

HEALTH & CLIMATE JUSTICE

at COP 26

Briefing paper – Dec 2020

STUDENTS
FOR
GLOBAL
HEALTH

11K

medact

Contents

Foreword	3
Executive Summary	4
1. Introduction	6
2. Climate & Health Justice	7
3. COP 26 in the context of international climate change negotiations	8
4. Recommendations for a Just Approach to COP 26	9
4.1. A just and historically accurate Nationally Determined Contribution (NDC) to emissions reductions from the UK government	9
4.2. Permanently cancel all new fossil fuel extraction projects	12
4.3. Guarantee a Fossil Free COP 26	14
5. Conclusions & Recommendations	17
References	18

About Medact

Medact is a global health charity that uses evidence-based campaigns to support health workers to take action on structural barriers to health equity and justice, in an effort to bring about a world in which everyone can access their human right to health.

About Students for Global Health

Students for Global Health is a student network and registered charity tackling global and local health inequalities through education, advocacy and community action.

About this briefing

This briefing was produced by members of the Medact Research Network and Medact's Climate & Health Group.

The primary authors were Rob Abrams, Hilary Aked, Aditi Babel, Al Chisholm, Ben Eder, Tessa Elliot and Alistair Wardrope.

Acknowledgements

A huge thank you to all those that contributed to the briefing and in particular to Belen Alonso, Harpreet Kaur, Rhiannon Osborne and Benjamin Walpole.

Citation: Abrams R, Aked H, Babel A, Chisholm A, Eder B, Elliot T, Wardrope A, Health & Climate Justice at COP 26, published by Medact, London, 2020

Foreword

When politicians from across the world come together in November 2021 for the 26th Conference of the Parties (COP 26) to the Paris Agreement on climate change, they will do so in a city, Glasgow, that was once among the richest in the world. It grew rich by taking advantage of nearby supplies of coal and iron ore, which it turned into ships and locomotives that made possible the expansion of the British Empire. The industrial revolution, from its beginning in the UK, spread across the world. It brought many benefits, even if those benefits were unevenly distributed. But it did so at a terrible cost. Carbon that had been locked up in the earth since the Carboniferous period, 300 million years ago, was consumed at an ever faster rate, pouring vast quantities into the atmosphere as carbon dioxide, a process that, by the end of the 20th century, was overwhelming the capacity of the earth's plant-based regulatory system that had kept the planet habitable.

Both in Paris, in 2015, and in Glasgow in 2021, the vast majority of those present agree on the need for action. It would be hard not to. The evidence of global heating is now all too apparent, in bushfires, hurricanes, drought, and even plagues of locusts. It is, however, in the details that the problems arise. Who should bear the burden of reducing emissions and how quickly?

As the host government, the UK will face a major challenge in reaching consensus among governments with very different agendas. One question that cannot be ignored is the extent to which each country's historical contribution to atmospheric carbon dioxide should be taken into account. The buildings of Glasgow, many still dating to the 19th century, will serve as a reminder of how the UK benefited from decades of coal burning. Many of those in Glasgow, a city in a country that has now become post-industrial, will have come from societies with economies that

are still predominantly based on agriculture and extractive industries. Why, they will argue, should they be denied the benefits of industrialisation? Surely, they will argue, those countries that have, in the past, done most to create the problem of global heating, must make the greatest contributions to tackling it?

If we judge them by their words, British ministers do seem to be determined to make COP 26 a success. Climate change was the main topic when Boris Johnson had his first call with President Elect Joe Biden. But will the UK walk the walk, moving rapidly to real zero emissions and rejecting any more fossil fuel extractive projects? And will it accept its historical obligations, recognising the benefits it has realised over two centuries and commit to a Nationally Determined Contribution that accounts for its 'fair share? Will the UK government and COP 26 leadership ensure that the fossil fuel industry, who have funded the denial of climate change, are not present at COP 26 in any form? Will they learn from the action taken against the Tobacco Industry and put on a Fossil Free COP 26? This is what Medact and Students for Global Health are calling for, in this new Briefing Paper written for COP 26. It makes a powerful argument that we cannot ignore.

Professor Martin McKee MD CBE



Executive Summary

1. Introduction

- The drivers of health inequalities are the same **political and economic systems that are driving climate breakdown**.
- As we respond and recover from Covid-19, we must do so in a way that tackles the climate crisis and **improves the health of people and the planet**.
- COP 26 represents the first coordinated assessment since the signing of the Paris Agreement in 2015 of both the UK's and global commitments to tackling climate breakdown.
- As COP 26 comes to Glasgow in November 2021, we, the health community must use our voice to call for the UK government to take climate action as a matter of health justice.

2. Climate & Health Justice

- Climate breakdown has been labelled "**the greatest threat to global health of the 21st century**"¹ as a result of its direct and indirect effects on human health.
- Locally and globally, lower-income and otherwise **marginalised communities** face a **disproportionate burden** of the impacts of climate change and fossil fuel-related environmental degradation, **despite contributing least to producing them**.
- Addressing climate breakdown is thus a matter of **justice**.

3. COP 26 in the context of international climate change negotiations

- Under the framework of the Paris Agreement, governments independently present intended Nationally Determined Contributions (NDCs) to global emissions reductions.
- COP 26 represents the first such **stocktake** since the enforcement of the Paris Agreement.
- Emissions reductions achieved through UNFCCC processes have **failed to provide an adequate response** to anthropogenic climate change.
- The NDCs to be set at COP 26, therefore, may represent **one of the last opportunities** to show ambition sufficient to meet the scale of the challenge faced.

4. Recommendations for a Just Approach to COP 26

4.1 – *A just and historically accurate nationally determined contribution*

- Industrialised nations such as the UK, through colonialism, have benefited from fossil fuel-driven economic development, at the expense of less-industrialised communities and future generations - thus the UK owes a '**Climate Debt**.'
- The UK must therefore do its '**fair share**' by setting an ambitious emissions reductions target as part of its Nationally Determined Contribution (NDC).
- To keep warming within a 1.5°C target and prevent the worst health impacts of the climate crisis, the **UK must commit to emissions reductions of 200% by 2030 relative to 1990 emissions**.

4.2 – **Permanently cancel all new fossil fuel extractive projects**

- The UK commitment to achieve ‘net zero’ emissions by 2050 is too late and does not go far enough.
- The continued development of fossil fuel extractive projects in the UK and financed by the UK internationally **undermines all current decarbonisation targets**.
- The UK must work to prohibit new fossil fuel extractive projects while also bringing its aid and export financing systems into line with this goal.

4.3 – **Guarantee a Fossil Free COP 26**

- The fossil fuel industry is **disproportionately responsible** for anthropogenic (human-induced) climate change and has historically played a major role in **funding denial of climate science**.
- **Fossil Fuel companies continue to exert their political influence to undermine** national and international climate mitigation policy and are trying to influence the negotiations at COP 26.
- The UK and COP 26 leadership must work to **ensure that companies operating in the fossil fuel industry are not able to sponsor the talks**, and that lobbyists working on behalf of the industry are not granted access to decision makers.
- The recently announced sponsorship agreement with SSE plc must be reconsidered in light of the company’s operations at Peterhead in Aberdeenshire (a gas-fired power station and Scotland’s single biggest source of industrial pollution), as well as the company’s plans for a new gas powered station due to open in Lincolnshire in 2022.
- Just as the World Health Organisation Framework Convention for Tobacco Control works to insulate all tobacco control policy from industry influence, **so too should the health sector work to insulate the UNFCCC and COP 26 from carbon-intensive industries**.

