Climate & Ecology Bill

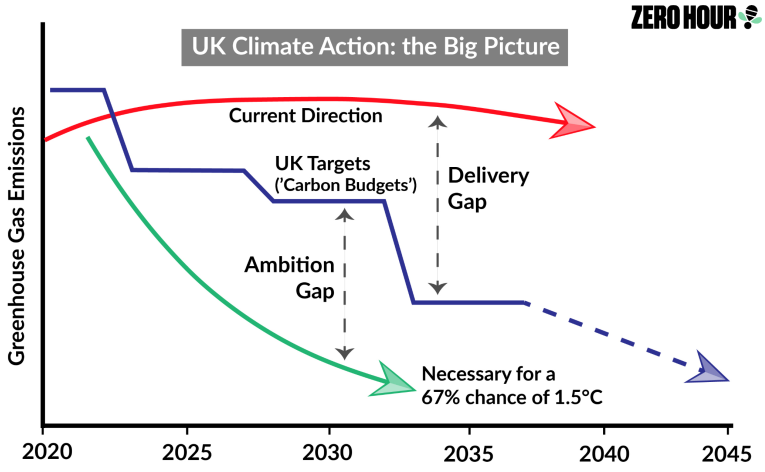
Zero Hour briefing for MPs ahead of the CE Bill's 10 May re-introduction

Introduction

The Climate & Ecology (CE) Bill is a legally-binding mission statement which will ensure policy and action on the climate and nature crisis is science-led and people-oriented.

The UK led the world with the Climate Change Act of 2008, and did so again with its commitment to Net Zero by 2050. In both cases, other countries followed our lead. The CE Bill would set a gold standard for other developed nations. By passing it, UK politicians would help inspire positive action across the world.

The UK's current targets are far from sufficient for 1.5°C. The Government's latest policy announcements aimed to tackle the Delivery Gap, but the Ambition Gap remains. Furthermore, it is critical that we tackle the interconnected climate and nature crises together.



We have no chance of limiting warming to anything like 1.5°C unless we protect and actively restore nature; particularly the critical ecosystems that support life and store huge amounts of carbon, such as peatlands, woodlands, seas and wetlands, as well as our rivers and soils.

Our Ambition Gap report, reviewed and endorsed by leading scientists, sets out in more depth the void between current legislation and the red lines dictated by the latest science.

The framework set out in the CE Bill, however, would lock the science into law and ensure the UK is doing its real fair share to maintain a liveable planet.

Key proposals

If made law the CE Bill would ensure that the UK:

- Creates a joined-up plan—the crises in climate and nature are deeply intertwined, requiring a plan that considers both together.
- Cuts emissions in line with 1.5°C—ensuring UK emissions are reduced rapidly, for the best chance of limiting warming to 1.5°C.
- Not only halts, but also reverses the decline in nature—setting nature measurably on the path to recovery by 2030.
- Takes responsibility for our overseas footprint—both emissions and ecological.
- Prioritises nature in decision-making, and ends fossil fuel production and imports as rapidly as possible.
- Ensures no-one is left behind—through fairness provisions.
- Involves the public—giving people a say in finding a fair way forward through a Climate & Nature Assembly, an essential tool for bringing the public along with the unprecedented pace of change required.

Fundamental principles

After passing the CE Bill, the Government must develop a strategy, in consultation with the public via a 'Climate & Nature Assembly'. The strategy must follow the following fundamental principles:

1. Limit the UK's total CO_2 emissions to no more than its proportionate share of the IPCC's remaining global carbon budget, for a 67% chance of limiting heating to 1.5°C.
2. Reduce CO_2 emissions caused in the manufacture of the goods we import, in line with UK territorial emissions.
3. Reduce the UK's emissions of methane and other greenhouse gases, at rates consistent to limiting global heating to 1.5°C.
4. Ensure the end of the exploration, extraction, export and import of fossil fuels by the UK as rapidly as possible.
5. Ensure that steps taken to mitigate emissions minimise damage to ecosystems, food and water availability, and human health, as far as possible.

