

The 2020 CCC report

This document aims to provide clear and structured responses to questions about the new Committee on Climate Change report, how it reveals that the UK Government is not meeting its own climate targets or preparing us for what's coming, why we should care, and whether the committee has gone far enough in taking the Government to task.

This document was prepared by Dr Caroline Vincent and Dr Emily Grossman from "[XR Scientists](#)". Please contact them with any questions.

All references for statements in this document (outside of those from the report itself) are in the [Emergency on Planet Earth](#) doc. Please also refer to the above document for lots more info on the impacts of a 2C or 4C world, and why aiming for net zero by 2050 is too late. Any references not provided in the Emergency on Planet Earth doc are provided below as links.

Interview with Dr Emily Grossman

Watch Dr Emily Grossman explaining the points addressed in this document in her XR livestream interview from Thursday's XR action:

<https://www.youtube.com/watch?v=QiF16QitEaU&list=PLCVxr5TXD8cvhJxVoUn7nZwo0iK9bcGGi&index=2&t=0s>

What is the 2020 Committee on Climate Change (CCC) report?

The Committee on Climate Change (CCC) is an independent, statutory body established under the Climate Change Act 2008. They advise the UK and devolved governments on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.

[The 2020 report](#) details the UK progress on emissions and on building resilience to climate change. It gives advice on the steps to achieve a resilient recovery. Recommendations on emissions reduction are joined by recommendations to improve climate change adaptation. Advice is grouped by Government department to bring extra clarity to the steps required. The report is also highlighting that COP26 must be seen as a platform for climate leadership.

Questions about the report addressed by this document:

1. Is the UK Government on track to reach the Net Zero target by 2050?
2. Is the government preparing us for what is coming?
3. We heard that UK emissions are reducing, is it not the case?
4. Aren't we really doing well this year because of COVID-19?
5. Do you think the CCC report has gone far enough in taking the government to task?

Overview:

The role of the UK Committee on Climate Change (the CCC) is to advise the government on climate change. Last year they gave recommendations that in order to reach the Paris Agreement and global net zero carbon by 2050, the UK must get to net zero total greenhouse gas emissions by 2050. Today their report on how the government is doing was released.

Overwhelming evidence shows that if global greenhouse emissions are not brought rapidly down to net zero, and biodiversity loss is not halted, we face catastrophic and irreversible damage to our planet, causing incalculable human suffering and many deaths.

Yet, the new CCC report shows our government's **staggering failure to listen to its own advisors on Climate Change and to meet its own targets**. If changes are not urgently made, this country will be hurtling towards climate collapse, risking civil unrest, war and societal breakdown - and the deaths of hundreds of millions if not billions of people.

There is utter hypocrisy in parliament declaring a "climate emergency" last year but the government still failing to meet its own targets for reducing emissions and instead investing in MORE fossil fuel infrastructure in other countries.

This is a **global emergency**, we should be doing everything in our power to address it. Instead, the government is not even doing enough to achieve the unambitious targets it has set itself.

- In Nov 2019, more than **11,000 scientists from 153 countries** declared "clearly and unequivocally that the Earth is facing a climate emergency" and that without deep and lasting changes, the world's people face "untold human suffering".
- In February 2020, a hard-hitting report from **JP Morgan economists** warned that human life "as we know it" could be threatened by climate change, and that without action being taken there could be "catastrophic outcomes".
- In May, a letter on behalf of more than **40 million health professionals** was sent to world leaders, asking for government plans to have "health protection and promotion embedded at their core."

The world now [has only six months in which to change the course of the climate crisis](#) and prevent a post-lockdown rebound in greenhouse gas emissions that would overwhelm efforts to stave off climate catastrophe, one of the world's foremost energy experts has warned. "This year is the last time we have, if we are not to see a carbon rebound," said Fatih Birol, executive director of the International Energy Agency.

We are at a crossroads and we have to act now. **Governments are planning to spend \$9tn (£7.2tn) globally in the next few months on rescuing their economies from the coronavirus crisis, the Int Env Agency has calculated.** The stimulus packages created this year will determine the shape of the global economy for the next three years, according to Birol, and within that time emissions must start to fall sharply and permanently, or climate targets will be out of reach.

We, Extinction Rebellion, demand that the government face the emergency at hand and act now.

Answers to specific questions:

1. Is the UK government meeting its targets?

- The government is absolutely **not** meeting its targets to get to net zero by 2050 - which the IPCC say would still only give us a 50:50 chance of staying below 1.5C heating.
- In fact, the report shows that the lack of progress is staggering:
 - Of the **21 key indicators** to show progress towards meeting carbon budgets and the 2050 target, only **4 were on track**
 - Of the **31 milestones** for actions recommended by the CCC last year in order to get to net zero by 2050, only **2 have been fully achieved** and there has been partial progress on 15. The other 14 have shown no progress.
- The CCC says that the current carbon budgets in place are not consistent with getting us to net zero by 2050. We need to see **much steeper reductions in emissions**.
- We've been off track to meet the already inadequate fourth and fifth carbon budgets (2023-2032) for four years now, and we're **still off track** (which this report barely mentions). Bear in mind these carbon budgets are for an 80% reduction by 2050, not even net zero.