5. **Conclusions & Recommendations**

- The UK owes its position internationally to a **history of fossil fuel exploitation**.
- Given the unparalleled threat to global health presented by climate change and associated environmental degradation, **health provides a unique and influential frame for communicating the need for climate action**.
- In the run-up to COP 26, the UK health community should therefore demonstrate its support for UK government **policy that centres climate and health justice**. It can do so in part by calling for the government to commit to:
 1. **A just and historically accurate nationally determined contribution**
 2. **Permanently cancel all new fossil fuel extractive projects**
 3. **Guarantee a Fossil Free COP 26**

1. Introduction

'COVID-19 and the climate emergency have both underscored and amplified long standing inequalities, demonstrating the need for an economic transition centred on health and sustainability; which addresses the root causes of wealth, power and income inequalities; and pursues a democratic economy that prioritises self-determination.' Guppi Kaur Bola – *Reimagining Public Health*²

As of 15th November 2020, over 1.3 million people have died from Covid-19 globally.³ In the UK, over 50,000 people have died within 28 days of a positive Covid-19 test,⁴ with black people 4.2 times more likely to die from Covid-19 as compared to white people⁵. Covid-19 has highlighted the deep pre-existing health inequalities that exist, driven by extractive, exploitative, racist, economic systems. The updated Marmot review demonstrated that, for the first time in more than 100 years, life expectancy has stalled, with inequalities widening.⁶ The drivers of health inequalities are the same political and economic systems that are driving climate breakdown. As Michael Marmot writes, 'The twin problems of social inequalities and climate change have to be tackled at the same time.'⁶ The Covid-19 pandemic (or 'syndemic', the terminology used by *Lancet* editor Richard Horton to reflect the interaction of the infection with pre-existing health inequities and social factors such as employment, housing, and racial inequalities. The term syndemic situates Covid-19 within the broader physical and social conditions in which people live and how structures of power shape health outcomes. It recognises that it is these factors that shape who is more likely to already be living with a pre-existing health condition, who is more likely to contract Covid-19 and thus who is more likely to die as a result. ⁷) and its consequences have prompted reflection on how society might be organised to address the root causes of injustice and climate breakdown. As we respond and recover from Covid-19, we must do so in a way that tackles the climate crisis and improves the health of people and planet.⁸

“ As we respond and recover from Covid-19, we must do so in a way that tackles the climate crisis and improves the health of people and planet

In November 2020, the 26th Conference of the Parties (COP 26) to the United Nations Framework Convention on Climate Change (UNFCCC) was due to take place in Glasgow. However, in light of Covid-19, COP 26 has been delayed until 2021. As host nation, the UK holds a unique position of responsibility at this conference, which represents the first coordinated assessment since the signing of the Paris Agreement in 2015 of both the UK's and global commitments to tackling climate breakdown.

Climate breakdown is harming people's health and exacerbates health inequalities. The health community therefore has a responsibility to act to address its root causes. As COP 26 comes to Glasgow, we must use our unique voice to call for action on climate change as a matter of health justice. In this briefing, we set out the evidence that supports the following demands for the UK government to act upon:

1. Commit to an ambitious and historically accurate Nationally Determined Contribution (NDC) to greenhouse gas emissions reductions.
2. Permanently cancel all new fossil fuel extractive projects.
3. Guarantee a Fossil Free COP 26.

2. Climate & Health Justice

Global mean surface temperatures have increased by 1°C relative to the pre-industrial era as a result of anthropogenic emissions of greenhouse gases (GHGs) – the majority from the combustion of fossil fuels.⁹ Under current national and international climate policies, this figure is expected to reach 1.5°C between 2030 and 2052,⁹ and exceed 3°C by 2100.¹⁰

This global heating has been labelled “the greatest threat to global health of the 21st century”¹ as a result of its direct and indirect effects on human health. Extreme weather events such as floods, droughts, storms, and forest fires are becoming more frequent and more intense.^{9,11} Extreme heatwave exposures reached record levels in 2018, disproportionately affecting more vulnerable older populations and those in agricultural and manufacturing occupations.¹² Indirect effects include changes in the global distribution of water-borne and zoonotic infectious diseases that

“ *Locally and globally, lower-income and otherwise marginalised communities face a disproportionate burden of the impacts of climate change and fossil fuel-related environmental degradation, despite contributing least to producing them.* ”

are exposing more susceptible populations to increased risks of diseases like Dengue fever and *Vibrio* spp. infection,^{12,13} and reduction in the yield and nutritional value of staple crops such as rice and maize.^{12,14} Climate stresses further act as a threat multiplier for already-stressed social systems, increasing risks of food and water insecurity,¹⁵ antibiotic resistance,¹⁶ and conflict.¹⁷ These vulnerabilities are compounded by the local health burdens of the fossil fuel emissions driving climate change, ranging from air pollution (accounting for 6.81 million deaths per year)¹⁸ to water, land, and food contamination,^{19,20} and biodiversity loss.²¹

These risks are not evenly distributed. Locally and globally, lower-income and otherwise marginalised communities face a disproportionate burden of the impacts of climate change and fossil fuel-related environmental degradation, despite contributing least to producing them. Within and between nations, lower-income communities face higher health burdens from heat-related illness and extreme heat events.^{22,23} Poorer communities are more likely to bear the environmental burden of fossil fuel extraction,²⁴ while other extractive projects in colonised nations specifically disrupt the land communities and food webs of Indigenous peoples.^{19,20} The effects of air pollution also show an economic gradient; more-deprived communities in the UK are both more likely to suffer from unsafe levels of particulate air pollution, and less likely to (through car ownership or high domestic energy use) contribute to its presence.²⁵ This pattern manifests temporally as well as spatially, with future generations bearing the greatest health burden from present activities; as the 2015 report of the Rockefeller Foundation-*Lancet* Commission puts it: “we have been mortgaging the health of future generations to realise economic and development gains in the present.”²⁶

A just response to the health burdens of global environmental change requires acknowledging both the intergenerational injustice of disproportionate climatic impacts on youth and future generations, and the social injustice of disproportionate impact on lower-income and otherwise marginalised communities who contribute least to emissions driving climate change. The objective of this briefing is to present arguments for three core demands that the health sector should consider central to a just political response in the UK to the present climate crisis in advance of COP 26.

4. Recommendations for a Just Approach to COP 26

4.1 – A just and historically accurate Nationally Determined Contribution (NDC) to emissions reductions from the UK government

The United Kingdom's early industrialisation and high coal dependence makes its historical responsibility for presently observed climate change substantial, accounting for 0.032°C of observed warming up to 2005; relative to 2005 populations, the UK has the highest per-capita historical emissions of any nation.³¹ At the same time, the UK is one of the world's wealthiest nations, with the financial capability to undertake major emissions reductions. Given increasing evidence for the need to stabilise long-term warming not just at 2°C above pre-industrial levels, but to aim for 1.5°C, we therefore support other civil society groups in calling for an NDC of 200% emissions reductions below 1990 levels by 2030.³²

The 1.5°C warming target

As discussed above, the Paris Agreement commits the international community to keeping global mean surface temperature rise “well below” 2°C. Subsequent research, however, has highlighted that the 2°C threshold may fail to prevent many severe climate-related harms, leading to calls for a more ambitious – but still achievable – limit of 1.5°C.⁹ The 1.5°C target reduces exposure to most climate-related health risks relative to the 2°C scenario, including droughts, sea level rises, heavy precipitation events, effects on biodiversity including marine biodiversity, and reductions in crop yields.⁹ Furthermore, a 1.5°C target would significantly reduce the probability of triggering climatic ‘tipping points’ (irreversible changes resulting in stepwise climatic change) such as melting of permafrost leading to release of stored methane or loss of the Greenland ice sheet.⁹

