Net zero policy tracker
Parliamentary briefing

green alliance…

In November 2020, the UN climate summit (COP26) will be hosted by the UK government in Glasgow. This is an important opportunity to showcase climate leadership. But the UK can only lead internationally if it is also acting at home.

Green Alliance calculations show that, as of January this year, there was a significant gap between the UK's stated emissions reduction plans and the trajectory needed to meet the government's own net zero carbon emissions by 2050 law. The gap to being on track to net zero over the fifth carbon budget period (2028 to 2032) was 313MtCO_2e in January 2020.

Throughout 2020, Green Alliance is monitoring the government's progress to close this gap and the public spending needed to tackle the climate and nature emergency.

March 2020: post-budget update

Emissions reductions

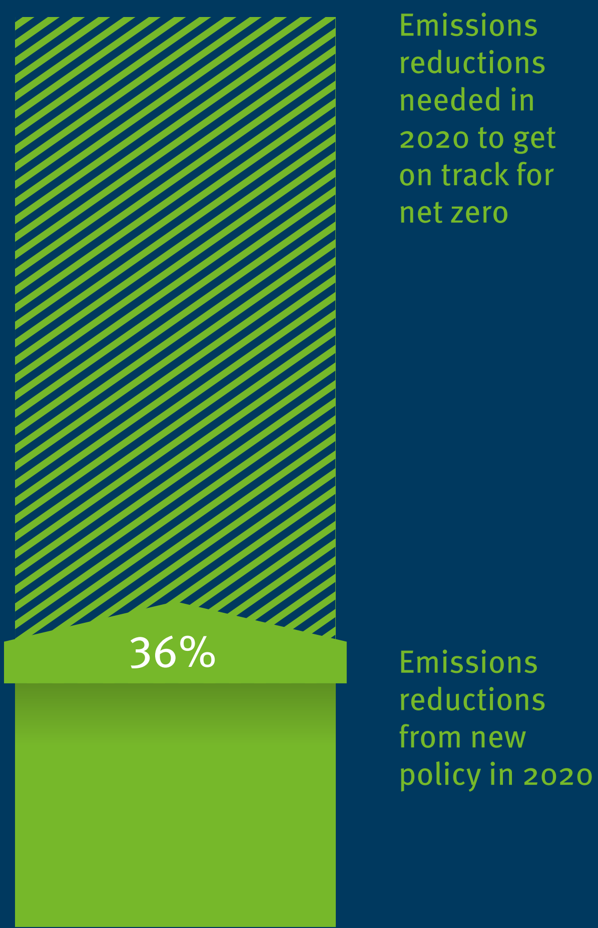
In 2020, policy announcements, including a 2035 phase-out date for petrol and diesel cars, allowing solar and onshore wind to access the energy market and fuel switching programmes for the concrete and glass industries, promise an **overall reduction of 113.5 $MtCO_2e$ over the fifth carbon budget period (to 2032)**. This amount is nearly equivalent to the current total annual emissions of the transport sector every year in the UK.

