

Research Briefing

12 August 2025

By Nuala Burnett,
Iona Stewart

The UK's Plans and Progress to Reach Net Zero by 2050



Summary

- 1 Targets and governance
- 2 UK policy
- 3 Progress towards net zero

Contributing Authors

Tamsin Edwards;
Roger Tyers

Image Credits

Solar panels wind turbines by vencav. Licensed by Adobe Stock
id=#96622127. 4 May 2023.

Disclaimer

The Commons Library does not intend the information in our research publications and briefings to address the specific circumstances of any particular individual. We have published it to support the work of MPs. You should not rely upon it as legal or professional advice, or as a substitute for it. We do not accept any liability whatsoever for any errors, omissions or misstatements contained herein. You should consult a suitably qualified professional if you require specific advice or information. Read our briefing [‘Legal help: where to go and how to pay’](#) for further information about sources of legal advice and help. This information is provided subject to the conditions of the Open Parliament Licence.

Sources and subscriptions for MPs and staff

We try to use sources in our research that everyone can access, but sometimes only information that exists behind a paywall or via a subscription is available. We provide access to many online subscriptions to MPs and parliamentary staff, please contact hoclibraryonline@parliament.uk or visit commonslibrary.parliament.uk/resources for more information.

Feedback

Every effort is made to ensure that the information contained in these publicly available briefings is correct at the time of publication. Readers should be aware however that briefings are not necessarily updated to reflect subsequent changes.

If you have any comments on our briefings please email papers@parliament.uk. Please note that authors are not always able to engage in discussions with members of the public who express opinions about the content of our research, although we will carefully consider and correct any factual errors.

You can read our feedback and complaints policy and our editorial policy at commonslibrary.parliament.uk. If you have general questions about the work of the House of Commons email hcenquiries@parliament.uk.

Contents

Summary	4
1 Targets and governance	6
1.1 Net zero by 2050 target	6
1.2 Carbon budgets	7
1.3 Interim targets up to 2050	8
1.4 Assessing progress	9
2 UK policy	13
2.1 The Net Zero Strategy (October 2021)	13
2.2 Carbon Budget Delivery Plan (March 2023)	14
2.3 Clean Power by 2030 (December 2024)	16
2.4 Revised Carbon Budget Delivery Plan (due by October 2025)	18
3 Progress towards net zero	19
3.1 Overall assessment	20
Sectoral progress	25
3.2 Electricity supply	25
3.3 Transport	27
3.4 Heat and buildings	29
3.5 Industry	30
3.6 Agriculture and land use	32

Summary

The UK is committed to reaching net zero by 2050. This means that the total greenhouse gas emissions would be equal to the emissions removed from the atmosphere, with the aim of limiting global warming and resultant climate change.

The UK Government has adopted a suite of policies in order to reach net zero. Its most recent strategy document, published under the Sunak Government, is the 2023 [Carbon Budget Delivery Plan](#) (March 2023), with a revised plan to be published in Autumn 2025.

Initial policy and the Net Zero Strategy

The 2021 Net Zero Strategy set out a series of policies and commitments designed to enable the UK to reach net zero by 2050. In July 2022, a [High Court judgement](#) found that the strategy was unlawful under the Climate Change Act 2008, and ruled that the government should set out more detail on how it aims to meet its carbon budgets and reach net zero.

In response to the judgement, the government updated the policies and commitments made in the strategy with the March 2023 [Carbon Budget Delivery Plan](#). The delivery plan set out how the government would meet the emissions reductions required for carbon budgets four to six (spanning 2023 to 2037).

Policy developments in 2024

A [second legal challenge at the High Court](#) in May 2024 found that the revised strategy (the Carbon Budget Delivery Plan) was unlawful in its assertion that the plans put forward would enable the UK to meet its carbon budgets. It ruled that government needed to prepare a revised plan by 2 May 2025. Following the announcement of the general election, this deadline was [extended to October 2025](#).

The Labour Government announced its plan to deliver [Clean Power by 2030](#) in December 2024. This was supported by several policies and new pieces of legislation, notably the Great British Energy Act (to set up a publicly owned clean power company to accelerate investment in renewable energy).

Policy developments in 2025

In 2025, further funding for measures to decarbonise the economy and meet net zero was announced in the [Spending Review](#).

A revised plan setting out policies and commitments to meet carbon budgets and the UK's net zero target needs to be published by October 2025, and the government has said that it will [publish a “refreshed Carbon Budget delivery and Growth Plan”](#).

Scrutiny of the government's approach

These strategies and policies have been subject to scrutiny from parliamentary committees, independent third-party reviews, and wider media attention. The Climate Change Committee undertakes an annual assessment of policies that contribute to the net zero by 2050 target, which it submits to Parliament.

Its [2024 Progress Report](#) set out that the new government would “have to act fast to hit the country's commitments”. It noted progress in low carbon technologies alongside an increasing need to focus on how the UK adapts to changes already present, and sets out ten priority actions for the next year.

The CCC's [2025 Progress Report](#) recognised the new government's ambitions and assessed that the net zero target is “within reach, provided the government stays the course”. The CCC noted that while historic progress has been driven by decarbonisation of the electricity system, more recent progress could be attributed to the surface transport sector, alongside the increased roll out of measures such as heat pumps, and policies such as tree planting and peatland restoration. However, it also noted that limited action had been taken to remove policy costs from electricity and reiterated that making electricity cheaper remained its main recommendation.

This briefing provides an overview of the background context for net zero, headline policies since 2020, and current progress towards this goal. It gives a breakdown of current net zero policy by some of the key sectors, including stakeholder commentary on this progress.

1 Targets and governance

1.1 Net zero by 2050 target

The [Climate Change Act 2008](#) sets the legislative basis for the UK's action on climate change.¹

In 2019, following the recommendation of the Climate Change Committee (CCC), the Government committed to a 100% reduction in greenhouse gas emissions by 2050 as compared to a baseline of 1990. This was done via the [Climate Change Act 2008 \(2050 Target Amendment\) Order 2019](#). This is referred to as the net zero target and is legally binding.

The legal definition of net zero as set out in the Climate Change Act is to ensure that the “net UK carbon account” is 100% lower than the 1990 baseline. This can be achieved through reducing emissions as well as offsetting greenhouse gases, such as planting trees or using carbon capture and storage technologies.² This means the total greenhouse gas emissions produced would be equal to the greenhouse gas equivalents removed from the environment.³

Net zero targets in the four parts of the UK

All of the UK must meet net zero by 2050 in line with the target set out in legislation; however, the four parts of the UK have different emissions profiles and approaches to achieving this.⁴

England, Wales and Northern Ireland will reach net zero by 2050, whilst [Scotland has set its own target](#) to become a net zero economy by 2045.⁵ In 2020, [the interministerial group for Net Zero, Energy and Climate Change](#) was established to support collaboration across the parts of the UK.⁶

¹ [Climate Change Act 2008](#)

² GOV.UK, [UK becomes first major economy to pass net zero emissions law](#), 27 June 2019

³ Office for National Statistics, [Net Zero and the different official measures of the UK's greenhouse gas emissions](#), 24 July 2019

⁴ National Audit Office, [Approaches to achieving net zero across the UK](#), 15 September 2023

⁵ [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#)

⁶ GOV.UK, [Interministerial Group for Net Zero, Energy and Climate Change Communique: 30 June 2021](#), 6 November 2023

1.2

Carbon budgets

Under [Section 4 of the Climate Change Act 2008](#), as amended, the government must set five-yearly carbon budgets, twelve years in advance, from 2008 to 2050, and must meet these targets.⁷

[Carbon budgets](#) are a statutory cap on the total greenhouse gas emissions the UK can emit in a five-year period.⁸

The carbon budgets that have been set are as follows:

- The first carbon budget ran from 2008 to 2012 with an emissions cap of 3,018 million tonnes of carbon dioxide equivalent (MtCO₂e). A 26% reduction on 1990 levels.
- The second carbon budget covered the period from 2013 to 2017 with an emissions cap of 2,782 MtCO₂e. A 32% reduction on 1990 levels.
- The third budget covered the period from 2018 to 2022 with an emissions cap of 2,544 MtCO₂e. A 38% reduction on 1990 levels.
- The fourth budget covers the period from 2023 to 2027 with an emissions cap of 1,950 MtCO₂e. A 52% reduction on 1990 levels.
- The fifth budget covers the period from 2028 to 2032, with a cap of 1,725 MtCO₂e. A 58% reduction on 1990 levels.
- The sixth budget covers the period from 2033 to 2037, with a cap of 965 MtCO₂e. A 77% reduction on 1990 levels.⁹
- A seventh carbon budget is due to be set by 30 June 2026 to cover the period from 2038 to 2042.¹⁰

These carbon budgets apply to the UK as a whole; however, Wales has set different carbon budgetary periods to England and Northern Ireland. Legislation in Scotland does not require carbon budgets to be set, but there is a requirement to meet annual carbon reduction targets.¹¹ The emissions of all four parts of the UK contribute to the carbon budgets, even if their individual approaches are different.