UK Climate Debt

Rather than a sole focus on current emissions, a country's contributions to cumulative historical emissions are a more accurate way of determining their responsibility for climate damage, as present atmospheric stocks of GHGs, not their annual flow, determine observed climate change.³³ In 2015, the EU-28 was responsible for 29% of excess global CO₂ emissions, while G8 nations collectively were responsible for 85%.³⁴ Currently, the United Kingdom alone ranks as the 16th highest global emitter and the 6th highest historic emitter since 1850.³²

This observation has given rise to the concept of ‘climate debt’,³⁵ defined in the Bali Principles of Climate Justice as “that [which] industrialized governments and transnational corporations owe the rest of the world as a result of their appropriation of the planet's capacity to absorb greenhouse gases.”³⁶ The wealth of industrialised nations comes chiefly from the entwined processes of colonialism and industrialisation, driven by exploitation of people, land and natural resources, including fossil fuels. This required appropriation of an excessive share of a global, and commonly-held, resource – the atmosphere's GHG carrying capacity. A recent quantitative estimate of national climate debts places the United Kingdom as the 4th biggest climate debtor, behind the USA, Russia and Germany. Equal per-capita emissions rights would allocate the UK a total emissions budget of GHGs equivalent to 13 billion tonnes of CO₂ (13GtCO₂e), but the nation's cumulative emissions of 79.3GtCO₂e provide an overshoot of 66.4GtCO₂e, or 7% of total global climate debt.³⁴

The UK's current emissions trajectories

The UK's GHG emissions have increased dramatically since the end of World War II, only briefly interrupted by financial and oil crises.^{37,38} From 1945 to 1970, emissions rose at an annual average rate of over 5%. Since then the UK has seen continued growth, increasing by 135% from 1971 to 2017.³⁷ More recently this trend has shown signs of reversal, with emissions falling by 45% from 1990 to 2018.^{37,38} These figures, however, include only territorial emissions, thus fail to account for the climate impacts of goods consumed in the UK but manufactured abroad, or emissions from international shipping and aviation. Accounting for UK consumption would place estimated emissions 70% higher than official figures in 2017, with markedly slower rates of reduction in these emissions (a 9% fall, compared to the 41% drop in territorial emissions.)^{37,39}

Emissions from energy supply, particularly power generation, are responsible for 50% of total emission cuts, driven by a move away from coal use and increased popularity of renewable energy sources. Smaller cuts have been seen in the business (31%) and residential (14%) sectors. Transport emissions remain high, becoming the largest source of emissions in 2016.^{37,39} With existing policies, UK emissions are projected to be below budget for 2018-2022, but are not expected to fall enough to meet the next two budgets.^{37,39}

A just and historically accurate NDC for the UK

Industrialised nations like the UK, through colonialism, have benefited from fossil fuel-driven economic development, at the expense of less-industrialised communities and future generations. As a consequence of this economic development, they also have the economic and material resources to contribute more to global decarbonisation efforts. Given that it is increasingly evident that an increase in surface temperatures of 2°C would pose unacceptable threats to human health and wellbeing, as well as risk triggering irreversible climatic tipping points, climate mitigation efforts should seek to keep warming within a 1.5°C target.

Translating these qualitative conclusions into quantitative emissions reductions responsibilities is a project that allows for some latitude in interpretation, but unambiguously demands more from the UK than present policy commitments. The Climate Equity Reference Calculator is a tool which permits exploration of how these responsibilities might vary.^{40,41} Its framework enshrines the two principles endorsed above, that responsibilities vary both with historic culpability and present capacity for emissions reductions. It also allows for a morally and politically significant distinction between economic activity and emissions needed to support basic capacities and functioning communities, and those that are hallmarks of excessive carbon-dependence (the distinction between what have been called 'subsistence' and 'luxury' emissions).⁴²

Even on less progressive assumptions (excluding emissions prior to 1950 and weakening distinctions between subsistence and luxury emissions), an emissions trajectory consistent with a 66% probability of avoiding surface temperature rise of over 1.5°C by 2100 would require the UK to reduce emissions by 1.54GtCO₂e relative to 1990 levels by 2030 — that is, by 193%.³² Fully accounting for the UK's historical responsibility for climate change would require even more stringent emissions reductions of 200%. Thus a just and historically accurate NDC for the UK commits the nation not simply to rapid and complete decarbonisation in the next decade, but also to taking on a 'fair share' and ambitious support for low-carbon development in 'carbon creditor' nations — those communities who have suffered as a consequence of the UK's past development trajectory.⁴³

“ Industrialised nations like the UK, through colonialism, have benefited from fossil fuel-driven economic development, at the expense of less-industrialised communities and future generations ”

THE UK'S CLIMATE FAIR SHARE

TO LIMIT GLOBAL WARMING TO **1.5°C**



< **Overall historic responsibility:** the UK is currently the 16th highest global emitter and the 6th highest historic emitter since 1850

Why? →



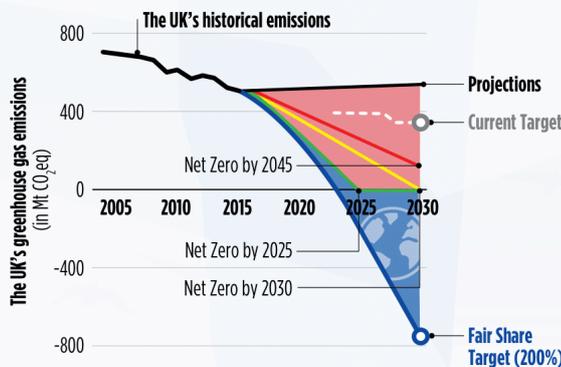
< **Financial capacity:** The world's 5th wealthiest country, grown rich on fossil fuels and colonialism



< **It is the right thing to do:** the UK has a moral and legal obligation to protect human rights, which are threatened by the climate emergency



THE UK'S FAIR SHARE TARGET



UK is responsible for 3.5% of the global total emissions reductions. Therefore to take its fair share of global effort the UK must reduce greenhouse gas (GHG) emissions by **a total of 200% below 1990 levels by 2030.**

That means UK **net zero is only half the story.** Additionally, we have to support **at least the same level of emissions reductions** in low-income countries overseas.

THE UK'S FAIR SHARE (at least 200% or 1600Mt by 2030) =

Up to **100%** (800Mt CO₂ eq) domestic emissions reduction

AT HOME

Domestic GHG emissions need to drop to **zero** as fast as possible. The graph shows lines for net zero by 2025 (green), 2030 (yellow) and 2045 (red). The later the net zero date, the more international action is necessary. Current UK target is net zero by 2050.



At least **100%** (800Mt CO₂ eq) emissions reductions abroad

INTERNATIONAL

Delivering the UK's fair share also means fulfilling our responsibility to **support low-income countries** in the global south reduce their GHG emissions.

How?

DOMESTIC INITIATIVES

Decarbonise the UK economy while addressing inequality. Estimated cost: £1 trillion.

- The wealthiest take greatest responsibility
- Just transitions to 100% renewable energy
- End high carbon consumption
- Deliver low-carbon trade deals
- End industrial agri-business, restore and protect ecosystems
- Zero carbon transportation and buildings
- Ensure net zero UK private investments

INTERNATIONAL INITIATIVES

Decarbonise the global economy while addressing inequality and protecting human rights and environmental integrity. Estimated total cost: £1 trillion

- Sustainable energy access for all
- Promote agro-ecological farming
- End UK public money funding fossil fuels
- Eliminate tropical deforestation
- Support sustainable urbanization
- Scale up public climate finance for mitigation
- Additional public climate finance for adaptation and loss and damage including social protection and access to public services

¹ Fair shares calculations use the climate equity reference calculator. A progressive equity assumption shows the fair share effort for the UK's as 202% below 1990 levels.
² Dotted line on graph show the UK 4th and 5th carbon budgets. Net-zero should be domestic only, no offsets.
³ The £1 trillion calculation uses the CCC cost estimate for UK net zero and assumes equivalence for international mitigation.



