

The Environment Strategy for Scotland:

Progress report on Environment Strategy
March 2024



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Laid before the Scottish Parliament by the Scottish Ministers under section 47 of the UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021.

March 2024

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Foreword

The Environment Strategy is the overarching framework for Scotland's environment and climate policies. It brings together in one place our plans and actions designed to tackle the twin crises in nature and climate. The strategy aims to strengthen the connections between environmental policy and policies across government.

The development of the strategy is seeking the transformative changes needed to meet our targets to restore nature and tackle climate change, while harnessing the opportunities this creates for our economy and wellbeing. These are challenging questions, that go to the heart of the country we want to be in the future. We are building a strong evidence base to inform the development of the strategy.

The strategy complements and reinforces our vision for Scotland to transition to a wellbeing economy: that is, an economic system, within safe environmental limits, which serves and prioritises the collective wellbeing of current and future generations.

In 2020, we published the Vision and Outcomes¹ for the strategy, setting out the scale of our ambition for Scotland's environment, and for a healthier and sustainably prosperous society that thrives within the limits of our single, shared planet.

This report provides an update for the Parliament on our progress in developing the strategy including the developing evidence base.



Màiri McAllan MSP
Cabinet Secretary for
Wellbeing Economy,
Net Zero and Energy

A handwritten signature in black ink, appearing to read 'Màiri McAllan'.

1 [The Environment Strategy for Scotland: vision and outcomes](#)

1. Introduction

The UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021 ('the Continuity Act')² provides a statutory framework for the Environment Strategy. Section 47 of the Continuity Act requires the Scottish Ministers to prepare and publish an environmental policy strategy. The section places requirements on the content of this strategy and the process for its adoption. In addition, it requires that a report containing an explanation of progress towards preparation of the strategy should be submitted to the Parliament annually until it is completed.

The Scottish Government will meet the requirements of section 47 of the Continuity Act through further development of the Environment Strategy, building on the vision and outcomes³ that were published in February 2020.

In 2021, the Scottish Government published an initial monitoring framework for the Environment Strategy.⁴ This set out the initial selection of indicators that will be used to track progress towards the strategy outcomes, and plans for reporting progress. We also identified areas where further work will be undertaken to explore indicators as the monitoring framework is further

developed. We have developed a website to show progress towards the strategy outcomes.⁵

In 2022, we published the first update report to Parliament, as required by the Act. In that report, we set out some of the key policy areas that intersect with the strategy, and some of the main areas of progress.

The connections between the Environment Strategy and the Scottish Government's vision for a wellbeing economy are strong. Under our wellbeing economy vision, we recognise that all economic activity should serve a purpose. It should be a means to meeting everyone's basic needs and improving our collective health and wellbeing, so that all of Scotland's people and places can thrive and prosper. That also means responsible stewardship of our natural environment to safeguard the wellbeing of both current and future generations, and to make a positive contribution internationally.

Our vision for Scotland is to transition to a wellbeing economy: that is, an economic system, within safe environmental limits, which serves and prioritises the collective wellbeing of current and future generations.

2 [The UK Withdrawal from the UK \(Continuity\) \(Scotland\) Act 2021](#)

3 [The Environment Strategy for Scotland: vision and outcomes](#)

4 [Environment strategy: initial monitoring framework](#)

5 [Environment Strategy: Initial Monitoring Framework \(data.gov.scot\)](#)

In 2023, we published a progress report that described our plans for the development of pathways for the achievement of the Environment Strategy's outcomes. We set out how we would develop a solid evidence base and work with partners to develop new and effective policy ideas to help Scotland to achieve our ambitious targets.

In this third progress report, we will present the results of research that will form a major part of the evidence base for the strategy. This research will contribute to the development of policy for the outcomes for Scotland's economy and society and our global footprint. This report will also set out how we shall bring the strategy to consultation and complete its development.

2. Environment Strategy Vision and Outcomes

The Environment Strategy vision and outcomes⁶ were published by the Scottish Government in February 2020. Publication followed detailed consultation with stakeholders, through an online discussion and consultative groups. A series of knowledge accounts were also published, summarising the key evidence that supported the development of the vision and outcomes for the strategy.

One Earth. One home. One shared future.

By 2045: by restoring nature and ending Scotland's contribution to climate change, our country is transformed for the better – helping to secure the wellbeing of our people and planet for generations to come.

