy and incubator facility for SMEs. It will provide key capability to enable the transition to hydrogen and electric vehicles.

The Low Carbon Manufacturing Challenge Fund (LCMCF) will be open to any business in the manufacturing sector and will provide research and development funding for projects that result in increased product circularity, reduce waste during the manufacturing process and reduce carbon. We believe the LCMCF can support development of new business models; lead to new products that will drive low carbon transition in the Scottish manufacturing sector; drive collaborative development across supply chains of new manufacturing processes and technologies; develop options to enhance capacity in growth sectors; and exploit opportunities in support of the transition to a circular, net zero carbon economy. It is backed by £26 million of capital investment over five years and is part of a wider £60 million investment for industrial decarbonisation.

We are committed to developing further scope to using locally sourced goods and materials with a view to lowering carbon emissions of products associated with transport as well as supporting local economies. Our Supply Chain Development Programme aims to improve the capacity, capability and development of supply chains in Scotland, spanning sectors where we see genuine sustainable economic potential to grow Scottish supply chains.

## Goal 12:

# Work and Volunteering

**Develop work, training and volunteering opportunities to support net zero targets, connect people with nature, rebuild depleted natural resources and increase biodiversity.**

Given the green recovery and economic transformation that Scotland will undertake along the journey to net zero, it is critical that the workforce has the required skills to support and contribute to this transition.

Central to the Scottish Government's approach to reaching net zero is our commitment to increasing the number of good, green jobs, and enabling people to better access these through training and reskilling.

To support this, we published the [Climate Emergency Skills Action Plan](#) in December 2020, which, alongside the Fair Work agenda, supports employers and employees with retraining, upskilling and recruiting. We are investing £100 million to help businesses create new, green jobs via the Green Jobs Fund. The Fund will help businesses providing sustainable or low carbon products or services to develop and grow.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- Drawing on Assembly recommendations, we launched the Green Jobs Workforce Academy in August 2021.
- We will consider the Assembly's recommendations as we develop a Volunteering Action Plan with stakeholders.

Recommendation 57:

## National Nature Service

Government and industry should 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. This could be driven by a National Nature Service, supplemented by a Conservation Volunteers Scheme.

Children's Parliament: Create more jobs for looking after all our nature. This would involve helping people without jobs learn skills to have green jobs.

### Scottish Government Response

The Scottish Government supports this recommendation and commits to developing a career pathway and volunteering opportunities for economically inactive people to develop green, nature-based skills.

Research conducted by NatureScot highlights the increasing importance of the nature-based jobs sector to Scotland's green recovery and net zero ambitions. We know that nature-based solutions can contribute around 30% to reducing Scotland's emissions, but that currently we don't have sufficient skills in place in order to fully realise this potential.

This recommendation expands on existing policy relating to developing volunteering opportunities in Scotland. This includes the [Volunteering for All framework](#) which was developed by the Scottish Government jointly with partners from the volunteer and community sector, local government and NHS.

The framework was published in April 2019 and, subsequently, working groups have been established to implement its outcomes, by

developing a Volunteering Action Plan by June 2022. This was a Programme for Government commitment in 2019, which was delayed due to the COVID-19 pandemic. The Scottish Government are working with over 100 stakeholders to co-produce a collaborative piece of work which will include some 'quick wins', as well as longer term actions. Working groups will consider the Climate Assembly's report, including this recommendation, as part of the Action Plan's development.

Aside from including this recommendation within the scope and mapping of the Volunteering Action Plan, the Scottish Government is already delivering against this commitment.

NatureScot launched a [Nature-Based Jobs and Skills Action Plan](#) for

2021/22, developed closely with Skills Development Scotland. The Plan focuses on inspiring young people and providing them with skills pathways to enter the nature-based sector. It includes details on NatureScot's £1 million Programme for Youth Employment which is supporting Modern Apprentices, student and graduate placements.

[The Conservation Volunteers](#) (TCV) in Scotland works with local volunteers to develop community action projects that raise awareness of flood risk locally. The Scottish Government has provided TCV with a £20,000 grant to promote community engagement in local flood risk management in 2021/22.

NatureScot and the Scottish Government also provide over £300,000 of core funding to TCV to deliver volunteering programmes across Scotland. The latter has also provided TCV with a £20,000 grant to promote community engagement in local flood risk management in 2021/22. As part of its broader [Make Space for Nature](#) campaign, NatureScot also provides £80,000 of

funding to Volunteering Matters to deliver its Action Earth volunteer fund that supports local communities to improve their local environment for people and nature.

These, and other projects such as the Scottish Invasive Species Initiative, the John Muir Award or Junior Rangers, provide a strong foundation to build a national volunteer programme in Scotland in line with this recommendation.

Through work led by NatureScot, the Scottish Government is supporting the development of a first phase of 100 '[Wee Forests](#)' in Scotland, which are part of the global family of 'Miyawaki Forests' or '[Tiny Forests project](#)' led by EarthWatch in Europe. NatureScot and other partners are also supporting YoungScot to establish a Young Person's forest initiative. This project will support and train young people to secure funding and land, and then plant, maintain and monitor local forest(s) over time, helping to reconnect people with nature and develop green skills.



Recommendation 58:

## Green training and Apprenticeship Scheme

Scottish Government should support businesses and employers to transition and prioritise green skills by introducing a national training/retraining and apprenticeship scheme for new green jobs, accessible to all.

Children's Parliament: Make sure all children and adults learn about climate change. This would involve hearing from experts in climate change and helping children and adults learn green skills that will help tackle the climate emergency like: How to grow food and compost; How to recycle properly; How to repair and mend things; How to have a climate friendly diet; How to plant trees and protect wildlife.

Children's Parliament: Teach children and young people about what green jobs and qualifications they could get when they're older. In schools, introduce children to different green jobs, and degrees at university which are designed to tackle climate change.

### Scottish Government Response

**The Scottish Government supports the Assembly's recommendation to support businesses and employers to transition and prioritise green skills, including through a national training and apprenticeship scheme.**

Ensuring a just transition will be critical to ensuring no-one is left behind and that Scotland's labour force is equipped with the skills needed to overcome the challenges, and seize the opportunities presented by the transition. This is fundamental to our economic strategy. It is vital that we engage with industry, employee representatives, and skills agencies to ensure that the right interventions are available to maintain Scotland's talent pipeline. Equally, it is vital that employers themselves consider how they may meet their workforce's upskilling and retraining needs.

The [Climate Emergency Skills Action Plan](#) (CESAP), published in December 2020, sets out how we can align our skills system with business needs for a low carbon and circular economy. It outlines how we can work collaboratively to develop our workforce and set pathways to support sectors and regions attract, develop and retain the right people with the right skills.

As a priority action from the CESAP, and in response to the Just Transition Commission and Climate Assembly recommendations, we launched the Green Jobs Workforce Academy in August this year. The Academy is

designed to provide our current and future workforce with the information, advice and skills needed to thrive in a low carbon and circular economy. Delivered by Skills Development Scotland, the Academy is also helping people take a greener approach to their careers, from accessing funded training and learning new skills, to finding a new green job. The new [greenjobs.scot](https://www.greenjobs.scot) site provides information on the types of jobs emerging in sectors such as renewable energy, construction and transport. Crucially it guides individuals of all ages through a process of identifying the skills they have and the skills they will need to develop, which will support the delivery of our skills guarantee for those in carbon intensive sectors.

Additionally, in 2021/22, the National Transition Training Fund, which was initially introduced to support individuals and employers affected by the pandemic, has taken on a broader role to address the impact of EU Exit and to respond to demand for new skills to support the transition to net zero. This includes a suite of projects supporting green construction, advanced manufacturing and forestry.

Over the next five years we will invest £200 million specifically in adult upskilling and retraining opportunities.