⁷ [Climate Change Act 2008](#)

⁸ LSE Grantham Research Institute, "[What are Britain's carbon budgets?](#)", 30 April 2020, [accessed 31 July 2024]

⁹ CCC, [Advice on reducing the UK's emissions](#), [accessed 16 October 2023]

¹⁰ CCC, [Advice on reducing the UK's emissions](#), [accessed 16 October 2023]

¹¹ National Audit Office, [Approaches to achieving net zero across the UK](#), 15 September 2023

Advice on CB7

In February 2025, the CCC issued advice to government on [setting the seventh carbon budget](#) (CB7).¹² This recommended that CB7 be set at is 535 MtCO₂e for the period 2038-2042, including emissions from international aviation and shipping.

The CCC set out that:

this would be an ambitious target, reflecting the importance of the task. But it is deliverable, provided action is taken rapidly. Our advice is based on the latest technological, social, and economic evidence; extensive sector modelling; engagement with stakeholders including businesses, trade unions, and farmers; and a citizens' panel testing what would make changes accessible and affordable to households.¹³

The government has not publicly responded to this advice. The statutory deadline for setting CB7 is June 2026.

1.3

Interim targets up to 2050

Following the 21st United Nations Climate Change Conference (COP21) in 2015, the Paris Agreement was adopted. It is a legally binding international agreement on climate change with an overarching goal to keep the increase in global average temperature to “well below” 2°C above pre-industrial levels, and to “pursue efforts” to limit the temperature increase to 1.5°C. It entered into force on 4 November 2016.¹⁴

As part of the agreement, countries (including the UK) have to submit a “[nationally determined contribution](#)” (NDC) to set out the actions they will take to meet the goals of the agreement.¹⁵

In [December 2020, the UK Government submitted its NDC](#) to the United Nations Framework Convention on Climate Change (UNFCCC) in line with Article 4 of the Paris Agreement. In its NDC, the UK committed to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels.

In [January 2025, the UK Government submitted its revised NDC](#) to the UNFCCC. In this, the UK committed to reducing economy-wide greenhouse gas emissions by at least 81% by 2035, compared to 1990 levels.¹⁶ This

¹² Advice provided in respect of [section 34 of the Climate Change Act 2008](#)

¹³ CCC, [The Seventh Carbon Budget](#), 26 February 2025

¹⁴ UNFCCC, [The Paris Agreement: What is the Paris Agreement?](#), [accessed 26 October 2023]; United Nations, [Paris Agreement \(PDF\)](#), 2015

¹⁵ UNFCCC, [Nationally Determined Contributions: The Paris Agreement and NDCs](#), [accessed 10 November 2023]

¹⁶ Department for Energy Security and Net Zero (DESNZ), [UK's 2035 Nationally Determined Contribution \(NDC\) emissions reduction target under the Paris Agreement](#), 30 January 2025

followed [advice from the CCC](#), which recommended that the NDC be set at this level to remain consistent with the government's net zero by 2050 ambitions and clean power by 2030 target.¹⁷

There are no separate interim targets for England, with progress assessed against UK-wide targets. Northern Ireland has set an interim target of 48% reduction by 2030 through the [Climate Change Act \(Northern Ireland\) 2022](#), and Wales has set an interim target of 63% by 2030 through the [Climate Change \(Interim Emissions Targets\) \(Wales\) Regulations 2021](#).¹⁸ Scotland set an interim target of 75% by 2030 through the [Climate Change \(Emissions Reductions Targets\) \(Scotland\) Act 2019](#), but this has subsequently been withdrawn by the Scottish Government.¹⁹

1.4 Assessing progress

The Department for Energy Security and Net Zero ('DESNZ') is the government department primarily responsible for policies relating to net zero in England, although this is a cross-cutting issue that requires coordination with other departments (for example, the Department for Environment, Food and Rural Affairs 'Defra' and the Department for Transport).²⁰

Government progress towards net zero is assessed by Parliamentary scrutiny committees and the independent Climate Change Committee, as well as independent parliamentary body the National Audit Office (NAO).

Scrutiny of UK Government policy

The Climate Change Committee

Scrutiny of the government's policy progress towards net zero is undertaken by the independent Climate Change Committee (CCC), which produces annual progress reports. The CCC is an independent statutory body established under the [Climate Change Act 2008](#), and its purpose is:

To advise the UK and devolved governments on emissions targets, and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.²¹

The CCC also scrutinises climate change policy progress and plans across the other parts of the UK, including issuing progress reports to the Scottish

¹⁷ CCC, [Letter: Advice on the UK's 2035 Nationally Determined Contribution \(NDC\)](#), 26 October 2024

¹⁸ National Audit Office, [Approaches to achieving net zero across the UK](#), 15 September 2023

¹⁹ CCC, [Letter: Design and implement carbon budgets in Scotland](#), 14 May 2024

²⁰ Previously referred to as the Department for Business, Energy and Industrial Strategy, before the Machinery of Government Change, see: [GOV.UK explainer](#)

²¹ CCC, [About the CCC](#), [accessed 26 October 2023]

Parliament and Senedd Cymru/Welsh Parliament, as well as providing advice to the Northern Ireland Assembly.²²

In July 2024, it stated that the [UK was off-track](#) as a whole for its 2050 net zero ambitions.²³ In June 2025, it said that [the net zero target was “within reach](#), provided the government stays the course”; further detail of this assessment is set out in section 3 of this briefing.²⁴

Energy Security and Net Zero Committee

The Energy Security and Net Zero Committee is a House of Commons select committee that scrutinises the policy, spending and administration of the Department for Energy Security and Net Zero and its public bodies (including Ofgem and the CCC).

The committee covers topical inquiries, alongside overarching scrutiny of the work of the department. It has several ongoing inquiries relating to net zero, covering nuclear power, the cost of energy, retrofitting homes, and building support for the energy transition.²⁵ Its report on [national planning for energy infrastructure](#) (July 2025) awaits a government response.²⁶

Environmental Audit Committee

The Environmental Audit Committee is another Commons select committee, which considers and audits policies and programmes that contribute to environmental protection and sustainable development.

The committee covers topical inquiries and pre-appointment hearings of those considered for public office, amongst other non-inquiry work. It has an ongoing inquiry covering sustainable aviation and airport expansion.²⁷

Environment and Climate Change Committee

The Environment and Climate Change Select Committee is a House of Lords select committee, and it considers the environment and climate change. Its work consists of specific topical inquiries.²⁸

²² For scrutiny of other parts of the UK, see: CCC, [publications on Scotland](#); [Wales reports](#); [Northern Ireland reports](#)

²³ CCC, [UK off track for net zero, say country's climate advisors](#), 18 July 2024

²⁴ CCC, [Progress in reducing emissions - 2025 report to Parliament](#), 25 June 2025

²⁵ House of Commons, [Energy Security and Net Zero Committee](#)

²⁶ Energy Security and Net Zero Committee, [Gridlock or growth? Avoiding energy planning chaos](#), 7 July 2025

²⁷ House of Commons, [Environmental Audit Committee](#)

²⁸ House of Lords, [Environment and Climate Change Select Committee](#)

Scrutiny of policy in Wales

The CCC produces progress reports and provides advice specific to Wales. Most recently, it advised on the interim carbon budget for Wales, however its last full progress report dates from 2023.²⁹

Senedd Cymru's Climate Change, Environment and Infrastructure Committee looks at policy and legislation and holds the Welsh Government to account on climate change policy, the environment, and energy.³⁰

Scrutiny of policy in Scotland

The CCC also produces progress reports and advice specific to Scotland. In March 2024, the CCC stated that [Scotland's 2030 climate goals were no longer credible](#).³¹

More information on progress to reduce emissions in Scotland is set out in section 3.1 of this briefing. In short, the Scottish Government passed the [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2024](#), which withdrew its 2030 and 2040 interim targets. Scotland's net zero by 2045 target remains.