Alongside the vision, we presented the six outcomes that provide a structure for the efforts of the Scottish Government and partners to achieve the vision.

Three of the outcomes describe our ambitions for the environment, focusing on nature, climate change and sustainable resource-use:

- Scotland's nature is protected and restored with flourishing biodiversity and clean and healthy air, water, seas and soils.
- We play our full role in tackling the global climate emergency and limiting temperature rise to 1.5°C.

- We use and re-use resources wisely and have ended the throw-away culture.

There are established policies and strategies in these areas, which support and integrate with the Environment Strategy. The Environment Strategy sets an overall framework for these policies and explores synergies between them, and with the wider ambitions discussed below.

The remaining three outcomes describe wider ambitions for Scotland's economy, society and global citizenship – strengthening connections with wider government policies.

- Our thriving, sustainable economy conserves and grows our natural assets.
- Our healthy environment supports a fairer, healthier, more inclusive society.
- We are responsible global citizens with a sustainable international footprint.

It is important that all areas of policy contribute towards the vision of the strategy, driving the transformative changes needed to tackle the twin crises, through a just transition. It is also vital to recognise and promote the role nature can play in achieving wider goals for the health and wellbeing of Scotland's people and the resilience of our economy.

Figure 1 shows how our action to deliver the strategy outcomes will help to achieve the Scottish Government's national outcomes and contribute to the UN sustainable development goals.

⁶ [The Environment Strategy for Scotland: vision and outcomes](#)

Figure 1: Contribution of the Environment Strategy vision and outcomes to National Outcomes and UN Sustainable Development Goals



Centre:
 Environment Strategy vision












Inner ring:
 Environment Strategy outcomes

Middle ring:
 National Outcomes in the National Performance Framework

Outer ring:
 UN Sustainable Development Goals

Key

National Outcomes in the National Performance Framework

- 
Children and young people: We grow up loved, safe and respected so that we realise our full potential
- 
Communities: We live in communities that are inclusive, empowered, resilient and safe
- 
Culture: We are creative and our vibrant and diverse cultures are expressed and enjoyed widely
- 
Economy: We have a globally competitive, entrepreneurial, inclusive and sustainable economy
- 
Education: We are well educated, skilled and able to contribute to society
- 
Environment: We value, enjoy, protect and enhance our environment
- 
Fair work and business: We have thriving and innovative businesses, with quality jobs and fair work for everyone
- 
Health: We are healthy and active
- 
Human rights: We respect, protect and fulfil human rights and live free from discrimination
- 
International: We are open, connected and make a positive contribution internationally
- 
Poverty: We tackle poverty by sharing opportunities, wealth and power more equally

UN Sustainable Development Goals



3. Building the Evidence Base

It is vital that the policies and priorities that will be set out in the fully developed Environment Strategy are built on a strong base of evidence. This is particularly important for the three outcomes that link environmental policy to wider ambitions for Scotland's economy, society and global citizenship. For these outcomes, there is the most to learn from an assessment of where we need to change to meet the outcome, and from international examples of successful policies. There is also the greatest scope for new thinking, drawing on academic studies of ways to achieve transformative change in an economy and society, in line with our vision for a wellbeing economy.

As well as gaining expert input from the researchers, we are working with subject experts and stakeholders to ensure that the research best reflects Scottish circumstances. The results of this research will help us understand in greater detail the nature of the transformations needed to achieve the outcomes, and the types of policy levers that can be used to drive change.

To support the development of the strategy, substantial new research focuses on the economy, society and global footprint outcomes. The work addresses two broad research questions.

1. What does evidence tell us about current progress towards the outcome?
2. How can the Scottish Government use the available policy levers most effectively to drive progress?

We have published completed research projects for the economy and global footprint outcomes. This comprises a major project for each outcome, with the New Economics Foundation reporting on the economy outcome⁷ and the Global Footprint Network reporting on the footprint outcome.⁸ For each project, we have also published work that we commissioned from the James Hutton Institute to enrich and support the development of the main research.

We set out below brief summaries of the research findings. The reports are available to read in full, and each report has a comprehensive executive summary that gives a more thorough overview of the research findings and policy recommendations.