The Scottish Government has also committed to establishing a Green Jobs and Skills Hub in 2021/22, to support employers through cascading intelligence into the skills system on

the numbers and types of green jobs that will be needed over the next 25 years. The Hub is currently in development and is expected to launch before the end of 2021/22. The Government is committed to ensuring that our apprenticeship programme supports our transition to net zero. Apprenticeships are an integral part of our response and aim to deliver interventions that provide the skills the economy needs, both now and in the future, and help drive awareness and interest in the wide range of sectors available in Scotland. Scotland's apprenticeship programme is unique in terms of supporting people into sustainable and rewarding careers while contributing to the skills needs of our businesses. As set out in the Programme for Government, we will maximise apprenticeship opportunities building back up to 30,000 starts and then assess demand to see how much further we can go. We will also consider with the Scottish Apprenticeship Advisory Board, Skills Development Scotland and the Scottish Funding Council, how apprenticeship development can support the recommendation of the Assembly, the [Climate Emergency Skills Action Plan](#), carbon management plans, and greens skills, ensuring apprentices are aware of how they can act in their day-to-day work to support greener/environmental practices.

Funded by Developing the Young Workforce, "My Climate Path" was launched by the Minister for Environment, Biodiversity and Land Reform on Friday 17th September

2021. It was the Developing the Young Workforce (DYW) COP26 project focusing on raising awareness and getting young people engaged with inspirational individuals from key sectors such as Green, Digital and Circular Economy as they prepare to enter the labour market.

DYW have been working with businesses to inform and inspire our young people on the roles and skills required for the jobs of the future that will drive sustainable economic growth in a circular and net zero economy.

Young people have been learning about pathways to green jobs, and the COP26 legacy plans include young people having the opportunity for work experience placements and engagement with their local communities, to gain insights into their local circular economy and learn about green projects.

We are working to expand the COP26 legacy remit across the DYW Network by sharing the learnings nationally and promoting green opportunities across Scotland.

#### Recommendation 59:

### Flexible Working Conditions

Government should publish clear guidelines about their expectations for flexible working conditions and ensure that businesses are meeting these for staff when making procurement decisions and issuing contracts.

#### Scottish Government Response

The Scottish Government supports this recommendation and is integrating flexible working into our [Fair Work First](#) policy.

From October 2021, Fair Work First included new criteria to promote flexible working and oppose the use of fire and rehire practices. Guidance on how to support the implementation of Fair Work First criteria has been published. Through our Fair Work First policy we are rewarding and encouraging employers to adopt Fair Work, by extending Fair Work criteria to as many grants, funding streams and public contracts as we can.

The Scottish Government is funding Flexibility Works in 2021/22 with £94,850 to support and promote the development of flexible and family-friendly workplaces. This includes offering vital advice and support to business and organisations on the benefits of flexible working practices such as working from home, hybrid and remote working, as Scotland moves to recovery.

We are also supporting Timewise with £167,070 to support delivery of year two of their 'A Fair, Flexible Work Programme for Scotland'. Their programme provides advice and training to employers, employment intermediaries and advisers on how to embed flexible working in employability approaches and provision.

Although the legal powers governing flexible working are currently reserved to the UK Parliament, the Scottish Government is providing support and guidance to employers to encourage them to adopt flexible, agile and inclusive workplaces that benefit all employees.

Flexible working is an important aspect of Fair Work and recognises that being able to balance work with other commitments enables workers to participate and contribute more fully and productively in the workplace, whilst protecting their well-being and improving job satisfaction.

Flexible working practices take many forms and will vary from employer to employer. There is no one-size-fits-all approach. They may include part-time work and job share, flexitime, compressed hours, staggered hours, and working remotely or a hybrid arrangement. Effective flexible working practices need to work for the individual, the team and the employer and should be agreed in collaboration with all.

Between April 2019 and March 2021, the Fair Work First criteria have been applied to over £2.4 billion worth of public sector funding, including almost £620 million of procurements. Our enterprise agencies provide significant financial and non-financial support to business, and encourage companies they work with to commit to Fair Work.

## Goal 13:

# Business

**Support long term, sustainable business models where people and the environment are considered before profit, and the carbon footprint of working practices are reduced.**

Scottish businesses have much to gain from being at the forefront of the transition to a net zero economy. Decarbonising our economy in and just and fair way will help businesses to grow and compete in the economy of the future, benefit from new investment and export opportunities, create new and quality jobs and grow closer to their customers and the communities in which they are based.

Emissions from businesses constitute a large proportion of Scotland's total emissions – 17% in 2019, making them the second largest emitting sector that is reported against, after domestic transport. So we know that emissions from industry need to continue to decline significantly.

To support businesses to take advantage of the economic opportunities of moving towards a net zero nation and transition to more sustainable models, the Scottish Government has:

- Provided support for businesses operating in the Negative Emissions Technology and CCS sectors;
- Announced a £180 million Emerging Energy Technologies

Fund to support the development of hydrogen and carbon capture and storage (CCS);

- Developed a £5 million Carbon Capture and Utilisation Challenge Fund to boost early stage work in this area; and
- Supported business innovation through the Scottish Industrial Energy Transformation Fund and Low Carbon Manufacturing Challenge Fund.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following actions:**

- We have committed to develop: a set of wellbeing indicators to ensure that environmental, economic, human and social capitals are embedded; creation of a green industrial catalyst fund; and provision of tailored support for businesses with alternative ownership models.
- We will continue to explore options to support award schemes and/or provide funding to support sustainable practices and innovation adaptation in businesses.



Recommendation 60:

## Eliminate Frequent Flyer and Air Mile Bonuses

Eliminate frequent flier and air-mile bonuses to reduce the number of flights taken for business, encouraging the use of alternatives like video conferencing for meetings.

### Scottish Government Response

The Scottish Government supports the increased use of digital alternatives for meetings.

We are seeking to make video conferencing more accessible through our commitment to extend superfast broadband to rural communities, reducing the need for travel to meetings. See Recommendation 66 for further details.

The Scottish Government does not have the legal powers to ban frequent flyer or air mile bonuses.

As set out in other Recommendations including 32 and 34, as part of our work to develop an aviation strategy we are considering what further actions might be needed to accelerate the transition to low and zero emission aviation and we have already committed to work to decarbonise scheduled passenger flights within Scotland by 2040.

Recommendation 61:

## Incentivise Cooperative Models of Land Use

Incentivise cooperative models of land use / land management, and partnerships between farming and other uses, that drive sustainable agriculture and move away from intensive farming and reliance on pesticides.

### Scottish Government Response

The Scottish Government supports this recommendation and commits to encouraging the use and management of land in a more sustainable and environmentally friendly way.

This recommendation is linked closely to Recommendation 46 which centres on incentivising landowners to expand the land available for carbon

sink use. Incentivising landowners to maximise their land in a way that is sustainable and helps combat climate change will require a cross-

government approach. It is also linked to Recommendation 47 which considers the need for a new subsidy regime that encourages farmers to transition to more sustainable land management practices.

As previously mentioned at Recommendation 47, our vision for farming and crofting in Scotland is a positive one – we will transform how we support farming and food production in Scotland to become a global leader in sustainable and regenerative agriculture.

We have committed £213 million through the Agri-Environment Climate Scheme (AECS) since 2015, and we continue to prioritise agri-environment support following significant cuts to the budget by the UK Government, reflecting our commitment to ensure that farmers and crofters are not financially disadvantaged as a result of leaving the EU.

The AECS will reopen for funding in 2022 which will underpin the ambition of doubling the amount of land used for organic farming by 2026, alongside a suite of other measures aimed at promoting low carbon farming and protecting the environment. Work tied to the Agriculture Reform Implementation Oversight Board (see Recommendation 47) and the NatureScot's [Natural Capital Pilot Programme](#) (NCAPP) will ensure a sustainable, long-term approach that addresses the specific needs of Scotland's rural landscapes.