2. Is the UK government preparing us for what's coming?

- In terms of preparing us for what lies ahead, the report says that no sector has yet demonstrated resilience for a 2C warmer world - yet we are projected to be hitting this by around 2050 if we keep going as we are.
 - The current rate of heating of our planet is equivalent to five nuclear bombs going off every second. All this extra heat is causing melting of ice caps, rising sea levels and damage to wildlife, as well as changes to our climate that can result in

- the spread of diseases and extreme weather such as heatwaves, forest fires, droughts, storms and floods.
- Such events can not only damage our homes, affect our health and harm our wildlife, but they can also prevent the crops that feed us from being able to grow. As temperatures continue to rise, events like this will become more and more common.
- Without radical changes, we are currently heading for a temperature rise of 1.5C by around 2030, 2C by around 2050 and 3-4C by 2100.
- Indeed, the new CCC report states we should be confronting the range of **climate risks** that face the UK, including **flooding, overheating and water shortages**
- The report warns us that in a 2C scenario, by the 2050s, **700,000 more people in England will be at risk of severe flooding, a quarter of the farmland in England and Wales will only support grass most years, and our thirst for water in England will be 1.1bn litres greater than the water we actually have.**
- At the rate we're going the IPCC warns that by 2050 we will be experiencing **extreme heat waves of the kind seen in 2019 every summer** and the UK is predicted to see a **trebling of heat-related deaths** - with 7,000 dying due to excess heat each year. **Tropical cyclones** are more likely to be hitting Western Europe.
- The UK is also set to be one of the worst areas in the world affected by sea level rise, with **large parts of the English coastline and areas around its rivers, such as Sussex, Kent, Cambridgeshire and Central London, predicted to regularly fall below water level at high tide** by 2050.
- According to the Greater London Authority, London is likely to have **water supply problems by 2025 and "serious shortages" by 2040.**
- Sir James Bevan, chief executive of England's Environment Agency warned: "On the present projections, many parts of our country will face **significant water deficits by 2050, particularly in the southeast, where much of the UK population lives.**"
- By 2050 land degradation and climate change are predicted to reduce global crop yields by up to 50% in certain regions.
- An advisor at the UN has warned that we may have only 60 years of harvests left.
- The UK has some of the most degraded soils on Earth, with nearly 85% of fertile peat topsoil in East Anglia having been lost since 1850, and the remainder at risk of being lost over the next 30–60 years.
- According to Michael Gove: "The UK is 30 to 40 years away from the fundamental eradication of soil fertility."
- By 2050, it is predicted that as many as 1.5 billion MORE people – that's 5 billion people in total – are likely to face shortages of food and clean water, particularly those in Africa and South Asia. That's one in every two people.

- On our current path, by 2050 it is estimated that there could be up to 200 million environmental migrants.
 - Mass migration and famine are likely to take us towards civil unrest and ultimately war, raising the terrifying possibility of societal collapse.
 - Last year the chair of the CCC, Lord Deben was quoted about the UK's climate crisis preparations : "The whole thing is run by the government like a *Dad's Army* operation."
- The report also says that a priority should be **preparing for the possibility of a 4C world.**
 - In 2008 the CCC had advised the Government that 4°C was the threshold of "extreme danger", to be avoided at all costs. Yet today it is advising the Government to consider preparing for it.
 - Tim Crosland, Director of the volunteer-based climate litigation charity Plan B Earth commented: "Leading climate scientist Professor Johan Rockstrom recently warned that he could not see how a 4°C world could accommodate 8 billion people, or even half of that - implying the loss of not just millions but billions of human lives, with racially marginalised communities and those in the Global South on the front line"
 - Indeed, Professor Johan Rockström, director of The Potsdam Institute for Climate Impact Research, fears that in a 4°C-warmer world: "It's difficult to see how we could accommodate eight billion people or even half of that. There will be a rich minority of people who survive with modern lifestyles, no doubt, but it will be a turbulent, conflict-ridden world." By 2100 we would have been heading towards a population of around 11.2 billion.
 - Professor Kevin Anderson, deputy director of the Tyndall Centre for Climate Change Research, warns: "There is a widespread view that a 4°C future is incompatible with any reasonable characterisation of an organised, equitable and civilised global community."
 - A 4C world doesn't even bear thinking about. That amount of heating would make **some parts of the world simply too hot for people and animals to live on**, and cause an **amount of sea level rise that could flood the homes of hundreds of millions of people**, eventually submerging some countries completely.
 - Rising sea levels and droughts could render **vast tracts of land uninhabitable through flooding and desertification**, putting **food supplies at risk**.
 - Receding glaciers could **cut off fresh water supplies for millions**. Mass migration and famine are likely to take us towards civil unrest and ultimately war, raising the terrifying possibility of societal collapse.

