FFS? Fossil Fuels Support in the UK Tax System



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"There is a cost to everything. But the biggest cost is doing nothing. The biggest cost is subsidizing a dying fossil fuel industry, building more and more coal power plants, and denying what is plain as day. That we are in a deep climate hole and to get out, we must first stop digging."

- António Guterres, Remarks at 2019 Climate Action Summit¹

Executive Summary

As the host of the recent 26th United Nations Climate Change Conference of the Parties (COP26) the UK had an opportunity to showcase leadership in taking decisive steps towards deep transformation and decarbonisation of the economy. Further, the UK Government's recently published net-zero emissions by 2050 strategy provides a foundation to develop a publicly-directed programme of rapid decarbonisation and shared prosperity, and highlights that 'we do need to reduce our reliance on hydrocarbons as swiftly as possible².'

Yet, despite its domestic climate goals and international commitments, the UK continues to offer a number of tax reliefs for both domestic production and consumption of fossil fuels. In the last 5 years, the value of UK support to fossil fuels mounted to approximately £12bn annually on average.

Findings in this report uncover that despite the UK being a part of the December 2015 Paris Agreement on climate change, **the level of fossil fuel support in the UK tax system has not been substantially reduced**. While the overall level of domestic support has fallen from £17bn to £10.5bn in 2020-21 (in real terms), this includes a fall of £2.3bn in direct budgetary transfers rather than changes to tax reliefs, as well as a fall of £2bn between 2019-20 and 2020-21 linked to the steep economic contraction caused by the Covid-19 pandemic.

Looking at the pre-pandemic figures shows fossil fuel support falling in real terms by £4.5bn between 2015 and 2019, but with about half of this fall resulting from a decline in direct budgetary transfers (which typically go towards coal mines decommissioning costs and vary hugely from year-to-year). Tax reliefs for fossil fuels - representing a continuous feature of the tax system - have declined before the pandemic by only 15% in real terms since 2015, from £14.7bn in 2015 to £12.5bn in 2019 (in 2020-21 prices). Over this time period, no major measures have been withdrawn - with the exception of the announced plans to reduce eligibility for Red Diesel relief from April 2022 - suggesting the government has not taken meaningful action to align its tax and subsidies system with climate goals, and is instead supporting the continuation of harmful environmental behaviour. The removal of subsidies, particularly consumer subsidies that impact low income households, should be considered carefully. It is vital that as subsidies are withdrawn, policies are put in place to mitigate the impact on those who cannot afford the change.

In the face of the climate and environmental crises, and the short timeframe left to avert breakdown, it is increasingly clear that the current rate and scale of action will not deliver a safe

future. In place of this we need a deep transformation of design and operation of the economy. This will require structural policy shifts, as well as a step-change in public investment. Tax revenues can play an important role in sustainably servicing this increased borrowing. Crucially though, by bringing together the twin goals of a Green New Deal – securing economic and climate justice - a reimagined UK tax system can play a central role in driving a more equitable distribution of wealth while reorienting economic activity away from high-carbon production and consumption. Phasing out UK fossil fuel support needs to be part of a coherent strategy to ensure an orderly, just, and rapid transition.

To do so, the report sets out a series of principles and recommendations on delivering such tax reform. Building on the principles for a climate-just tax system developed jointly by Tax Justice UK with other NGO partners, this report sets out three overarching recommendations:

1. Changing the definition to change the debate

The UK Government currently relies on a narrow definition of a 'subsidy', obscuring the scale of effective fossil fuel subsidisation. It is imperative that HM Treasury re-evaluates its current definition, aligning it instead with a more comprehensive approach to identifying fossil fuel subsidies; one that incorporates tax reliefs, subsidies and support, recognising that choosing not to tax something through reliefs is a choice to subsidise its usage.

2. Initiating a rapid phase-out of fossil fuel subsidies and support

In line with the UK's commitment under the G7 pledge of ending all subsidies by 2025, the government should create a comprehensive roadmap to immediately substantially reduce and then rapidly phase out fossil fuel subsidies completely over the next few years. A central pillar of a climate-just tax system should be safeguarding low-income households and marginalised communities against higher costs after the phase-out, for example through revenue recycling. Such tax changes should be part of a broader green industrial strategy, steering green industries of the future and nurturing green infrastructures.

3. Designing a tax system fit for the future: just transition as Treasury's new operating model

Following the recommendation from the Climate Change Committee (CCC), HM Treasury recently published a Net Zero Review, aimed at looking at how households, businesses and the government could contribute to transition; identify equitable transition mechanisms, consider economic growth opportunities and evaluate the trade-offs of different

measures.³ The government should build on this and extend the remit of the Net Zero team to encompass a just transition across all Treasury policies (including the tax system and resource decisions influencing other departments). This dedicated just transition team should have a direct reporting line to the Chancellor and should monitor progress in responding to the CCC recommendations, alignment with the Paris Agreement, and, working closely with the existing Cabinet Committees and BEIS Directorates working on climate and net zero, advise ministers how to reduce emissions in the most progressive way. It could also help strengthen democratic accountability by providing regular updates to Parliament (and with Parliament making final tax & spending decisions informed by this advice). Lastly, it could support wider cross-institutional coordination, including the Bank of England, the CCC and other Ministries, through an establishment of a Green Finance Action Taskforce (GFAT).⁴

In addition, the report sets out a number of specific measures on tax relief, including:

- Reduced Rate of VAT for Domestic Fuel and Power

The UK Government should phase out this relief whilst providing transition support to households, such as 'climate dividend' payments and measures enabling them to move to clean heating alternatives. The removal of some consumer subsidies, particularly the £3.6 billion VAT relief for domestic heating, must be designed very carefully, particularly in the context of the rise in energy price cap (which puts a limit on the maximum price producers can charge for energy). The VAT relief protects low income households from bearing the full cost of increasing ginas and electricity prices, especially because direct income support measures such as Winter Fuel Payments have been fixed since 2000/01 at between £100 and £300 depending on circumstances. As consumer subsidies are phased out, revenue gained must be used to support low income households, and ensure that they are appropriately protected over the transition period to affordable clean heating.

- "Ring-fence" producer reliefs

Ring-fence oil and gas corporate income tax reliefs subsidise fossil fuel companies allowing them to deduct costs of decommissioning old infrastructure as well as capital expenditure on new plant and machinery from their taxable profits, which reduces their taxes and may lead to tax refunds. The Government should immediately withdraw subsidies for any new fossil projects, apply the 'polluter pays' principle for decommissioning and accelerate plans for a just transition for the North Sea workers into zero-carbon jobs.

- Tied oils scheme (industrial relief)

As qualifying industrial uses would not typically result in carbon emissions, the exemption is justified on principle, although the government should step up its monitoring of potential harmful environmental impacts even if not directly emissions-related. Furthermore, due to risks of fraud – where 'tied oil' is illegally put to use, such as burned as fuel – the government will need to step up monitoring of this relief when it begins the phase out of other reliefs for carbon-emitting uses.

Introduction: The case for action

The climate and environmental crises pose an existential danger to our collective futures.⁵

As we approach COP26, the IPCC has warned we face a "code red for humanity."6

The World Meteorological Organization warned in May that there is an approximately 40 percent chance of the annual average global temperature temporarily reaching 1.5 degrees above pre-industrial levels in at least one of the next five years. Meanwhile, a leaked draft report from the Intergovernmental Panel on Climate Change (IPCC) revealed in June that while prolonged warming beyond 1.5 degrees could produce progressively more serious, centurieslong and, in some instances, irreversible consequences, current trends point to temperatures rising by at least 3 degrees Celsius.

Without drastic and rapid action, we face the prospect of a future engulfed by species extinction, extreme heat, rising sea levels, deadly storms and floods, increased fires, food system loss, and prolonged periods of droughts.⁹

The responsibilities for and distributional impacts of the climate crisis are unevenly distributed, with those that have contributed the least to the crisis appearing likely to be most negatively affected by it.¹⁰ At a global level, the richest one percent are responsible for more than twice as much carbon pollution as the poorest half of humanity.¹¹ At the UK level, the richest 1 percent of people each produce 11 times more carbon emissions than the average emissions per person in the poorest half of society.¹² On top of the uneven causes of climate breakdown in the UK, unequal impacts highlight deep-rooted structural injustices.¹³

Given the pace and scale of the emergency, it is increasingly clear that small adjustments will not be sufficient to secure a liveable planet. Moreover, having contributed to the majority of current and historic emissions, including through colonial exploitation and extracting resources from other countries, wealthy nations like the UK have a greater responsibility to lead in decarbonising their economies. While it falls outside of the scope of this report, the UK has a broader responsibility at an international level to help shift from an approach rooted in power imbalances and towards a genuinely reparative agenda of climate and economic justice.

Yet, in spite of its newly announced Net Zero Strategy,the government appears to continue making major decisions that undermine its professed goals. It was recently revealed that UK Ministers are set to approve a new North Sea oil field, despite the International Energy Agency (IEA) calling for an end to new oil and gas fields if we are to align our strategy with a 1.5 degree pathway, while North Sea oil projects with capacity to produce over a billion barrels are avoiding the UK Government's climate compatibility checkpoint. The combination of a 'Maximising Economic Recovery' strategy, the current licensing approach, and continued commitment to fossil fuel production subsidies and support is a recipe for disaster.

As the world's gaze turns to the UK in preparation for the COP26, we have an opportunity to develop and showcase deep, transformative change, with a public-directed Green New Deal programme of rapid decarbonisation and shared prosperity.²⁰ While a Green New Deal must be anchored in a step-change in the quantity and quality of public investment, it is also important to transform the UK's tax and subsidies system.

The UK, despite its climate goals and international commitments, continues to offer tax breaks for fossil fuels. By marrying the twin goals of a Green New Deal – securing economic and climate justice - a reimagined UK tax system can play an important role in equitably reorienting economic activity away from high-carbon production and consumption towards zero-carbon alternatives.

² The definitional debate

2.1

The UK's narrow definition of fossil fuel subsidies

Does the UK subsidise fossil fuels? The UK tax system provides a number of tax reliefs for both domestic production and consumption of fossil fuels, as documented by the Organisation for Economic Co-operation and Development (OECD) and other recent research, yet the UK Government claims these are not subsidies, instead relying on a narrow definition of a 'subsidy'.^{21,22,23} The government argues it follows the approach of the IEA: "A fossil fuel subsidy is any government measure or programme with the objective or direct consequence of reducing below world market prices, including all costs of transport, refining and distribution, the effective cost for fossil fuels paid by final consumers, or of reducing the costs or increasing the revenues of fossil-fuel producing companies."²⁴ Using this logic, the UK Government dismissed the 2019 report by the European Commission, which found that, as of 2016, the UK had the biggest fossil fuel subsidies in Europe. ^{25,26}

This definition of fossil fuel subsidies is, however, problematic. By emphasising the comparison to 'world market prices', the UK's relatively narrow definition overlooks effective subsidisation granted by tax reliefs. As noted by the landmark 2011 Mirrless Review of the UK tax system, "we rarely think of the fact that failing to tax something is, in effect, subsidizing its usage." By supporting activities with harmful environmental impacts and failing to penalise externalities associated with pollution, such an approach leads to misaligned incentives.

Lukasz Krebel, Miriam Brett & Sarah Arnold Carbon emissions and pollution are among the clearest examples of externalities, which arise when production or consumption of a good or service affects a third party which is not directly involved in producing or consuming it, and the tax system has an important role in correcting them.²⁸ By offering tax reliefs for carbon intensive sectors and activities, the government not only fails to tax externalities of fossil fuels, but sends price signals that are incoherent with its broader net zero agenda, which calls for a higher – not lower – price on carbon.²⁹

The lack of acknowledgement that the UK subsidises fossil fuels is exacerbated by the broader opaqueness of tax reliefs (technically described as 'tax expenditures'). Since not being direct government spending recorded in public expenditure accounts, tax reliefs often go relatively under-reported and under-scrutinised. A Public Accounts Committee report in 2020 called on the government to "markedly improve their reporting on the cost, beneficiaries, and impact of tax reliefs in order to give Parliament the information it needs to scrutinise the value for money of these schemes. They further expressed serious concern that existing tax reliefs failed to account for the impact of fossil fuel support measures on the environment and the government's ability to reach net zero.