6. Restore and expand natural ecosystems, and enhance the management of cultivated ecosystems, to protect and enhance biodiversity.

7. Include the Mitigation and Conservation Hierarchy so that any development or activity that threatens nature uses this framework to prioritise the protection of nature.

8. Address the UK's entire ecological footprint at home and overseas by accounting for and monitoring the impacts on human health and the destruction of nature; through the production and consumption of goods and services and all related activity including financing, the extraction of raw materials and waste production.

Key clauses in the CE Bill

The Bill leads with two overarching targets, one for climate and the other for nature.

1. Climate target

This target would ensure that the UK:

1 (2) (a) reduces its overall contribution to global greenhouse gas emissions to net zero at a rate consistent with—

(i) limiting the global mean temperature rise to 1.5°C versus pre-industrial levels;

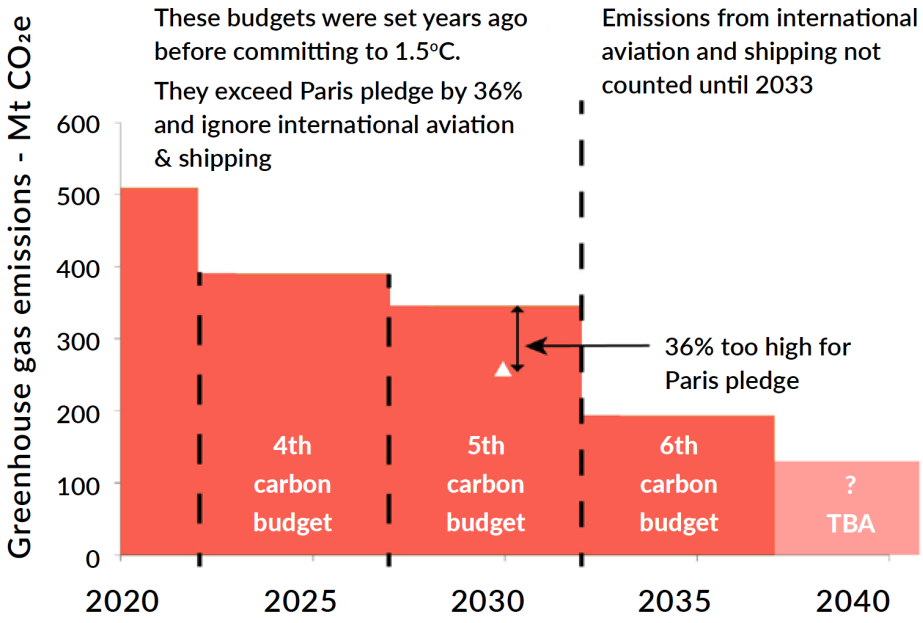
(ii) fulfilling its obligations and commitments under the UNFCCC and the Paris Agreement, taking into account the United Kingdom's and other countries' common but differentiated responsibilities, and respective capabilities, considering national circumstances;

Why do we need a new climate target?

Below are some of the weaknesses with the UK's current targets. For a comprehensive list, please refer to Zero Hour's Ambition Gap report.

Out of date and incomplete

Some of our targets are almost 13 years old, set before scientists fully understood the dangers of exceeding 1.5°C, and before the UK adopted its net zero by 2050 target. They ignore international aviation and shipping until 2033, as well as blue carbon, which is being released from marine environments due to activities like industrial fishing. Current targets also ignore almost 40% of the UK's emissions by not accounting for all of our imported emissions (as outlined on page 6, below).



No specific targets for methane and other non-C02 warming gases

Methane is responsible for a huge 0.5°C of the 1.2°C of warming seen to date. But the current UK strategy sets no individual targets for methane or other non-CO2 warming gases. Instead, these gases are bundled into a single metric, 'Greenhouse Gases', expressed in tonnes of CO2 equivalent (CO2e).