7 [The Environment Strategy for Scotland: Delivering the Environment Strategy Outcome on Scotland's Economy - Evidence Base & Policy Levers - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/evidence-base-policy-levers/economy-outcome/summary/2024-03-20/html)

8 [The Environment Strategy for Scotland: Delivering the Environment Strategy Outcome on Scotland's Global Footprint - Evidence Base & Policy Levers - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/evidence-base-policy-levers/global-footprint-outcome/summary/2024-03-20/html)

Research to support the development of policies for the economy outcome

The world faces unprecedented crises of climate breakdown and biodiversity loss, driven by the ways in which our economies have developed. The New Economics Foundation research project focuses on the functioning of the domestic economy within Scotland and the features and functions of key sectors of the Scottish economy.

The 'economy' outcome within the strategy focuses on the goal of a just transition to a net zero, nature positive, circular economy. This outcome directly aligns with the National Strategy for Economic Transformation's ambition for a 'greener economy'. It is also integral to the Scottish Government's vision for a wellbeing economy, defined as an economic system, within safe environmental limits, which serves and prioritises the collective wellbeing of current and future generations. The Scottish Government's Programme for Government (2023-24) describes a wellbeing economy as 'an economy which meets the needs and aspirations of people and provides opportunities for all', and commits to 'use every lever at its disposal to deliver a wellbeing economy that is fair, green and growing'.

The report begins with an assessment of current progress in Scotland towards a net zero, nature positive, circular economy:

- In the transition to net zero, Scotland has set ambitious targets and has made some progress in sectors such as electricity generation, but many other key sectors require a faster pace of emissions reduction to meet 2030 and 2045 milestones.
- The combined evidence available suggests that a significant transformation across many sectors will be needed to achieve a nature positive economy in Scotland.
- Scotland's economy was estimated to be 1.3% circular in terms of its resource use in 2022, below the level of circularity estimated for the global economy (8.6%). Waste management and reduction targets are ambitious, but further system change will be needed to meet them.

The report continues with a review of the Scottish Government's existing use of the available policy levers for driving the just transition to a net zero, nature positive, circular economy. This finds that, although there have been pockets of success, overall progress has been limited on creating a nature positive and a circular economy, where bold targets have been set but the necessary legislation, policies and implementation are still in train.

In the report, a Theory of Change approach is undertaken to map out the key intermediate outcomes on the pathway to a net zero, nature positive, circular economy, and to identify how existing policy levers could go further, or new policy levers could be adopted, to steer the economy of Scotland onto a more direct path to achieving these goals. Finally, the report makes extensive recommendations for how the set of available policy levers can be applied more effectively to move towards a net zero, nature positive, circular economy.

Finally, the report reflects on how the

wider economic model and policy framework affects Scotland's ability to achieve the just transition to a net zero, nature positive, circular economy. Broad recommendations arising from this discussion include shifting to an economic system that is growth-agnostic, targeting improvements in wellbeing rather than GDP.

The supporting report from the James Hutton Institute⁹ provided important analysis on the character of nature positive economies, which are an emerging concept, with no current consensus on how they are defined. However, the report set out that there is an acceptance that they are economies built around principles of wellbeing for nature and societies rather than monetary and material values, with actions that are regenerative and collaborative, in which economic growth is only valued where it contributes to social progress and environmental protection. Some of their components are recognisable as part of a system that tackles climate change and biodiversity loss and delivers outcomes consistent with wider societal goals.

The report found that an important aspect of achieving such a transformation is to progress towards renovating infrastructures and implementing innovations that integrate social, institutional, and physical processes and relationships that support the connections within and between systems. One framework for articulating

the transformations required is Economic Operating Infrastructures (EOI) for a wellbeing economy. The categories of EOI that follow the principles for a wellbeing economy consist of economic innovations associated with overarching efforts to shift the narrative away from conventional economics towards one of wellbeing, alongside innovations in approaches to economic governance, financing mechanisms, exchange mechanisms, business structures, and products and services. Using this model and a review of evidence, the report sets out a synthesis of actions and recommendations to achieve transitions to nature positive economies.

Research to support the development of policies for the global footprint outcome

The research will support our development of a pathway for achieving Scotland's goal of being responsible global citizens with a sustainable international footprint. The Global Footprint Network research project first considered the impact of Scotland's consumption and production on the natural environment in other countries.