The UK's insistence on the narrow subsidy definition by the IEA has also been challenged by other experts³⁴, pointing out its inconsistency with the World Trade Organization (WTO) definition of subsidies.³⁵ The IEA approach to measuring subsidies follows the 'pricegap' method, which measures the extent that a policy keeps domestic fuel prices below an international reference price'. The WTO, however, defines subsidies as instances where "there is a financial contribution by a government or any public body within the territory of a Member' including, among other cases, where 'government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits)."³⁶

The inadequacy of the IEA approach has further been recognised by the OECD, contributing to the decision to develop its own approach drawing on the WTO definition of subsidies. As the OECD explains, "The price-gap approach does not capture support to producers and tax concessions to producers and consumers, which account for much of the support provided by developed countries, since such measures do not push final prices below the level of international reference price." While building on the WTO definition, the OECD resolved to consider all 'support' measures: "The definition of *support*, as opposed to *subsidy*, is a deliberately broader one, which encompasses policies that can induce changes in the relative prices of fossil fuels [emphasis own]. The Inventory casts a wide net, in line with its objective of promoting the transparency of public policies." 38,39

This crucial distinction accounts for the fact that while the IEA fails to identify UK fossil fuel support under its subsidies measure, the OECD approach captures a range of such measures in its analysis. 40,41 Focusing on 'support' for fossil fuels is ultimately more useful if the aim is to reduce their use and deliver the government's emission reduction goals, whether or not given reliefs meet one or the other particular definition of a 'subsidy'.

2.2

Paris misalignment

The UK's ongoing support for fossil fuels, including plans for continued exploration and extraction of oil and gas reserves, is incompatible with its commitments to the Paris Agreement and net zero.

As estimated by Oil Change International and Friends of the Earth, "the UK's 5.7 billion barrels of oil and gas in already-operating oil and gas fields will exceed the UK's share in relation to Paris climate goals - whereas industry and government aim to extract 20 billion barrels", including through subsidising existing production and licensing new production fields.⁴² In a G20 'scorecard' on fossil fuel support by the International Institute for Sustainable Development, the UK scored overall joint worst (11th) among the OECD members, with particular concerns about its transparency -coming in joint last - and progress in ending support for fossil fuels - scoring ninth.⁴³

The inadequacy of the UK position has been put even more starkly in the spotlight by the landmark report by the IEA in May this year, which states that "No new oil and natural gas fields are needed in the net zero pathway." The UK Government stance on providing continuing subsidies to fossil fuel production and new exploration is detached from this assessment, and could lead to 'deferred collapse' of the UK North Sea oil and gas sector and stranding assets, and continues to frustrate the urgent need to provide a rapid strategy for green job creation in oil communities. It is therefore paramount that the government urgently begins a phase-out of all subsidies and tax breaks for oil and gas exploration and extraction, whilst redirecting funding towards a managed just transition for impacted communities, as campaigners have called for.45

2.3 Fossil fuel support in the UK tax system

Support provided by the UK Government to fossil fuels is mostly concentrated in direct budget transfers and tax expenditures.⁴⁶ Budgetary transfers are 'payments made by governments, or bodies acting on behalf of governments to individual recipients'. Tax expenditures (tax reliefs), which constitute the bulk of UK fossil fuel support, are tax concessions that are typically provided through lower rates, exemptions, or rebates of taxes on fossil fuels.

While often overlooked, tax reliefs are in widespread use in the UK. As of October 2019, there were 1,190 tax reliefs, including 362 non-structural reliefs (where 'government opts not to collect tax to support social or economic objectives', as opposed to structural reliefs which 'define the scope and structure of tax ').⁴⁷ The 2020 National Audit Office (NAO) report compiled estimates for all non-structural reliefs (tax expenditures), which, if summed in aggregate, would amount to £155bn, or approximately 7.3 percent of gross domestic product (GDP) in 2017-18.⁴⁸ It is important to note that notional amounts of tax revenue foregone due to reliefs do not necessarily equate either to additional tax that would be raised if the reliefs were eliminated,

or to savings received by producers or users of fossil fuels through lower prices, due to likely behavioural effects should a relief be withdrawn.⁴⁹

Tax expenditures

Tax expenditures are defined by the NAO as 'tax reliefs which government uses to encourage particular groups, activities or products in order to achieve economic or social objectives.' The OECD broadly follows Kraan describing tax expenditures as a "transfer of public resources that is achieved by reducing tax obligations with respect to a benchmark tax, rather than by a direct expenditure." Tax expenditures are otherwise known as non-structural tax reliefs where the government opts not to collect tax to pursue social or economic objectives - in contrast to structural tax reliefs that are largely integral parts of the tax system and define the scope and structure of tax (such as the personal tax allowance).

Tax expenditures can be further subdivided by target beneficiary type: first, Producer Support Estimates, which include measures that benefit individual producers of fossil-fuels and reduce the costs of extraction, and Consumer Support Estimates, which includes measures that benefit individual consumers of fossil-fuels by reducing the cost of consumption of fossil fuels.⁵¹ Who ends up benefitting from a given relief and to what extent depends on a variety of factors (see "Tax incidence" Textbox).

Tax incidence⁵²

When distinguishing producer and consumer support, it needs noting that tax liability (who legally pays the tax - or receives the relief) is not necessarily the same as economic tax incidence (who bears the cost of tax - or benefits from the lower cost). Therefore, withdrawal of particular fossil subsidies would not purely impact producers or consumers as per the measure's classification, rather it is likely that the cost of the extra tax then due would be split between producers (facing loss of profits) and consumers (facing higher prices). The exact balance of this split, however, depends on many factors and is difficult to predict. What can, however, be concluded, is that removal of support measures would reduce incentives for fossil fuel use one way or another: if most of the cost was passed onto customers in higher prices, they would be incentivised to reduce their use or move to non-fossil alternatives. And if producers absorbed most of the cost, this would reduce their marginal profits (assuming they remain profitable) and therefore act as a disincentive to fossil fuel production. This would be likely reinforced by the signalling effect of the policy, that fossil fuels as such are on their way out.

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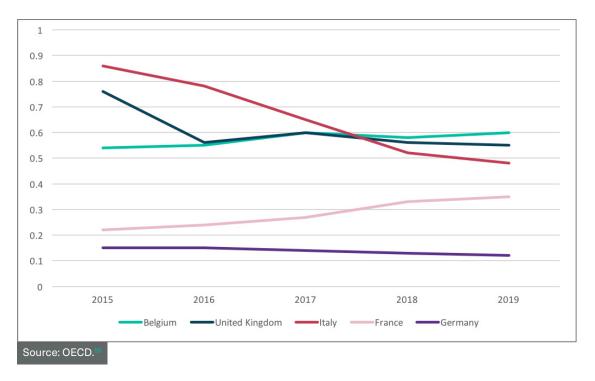
UK fossil fuel support measures

Overview

In recent years, the value of UK support to fossil fuels amounted to about£12bn annually on average.^{53,54} While international comparisons should be treated with caution due to differences between national tax systems, an illustrative overview suggests the UK provides relatively higher support (as a percentage of GDP) to fossil fuels than comparable OECD peers, such as Italy, Germany and France (see Chart 1). Whilst not definitive, this relatively poor international performance should concern the UK Government if it wants to be seen as a climate leader.

Chart 1: While not perfectly comparable, UK fossil fuel support measures, as a percentage of GDP, are relatively higher than in similar European countries.

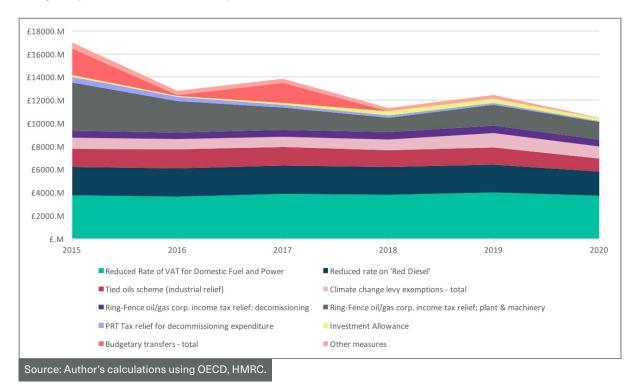
Fossil fuel support in select OECD countries 2015-2019, as a percentage of GDP.



Despite the UK being a part of the December 2015 Paris Agreement on climate change, where all signatory countries resolved to "making finance flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development", the level of fossil fuel support in the UK has since remained relatively high.^{56,57} This suggests the government has failed to take meaningful action to align its tax and subsidies system with climate goals

Chart 2: UK fossil fuel support has remained substantial since the Paris Agreement was signed in 2015.

Fossil fuel support measures, including producer support, consumer support and direct budgetary transfers (£, 2020-21 prices)⁵⁸.

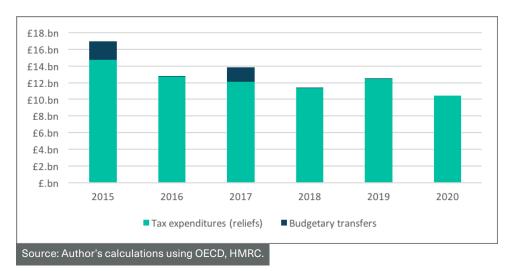


While since 2015 fossil fuel subsidies have declined from £17bn to £10.5bn, the £2bn fall from £12bn in 2019 to £10.5bn 2020 appears to be primarily driven by the economic impacts of the Covid-19 pandemic, with the amounts of support falling in line with declines in fossil fuel consumption and production that resulted from the economic shock and deep contraction of the GDP.

Looking at the pre-pandemic figures shows fossil fuel support falling in real terms by £4.5bn between 2015 and 2019, but with more than about a half of this fall resulting from a decline in direct budgetary transfers (which typically go towards coal mines decommissioning costs and vary hugely from year-to-year). The decline in tax reliefs has been less pronounced, with the £2.3bn fall (from £14.7bn in 2015 to £12.5bn in 2019) amounting to 15% fall in real terms.

Chart 3: Fall in the level of subsidies has been primarily accounted for by the decline in direct budgetary transfers, and a reduction in 2020 level reflected economic impacts of the Covid crisis

Fossil fuel support measures: tax expenditures and direct budgetary transfers (£, 2020-21 prices).



Even this fall, however, does not signify a policy shift away from fossil fuel support. Almost this entire decline could be attributed to the £2.3bn fall in oil and gas corporate tax reliefs for plant and machinery, which track closely the capital expenditures on UK Continental Shelf exploration and development. The 56% reduction in the annual value of this subsidy follows the fall by about a half of oil and gas capital investments between 2015 and 2019⁵⁹, indicating the reduction in qualifying expenses to be the driving factor in the context of unchanged subsidy regime.