But these other greenhouse gases affect the climate very differently to CO2, and grouping them together like this misrepresents the impact of powerful short-lived warming gases like methane. Methane only lasts in the atmosphere for around 12 years, yet its heating impact, when incorporated into the combined 'Greenhouse Gases' metric, is treated as if it is spread evenly over 100 years. This seriously underestimates the impact of methane over the near term, during which it is vital to avoid crossing tipping points like the melting of large ice sheets, or the loss of the Amazon Rainforest.

The CE Bill will require individual targets be set for methane and the two other main greenhouse gases, nitrous oxide and f-gases (see clause 2(3)(c)).

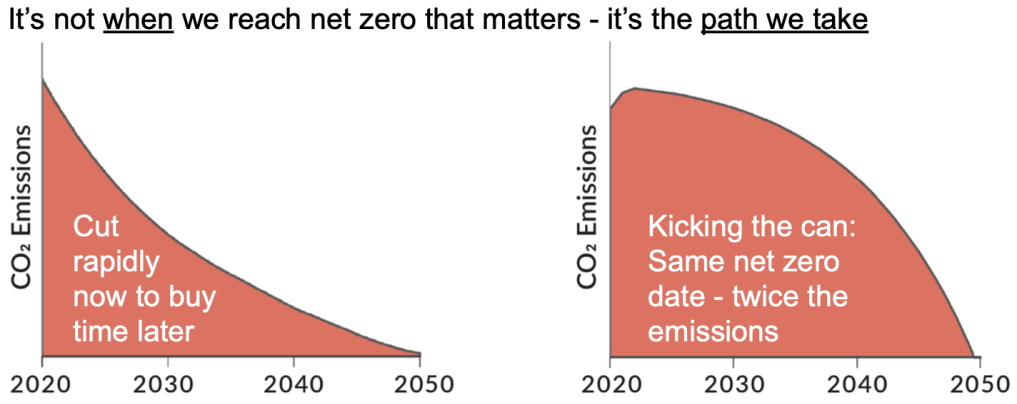
Too many promises for the future, and not enough action now

The UK's current strategy is heavily focused on the relatively distant net zero date of 2050. Perhaps partly as a consequence, far too few people understand that it's cumulative emissions that matter—not target milestone dates. That is because global heating is proportional to cumulative emissions. And the Government is taking far too little action to reduce emissions now, instead gambling on speculative technology to deliver big cuts tomorrow.

But people do understand the concept of working to a budget. That's one of the key benefits of switching over to a system of linking the UK targets to our share of the remaining carbon budget. It matches more closely to the principle of how CO2 works on

the atmosphere—i.e. it accumulates and so we need to build an understanding that every tonne matters.

The CE Bill will embed this concept of a finite carbon budget into law and lead us to take much stronger action in areas like cutting wasteful emissions and moving more quickly on renewables (e.g. onshore wind).



---

2. Nature target

This target would ensure that the UK:

1 (2) (b) halts and reverses its overall contribution to the degradation and loss of nature in the United Kingdom and overseas by—

(i) increasing the health, abundance, diversity and resilience of species, populations, habitats and ecosystems so that by 2030 and measured against a baseline of 2020, nature is visibly and measurably on the path of recovery;

(ii) fulfilling its obligations under the UNCBD and its protocols and the commitments set out in the Leaders' Pledge for Nature;

(iii) following the principle of common but differentiated responsibilities.

Why do we need a new nature target?