The Scottish Parliament's Net Zero, Energy and Transport Committee scrutinises the Scottish Government's policies and progress towards meeting climate change targets.³² The Committee is running a '[call for views](#)' in [advance of a new draft Climate Change Plan](#) being published, which it says will inform parliamentary scrutiny of this plan.³³

Scrutiny of policy in Northern Ireland

As with Wales and Scotland, the CCC also produces progress reports and advice specific to Northern Ireland. Most recently, it advised on the interim carbon budget for Northern Ireland.³⁴

The Northern Ireland Assembly's Agriculture, Environment and Rural Affairs Committee scrutinises the work of the relevant department (DAERA).³⁵

Other assessments

The NAO audits government spending, which includes its spending on net zero. In December 2020, the NAO published a report on '[Achieving Net Zero](#)'.

²⁹ CCC, [Wales reports - Climate Change Committee](#)

³⁰ Welsh Senedd, [Climate Change, Environment, and Infrastructure Committee](#)

³¹ CCC, [Scotland's 2030 climate goals are no longer credible](#), 20 March 2024

³² Scottish Parliament, [Net Zero, Energy and Transport Committee](#)

³³ Net Zero, Energy and Transport Committee, [Draft Climate Change Plan Scrutiny 2025 - Scottish Parliament](#), closes 19 September 2025

³⁴ CCC, [NI reports - Climate Change Committee](#)

³⁵ Northern Ireland Assembly, [Committee for Agriculture, Environment and Rural Affairs](#)

In September 2023 it published a joint publication with the four audit offices of the UK on '[Approaches to achieving Net Zero across the UK](#)'.³⁶

Further assessments of the costs of net zero have been published by [the CCC](#) and the [Office for Budget Responsibility](#).³⁷

The Skidmore Independent Review

The [independent review 'Mission Zero'](#) was commissioned by the Secretary of State for the Department for Business, Energy and Industrial Strategy (BEIS, now known as DESNZ) in 2022.³⁸ This was undertaken by former Energy Minister, Chris Skidmore MP and published on 13 January 2023 as [Mission Zero: Independent Review of Net Zero](#). The review made 129 recommendations to government and proposed 25 key actions, setting out a series of 'missions' to take economic advantage of the transition to net zero.

On 30 March 2023, the government published its [response to the review in its Net Zero Growth Plan](#) (see section 2.2 of this briefing), stating “decisive action” was needed to capitalise on economic opportunities:

We agree with the review’s conclusion that net zero is the growth opportunity of the 21st century and could offer major economic opportunities to the UK – but that decisive action is needed to seize these. Other countries such as the USA with the Inflation Reduction Act are moving quickly, and we must do the same. We are focused on unlocking the ambition of places and communities to deliver net zero by 2050.³⁹

³⁶ National Audit Office, [Achieving Net Zero](#), 4 December 2020

National Audit Office, [Approaches to achieving net zero across the UK](#), 15 September 2023

³⁷ CCC, [Progress in reducing emissions 2024 Report to Parliament](#), 18 July 2024; The Office for Budget Responsibility, [The fiscal cost of net zero in the UK in an international context](#), July 2023

³⁸ Following a [Machinery of Government Change](#), the Department for Business, Energy and Industrial Strategy (BEIS) ceased to exist and departmental responsibility for climate change policies transferred to the Department for Energy Security and Net Zero (DESNZ). See [government guidance, 2023](#)

³⁹ DESNZ, [Responding to the independent review of net zero’s recommendations](#), 30 March 2023

2 UK policy

2.1 The Net Zero Strategy (October 2021)

The UK Government's first main climate change policy document was the [Net Zero Strategy \(Build Back Greener\)](#), which was published on 19 October 2021 and last updated in April 2022.⁴⁰ This strategy was produced by the government as part of its statutory duties under the Climate Change Act 2008.⁴¹

It sets out policies and proposals for decarbonising all sectors of the UK economy to meet the government's net zero target by 2050. The Net Zero Strategy builds on wider government policy, such as the [ten-point plan for a green industrial revolution](#) which was published on 18 November 2020.⁴²

Several sector and technology specific strategies were also published by the relevant government departments. Wider policy documents include:

- [Environmental Improvement Plan](#), updated February 2023 (applies to the UK)
- [British Energy Security Strategy](#), April 2022 (strategy to decarbonise the power sector, applies to England, Wales and Scotland)
- [Transport decarbonisation plan](#), July 2021 (strategy to decarbonise the entire transport system in the UK, most policies apply to the UK and some apply just to England – these are specified within)
- [Industrial decarbonisation strategy](#), updated April 2021 (strategy to reduce industrial emissions for the UK)
- [Hydrogen strategy](#), August 2021 (strategy to develop the low carbon hydrogen sector, applies to the UK)
- [Heat and buildings strategy](#), October 2021 (strategy to decarbonise homes, commercial, industrial and public sector buildings – some policies are specific to England, and other parts of the UK will produce their own policy frameworks).

⁴⁰ Department for Energy Security and Climate Change (DESNZ), [Net Zero Strategy: Build Back Greener](#), 19 October 2021, updated 5 April 2022)

⁴¹ Section 13 of the [Climate Change Act 2008](#)

⁴² GOV.UK, [The ten point plan for a green industrial revolution](#), 18 November 2020

The Net Zero Strategy applied to the UK as a whole, although policies are also set by the devolved administrations, for example:

- [The Scottish Government published an update to the climate change plan 2018-2032](#) (PDF) in April 2023.
- The [Welsh Government published an update to the All Wales Plan 2021-25 Working Together to Reach Net Zero](#) (PDF) in April 2022.
- The [Northern Ireland Executive published its Path to Net Zero Energy](#) (PDF) in December 2021.

1 High Court judgment on the Net Zero Strategy

On 18 July 2022, following a claim brought against the UK Government by Friends of the Earth, ClientEarth and the Good Law Project, the English High Court determined the 2021 Net Zero Strategy to be “unlawful” and “inadequate” in meeting the 2050 net zero target and that it breached the requirements set out by the Climate Change Act 2008.⁴³

The [High Court ordered the government](#) to refine and reissue the strategy by the end of March 2023.⁴⁴ The government subsequently published the [Carbon Budget Delivery Plan \(CBDP\)](#) in March 2023.⁴⁵

2.2

Carbon Budget Delivery Plan (March 2023)

The [Carbon Budget Delivery Plan \(CBDP\)](#) was produced by the government as part of its statutory duties under the Climate Change Act 2008.⁴⁶ It set out proposals and policies, and associated timescales and delivery risks, that should enable [carbon budgets four, five and six](#) to be met. The CBDP built on the Net Zero Strategy, and was published alongside a suite of wider policy documents under [the headline ‘Powering Up Britain’](#), which included both an energy security plan and a ‘net zero growth’ plan.⁴⁷

⁴³ White&Case, [Landmark High Court decision that the UK’s Net Zero Strategy is unlawful](#), 31 August 2022

⁴⁴ [FoE v BEIS \[2022\] FWHC 1841](#)

⁴⁵ DESNZ, [Carbon Budget Delivery Plan](#), 30 March 2023

⁴⁶ Section 13 of the [Climate Change Act 2008](#)

⁴⁷ DESNZ, [Powering up Britain](#), 30 March 2023, updated 4 April 2023

The CBDP estimated that its quantified proposals and policies would deliver 100% of the savings required to meet the fourth and fifth carbon budgets, and 97% of the savings required to meet the sixth carbon budget. The plan outlined that the remaining 3% of sixth carbon budget was expected to be met through areas in which further savings are estimated, but not yet quantified, such as agriculture and land use, energy efficiency and local emissions reductions.⁴⁸

Additional funding to deliver carbon budgets was announced in the [Spring Budget 2023](#), which made up to £20 billion available for Carbon Capture, Utilisation and Storage (CCUS). More widely, the [Net Zero Innovation Portfolio](#) also made £1 billion of funding available to accelerate the commercialisation of low-carbon technologies, systems and business models in power, buildings, and industry.

2 High Court judgement on the CBDP

Following the publication of the CBDP, Client Earth, Friends of the Earth and the Good Law Project indicated that they would take forward further legal challenges against the government.⁴⁹

In October 2023, these organisations requested a judicial review of the revised plans in the CBDP, due to its reliance on “unproven and high-risk technological fixes”.⁵⁰

In May 2024, [the High Court ruled](#) that four of the five grounds on which the organisations brought the challenges were arguable, and that the government would be required to publish a revised and legally compliant plan within 12 months (by May 2025).⁵¹

Following the General Election in July 2024, this [deadline was extended to October 2025](#).