4.2 – Permanently cancel all new fossil fuel extraction projects

Current plans for fossil fuel extraction are not compatible with achieving 1.5 degrees warming

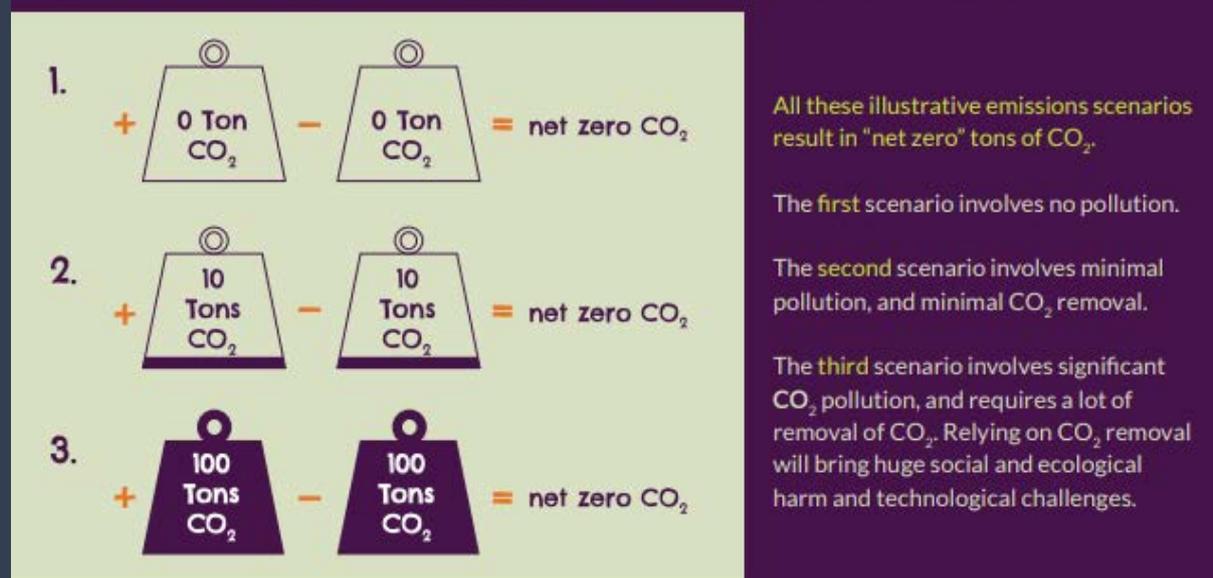
In order to restrict global warming, CO₂ emissions will ultimately have to fall to near-zero.⁴⁴ To remain below 1.5°C we have a remaining global carbon budget of 420-580GtCO₂e; current plans for fossil fuel extraction would far exceed this. Present international governmental commitments to extractive developments would produce 50% more fossil fuels than is consistent with limiting warming to 2°C, and 120% more than the budget for 1.5°C.⁴⁵ If all proposed new plants are included, committed emissions would reach 852GtCO₂e.⁴⁶ There is therefore no room for new extraction projects if we are to comply with the Paris Agreement, let alone achieve the just NDC outlined above, and appropriately minimise the risks posed by climate change.

Current UK climate policy

In 2019, the UK government declared a climate emergency and committed to the legally binding target of reaching net zero emissions by 2050,⁴⁷ but the UK's actions and investments to date do not reflect that commitment. The Climate Change Committee's annual reports on the UK government's fulfilment of its climate commitments highlight a failure to adhere both to promises to lead international action on climate change, and domestic carbon budgets.^{48,49} This despite the fact that government targets involve only a commitment to 'net' zero emissions (which permits offsetting of domestic emissions with on-paper commitments to emissions-reduction or negative-emissions projects elsewhere).

As diverse civil society organisations have highlighted, 'net zero' accounting has permitted major national and corporate emitters to avoid making necessary emissions reductions. This is enabled through theoretical commitments to carbon capture and storage or other negative emissions projects, commitments which would often require further expropriation of land from communities in the Global South who are already disproportionately suffering from the effects of climate change.⁵⁰

Figure 1: How 'net zero' disguises the amount of actual emissions.



NOT ZERO: How 'Net Zero' targets disguise climate inaction⁵⁰

New domestic fossil fuel projects

Despite this failure to meet even present inadequate targets, the UK government continues to invest in fossil fuels. In 2016 the UK spent £10.5bn subsidising fossil fuel companies in the UK, more than any other country in the EU, and more than it spent supporting renewable energy.⁵¹ It continues to approve new domestic fossil fuel projects. Four new gas-fired turbines at Drax power station in North Yorkshire were approved, despite the Planning Inspectorate advising against the plans due to climate concerns. The recently-approved Woodhouse Colliery in Cumbria would, if built, commit to 8.4MtCO₂e annually over 50 years.⁵² The predicted 500 jobs expected to be created by the colliery are dwarfed by the potential of a just transition to a low-carbon economy, which the IPPR predicts could provide 46 000 jobs for the North of England in the energy sector by 2030.⁵³

UK support for fossil fuel development abroad

The UK government also continues to support the fossil fuel industry internationally. In 2018, UK Export Finance (UKEF) invested almost £2bn in fossil fuel projects abroad, mainly in low income countries, while support for renewable energy in those countries was just £700,000.⁵⁴ Of the eight projects supported in 2018/19, the largest was £734m for an oil refinery in Oman, which UKEF itself judged to have 'high potential' for environmental, social and human rights risk.⁵⁵ UKEF argues that fossil fuels are needed as part of a transition to a low carbon future, but this argument mistakes a historical contingency for a physical necessity.

While nations have previously powered their development with fossil fuels, investment in renewable energy is now modelled to have greater and more sustainable development returns.⁵⁶ New and unsubsidised solar and wind projects are undercutting even the cheapest coal generation, with over half of new renewable capacity added in 2019 providing lower electricity costs.⁵⁷ Two-thirds of the world's population currently live in regions where onshore wind or solar power are the cheapest options for new bulk generation.⁵⁸ Fossil fuels appear viable due to the vast subsidies the industry receives — a projected \$5.2tn in 2017, according to IMF figures⁵⁹ — and neglect of their health-related externalities (it is estimated that coal-related air pollution costs China up to 4% of its GDP⁶⁰). Export finance for new fossil fuel projects represents a considerable lost opportunity to invest in renewable alternatives.

A commitment to cancellation of all new fossil fuel extraction projects

Present UK climate policy is inadequate to meet internationally-agreed emissions reductions targets, yet current policy action is insufficient to meet even these modest goals. Further domestic fossil fuel development is unnecessary, delays development of the renewable energy infrastructure we need, and has a significant opportunity cost in missed investment in a just transition to a green economy. UK export finance for new fossil fuel developments abroad, meanwhile, fails to realise the greater and more sustainable development opportunities presented by renewable energy investment. The UK government should therefore commit to ending approval of new fossil fuel development projects domestically, and investment in such projects abroad.

4.3 – Guarantee a Fossil Free COP 26

The fossil fuel industry is disproportionately responsible for anthropogenic climate change, its largest companies accounting for 63% of historical GHG emissions and 71% globally in more recent years.^{61,62} Its largest companies continue to commit to increasing the carbon-intensity of their operations and overall emissions, in direct contradiction to internationally-agreed emissions reductions targets. These companies have historically played a major role in funding denial of climate science, and continue to exert their political influence to undermine national and international climate mitigation policy. A series of Freedom of Information (FoI) requests have revealed in detail how polluting industries, including Equinor, Shell and BP are seeking to lobby and influence the UK government both in the build up to, and at, COP 26.⁶³ The first round of sponsorship for COP 26 has been announced and includes SSE plc, Natwest, Scottish Power and the National Grid⁶⁴. It is not appropriate that SSE, a company that operates Scotland's single most polluting site is given such a role in talks⁶⁵. We have therefore joined calls for this decision to be reconsidered⁶⁶. We argue that the health sector should join local⁶⁷ and international⁶⁸ campaigns calling for exclusion of the fossil fuel industry from the COP 26 negotiations.