Scottish Forestry support the [Integrating Trees Network](#) which aims to raise awareness of the [multiple benefits](#) that tree planting can bring to agricultural businesses, including: providing shelter for livestock; habitat for wildlife; increasing biodiversity; reducing carbon footprint; providing diversification opportunities for future business income; and flood prevention. This farmer/crofter-led initiative has built up a strong network of six farm woodland demonstration sites across Scotland, and hosts regular practical events for all Scottish farmers and [crofters](#) to share practical knowledge, experiences and advice about the processes, objectives, challenges and outcomes of planting trees. The Integrating Trees Network is encouraging more trees to be planted on Scottish farm land: in the right place; for the right reasons; and where appropriate, provides guidance on how this can be achieved, practically.

The [Farm Advisory Service](#) (FAS) will continue to provide bespoke advice to farmers, crofters and land managers through a range of grant-based support. This includes [Specialist Advice, Carbon Audits and Integrated Land Management Plans](#) which advise businesses on environmental management, organic farming, soil and nutrient management. Additionally, the FAS offers more generic support on these topics through: open events, helpline support, discussion groups, the organic newsletter, technical notes, videos and podcasts all of which can be accessed through the FAS website.

[Farming for a Better Climate](#) (FFBC) offers practical guides on a range of subjects related to climate change, farm profitability, climate impacts and adaptation measures. FFBC also supports a farmer-led soil regenerative agriculture network bringing together five farmers to establish how best to support, enhance and protect their farm soils, with the aim of improving production and tailoring inputs, which will in turn maximise profitability. The group have trialled new approaches to allow them to improve production whilst delivering wider benefits such as building soil resilience, improving

water retention, storing carbon and enhancing biodiversity. This approach, which showcases farmers' taking action, can act as a major driver of behaviour change amongst their peers.

Regional Land Use Partnership (RLUP) pilots, once established, aim to support partnership working between stakeholders to develop regional land use priorities and facilitate collaboration on regional land use issues to help meet Scotland's climate and environmental targets.

#### Recommendation 62:

### Incentivise Green Business Models

**Provide government incentives for green business models, such as bronze/silver/gold awards or funding to reward sustainable practices and innovation for adaptation to climate change impacts.**

#### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to provide incentives, including through awards schemes, for business models which showcase sustainable practices and innovation relating to adaptation to climate change impacts.

Work is already taking place in this regard. This year's Unlocking Ambition entrepreneurs, from Scotland's flagship entrepreneurial development programme, were specifically chosen for their potential to contribute to Scotland's continuing economic recovery from COVID-19 and Scotland's journey towards a net zero economy.

In addition, there are established programmes, which also contribute to this end; for example, [Scottish EDGE](#), which includes one of its five special awards – Circular Economy EDGE, as well as its Net Zero Edge awards, where the Scottish Government, working with partners, invests in and looks to nurture ideas which transform lives and build a stronger Scotland. Consideration of a business's positive environmental

impact and net zero strategy are part of the criterion for assessing these applications.

A number of broader programmes exist to support businesses to innovate, change their operating models and to adopt new technologies. All of these schemes will be useful to support businesses to be less carbon intensive. An example is the £25 million Digital Boost Grant programme which provides cash grants to help smaller businesses invest in the digital technologies necessary to trade online and invest in improved infrastructure. A further example is the £100 million Green Jobs Fund which is investing in a range of projects which aim to stimulate the supply chains and infrastructure necessary to grow green industries and create new employment opportunities. We expect that improved support for smaller businesses and realising the opportunities of a net zero economy will also be a key theme in the forthcoming National Strategy for Economic Transformation.

Increasingly, the Scottish Government is also looking to work with our most cutting edge start-ups to develop and commercialise the new technologies necessary for our economy to transition and thrive. An example is the forthcoming £42 million tech-scaler network - new infrastructure that will provide first rate entrepreneurial schooling to Scottish start-ups. It is intended that these facilities will prioritise the entry of start-ups which specialise in net zero technologies and solutions.

Following the recommendation and as part of our wider work, we will continue to explore what other options there are to support award schemes and/or funding with which to support sustainable practices and innovation in adaptation. Support for such models is in-keeping with the just transition principles outlined in our climate change legislation. We will keep this work under review so that we can be as ambitious as possible to meet the Assembly's recommendations.

Recommendation 63:

## Well-being Before Profit

Prioritise funding and support for businesses that:

- look after well-being before profit;
- provide community benefits; and /or
- are staff owned or cooperatives.

### Scottish Government Response

The Scottish Government supports the principle of the Assembly's recommendation to support organisations that look after wellbeing, provide community benefits and/or are staff owned or cooperatives.

A green recovery is an opportunity to take ambitious action that will deliver our transition to net zero across multiple objectives, reducing emissions while strengthening our economy, protecting and creating new jobs and building an economy and society that prioritises wellbeing. Consideration of wider social impacts is in-keeping with the just transition principles outlined in our climate change legislation.

As part of the agreement between the Scottish Government and the Scottish Green Party, and influenced by the Assembly's recommendations, we have committed to develop: a set of wellbeing indicators to ensure that environmental, economic, human and social capitals are embedded; creation of a green industrial catalyst fund; and provision of tailored support for businesses with alternative ownership models.

Our COVID-19 Recovery Strategy commits us to creating the conditions for fair work and a just transition to net zero, including making payment of the real Living Wage to all employees a condition of public grants by Summer 2022. In addition, in all Scottish Government procurement exercises, it is mandatory for bidding companies to articulate the environmental and community benefits that they will deliver as part of the contract.

The Scottish Government recognises the critical role co-operative business models can play in economic recovery, supporting the Scottish Government's aim to create a fairer, stronger and more democratic economy. We will continue to work through Co-operative Development Scotland and the enterprise agencies to support the growth of co-operative and other alternative business models.



Furthermore, our response to Recommendation 43 also recognises the environmental, health and well-being benefits that a four-day working week could have and our

commitment to a pilot scheme that will explore these benefits further.

We will keep this work under review as we progress to ensure it is having its intended impact.

Recommendation 64:

## Universal Basic Income

Explore introduction of a Universal Basic Income to help improve the fairness of reducing hours at work, combined with a practical pilot/feasibility study which includes measuring environmental impact.

Children's Parliament: Make sure people are paid fairly to help with bills.

### Scottish Government Response

**The Scottish Government recognises the benefits of a Universal Basic Income, but recognises it is not currently feasible to pilot due to a lack of devolved powers. We are exploring the potential of a Minimum Income Guarantee as an alternative.**

During the last parliament, the Scottish Government funded a steering group to establish the feasibility of delivering a Citizens Basic Income, also known as a Universal Basic Income (UBI) in Scotland. The group published their final report in June 2020 which broadly stated that piloting a UBI would be desirable though ultimately not feasible with the current levels of devolved powers. Following on from these findings, the 2021 Programme for Government committed to commencing work to deliver a Minimum Income Guarantee (MIG).

While some overlap exists between the two, a UBI and MIG are distinct policies. A UBI is for everyone,

irrespective of income and individual needs e.g. disability, and is paid through the social security system. A MIG is a guarantee that everyone will receive a minimum level of income that enables them to live a dignified life, and this can be met through employment, tax changes and/or social security benefits, and is targeted at those on low incomes.

We know that this will not be possible to deliver overnight, but we are determined to make step changes, using our existing powers, to help ensure that everyone in Scotland can lead healthy, secure and fulfilling lives. On 17 August 2021, the Scottish Government laid the foundations for this work, by holding the first meeting of a Steering Group set up to

consider design and delivery of a MIG. The Steering Group's work may include consideration of the various externalities of a MIG, including the environmental and economic impacts of the policy.

The recently launched [Living Income](#) campaign suggests that a living income (similar to a MIG) would support an economically and socially stable way in which to transition workers out of jobs that become less viable due to climate change or as we transition away from fossil fuels.

#### Recommendation 65:

### Four Day Working Week

Introduce a 4-day (or 32 hour) working week as standard, based on research to explore where and in what sectors it would work best, and backed by incentives to compensate for the cost of employing more people.

**Children's Parliament: Shorten work and school hours.** This is so people can have more time to do things like grow their own food, plant trees and repair things at home or in their area.