Energy Act (October 2023)

The [Energy Act 2023](#) was introduced by the then government in July 2022, prior to the publication of the CBDP, and received Royal Assent on 26 October

⁴⁸ DESNZ, [Carbon Budget Delivery Plan](#), 30 March 2023

⁴⁹ Client Earth, [UK government faces fresh legal challenge over ‘unlawful’ climate plans](#), 7 July 2023

⁵⁰ Client Earth, [We’re taking the UK government back to court over its climate plan](#), 25 October 2023, [accessed 3 November 2023]

⁵¹ [FoE vs. Secretary of State for Energy Security and Net Zero \[2024\] EWHC 995](#); Friends of the Earth, [High court judgment on government’s climate plan](#), 3 May 2024

2023. The government set out that the act's aim was “deliver a cleaner, more affordable and more and more secure energy system for the long term”.⁵²

There were three main focus areas:

- Leveraging private investment in clean technologies and “homegrown energy”, through £100 billion of investment for carbon capture, usage and storage (CCUS) and hydrogen, new nuclear, heat pumps and decarbonising surface transport
- Reforming energy system pricing, and
- Ensuring the safety, security and resilience of the UK's energy system.⁵³

It also created the [National Energy System Operator \(NESO\)](#), which is responsible for “planning and delivering the energy of today and the future”, through working with both incumbent fossil fuel and future clean energy generators.⁵⁴

The government said that the act was intended to “help the government deliver net zero by 2050 in a pragmatic, proportionate and realistic way”.⁵⁵ Further information is set out in the [Library briefings on the bill](#).⁵⁶

2.3

Clean Power by 2030 (December 2024)

Following the General Election in July 2024, the Labour Government reiterated its manifesto commitment to reach “clean power by 2030” and “[make Britain a clean energy superpower](#)”.⁵⁷

The strategy for achieving this was published in December 2024 as the [Clean Power 2030 Action Plan](#), which was [informed by advice](#) from the National Energy System Operator (NESO).⁵⁸ Whilst the plan does not fulfil the same statutory duty as the Net Zero Strategy (section 2.1) and CBDP (section 2.2), it marks an accelerated timeframe for decarbonisation of the energy and power sectors compared to previous targets.

⁵² DESNZ, [Energy Security Bill overarching factsheet](#) updated 1 September 2023

⁵³ DESNZ, [Energy Security Bill overarching factsheet](#) updated 1 September 2023

⁵⁴ NESO, [About NESO | National Energy System Operator](#), [accessed July 2025]

⁵⁵ DESNZ, [New laws passed to bolster energy security and deliver net zero](#), 26 October 2023; for more information on the Energy Act 2023, see the overarching Commons Library briefing on the bill, CBP 9853, [Energy Bill \[HL\] 2022-23 Progress of the Bill](#)

⁵⁶ Commons Library research briefing, CBP 9693, [Energy Bill \[HL\] 2022-23: Overview - House of Commons Library](#)

⁵⁷ DESNZ, [Chris Stark to lead Mission Control to deliver clean power by 2030](#), 9 July 2024

⁵⁸ NESO, [Advice on Clean Power by 2030](#), November 2024

The government said that it is “committed to delivering clean power by 2030”, setting out three main aims of the plan:

- to maintain a secure and affordable energy supply in an increasingly unstable world
- to create new industries and investments around the country
- to protect the environment we live in from the most damaging effects of climate change.⁵⁹

This action plan sets out what the government means by a clean power system (with energy generated from renewables and nuclear, alongside the decarbonisation of industrial processes through the use of CCUS and hydrogen) and what government will do to support and accelerate delivery of the new infrastructure. It sets out aims for reduced bills for energy customers and businesses, as well as green job creation for workers.⁶⁰

Key publications that support the clean power by 2030 ambition include:

- [The UK's Modern Industrial Strategy](#) (June 2025), which set out a 10-year plan to “increase business investment and grow the industries of the future in the UK”, including renewables.⁶¹
- The [Spending Review 2025](#) (June 2025), which included £4.2 billion for Sizewell C (nuclear) and funding for two new hydrogen and carbon capture and storage clusters.⁶²
- NESO's further technical [advice on achieving clean power](#), including implementation and decisions on grid reform.⁶³

Great British Energy Act (May 2025)

The [Great British Energy Act 2025](#) was introduced by the government in July 2024, and received Royal Assent on 15 May 2025.

The main focus for the act was creating [Great British Energy](#), which the government set out would be “backed by £8.3 billion over the course of this Parliament”.⁶⁴ Great British Energy will invest in new renewable and clean energy projects across the UK, with any dividends reinvested.⁶⁵

⁵⁹ DESNZ, [Clean Power 2030 Action Plan](#), 30 December 2024, updated 15 April 2025

⁶⁰ DESNZ, [Clean Power 2030 Action Plan](#), 30 December 2024, updated 15 April 2025

⁶¹ Department for Business and Trade, [The UK's Modern Industrial Strategy 2025](#), 23 June 2025, updated 24 July 2025

⁶² HM Treasury, [Spending Review 2025 document](#), 11 June 2025, updated 30 June 2025; Carbon Brief, [UK spending review 2025: Key climate and energy announcements](#), 11 June 2025

⁶³ NESO, [Clean Power 2030 | National Energy System Operator](#), [accessed July 2025]

⁶⁴ DESNZ, [Great British Energy legislation passes through Parliament](#), 15 May 2025

⁶⁵ For more information on the Great British Energy and the Great British Energy Act 2025, see the Commons Library briefing on the bill, CBP 10088, [Great British Energy Bill 2024-25](#)

2.4

Revised Carbon Budget Delivery Plan (due by October 2025)

Following the two High Court judgements that found previous plans to be inadequate, the government is legally required to publish a revised plan to fulfil its statutory duties under the Climate Change Act 2008. Such a plan should set out proposals and policies that will enable both the carbon budgets and the net zero by 2050 target to be met.⁶⁶ The original deadline for revising the existing Carbon Budget Delivery Plan (CBDP) was 2 May 2025, however following the General Election this was extended to October 2025.⁶⁷

The government has said that it plans to publish “an updated whole economy plan to meet Carbon Budgets 4-6” as a “refreshed Carbon Budget Delivery and Growth Plan later this year”.⁶⁸

⁶⁶ Section 13 of the [Climate Change Act 2008](#)

⁶⁷ 2 May 2025 was 12 months from the judgement, which took place on 3 May 2024

⁶⁸ PQ 62222 [on [Carbon Emissions and Public Expenditure](#)], answered 2 July 2025

3

Progress towards net zero

Progress towards net zero is assessed by the independent Climate Change Committee, who are responsible for publishing an annual progress report to Parliament.

This section sets out the CCC's overall assessment as of June 2025, as well as a breakdown with commentary from specific sectors.

3 How does the CCC assess progress?

The CCC is an independent statutory body that assesses the UK Government and devolved administrations' plans, progress and policies across sub-sectors to determine what needs to be addressed to meet government targets.

It has four scoring criteria for assessing policies and plans:

- **Credible plans:** plans with funding, enablers and timelines in place.
- **Some risks:** some adjustment to plans may be needed to mitigate uncertainties and delivery or funding risks.
- **Significant risks:** plans under development and/or further work needed to enact policies and overcome uncertainties and delivery or funding risks.
- **Insufficient plans:** plans are either missing, clearly inadequate, or lack funding, and new proposals are needed.⁶⁹

⁶⁹ CCC, [Progress in reducing emissions - 2025 report to Parliament](#), 25 June 2025, Annex 2: Policy assessment criteria

3.1

Overall assessment

On 25 June 2025, the CCC issued its [2025 progress report to Parliament](#), its latest statutory assessment of the UK's progress towards meeting emissions targets.

Emissions reductions

The report noted continued progress in reducing emissions, with 2024 territorial emissions levels found to be 50.4% lower than 1990 levels.⁷⁰ The CCC assessed that this decline was primarily driven by the electricity supply and industrial sectors, where decarbonisation has been most advanced, but noted that progress had been partially offset by increased emissions from the aviation sector, which now contributes a larger share of total UK emissions than the entire electricity supply sector.

The emissions reductions compared to 1990 meant that the UK met its third carbon budget (CB3), covering the period 2018 to 2022.

The 2025 progress report found that 61% of the emissions reductions required to meet 2030 targets are covered by 'credible' or 'partially credible' plans, an improvement from the CCC's 2024 assessment.⁷¹ However, it notes that this leaves 39% of planned emissions reductions at significant risk of not materialising. The report adds that over 80% of the emissions reductions required must come from sectors beyond energy supply, which may be harder to decarbonise.⁷²

Progress since 2024

The 2025 progress report sets out progress across several key sectors, including the closure of the UK's last coal power station, a 56% increase in heat pump installations, and resumed growth in the market share of electric vehicle sales.