HM Treasury's own (interim) Net Zero review acknowledged that while the UK has made good progress in reducing emissions since 1990, it has "a long way to go to reach net zero." When analysing the tax impacts, the report, however, concentrated mainly on revenue impacts from existing environmental / carbon taxes. While the Treasury reviewed options for a variety of new (or adjusted) carbon and environmental levies to influence behaviours and promote decarbonisation and noted the potential role for subsidies/ tax reliefs to support abatement measures, it has not explicitly tackled the issue of existing fossil fuel subsidies (perhaps unsurprisingly, as the Treasury insists that they do not exist). 61

The final Net Zero Review by the Treasury, while failing to recognise the extent of existing UK fossil fuel subsidies, acknowledged that current approach to electricity and gas pricing does not incentivise households to switch to cleaner energy and recognised the need to re-balance energy pricing in favour of electricity over gas. The Treasury's suggestion of 'expanding carbon pricing to gas and reducing policy costs in electricity bills'62 makes little sense without at the same time removing subsidies towards fossil fuels such as gas. A logical next step for the UK Government would be to follow through with a phase-out roadmap for fossil fuel tax breaks to complement and deliver on the Net Zero Strategy.⁶³

3.1

Consumer Support measures

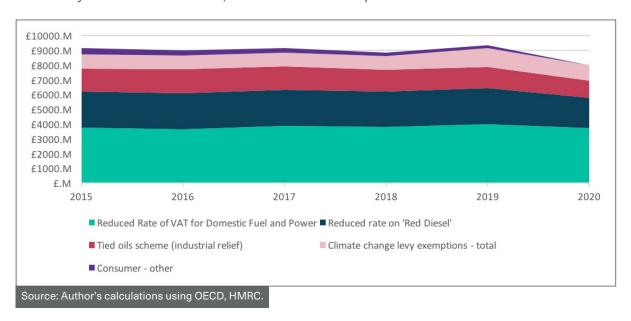
Overview

Consumer support measures - i.e. measures that reduce the taxes paid by fossil fuel users, such as reductions in VAT rate or fuel duty - constitute about three quarters of total UK fossil fuel support via tax expenditures, and amounted to £8.4bn in 2019. There are four major types: Reduced Rate of VAT for Domestic Fuel and Power, Reduced rate on 'Red Diesel', Tied oils scheme (industrial relief)⁶⁴ and Climate Change Levy reductions and exemptions. The following sections review each of them in turn.

Chart 4: UK consumer support subsidies for fossil fuels have remained relatively stable since 2015.

Fossil fuel consumer support, by relief category (£, 2020-21 prices).

Note, 'Other' measures only in place before 2018 and at a very low level, hence the series essentially invisible on the chart, but included for completeness.



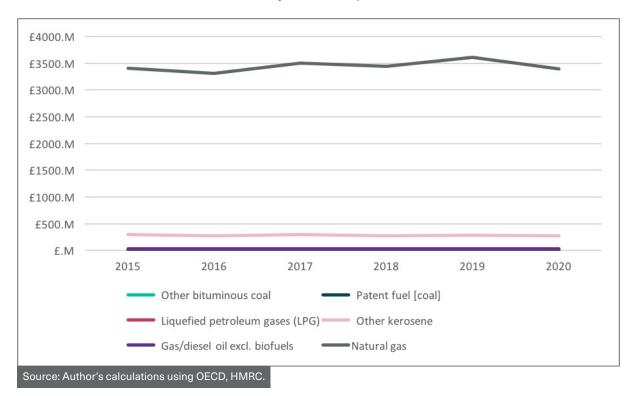
Reduced Rate of VAT for Domestic Fuel and Power

The largest tax relief for fossil fuels is the reduced (5 percent) VAT rate on domestic heating fuel and power (compared to the regular 20 percent VAT rate). Within this relief, by far the largest subsidy goes towards natural gas, reflecting its significant share as a source of domestic heating.

Chart 5: Natural gas constitutes by far the largest subsidy under Reduced Rate of VAT for Domestic Fuel and Power.

Fossil fuel consumer support: reduced rate of VAT for domestic fuel and power, by fuel type (£, 2020-21 prices).

Values of support for Liquefied petroleum gases (LPG), Patent fuel [coal] and Gas/diesel oil excl. biofuels are all below £50m annually and overlap in the chart below.



The recently announced Heat and Buildings Strategy outlines the government's ambition that virtually all heat in buildings will need to be decarbonised, including an intended phase-out of all new gas boilers from 2035 and mass roll-out of heat pumps. The strategy highlighted that 'current pricing of electricity and gas does not incentivise consumers to make green choices, such as switching from gas boilers to electric heat pumps' and outlined plans to reduce electricity levies and expand carbon pricing to domestic gas. With the effective carbon price on gas currently kept artificially low by reduced VAT rate, a managed withdrawal of this relief should be the logical next step.

This relief protects low income households from bearing the full cost of increasing gas and electricity prices, especially because direct income support measures such as Winter Fuel Payments have been fixed since 2000/01 at £100 to £300 depending on circumstances. As consumer subsidies are phased out, revenue gained must be used to support low income households, and ensure that they are appropriately compensated. For example, the government could explore 'climate dividend' payments – ie. recycling the proceeds of carbon taxes or subsidy removal back to households - and measures that help people to move to clean heating alternatives.

The UK Government should phase out this relief while staying true to the principle of 'Fairness and affordability are at the heart of our approach' it has announced, providing transition support to households in their transition to clean affordable heating.⁶⁶

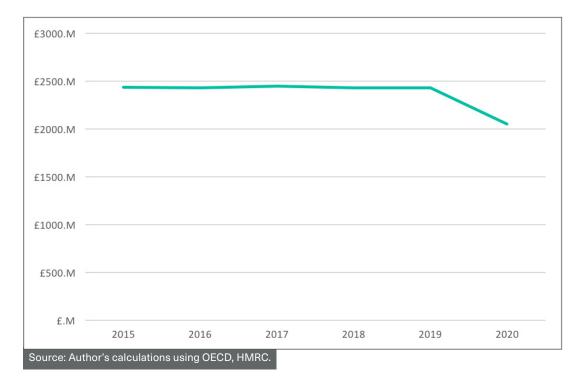
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Reduced rate of fuel duty on 'Red Diesel'

The second largest support measure is the reduced rate of fuel duty for oils *not* used as road fuels, including 'off-road vehicles, such as those used for agriculture, road construction or clearing snow'. (Fuel duty is a levy charged at variable rates on fuels used for vehicles or heating, such as petrol and diesel.) The name 'Red Diesel' reflects the requirement since 1961 that it must be 'marked with a red dye as well as chemical markers', to make it distinguishable from fully taxed oils upon inspection (to support fraud detection). Red diesel use accounts for 15% of total diesel use in the UK.⁶⁷

Chart 6: Reduced rate on Red Diesel has remained at a nearly constant level since 2015 in real terms, before the Covid-induced drop in 2020

Fossil fuel consumer support: reduced rate of fuel duty on 'Red Diesel' (£, 2020-21 prices).



At the 2020 Budget, the UK Government committed to remove most of the Red Diesel exemptions starting from the 2022 financial year, and stated the step reflected the UK's commitment to reach net zero by 2050.⁶⁸ This welcome move suggests that, contrary to its assertions otherwise, and lack of action on other subsidies, the government recognises the incompatibility of fossil fuel support with its climate obligations. Nonetheless, current policy still leaves some exceptions for Red Diesel continuing past 2022, including preserving lower rates for diesel used in domestic heating, rail and agriculture.

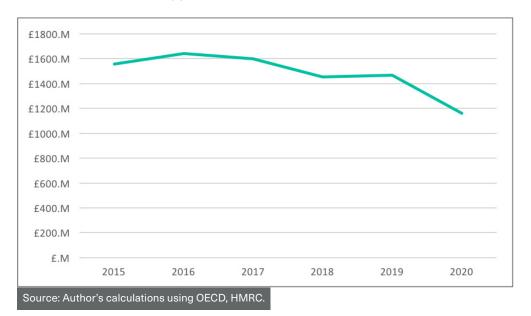
The Government should outline the roadmap of phasing out these remaining 'Red Diesel' reliefs alongside support measures for impacted users to transition to cleaner alternatives.

Tied oils scheme (industrial relief)

The third largest consumer relief is the Tied Oils Scheme (industrial relief). This involves exempting fuel oils from the fuel duty when they are put to eligible use which includes 'any use other than as fuel for any engine, motor or other machinery or heating fuel'.⁶⁹ This means all light oils and qualifying heavy oils, used for example for machine lubrication, anti-rusting agents or in asphalt production.

Chart 7: Tied oils scheme has only seen a minor fall in real terms since 2015, before the Covid-induced drop in 2020.

Fossil fuel consumer support: tied oils scheme [Industrial Relief Scheme] (£, 2020-21 prices).



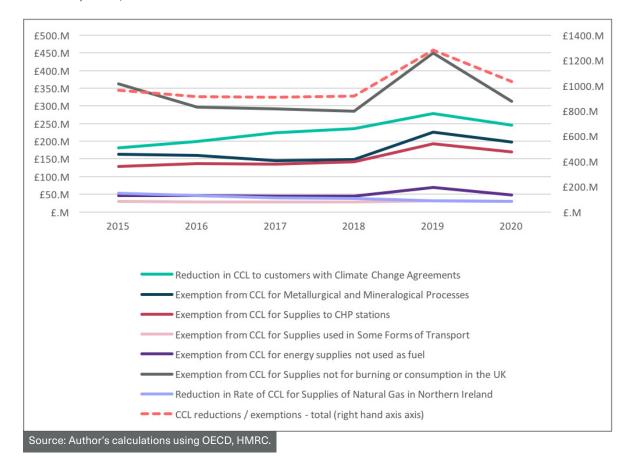
As qualifying industrial uses would not typically result in carbon emissions, the exemption is justified on principle, although the government should step up its monitoring of potential harmful environmental impacts even if they are not directly emissions-related. Furthermore, due to risks of fraud, where 'tied oil' is illegally put to use, such as burned as fuel, the government should step up monitoring of this relief when it begins the phase out of reliefs for carbon-emitting uses.

The Climate Change Levy reliefs and exemptions

The fourth largest category are exemptions from the Climate Change Levy (CCL). CCL is an environmental tax on commercial energy use. It was introduced in the UK in April 2001 and was designed to encourage businesses to be more energy efficient and to reduce greenhouse gas emissions.^{70,71} The levy is imposed on business use of 'taxable energy commodities': electricity, natural gas, liquefied petroleum gas, and coal and lignite (including coke coal).⁷²

Chart 7: Climate Change Levy reliefs and exemptions saw an actual increase in 2019 before an estimated decline due to Covid-19 economic impacts

Fossil fuel consumer support: Climate Change Levy [CCL] exemptions and reductions (£, 2020-21 prices).



There are a variety of exemptions from the CCL. Here we look at the four largest exemptions, which add up to about 90% of the total value of CCL reliefs. Given the latest OECD release lacks the estimates for some of those reliefs, we use the latest figures available from the HMRC for 2019-20, and impute figures for 2020-21 by adjusting the previous, pre-pandemic figures downwards in line with the fall of UK GDP, to align them with the estimates available in the data which indicate contraction in the level of support corresponding to the overall economic contraction under the Covid shock.⁷³ In the paragraph below, we report the latest known estimates (2019-20) but include imputed 2020-21 figures in the charts and calculations of overall support in that year.

The largest exemption, at £450m (2020-21 £s) in 2019, is for supplies 'not for burning or consumption in the UK'.⁷⁴ The second largest relief, at £78m in 2019 consists of exemptions relating to businesses that signed separate Climate Change Agreements (CCAs) with the Department for Business, Energy and Industrial Strategy (BEIS).⁷⁵ CCAs are voluntary agreements made between UK industry and the Environment Agency⁷⁶ to reduce energy use and carbon emissions. They were introduced in 2013 and are currently set to last until 2025. Businesses that sign up and commit to carbon and energy use reductions receive a discount on the CCL.⁷⁷

The third largest relief, for metallurgical and mineralogical processes, was estimated at £210 m in 2019. This covers activities such as manufacture of glass, ceramic products,

cement, concrete, iron, aluminium and steel (among others).⁷⁸ And finally, the relief for combined heat and power (CHP) stations, was worth an estimated £193m in 2019. BEIS argues that by generating heat and power simultaneously, CHP can reduce carbon emissions by up to 30% compared to the separate means of conventional generation via a boiler and power station.⁷⁹

Some of these reliefs appear justified in principle, such as those granted to businesses that commit to taking steps to reduce their carbon footprint. The case for others, however, merits more scrutiny. The Treasury and HMRC should establish a framework for regular evaluation, to ensure that any CCL reliefs provide climate benefits that otherwise would not have been achieved. In particular, the relief for fuels 'not for burning or consumption in the UK' should be re-evaluated, to avoid risks of 'carbon leakage' and potential offshoring of emissions.

