

Net zero policy tracker

2020 round up

December 2020



Following a year's postponement, the UN climate summit (COP26) will be hosted by the UK in Glasgow in November 2021. This is an important opportunity to demonstrate climate leadership to the world, but the UK can only lead if it has its own house in order.

During 2020 there have been many signals of intention to act on climate and nature, with the government indicating it wants to put the country on course for rapid emissions reductions and redefine the way land is managed for nature, supported by some welcome new policy and spending commitments.

But, despite these ambitions, policy and spending has so far fallen short of what is needed to achieve these aims. Our calculations show there is still a significant gap between the UK's stated plans and the actual trajectory needed to meet the legal net zero carbon objective for 2050. Indeed, there is an immediate spending shortfall in meeting the UK's climate and nature goals to the end of this parliament in 2024.

What progress has there been in 2020 on climate and nature?

Emissions reductions

The UK recently announced its Nationally Determined Contribution (NDC) for the 2021 UN climate summit. This commits it to reduce emissions by 68 per cent by 2030 compared to 1990 levels. If achieved, this would put the UK on the right trajectory in 2030 to meet its net zero goal. The government deserves credit for setting this ambitious target. However, the policies announced this year do not put the UK on track. They generate only 27Mt of carbon savings, or 23 per cent of the additional emissions reductions needed in 2030. **Additional reductions of 91Mt in 2030 are required** to meet this domestic target. Despite their significant contribution to emissions, international aviation and shipping are not included in this target. Other policy is required for these sectors.

As well as the 2030 target set as part of UN climate change processes, the UK government has national 'carbon budgets' that set a reducing trajectory of emissions over five year periods from 2008 to 2050. Overall, plans made in 2020 promise an overall emissions cut of 135 MtCO₂e in the period 2028 to 2032 (the fifth carbon budget). This gets the UK to **16 per cent of the cuts it needs to be on track to net zero in 2050 during this five year period**, leaving a shortfall of 849 MtCO₂e to make up to stay on course. This includes high emissions still coming from degraded peatlands and international aviation and shipping, which the UK must address as part of its decarbonisation plans to net zero.

Spending

The government has pledged **new funding of £26 billion** since January 2020 for climate and nature over the course of the next parliament, including on low carbon transport, industrial decarbonisation and low carbon buildings.

Taking into account these spending promises, **we estimate that £22.7 billion of additional spending will be needed every year to tackle the climate and nature emergency to the end of this parliament in 2024**. This includes an additional £9 billion a year on accelerating the transition to electric vehicles, and on walking, cycling, bus and rail infrastructure; £2.3 billion a year on making buildings efficient and kickstarting the roll-out of electric heat pumps; £400 million a year on establishing a resource efficiency programme for industry; and £6.6 billion a year on nature restoration and establishing a world leading food, farming and fishing sector.

118 MtCO₂e



Carbon cuts needed to get the UK on track to meet the 2030 emissions reduction goal

23%
(27MtCO₂e)

Emissions reductions in 2030 expected from new policy in 2020

£43.9bn



Annual spending needed to 2024

48%
(£21.2bn per year)

Annual spending pledged by government to 2024

Progress in decarbonising the transport sector in 2020

Policy area

New policy announcements since January 2020

Overall rating

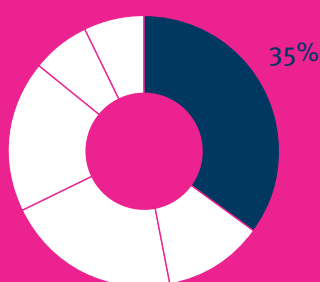
Transport

Transport is the largest emitting sector in the UK, accounting for 35 per cent of UK emissions, including international aviation and shipping. Emissions from surface transport have only fallen three per cent between 2008 and 2018. Emissions from aviation have grown.

Estimated emissions reductions over the fifth carbon budget period from 2020 policy announcements: 32MtCO₂e

New spending on sustainable transport in 2020, allocated over the next five years: £12.1 billion

Share of UK emissions



Summary

This year, the government has taken the ambitious step of bringing forward ending the sale of new petrol and diesel cars and vans to 2030, with a 2035 end date for sales of new plug-in hybrid vehicles. It also provided more support for low carbon travel, pledging funding for rail, buses, walking and cycling. It has consulted on a Transport Decarbonisation Plan. However, it also invested £14 billion in building new roads which is known to increase demand for car travel. This is not compatible with the UK's net zero targets.