Peterhead Power Station, owned by SSE – the single most polluting plant in Scotland⁶⁵

Fossil fuel industry and climate change

Anthropogenic climate change is overwhelmingly driven by the combustion of fossil fuels. As such, fossil fuel producers are disproportionately responsible for the historical GHG emissions driving current climate change, with just 90 privately- or state-run entities in the carbon-intensive industries (coal, oil, and gas extraction, and cement production) being responsible for 63% of cumulative industrial CO₂ and methane emissions from the start of the industrial revolution.⁶¹ In recent years, this trend has intensified. Since 1988 (the year in which the Intergovernmental Panel on Climate

Change [IPCC] was founded), these so-called 'carbon majors' were responsible for 71% global GHG emissions. 52% of emissions resulted from the activities of just 25 companies – including ExxonMobil, Shell, BP, Chevron, Peabody Energy, Total, and BHP Billiton.⁶²

This responsibility is not merely historical. The fossil fuel extraction industry must reduce production by at least 2% per annum to limit surface temperature increase to under 2.0°C relative to pre-industrial levels, or 3% to meet the 1.5°C target now proposed by the IPCC as necessary to avoid some of the most severe consequences of climate change.⁹ Yet the largest producers remain committed to increasing emissions. Investment in more carbon-intensive 'unconventional' fossil fuel sources such as oil sands and deepwater extraction is increasing;⁶² Shell has acknowledged that its energy efficiency is likely to fall as it switches production to these more carbon-intensive sources,⁶⁹ while ExxonMobil predicts that its yearly emissions will rise 17% by 2025.⁷⁰ These commitments are not readily reversible, since investment in new extractive infrastructure risks 'locking in' commitment to fossil fuel extraction that would lead to GHG emissions 120% higher than would be consistent with a 1.5°C pathway.⁴⁵

This disparity between internationally-agreed targets for emissions reductions and the fossil fuel industry's own emissions projections has stark economic implications. An estimated third of

listed oil reserves, half of current gas reserves, and over 80% coal reserves are ‘unburnable’ under a 2°C carbon budget,⁷¹ reducing the value of companies’ listed reserves by as much as 63% relative to business as usual.⁷² Negative emissions technologies such as carbon capture and storage are unlikely to be able to correct this disparity significantly.⁷³

Rather than view this as economic impetus to motivate a transition to renewable energy sources, the response from the fossil fuel industry has been to undermine scientific consensus and political will to act on climate change. Internal communications from major fossil fuel companies and industry organisations such as the American Petroleum Institute (API) and Global Climate Coalition (GCC) explicitly state these groups’ intent to “undercut [...] prevailing scientific wisdom” on climate change,^{74,75} even while internally acknowledging the consensus on GHG emissions’ contribution to global heating.⁷⁶ The industry exploited the same tactics as the tobacco industry – often working with the same institutes and researchers – to discredit scientific research on climate science and individual scientists.⁷⁷ Of particular concern to the health sector, these groups have specifically worked to reject research on the health impacts of climate change. In 1996, the GCC briefed its members to resist attempts of national governments to “play the health card” by presenting “an unfounded argument” that climate change would have damaging effects on human health, while in the same year Exxon developed an explicit strategy to undermine climate and health research.⁷⁵

While more recent interventions from the industry appear to pay lip service to the need for climate action – acknowledging the industry’s contribution to climate change and supporting calls for certain mitigation policies such as carbon pricing⁷⁸ – these pronouncements are not reflected in economic or political action. Even “front runners” amongst the oil majors invest only 3% total capital expenditure on renewables,⁷⁹ while the industry’s support of mitigation policy has chiefly been used to advocate for market-based, demand-side policies that have been accused of justifying inaction and shifting costs of climate change onto the Global South and future generations.⁸⁰

This approach has seen the extractive industries promote an image of climate change leadership even as they advocate for policies that favour development of new extraction projects.⁸¹ Promotion of such policies slows introduction of supply-side interventions (such as reductions in fossil fuel subsidies, or bans or moratoria on new fossil fuel extraction or generation projects) that are increasingly seen as necessary to achieve the required timescale of energy transition.^{45,82}

Influence of the fossil fuel sector on international climate change negotiations

Despite the flat inconsistency between the fossil fuel industry’s business projections and carbon budgets for internationally-agreed climate change targets, carbon-intensive industries continue to exert political influence at national and international levels. A recent European Parliament report highlights the ‘revolving door’ between national governments’ energy departments and regulatory bodies and the fossil fuel industry, documenting 88 cases of people moving directly from positions within one to the other (including near 90% of staff, and 6 former energy ministers, departing the UK’s Department for Business, Energy, and Industrial Strategy).⁸³

The presence of industry has also weighed heavily over international climate change negotiations since their inception. Between 1995 and 2018, trade associations counting fossil fuel corporations as members have sent over 6,400 delegates to the conferences of the UN Framework Convention on Climate Change (UNFCCC),⁸⁴ while at the most recent 25th Conference of Parties (COP25) in

“ *The industry exploited the same tactics as the tobacco industry – often working with the same institutes and researchers – to discredit scientific research on climate science*⁷⁷ ”

Madrid, over 40 Gulf state delegates were current or former employees of fossil fuel companies.⁸⁵

This presence has been used to shape the progress of negotiations in line with the interests of the industry. Industry organisations like the GCC and API worked closely with sympathetic delegations like the US Department of Energy to shape the negotiating agenda,⁸⁶ while other bodies like the World Coal Institute actively drafted elements of the final decision documents.⁸⁷ The GCC and API consistently worked to prevent ratification of the Kyoto Protocol,⁸⁶ and were then instrumental in its incorporation of so-called ‘flexibility mechanisms’ — measures that allowed national governments to meet their emissions reductions on paper without any steps toward domestic carbon reduction.⁸⁸ The industry’s influence is also discernible in more recent UNFCCC outputs; the 16 pages of the 2015 Paris Climate Agreement, while purporting to provide a framework for international action to limit warming to well below 2°C, do not mention the words ‘fossil fuels’, ‘coal’, ‘oil’ or ‘gas’ once.⁸⁹

Tobacco industry as precedent

The fossil fuel industry continues to drive climate change, to act in ways that are inconsistent with achieving internationally-agreed reductions in GHG emissions, and to exert its political influence to resist political action to reduce emissions at the pace and scale required. These actions are already having damaging effects on human health worldwide. Health workers are familiar with another industry that has acted in similar fashion — the tobacco industry. The success of international tobacco control efforts should guide our response to the influence of the fossil fuel industry.

The parallels between the tobacco and fossil fuel industries are many.⁹⁰ Their health impacts are comparable in scale (an estimated 6.4 million deaths annually attributable to smoking,⁹¹ compared to 6.81 million just from fossil fuels’ contribution to particulate air pollution.¹⁸) Both industries’ business models are at odds with successful intervention to address these health impacts. And as discussed above, both industries have responded to this dissonance by denial of science and undermining of policy.