3.2

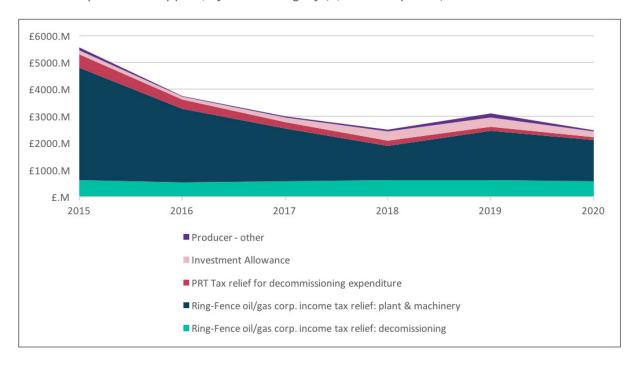
Producer Support measures

Overview

Producer support measures - measures that reduce taxes paid by fossil fuel producers, such as allowances for investment and machinery purchases that reduce their overall tax liability - constitute about a quarter of UK tax expenditures on fossil fuels, amounting to about £3.1bn in 2019-20 and £2.5bn in 2020.

Chart 8: UK producer support for fossil fuels has declined by 44% (in real terms) between 2015 and 2019, before a further 20% fall in 2020 linked to Covid-19 impacts.

Fossil fuel producer support, by relief category (£, 2020-21 prices).



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By far the largest of these subsidies is Ring-fence oil and gas trade corporate income tax relief, first-year capital allowances for plant and machinery, followed by Ring-fence oil and gas trades corporate income tax relief for decommissioning expenditure, Investment allowance and PRT (Petroleum Revenue Tax) relief for decommissioning expenditure, and a few smaller measures worth less than £100m annually. This section analyses those major categories of reliefs in turn.

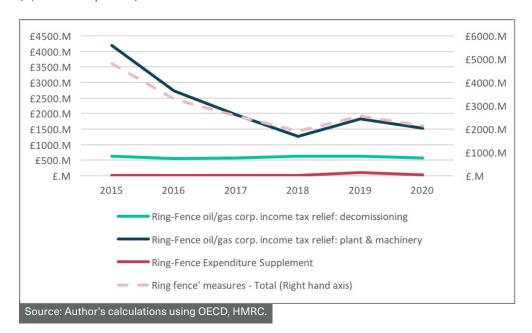
Ring-Fence measures

Estimated at £2.15bn in 2019, the Ring-fence oil and gas trade corporate income tax relief, first-year capital allowances for plant and machinery, is the largest producer-side measure of fossil fuel support in the UK. It effectively allows that 100 percent of most North Sea oil/gas capital investment can be deducted from the overall amount liable for Corporation Tax in the investing companies, enabling them to receive major tax breaks for continued infrastructure investment in fossil fuel infrastructure. Related to that, the Ring-fence oil and gas trades corporate income tax relief for decommissioning expenditure, estimated at £815m in 2019, 'allows capital expenditures connected to the decommissioning of fields to be deducted from profits subject to the corporate income tax in full in the year in which they are incurred'. Furthermore, the relief can be claimed against any profits earned since 2002⁸⁰ – which can result in tax refunds, not just reliefs.⁸¹ Lastly, the Ring-Fence expenditure supplement, costing about £95m in 2019, provides extended time for claiming reliefs, in which way 'the government seeks to foster the exploration and development of shale gas over the coming years.'⁸²

Taken together, these reliefs offer strong incentives for further exploration and extraction of the oil and gas from the UK continental shelf (essentially, the North Sea), as companies receive tax reliefs for both new investment and decommissioning costs for fully exploited fields and assets.

Chart 9: "Ring-fence" reliefs have fallen by over 50% in real terms since 2015; however, all of this decline took place by 2018, with higher levels since then.

Fossil fuel producer support: Ring-fence oil and gas corporate income tax reliefs for (1) decommissioning and (2) for plant and machinery, and Ring-Fence Expenditure Supplement (£, 2020-21 prices).



The decline in expenditure on those reliefs tracks closely the capital expenditures on UK Continental Shelf exploration activities, which have fallen by about half between 2015 and 2019.83 As such, they effectively reflect the decline in investment (which can go up again with UK government plans for further exploration), rather than any positive changes in the level of reliefs as such.

As the IEA stressed, 'there is no need for investment in new fossil fuel supply in our net zero Pathway', and it recommended a rapid phase-out of fossil fuel production and use, including the withdrawal of any subsidies to send the correct price signals to the markets.⁸⁴ This highlights that current government policies are clearly incompatible with net zero and the Paris Agreement.

The government should immediately withdraw tax reliefs that support any new fossil fuel infrastructure. Under the current proposals, it is estimated that UK taxpayers will spend at least £24bn cleaning up after oil companies in the North Sea.⁸⁵ The CO2 emissions released into the atmosphere from extracting North Sea oil and gas reached 13.1m tonnes in the UK in 2019 alone.⁸⁶ Decommissioning costs should be grounded in a polluter pays principle, where those that produce pollution - oil and gas firms - should bear the costs of managing it to avert more damage to people and the environment.⁸⁷

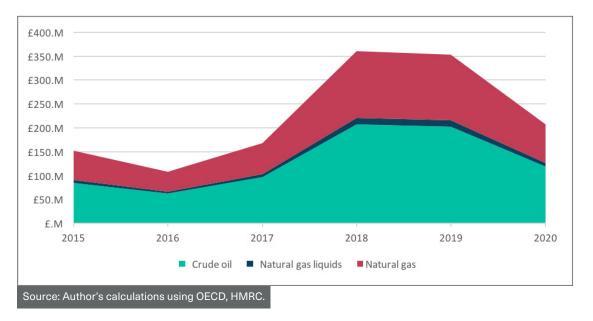
Investment Allowance

Investment Allowance, introduced in the 2015 Budget – just months ahead of the Paris Agreement – replaced some of the earlier measures, and reduces the amount of a company's profits that are subject to the supplementary charge (an additional charge on a company's ring fence profits, set at 10 percent since 2016).⁸⁸,⁸⁹ Eligibility for this relief was extended in 2016

from just capital investment to also include some operating and leasing expenditures. The measure has proven 'successful' with oil and gas firms, with expenditure for this relief more than doubling between 2015 and 2019, before a decline in 2020 influenced by the Covid-19 economic shock.

Chart 10: Investment allowance relief more than doubled between 2015 and 2019 in real terms (133% increase) before a Covid-related drop in 2020.

Fossil fuel producer support: Investment Allowance, by type of supported fuel (£, 2020-21 prices).



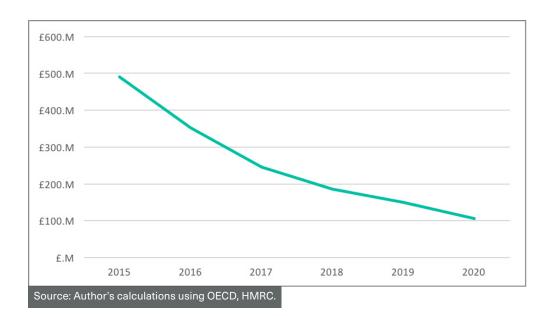
Following the IEA's guidance, there is no justification for continued investment in oil, gas and coal projects on a net-zero transition pathway. The government should immediately remove support for new fossil energy investments, and phase out the support of existing projects by 2025, as the UK has committed at G7.91

PRT Tax relief for decommissioning expenditure

This provision allows the deduction of capital expenditures associated with decommissioning fields from profits subject to the Petroleum Revenue Tax (PRT), when applicable, in full in the year when they are incurred. Losses from decommissioning costs can be deducted from profits earned in earlier years, which can lead to tax refunds.⁹²

Chart 11: Petroleum Revenue Tax (PRT) relief for decommissioning expenditure has seen steady decline since 2015, falling by 70% in real terms by 2019, before a further drop of nearly 30% in 2020.

Fossil fuel producer support: PRT Tax relief for decommissioning expenditure (£, 2020-21 prices).



The expenditure on this relief is linked to annual decommissioning costs for qualifying fields, with the decline indicating less decommissioning expenses incurred post-2015, rather than a reflection of a specific change in the level of the relief.

As with the 'Ring-fence' reliefs, this measure frees up fossil fuel producers' capital for further harmful investments (while these are permitted - even supported - by the UK government). Decommissioning costs should be grounded in a polluter pays principle, and to avoid providing a giveaway that frees up corporate finance for further fossil fuel investments.

Measures outside of tax expenditures

The UK Government also reduced the rate of the Petroleum Revenue Tax (PRT) - a tax on the profits from oil and gas production in the UK or on the UK continental shelf – to 0% on all fields that were approved since 16 March 1993 (PRT still applies to older fields), which incentivises more extraction. In fact, the Oil and Gas Authority (OGA) - a government company regulating and overseeing UK oil and gas industry - is obliged to 'secure the maximum value of economically recoverable petroleum from the strata beneath relevant UK waters'. This reflects the legally binding 'Maximising Economic Recovery of UK petroleum' (MER UK) Strategy, which passed through the UK Parliament in 2016 and came into force in March 2016. In an ironic twist, the latest iteration of the OGA's obligations does include a reference to helping meet the UK's net zero target "by reducing as far as reasonable in the circumstances greenhouse gas emissions from sources such as flaring and venting and power generation, and supporting carbon capture and storage projects."

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Perhaps the most striking element of the UK legal and fiscal framework that supports fossil fuels are Decommissioning Relief Deeds (DRDs), which represent 'a new contractual approach to provide oil and gas companies with certainty on the level of tax relief they will receive on future decommissioning costs.'97 Since their inception at Budget 2013, DRDs 'unlocked approximately £8.1bn of capital' which can now be invested elsewhere', implicitly suggesting likelihood of even more fossil investments by beneficiary companies.⁹⁸

Lastly, direct budgetary transfers until recently used to be a substantial measure of support, reaching as much as £2.3bn in 2015 and £1.7bn in 2017, before falling to as little as £2m annually in 2018 and 2019 (all figures in 2020-21 prices). The bulk of those subsidies related to Inherited Liabilities Related to Coal Mining, such as 'inherited liabilities for which no licensed coal-mine operator could be held responsible', including abandoned coal mines⁹⁹. As coal is on its way out, these should remain a diminishing element of the UK subsidy regime, although, if the proposed new Cumbria coal mine goes ahead, this would lead to new decommissioning costs in the future.

Looking ahead: Principles for a climate-just tax system

Tax reliefs for fossil fuels are fuelling the climate crisis. Dismantling and replacing them with an approach that supports a fair transition will require a tax system that prioritises and supports rapid decarbonisation and long-term sustainability, while ensuring that the costs and benefits of doing so are distributed justly.

Coordinated by Tax Justice UK, a collective of civil society organisations set out key principles for how the UK Government can and should reform the tax system to help steer the economy to a green future of shared prosperity.¹⁰⁰

First, taxes must be aligned with ambitious climate and environmental goals and a rapid decarbonisation of the economy. Alignment involves, among other measures, ensuring taxes disincentivise carbon emissions and environmentally destructive behaviours and outcomes.