### Scottish Government Response

The Scottish Government supports this recommendation in principle, although it cannot be legislated for by the Scottish Parliament given that employment law is a reserved matter.

Employment law is not something that has been devolved to the Scottish Parliament and so to give effect to this recommendation, any scheme would need to be delivered on a voluntary basis, in collaboration with employers in Scotland.

The Scottish Government recognises the research that correlates higher working hours with a greater carbon footprint. We also recognise, as well as the associated environmental benefits, the health and well-being benefits and efficiency gains that a four-day working week could bring. However, for some sectors efficiency

gains are highly unlikely to be of a scale that fully offsets the effect of lost working hours and therefore the costs of implementing a four-day week across society are likely to be significant.

The pandemic has served to intensify interest in, and support for, more flexible working practices. This could include a shift to a four-day working week as standard where appropriate. Reductions in the working week could help sustain more and better quality jobs.

Given that employment law is a reserved matter, the Scottish Government does not currently have the powers to mandate a shorter working week. However, we are in the early stages of designing a £10 million pilot scheme that will help employers explore the benefits and costs of moving to a four-day working week. This pilot will enable us to develop a better understanding of the implications of a broader shift to a shorter working week across the Scottish economy.

The Scottish Government has been engaging with a wide variety of organisations to inform development of the pilot: business representative groups and individual businesses interested in participating; trade unions; think-tanks; academics; four-day week campaign groups; voluntary organisations; and governments in other countries who have piloted approaches to shorter working weeks.

In the short term, the current Public Sector Pay Policy offers the opportunity for public bodies to consider standardising to a 35 hour working week, if and when it is practical to do so. This is an option only and is not mandated. It recognises the different contexts across the public sector and that each public body will need to consider its workforce, ways of working, impact on productivity and service demands.

“The Assembly’s recommendations demonstrate the underlying desire by the public for us to transition to a net zero and climate ready nation as we develop and grow our economy. We want to support businesses to innovate and change to realise these economic opportunities.”

**Cabinet Secretary for Finance and the Economy,  
Kate Forbes MSP**



## Goal 14:

# 20 Minute Communities

**Realise the principles of a '20-minute community' in flexible ways across Scotland by reducing the need to travel for work, shopping, services and recreation in ways that support localised living.**

The Scottish Government is clear that 20 minute communities or neighbourhoods will be an effective way of delivering the Place Principle – creating places with good quality homes that are well-connected, with easy access to services and public transport links. Establishing these 'communities' will contribute to our ambitions on net zero by reducing transport journeys and supporting local living. The 20 minute neighbourhood offers an approach to unlocking localism and creating better places. It provides a method of describing how places could be different if a place-based investment approach is adopted. Its focus on locally embedded workplaces and services could also be a significant component of our recovery from COVID-19.

Rethinking how our places are lived in, planned, delivered and adapted will help to futureproof our villages, towns, cities and regions from some of the impacts of climate change. We will work with local government and other key stakeholders to take forward our ambitions for 20 minute neighbourhoods. In 2021, we began sharing lessons from several key

demonstrator locations, promoting good practice, facilitating conversations, and offering resources and a route-map for other places to pursue their own climate change goals.

The 2021/22 Programme for Government made commitments to 20 minute neighbourhoods and we are already pursuing this approach to community development. This will be delivered through the next iteration of our NPF4, programmes to improve broadband connectivity across Scotland, and pilot and research projects into local working hubs.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following action:**

- We have commissioned a programme of work with Scottish Futures Trust to help facilitate a wider roll-out of work hubs across Scotland.

Recommendation 66:

## Broadband Connectivity

Improve broadband connectivity across Scotland by investing in a fit for purpose infrastructure to provide reliable, high-speed broadband access in all areas.

### Scottish Government Response

The Scottish Government supports this recommendation and will continue to invest in improving broadband connectivity across Scotland.

Telecommunications is wholly reserved to the UK Parliament under the provisions of the Scotland Act 1998. However, given the importance of good quality digital connectivity, particularly in rural Scotland, the Scottish Government is utilising its financial powers to invest £600 million in the Reaching 100% (R100) contracts.

The R100 programme is at the forefront of our plans for a green and resilient economic recovery from COVID-19. Through the R100 programme, we will deliver on our commitment to provide everyone (100% of residential and business premises) in Scotland with access to superfast broadband by the end of 2021, through a combination of the R100 contracts, our R100 Scottish Broadband Voucher Scheme (R100 SBVS) and commercial coverage.

We are in continuing dialogue with colleagues in the UK Government to ensure Scotland receives its fair share of the £5 billion the UK Government plans to invest in delivery of its own Project Gigabit. We are also working with Openreach - our R100 delivery

partner - to identify opportunities to accelerate the deployment of infrastructure through the R100 contracts.

By delivering universal superfast broadband across the whole of Scotland, we will increase opportunities for distance learning and working, thereby reducing pressure on transport routes and contributing to the Scottish Government's net zero ambitions.

The Scottish Government also intends to align with UK Government proposals to mandate gigabit capable connections (up to a per premise cost cap) in new build developments, with regulations intended to come into effect from Spring 2022.



Recommendation 67:

## Public Spaces for Walking and Cycling

Invest in improving public spaces in neighbourhoods and cities to make them safer and more appealing to walk and cycle in.

Children's Parliament: Encourage cycling by making more, safer cycle paths and lanes, and making public bikes available in villages, towns and cities.

Children's Parliament: Make travelling to school in environmentally friendly ways easier and cheaper. This would involve S'Cool buses, cycle/walking busses, and more, safer cycle routes across Scotland.

### Scottish Government Response

The Scottish Government supports the recommendation to make our towns, cities and neighbourhoods safer and more appealing to walk and cycle in.

We are committed to encouraging increased levels of active travel and committed in the Programme for Government 2020/21 to investing over £500 million on active travel over five years. We will use this funding to increase the amount of active travel infrastructure in Scotland, including through the Places for Everyone Programme. We are also directing funding to local authorities to create, repair and improve a Scotland-wide active travel network to ensure that every town has access to a high quality and segregated walking and cycling network. In 2021/22, over £50 million of the active travel capital budget has been allocated in grant funding to Sustrans for the Places for Everyone infrastructure fund, which supports a range of active travel projects including the creation of safer routes to schools. As part of the SNP and Scottish Green Party shared policy programme, we are also

committed to increasing the proportion of Transport Scotland's budget spent on active travel initiatives so that by 2024/25 at least £320 million or 10% of the total transport budget will be allocated to active travel.

Reflecting the circumstances of the pandemic, many of the recent projects to improve walking, wheeling and cycling around schools have focussed on making drop-off and picks-up safer for children and their families, making sure that there is sufficient space at the busiest times of day. This has been delivered through the Spaces for People programme which funded local authorities to implement temporary active travel measures in response to COVID-19.

51 schools across Scotland have seen nearby streets closed - either during parts of the day or full-time during

term time – to create more space for pupils, parents and teachers. Local authorities have also invested in the creation or expansion of 20 mph zones near schools, and new crossing points to make journeys safer. Feedback from local authorities to Sustrans suggests many of the measures around schools are popular with pupils, parents and teachers and may be made permanent following wider consultation.

The draft NPF4 supports reducing the need to travel unsustainably and promotes active travel choices and facilitating walking and cycling. It does not support development for significant travel generating uses at locations that would increase reliance on the private car. It sets out that development proposals should demonstrate how they will provide for and prioritise transport in line with the sustainable travel and investment hierarchies.

To make cycling more accessible, the Smarter Choices, Smarter Places is an annual programme funded by Transport Scotland, and managed by Paths for All, with a total of £9m in grants awarded to sustainable travel behaviour change projects across Scotland. Last year the programme supported schemes such as the Edinburgh and Glasgow cycle share initiatives.