Major announcements in 2020

£2 billion pledge on walking and cycling infrastructure to be spent over the next five years, and new policies to encourage walking and cycling

New statutory guidance was introduced that prioritises walking and cycling, and new funding for cycling was announced, including funding for 'fix your bike' voucher schemes, new protected cycle tracks in major cities and free cycle repair workshops at schools. The government needs to ensure local authorities deliver on this new guidance by helping them to access funding streams, and by giving the new cycling inspectorate the resources and powers it needs to ensure statutory guidance is followed.

Moving the phase-out date for sales of new petrol and diesel cars and vans from 2040 to 2030 and for sales of new hybrid vehicles to 2035

Compared to previous policy, we estimate this saves 27Mt of greenhouse gas emissions over the fifth carbon budget period. Alongside this, the government announced an extension of plug-in vehicle grants and £1.3 billion of new funding to improve electric vehicle charging infrastructure. New policies are now needed to encourage both greater supply and demand of electric vehicles, including a target for all car makers to sell an increasing share of zero emission vehicles each year and a reform of motor taxes to encourage more car and van buyers to switch to electric. Incentives must be designed to ensure hybrids are only marginal in new car sales after 2030.

The Transport Decarbonisation Plan is still awaited

This plan must set out a pathway for the transport sector to align with the UK's net zero target, particularly in sectors that currently have no long term decarbonisation policy, including buses and aviation.



Progress in decarbonising the energy sector in 2020

Policy area

New policy announcements since January 2020

Overall rating

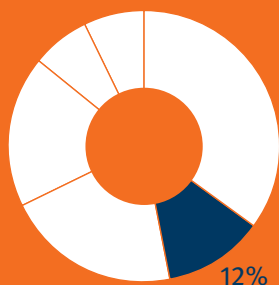
Power

Emissions from this sector are 62 per cent below 1990 levels, and now account for 12 per cent of UK emissions. In 2018, renewables provided 34 per cent of the UK's power.

Estimated emissions reductions over the fifth carbon budget period from 2020 policy announcements: 20MtCO₂e

New spending on sustainable energy in 2020, allocated over the next five years: £715 million

Share of UK emissions



Summary

The government has increased its ambition and support for renewables during 2020, with new targets for offshore wind capacity and renewed support for onshore wind and solar. What remains to be seen is how the pipeline of Contracts of Difference (CfD) auctions will be able to deliver the renewable energy generation capacity targets.

Major announcements

Doubling support for renewables in the next CfD auction

Following a four year block on entry, the government announced in March that onshore wind and solar would be included in a new auction in 2021. We calculate this move can save 11MtCO₂e over the fifth carbon budget period (2028-32). More recently, in October, the government set a target to double the capacity of renewables in the next auction.

Raising offshore wind targets to 40GW by 2030

In October, the government announced it would increase the previous offshore wind capacity target from 30GW to 40GW by 2030. We calculate that this can save 9.1 MtCO₂e over the fifth carbon budget period (2028-32).

Funding for UK nuclear innovation

The government has decided to push ahead with £500 million new funding and support for nuclear power, including for innovation in Small Modular Reactors, and an additional £100 million for nuclear fusion. While commitment to new low carbon power is welcome, the government should focus investment on renewables, which can deliver by 2030 at the lowest cost to consumers.



Progress in decarbonising the industrial sector in 2020

Policy area

New policy announcements since January 2020

Overall rating

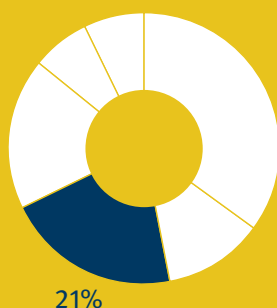
Industry

Carbon emissions from industry are 52 per cent below 1990 levels and now account for 21 per cent of UK emissions.

Estimated emissions reductions over the fifth carbon budget from 2020 policy announcements:
46MtCO₂e

New spending on low carbon industry in 2020, allocated over the next five years: £2.6 billion

Share of UK emissions



Summary

The government pledged significant sums of money for decarbonisation, carbon capture and storage (CCS) technologies and alternative low carbon energy sources. Whilst industry has the largest emissions savings by sector to make over the fifth carbon budget period (2028-32), much depends on innovation funding for technologies which are not yet proven.