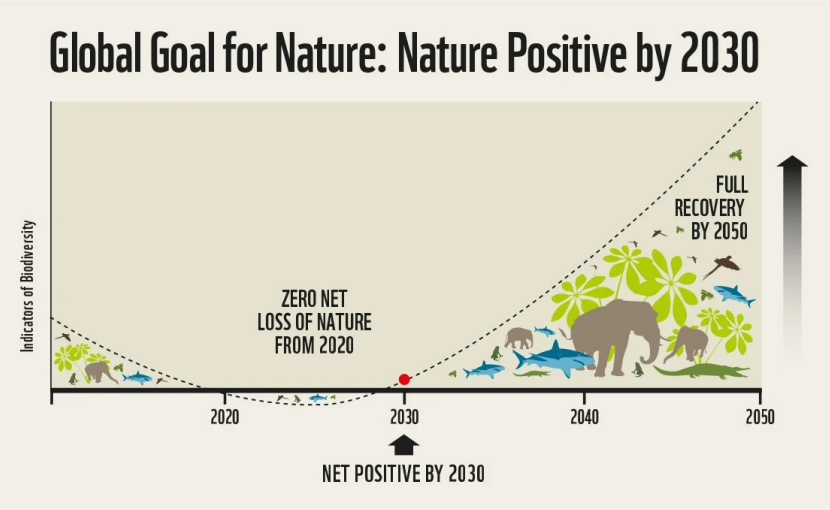
Joined up approach

The natural world is complex and the role it plays in regulating the climate is often overlooked. Protecting critical ecosystems that contain large stores of irrecoverable carbon, such as forests, peatlands, wetlands and the ocean, must take equal priority with cutting emissions. This is essential if we are to avoid tipping points that may lead to the large-scale release of carbon, resulting in catastrophic heating. Cuts in emissions from fossil fuels are only half the solution.

Climate change accelerates biodiversity loss. At the same time, biodiversity loss exacerbates climate change, degrading nature's capacity to absorb and store carbon and adapt to the impacts of global heating. Other than the Climate and Ecology Bill, there is currently no other proposed or actual legislation that addresses the two sides of the coin together in an integrated approach.

Halt and reverse

The Environment Act (2021) introduced a "species abundance target" to halt the decline in the abundance of species, by 2030. But as one of the world's most nature-depleted nations, scientists are calling for much more ambition, to halt and reverse the decline of nature—the target found in the CE Bill. The CE Bill has a holistic nature target that would increase "the health, abundance, diversity and resilience of species, populations, habitats and ecosystems so that by 2030, and measured against a baseline of 2020, nature is visibly and measurably on the path of recovery."



The UK does have a longer term target to halt "the decline in our wildlife populations" by 2042 and to increase species populations by 10% on 2030 levels. But the Wildlife and Countryside Link warns that in the absence of concrete plans to address the current rate of decline, the state of nature is on course to worsen considerably by 2030. This risks pushing ecosystems beyond dangerous points from which they may not be able to recover.

The CE Bill's nature target aligns with the international commitment to halt and reverse the destruction of nature by 2030 that the UK has signed up to at the UN Biodiversity Summit—CBD COP15—in 2022. Therefore the Bill would be enforcing this agreement by placing it into national legislation.

Prioritising the protection of nature

According to the first report published by the new Office for Environmental Protection (OEP) in May 2022, key UK ecosystems are close to tipping points. The OEP's chief insights officer, Simon Brockington, identified some of the key causes of degradation, including

seabed trawling, which destroys the integrity of the ecosystem, and the pollution of farmland and rivers with fertilisers and livestock manure.

The Bill evokes the Mitigation and Conservation Hierarchy (clause 2.(3)(g)) so that any development or activity that threatens nature uses this framework to prioritise the protection of nature. It also accounts for the UK's entire impact on human health and the destruction of nature, at home and overseas; through the production and consumption of goods and services and all related activity including financing, the extraction of raw materials and waste production.

---

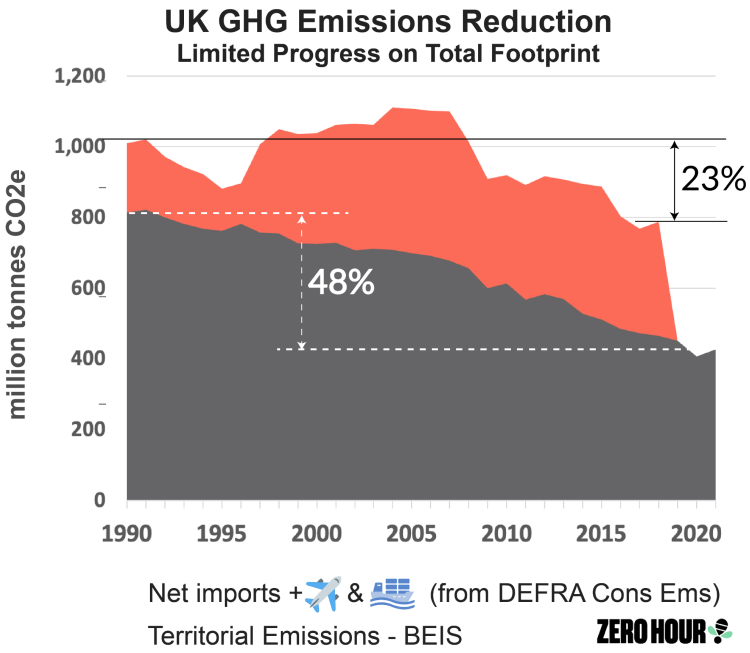
3. Accounting for the UK's emissions and ecological footprints