In the field of tobacco control, the response to the threat posed from industry influence has been clear. The WHO Framework Convention on Tobacco Control (WHO FCTC) explicitly excludes tobacco industry representatives from participation, and the updated Global Strategy to Accelerate Tobacco Control proposes that “all WHO FCTC related activities undertaken are [...] insulated from any influence by the tobacco industry.”⁹² This strategy has been effective, through contributing to a “tobacco industry denormalisation” that, by highlighting the deleterious influence of the industry’s actions on health, reduces its social capital and appears to reduce smoking prevalence.⁹³ There is evidence that similar mechanisms may work to promote effective climate policy, with framing climate action explicitly in terms of resisting fossil fuel expansion and reducing local harms such as air pollution attracting wider public support.⁹⁴

The success of international tobacco control efforts provides a powerful counterpoint to the argument that industry participation in the political process is necessary to allow governments and other actors to shape industry conduct in more socially-responsible directions through active engagement. Isolating industry from political influence makes it easier to implement supply-side policy that forces industries to accord with socially-responsible conduct, and helps to delegitimise health-harming industry behaviours.⁹³ This helps to support uptake of norms against these behaviours — and the responsible industries — that provide positive policy feedback effects, making it easier for institutions to pass more ambitious legislation.⁹⁴ Thus, just as the WHO FCTC works to insulate all tobacco control policy from industry influence, so too should the health sector work to insulate the UNFCCC and COP 26 from carbon-intensive industries.

“ *The success of international tobacco control efforts should guide our response to the influence of the fossil fuel industry* ”

5. Conclusion & Recommendations

The UK owes its privileged position internationally to a history of fossil fuel exploitation. The development gains achieved through this exploitation risk mortgaging the health of marginalised communities and future generations for the economic benefit of the already-privileged. COP 26 presents a unique opportunity for the UK government to show international leadership on climate change.

Given the unparalleled threat to global health presented by climate change and associated environmental degradation, the health community has a vested interest in calling for aggressive climate mitigation and sustainable development. Health provides a unique and influential frame for communicating the need for climate action.⁹⁵ In the run-up to COP 26, the UK health community should therefore demonstrate its support for UK government policy that centres climate and health justice. It can do so in part by calling for the government to commit to the policy proposals described in this briefing:

- Making an ambitious NDC for emissions reductions that acknowledges the UK's climate debt
- Ending support for all new fossil fuel development projects, at home and abroad
- Commit to a Fossil Free COP, ensuring that carbon-intensive industries are unable to influence the outcome of COP 26 negotiations

References

1. Costello A, Abbas M, Allen A, et al. Managing the health effects of climate change. *Lancet*. 2009;373(9676):1693–1733.
2. Bola GK. Reimagining Public Health. Accessed December 3, 2020. <https://www.common-wealth.co.uk/reports/reimagining-public-health>
3. WHO Coronavirus Disease (COVID-19) Dashboard. Accessed November 15, 2020. <https://covid19.who.int>
4. Official UK Coronavirus Dashboard. Accessed November 15, 2020. <https://coronavirus.data.gov.uk/details/deaths>
5. Coronavirus (COVID-19) related deaths by ethnic group, England and Wales - Office for National Statistics. Accessed December 3, 2020. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronavirusrelateddeathsbyethnicgroupenglandandwales/2march2020to10april2020>
6. Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. *Health Equity in England: The Marmot Review 10 Years On*. Institute of Health Equity; 2020. Accessed November 15, 2020. <http://www.instituteofhealthequity.org/resources-reports/marmot-review-10-years-on/the-marmot-review-10-years-on-full-report.pdf>
7. Horton R. Offline: COVID-19 is not a pandemic. *The Lancet*. 2020;396(10255):874. doi:10.1016/S0140-6736(20)32000-6
8. Belesova K, Heymann DL, Haines A. Integrating climate action for health into covid-19 recovery plans. *BMJ*. 2020;370. doi:10.1136/bmj.m3169
9. IPCC. Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. World Meteorological Organisation; 2018. Accessed June 12, 2020. <https://www.ipcc.ch/sr15/chapter/spm/>
10. CAT. *Warming Projections Global Update*. Climate Action Tracker; 2019. https://climateactiontracker.org/documents/698/CAT_2019-12-10_BriefingCOP25_WarmingProjectionsGlobalUpdate_Dec2019.pdf
11. Pachauri RK, Allen MR, Barros VR, et al. *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Ipcc; 2014.
12. Watts N, Amann M, Arnell N, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. *Lancet*. 2019;394(10211):1836–1878. doi:10.1016/S0140-6736(19)32596-6
13. Bouzid M, Colón-González FJ, Lung T, Lake IR, Hunter PR. Climate change and the emergence of vector-borne diseases in Europe: case study of dengue fever. *BMC Public Health*. 2014;14:781. doi:10.1186/1471-2458-14-781
14. Myers SS, Wessells KR, Kloog I, Zanobetti A, Schwartz J. Effect of increased concentrations of atmospheric carbon dioxide on the global threat of zinc deficiency: a modelling study. *Lancet Glob Health*. 2015;3(10):e639–645. doi:10.1016/S2214-109X(15)00093-5
15. Dangour AD, Mace G, Shankar B. Food systems, nutrition, health and the environment. *The Lancet Planetary Health*. 2017;1(1):e8–e9. doi:10.1016/S2542-5196(17)30004-9
16. Rodríguez-Verdugo A, Lozano-Huntelman N, Cruz-Loya M, Savage V, Yeh P. Compounding Effects of Climate Warming and Antibiotic Resistance. *iScience*. 2020;23(4). doi:10.1016/j.isci.2020.101024
17. Hsiang SM, Burke M, Miguel E. Quantifying the Influence of Climate on Human Conflict. *Science*. 2013;341(6151). doi:10.1126/science.1235367
18. Schwartz J, Vodonos A, Marais E, Sulprizio M, Mickley L. The Impact of Fossil Fuel Combustion on Global Health. *Environmental Epidemiology*. 2019;3:356. doi:10.1097/01.EE9.0000609936.13355.e0
19. Edwards J. Oil sands pollutants in traditional foods. *CMAJ*. 2014;186(12):E444–E444. doi:10.1503/cmaj.109-4859
20. Finkel ML. The impact of oil sands on the environment and health. *Current Opinion in Environmental Science & Health*. 2018;3:52–55. doi:10.1016/j.coesh.2018.05.002
21. IBPES. *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services; 2019. <https://ipbes.net/global-assessment>
22. Grineski SE, Collins TW, Ford P, et al. Climate change and environmental injustice in a bi-national context. *Applied Geography*. 2012;33:25–35. doi:10.1016/j.apgeog.2011.05.013
23. Lin S, Hsu W-H, Van Zutphen AR, Saha S, Lubner G, Hwang S-A. Excessive heat and respiratory hospitalizations in New York State: estimating current and future public health burden related to climate change. *Environ Health Perspect*. 2012;120(11):1571–1577. doi:10.1289/ehp.1104728
24. Ogneva-Himmelberger Y, Huang L. Spatial distribution of unconventional gas wells and human populations in the Marcellus Shale in the United States: Vulnerability analysis. *Applied Geography*. 2015;60:165–174. doi:10.1016/j.apgeog.2015.03.011
25. Mitchell G, Dorling D. An Environmental Justice Analysis of British Air Quality. *Environment and Planning A*. Published online July 24, 2016. doi:10.1068/a35240
26. Whitmee S, Haines A, Beyrer C, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. *The Lancet*. 2015;386(10007):1973–2028. doi:10.1016/S0140-6736(15)60901-1