Major announcements

Industrial Energy Transformation Fund (IETF)

The IETF is offering up to £315 million to industrial businesses to improve the energy efficiency of their processes and develop deep decarbonisation projects. We calculate that it could save 3.2MtCO₂e over the fifth carbon budget period (2028-32). Given how important this area is in decarbonising industry, we think this fund should be doubled over the course of this parliament, with an explicit focus on boosting resource efficiency.

New package of funding for decarbonising heavy industry

The government pledged £350 million to reduce emissions from heavy industry, space, construction and transport. From the £350 million fund, £139 million was designated to scale up CCS technologies (see below) and support the transition to hydrogen power (see below).

Carbon capture and storage funding

The government has now committed £1 billion of funding for CCS infrastructure. It aims to establish CCS at two industrial sites by the 2030s and construct the UK's first CCS power plant, with a target of removing 10Mt of CO₂ by 2030.

Hydrogen funding

In February 2020, the government allocated £90 million from the Energy Innovation Fund to a large scale low carbon hydrogen plant and for programmes to switch industrial fuels to hydrogen and other low carbon alternatives. More recently, it pledged up to £500 million for hydrogen production and development in the ten point plan for a green industrial revolution. The government should focus on green hydrogen, made from electrolysis using renewable energy, rather than 'blue hydrogen' made from natural gas, to maximise emissions savings.

The waste prevention plan has been delayed

This plan was due for revision in 2019 but has still not been published, despite its vital role in ensuring the UK properly values the resources it uses, reduces their impact and designs out waste. The current waste prevention plan has had virtually no material impact on waste production since 2013.



Progress in the buildings sector in 2020

Policy area

New policy announcements since January 2020

Overall rating

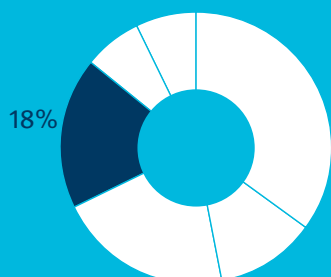
Buildings

Buildings account for 18 per cent of UK carbon emissions. Reductions have been very slow in this sector over the past decade. Emissions in the three years 2016, 2017 and 2018 were higher than in 2015.

Estimated emissions reductions over the fifth carbon budget period from 2020 policy announcements: 35MtCO₂e

New spending on low carbon buildings in 2020, allocated over the next five years: £4.6 billion

Share of UK emissions



Summary

The government has recently pledged funding for energy efficiency and low carbon heat in homes and non-domestic buildings. It is consulting on raising minimum efficiency standards in rental properties and on green financial incentives. However, there is still an absence of a long term, fully funded strategy for upgrading the energy efficiency of housing.

Major announcements

Green Homes Grant and Public Sector Decarbonisation Scheme
Through these schemes, the government has announced £4 billion of funding for energy efficiency and low carbon heat. Despite this, longer term funding and a comprehensive strategy is required to leverage private capital from homeowners and landowners, and to support work to increase the energy efficiency of lower income homes, if longer term UK targets are to be met.

Social Housing Decarbonisation Fund

The £50 million pilot of innovative energy efficiency retrofit in social housing is a very welcome start. Longer term funding of £250 million is needed to scale up industry so that all of the 2.3 million social homes suitable can benefit from whole house retrofits.

Improving building standards

The government is consulting on bringing forward Minimum Energy Efficiency Standards for homes in the domestic Private Rented Sector to EPC band C by 2030 and buildings in the non-domestic sector to EPC band B up from the current standard of EPC band E. We calculate that, in total, such a move could save 16.2 MtCO₂e over the fifth carbon budget period (2028-32).

There is no long term strategy for buildings and heat

Seventy per cent of UK homes do not yet meet the government's 2035 target of all homes being at least EPC band C, and the vast majority of UK homes are not heated by low carbon sources. There needs to be a long term, fully funded strategy that sets out comprehensive policies, regulation and incentives to reach a net zero aligned building stock in the UK.



Progress in the agriculture and land use sector in 2020

Policy area

New policy announcements since January 2020

Overall rating

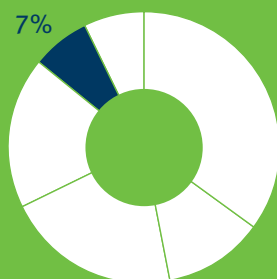
Agriculture, land use and forestry

Emissions from agriculture account for seven per cent of UK emissions, and have remained flat since 2008, only decreasing by two per cent in the past decade. The land use and forestry sector also removes 15MtCO₂e every year.