3. Aren't UK emissions falling?

- Yes the report shows we've seen a 30% reduction in emissions over the last 11 years

- But that's mostly been in the **power** sector, plus a bit in industry and waste
 - The reduction in those sectors has mostly been due to the switch from coal to gas, so that doesn't indicate that emissions will continue to fall even in that sector.
 - Even in those industries where emissions are falling, that's not fast enough.
 - To get to net zero 2050, globally we need to see 8% reductions **per year** - ie it's not just when the net zero date is, how we get there matters to. If we delay action to 2040 then bring emissions down to net zero by 2050, we won't keep to a 1.5C, we need massive emission reductions every year. 8%/year also still relies on negative emissions in the 2nd half of the century, like the global 2050 target.
 - The UK needs to do even more than 8% per year due to having higher emissions in the first place plus a historical responsibility:
 - The average UK per capita emissions (1.5%) are still higher than the global average (0.8%).
 - The UK is a richer country, so we have more capacity to decarbonise quickly than low income countries.
 - Carbon dioxide accumulates, so what we emitted in the past matters as much as what we are emitting today, and our historical emissions are very large so we hold a lot of responsibility to decarbonise.
 - The ideas of equity and 'common but differentiated responsibilities and respective capabilities' are part of the Paris Agreement - we are meant to decarbonise faster and help low income countries transition to a low carbon technology without building fossil fuel infrastructure first.
 - It is unrealistic to think that low and middle income countries will decarbonise if they don't think the high income countries are pulling weight.
 - Low income countries have the least responsibility for causing climate change but are the most impacted, so there is an element of climate justice, and they also need support for adaptation to the climate change that is already in the pipeline.
 - We need to tackle inequality so that those who are least responsible for causing climate change don't pay to fix it - that's true both within countries and between countries.
- But anyway, to get to carbon zero we need to see reductions across **all sectors** - including aviation, surface transport, shipping, and agriculture and land use.
 - Surface transport emissions have stayed the same for 10 years
 - Buildings emissions have fallen a bit (14% in 12 years) BUT houses are still being built that are supplied by fossil fuels and will need retrofitting to run without them.
 - 1 million such homes have been built in the last 12 years.
 - The uptake of low-carbon heating systems is almost negligible (less than 30,000 installations in 2019, whereas over a million a year will be needed by the early 2030s)

- Plus, that doesn't include aviation or shipping, or imported / embedded emissions
 - If we include imports, reductions have only been 18% over 9 years
 - According to a WWF report, nearly half of the UK's carbon footprint comes from emissions released overseas, to satisfy UK-based consumption.
 - The new CCC reports that 90% of emissions associated with consumption of manufactured products is imported, and that 8% of this imported emissions for manufactured products came from China.
 - The UK has become the biggest net importer of carbon dioxide emissions per capita in the G7 group of wealthy nations – outstripping the US and Japan – as a result of buying goods manufactured abroad.
 - We should not be playing accounting tricks by reducing emissions in our country but investing in fossil fuel infrastructure elsewhere in the world.
- Plus the UK government are still **subsidising** fossil fuels and even approving **new** fossil fuel projects
 - There is enough carbon in oil, gas and coalfields already-running or under construction) to take us not just over 1.5°C but also way past the 2C "safe" limit set by the Paris Agreement, the impacts of which would be devastating.
 - The government has also recently approved exploitation of new oil fields in The North Sea, and the opening of four new gas-fired turbines at Drax power station - in spite of a ruling from its Planning Inspectorate that they should be blocked due to their impact on climate change.
 - The opening of the Woodhouse Colliery has also been approved, a new coal mine in Cumbria that will produce up to 8.5 million tons of carbon dioxide a year for 50 years. That's the equivalent of all the electricity emissions from up to 11.5 million homes in the UK - nearly half of all UK households
 - And then there's HS2, a project that has been described as one of the largest deforestation programmes since the First World War, set to destroy a total of 108 ancient carbon-storing woodlands and damage or destroy almost 700 precious wildlife sites. Of major concern is also the fact that the railway is set to emit huge quantities of carbon emissions which would take us further away from our supposed commitment to reduce emissions. Indeed, the initial environmental assessment for the project was published in 2013, before the government signed up to achieving net zero carbon emissions by 2050.
 - According to a report from the European Commission in 2019, the UK has the biggest fossil fuel **subsidies** of the whole of the EU (mostly in the form of tax breaks)
 - Over the past five years, the UK has spent £2.5 billion on fossil fuel projects - the vast majority being in low- and middle-income countries. It doesn't matter where carbon is emitted, it all ends up in the same atmosphere. We are only cheating ourselves, our children and the planet by playing accounting games and reducing emission here while funding fossil fuel projects elsewhere.
 - The UK spends £10.5 billion a year supporting fossil fuel companies in the UK, significantly more than the £7.3 billion a year it spends supporting renewable

- energy. It should be noted that the government argues that this ‘financial support’ is not technically a ‘subsidy’.
- In 2018 alone, Britain increased its support for fossil fuel projects overseas to almost £2 billion
 - The UK government plans to spend £1 billion supporting a fracking company in Argentina - money that the government had previously committed to spending on green energy.