27. UNEP. *The Emissions Gap Report 2012*. UN Environment Programme; 2012. https://wedocs.unep.org/bitstream/handle/20.500.11822/8526/-The%20emissions%20gap%20report%202012_%20a%20UNEP%20synthesis%20reportemissionGapReport2012.pdf?sequence=3&isAllowed=y
28. Aichele R, Felbermayr G. The Effect of the Kyoto Protocol on Carbon Emissions. *Journal of Policy Analysis and Management*. 2013;32(4):731-757. doi:10.1002/pam.21720
29. Kumazawa R, Callaghan MS. The effect of the Kyoto Protocol on carbon dioxide emissions. *J Econ Finan*. 2012;36(1):201-210. doi:10.1007/s12197-010-9164-5
30. Metz B. The legacy of the Kyoto Protocol: a view from the policy world. *WIREs Climate Change*. 2013;4(3):151-158. doi:10.1002/wcc.216
31. Matthews HD, Graham TL, Keverian S, Lamontagne C, Seto D, Smith TJ. National contributions to observed global warming. *Environ Res Lett*. 2014;9(1):014010. doi:10.1088/1748-9326/9/1/014010
32. Climate Equity Reference Project. *Constructing an Equity-Based UK Greenhouse Gas Emissions Target for 2030 in Line with 1.5C*. CERP; 2019. Accessed November 14, 2020. <https://www.christianaid.org.uk/sites/default/files/2020-03/UK%20Climate%20Fair%20Share%20-%20Technical%20Backgrounder.pdf>
33. Ajani JI, Keith H, Blakers M, Mackey BG, King HP. Comprehensive carbon stock and flow accounting: A national framework to support climate change mitigation policy. *Ecological Economics*. 2013;89:61-72. doi:10.1016/j.ecolecon.2013.01.010
34. Hickel J. Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. *The Lancet Planetary Health*. 2020;4(9):e399-e404. doi:10.1016/S2542-5196(20)30196-0
35. Warlenius R. Decolonizing the Atmosphere: The Climate Justice Movement on Climate Debt. *The Journal of Environment & Development*. 2018;27(2):131-155. doi:10.1177/1070496517744593
36. Bali Earth Summit. Bali Principles of Climate Justice. Published online August 29, 2002. Accessed December 1, 2017. <https://www.ejnet.org/ej/bali.pdf>
37. Bolton P. UK and global emissions and temperature trends. Published online June 24, 2020. Accessed November 14, 2020. /uk-and-global-emissions-and-temperature-trends/
38. Boden T, Andres R, Marland G. Global, Regional, and National Fossil-Fuel CO₂ Emissions (1751 - 2013) (V. 2016). Published online 2016. doi:10.3334/CDIAC/00001_V2016
39. Department for Business, Energy, and Industrial Strategy. *Updated Energy and Emissions Projections 2018*. BEIS; 2019. Accessed November 14, 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/794590/updated-energy-and-emissions-projections-2018.pdf
40. Holz C, Kartha S, Athanasiou T. Fairly sharing 1.5: national fair shares of a 1.5 °C-compliant global mitigation effort. *Int Environ Agreements*. 2018;18(1):117-134. doi:10.1007/s10784-017-9371-z
41. Holz C, Kemp-Benedict E, Athanasiou T, Kartha S. The Climate Equity Reference Calculator. *Journal of Open Source Software*. 2019;4(35):1273. doi:10.21105/joss.01273
42. Shue H. Subsistence Emissions and Luxury Emissions. *Law & Policy*. 1993;15(1):39-60. doi:https://doi.org/10.1111/j.1467-9930.1993.tb00093.x
43. ActionAid, Christian Aid, War on Want, Friends of the Earth England, Wales and Northern Ireland, Friends of the Earth Scotland. *The UK's Climate Fair Share to Limit Global Warming to 1.5C.*; 2020. Accessed November 14, 2020. https://waronwant.org/sites/default/files/20-21_FairShareUK_Infographic_web.pdf
44. Cozzi L, Gould T. *What Would It Take to Limit the Global Temperature Rise to 1.5°C?* International Energy Agency; 2019. Accessed November 14, 2020. <https://www.iea.org/commentaries/what-would-it-take-to-limit-the-global-temperature-rise-to-15c>
45. SEI, IISD, ODI, Climate Analytics, CICERO, UNEP. *The Production Gap: The Discrepancy between Countries' Planned Fossil Fuel Production and Global Production Levels Consistent with Limiting Warming to 1.5C or 2C*. UN Environment Programme; 2019. <http://productiongap.org>
46. Tong D, Zhang Q, Zheng Y, et al. Committed emissions from existing energy infrastructure jeopardize 1.5 °C climate target. *Nature*. 2019;572(7769):373-377. doi:10.1038/s41586-019-1364-3
47. Hirst D, Bolton P, Priestley S. Net zero in the UK. Published online November 14, 2020. Accessed November 14, 2020. <https://commonslibrary.parliament.uk/research-briefings/cbp-8590/>
48. Climate Change Committee. *Reducing UK Emissions: 2020 Progress Report to Parliament*. CCC; 2020. Accessed November 14, 2020. <https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/>
49. Committee on Climate Change. *Reducing UK Emissions: 2019 Progress Report to Parliament*. CCC; 2019. Accessed November 14, 2020. <https://www.theccc.org.uk/publication/reducing-uk-emissions-2019-progress-report-to-parliament/>
50. ActionAid, Corporate Accountability, Friends of the Earth International, Global Campaign to Demand Climate Justice, Third World Network, What Next? *Not Zero: How "net Zero" Targets Disguise Climate Inaction.*; 2020. Accessed November 15, 2020. https://demandclimatejustice.org/wp-content/uploads/2020/10/NOT_ZERO_How_net_zero_targets_disguise_climate_inaction_FINAL.pdf
51. European Commission. *Energy Prices and Costs in Europe: Report from the Commission to the European Parliament, the European Economic and Social Committee and the Committee of the Regions*. European Commission; 2019. Accessed November 14, 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019DC0001>
52. Willis R, Berners-Lee M, Watson R, Elm M. *The Case against New Coal Mines in the UK*. Green Alliance; 2020. Accessed November 14, 2020. https://www.green-alliance.org.uk/resources/The_case_against_new_coal_mines_in_the_UK.pdf