The project presented an estimate of the ecological footprint, using a methodology of biocapacity accounting. The report discusses that earth is in overshoot, as the demand on ecological resources exceeds what the ecosystems can regenerate. During overshoot, the planet's ecological regeneration becomes the most limiting physical bottleneck for economies. Even fossil fuel is most severely limited by ecological regeneration, as this energy source is constrained by the

⁹ [The Environment Strategy for Scotland: Driving the Transition to a Nature Positive Economy - A Synthesis of Policy Levers for Governments - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/environmental-strategy-for-scotland-driving-the-transition-to-a-nature-positive-economy-a-synthesis-of-policy-levers-for-governments-2022/pages/100_to_109.aspx)

finite amount of greenhouse gas emissions that ecosystems can assimilate. Therefore, the report uses regeneration as the metric's lens is the most effective way to systemically track the ecological performance of a city, a country, a company or even humanity as a whole.

By now, the sum of all human activities competing for our planet's 'regenerative budget' is so large that only portions are renewed, and the rest depends on depleting the planet's ecosystems. As explained in the report, regenerating humanity's total demand would currently require more than 1.7 Earths. The situation is even tighter than this number may suggest, because some portions of Earth would need to be set aside for biodiversity to stop its decline. The ratio between human demand and regeneration can be quantified by mapping the demand and the availability of biologically productive land required to provide for this demand.

The Ecological Footprint represents the demand side – the sum of all the productive areas needed to regenerate what is being taken, such as forests, pasture, crop area or fishing grounds. Biocapacity represents the availability – the sum of all these productive areas that exist to provide regeneration. Tracking these through the same lens then allows analysts to compare demand against availability. This then shows the levels of deficits and overshoot.

The report presents findings that:

- Scotland's demand on regeneration, i.e. its Ecological Footprint of consumption, stretches to 4.3 global hectares per person, slightly higher

than the UK average of 4.2 global hectares per person.

- Scotland's Ecological Footprint of consumption currently exceeds by about one quarter what its territory's ecosystems can renew i.e. its biocapacity. Compared to the UK's biocapacity, which is only 1.1 global hectares per person, Scotland's biocapacity per person (3.5 global hectares) is over three times larger. Still, with a Footprint of 4.3 global hectares per person, Scotland runs a biocapacity deficit.
- an estimated 47% of Scotland's consumption originates from countries outside the UK. Food comprises the largest overseas footprint among all consumption categories. Goods have the largest portion of their Footprint originating overseas – over 70%. Housing is on the other end of the extreme with only one quarter sourced from overseas.

The report sets out that, in the past, it would suffice to directly address specific impacts. However, with persistent overshoot at a global level, impacts have become systemic. Therefore, it now requires managing economies' overall demand on 'nature's budget': reducing overuse in one place without reducing demand will simply move demand and its impact somewhere else. In other words, impacts are no longer just a question of quality (how we interact with nature) but of quantity (how much we demand i.e. the size of economies' material metabolism). Reducing the total quantity of consumption demand will therefore be essential in order to achieve Scotland's goal of having a sustainable international footprint.

Quantity reduction efforts can be challenging to achieve and this will require careful policy development. The report considers ways to reduce consumption demand while also strengthening Scotland's long-term prosperity. Approaches that position the environmental goal in ways that support wider societal goals have the highest chance of being embraced. Also, the report explains the benefit of taking the broader view of building Scotland's 'wealth' (i.e. its capacity to operate and thrive) rather than merely driving income (e.g. as measured by Gross Domestic Product), when evaluating policies. Drawing on international examples and existing policy levers, the report recommends how to think about the challenge, outlines possible policy interventions and explores how these could be positioned among current government activities.

The GFN report builds on a review by the James Hutton Institute¹⁰ which sets out policy examples from around the world that aim at reducing environmental impacts abroad. This review makes clear that even 'best practices' are too weak to respond to the size of the challenge, and that many practices have not been in place long enough to even determine their effectiveness. Most of the existing policies addressing impacts abroad focus on quality aspects, thereby underplaying overshoot and this can lead to impact displacement rather than their reduction. The GFN report identifies

specific footprint reduction opportunities from a systemic perspective.