4. Aren’t we in a good position due to COVID?

- Yes we have seen a temporary drop in emissions BUT the report warns that we mustn’t use this as an excuse to ramp up emissions again. It is the total accumulated emissions over time that matters, not how much in any one year, if this is just a blip and emissions recover it will make almost no difference in the long run. We need to drop more than this every year!
- We are at a cross-roads. The CCC report warns that the next few months “have huge significance”. If we prioritise the economy without thinking about climate change (Boris says spend, spend, spend, buy buy buy), we could be locking ourselves into even higher emissions in the long term.
- Covid-19 is an emergency, and we have shown what an emergency response looks like. It means acknowledging the problem, following scientific advice, doing everything in our power to prevent catastrophe and not putting a price on life. As covid situation looked like in February, the CCE is already here, many parts of the world are already suffering and scientists are up in arms that the whole world will be at risk if we don’t take it seriously. It has the potential to be much worse than covid in the long term, but like with covid the sooner we intervene the less painful it will be and the more options we will have available, but if we ignore it it will just get worse.
- We can achieve similar reductions in emissions with far less disruption than we saw with COVID. The COVID reductions have happened by unfair shutting down of all activity - it essentially shows the limits of what can be achieved by people changing personal behaviour, particularly stopping transport. To address the climate crisis we need to reduce emissions fairly. Reductions need to be shared across sectors and particularly include changes in infrastructure and business which are beyond what individuals can do. Changes in **behaviour** from COVID are good and should be encouraged e.g. more walking and cycling, working from home, less flying etc., but also remember that these are limited and we need changes elsewhere - particularly in our infrastructure, housing and agriculture - for reductions to be longterm and fair.

5. Are the CCC going far enough to hold the government to account?

NO!

- They're still agreeing that the government should aim for net zero by 2050, but it should be much sooner
 - Net zero global emissions by 2050 puts human civilisation at great risk. It only gives us a 50/50 chance of limiting warming to 1.5C, according to the UN
 - [New research](#) from the Tyndall center shows that for a **2 in 3 chance of stabilizing warming below the internationally agreed limit of 2C** of warming then the total amount of carbon we can emit in the UK is in fact **only half that currently budgeted in government policy** to get to net zero. The idea that a UK target for 2050 is in line with global efforts for staying below 1.5C is therefore a joke.
 - Even if we were on target to reduce emissions by the specified amount to get to net zero by 2050, we would also need to plant trillion of trees and rely on other artificial 'negative emissions technologies' (such as carbon capture and storage) on a grand scale, which is a technology that barely exists and is there is no evidence it will ever be reliable enough or useable on such large scales
- The UK needs to include aviation and shipping in our accounting NOW, not in 13 years' time which the report has called for.
- The Committee on Climate Change noted that the government has created a Citizens' Assembly, showing "an effort to consult and inform the public". But it needs to call for the government to create a Citizens' Assembly that's got **legislative power** - the power to make changes.
- The report says (in meek terms) that bailouts should be conditional on meeting climate conditions, but it doesn't mention any of the £58bn+ in condition-free bailout money the Bank of England has already given out.
- The CCC has been placated by the promise of upcoming reports and reviews (e.g. Treasury Net Zero/National Infrastructure Strategy/Cabinet Committee on Climate Change), but there's no reason to believe the government will back them up with action.

2020 CCC report - important facts

A few key messages embedded in the report

The CCC report set priorities for all governments to demonstrate adaptation planning for a minimum 2°C and consideration of a 4°C global temperature rise. In last year report, 4°C was barely mentioned "*it is prudent to plan adaptation strategies for a scenario of 4°C*"

The report highlights the importance of the next few months (although in a meek way)
“The months ahead have huge significance”
“Choices in the coming months must steer a recovery that drives vital new economic activity, accelerates our transition to Net Zero and strengthens our resilience to the impacts of climate change”

The CCC warned the government that:

“Short-term choices aimed at tackling unemployment and inequality, if poorly targeted, could lock in higher emissions in the long-term.”

In the long term “Public money should not support industries or infrastructure in a way that is not consistent with the future net-zero economy or that increase exposure to climate Risks.”

The treasury review must “embed fairness as a core principle of policy design.”

In term of climate policy: Net Zero and Adaptation need to be integrated into all Government policy and departments must work together to deliver ambitious policy

The government is not on track to achieve their own target:

The path to achieving net-zero emissions by 2050 will require a steeper reduction in emissions over the intervening three decades than is currently legislated in carbon budgets (out to 2032). Current Government projections indicate a significant policy gap between expected emissions and required reductions over this period.

2020 fall in emissions due to COVID-19 crisis is likely to increase the margin by which the UK meets its Third Carbon Budget (2018-2022). The CCC is recommending that any surplus from the Third Carbon Budget should not be carried forward.

In December, the Committee will publish its recommendation on the level of the Sixth Carbon Budget, the limit on UK emissions for 2033-37.