Emissions footprint

The CE Bill calls on the UK to account for emissions created outside the UK via our consumption by:

2 (3) (b) reducing emissions of carbon dioxide in respect of imports to the United Kingdom, at the same percentage rate each year as the annual reduction of the United Kingdom's emissions of carbon dioxide

The UK has done well to reduce its territorial GHG emissions by 48% since 1990, i.e. those that occur within our geographic borders. But that picture changes when we include the emissions caused in the manufacture of our imports, and our share of international and aviation emissions. This is a major issue for the UK as the largest net importer of CO2 emissions in the G7.



In total, our carbon footprint has only fallen by 23% since 1990. That's less than 1% a year - a long way from the "rapid far-reaching and unprecedented changes in all aspects of society" called for by the IPCC. On the positive side, there is now much more awareness that ignoring imports isn't a sustainable position. Companies and cities take responsibility for their scope 3 emissions. It is time that countries did too.

Ecological footprint

A priority for all governments in developed countries must be to stabilise the world's critical carbon sinks and stores—the 'global safety net' of ecosystems such as tropical

forests, peatlands, and the ocean. Many of these are also the richest remaining areas for biodiversity, which is critical to keeping them functioning and preventing the loss of irrecoverable carbon.

- Groundbreaking new research published in the journal Lancet Planetary Health establishes that the EU and the UK are responsible for 25% of global ecological damage.

- The UK has an extremely high food emissions economy, responsible for 35% of emissions because it imports around 50% of its food. To compound this, more than 50% of UK household food purchases are ultra-processed, compared to 14% for France and 13% for Italy.

We eat an astonishing 79 million ready meals each week. Ultra-processed foods and livestock production use large quantities of water and vast amounts of just a few commodities, such as meat and seafood, soy, palm oil, and wheat. Our diet leaves our economy highly dependent on these commodities and exposed to supply disruption, causing shortages and price rises, as shown by the wheat shortage due to the war in Ukraine and pressure from climate change in India and Canada.

The large-scale production of these commodities causes widespread ecological damage, with beef, soy and palm oil particularly associated with global deforestation. The JNCC has begun work on estimating the global environmental impacts of UK consumption, producing its first report in October 2021.

- Exponential growth in the production of unsustainable foods is driving large-scale emissions and ecological breakdown.

- This poses risks to public health, food security and the stability of Earth's critical carbon stores. It is also inequitable.

- Developed countries use more than three quarters of the world's farmland to feed livestock, while over 2 billion people have insufficient access to safe and nutritious food.

- Richer nations are stripping natural resources from poorer nations—such as land, minerals, forests, water, and marine resources—hampering their ability to develop sustainably and to protect the critical ecosystems that all countries depend upon.

According to the Lancet report, resource consumption in the UK and among the other largest consumers must be reduced by around 70%. The WWF concurs: "we must reduce the UK's environmental footprint by three-quarters by 2030 to help the world stay within planetary limits". The European Parliament also calls for binding targets to reduce resource footprints by 2030 and bring them within planetary boundaries by 2050. The WWF report Thriving Within our Planetary Means shows that the UK's overseas land footprint for just seven commodities takes up a land area almost equal to the size of the UK itself.