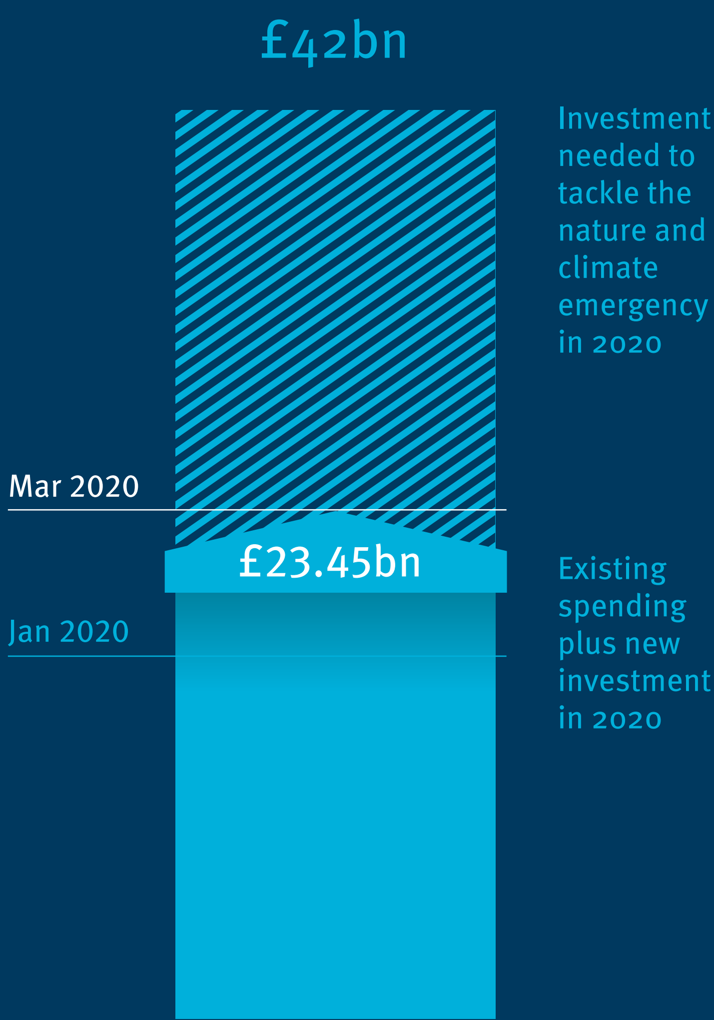
This still leaves a policy gap of **199.5 $MtCO_2e$** which will need to be closed to be on track for net zero in the fifth carbon budget period, between 2028-2032.

Spending on climate and nature

The government has committed to **new funding of £6.7 billion** since January 2020 for low carbon buses, rolling out fast charging infrastructure for electric vehicles (EVs), new support for carbon capture and storage (CCS) and a new Low Carbon Heat Support Scheme.

However, **£18.55 billion further funding is needed** to most effectively tackle the climate and nature emergency. This should spread across areas as diverse as public transport, flood defences and improving the energy efficiency of our homes. For more information, see *Government investment for a greener and fairer economy* (September 2019)





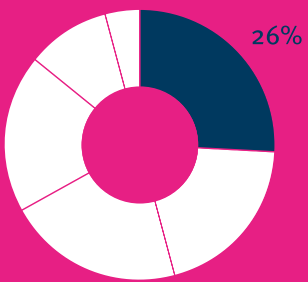
Assessment of new government commitments

Policy area	New policy announcements since January 2020	Overall rating

Transport

Surface transport is the largest emitting sector in the UK, accounting for 26 per cent of UK emissions. Following three consecutive years of growth between 2014 and 2016, emissions fell by two per cent in 2018.

Share of UK emissions



Budget announcements

Extending the plug-in grant for cars, vans, taxis and motorcycles to 2023, along with £500 million spending to support the roll-out of a fast-charging electric vehicle (EV) network, are both welcome steps in the transition away from fossil fuel based vehicles.

Much of the investment for accelerating EV roll-out is now in place. The government must now act to ensure operation, grid capacity and supply chain issues are solved to continue to drive EV roll-out forward. The government is also ending a tax break on red diesel, which is used for heavy vehicles. Whilst this will eventually be good for reducing air pollution, the two year delay in its implementation, and the fact many sectors are exempt, including agriculture, fishing and rail, will limit its positive impact.

However, a commitment to spend £27 billion on roads, more than 50 times the investment in EV charging infrastructure, and the continued freezing of fuel duty (which has been responsible for an additional 4.4 $MtCO_2e$ since it was first frozen in 2011) shows that the government has a long way to go to balance spending on green transport with other transport spending.