Estimated emissions reductions over the fifth carbon budget period from 2020 policy announcements: 0MtCO₂e

Spending on agriculture and land use in 2020: £5.9 billion

Share of UK emissions



Summary

There have been some promising announcements on tree planting and job creation in the natural environment, and the government has announced a new plan for sustainable farming. However, due to an absence of detailed policies, we have not been able to calculate emissions reductions from this sector. There have also been no significant funding or strategy announcements for nature-based solutions, the Tree Strategy or the Peat Strategy.

Major announcements

Pathway to sustainable farming

With the Agriculture Bill passing into law, the government published a plan for how it will transition England to sustainable farming, including the new Environmental Land Management system, which will pay farmers to improve 'public goods' like better air and water quality, improved soil and thriving wildlife. Although, for the moment, this is not a detailed strategy, it is welcome that land management in England will begin to prioritise nature recovery and climate action.

Planting 75,000 acres of trees every year by 2025

In July, the UK government committed to planting 75,000 acres of trees every year by 2025. We calculate that the government's tree planting target could save 5MtCO₂e over the fifth carbon budget period (2028-32), although there is no strategy or plan yet in place to achieve it. Devolved administrations will be important partners in this.

Green Jobs Challenge Fund

This new fund of £80 million will help conservation organisations and their suppliers create up to 3,000 jobs and safeguard up to 2,000 others in areas such as protecting species, using nature-based solutions to tackle climate change and connecting people with the outdoors. Whilst the challenge fund has lots of potential, Wildlife and Countryside Link has pointed out that the fund is oversubscribed by almost £330 million and requires additional funding to be successful.

Environment Bill is not yet law

The Environment Bill has not yet been translated into law and is not expected to be until after the end of the Brexit transition period. This leaves a serious governance gap on environmental protection, once the oversight of the EU disappears.



Methodology and assumptions

This policy tracker only measures national UK level policies, not additional policies announced by the devolved administrations. Almost all the spending and policy asks relate to England only (except for a small proportion of rail investment), reflecting the devolution of many important policy areas relevant to decarbonisation to the Welsh, Scottish and Northern Irish administrations.

Emissions calculations

The baseline for emissions projections over the fifth carbon budget comes from the latest Climate Change Committee (CCC) projections. For this, we use the total greenhouse gas projections rather than net carbon account emissions projections. The net zero aligned fifth carbon budget is calculated assuming an average rate of emissions reductions needed to reach net zero emissions in 2050, from UK emissions in 2019. We report a figure that includes international aviation and shipping, updated peatland emissions and values for methane intensity, as outlined in the CCC's sixth carbon budget advice.

The baseline for emissions projections to 2030 for the Nationally Determined Contribution (NDC) comes from the latest BEIS projections. For this, we use the total greenhouse gas projections rather than net carbon account emissions projections. The level of emissions for the NDC is calculated using a 70 per cent reduction on 1990 levels of emissions, not including international aviation and shipping or peatland. For this, we assume that the CCC's advice on a 68 per cent reduction of emissions compared to 1990 would have been two per cent higher if it were using older inventories for peatland and methane intensity (as suggested by the CCC).

Estimated emissions reductions from policy come from a number of sources. These include government impact assessment associated with policies which are publicly available online and from Green Alliance's own analysis (for example, our work on the emissions savings from a 2030 phase out of the sale of new petrol and diesel cars). All of these estimate the carbon emissions reductions from policies over the fifth carbon budget period (2028-32).

Investment calculations

Investments made by the government this year (2020) in climate and nature are averaged over the next four years until the end of this parliament in 2024-25. For example, even though the Plug-In Grants for Electric Vehicles are only allocated to 2023, we average spending to 2025 to give average spending on electric vehicle grants over the course of this parliament.

We and a group of other NGOs developed a list of priority asks for investment in climate and nature. We only mark progress against these asks in our overall figures for annual spending needed on nature and climate to 2024-25. The government may have also invested, or may need to invest, in additional green spending which is not included in our priority asks. We used Wildlife and Countryside Link's asks for nature restoration in the UK, made ahead of the 2020 spending review, to calculate England's nature spend.

Spending asks are given per year until the end of this parliament.

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This work part of the Cutting Carbon Now project, run by Green Alliance and supported by the Network for Social Change. It is advocating immediate action across the UK economy to drastically reduce the UK's contribution to climate change.