The second principle is taxing fairly. Despite 1 percent of people in the UK producing, on average 11 times the amount of carbon per person than those in the poorest half of society, many of the UK's environmental taxes disproportionately impact marginalised people and households.¹⁰¹ Relatively high rates of tax are often applied to more widely distributed

activities, while heavily polluting activities, like aviation, remain relatively undertaxed, despite being undertaken disproportionately by a small minority of the population.¹⁰² The tax system must ensure costs are borne by those with "the greatest ability to pay and with the greatest responsibility for climate and other environmental damage."¹⁰³ Low income people and households must not face increased costs, and sustainable living should be accessible to all.

As the UK's tax influence extends far beyond our borders, this principle should also be applied in a global context, by clamping down on international tax avoidance and ensuring the UK does not undercut other states' tax revenues, which would hinder their ability to decarbonise.

Third, tax measures must be effective with clear incentives and outcomes, while minimising any unintended outcomes contradicting wider climate, environmental and societal goals. For example, mechanisms should prevent carbon emissions simply shifting offshore.

The last principle recognises the limitations of the use of the tax system, noting that tax reform is not a silver bullet. Instead, it must be part of a publicly directed programme for rapid and just decarbonisation, sitting alongside, for example, a green industrial strategy¹⁰⁴ to nurture and steward industries of the future while levelling up regional and national imbalances and rooting out intersectional inequalities, as well as a New Deal for workers.¹⁰⁵

Moreover, there is a need to avoid viewing climate and environmentally focussed tax changes primarily as a source of revenue. Instead, a primary aim must be climate and environmental protection; for example, tax policy changes supporting nature restoration.

Together, these principles provide a lens through which we can scrutinise the current tax structures, and a foundation from which recommendations are set.

5 Recommendations

Despite the limited time available to prevent potentially devastating climate change, the UK tax system provides a number of tax reliefs for both production and consumption of fossil fuels. In recent years, the value of UK support to fossil fuels domestically was on average around £12bn annually, and this demonstrates the government's failure to match its commitments with actions.

We need to phase out UK fossil fuel support as a part of a coherent strategy to ensure an orderly, just, rapid transition. The reform needs to consist of (1) changing the definition to change the debate; (2) Initiating a rapid phase out of fossil fuel subsidies and support (see Appendix 1 for overview of relief-specific recommendations) (3) Designing a tax system fit for the future: just transition as Treasury's new operating model.

1 Changing the definition to change the debate

By continuing to align its definition of fossil fuel subsidies with the IEA, as opposed to the methods more attuned to the WTO and OECD approaches, the UK obscures the scale of our effective fossil fuel subsidisation. As a starting point towards broader climate and environmental centred tax reform, it is imperative that HM Treasury re-evaluates its current definition of fossil fuel subsidies, aligning it instead with a more comprehensive approach, which incorporates tax reliefs, subsidies and support, and recognises that choosing not to tax something through reliefs is a choice to subsidise its usage.

Codifying a comprehensive definition of fossil fuel subsidies is important for three primary reasons. First, it allows the UK to fully understand the scale of current fossil fuel subsidies, by capturing both support for production and broader tax reliefs to consumers and producers. Understanding the scale of the current approach is imperative if we are to begin to rapidly and justly disincentivise carbon intensive activities, which, given the narrow time frame we have to avert dramatically worsening climate and environmental breakdown, is urgently needed.

Second, in presenting a fuller picture of the scale of subsidisation, the UK can address the issue of opaqueness embedded in the current methodology, with the country currently ranking joint last among the G20 OECD members in the fossil fuel funding G20 scorecard, which aims to track each of the G20 countries' progress in ending government support to fossil fuels, as well as boosting accountability and transparency.¹⁰⁶

As well as tackling the opaque nature of the current approach, and exposing the scale of today's fossil fuel support, changing the definition is key to forging a new path forward for tax reform as part of a Green New Deal. This can and should be a starting point to a strategy to remove existing tax subsidies on the production and use of carbon and fossil fuels, while reducing the cost of green alternatives by harnessing effective and sustainable tax relief measures, rebates and other forms of funding to incentivise a just transition.

The current trajectory is failing to change course and avert climate catastrophe, and a comprehensive reassessment of the UK tax system can play a crucial role in averting irreversible climate and environmental breakdown, particularly ahead of the UK hosting COP26. Fully incorporating fossil fuel tax reliefs and subsidies into HM Treasury's Net Zero framework and aligning subsequent tax policies with an ambitious and just decarbonisation strategy provides a step in the right direction to begin to turn around the destructive current trajectory.

2 Initiating a rapid phase out of fossil fuel subsidies and support

At the 2009 Pittsburgh Summit, the G20 – an intergovernmental forum bringing together the world's wealthiest nations, of which the UK is a member - announced that it would "Rationalize and phase out the medium-term inefficient fossil fuel subsidies that encourage wasteful consumption." ¹⁰⁷

Over a decade on from the landmark announcement in Pittsburgh, progress is inadequate and lacking a concrete plan to rapidly phase out subsidies. G20 states in 2019 still subsidised coal, oil and gas to the tune of around USD 150 billion annually, including production and consumption subsidies.¹⁰⁸

As demonstrated in the research findings, despite being a signatory to both the Paris Agreement and part of the cohort of nations signed up to the G20 commitment to phasing out fossil fuel subsidies, the level of fossil fuel support in the UK has remained substantial in recent years. Moreover, over the past two decades, revenues from taxes categorised by the Office for National Statistics as 'environmental' have declined, as a fraction of both GDP and total tax revenues. Despite a narrative of 'building back better', research into public money commitments to fossil fuels as part of recovery packages still offer unconditional fossil fuels commitments.

There has however been an increased appetite in recent years to address some issues surrounding support for fossil fuels in the UK. As part of the G7 agreement, the UK committed to phasing out fossil fuel subsidies by 2025,¹¹¹ yet progress has been slow.¹¹² In December 2020, the UK Government committed to ending public support for overseas fossil fuel projects, marking a significant win for climate campaigners and following \$2.6 billion being channelled to fossil fuels in 2018-2019 via its export credit agency.¹¹³

It is increasingly clear that the current approach to taxing polluting and carbon intensive forms of production and consumption, alongside tax reliefs for 'clean' production and consumption, fails to rise to the challenge ahead of us. Urgent action from the government is necessary to align its tax system with climate and environmental goals.

To harness the recent appetite for change and complement the ambitions of its new Net Zero Strategy, the UK Government should commit to a rapid managed decline of fossil fuels subsidies and support. In line with the UK's commitment under the G7 pledge of ending all subsidies by 2025, the government should create a comprehensive roadmap to immediately substantially reduce and then rapidly phase out fossil fuel subsidies completely by the middle of this decade at the latest. While the phase out needs to happen imminently, its design matters, and should be grounded in the principles outlined above.

For instance, safeguarding low-income households and marginalised communities against facing heightened costs as a result of the phase out must be a central pillar of the design of a climate-just tax system. While operating on a system of making polluters pay, it is imperative that we also understand the ways in which low-income households can be trapped into emissions intensive consumption patterns as a result of poorly designed tax policies and being financially locked out of greener, cleaner options. As such, there is a need to ensure that climate and environmental taxes address social and economic inequalities. As the Mirrlees review noted, "if the government is concerned about equity, and does not have an effective direct tax and benefit system to achieve redistribution, then there is a case for imposing lower taxes on those goods that take a greater part of the budget of the poor. However, where there are effective progressive direct taxes and benefits available, these will do a better job at redistributing."¹¹⁴

Distributional effects of withdrawal of VAT relief on domestic heating

Removing the relief of VAT on domestic heating will have a disproportionately large impact on lower income households, for whom spending on necessities such as energy forms a large proportion of total spending.

Therefore removing it will tend to increase the regressivity of the system,

unless compensated by other measures¹¹⁵. However, we should not consider the distributional incidence of only one part of the tax system in isolation. And general reliefs are not an efficient way to provide support to low income households. A more efficient way to ensure that low income households are able to meet their needs is through targeted support - through the social security system. However, in the case of domestic heating, such support has been significantly eroded over time. For example the Winter Fuel Payment, available to low income households, has been frozen since 2000/01 at £200 and Cold Weather Payment in 2008/09 at £25¹¹⁶.

Given the UK's role as a high historic emitter, teamed with its consumption emissions, ¹¹⁷ it is imperative that we rapidly move away from a subsidy approach that is contributing to climate and environmental chaos. Once these measures have been withdrawn, however, there is significant potential to harness revenue and channel it to green infrastructure investment, helping to plug the green finance gap in the UK. For example, the value of UK support to fossil fuels amounted to approximately £12bn annually in recent years, of which about £10bn merit urgent withdrawal. ¹¹⁸ This, at the same time as the UK green finance gap—the amount of *additional* annual investments in green infrastructure that are required to reach climate targets – remains large, estimated variously at some £11bn to £20bn annually at present, with investment needs increasing to extra £50bn a year by 2030 according to the CCC. ¹¹⁹

The withdrawal of fossil fuel subsidies would likely generate less revenue than the notional £10bn (excluding reliefs that merit further evaluation), due to the (desired) shifts in consumer and producer behaviour away from fossil fuels. It could, nonetheless, raise substantial amounts in the short term, which should be used to (a) redistribute to households and SMEs, where appropriate, as consumer support measures and (b) reinvest into green infrastructure, to support clean energy production.

3. Designing a tax system fit for the future: just transition as Treasury's new operating model

Following the recommendation from the Climate Change Committee (CCC), HM Treasury recently published its Net Zero Review , to look at how households, businesses and the government could contribute to transition; identify equitable transition mechanisms, consider economic growth opportunities and evaluate the trade-offs of different measures.\(^{120}\)
The government should build on this and extend the remit of the Net Zero team to encompass a just transition across all Treasury policies (including the tax system and resource decisions influencing other departments). This dedicated just transition team should have a direct reporting line to the Chancellor and should monitor progress in responding to the CCC recommendations, align with the Paris Agreement, and advise ministers how to reduce emissions in the most progressive way. It could also help strengthen democratic accountability by providing regular updates to Parliament (and with Parliament making final tax and spending decisions informed by this advice). Lastly, it could support wider cross-institutional coordination, including the Bank of England, the CCC and other Ministries, through an establishment of a Green Finance Action Taskforce (GFAT).\(^{121}\)

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Critical to the remit of the just transition team is the need to broaden our understanding of what constitutes beneficial climate and environmental tax policies, to recognise the inherent link between the climate crisis and the inequality crisis, with regards to both consumption patterns and distributional impacts. It should monitor the effects of tax policy changes and design appropriate measures to mitigate the effects on low income households.

A dedicated Treasury just transition team would strengthen the capacity and institutional architecture necessary to adapt the tax system to the challenges of climate and ecological breakdown, as well as transforming it to make it fairer. It should also consider transition plans for revenue raising as environmentally harmful activity winds down (such as the decline in Fuel Duty receipts as more cars become electric), to maintain fiscal sustainability, again ensuring that any new revenue streams are progressive.

⁶ Conclusion

The UK continues to subsidise fossil fuels through tax reliefs to the tune of on average £12bn a year. This is a shocking indictment of the government's failure to match its commitments with actions. We need to change the government's official definition of fossil fuel subsidies; enact an urgent phase out of subsidies to harmful activities; and design a tax system fit for the future.

A Green New Deal will require significant public investment. Tax revenues will be important to sustainably service this increased borrowing, but more fundamentally, tax will have a vital role to play in steering economic activity away from high-carbon production and consumption towards zero-carbon alternatives and supporting redistribution. It is imperative that future spending, including through additional revenue gains from withdrawing fossil fuel subsidies, is channelled to support a just transition, including programmes for impacted workers and communities, and that support is provided for low-income households and marginalised communities. For example, the government could consider a 'climate dividend–a cash support payment to households or government grants for house retrofits and improving energy efficiency.¹²²

As a host of the upcoming COP26 conference on climate, the UK Government must recognise the incoherence of simultaneously subsidising fossil fuels, and act at speed to fix this. To deliver a just transition and adhere to legally binding climate commitments, the UK Government needs to utilise all the tools at its disposal. Increased public investment will be crucial, alongside further regulatory changes and measures to curb fossil fuel financing and greatly upscale green investment. And the tax system must be transformed so it supports climate, environmental and economic justice.