Pre-budget announcements

Moving the phase-out date for petrol and diesel cars from 2040 to 2035

This announcement saves 57 $MtCO_2e$ over the fifth carbon budget period. However, if the date was brought forward to 2030, a further 41 $MtCO_2e$ could be saved and air pollution could be cut by 25 per cent by 2030.

£5 billion for new bus and cycle infrastructure

This is an exciting investment in public and active transport. We await further details on policy and spending plans to assess its potential carbon savings.

Increasing bioethanol in petrol to ten per cent

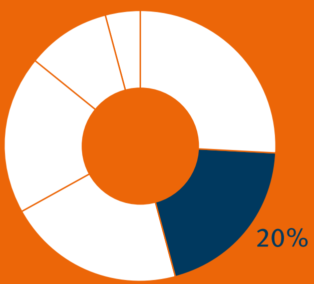
As long as this is accompanied by incentives to switch to cleaner forms of transport, this is a good, short term way to cut emissions. We calculate this will cut emissions by 3.4 $MtCO_2e$ over the fifth carbon budget period.

Policy area	New policy announcements since January 2020	Overall rating

Power

Emissions from the power sector are 68 per cent below 1990 levels, and now account for 20 per cent of UK emissions. In 2018, low carbon power generation accounted for 54 per cent of total UK generation, while coal accounted for just five per cent.

Share of UK emissions



Budget announcements

Renewable and low carbon power sources received no further investment apart from a new fund for CCS gas power stations (covered under 'Industry' below), and a welcome announcement that businesses will be taxed on gas use, which may help to drive a shift away from gas towards electricity, which is increasingly low carbon. Since decarbonisation policy has been heavily concentrated in the power sector in recent years so lighter investment here was expected for this budget.

Pre-budget announcements

New routes to market for onshore wind and solar
This announcement came with some political risk for the government, and shows a desire to allow the cheapest and lowest carbon forms of energy to access the energy market. We calculate this can save 37 $MtCO_2e$ over the fifth carbon budget period (2028-2032).

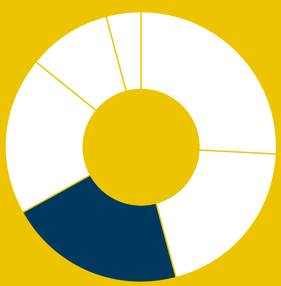
Moving the phase-out date coal power generation from 2025 to 2024
Although any reduction in coal usage is welcome, BEIS projections show that coal was not expected to be generating any electricity at all from 2023. This announcement will, therefore, have very little effect on carbon emissions over the next ten years.

Policy area	New policy announcements since January 2020	Overall rating

Industry

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

Share of UK emissions



21%

Budget announcements

A new carbon capture and storage (CCS) infrastructure fund of £800 million was announced to set up two UK sites for the technology in the next 20 years. While such an investment is welcome, there now needs to be more detailed policy on how the government expects to get CCS off the ground. The budget announcement does not appear to be consistent with net zero: we estimate that the government should be ensuring that at least 10 $MtCO_2e$ is removed every year by CCS sites by 2030 which is unlikely to be delivered by the proposals in the budget.

Pre-budget announcements

£69 million of funding for new hydrogen production facilities
This is a very promising announcement, in particular for decarbonising the glass and concrete industries, which have little choice of low carbon fuels. However, the majority of this funding is for feasibility, engineering and design of projects, so there are few associated carbon emissions reductions in sight. We calculate only 16 $MtCO_2e$ emissions reduction by 2032, the end of the fifth carbon budget period.

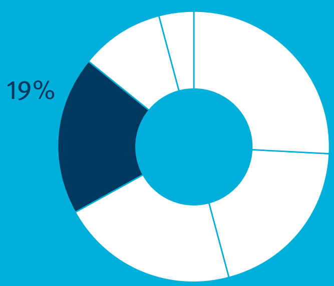
The pledge to double the energy innovation programme to £1 billion, investment in industrial waste reduction programmes and the new carbon capture and storage fund mean that the government is now investing three times more than the £0.3 billion identified in our recent report to get industry on track for net zero over the next three years. This is particularly ambitious and a welcome signal from the government on the direction of the UK economy. This funding should now be supported by policy and strategy to enable the transition to a greener industrial sector. This new level of funding is reflected in our updated spending tracker.