The Scottish Government is also establishing pilots that will explore the delivery of free bikes for school children who cannot afford one. Six pilot projects were launched on 17 August 2021 with others to follow. The pilots will test various elements of the practical delivery of the policy, including how to identify those children who need a bike; different models of sourcing and distributing the bikes, and; delivery of the wrap-around support required, including bicycle training and maintenance, and equipment such as a helmet, hi-vis clothing, lights and locks.

Pilots are linked to existing community networks across schools, charities, cycling clubs and active travel hubs – all helping to determine what the best models of local delivery could look like. The benefits of giving greater access to bikes for children are clear from the evidence – it supports equality of opportunity in building life skills, confidence, independence and embeds healthy and sustainable travel habits from a young age.

Ensuring that more children can choose active travel including cycling is vital to enable them to make the travel choices in the future that support us meeting our world leading net zero targets.

Recommendation 68:

## Convert Existing Buildings

Create thriving town centres by focusing on the conversion of existing properties into high quality housing and community spaces rather than building more edge of town developments.

### Scottish Government Response

The Scottish Government supports this and is clear that the planning system can reshape future city and town centres.

As set out in previous responses (including to Recommendation 8), the draft NPF4 will have the status of development plan for planning decisions once adopted. Development plans set out the long term vision for where development should and shouldn't happen and can include policies for the development and use of land. The status of the Framework is important because, along with Local Development Plans, it will form part of the development plan and broadly where planning applications are made for new development they should be approved where consistent with the development plan and refused where they are not.

The draft NPF4 supports: compact growth; reuse of vacant and derelict land and redundant buildings; the creation of a low-carbon network of towns; 20 minute neighbourhoods; a town centre first approach; and town centre living including in reused buildings or upper floors; and

development that improves the vitality and viability of city, town and local centres as part of place based strategies. It does not support out-of-town locations for retail development generating significant footfall. As set out in Recommendation 19, a compact growth approach limits urban expansion where brownfield, vacant and derelict land and buildings can be used more efficiently, the draft policy is also clear that development proposals on greenfield sites should not be supported unless the site has been allocated for development or the proposal is explicitly supported by policies in the development plan, and there are no suitable brownfield alternatives. As highlighted in other responses (including Recommendation 19), we welcome comments on the draft at this time and currently anticipate the finalised version will be adopted in 2022. Further information is available from [www.transformingplanning.scot](http://www.transformingplanning.scot).

Recommendation 69:

## Reform Planning Laws

Reform planning laws to enable governments to require developers to include community infrastructure and local facilities that can be reached by 'active travel' in new developments, preventing collections of houses being built with no amenities, and instead building thriving communities.

Children's Parliament: Create more nature parks and stop green spaces from being built on. In towns and cities, create green, traffic-free areas for children and adults to play.

### Scottish Government Response

The Scottish Government supports the development of neighbourhoods where community infrastructure and local facilities can be easily reached by active travel, and is promoting the creation of networks of 20 minute neighbourhoods, as well as integrating an infrastructure first approach to the planning system.

The Scottish Government is carrying out a review of existing mechanisms for securing financial or in-kind contributions to infrastructure or affordable housing, sometimes known as developer contributions. The purpose of the review is to evaluate the effectiveness of existing approaches, such as planning obligations, in securing timely contributions to - and delivery of - the infrastructure and affordable housing that are necessary to create high quality places. This will inform the consideration and development of new approaches, taking account of powers in the [Planning \(Scotland\) Act 2019](#) for Scottish Ministers to introduce an infrastructure levy. In broad terms the levy would provide authorities with an additional means of ensuring that a proportion of land value increases are reinvested in

community facilities and infrastructure.

Legislative reform under the [Planning \(Scotland\) Act 2019](#) already means that once adopted, the NPF4 will have the status of development plan for planning decisions. The importance of this is set out in Recommendation 68. As mentioned under Goal 6 and Recommendation 43, the draft NPF4 supports the creation of 20 minute neighbourhoods for which active travel links will be important and where most people can meet their daily needs online or in person within a 20 minute walk, wheel or cycle. This means most people being able to live and work locally, pursuing opportunities, learning and well-being in your own neighbourhood, reducing the need to travel further afield to meet daily needs. The draft Infrastructure First policy seeks to

put infrastructure considerations at the heart of place making. It supports making better use of existing infrastructure assets and the provision of infrastructure, services and facilities that are necessary to create liveable and sustainable places. This approach clearly

increases expectations about the quality and accessibility of places that will be delivered. As highlighted above in Recommendation 68, further information about the consultation on the draft NPF4 is available from [www.transformingplanning.scot](http://www.transformingplanning.scot).

#### Recommendation 70:

### Rural Localised Living

Ensure that all communities are able to benefit from the principles of localised living, inspired by the 20-minute community, by guaranteeing access to services through remote, digital and mobile provision.

#### Scottish Government Response

The Scottish Government supports the Assembly's recommendation to enable all communities to benefit from the principles of localised living.

[Connecting Scotland](#) is one of the most comprehensive national programmes aimed at tackling digital exclusion in the world, unmatched elsewhere in the UK. It provides individuals with a device, internet connection and a package of training and support. The Programme is currently open for applications via a fast-track process for organisations working with people who are on a low income and digitally excluded - in particular, older people, disabled people and single parents.

In total, the Scottish Government has committed over £48 million to Connecting Scotland and by the end of 2021 we aim to have reached the target of bringing 60,000 people online. We are now working to scope out an extension to the programme to

reach 300,000 people by the end of this Parliament.

As previously mentioned at Recommendation 66, the R100 programme is central to our plans for a green economic recovery from COVID-19 and will ensure universal access to superfast broadband by the end of 2021.

Through our Scottish 4G Infill (S4GI) programme, we are also investing in future-proofed infrastructure to improve rural 4G mobile coverage. Through an investment of £28.75 million (including £11.27 million of European Regional Development Funding), we are now delivering future-proofed, 4G mobile infrastructure at up to 55 mobile



“notspots” – providing connectivity in remote rural and island areas.

These policy initiatives are critical to support communities to be able to benefit from localised living principles. They will advance equality of opportunity for people living in

rural areas and island communities who will experience an increase in digital connectivity. They will also increase community cohesion by increasing opportunities for people who have had limited internet connectivity to access employment, education and other services online.

#### Recommendation 71:

### Create New, and Support Existing, Work Hubs

Create new, and supporting existing, work hubs / shared work facilities where someone can go to work, whether they are self-employed or an employee.

#### Scottish Government Response

**The Scottish Government will support the creation of new work hubs, and support existing work hubs.**

The COVID-19 pandemic has resulted in working from home as the default position for most Scottish Government employees, although it is clear that working from home may not be the right space for everyone all of the time. The Scottish Government is leading by example and currently trialling three pilot Local Hubs. These hubs provide Scottish Government employees with the option to use buildings close to home, which is a more resilient and greener solution to business delivery.

To support the concept of local living, hubs are demand-driven and located in towns and major settlements close to where colleagues live, limiting emissions associated with commuting and supporting local communities. As a first step the pilot project

responded to a desire from Scottish Government colleagues, who would normally commute into the main office buildings in Edinburgh and Glasgow, to work closer to home. Analysis identified potential cluster areas which then resulted in three locations for trial. Evaluation and feedback will help determine demand and support recommendations for the future.

To help facilitate a wider roll-out of work hubs across Scotland, the Scottish Government has also commissioned a programme of work with Scottish Futures Trust. This work will scope existing and planned local work hubs to identify key types and their key characteristics and understand how they support better local outcomes. The research will aim

to identify the benefits of work hubs to communities and businesses, and will be used to inform next steps on

how and where wider opportunities could be achieved.

#### Recommendation 72:

### Free Wi-Fi and Support Access to Smart Devices

Work towards ensuring the availability of free Wi-Fi for all, and support access to smart devices for all, to close the digital divide.

#### Scottish Government Response

The Scottish Government partially supports this recommendation, and will commit to enhancing digital accessibility for those currently excluded, although it cannot be legislated for, as telecommunications is a reserved matter.