This strategy can go hand in hand with a New Deal for workers as part of a Green New Deal to significantly enhance rights at work and drive out work-based insecurities and inequalities. It is imperative that the ambitious transition includes the voices of trade unions, green industries, and fossil fuel communities, co-producing the design of a rapid and just transition for workers and communities.

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Appendix 1 Relief-specific recommendations

Reduced Rate of VAT for Domestic Fuel and Power

The UK Government should phase out this relief whilst providing transition support to households, such as 'climate dividend' payments and measures enabling them to move to clean heating alternatives.

Reduced rate of fuel duty on 'Red Diesel'

The Government should outline the roadmap of phasing these remaining 'Red Diesel' reliefs alongside support measures for remaining impacted users to transition to cleaner alternatives.

Tied oils scheme (industrial relief)

As qualifying industrial uses would not typically result in carbon emissions, the exemption is justified on principle, although the government should step up its monitoring of potential harmful environmental impacts even if not directly emissions-related. Furthermore, due to risks of fraud – where 'tied oil' is illegally put to use, such as burned as fuel – the government will need to step up monitoring of this relief when it begins the phase out of other reliefs for carbon-emitting uses.

The Climate Change Levy

The Treasury and HMRC should establish a framework for regular evaluation, to ensure that any CCL reliefs provide climate benefits that otherwise would not have been achieved. In particular, the relief for fuels 'not for burning or consumption in the UK' should be re-evaluated, to avoid risks of 'carbon leakage' and potential offshoring of emissions.

Ring-Fence measures

The government should immediately withdraw tax reliefs that support any new fossil fuel infrastructure, and rapidly wind up ongoing projects. Tax reliefs for decommissioning should only continue if they are granted as a part of low carbon transition of fossil companies, to avoid providing a giveaway that frees up corporate finance for further fossil fuel investments.

Investment Allowance

Following the guidance from the IEA, there is no more justification for continued investment in oil, gas and coal projects on a net-zero transition pathway. The government should immediately remove support for new fossil energy investments, and rapidly phase out the support of existing projects.

PRT Tax relief for decommissioning expenditure

Decommissioning costs should be grounded in a polluter pays principle, where those that produce pollution - oil and gas firms - should bear the costs of managing it to avert more damage to people and the environment.¹²³

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Appendix 2 **Detailed definitions of major fossil fuel support measures**

Reproduced from the OECD: Fossil Fuel Support - GBR.¹²⁴

Consumer support measures

Reduced Rate of VAT for Domestic Fuel and Power

The domestic consumption of both heating fuel and power in the United Kingdom is subject to a lower rate of VAT than that applied to regular products (which corresponds to 20% from February 2011 onwards). Domestic fuel and power were initially zero-rated when VAT was first introduced in 1973 but subsequently became liable to a rate of 8% with the VAT Act of 1994. The rate was eventually lowered to 5% (the EU minimum) in 1997, and this rate still applies. This inventory allocates the annual amounts reported by HM Revenue & Customs to the various energy sources concerned on the basis of the IEA's Energy Balances for the UK residential sector. The reduction in the cost of the reduced rate for domestic fuel and power from 2015-16 is the result of reductions in suppliers' prices.

Reduced rate of fuel duty on 'Red Diesel'

As of January 2019, excise duty on fuels is charged at the rate of GBP 0.5795 per litre for unleaded petrol, GBP 0.3770 per litre for aviation gasoline, GBP 0.6767 per litre for light oil (other than unleaded petrol or aviation gasoline) and GBP 0.5795 per litre for heavy oil. Producers and distributors of rebated oils (or controlled oils) such as red diesel pay lower rates of duty on these fuels. These oils are not to be used as road fuels; eligible uses include off-road vehicles such as those used for agriculture, road construction or clearing snow. As of January 2019, duty on marked gas oil is charged at GBP 0.1114 per litre, a rebate of GBP 0.4681

per litre compared to unrebated price of GBP 0.5795 per litre. No estimates of the revenue foregone due this provision are available.

Tied oils scheme (industrial relief)

As of January 2019, excise duty on fuels is charged at the rate of GBP 0.5795 per litre for unleaded petrol, GBP 0.3770 per litre for aviation gasoline, GBP 0.6767 per litre for light oil (other than unleaded petrol or aviation gasoline) and GBP 0.5795 per litre for heavy oil. Under the Tied Oils or Industrial Relief Scheme, any light oils or heavy oils that fall into the definition of fuel oil, gas oil or kerosene are delivered conditionally relieved of excise duty when put to an eligible use. Eligible use includes any use except fuel for any engine, motor or other machinery or heating fuel. This inventory uses production data from the IEA's Energy Balances to allocate the annual amounts reported by HM Revenue & Customs to oil and natural gas extraction.

The Climate Change Levy

The Climate Change Levy (CCL), introduced in April 2001, is charged by on 'taxable commodities' supplied for lighting, heating and power purposes to business customers in the industrial, commercial, agricultural and public service sectors. These taxable commodities include natural gas, electricity, petroleum and liquefied gas, coal, lignite and coke. As of April 2019, the rate is set at: GBP 0.00847 per kwh of electricity, GBP 0.00339 per kwh of natural gas, GBP 0.02175 per kilogram of petroleum and liquefied gas and GBP 0.0263 per kilogram of solid product¹²⁵. It was designed to encourage businesses to be more energy efficient and to reduce greenhouse gas emissions, and charged to the majority of business customers, with a few minor exceptions.126

Producer support measures

Ring-Fence measures

Ring-fence oil and gas trade corporate income tax relief, first-year capital allowances for plant and machinery

The United Kingdom offers a 100% firstyear capital allowance for ring-fence capital expenditure. This means that 100 per cent of most North Sea capital expenditure is allowable for Corporation Tax, including the Supplementary Charge, in the year that the expenditure is incurred. This applies to both expenditure on plant and machinery extraction stage, or expenditure incurred during the exploration and development phase. If the allowance is not taken the first year in which the capital expenditure took place, then the write-down is reduced by 25% for each subsequent year for both plant and machinery and most intangible expenditure, and 10% writedown for expenditure on long-life assets or extraction assets on a reducing-balance basis. The Inventory allocates the measure to crude oil and natural gas based on the IEA World Energy Balances for domestic production of these fuels.

Ring-fence oil and gas trades corporate income tax relief for decomissioning expenditure

This provision allows capital expenditures connected to the decommissioning of fields to be deducted from profits subject to the corporate income tax in full in the year in which they are incurred. Deductions are coupled with a carry-back provision which makes it possible for companies to deduct losses arising from decommissioning costs against profits earned in earlier years. This may therefore result in tax refunds. Decommissioning includes demolishing the plant or machinery, preserving the plant or

machinery pending its reuse or demolition, preparing the plant or machinery for reuse, or arranging for the reuse of the plant or machinery.

The Inventory allocates this measure to crude oil and gas according to domestic production from the IEA World Energy Balances.

Investment Allowance

This provision was introduced with the 2015 Budget -in combination with the Supplementary Charge Reduction to 20% and the Petroleum Revenue Tax Reduction to 35%- in order to simplify the existing taxation regime in the sector. The measure effectively replaced offshore field allowances (except for the Cluster Allowance) and supports investments in a similar way as its predecessors (e.g., reducing the amount of a company's profits which are subject to the supplementary charge). The amount of the allowance equals 62.5% of the qualifying expenditure (investment expenditure incurred by a company in relation to a field) incurred on or after 1 April 2015, which is deducted from its adjusted ring-fenced profits for the purpose of the Supplementary Charge. Initially, only capital expenditure qualified for this allowance, but the 2016 Finance Act broadened the scope of the measure in order to include certain operating or leasing expenditures incurred on or after 8 October 2015. Unlike field allowances, which were distributed among participants in accordance to equity interest, this measure is allocated based on participants' own expenditure. Envisioned transitional rules enable converting field allowances into respective investment allowances.

HM Revenue & Custom reports an estimate for the reduction in Supplementary Charge arising from field <u>31</u>

and investment allowances, but notes that this is subject to a wide margin of error. Amounts prior to FY 2015 are attributed to Field Allowances and estimates after this date to Investment Allowances, although transitional arrangements between the two do apply. This inventory uses production data from the IEA's Energy Balances to allocate the annual amounts reported by HM Revenue & Customs to oil and natural gas extraction.

PRT Tax relief for decommissioning expenditure

This provision allows capital expenditures connected to the decommissioning of fields to be deducted from profits subject to the Petroleum Revenue Tax (PRT), when applicable, in full in the year in which they are incurred. Deductions are coupled with

a carry-back provision which makes it possible for companies to deduct losses arising from decommissioning costs against profits earned in earlier years. This may therefore result in tax refunds. Decommissioning includes demolishing the plant or machinery, preserving the plant or machinery pending its reuse or demolition, preparing the plant or machinery for reuse, or arranging for the reuse of the plant or machinery.

This provision applies only to pre-cessation ring-fence trade, since only pre-cessation ring-fence profits are liable for the PRT.

The Inventory allocates this measure to crude oil and gas according to domestic production from the IEA World Energy Balances.

Endnotes

- 1 Guterres, A (2019) 'Remarks at 2019 Climate Action Summit', United Nations
- 2 Department for Business, Energy & Industrial Strategy (2021). Net Zero Strategy: Build Back Greener. Available at https://www.gov.uk/government/publications/net-zero-strategy
- 3 HM Treasury (2019) HM Treasury's review into funding the transition to a net zero greenhouse gas economy: terms of reference. Available at https://www.gov.uk/government/publications/net-zero-review-into-funding-the-transition-to-a-net-zero-greenhouse-gas-economy-terms-of-reference
- 4 Krebel, L., Barmes, D. & Van Lerven, F. (2021). Greening Finance to Build Back Better. New Economics Foundation. Available at https://neweconomics.org/2021/06/greening-finance-to-build-back-better
- United Nations (2021) 'Climate Change 'Biggest Threat Modern Humans Have Ever Faced', World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation' [Press Release].

 Available at: https://www.un.org/press/en/2021/sc14445.doc.htm
- 6 McGrath, M (2021) Climate change: IPCC report is 'code red for humanity', BBC News. Available at: https://www.bbc.co.uk/news/science-environment-58130705
- World Meteorological Organization (2021) 'New climate predictions increase likelihood of temporarily reaching 1.5 °C in next 5 years' [Press Release] Available at: https://public.wmo.int/en/media/press-release/new-climate-predictions-increase-likelihood-of-temporarily-reaching-15-%C2%B0c-next-5
- 8 Al Jazeera (2021) 'Leaked UN draft report warns of accelerating climate devastation', Available at: https://www.aljazeera.com/news/2021/6/23/leaked-un-report-warns-accelerating-climate-devastation
- 9 Allan, R et al. (2021) 'Climate Change 2021: The Physical Science Basis, Summary for Policy Makers.'
 Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf
- P, Harpreet (2021) 'Towards Reparative Climate Justice: From Crises to Liberations', Common Wealth.