The lack of progress is staggering

- Progress is generally off-track in most sectors, with **only 4 out of 21 of the indicators on track in 2019** (see examples in Appendix 1: Key indicators of progress towards meeting carbon budgets and the 2050 target)
- Out of recommended actions for 2019 and 2020 to achieve net Zero target (set out last year) the Government has only fully achieved **2 milestones out of the 31** (partial progress has been made in 15) (see Examples in Appendix 2)
- Since the publication of last year report, the UK progress on building resilience to climate change is still non-existent:
“a resilience which no UK sector has yet demonstrated for even a 2°C rise in global

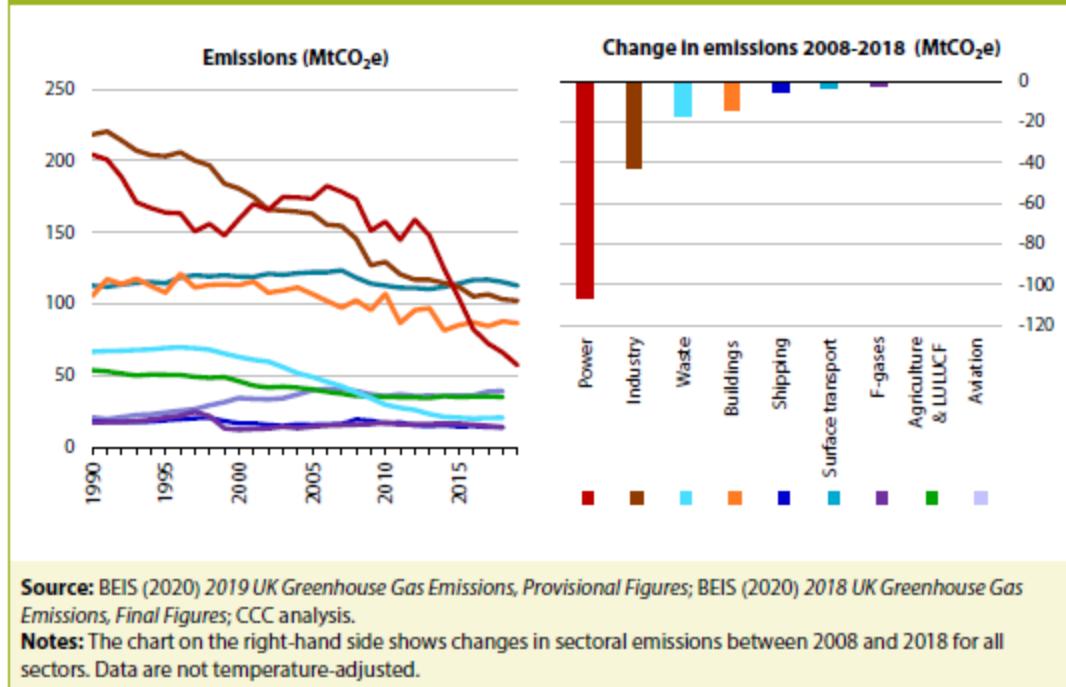
temperature.”

“This is a moment to confront the range of climate risks that face the UK, including flooding, over-heating and water shortages”

- A few items in the report also highlight the lack of commitment from the government
 - The UK Government has instigated a Cabinet Committee on Climate Change, chaired by the Prime Minister, as we recommended last year. However, it did not meet until March this year, five months after its creation.
 - The National Infrastructure Strategy, due to set a vision for infrastructure development over the next 30 years consistent with Net Zero, has been delayed from Budget 2020

Progress on emissions

Figure 2.3. UK greenhouse gas emissions by sector 1990-2019



In the period 2008-2019, overall territorial emissions have reduced by 30% while the economy grew by 15%. The UK has the strongest record of emissions reduction in the G20 over the last decade

Under consumption accounting – which includes emissions embedded in imports produced overseas but consumed in the UK – despite rising consumption, emissions have also fallen, although more slowly (by 18% from 2008 to 2017, the latest year of available data).

BUT Recent falls in UK emissions are dominated by policy-driven progress in the power sector. While other sectors with weaker policies have made more limited progress.

2 examples (transport and buildings)

Transport

Surface transport emissions in 2019 were at around the same levels that they were in 2010. That reflects an increase in demand and a move towards larger vehicles offsetting improvements in efficiency.

Buildings

Although buildings emissions have fallen 14% from 2008 to 2018, the sector is not well placed for the transition to zero emissions.

- New buildings, which will still be standing in 2050, continue to be built with fossil fuel heating. In fact, there are over a million more homes requiring zero-carbon retrofits now than when the Climate Change Act was passed.
- The uptake of low-carbon heating systems is almost negligible (less than 30,000 installations in 2019, whereas over a million a year will be needed by the early 2030s

Why the CCC report does not go far enough

- Still aiming for a 2050 net Zero target (see chapter why 2050 is too late)
- Calling for International aviation and shipping to be formally included in UK climate targets but only for the 6th Carbon budget 2033-37
- Citizen assembly is seen as an effort to consult and inform the public. Why is the CCC not pushing for a Citizen assembly with legislative power?