The CCC further highlights that the government has made good or moderate progress on 20 of the 35 recommendations made in its 2024 progress report. However, it noted that there has been no progress on its priority recommendation for 2024, which was to make electricity cheaper for consumers through removing policy costs.

⁷⁰ The UK's territorial emissions fell by 2.5% in 2024 to 413.7 metric tonnes of carbon dioxide equivalent greenhouse gases (MtCO_{2e}), representing a 50.4% reduction from 1990 levels

⁷¹ CCC, [2025 Progress Report to Parliament](#), 25 June 2025; CCC, [2024 Progress Report to Parliament](#), 18 July 2024

⁷² CCC, [2025 Progress Report to Parliament](#), 25 June 2025

Recommendations

The CCC identified ten priority recommendations for 2025. Of these, six remain from its 2024 assessment: the first priority recommendation to make electricity cheaper; to decarbonise public sector buildings; to accelerate the electrification of industrial heat; increase tree planting and peatland restoration; finalise business models for engineered carbon dioxide removals; and publish a skills strategy. The rest are new recommendations, based on actions that will be needed to deliver continued emissions reductions, such as policy to decarbonise aviation.

The CCC assess that “meeting the UK’s emissions targets is achievable but relies on urgent action in several critical areas”.

4 The CCC’s Priority Recommendations for 2025

The CCC set out ten priority actions in its 2025 progress report:

1. **Make electricity cheaper.** Removing policy costs from electricity bills, to support industrial electrification and ensure that the lower running costs of heat pumps etc are reflected in household bills.⁷³
2. **Scale up heat pump deployment.** Further develop the market by 2035, and ensure that the forthcoming Warm Homes Plan is consistent with this ambition.
3. **Implement regulations to prevent new homes being connected to the gas grid.**
4. **Introduce a comprehensive programme for decarbonisation of public sector buildings.**
5. **Accelerate electrification of industrial heat.** The CCC recommended that the Industrial Strategy and supporting strategy for decarbonising clean energy industries should support a rapid transition towards electric heat, and that the UK Emissions Trading Scheme (ETS) should be linked to the EU market.
6. **Deliver rapid expansion of the low-carbon electricity system.** For example, through an effective allocation round seven (AR7) for the Contracts for Difference (CfD) scheme.⁷⁴
7. **Ramp up tree planting and peatland restoration.** The CCC note the significance of the forthcoming Land Use Framework in achieving this ambition.

⁷³ A portion of energy bills come from costs associated with energy policies, and these policy costs currently fall more on electricity than gas

⁷⁴ CfD is the support scheme which offers a set strike price per unit of power, agreed at a competitive auction, for new renewable projects; for more information, see the Commons Library research briefing, CBP 9871, [Contracts for Difference Scheme](#)

8. **Develop policy to address aviation emissions.** The CCC recommend that the costs of decarbonising aviation and addressing non-CO₂ effects should be incorporated into the costs of flying.⁷⁵
9. **Finalise business models for engineered removals of carbon dioxide.** The CCC recognise progress in carbon dioxide removals, but note that it will be increasingly challenging for removals to meet the savings required by 2030 under current funding.
10. **Publish a strategy to support skills needed in green industries.** The CCC recommends that the new Office for Clean Energy Jobs and Skills should deliver this.⁷⁶

The following chart shows the change in assessed risks for the current “government pathway”, with a comparison between plans and policies at June 2023, July 2024 and June 2025.

The government pathway refers to the quantified plans described in the Carbon Budget Delivery Plan (see section 2.2). These plans are estimated by the government to lead to emissions reductions of around 163 million tonnes of CO₂-equivalent (MtCO₂-eq) over this period.

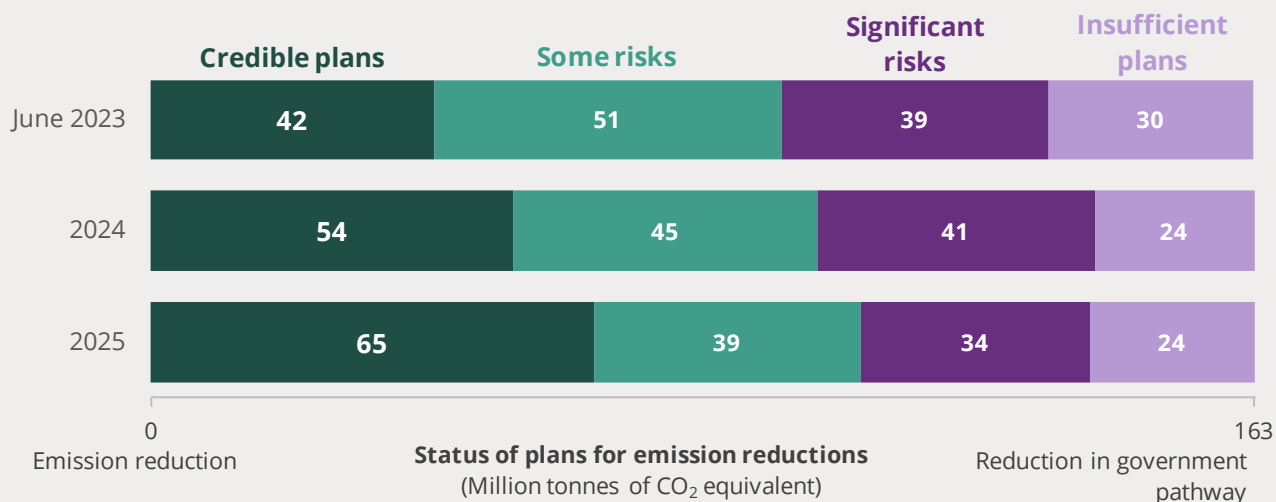
Generally, the proportion of emissions reductions covered by credible plans has increased, whilst the proportion covered by insufficient plans has decreased.⁷⁷

⁷⁵ For more information on the emissions impacts associated with aviation (both CO₂ and non-CO₂), see Commons Library, CBP 8826, [Aviation and climate change](#)

⁷⁶ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

⁷⁷ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

CCC assessment of changes in the risks to meeting emissions targets



Notes: Total emissions under the 'no action' scenario are 473 MTCO₂-eq (annual average for 2028-32)

The 'Government pathway' has emissions of 310.7 MTCO₂-eq. This reduction falls 4% short of that required to meet the 2030 Nationally Determined Contribution. The Government has said this gap will be closed by unquantified plans.

Source: Climate Change Committee, [CCC assessment of recent announcements and developments on Net Zero](#), 12 October 2023; CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

Progress across the four parts of the UK

The CCC's assessment of progress covers the entirety of the UK. However, as set out in Section 1.1, the four parts of the UK have different emissions profiles and approaches. England, Wales and Northern Ireland have committed to reaching net zero by 2050, whilst Scotland has committed to reaching net zero by 2045.⁷⁸

Wales

In its most recent [2023 progress report on reducing emissions in Wales](#), the CCC recognised that while the first Wales specific carbon budget (2016-20) has been met, "Wales is not yet on track to meet its targets for the second half of this decade and beyond". The CCC note that there have been positive policy signals and decisions, but that tangible progress in areas that depend on Welsh Government devolved powers has been insufficient.⁷⁹

Most recently, the CCC published [advice on the fourth Wales specific carbon budget \(2031-35\)](#), which acknowledged some of the same progress in early decarbonisation of energy supply and industry in Wales as in the whole of the

⁷⁸ [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2019](#)

⁷⁹ CCC, [Progress Report: Reducing emissions in Wales](#), 6 June 2023

UK, and emphasises the role that other sectors will have to play from 2030 onwards.⁸⁰

Scotland

In its March 2024 progress report on reducing emissions in Scotland, the CCC stated that [Scotland's 2030 climate goals were no longer credible](#).⁸¹ The CCC said that the Scottish Government's continued delays to updating its climate change plan and "slippage" in implementing climate policies meant that there was "no comprehensive strategy for Scotland to decarbonise towards net zero" and that the required acceleration in emissions reductions to meet these goals was "beyond what is credible".⁸²

Scotland's net zero target initially included interim targets of reducing emissions by 75% by 2030 and 90% by 2040. In April 2024, following the CCC's assessment, the Scottish Parliament passed the [Climate Change \(Emissions Reduction Targets\) \(Scotland\) Act 2024](#), which withdrew its two interim targets. The Scottish Government noted that it still intended to meet its net zero target by 2045.⁸³

In a letter from May 2024, [the CCC advised the Scottish Government](#) to act quickly to implement a new legal framework for its interim carbon budgets, stating that such a move is "crucial to restore confidence and avoid a vacuum of ambition around net zero".⁸⁴