 Available at: https://www.common-wealth.co.uk/reports/towards-reparative-climate-justice-from-crises-to-liberations
- Oxfam (2020) Carbon emissions of richest 1 percent more than double the emissions of the poorest half of humanity. [Press Release] Available at: https://www.oxfam.org/en/press-releases/carbon-emissions-richest-1-percent-more-double-emissions-poorest-half-humanity
- Stubley, P. (2020) Richest 1% in UK produce 11 times the carbon emissions of poorest 50%, says study. The Independent. Available at: https://oxfamapps.org/media/press_release/wealthiest-brits-have-a-carbon-footprint-11-times-that-of-someone-in-the-poorest-half-of-society-oxfam/
- Bola, G (2020) Reimagining Public Health. Common Wealth. Available at: https://www.common-wealth.co.uk/reports/reimagining-public-health
- Richie, H. (2019) 'Who has contributed most to global CO2 emissions?', Our World in Data.

Available at: https://ourworldindata.org/contributed-most-global-co2

- 15 'The UK's Climate: Fair Share', ActionAid, Christian Aid, War on Want, Friends of the Earth England and Wales, Friends of the Earth Scotland. Available at: https://waronwant.org/sites/default/files/20-21_FairShareUK_Infographic_web.pdf
- Wright, O. (2021) UK prepares to approve oilfield despite Cop26 climate conference. The Times.

 Available at: https://www.thetimes.co.uk/article/uk-prepares-to-approve-oilfield-despite-cop26-climate-conference-0wlxjm7tv
- Thompson, A. (2021) IEA director hopes UK will be 'inspiration for the rest of the world' on climate action ahead of decision on Cambo oil field. Channel 4 News. Available at: https://www.channel4.com/news/iea-director-hopes-uk-will-be-inspiration-for-the-rest-of-the-world-on-climate-action-ahead-of-decision-on-cambo-oil-field
- Savage, M. (2021) Green groups' fury at loophole in new North Sea oil test, The Guardian. Available at: https://www.theguardian.com/business/2021/jun/26/green-groups-fury-at-loophole-in-new-north-sea-oil-test

- 19 Common Wealth (2021) Who Owns the North Sea? Available at: https://www.common-wealth.co.uk/ interactive-digital-projects/north-sea/more
- Brett, M. Buller, A. Lawrence, M (2020) Blueprint for a Green New Deal: Launch Essay, Common Wealth. Available at: https://www.common-wealth.co.uk/reports/blueprint-for-a-green-new-deal
- Friends of the Earth Scotland, Oil Change International (2019) Sea Change: Climate Emergency, Jobs and Managing the Phase-Out of UK Oil and Gas Extraction. Available at: https://foe.scot/resource/sea-change-climate-report/
- Picciariello, A and Gencsu, I (2020) Doubling back and doubling down: G20 scorecard on fossil fuel funding, ODI. Available at: https://odi.org/en/publications/doubling-back-and-doubling-down-g20-scorecard-on-fossil-fuel-funding/
- Oil Change International, Platform and Friends of the Earth Scotland (2019) Sea Change: Climate Emergency, Jobs and Managing the Phase-Out of UK Oil and Gas Extraction. Available at: http://priceofoil.org/2019/05/15/sea-change-report/
- Convert fossil fuel subsidies into subsidies for renewable energy (2017-2019) [Parliamentary Petition]. Available at: https://petition.parliament.uk/archived/petitions/263313
- European Commission (2019) Energy prices and costs in Europe. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=COM:2019:1:FIN&from=EN
- Carrington, D. (2019) UK has biggest fossil fuel subsidies in the EU, finds commission. The Guardian. Available at:http://www.theguardian.com/environment/2019/jan/23/uk-has-biggest-fossil-fuel-subsidies-in-the-eu-finds-commission
- 27 Mirrless, . (2011) Tax by design. The IFS. Available at: https://ifs.org.uk/docs/taxbydesign.pdf
- 28 Ibid.
- 29 Roser, M (2021) The argument for a carbon price. Our World in Data. Available at: https://ourworldindata.org/carbon-price
- The National Audit Office (NAO) have found that HMRC has since 2015 'evaluated only a small minority of established tax expenditures', and none of those supporting fossil fuels. See NAO (2020) The Management of Tax Expenditures Pp. 38-41. Available at: https://www.nao.org.uk/report/the-management-of-tax-expenditures/
- Resolution Foundation (2019) UK's tax relief bill has grown to £164bn more than the country's entire health spend. Available at: https://www.resolutionfoundation.org/press-releases/uks-tax-relief-bill-has-grown-to-164bn-more-than-the-countrys-entire-health-spend/
- House of Commons Public Accounts Committee (2020) Management of tax reliefs. Available at: https://committees.parliament.uk/publications/1924/documents/18729/default/
- House of Commons, Committee of Public Accounts: Environmental tax measures (2021) Available at: https://committees.parliament.uk/work/1007/environmental-tax-measures/publications/
- UNEP, OECD and IISD (2019) Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals. Available at: https://www.unep.org/resources/report/measuring-fossil-fuel-subsidies-context-sustainable-development-goals
- 35 Ibid.
- World Trade Organization, Agreement on Subsidies and Countervailing measures. Available at: https://www.wto.org/english/docs_e/legal_e/24-scm.pdf
- OECD. An OECD-Wide Inventory of Support to Fossil Fuel. Available at: https://www.oecd.org/fossil-fuels/Fossil%20Fuels%20Inventory_Policy_Brief.pdf
- The OECD's broad definition of support was adopted in 2019 to track and measure the Sustainable Development Goal Indicator 12.c.1 on fossil-fuel subsidies, in a joint publication by UNEP, IISD and OECD'. https://www.unep.org/resources/report/measuring-fossil-fuel-subsidies-context-sustainable-development-goals
- 39 OECD Work on Support for Fossil Fuels: Methodology. Available at: https://www.oecd.org/fossil-fuels/methodology/

40 IEA. Energy subsidies: Tracking the impact of fossil-fuel subsidies. Available at:

https://www.iea.org/topics/energy-subsidies

- 41 OECD (2021) OECD Companion to the Inventory of Support Measures for Fossil Fuels 2021. Available at: https://www.oecd-ilibrary.org/environment/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2021_e670c620-en?_ga=2.77159197.923838731.1633362811-1128646972.1557223237
- Oil Change Int., & Friends of the Earth. (2019). SeaChange: Climate emergency, jobs and managing the phase out of UK oil and gas extraction. http://priceofoil.org/2019/05/15/sea-change-report/
- International Institute for Sustainable Development (2020). Doubling Back and Doubling Down: G20 scorecard on fossil fuel funding | Methodology Note. 45.
- 44 IEA (2021). Pathway to critical and formidable goal of net-zero emissions by 2050 is narrow but brings huge benefits, according to IEA special report. Available at: https://www.iea.org/news/pathway-to-critical-and-formidable-goal-of-net-zero-emissions-by-2050-is-narrow-but-brings-huge-benefits-according-to-iea-special-report
- International Institute for Sustainable Development IISD et al. (2020n.d.). Doubling Back and Doubling Down: G20 scorecard on fossil fuel funding.
- In the 'G20 scorecard on fossil fuel funding' report, Geddes et al outline five major types of such support: (1) Direct budget transfers and tax expenditures; (2) Price support (induced transfers) through regulated below-market prices for consumers; (3) Public finance (e.g., loans and guarantees) at both market and below-market value; (4) State-owned enterprise (SOE) investment (e.g., capital expenditure for projects via equity or debt) at both market and below-market value; (5) 5. Public money commitments in response to the COVID-19 crisis (any kind of support measure, including the four previous types and broader government interventions, in response to the COVID-19 crisis).
- 47 House of Commons Public Accounts Committee (2020). Management of tax reliefs. Available at: https://committees.parliament.uk/publications/1924/documents/18729/default/
- Estimating an aggregate cost of all concurrently existing reliefs is difficult (HMRC advise against it since eligibility of many may overlap or receiving one precludes receiving another). It is possible, however, to present an illustrative estimate to show their scale. See HM Revenue & Customs (2020). Estimated Cost of Tax Reliefs. Available at https://www.gov.uk/government/statistics/main-tax-expenditures-and-structural-relief and NAO (2020).The Management of Tax Expenditures. Available at: https://www.nao.org.uk/wp-content/uploads/2020/02/The-management-of-tax-expenditure.pdf
- This is because the estimated amounts of support are notional values that do not account for behavioural effects such as the potential decreases in fuel production or consumption were the given subsidy withdrawn as well as the fact that eligibility for some measures overlaps, and the recipients do not benefit cumulatively but typically only from one measure or another. See: HM Revenue & Customs (2020). Estimated Cost of Tax Reliefs. Available at https://www.gov.uk/government/statistics/main-tax-expenditures-and-structural-reliefs
- OECD (2003), Revenue Statistics 1965-2002. Special features: Tax reliefs and the interpretation of tax-to-GDP ratios, Organisation for Economic Cooperation and Development, Paris.
- 51 See: https://www.oecd.org/fossil-fuels/
- Elgouacem, A. (2020) Designing Fossil Fuel Subsidies in OECD and G20 Countries: A Robust Sequential Approach Methodology. OECD. Available at: https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/WKP(2020)15&docLanguage=En
- OECD (2021). Fossil fuel support GBR. Available at https://stats.oecd.org/Index.aspx?DataSetCode=FFS_GBR
- All sterling figures are converted to 2020-21 pounds using the official UK GDP deflator. See: HM

 Treasury (2021). GDP deflators at market prices, and money GDP March 2021 (Budget) https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-march-2021-budget
- OECD. Compare your country: Environment Fossil fuels support. Available at https://www.compareyourcountry.org/oecd-fossil-fuels/en/4/2425/datatable
- United Nations (2015). The Paris Agreement. Article 2.1c. Available at: https://unfccc.int/sites/default/files/english_paris_agreement.pdf

- The initial fall from 2015 to 2016 in mainly accounted for by the volatile character rather than changes in policy of direct budgetary transfers (such as for writing off old coal mines), which amounted to nearly £2bn in 2015, falling to just £32m in 2016, before rising to £1.5bn in 2017 and falling dramatically again in 2018. More meaningful has been a fall in Ring-Fence oil and gas corporate income tax relief for plant & machinery, which had been declining year-on-year from a peak of nearly £8bn in 2013 the year of its introduction before stabilising at around £2.1bn from 2018.
- Following the OECD convention, fiscal years data is allocated to the starting calendar year so that data covering the period April 2016 to March 2017 is shown as allocated to 2016. Fiscal year in the UK runs from 1 April to 31 March. See: https://stats.oecd.org/Index.aspx?DataSetCode=FFS_GBR
- Oil and Gas Authority (2020). Income from and Expenditure on UKCS Exploration, Development and Operating Activities 1970 to 2019.
- 60 HM Treasury (2020) Net Zero Review: Interim Report. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004025/210615_NZR_interim_report_Master_v4.pdf
- 61 Ibid.
- 62 HM Treasury (2021). Net Zero Review. Available at https://www.gov.uk/government/publications/ net-zero-review-final-report
- Department for Business, Energy & Industrial Strategy (2021). Net Zero Strategy: Build Back Greener.

 Available at https://www.gov.uk/government/publications/net-zero-strategy
- 64 HM Revenue and Customs (2020) Get relief for mineral oil put to certain uses (Excise Notice 184A).