As the report was tasked with evaluating Scotland's impact on the natural environment overseas, it focuses on those consumption categories with large portions of their footprints representing biological inputs, such as food and clothes (i.e. Scotland's non-carbon footprint). This report does not address in any detail the largest footprint component, the carbon footprint. Scotland's consumption emissions are already being considered by Scottish Government policies and plans. As climate change is a key driver of biodiversity loss, Scotland's carbon footprint contributes to its impact on nature overseas. Finally, the footprint reduction opportunities identified are also analysed from the perspective of how well they serve other core priority goals of the government, to avoid policy conflicts.

The recommendations presented in the report address opportunities for reducing food waste, strengthening local food production, supporting agricultural innovation, promoting sustainable, healthy diets and establishing more circular supply chains for the textile industry. Scotland already has policies in place across many of these areas, but there are opportunities to go further and to address gaps.

10 [3. Executive Summary - The Environment Strategy for Scotland: Reducing Scotland's International Environmental Impact - Learning from International Best Practices - gov.scot \(www.gov.scot\)](#)

Research in progress to support the development of policies for the society outcome

We have commissioned further research from the Stockholm Environment Institute that will draw on their globally influential work over the last 50 years to contribute to the development of policy for our society outcome, and to assist in the integration of the research across the strategy. This project, which will also inform the development of the Scottish Government's Just Transition policies will consider how the Scottish Government can design policies to achieve the societal transformations needed in response to tackle the climate and nature emergencies. The project will follow the pattern of the projects on the economy and global footprint outcomes, first assessing the evidence for where Scotland stands now against the desired outcome and secondly identifying policy levers and policy options for moving towards the outcome. The project will also bring together recommendations from the completed research projects to identify connections and synergies. The Stockholm Environment Institute research project is due to complete in summer 2024.

4. Completing the Strategy

Building on the solid evidence base, we shall move ahead to complete the Environment Strategy. The Environment Strategy will set out policies and actions that promote a whole-of-government approach to achieving our vision. Progress with delivery does not have to wait until the strategy is fully developed and delivery is already happening across many areas of policy.

The outcomes pathways for nature, climate change and resource-use will signpost to Scotland's established strategies and plans in these areas. We will promote new opportunities for breaking down barriers between environmental policy and a whole-government approach to delivery.

The outcome pathways for Scotland's economy, society and global footprint will explore where there is potential for further action to help drive transformative change, building on existing policies, seeking opportunities to build actions into strategies and programmes across government.

The results of the research discussed in Chapter 3 will feed into the development of the outcome pathways, where we will explore opportunities across government for implementing the research recommendations through changes to policy design and delivery. Our aim is to find new ideas to improve policy design to promote the outcomes of the strategy while supporting the other goals of government, including sustainable growth, improved health outcomes and the wellbeing economy.

A range of impact assessments will also be undertaken during the second phase of pathway development. These impact assessments will ensure that the proposals in the Environment Strategy are effective and protect important rights and communities. A Strategic Environmental Assessment (SEA) will be carried out to evaluate the impact of the proposed strategy on the environment, and to inform the development of the outcome pathways by robustly considering whether we have identified policies that best promote delivery of our goals for nature and environmental sustainability. The SEA process will be open and consultative and will be an important element in the development of the strategy. As a part of the SEA development, we shall give full consideration to the guiding principles on the environment, in line with the duty included in the Continuity Act.

Our aim is to launch a public consultation in 2025, building on the open and participative approach we have taken throughout the development of the Environment Strategy. We will conduct a public consultation on the full Environment Strategy (vision, outcomes, monitoring framework and outcome pathways) and the SEA Environmental Report. We will develop plans to hear views from as wide a range of interests as possible during the consultation.