2050 is too late

- Net zero global emissions by 2050 puts human civilisation at great risk. It only gives us a 50/50 chance of limiting warming to 1.5C, according to the UN
- [New research](#) from the Tyndall center shows that for a **2 in 3 chance of stabilizing warming below the internationally agreed limit of 2C** of warming then the total amount of carbon we can emit in the UK is in fact only **half that currently budgeted in government policy** to get to net zero. The idea that a UK target for 2050 is in line with global efforts for staying below 1.5C is therefore a joke.
- Even if we were on target to reduce emissions by the specified amount to get to net zero by 2050, we would also need to plant trillion of trees and rely on other artificial 'negative'

emissions technologies' (such as carbon capture and storage) on a grand scale, which is a technology that barely exists and is certainly not reliable enough or useable on such large scales

In a UK context, the 2050 target:

- Ignores responsibility for historic emissions
- Ignores aviation and shipping (until 2033)
- Ignores the carbon cost of goods imported from outside of our borders but that are only created because of **our** demand for them (according to WWF "Nearly half of the UK's carbon footprint comes from emissions released overseas to satisfy UK-based consumption")
- Will be exhausted in 6-8 years, even with dodgy government definitions (2.9bn tonne budget based on proportional allocation)

Appendix 1

Measurement of progress towards meeting carbon budgets and the 2050 target through the use of indicators

Table 4.1. Assessment of key indicators

Sector	Measure	2019 Indicator	Actual	Unit	Met?
Transport (24% of emissions in 2019)	New car CO ₂ emissions*	-3.9%	-3.7% NEDC 0% WLTP	% change from previous year	✗ ▼
	New van CO ₂ emissions	149.2	165.9	gCO ₂ /km	✗ ▼
	Electric car registrations	5.3	3.15	% market share	✗ ▲
	Biofuel uptake	7.3	4.0	% of fuel sales by energy	✗ ▲
	Vehicle distance driven	560.2	530.6	Billion-kms	✓ ▲
Industry (21%)	New indicators for the industry sector will be introduced next year.				
Buildings (18%)	Lofts insulated	545,000	27,000	Installations per year	✗ ▼
	Cavity walls insulated	200,000	41,000	Installations per year	✗ ▼
	Solid walls insulated	90,000	11,000	Installations per year	✗ ▼
	Heat pumps installed***	>30,000	26,000	Installations per year	✗ ▲
	Low-carbon heat** ***	7.0	7.0	% of heat demand	✓ ▼
Power (12%)	Grid emissions intensity	314	221	gCO ₂ /kWh	✓ ▼
	Total renewable generation	93	103	TWh	✓ ▲
Agriculture (9%)***	Non-CO ₂ emissions	36.9	39.7	MtCO ₂ e	✗ ▼
	Soil emissions	10.2	11.4	MtCO ₂ e	✗ ▼
	Enteric emissions	20.2	21.2	MtCO ₂ e	✗ ▼
	Nitrous oxide emissions	13.2	14.3	MtCO ₂ e	✗ ▲

Sector	Measure	2019 Indicator	Actual	Unit	Met?
	Methane emissions	23.7	25.4	MtCO ₂ e	✗ ▼
Land use & forestry (-2%)	Afforestation****	15,000	13,460	Hectares per year	✗ ▼
Waste (4%)***	Landfill emissions	-77	-61	% change vs 2007 levels	✗ ▲
	Biodegradable waste to landfill	-65	-56	% change vs 2007 levels	✗ ▼
F-gases (3%)***	Emissions	-23	-11	% change vs 2007 levels	✗ ▼

Source: CCC analysis.

Notes: A tick or cross shows whether the indicator has been met. The arrow shows the trend in the measure since the previous year, with a green arrow showing that the measure is moving the correct way, a red arrow showing the measure is moving the wrong way.