 Available at: https://www.gov.uk/guidance/get-relief-for-mineral-oil-put-to-certain-uses-excise-notice-184a
- 65 HM Government (2021). Heat and Buildings Strategy. Available at https://www.gov.uk/government/news/plan-to-drive-down-the-cost-of-clean-heat
- 66 Ibid.
- 67 HM Treasury (2020) Red diesel: call for evidence. Available at: <a href="https://www.gov.uk/government/consultations/red-diesel-call-for-evidence/red-diesel-call-for-evidence#what-is-red-diesel
- 68 HM Revenue and Customs (2021) Reform of red diesel and other rebated fuels entitlement. Available at: https://www.gov.uk/government/publications/reform-of-red-diesel-entitlements/reform-of-
- 69 HM Revenue and Customs (2016) Hydrocarbon Oils Strategy. Available at: https://www.gov.uk/hmrc-internal-manuals/hydrocarbon-oils-strategy/hcos3025
- The levy is not charged to: Domestic customers; charities when put to a non-business use; business customers who consume very small quantities of energy.
- British Gas. Climate Change Levy (CCL): Learn more about the Climate Change Levy, an environmental energy tax for businesses. Available at: https://www.britishgas.co.uk/business/gas-and-electricity/large-business/CCL
- 72 See: https://www.gov.uk/guidance/register-for-climate-change-levy#tax-com
- An additional adjustment is made for 'Reduction in Climate Change Levy to customers with Climate Change Agreements' as in this case HMRC and OECD figures differ, and OECD data is missing for most recent years, we use HMRC figures throughout. See: HM Revenue & Customs (2021). Non-structural tax reliefs: Estimated cost of non-structural tax reliefs (October 2020). Available at https://www.gov.uk/government/statistics/main-tax-expenditures-and-structural-reliefs
- 74 HM Revenue and Customs (2020) Excise Notice CCL1/3: Climate Change Levy reliefs and special treatments for taxable commodities. Available at: <a href="https://www.gov.uk/government/publications/excise-notice-ccl13-climate-change-levy-reliefs-and-special-treatments-for-taxable-commodities/excise-notice-ccl13-climate-change-levy-reliefs-and-special-treatments-for-taxable-commodities
- 75 Environmental Agency (Updated 2020) Climate change agreements. Available at: https://www.gov.uk/guidance/climate-change-agreements-2

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- 76 The Environmental Agency is a non-departmental public body accountable to Parliament through ministers.
- PEIS monitors the impacts of the scheme. However, while its 2020 report found that it has proven popular with businesses and led to some reductions in energy use, the primary angle of analysis was focused on traditional cost-benefit analyses of economic impacts, rather than on the effectiveness of climate change mitigation measures. See Department for Business, Energy and Industrial Strategy (2020) Second Climate Change Agreements scheme: evaluation. Available at: https://www.gov.uk/government/publications/second-climate-change-agreements-scheme-evaluation
- 78 HM Revenue and Customs (2020) Excise Notice CCL1/3: Climate Change Levy reliefs and special treatments for taxable commodities. Available at: <a href="https://www.gov.uk/government/publications/excise-notice-ccl13-climate-change-levy-reliefs-and-special-treatments-for-taxable-commodities/excise-notice-ccl13-climate-change-levy-reliefs-and-special-treatments-for-taxable-commodities#annex-a
- 79 Department for Business, Energy and Industrial Strategy (last updated: 2020) Combined heat and power. Available at: https://www.gov.uk/guidance/combined-heat-and-power
- HM Revenue and Customs (last updated 2015) Oil and gas: Ring Fence Corporation Tax. Available at: https://www.gov.uk/guidance/oil-gas-and-mining-ring-fence-corporation-tax
- 81 HM Treasury (2017) Tax issues for late-life oil and gas assets: discussion paper. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/599888/Tax-issues-for-late-life-oil-and-gas-assets-discussion-paper.pdf
- 82 OECD, Ring-Fence Expenditure Supplement. Available at https://stats.oecd.org/OECDStat_
 Metadata/ShowMetadata.ashx?Dataset=FFS_GBR&Coords=%5bMEA%5d.%5bGBR_
 TE_07%5d&ShowOnWeb=true&Lang=en
- Oil and Gas Authority (2020). Income from and Expenditure on UKCS Exploration, Development and Operating Activities 1970 to 2019.
- 84 IEA (2021) Net Zero by 2050: A Roadmap for the Global Energy Sector. Available at: https://www.iea.org/reports/net-zero-by-2050
- New Statesman (2019) UK taxpayers to spend at least £24bn cleaning up after oil companies in the North Sea. Available at: https://www.newstatesman.com/spotlight/2019/01/uk-taxpayers-spend-least-24bn-cleaning-after-oil-companies-north-sea
- Ambrose, J. (2021) UK North Sea oil rigs release as much CO2 as coal-fired power station study. The Guardian. Available at: https://www.theguardian.com/environment/2021/feb/01/uk-north-sea-oil-rigs-release-as-much-co2-as-coal-fired-power-station-study
- 87 London School of Economics (2017) What is the polluter pays principle? Available at: https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-polluter-pays-principle/
- HM Revenue and Customs (last updated: 2015) Oil and gas: Ring Fence Corporation Tax. Available at: https://www.gov.uk/guidance/oil-gas-and-mining-supplementary-charge
- HM Revenue and Customs (2015) Oil and gas: supplementary charge. Available at: https://www.gov.uk/guidance/oil-gas-and-mining-supplementary-charge
- 90 OECD. Investment Allowance. Available at https://stats.oecd.org/OECDStat_Metadata/ShowMetadata.
 ashx?Dataset=FFS_GBR&Coords=%5bMEA%5d.%5bGBR_TE_14%5d&ShowOnWeb=true&Lang=en
- 91 Harvey, F. (2021) G7 reaffirmed goals but failed to provide funds needed to reach them, experts say. The Guardian. Available at: https://www.theguardian.com/world/2021/jun/13/g7-reaffirmed-goals-but-failed-to-provide-funds-needed-to-reach-them-experts-say
- Decommissioning includes demolishing the plant or machinery, preserving the plant or machinery pending its reuse or demolition, preparing the plant or machinery for reuse, or arranging for the reuse of the plant or machinery. This provision applies only to pre-cessation ring-fence trade, since only pre-cessation ring-fence profits are liable for the PRT. See: OECD. PRT Tax relief for decommissioning expenditure. Available at https://stats.oecd.org/OECDStat_Metadata/ShowMetadata.

 ashx?Dataset=FFS_GBR&Coords=%5bMEA%5d.%5bGBR_TE_12%5d&ShowOnWeb=true&Lang=en
- HM Revenue and Customs (last updated 2017) Petroleum Revenue Tax. Available at: https://www.gov.uk/guidance/oil-gas-and-mining-petroleum-revenue-tax

- 94 OGA (2020) OGA unveils new strategy to support net zero. Available at: https://www.ogauthority.co.uk/news-publications/2021/oga-overview-2021/
- Oil and Gas Authority (2015) The Maximising Economic Recovery Strategy for the UK. Available at: https://www.ogauthority.co.uk/media/1022/mer_uk_strategy.pdf
- 96 See: https://www.ogauthority.co.uk/news-publications/publications/2021/oga-overview-2021/
- 97 UK Parliament: Written Questions, Answers and Statements (2020) Oil and Gas Decommissioning Relief Deeds: Statement made on 25 March 2020. Available at: https://questions-statements.parliament.uk/written-statements/detail/2020-03-25/HCWS189
- 98 Ibid. Also see Oil Change Int., & Friends of the Earth. (2019). SeaChange: Climate emergency, jobs and managing the phase out of UK oil and gas extraction. http://priceofoil.org/2019/05/15/sea-change-report/
- 99 See: https://stats.oecd.org/OECDStat_Metadata/ShowMetadata.ashx?Dataset=FFS_GBR&Coords=%5bMEA%5d.%5bGBR_DT_03%5d&ShowOnWeb=true&Lang=en
- Tax Justice Network (2020) Reforming the tax system to support a green and fair transition. Available at: https://www.taxjustice.uk/uploads/1/0/0/3/100363766/reforming_the_tax_system_to_support_a_green_and_fair_transition.pdf
- 101 Arnold, S and Buller, A. (2020) Redesigning tax for a just, green recovery. Available at: https://www.common-wealth.co.uk/reports/redesigning-tax-for-a-just-green-recovery
- 102 Chapman, A et al.(2021) A Frequent Flyer Levy. New Economics Foundation. Available at: https://neweconomics.org/2021/07/a-frequent-flyer-levy
- 103 See: https://www.taxjustice.uk/blog/were-off-track-on-climate-commitments-how-can-tax-reform-help
- Murphy, L. (2020) An industrial strategy at the heart of a Green New Deal. Common Wealth. Available at: https://www.common-wealth.co.uk/reports/an-industrial-strategy-at-the-heart-of-a-green-new-deal
- O'Brien, H and Lawrence, M (2020) 'Data and the Future of Work', Common Wealth. Available at: https://www.common-wealth.co.uk/reports/data-and-the-future-of-work
- Picciariello, A. (2020) G20 Scorecard of Fossil Fuel Funding: United Kingdom. IISD. Available at: https://www.iisd.org/publications/g20-scorecard-united-kingdom
- 107 IISD (2019) All Change and No Change: G20 Commitment on Fossil Fuel Subsidy Reform, Ten Years On. Available at: thttps://sdg.iisd.org/commentary/guest-articles/all-change-and-no-change-g20-commitment-on-fossil-fuel-subsidy-reform-ten-years-on/
- 108 Ibid.
- 109 Ibid.
- 110 See: https://www.energypolicytracker.org/region/g20/
- Harvey, F. (2021) G7 reaffirmed goals but failed to provide funds needed to reach them, experts say. The Guardian. Available at: https://www.theguardian.com/world/2021/jun/13/g7-reaffirmed-goals-but-failed-to-provide-funds-needed-to-reach-them-experts-say
- 112 Gencsu, I. Whitley, S and Worrall, L (2021) ODI. Available at: https://odi.org/en/publications/multimedia/are-the-g7-on-track-to-phase-out-fossil-fuel-subsidies-by-2025/
- 113 https://odi.org/en/press/statement-uk-ends-public-support-for-overseas-fossil-fuel-projects-odi-response/
- 114 Ibid.
- 115 Chawla, M. & Pollitt, M.G. (2013) Energy-efficiency and Environmental Policies & Income Supplements in the UK. Economics of Energy & Environmental Policy Vol. 2, No. 1 (MARCH 2013), pp. 21-40. Available at https://www.jstor.org/stable/26189442
- Thurley, D., McInnes, R. & Kennedy S. (2021) Winter Fuel Payments update. House of Commons Library. Available at https://researchbriefings.files.parliament.uk/documents/SN06019/SN06019.pdf

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- 'Reducing the UK's carbon footprint and managing competitiveness risks' (2013) Committee on Climate 117 Change. Available at: https://www.theccc.org.uk/wp-content/uploads/2013/04/CF-C-SummaryRep- web1.pdf
- 118 The remaining approximately £2bn of support measures that relate either to industrial oils (not for burning) and some of the Climate Change Levy exemptions that appear justified in principle, but merit more thorough evaluation by the officials to ensure they remain aligned with climate goals and are not exploited as loopholes.
- 119 The Climate Change Committee (2020) The Sixth Carbon Budget: The UK's path to Net Zero. Available at: https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-pathto-Net-Zero.pdf
- 120 HM Treasury (2019) HM Treasury's review into funding the transition to a net zero greenhouse gas economy: terms of reference. Available at https://www.gov.uk/government/publications/net-zeroreview-terms-of-reference/hm-treasurys-review-into-funding-the-transition-to-a-net-zero-greenhousegas-economy-terms-of-reference
- 121 Krebel, L., Barmes, D. & Van Lerven, F. (2021). Greening Finance to Build Back Better. New Economics Foundation. Available at https://neweconomics.org/2021/06/greening-finance-to-build-back-better
- 122 See, for example: LSE (2020) Distributional impacts of a carbon tax in the UK. Available at https://www. lse.ac.uk/granthaminstitute/publication/distributional-impacts-of-a-carbon-tax-in-the-uk/
- 123 London School of Economics (2017) What is the polluter pays principle? Available at: https://www.lse. ac.uk/granthaminstitute/explainers/what-is-the-polluter-pays-principle/
- OECD. Fossil Fuel Support GBR. Available at https://stats.oecd.org/Index.aspx?DataSetCode=FFS_ 124 **GBR**
- 125 Ibid.
- See https://www.britishgas.co.uk/business/gas-and-electricity/large-business/CCL 126