There is no doubt that reducing our global footprint presents governments with huge challenges. But a Nature Positive Economy can create significant opportunities and

benefits, generating new jobs, innovations and wider economic gains. The Government's Net Zero Strategy recognises the need for a circular economy, but mainly in the context of energy saving and waste reduction. It does not commit to addressing extent to which we are depleting domestic and global natural resources.

---

4. Fairness and involving the public

Leaving no-one behind in the transition to a green economy

It is important to ensure that sections of society are not left behind in the rapid transition away from fossil fuels—both for moral reasons but also out of economic national interest. That is why the Bill contains the following measures:

- The Government's strategy must include financial support and retraining to enable people to transition from working in high emissions and high impact industries to new jobs in the low carbon economy.
- The strategy must be designed to ensure a positive and fair impact on local communities with high levels of deprivation.

Building consensus

The IPCC has warned that limiting heating to 1.5°C will require "rapid, far-reaching and unprecedented changes in all aspects of society". Achieving a broad public consensus on the way forward will be essential in rising to this challenge. So it is vital that the British public is fully informed about, and feels consulted on, the changes needed—rather than having the sense that changes are being imposed in a top down way.

- That's why the Climate and Ecology Bill includes a temporary Climate and Nature Assembly to advise Parliament on the emergency strategy.

- The Assembly will be made up of ordinary citizens, randomly selected to represent all sections of society.

- It will hear evidence from a wide range of experts, deliberate on the options, and make recommendations on a strategy which will be debated in Parliament.

- The Secretary of State must include in the strategy all recommendations by the Assembly that have the support of 66% or more of its members, where those recommendations are also jointly proposed by Government advisory committees: the Climate Change Committee and the Joint Nature Conservation Committee.

The Assembly will not override our democracy. Parliament will remain sovereign at all times and has to vote on the Secretary of State's strategy. But it will provide visible democratic legitimacy for the far-reaching changes that are required to tackle the climate and nature crisis. It will provide robust support for ministers communicating changes to the public, which will inevitably be challenging for some. A robust example of such an assembly was Climate Assembly UK, which was established by several Select Committees in 2019 to help them understand public preferences on how to tackle climate change.

Developing a strategy: The Climate and Nature Assembly process

1. Government must present an emergency strategy to Parliament within 12 months of passing the CE Bill, with annual interim targets to help us stay on track.

2. Formation of a Climate & Nature Assembly, made up of a representative group of randomly selected UK citizens must commence within 3 months of passing the Bill.

3. The Climate Change Committee (CCC) and Joint Nature Conservation Committee (JNCC) must produce a review for the Government, listing proposed measures for inclusion in the strategy. It must include all recommendations of the Climate & Nature Assembly which have more than 66% support, unless there are exceptional and compelling reasons why not, which must then be stated in order that MPs can have final say.

4. The Secretary of State must include all recommendations from the Climate & Nature Assembly with more than 66% support **and backed by the CCC and JNCC**.

5. The CCC and JNCC must report annually on progress against targets, and if we are not on track, the Secretary of State must revise the strategy or explain to Parliament why a revision is not necessary.

6. If the Government fails to deliver a strategy that meets the Bill's objectives and fundamental principles, breaching the duties imposed by the Bill, the Government can be challenged in the High Court through judicial review.