Telecommunications is reserved to the UK Parliament, and so the Scottish Government does not have any legislative or regulatory powers to mandate operators to provide a free or low cost service. This means that the provision of free Wi-Fi is not feasible. However, a number of steps are being taken to expand digital connectivity and therefore narrow the digital divide.

We know from evidence that cost is the greatest barrier to getting online. According to the latest (2019) [Scottish Household Survey](#), over a third (35%) of the lowest income households, those with a net annual income of £10,000 or less, had no internet access at all.

People who are digitally excluded are disproportionately disadvantaged due to the extensive role digital accessibility plays supporting people to flourish in educational, economic, social, employment, access to services, and well-being terms.

Work has already been trialled in this space. The [2017/18 Programme for Government](#) contained a commitment around the delivery of free public Wi-Fi. This encountered many difficulties – in particular around the inability to secure operational expenditure across required partners, even where initial capital was available to fund the installation of kit. However, we do understand that both BT and Virgin Media offer social tariffs at lower cost to some in receipt of means-tested benefits, such as Universal Credit.

Good quality digital connectivity is more vital than ever, and the impacts of the pandemic have only served to reinforce that – likely permanently changing the working habits and patterns of many people across Scotland. Our R100 commitment to deliver access to a superfast (>30 megabits per second) connection to every home and business in Scotland will be delivered via three strands – £600 million R100 contracts with BT,

our R100 Scottish Broadband Voucher Scheme and continued commercial coverage. Build has commenced in the main contracts and any premises unable to receive a superfast connection by the end of 2021 will be eligible for an interim voucher for installation of a temporary solution. The vast majority of premises eligible for intervention in the main R100 contracts with BT will receive future-proofed gigabit capable (>1,000 megabits per second) connections offering speeds in excess of the original superfast commitment.

More recent work does partially address this recommendation. In response to the COVID-19 pandemic, we also launched the Connecting Scotland programme, which aims to tackle digital exclusion. The programme provides people with a device and connection with unlimited data for two years, as well as training and support.

The programme was initially aimed to reach up to 9,000 people at clinical risk from COVID-19. Building on its initial success, the programme has been extended to reach 60,000 people on low incomes by the end of 2021, backed by £48 million of Scottish Government investment.

We are now working on an extension to the programme, with the aim of reaching 300,000 digitally excluded people over the course of this Parliament.

## Goal 15:

# Taxation

**Develop and implement a fair, equitable and transparent tax system that drives carbon emission reductions, while recognising different abilities to pay, and generates revenue to enable energy transition.**

As set out in the [updated Climate Change Plan](#), the Scottish Government is supportive of using tax policy, where possible and appropriate, to drive action. UK government action is critical to the delivery of Scotland's targets given the number of key powers it holds. This includes fiscal and pricing elements of emissions trading, decisions on the gas grid, investment in electricity network infrastructure, regulation on energy networks, vehicle standards, motoring taxes and the regulation of renewable energy investment. The vast majority of tax and fiscal powers, including many of those that relate to recommendations made by Assembly members, are reserved. The Scottish Government is therefore very limited in what it can implement itself in this area.

However, we are committed to work with, and set out our specific requests to, the UK government to encourage the changes that are needed if we are to reach our net zero target. We will also consider how the powers we have can be used to incentivise change. The work to identify potential options is underway and, where possible, we will endeavour to consider the recommendations of the Assembly members as this work progresses.

**Following analysis of the Assembly's recommendations, the Scottish Government will take the following action:**

- We have committed to work with our agencies and stakeholders to design and implement a skills guarantee for workers in carbon-intensive sectors.

## Recommendation 73:

**Incentives for Green Jobs Training**

Introduce tax incentives for training / retraining for green jobs, aimed at those industries which are set to grow rapidly, to support the replacement of existing high-carbon jobs in the transition to net zero.

**Scottish Government Response**

The Scottish Government supports the ambition to provide opportunities and incentives for the skills and training laid out in this recommendation. Whilst the vast majority of tax powers are reserved to the UK Parliament, we will utilise different methods to achieve this.

In September 2021, reflecting the recommendations from both Scotland's Climate Assembly and the Just Transition Commission, the Scottish Government committed to work with our agencies and stakeholders to design and implement a skills guarantee for workers in carbon-intensive sectors and deliver this as part of the Green Jobs Workforce Academy.

The Government also committed to pilot and evaluate new apprenticeship models in sectors central to the transition to net zero, to help address barriers faced by SMEs.

The Government plans to introduce a 'toolkit' to help small/micro enterprises develop the skills and knowledge they need to adapt to a net zero world. The learning from these commitments will inform the shape of future action and funding.

The [Climate Emergency Skills Action Plan](#) (CESAP), published at the end of 2020, set out an overarching

approach for managing this skills transition, in addition to identifying a series of immediate actions. It outlines an ambitious, cohesive approach to green skills and green jobs.

The Government has also committed to refresh our internationally-recognised 'Learning for Sustainability Action Plan' in partnership with campaigners. This cross-curricular entitlement for all learners aims to ensure a whole school approach to the climate emergency.

The Government is committed to ensuring that the skills and education systems prepare people to contribute to the transition to net zero and ensure that everyone can benefit from new opportunities brought about by the transition.



## Recommendation 74:

**High Tax Carbon Resources**

Introduce a tax on producers that use high carbon resources in their manufacturing processes.

Children's Parliament: Make businesses pay for their waste and impact on the environment.

**Scottish Government Response**

It is beyond the current powers of the Scottish Parliament to introduce a new national devolved tax on carbon resource producers. However, carbon pricing mechanisms already exist that share similar aims.

The Scottish Government, along with the UK Government and the other Devolved Administrations, has joint responsibility for a significant non-tax carbon pricing lever – the UK-wide emissions trading scheme (UK ETS), that came in to operation in January 2021. The UK ETS creates a market-driven carbon price for the power and energy-intensive industry sectors. We have committed to tightening the UK ETS emissions cap by January 2023, or 2024 at the latest, to reflect the path to net zero. We have also committed to review other aspects of the Scheme such as free allocation (currently used to safeguard the competitiveness of the regulated industries and to avoid carbon leakage). The four nations have committed to consult on reforms to the UK ETS to ensure it supports our net zero commitments, and, subject to agreement of all Governments, we expect this to be published soon.

This builds on the Scottish Government's record of using pricing

policies successfully to reshape markets and deliver fairer and better outcomes, for example, through Minimum Unit Pricing for alcohol, the plastic bag charge, and Scottish Landfill Tax. Our approach to carbon pricing and supporting a more circular economy is no different and there are a number planned interventions, including the introduction of a Scottish Deposit Return Scheme, and through the Circular Economy Bill, exploring powers to introduce charges on single use plastic items such as single-use plastic coffee cups. These efforts are augmented by the new UK Plastics Packaging Tax, which will commence in 2022, and is intended to increase the supply of recycled plastic in circulation and reduce its costs relative to new and single-use plastics.

There are measures that the Scottish Government is already taking to reduce emissions associated with manufacturing processes, and engaging with UK Government to

create demand for low-emissions industrial products. As set out in Recommendations 1 and 56, we are also investing significantly in the support infrastructure for manufacturing in Scotland. The National Manufacturing Institute

Scotland (NMIS) and Michelin Scotland Innovation Parc (MSIP) are two of the major projects, amongst others, designed to generate efficiencies in manufacturing processes and support R&D investment and the transition to new, low carbon markets.

Recommendation 75:

## Carbon Land Tax

Introduce a carbon land tax which taxes emissions created through land use and penalise land currently emitting more carbon than it captures.

### Scottish Government Response

**The Scottish Government recognises the ambition behind this recommendation but is unable to implement a new national devolved tax within current powers.**

The ability to introduce a new national devolved tax in Scotland would require the devolution of new tax powers, with the consent of both the UK and Scottish Parliaments. As stated in responses to Goal 9, significant efforts are being made to

reduce carbon emissions from land use and support more sustainable land management reforms, including carbon reduction measures, such as tree planting and peatland restoration, that will be essential in tackling the climate crisis.