The Scottish Government has said that it aims to [publish a draft climate change plan in 2025](#), covering the period 2026-2040. Once the draft CCP is published, the Scottish Parliament will have 120 days to scrutinise it.⁸⁵

Northern Ireland

In March 2025 the CCC published [advice on the fourth Northern Ireland specific carbon budget \(2038-42\)](#), which would align with the whole of the UK carbon budget for this period. The CCC acknowledge that the agricultural sector is the highest emitter in Northern Ireland, and emphasised the need for specific policies and incentives to decarbonise the sector.⁸⁶

⁸⁰ CCC, [Wales Fourth Carbon Budget](#), 14 May 2025

⁸¹ CCC, [Progress in reducing emissions in Scotland - 2023 Report to Parliament](#), 20 March 2024; [Scotland's 2030 climate goals are no longer credible](#), 20 March 2024

⁸² CCC, [Progress in reducing emissions in Scotland - 2023 Report to Parliament](#), 20 March 2024

⁸³ FT, [Scotland ditches climate 2030 climate target as being 'out of reach'](#), 18 April 2024; Scottish Government, [Climate Change Committee Scotland report - next steps: Net Zero Secretary statement](#), 18 April 2024

⁸⁴ CCC, [Letter: Design and implement carbon budgets in Scotland](#), 14 May 2024

⁸⁵ Scottish Parliament, [Draft Climate Change Plan Scrutiny 2025](#), [accessed July 2025]

⁸⁶ CCC, [Northern Ireland's Fourth Carbon Budget](#), 19 March 2025

The Department for Agriculture, Environment and Rural Affairs (DAERA) is responsible for climate change in Northern Ireland, and has recently launched a public consultation on the fourth carbon budget.⁸⁷

Sectoral progress

The following sections describe progress in five sectors that contribute the most to UK emissions: transport, energy, heat and buildings, industry, and agriculture and land use. These sectors cover the UK as a whole, although relative sectoral emissions do vary across the different parts of the UK, and different parts have adopted specific strategies and approaches in addition to wider government policy.

3.2 Electricity supply

Energy is a broad term encompassing various different fuels. Energy use in other sectors is normally the main driver of their emissions, such as fuels for road transport, aviation, heating buildings, and powering industry.

Electricity only met around 12% of total energy demand in the UK in 2023.⁸⁸ However, the role of electricity is expected to increase with the electrification of large proportions of the heat and transport sectors through technologies such as heat pumps and electric vehicles, and many industrial processes. This is seen by government as the most effective way to decarbonise these sectors and meet climate change targets.

Electricity sector emissions have fallen 82% since 2008, accounting for almost half (49%) of economy wide emission reductions in the first three carbon budgets. This has largely been driven by phasing out coal (the most emissions-intensive fossil fuel) from the electricity mix. The CCC notes that 2024 was the first year of emissions data to capture the effect of the closure of the UK's last remaining coal fired electricity generation plant, at Ratcliffe-on-Sour.

In 2024, the main driver of emissions reduction for electricity supply was falling gas generation. Emissions from the supply of electricity from gas reduced by 15% in 2024, driven both by imports from countries such as Norway, France and Denmark (which have less carbon-intensive grids than the UK) and by increased low carbon generation of electricity in the UK.

Additionally, the CCC assess that an increase in renewable generation capacity is expected by the end of 2025 (following a successful allocation

⁸⁷ DAERA, [Consultation on the setting of Northern Ireland's Fourth Carbon Budget \(2038-2042\)](#), [accessed July 2025]

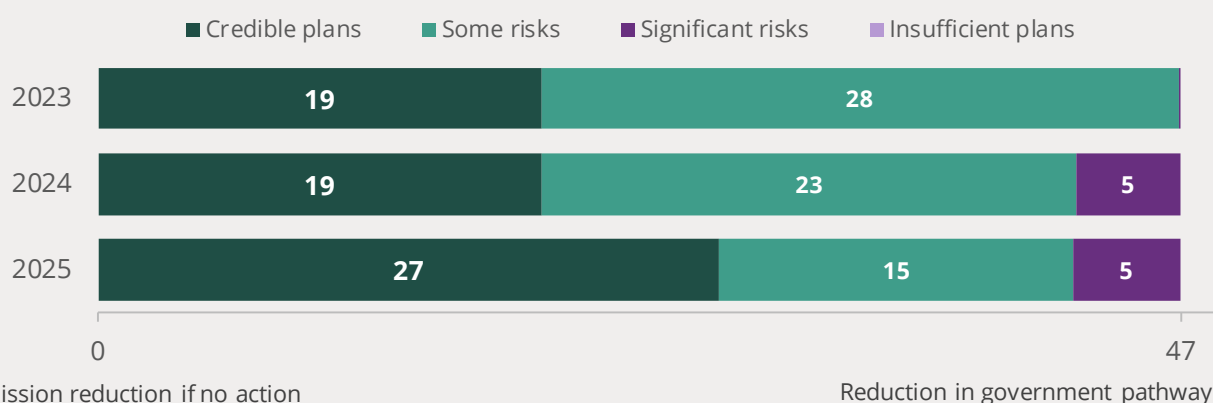
⁸⁸ DESNZ, [Digest of UK Energy Statistics \(DUKES\): energy](#), 1.1.2, 27 July 2024

round six for the Contracts for Difference scheme), which should further increase the displacement of fossil fuels (such as gas) by renewable alternatives.⁸⁹

For the electricity sector, the CCC assessed that “credible” plans were in place for 41% of the government pathway for the fifth carbon budget in 2023 and 2024, or 19 MTCO₂-eq. This increased to 57% (27 MTCO₂-eq) in 2025. While this is higher than several other sectors, there was an increase in significant risks in decarbonisation plans to 10% in 2024, which has remained in 2025.

Electricity supply: CCC assessment of changes in risks to emission reduction plans

Status of plans for emission reductions required by 2028-2032 in MTCO₂-eq



Source: CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

The CCC noted policy progress in decarbonising electricity supply, notably the publication of the Clean Power 2030 Action Plan (see section 2.3), as well as steps taken to remove barriers (such as those in the planning process) to the deployment of low carbon technology. However, some risks remain, including uncertainty about future electricity market arrangements following the government’s decision not to transition towards zonal pricing.⁹⁰

⁸⁹ CfD is the support scheme which offers a set strike price per unit of power, agreed at a competitive auction, for new renewable projects; for more information, see the Commons Library research briefing, CBP 9871, [Contracts for Difference Scheme](#)

⁹⁰ CCC, [2025 Progress Report to Parliament](#), 25 June 2025; DESNZ, [Review of electricity market arrangements \(REMA\): Summer update, 2025](#), 10 July 2025

3.3

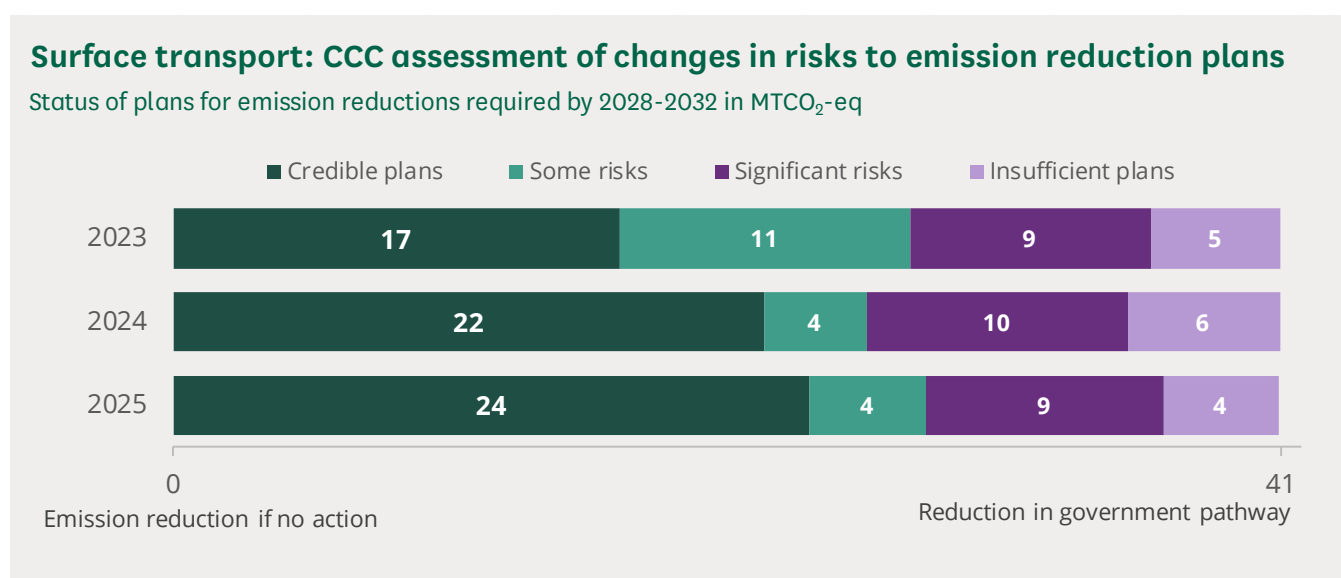
Transport

Surface transport

Surface transport (emissions from vehicles on the roads and rail) is the highest emitting sector across the UK, responsible for 30% of UK emissions in 2024.⁹¹

In its 2025 progress report, the CCC noted that the market share for new electric vehicles (EVs) resumed growth in 2024, following stagnation in 2023. It found that prices are falling quickly and that charge point deployment is growing well. The number of public charge points increased by almost 40% in 2024, although the CCC noted that some areas remain under-served.⁹²

Overall, there were more credible plans in 2025 than 2024.