Devolution

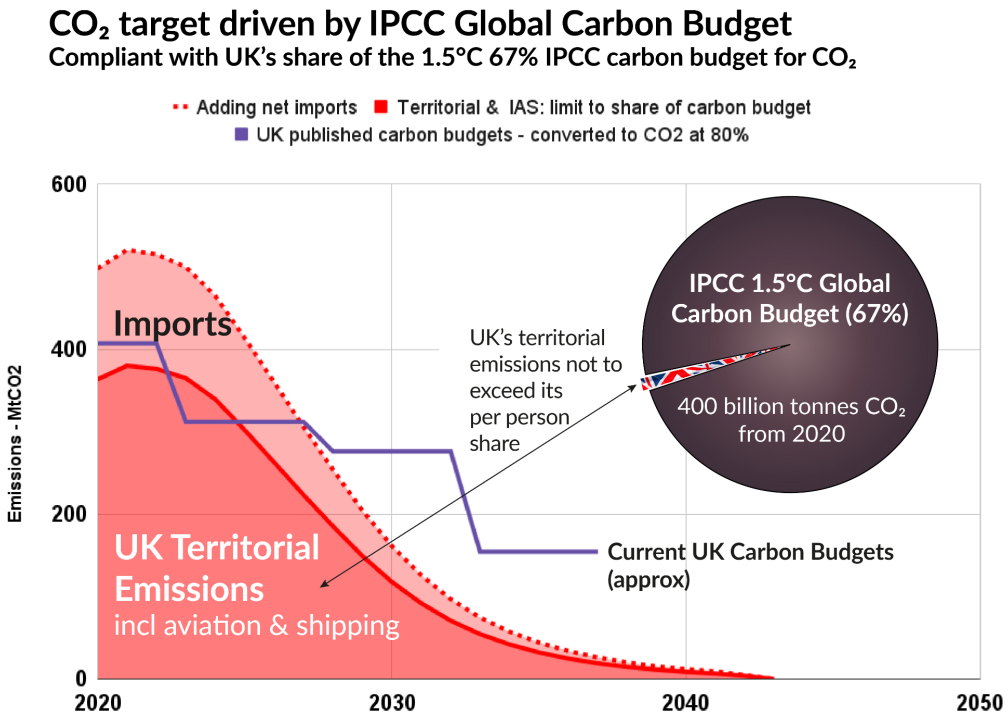
The CE Bill proposes a UK-wide, co-operative approach between all UK Administrations, via a process that respects matters of devolved legislative competence. As some climate (i.e. energy) and environmental matters are devolved issues, and the responsibility of the Scottish Parliament/Government, Welsh Parliament/Government, and Northern Ireland Assembly/Executive, the measures in the strategy relating to devolved matters require approval from these Devolved Administrations (see, clause 5).

In addition, the joined-up strategy proposed by the CE Bill will be developed with the input of citizens—representative of England, Scotland, Wales, and Northern Ireland—ensuring that the voices of citizens across the UK nations are taken into account, as part of co-creating the strategy.

Appendix

The CE Bill explained graphically

The following chart shows one illustrative pathway to net zero consistent with the Bill. Our share of the global carbon budget has been stretched out just beyond 2040 by cutting emissions more robustly in the near term. The UK's territorial emissions (red shaded area), including all aviation and shipping, must not exceed our share of the 400 billion tonne CO2 global carbon budget, measured from the start of 2020. Imported emissions must be reduced at the same pace as territorial emissions.



Calculating the UK's proportionate share of the Global Carbon Budget

The CE Bill would require the UK not to emit more than its proportionate share of the global carbon budget for a 67% chance of limiting heating to 1.5°C, calculated proportionately on the basis of population. To allow for the additional emissions associated with population growth up to global net zero in 2050, we have used average forecast population figures from 2020 to 2050. This is essential to ensure that developing nations are not unfairly treated.

A	Global carbon budget, from 2020, for 67% chance of 1.5°C	400	billion tonnes CO_2
B	World population (forecast average to 2050)	8.2	billion
C	Carbon budget per person (A ÷ B)	49	tonnes CO_2
D	UK Population (avg. to 2050—ONS projected)	69.7	million
E	UK Share of the carbon budget for 67% chance of 1.5°C (C ✕ D)	3.4	billion tonnes CO_2

Under the UK's existing climate targets, the UK's carbon footprint from 2020 to 2050 is likely to be at least 2.2 times higher than our proportionate share of the global carbon budget.

Since so little remains of the global carbon budget for 1.5°C, under existing targets, there is no realistic prospect now of the UK emitting less than its proportionate share in order to account for its historic emissions—despite a strong moral case for doing so.

To limit warming to 1.5°C, developing nations will have to leapfrog the large-scale exploitation of fossil fuels. For this, they will need financial and technical assistance, which must be provided by the UK and other developed nations in line with commitments made under the the principle of 'Common but Differentiated Responsibilities' (UNFCCC).