Recommendation 76:

## Frequent Flyer Tax or Levy

Discourage air travel by introducing a frequent flyer tax or levy.

Children's Parliament: Make prices for flying higher.

### Scottish Government Response

**The Scottish Government recognises the need to reduce the environmental impact of flying.**

The Scottish Government recognises the contribution that aviation makes to Scotland's greenhouse gas emissions, and the need for aviation emissions to reduce in order for our net zero ambitions to be realised. We want to achieve this in a way which still allows us to enjoy the social and economic benefits of air travel, and which recognises the role that aviation plays in connecting remote parts of Scotland, and the familial, cultural and economic benefits to Scotland of being connected globally.

We are supporting a range of ways to achieve the reductions required, including through technological improvements in the aviation sector and by providing viable alternatives to flying.

The use of Sustainable Aviation Fuels (SAF) has the potential to reduce emissions from international aviation by around 5-30%, depending on uptake and type of fuel used. The UK Government recently consulted on introducing a SAF mandate aimed at increasing the amount of SAF used in flights from the UK and as part of the work we are doing to develop a

Scottish Government Aviation Strategy we are considering what else we can do to increase the use of SAF.

For shorter routes with smaller aircraft, there has been some really promising progress in developing hydrogen and electric powered aircraft. While these aircraft are still at the early stages, they could mean that in future flying has a significantly lower environmental impact. As outlined in our response to Recommendation 32 we are committed to supporting the research and development of technical solutions to reduce aviation emissions.

Air transport in Scotland is currently taxed through UK Air Passenger Duty (APD). This has the effect of charging tax for each flight purchased, and at higher rates for longer journeys and in higher classes of travel, but without the need for recording the number of flights an individual has taken.

The Scottish Government does not currently have control over APD. However, we have committed to

reviewing APD rates and bands ahead of the introduction of the devolved Air Departure Tax (ADT), which will apply to the carriage of all eligible passengers from airports in Scotland, to ensure that any policy aligns with our climate change goals.

Separately, the Scottish Government is taking measures to encourage the

uptake of lower emission travel options. As outlined in our response to Recommendations 27 and 28 we are fully committed to improving the availability of low emission public transport options which could offer lower cost, convenient alternatives to air travel for domestic journeys.

Recommendation 77:

## Food Carbon Tax and Subsidy

Introduce a carbon tax on food, based on the carbon intensity of food production, and use the revenue to subsidise sustainable foods.

Children's Parliament: Make fresh, organic food cheaper. Make junk, processed and imported food more expensive.

Children's Parliament: Make items that are not good for the environment a higher price.

## Scottish Government Response

**The Scottish Government recognises the principle behind this recommendation, but is unable to implement a new national devolved tax within current powers.**

Powers related to taxation in this area are reserved. The ability to introduce a new national devolved tax in Scotland would require the devolution of new tax powers, with the consent of both the UK and Scottish Parliaments.

Through the United Kingdom's membership of the World Trade Organisation (WTO) Scotland is bound by international trade rules that limit the ability to subsidise agriculture and food sectors.

However, as outlined in Recommendation 47 the Scottish Government is committed to ensuring that environmental impact, emissions and climate change implications are key considerations in the development of a replacement for the current agriculture support scheme that is permissible within WTO rules.

Recommendation 78:

## Carbon Tax and Dividend

Introduce a carbon tax and dividend scheme - based on the polluter pays principle - so that for every tonne of CO2 emitted you pay a tax.

Children's Parliament: Make items that are not good for the environment a higher price.

### Scottish Government Response

**The Scottish Government is unable to implement a new national devolved tax within current powers.**

As outlined in previous responses the Scottish Parliament does not have the power to introduce a national devolved tax in Scotland, in lieu of the requisite powers being devolved.

As set out in the response to Recommendation 74, the UK ETS, which is jointly operated by all four UK nations, sets a market-driven carbon price for around a fifth of all carbon emissions in Scotland. The four nations have committed to consult on reforms to the UK ETS to ensure it supports our net zero

commitments, and subject to agreement of all Governments we expect this to be published soon.

Under the devolution settlement, revenues raised from UK ETS auctions currently revert to HM Treasury, not the Devolved Administrations. As part of the UK ETS governing authority, we will continue to press the UK Government to use the revenue from the UK ETS, as well as their significant fiscal capacity, to further support a just transition.



Recommendation 79:

## Tax High Carbon Aviation Fuels

Reduce the incentives to fly by introducing tax on high carbon aviation fuels and making it mandatory that this cost is passed on to the customer in their ticket price.

Children's Parliament: Make prices for flying higher.

### Scottish Government Response

The Scottish Government recognises the need to reduce the environmental impact of flying, however air transport is currently taxed through APD rather than a fuel duty. Members of the International Civil Aviation Organisation (including the United Kingdom) are prevented from taxing international aviation fuel under the Chicago Convention.

As set out in Recommendation 76, the Scottish Government recognises the impact of the aviation sector on our greenhouse gas emissions and the importance of reducing this.

The UK recently joined an International Aviation Climate Ambition Coalition which will work towards International Civil Aviation Organisation adopting an ambitious long-term goal for reducing aviation emissions. Other countries such as France, the USA and Japan have also joined this coalition. International collaboration is key to reducing global emissions from aviation.

If, in the future, international agreements were amended to permit the charging of duty on aviation fuel, any consideration of a duty would need to consider the risk of perverse incentives such as tankering on short-haul routes (i.e. carrying additional fuel for the return journey, increasing the weight carried and thus

emissions), or displacement of demand to jurisdictions without such a duty, and the availability of alternative aviation fuels. International collaboration is also critical to avoiding these types of risks.

Flights within the UK and between the UK and the EEA are covered by the [UK Emissions Trading Scheme](#). This creates a carbon price for aircraft operators, who must acquire and surrender a number of allowances equivalent to the carbon dioxide emissions of their flights. In addition, the three airlines that provide almost all of Scotland's domestic connectivity offset emissions from all domestic flights.

Given the complex interplay between international agreements, and of making links between a duty on fuel and a tax on ticket prices, the Scottish Government would need to carefully consider any proposals in this area.

Recommendation 80:

## Increase Road Tax to Subsidise Public Transport

Phase in increased road taxes for private car use and use the revenue to subsidise public transport.

### Scottish Government Response

**The Scottish Government supports the ambition to reduce the emissions generated in the production and use of cars and to encourage active and public transport as alternatives.**

Emissions from transport contribute nearly a fifth of all Scotland's carbon emissions with cars accounting for almost 40% of transport emissions. Reducing our transport emissions will be vital if we are to meet our world leading carbon reduction targets and end Scotland's contribution to climate change.

Technology solutions will be key in some areas such as the transition to zero carbon vehicles, including electric cars. However, it will not be possible to reach zero emissions through technological solutions alone and encouraging more people to take active and public transport options and to take fewer journeys by car will also be needed. This underpins the Scottish Government's commitment to reducing car kilometres travelled in Scotland by 20% by 2030.

We are working to publish a route map that will set out the range of supporting measures the Scottish Government is taking to meet the 20% km reduction commitment. This builds on steps the Scottish Government has already taken to support increased use of public

transport, including through the use of subsidies. These are outlined in the response to Recommendations 28 and 29.

The Scottish Government will continue to engage the UK Government on the need for reform of existing taxes related to motoring – to create a tax system that better incentivises the transition to zero-emission vehicles, and protects future revenues to fund policies that can support a shift to more active and public transport and that encourages all of us to be less reliant on our cars.

## Goal 16:

# Measuring Success

**Reframe the national focus and vision for Scotland's future away from economic growth and Gross Domestic Product (GDP) in order to reflect climate change goals towards the prioritisation of a more person and community centred vision of thriving people, thriving communities and thriving climate.**

The COVID-19 pandemic has emphasised the interconnected nature of social well-being, economic prosperity and the environment, and has given renewed impetus to our efforts to ensure that Scotland can thrive in the future. By addressing the disproportionate, negative impact of the pandemic on people already experiencing disadvantage and acknowledging that we must improve further, the [Covid Recovery Strategy](#) aligns our recovery with our ambitions for a well-being economy.