Appendix 2

Table 4.2. Delivery of policy action in the last year

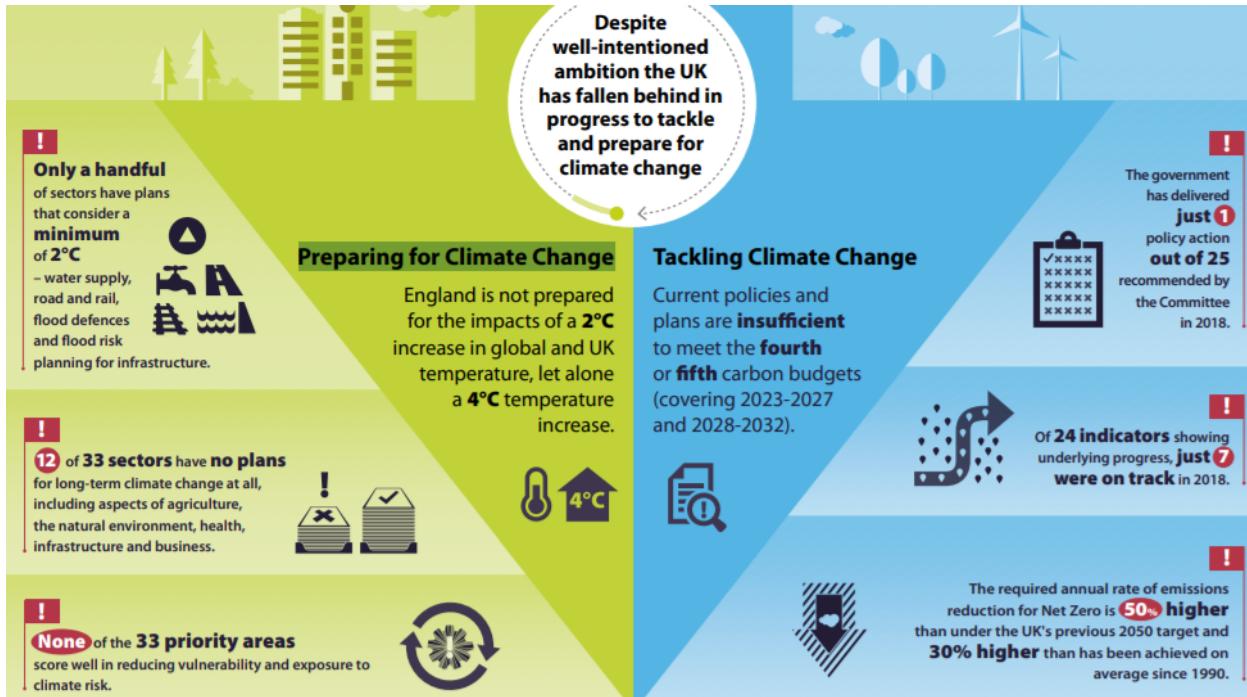
Sector	Action	Timing	Done?
Transport	Bring forward the ban on new conventional vehicle sales to 2035 (or ideally earlier) and clarify that only battery electric (or other zero-carbon) vehicles will be permitted to be sold after this point.	2020	Partly
	Clarify the UK regulatory approach to the EU 2020/21 new car and van CO ₂ targets and set stretching CO ₂ targets for new cars and vans beyond 2020, requiring a high electric vehicle market share. A real-world testing regime must be used alongside standardised tests.	2019	Partly
	Implement policies, including fiscal instruments, to strengthen incentives to purchase cleaner vehicles. Current purchasing trends are undermining new car and van emissions targets and must be reversed.	2019	Partly
	Set stretching targets for CO ₂ emissions reductions from new HGVs to address the rise in emissions and exploit opportunities to improve logistics and increase uptake of eco-driving.	2019	Partly
	Set out policies to address the decline in bus usage and introduce new schemes and measures to increase levels of walking and cycling.	2019	Partly
Industry	Make explicit how current and future policies will achieve a 20% energy efficiency improvement for businesses by 2030.	2019	Partly
	Publish the results of the evaluation of Climate Change Agreements to inform any successor scheme for 2023.	2019	✓
	Consult on mechanisms to incentivise widespread industrial fuel switching and CCS. Alongside this, BEIS should identify when those industrial sites that will require CCS and/or fuel switching would need to install them in order to fit with their refurbishment cycles.	2019	Partly
	Secure (e.g. taxpayer or consumer) funding for mechanism to incentivise widespread industrial fuel switching and CCS.	2020	✗
	Deliver near-term capital support for industrial decarbonisation, through the IEFT and ISCF. Where necessary this should be accompanied by bespoke support for operational expenditure for these projects.	2019	Partly
	Establish a policy to develop near-zero GHG emission technologies for off-road mobile machinery.	2020	Partly
	Establish a policy to reduce levels of methane leakage and venting.	2020	✗

Buildings	Develop a fully-fledged strategy for decarbonised heat. This must be designed to fully decarbonise buildings across the UK in line with the Net Zero goal. HM Treasury must commit to working with BEIS, undertake a review of where the costs of the transition should fall, and allocate sufficient funding to deliver over the full period from now to 2050.	2020	✗
	Strengthen new-build standards to ensure that all new homes built from 2025 at the latest are designed for a changing climate, are ultra-energy efficient and use low-carbon heat. No new homes built from 2025 should be connected to the gas grid. Ambitious standards for non-residential buildings must also be set.	Regulations set by 2020 (with energy/carbon standards in force by 2025 at the latest)	Partly
	Set clear trajectories of standards across the building stock and firm policies to drive delivery. This includes introducing concrete policies for able-to-pay homeowners, addressing the major delivery risks which remain around the Private Rented Sector (PRS) regulations and setting out a trajectory, a delivery mechanism for the social housing minimum standards, and concrete policies to deliver the ambition for non-residential buildings.	Consultation in 2019	✗
	Tackle performance and compliance issues to ensure that new buildings and measures retrofitted in existing buildings perform as they should. This includes consulting on strengthened compliance and enforcement measures which extend beyond fire safety to regulations more widely; funding building control adequately, and incorporating widespread use of testing so as to focus on actual rather than modelled performance; and developing a nationwide training programme to upskill the existing workforce, alongside implementation of low-carbon accreditation.	2019	Partly
	Publish detailed plans to phase out the installation of high-carbon fossil fuel heating in the 2020s, ensuring there is no policy hiatus in 2021.	2019	✗
	Develop contingency plans that allow for additional low-carbon generation to be brought forward in the event of delay or cancellation of planned projects, or imports of electricity below projected levels.	2019	✗
Power	Develop and deliver a plan, in coordination with Ofgem, to upgrade networks in the 2020s to accommodate new electricity demands (e.g. from electric vehicles), and future-proof them in order to limit costs.	2019	Partly
	Outline in the forthcoming Energy White Paper a level of ambition compatible with achieving Net Zero emissions. This should include the outline of a subsidy-free route to market for the cheapest low-carbon generation from 2020.	2019	Partly