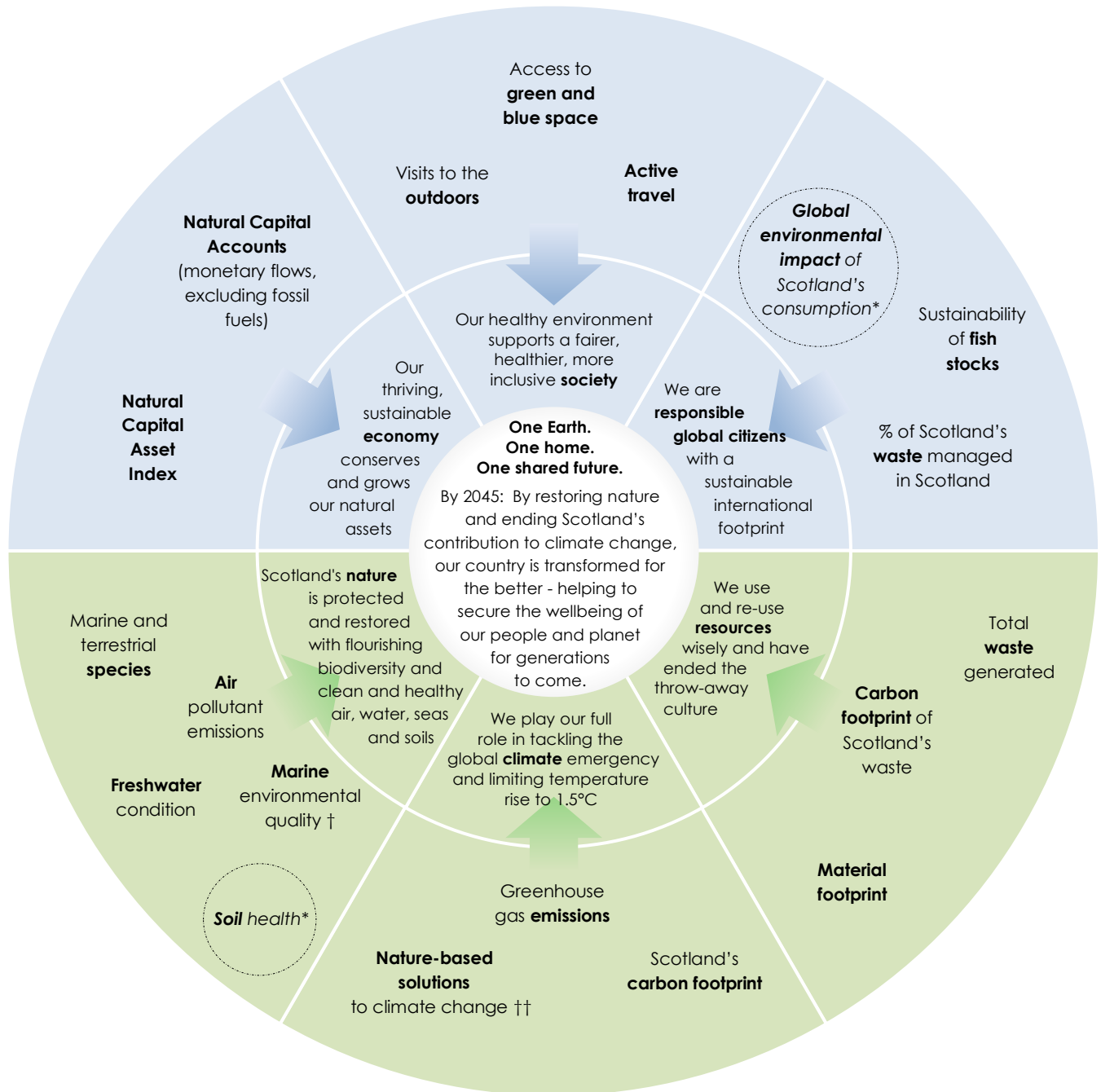
After taking account of consultation feedback, the full strategy will be laid before the Parliament and designated as the 'environmental policy strategy' required under the Continuity Act.

Once the policy is adopted, the statutory duty on Ministers to have due regard to the strategy when developing all policies will take effect. This will help to ensure that the strategy has an impact across government. We will consider the need for guidance, training support for officials and record keeping to support the implementation of this duty.

Monitoring Framework

The initial monitoring framework, published in 2021, identified some areas where further work is needed to identify robust indicators of progress towards outcomes. Work to identify additional indicators will be undertaken following the development of draft outcome pathways. This will allow us to consider indicators to measure progress in the key areas for change identified in the pathways. The consultation on the pathways will also seek views on indicators to consider during this review. During the review process, we will engage with stakeholders to invite their views and expertise. Once finalised, new indicators will be incorporated in the monitoring framework website.

Figure 2: Environment Strategy: Initial Monitoring Framework



Key:

Centre: Environment Strategy vision

Inner ring: Environment Strategy outcomes

Outer ring: Indicators in initial monitoring framework

* Indicators to be confirmed

† A suite of indicators reflecting chemical contamination, marine litter and seafloor integrity

†† A suite of indicators relating to woodland expansion and peatland restoration



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