53. Emden J, Murphy L. *A Just Transition: Realising the Opportunities of Decarbonisation in the North of England*. Institute for Public Policy Research; 2019. Accessed November 14, 2020. <https://www.ippr.org/files/2019-03/energy-skills-march19.pdf>
54. UK Export Finance. *UK Export Finance: Annual Report and Accounts 2018-19*. UK Export Finance; 2019. Accessed November 14, 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810203/UKEF_Annual_Report_2018-19.pdf
55. Categorisation for cases issued 2018 to 2019. GOV.UK. Accessed November 14, 2020. <https://www.gov.uk/government/publications/eshr-risk-and-impact-categorisations-2018-to-2019/categorisation-for-cases-issued-2018-to-2019>
56. Güney T. Renewable energy, non-renewable energy and sustainable development. *International Journal of Sustainable Development & World Ecology*. 2019;26(5):389-397. doi:10.1080/13504509.2019.1595214
57. IRENA. *Renewable Power Generation Costs in 2019*. International Renewable Energy Agency; 2020. Accessed November 15, 2020. <https://irena.org/publications/2020/Jun/Renewable-Power-Costs-in-2019>
58. BloombergNEF Climatescope. *Emerging Markets Outlook 2019: Energy Transition in the World's Fastest Growing Economies*. Bloomberg Finance; 2019. Accessed November 15, 2020. <https://global-climatescope.org/assets/data/reports/climatescope-2019-report-en.pdf>
59. Coady D, Parry I, Nghia-Piotr L, Baoping S. *Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates*. International Monetary Fund; 2019. Accessed November 15, 2020. <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>
60. Parry I, Heine D, Lis E, Li S. *Getting Energy Prices Right: From Principle to Practice*. International Monetary Fund
61. Heede R. Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854–2010. *Climatic Change*. 2014;122(1):229–241. doi:10.1007/s10584-013-0986-y
62. Griffin P. *The Carbon Majors Database: CDP Carbon Majors Report 2017*. CDP; 2017.
63. The COP Files. Culture Unstained. Published September 21, 2020. Accessed November 27, 2020. <https://cultureunstained.org/bigoilpushtosponsorcop/>
64. First sponsors for COP26 announced with one year to go until the climate summit. GOV.UK. Accessed December 3, 2020. <https://www.gov.uk/government/news/first-sponsors-for-cop26-announced-with-one-year-to-go-until-the-climate-summit>
65. Climate pollution on the rise because of Peterhead gas plant. The Ferret. Published March 20, 2020. Accessed December 3, 2020. <https://theferret.scot/climate-pollution-peterhead-gas-plant/>
66. Campaigners slam choice of fossil fuel-linked companies as sponsors of COP26. Culture Unstained. Published November 18, 2020. Accessed December 3, 2020. <https://cultureunstained.org/2020/11/18/campaigners-slam-choice-of-fossil-fuel-linked-companies-as-sponsors-of-cop26/>
67. GCOP. Glasgow Calls Out Polluters. Glasgow Calls Out Polluters. Accessed October 31, 2020. <http://gcop.scot/>
68. Polluters Out. Polluters Out. Polluters Out. Accessed October 31, 2020. <https://pollutersout.org>
69. Greenhouse gas emissions. Accessed October 25, 2020. <https://www.shell.com/sustainability/sustainability-reporting-and-performance-data/performance-data/greenhouse-gas-emissions.html>
70. Exxon's Plan for Surging Carbon Emissions Revealed in Leaked Documents. *Bloomberg.com*. <https://www.bloomberg.com/news/articles/2020-10-05/exxon-carbon-emissions-and-climate-leaked-plans-reveal-rising-co2-output>. Published October 5, 2020. Accessed October 31, 2020.
71. McGlade C, Ekins P. The geographical distribution of fossil fuels unused when limiting global warming to 2 °C. *Nature*. 2015;517(7533):187-190. doi:10.1038/nature14016
72. Linquiti P, Cogswell N. The Carbon Ask: effects of climate policy on the value of fossil fuel resources and the implications for technological innovation. *J Environ Stud Sci*. 2016;6(4):662-676. doi:10.1007/s13412-016-0397-2
73. Caldecott B, Lomax G, Workman M. Stranded carbon assets and negative emissions technologies. Published online 2015. Accessed October 25, 2020. <https://ora.ox.ac.uk/objects/uuid:258c4d8e-3ea7-4b72-a24e-44acd01405d1>
74. van den Hove S, Le Menestrel M, de Bettignies H-C. The oil industry and climate change: strategies and ethical dilemmas. *null*. 2002;2(1):3-18. doi:10.3763/cpol.2002.0202
75. Climate Investigations Center. *The Global Climate Coalition: Big Business Funds Climate Change Denial and Regulatory Delay*. Climate Investigations Center; 2019. <https://climateinvestigations.org/wp-content/uploads/2019/04/The-Global-Climate-Coalition-Denial-and-Delay.pdf>
76. Supran G, Oreskes N. Assessing ExxonMobil's climate change communications (1977–2014). *Environ Res Lett*. 2017;12(8):084019. doi:10.1088/1748-9326/aa815f
77. Conway EM, Oreskes N. *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. UK ed. edition. Bloomsbury Paperbacks; 2012.
78. Nasiritousi N. Fossil fuel emitters and climate change: unpacking the governance activities of large oil and gas companies. *Environmental Politics*. 2017;26(4):621-647. doi:10.1080/09644016.2017.1320832
79. Pickl MJ. The renewable energy strategies of oil majors – From oil to energy? *Energy Strategy Reviews*. 2019;26:100370. doi:10.1016/j.esr.2019.100370

80. Lohmann L. Carbon Trading, Climate Justice and the Production of Ignorance: Ten examples. *Development*. 2008;51(3):359-365. doi:10.1057/dev.2008.27
81. Blue G, Daub S, Yunker Z, Rajewicz L. In the Corporate Interest: Fossil Fuel Industry Input into Alberta and British Columbia's Climate Leadership Plans. *CJC*. 2018;43(1). doi:10.22230/cjc.2018v43n1a3309
82. Green F, Denniss R. Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies. *Climatic Change*. 2018;150(1):73-87. doi:10.1007/s10584-018-2162-x
83. Huter M, Polfliet A, Cummins-Tripodi P, et al. *Revolving Doors and the Fossil Fuel Industry: Time to Tackle Conflicts of Interest in Climate Policymaking*. Greens/EFA Group in the European Parliament; 2018.
84. Thousands of Fossil Fuel "Observers" Attended Climate Negotiations - UNFCCC Data 2005-2018 COP1-COP24. Climate Investigations Center. Published June 21, 2019. Accessed October 27, 2020. <https://climateinvestigations.org/thousands-of-fossil-fuel-observers-attended-climate-negotiations-unfccc-data-2005-2018-cop1-cop24/>
85. Newell P, Taylor O. Fiddling while the planet burns? COP25 in perspective. *Globalizations*. 2020;17(4):580-592. doi:10.1080/14747731.2020.1726127
86. Downie C. Transnational actors in environmental politics: strategies and influence in long negotiations. *null*. 2014;23(3):376-394. doi:10.1080/09644016.2013.875252
87. Newell P, Paterson M. A climate for business: global warming, the state and capital. *Review of International Political Economy*. 1998;5(4):679-703. doi:10.1080/096922998347426
88. Orsini A, Compagnon D, Kleppinger K. Corporate lobbying and multilateral environmental agreements. *Revue française de science politique*. 2011;Vol. 61(2):231-248.
89. Finally saying the F-words at UN climate talks. Climate Home News. Published December 16, 2019. Accessed October 24, 2020. <https://www.climatechangenews.com/2019/12/16/finally-saying-f-words-un-climate-talks/>
90. Wardrope A, Braithwaite I. *Unhealthy Investments: Fossil Fuel Investment and the UK Health Community*. Climate and Health Council; 2015.
91. Reitsma MB, Fullman N, Ng M, et al. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990–2015: a systematic analysis from the Global Burden of Disease Study 2015. *The Lancet*. 2017;389(10082):1885-1906. doi:10.1016/S0140-6736(17)30819-X
92. WHO | Global Strategy to Accelerate Tobacco Control: WHO. Accessed October 29, 2020. <http://www.who.int/fctc/implementation/global-strategy-to-accelerate-tobacco-control/en/>
93. Malone RE, Grundy Q, Bero LA. Tobacco industry denormalisation as a tobacco control intervention: a review. *Tobacco Control*. 2012;21(2):162-170. doi:10.1136/tobaccocontrol-2011-050200
94. Green F. Anti-fossil fuel norms. *Climatic Change*. 2018;150(1):103-116. doi:10.1007/s10584-017-2134-6
95. Ahmadi S, Schütte S, Herlíhy N, Hemono M, Flahault A, Depoux A. Health as a Key Driver of Climate Change Communication. A Scoping Review. Published online October 5, 2020. doi:10.20944/preprints202010.0095.v1
96. Image by AFP from <https://www.bbc.co.uk/news/world-europe-50694361>

Published by Medact, 2020

© Medact 2020

Original material may be reproduced for non-commercial purposes without permission but with accreditation.

Citation: Abrams R, Aked H, Babel A, Chisholm A, Eder B, Elliot T, Wardrope A, Health & Climate Justice at COP 26, published by Medact, London, 2020

ISBN 978-1-8381205-2-8



Medact, The Grayston Centre, 28 Charles Square, London N1 6HT, United Kingdom

T: +44 (0)20 7324 4739

E: office@medact.org

<https://www.medact.org>

Registered charity 1081097 Company reg no 2267125