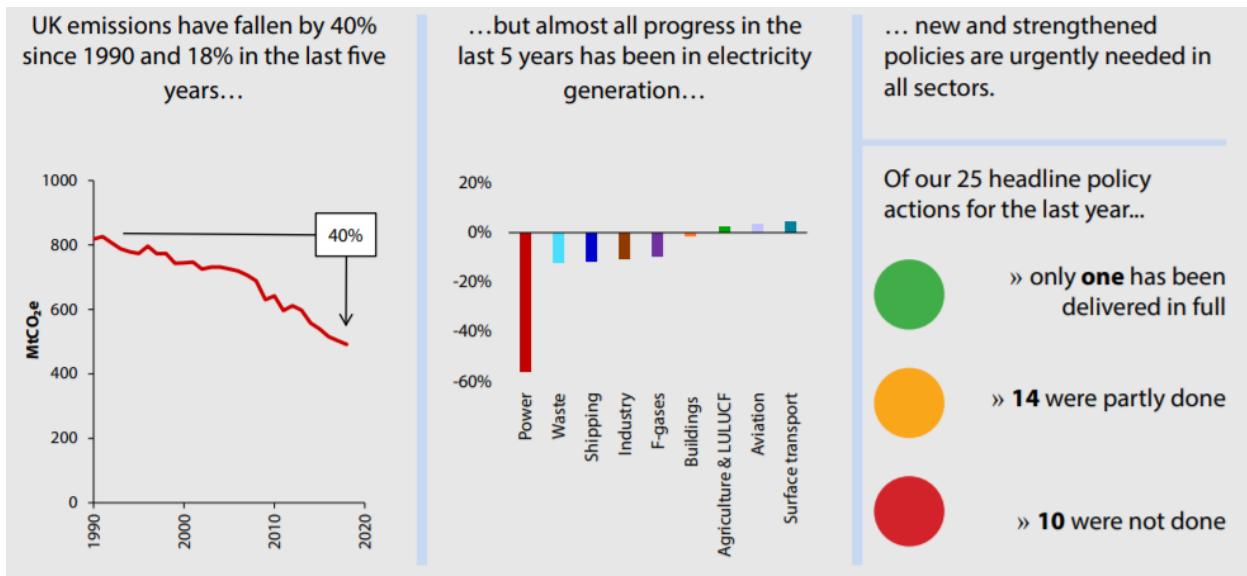
CCS	Set out preferred mechanism for CO ₂ transport and storage infrastructure.	2019	✗
	Set out plan to enable multiple CCS facilities to be operational by the mid-2020s.	2019	✗
Agriculture	England's Farm Emissions Reduction Plan and Scotland's updated Climate Change Plan, both due out next year should set out firm policies and an implementation plan to reduce GHG emissions in agriculture.	By mid-2020	✗
	The Industrial Strategy's Transforming Food Production Challenge Fund: ensure the £20m of funding already committed to under the first call made in 2018 and subsequent calls are allocated to projects that deliver supporting emissions reduction and clean growth in the food and agriculture sectors	2019 and 2020	Partly
	Post-CAP framework: ensure the on-going design of the Environmental Land Management System, including the testing and trialling of options will incentivise the take-up of low-carbon farming measures and changes in land use to increase carbon removals.	2020	Partly
Land use, land-use change and forestry	Develop strategies for each part of the UK to increase overall annual afforestation rates to at least 30,000 hectares in the 2020s.	2020	✗
	Publish England's Peatland Strategy to deliver peat restoration, and sustainable management practices for lowland peat that remains in agricultural production.	2019	✗
Waste	In England, set out a commitment to ban the landfilling of most bio-degradable waste streams including food by 2025 at the very latest. In the forthcoming consultation, set out proposals for the mandatory measurement and reporting of food waste in England by all large businesses in the food supply chain (e.g. food retail, caterers and hospitality).	2019	✗
	In Wales, publish a new Waste Strategy including proposals to reduce food waste substantially and regulations requiring that all businesses and public bodies separate recyclable waste at source.	2020	✓
F-gases	Publish a plan to restrict the use of F-gases to the very limited uses where there are currently no viable alternatives.	2019	✗
Public engagement	Develop a strategy – building on the planned Citizens' Assemblies and Youth Steering Group – to engage with the public over the choices they can make, especially on heating, diet and transport, that will reduce emissions and bring other benefits like improved health.	2020	✗

Last year (2019) CCC report

The UK had fallen behind in progress to tackle and prepare for climate change
Key facts (this drawing summarises all key points)



Tackling climate change:



<https://www.theccc.org.uk/wp-content/uploads/2019/07/2019-Progress-Report-Summary.pdf>