What we measure matters, and delivering a well-being economy will mean looking beyond GDP to measure things that people value – the quality of jobs, the health of citizens and the impact of economic activity on our environment.

Scotland is already leading the way on this work and we have made well-being an explicit part of our national purpose as a country, underpinning our National Performance Framework.

We are committed to pursuing a well-being economy and Scotland is a founding member of the Well-being Economy Government network (WEGo) alongside New Zealand and Iceland. WEGo seeks to promote sharing of expertise and transferable economic policy practices to deliver societal well-being.

## Recommendation 81:

# Measurement Framework

**Business and government to adopt a measurement framework for success that incorporates sustainability, well-being and happiness alongside profit.**

## Scottish Government Response

**The Scottish Government supports the Assembly's recommendation to consider sustainability, well-being and happiness in our measurement framework.**

The National Performance Framework is Scotland's well-being framework, first introduced in 2007. 11 National Outcomes set out a vision for Scotland where everyone can flourish through increased well-being, and sustainable and inclusive economic growth. 81 National Indicators measure success using a wide range of social, economic and cultural indicators that consider various aspects of well-being such as: mental health, child well-being and happiness, greenhouse gas emissions, wealth inequality, and loneliness, alongside economic measures such as GDP.

The COVID-19 pandemic has emphasised the interconnected nature of social well-being, economic prosperity and the environment, and has given renewed impetus to our efforts to ensure that Scotland can thrive in future. We are aligning our recovery with our ambitions for a well-being economy which is based on the principles of equality, sustainability, prosperity and resilience.

The [Community Empowerment \(Scotland\) Act 2015](#), states that the National Outcomes must be reviewed every five years, and the next review will start no later than June 2023. Changes to the National Performance Framework will be considered as part of this process.

To understand how well we are performing as a well-being economy, we are developing a Well-being Economy Monitor. The Monitor will not only guide economic policy, but will also identify barriers to well-being and integrate a four capitals approach to make sure that sustainability is part of our policy process.

## Case Study: Well-being Economy Pilot

We have developed a Well-being Economy Framework as a tool to identify key opportunities, challenges and strategic priorities for delivering a well-being economy. Our Well-being Economy Pilot Project, in collaboration with Clackmannanshire Council, is using this framework to establish how the well-being economy principles of prosperity, inclusion and sustainability can guide local economic development policy, including as a response to COVID-19.

Evidence gathered in the course of this project from data, analysis and stakeholder engagement is supporting Clackmannanshire Council to prioritise and target interventions to maximise well-being economy opportunities within the local area, including through refreshing their Local Outcome Improvement Plan. The outcomes of this project will allow us to develop a comprehensive toolkit to support decision-making for the well-being economy in local areas and regions across Scotland.

“Covid has shown that by working together and focussing on what really matters we can make a difference. The Climate Assembly is another shining example of this, bringing together diverse backgrounds and experiences, truly representative of all of Scotland. We must take the energy and innovation that was brought to saving lives and supporting people during the pandemic to the even greater challenges presented by the climate emergency.”

**Deputy First Minister and Cabinet Secretary for Covid Recovery, John Swinney MSP**





# Section 3: Next Steps



## Next Steps

This response describes the actions that the Scottish Government is taking as a result of the ambitious recommendations made by Scotland's Climate Assembly. What is more difficult to quantify is the profound impact the Assembly has had within Government. The Assembly has given us a mandate to act in some of the most challenging areas, and has opened the door for new conversations now taking place across Government. This will have a fundamental, enduring impact on future policy development.

Our response to the Assembly's recommendations is also reflected in Scottish Government policy that has been evolving over the past six months, since the publication of the full report:

- The refining of Government's policy positions ahead of COP26
- The Bute House Agreement between the Scottish Government and the Scottish Green Party Parliamentary Group
- The new [Heat in Buildings Strategy](#)
- The development of a new Economic Strategy

The Assembly has called for action at all levels of society and considered these levels when making their recommendations - society, public policy, organisations, households, individuals. We agree that Government alone cannot achieve a just transition to net zero. Where Scottish Government action is not possible due to a lack of necessary powers, we will contact our counterparts in the UK Government directly to raise the Assembly's recommendations and request their response.

We will work with Children's Parliament to ensure that children are able to access and engage with the response. We will also continue to develop opportunities for the ongoing participation of children and young people, including in our Just Transition Plans.

This formal Scottish Government response is not the end of this Assembly process. The Assembly itself will meet again for an eighth and final weekend in early 2022, to consider this response. During this meeting, the Scottish Government will make a representative available to discuss this response with Assembly members.

Where we have committed to taking action in the future, we will provide updates to Assembly members to ensure we remain accountable for the steps we have set out in this response.

**This is our commitment to doing politics differently.**

## Annex A: List of Acronyms

ABS	Area Based Schemes
AECS	Agri-Environment Climate Scheme
AMCF	Advancing Manufacturing Challenge Fund
APD	Air Passenger Duty
BPF	Bus Partnership Fund
BSI	British Standards Institution
BSIP	Bus Service Improvement Partnership
CAP	Common Agricultural Policy
CARES	Community and Renewable Energy Scheme
CCS	Carbon Capture and Storage
CESAP	Climate Emergency Skills Action Plan
COSLA	Convention of Scottish Local Authorities
COSS	Community Ownership Support Service
CPS	ChargePlace Scotland
CSIC	Construction Scotland Innovation Centre
CSO	Civil Society Organisations
DYW	Developing the Young Workforce
ELC	Early Learning and Childcare
EPC	Energy Performance Certificate
EPR	Extended Producer Responsibility
ESA	Energy Skills Alliance
EU	European Union
EV	Electric Vehicle
FAS	Farm Advisory Service
FFBC	Farming for a Better Climate
FTE	Full-Time Equivalent
GDP	Gross Domestic Product
HIAL	Highlands and Islands Airports Limited
IMO	International Maritime Organisation
IPCC	Intergovernmental Panel on Climate Change
kWh	Kilowatt-hour
LED	Light-Emitting Diode
LHEES	Local Heat and Energy Efficiency Strategies
LCF	Low Carbon Fuels
LCITP	Low Carbon Infrastructure Transition Programme
LCMCF	Low Carbon Manufacturing Challenge Fund
MIG	Minimum Income Guarantee

MSIP	Michelin Scotland Innovation Parc
MSP	Minister of Scottish Parliament
MVP	Minimum Viable Product
NCAPP	Natural Capital Pilot Programme
NESA	National Energy Skills Accelerator
NGOs	Non-Governmental Organisations
NHS	National Health Service
NMIS	National Manufacturing Institute Scotland
NMP	National Marine Plan
PAS	Publically Available Specification
PB	Participatory Budgeting
POBAS	Piloting an Outcomes Based Approach in Scotland
R100 SBVS	R100 Scottish Broadband Voucher Scheme
RLUP	Regional Land Use Partnership
SAF	Sustainable Aviation Fuels
SAP	Standard Assessment Procedure
SBCF	Scottish Blue Carbon Forum
SCCAN	Scottish Communities Climate Action Network
SCDC	Scottish Community Development Centre
SECR	Streamlined Energy and Carbon Reporting
SMAS	Scottish Manufacturing Advisory Service
SME	Small and Medium Sized Enterprises
TCV	The Conservation Volunteers
UBI	Universal Basic Income
UNCRC	United Nations Convention on the Rights of the Child
UNESCO-IPBC	United Nations Educational, Scientific and Cultural Organisation, International Partnership for Blue Carbon
UK	United Kingdom
UK ETS	United Kingdom Emissions Trading Scheme
WEEE	Waste Electrical and Electronic Equipment
WRAP	Waste and Resources Action Programme
WTO	World Trade Organisation



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