Policy area	New policy announcements since January 2020	Overall rating

Buildings

Buildings account for 19 per cent of UK carbon emissions. Reductions have been very slow in this sector over the past decade and emissions in the three years 2016, 2017 and 2018 were higher than in 2015.

Share of UK emissions



Budget announcements

Despite being trailed prior to the budget, making homes more energy efficient was once again missing from the announcements. Given the massive benefits of cheaper bills and fewer deaths related to cold housing (about 10,000 deaths in 2017 were directly attributed to living in a cold home), it is disappointing that this was absent. If the government was to meet its own energy efficiency targets, we estimate it would save 96 $MtCO_2e$ over the fifth carbon budget period (to 2032).

Low carbon heat received some welcome investment as this will be one of the most difficult areas for the UK to decarbonise, requiring changes in almost all homes. The government has promised to extend the Renewable Heat Incentive for a year, and then invest £100 million in a ‘Low Carbon Heat Support Scheme’ over the next five years, which will support technologies like heat pumps. District Heat Networks were also supported through a further year of funding, with £270 million extra to ensure they switch to greener fuels. This amounts to around £0.4 billion over the next three years for low carbon heat. We estimate this is still about £2 billion a year short of where this investment needs to be to get on track for net zero.

A new ‘green gas levy’ was also announced, which will increase the proportion of biomethane used for heating by homes on the gas grid. Although biomethane is a good short term way to help decarbonise heating in homes, these waste resources may be better used in harder to decarbonise sectors like aviation in the long term. The levy should ensure it is flexible enough to enable the use of biomethane in sectors beyond the built environment.

Pre-budget announcements

Phase-out of coal and ‘wet wood’ for domestic heat

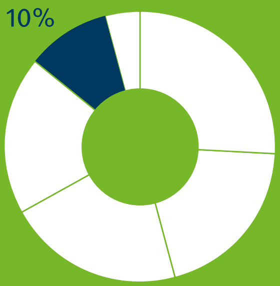
While this is an important announcement for air pollution, it will make little difference in reducing carbon emissions, with homes expected to switch to similarly carbon intensive fuels which will save only about 0.4 $MtCO_2e$ over the next ten years. There still needs to be a proper programme that supports off-gas grid homes to move to genuinely low carbon heat sources.

Policy area	New policy announcements since January 2020	Overall rating

Agriculture, land use and forestry

Emissions from agriculture account for ten per cent of UK emissions, and are 16 per cent below 1990 levels. The land use and forestry sector also removes 15 $MtCO_2e$ every year.

Share of UK emissions



Budget announcements

£640 million has been pledged to plant over 30,000 hectares of trees and restore peatland. While this is not a new announcement, it is welcome. But, if the government hopes to sequester the amount of carbon necessary to get on track to net zero from this sector, it will need much greater investment in tree planting and peatland restoration. For instance, planting 42,000 hectares of new woodland each year would save 36 $MtCO_2e$ to 2032.

The announcement to restore 35,000 hectares of peatland is disappointing. This is only around one per cent of the UK's peatlands. The Committee on Climate Change says that at least 50 per cent of upland peat and 25 per cent of lowland peat require restoration.

Pre-budget announcements

There were no additional new policies or investment announced on agriculture and land use prior to the budget. However, **the Environment Bill and Agriculture Bill are currently moving through parliament** and contain important proposals for incentives for farms to provide 'public goods', such as soil management, agroforestry and natural flood defences; and for an Office for Environmental Protection to monitor, report and enforce environmental law.

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CUTTING CARBON NOW

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.