Source: CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

The CCC noted policy progress in 2025, such as the reinstatement of the 2030 phase-out date for new petrol and diesel cars and the zero-emission vehicle (ZEV) mandate. However, the CCC note that transport emissions since 2008 have not reduced as much as the CCC had predicted then, largely because of a trend towards larger cars which has offset efficiency gains in the overall car fleet.⁹³

⁹¹ DESNZ, [Provisional UK greenhouse gas emissions statistics 2024](#), 27 March 2025

⁹² CCC, [2025 Progress Report to Parliament](#), 25 June 2025

⁹³ CCC, [2024 Progress Report to Parliament](#), 18 July 2024, p36

The CCC assess that the annual reduction in surface transport emissions across the rest of this decade will need to be more than four times that seen in 2023. However, it noted that despite this challenge, surface transport is one of the only sectors in which a rapid-roll out of low-carbon technology has the potential to deliver rapid emissions reductions.⁹⁴

ZEV mandate

The ZEV mandate is a trading scheme which specifies the minimum percentage of car manufacturers' sales that must be comprised of zero-emission vehicles each year, rising from 22% in 2024, to 80% by 2030. For vans, the minimum percentages are 10% in 2024 and 70% in 2030.⁹⁵

If a manufacturer's sales are either below or above the minimum percentage level, they can sell excess or buy additional 'allowances' from other manufacturers. Manufacturers may also opt to pay compliance penalties.⁹⁶

In its 2024 progress report, the CCC found that the ZEV mandate contributed to a substantial increase in "credible" plans for transport.⁹⁷

In its 2025 progress report, the CCC assessed that electric vehicle sales still remain below the headline targets of the ZEV mandate that the government assumed in its 2023 CBDP (see section 2.2).⁹⁸

Aviation

Aviation emissions are to be included for the first time in the sixth carbon budget (2033-37). As set out in the headline findings of the CCC's 2025 progress report, an increased focus on decarbonising aviation will be needed towards the end of this decade, as 'easier' policy choices (such as displacing fossil fuels with renewables) are used up.

The CCC assess that the aviation sector now contributes a greater proportion of emissions than the entire electricity supply sector. In its 2025 progress report, it found that aviation emissions in 2024 were above both those expected in the government's Jet Zero Strategy and the CCC's predicted 2025 baseline, concluding that "aviation emissions will likely exceed these trajectories [...] posing a risk to the UK's emissions targets".⁹⁹

The 2024 progress report improved its assessment of the government's sustainable aviation fuel (SAF) policy from "significant risks" to "some risks", following the government's confirmation of its policy for the UK's SAF

⁹⁴ CCC, [2024 Progress Report to Parliament](#), 18 July 2024, p27

⁹⁵ [The Vehicle Emissions Trading Schemes Order 2023](#)

⁹⁶ DfT, [Zero emission vehicle \(ZEV\) mandate consultation: summary of responses and joint government response](#), 25 October 2023, Overview of responses

⁹⁷ CCC, [2024 Progress Report to Parliament](#), 18 July 2024.

⁹⁸ CCC, [2025 Progress Report to Parliament](#), 25 June 2025; for more information on electric vehicles, emissions and the ZEV mandate, see the Commons Library research briefing, CBP 7480, [Electric vehicles and infrastructure](#)

⁹⁹ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

mandate to begin in January 2025.¹⁰⁰ However the CCC noted that some of the near-term SAF uptake targets (for instance, reaching 10% SAF share by 2030) were “ambitious”.¹⁰¹

In its 2025 progress report, the CCC briefly commented on the increased aviation demand projected in the UK, following the UK’s announcement of airport expansion; the CCC said that “it is too early to say whether potential future increased aviation demand will be sufficiently offset by abatement to keep the sector on track to delivering UK emissions targets”.¹⁰²

Maritime decarbonisation

As with aviation, emissions from the maritime sector are to be included for the first time in the sixth carbon budget (2033-37). In March 2025, the government published its first domestic shipping decarbonisation targets within the UK’s [Maritime Decarbonisation Strategy](#). These set an ambition to reduce domestic maritime emissions 30% by 2030, 80% by 2040 and net zero by 2050, relative to a baseline of 2008.¹⁰³

In its 2025 progress report, the CCC recognised progress in this area, and noted that the publication of the strategy improved its assessment from ‘significant risks’ to ‘some risks’ for this area.¹⁰⁴

3.4

Heat and buildings

Buildings accounted for 20% of UK emissions in 2022.¹⁰⁵

As shown in the chart below, the CCC assessed that the proportion of “insufficient” plans for buildings increased between 2023 and 2025, from 5% to 29% of the government pathway for emissions reductions (assessed “credible” plans labels are not visible on the chart: these are 0.2 MtCO₂-eq in 2023 and 2024, and 0.3 MtCO₂-eq in 2025).¹⁰⁶

¹⁰⁰ DfT Consultation outcome, [Pathway to net zero aviation: developing the UK sustainable aviation fuel mandate](#), 25 April 2024

¹⁰¹ CCC, [2024 Progress Report to Parliament](#), 18 July 2024, page 80

¹⁰² CCC, [2025 Progress Report to Parliament](#), 25 June 2025; for more information on sustainable aviation, see the Commons Library research briefing, CBP 8826, [Aviation and climate change](#)

¹⁰³ DfT, [Maritime decarbonisation strategy](#), 25 March 2025; Hill Dickinson, [The UK’s Maritime Decarbonisation Strategy and MEPC 83: impacts on the marine cargo industry](#), 17 April 2025

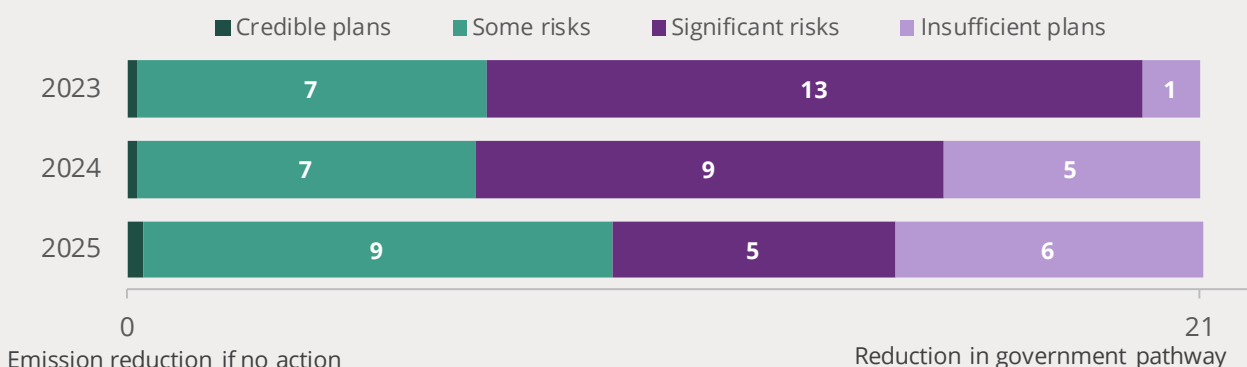
¹⁰⁴ CCC, [2025 Progress Report to Parliament](#), 25 June 2025, page 83

¹⁰⁵ DESNZ, [Final UK greenhouse gas emissions national statistics: 1990 to 2022](#), 27 June 2024, ‘buildings and product uses’

¹⁰⁶ CCC, [2024 Progress Report to Parliament](#), 18 July 2024

Buildings: CCC assessment of changes in risks to emission reduction plans

Status of plans for emission reductions required by 2028-2032 in MTCO₂-eq



Source: CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

The CCC found positive progress with the growth of heat-pump deployment in 2024, but that significant scale up is inhibited by high costs. It recommended that the government focus on making electricity cheaper by removing policy costs from electricity bills, as otherwise “the UK’s electricity-to-gas price ratio remains too high to ensure the underlying costs savings of heat pumps’ greater efficiency are captured by households”.¹⁰⁷

The forthcoming Warm Homes Plan is expected to provide further information about government ambition to decarbonise homes.¹⁰⁸

3.5

Industry

The industry sector contributed 13% of UK emissions in 2024.¹⁰⁹

The CCC assessed that the proportion of “insufficient” plans decreased from 70% of the government pathway for industry emissions in 2023 to 38% in 2025. There was a corresponding increase in the proportion of emissions covered by “credible plans”, from 5% to 29%.¹¹⁰ The chart below shows the change in the CCCs assessment of the government’s plans relating to industry, in terms of the volume of emissions accounted for by those plans.

¹⁰⁷ CCC, [2025 Progress Report to Parliament](#), 25 June 2025, page 54

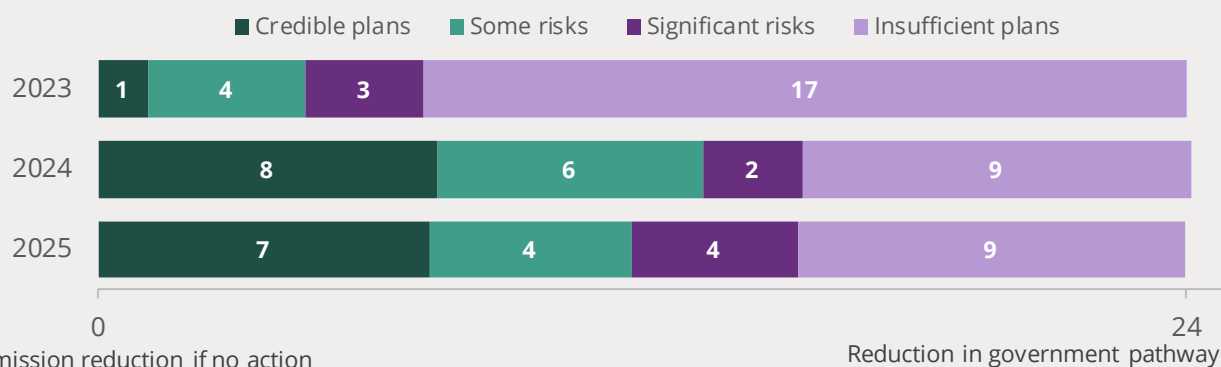
¹⁰⁸ The government is expected to publish its Warm Homes Plan in October 2025; see PQ 68777 [on [Warm Homes Plan](#)], answered 22 July 2025

¹⁰⁹ DESNZ, [Provisional UK greenhouse gas emissions statistics 2024](#), 27 March 2025

¹¹⁰ CCC, [2024 Progress Report to Parliament](#), 18 July 2024

Industry: CCC assessment of changes in risks to emission reduction plans

Status of plans for emission reductions required by 2028-2032 in MTCO₂-eq



Source: CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

Note: Each category label has been rounded to the nearest whole number, therefore may not round to the total. For both 2023 and 2024, the reduction in Government pathway totals to 24 MTCO₂-eq.

This improvement from 2023 was largely driven by major actions in 2024 and 2025, including the agreement to transition the steelworks at Port Talbot to electric arc furnaces, British Steel's plans to replace its blast furnace with electric arc furnaces, and the roll out of the [British Industry Supercharger scheme](#), which reduces electricity prices for some large industrial users.¹¹¹ In June 2025, the government also published its [Modern Industrial Strategy](#), which includes the specific [Clean Energy Industries Sector Plan](#), as well as continued compensation for energy-intensive industries as they decarbonise and plans for the introduction of the UK's own carbon border adjustment mechanism (CBAM).¹¹²

Despite improvements, significant risks remain. The CCC again highlighted its priority recommendation to reduce the cost of electricity, noting that to deliver the required emissions reductions, firms will increasingly need to switch from fossil fuels to electric alternatives, and at present the electricity-to-gas price ratio inhibits this.¹¹³ Additional progress is expected in relation to carbon capture, usage and storage, industrial hydrogen, decarbonising the steel sector, and implications of the UK ETS and CBAM.¹¹⁴

¹¹¹ CCC, [2024 Progress Report to Parliament](#), 18 July 2024, pages 74-77; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

¹¹² DBT, [The UK's Modern Industrial Strategy 2025](#), 23 June 2023, updated 1 August 2025; DBT, [Clean Energy Industries Sector Plan](#), 23 June 2025, updated 5 August 2025; Commons Library research briefing, CBP 9935, [Carbon Border Adjustment Mechanism](#)

¹¹³ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

¹¹⁴ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

3.6

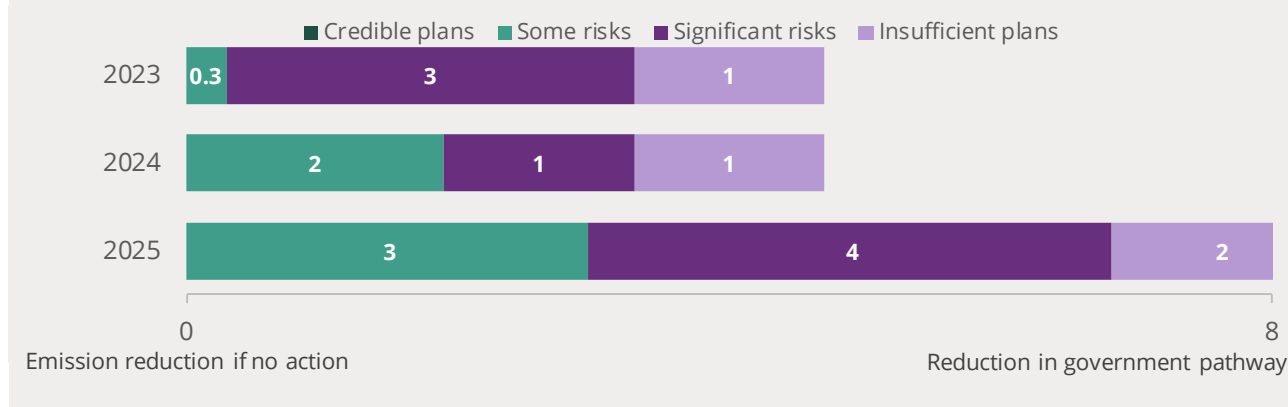
Agriculture and land use

Agriculture contributed 12% of UK emissions in 2024.¹¹⁵

The CCC assessed that none of the plans in place are “credible”. The reduction in government pathway increased from 5 MtCO₂-eq in 2023 and 2024, to 8 MtCO₂-eq in 2025. In 2025, the proportion of plans with “some risks” was 38% and “significant risks” was 50%. In its progress report, the CCC notes that progress in reducing emissions from agriculture has been particularly slow; total emissions have not significantly decreased since 2008, with “a lack of progress in and extreme uncertainty around policy over the third carbon budget” (2018-2022).¹¹⁶

Agriculture: CCC assessment of risks to emission reduction plans

Status of plans for emission reductions required by 2028-2032 in MtCO₂-eq



Source: CCC, [2024 Progress Report to Parliament](#), 18 July 2024; CCC, [2025 Progress Report to Parliament](#), 25 June 2025

The CCC assessed that woodland creation and peatland restoration are behind both the UK and devolved administration targets. While there was a substantial increase in woodland creation in 2023/24, the CCC assessed that recent reductions in funding (particularly in Scotland) could reduce this trend. However, it also assessed that there was positive progress towards planning for land use, with the UK Government due to publish a Land Use Framework in 2025.¹¹⁷

¹¹⁵ DESNZ, [Provisional UK greenhouse gas emissions statistics 2024](#), 27 March 2025

¹¹⁶ CCC, [2024 Progress Report to Parliament](#), 18 July 2024

¹¹⁷ CCC, [2025 Progress Report to Parliament](#), 25 June 2025

The House of Commons Library is a research and information service based in the UK Parliament. Our impartial analysis, statistical research and resources help MPs and their staff scrutinise legislation, develop policy, and support constituents.

Our published material is available to everyone on commonslibrary.parliament.uk.

Get our latest research delivered straight to your inbox. Subscribe at commonslibrary.parliament.uk/subscribe or scan the code below:



 commonslibrary.parliament.uk

 [@commonslibrary](https://twitter.com/commonslibrary)