



OXFAM

Rich polluter profit tax could raise up to US\$400 billion and help drive fossil fuel phase out

Methodology noteⁱ

The broader context for the taxes modelled in Statistics 1-2 is found in the Oxfam blog [here](#).

Statistic 1: An additional tax on the profits of 585 of the world's major oil, gas and coal companies would raise US \$400 billion

Using the S&P Capital IQ database, a filter was created for all companies on the database (private and public) in the fossil fuel energyⁱⁱ sector with an Earnings Before Interest and Tax (EBIT) greater than 0. This created a 1,001-company sample before further filtering. This is not an exhaustive list of companies that would fall into the scope of the proposed taxation but rather the companies where the financial data was publicly available via the Capital IQ database when analysed in March 2025.

The projected revenue for the rich polluter profit tax was calculated using the following steps:

1. For each company, calculate earnings before interest and taxes (EBIT) return on total assets (ROTA) for each year from 2019 to 2024 by dividing EBIT by Total Assets.ⁱⁱⁱ

Rationale: We chose to use EBIT but recognize that other measures could be used, such as Earnings Before Interest Taxes Depreciation and Amortization (EBITDA). In choosing to use EBIT we have followed a similar approach chosen in an IMF Staff Working Paper and a model proposed by Heck et al for excess profit taxes.^{iv}

We chose to calculate the return on total assets (ROTA). This is a common approach to measuring profitability, and we again follow the choice made in the IMF Staff Working Paper and study from Heck et al that also both use return on assets. Another common approach to measure profitability is the return on equity (ROE). The rich polluter profit tax is meant to reduce investments in the impacted sectors and is therefore expected to reduce shareholder equity value of the fossil fuel companies. This is one reason for choosing to use ROTA as the value of assets such as machinery used in the extraction of oil, coal and gas is assumed to be less impacted by the tax. The risk of using ROE is that profitability can appear to increase even if earnings are falling, if the equity value is falling faster than earnings.

2. Calculate the mean average of the ROTA from 2019-2023.

3. Filter out all companies with ROTA 2019-2023 average below 3%, as the tax is differentiated between lower and higher amounts of profitability. 645 companies remained in the sample.

Rationale: This tax is designed to allow fossil fuel companies to continue to provide some (but less) fossil fuels and earn a decent, however smaller, profit, while at the same time ensuring that fossil fuel investments are made significantly less profitable than renewable energy. The tax is modelled to secure higher amounts of revenue from the most profitable fossil fuel companies, to maximize the tax's total revenue while limiting its impact on fossil fuels production and hence limiting both consumer price increases and CO2 emission reductions. The differentiated tax rate applied over 3% ROTA is illustrative, rather than a fixed proposal. For reference, the ROTA for fossil companies is 9%, while for companies classified by the S&P Capital IQ database as Independent Power and Renewable Electricity Producers, which includes clean energy as well as some fossil fuels providers, it is 7.6%.

A 50% tax on fossil fuel corporation profits above a 3% return on total assets, as well as a 20% tax on return on total assets below 3%, would reduce the weighted average ROTA for fossil corporations to 5.4% (not including other taxes and interest), less than the 7.6% figure for Independent Power and Renewable Electricity Providers. However, disaggregating the latter figure into renewable and independent power is required in order to more accurately estimate the relative returns as a result of the tax for fossil fuels verses renewables.

4. Calculate mean average assets for 2019 to 2023.
5. Reduce the 2024 ROTA for these 645 companies by 4%.

Rationale: A polluter profits tax should not be applied to the clean energy proportion of each company's business, as determined by the proportion of the value of their sales that derived from clean energy. As we do not have access to the proportion of fossil fuel sales for all fossil fuel companies, for the purpose of this calculation, we use as a proxy indicator the current average proportion of oil and gas company spending on forms of energy other than fossil fuels, which is 4%.^v Therefore, we calculate the tax based on an over-estimate of clean energy sales since the investment in clean energy will not yet have translated into a corresponding amount of clean energy sales. The figure generated for revenue is therefore a conservative under-estimate of the revenue that could be collected.

The tax's policy objective is to reduce fossil fuel investment and increase the profitability of renewable energy investment. This requires a specific tax on fossil fuels, but not on non-renewable clean energy sources. By exempting a company's business from non-fossil fuel activities, we provide an incentive for fossil fuel companies to increase their own transition towards greener energy forms to avoid liability for paying the polluter profit tax.

Many fossil fuel companies had set targets for transitioning towards green energy forms in recent years, but in many cases abandoned or lowered such targets in the wake of shareholder pressure during the recent spike in fossil fuel energy prices,^{vi} demonstrating the high impact that profits have on these companies' decisions. For example, in 2025, major oil and gas companies BP, Shell, and Equinor cut their targets for future low carbon investments by 73%, 37% and 41% respectively.^{vii} According to the Financial Times article from which this data was sourced, Shell said Wood Mackenzie's data overlooked the "scale of our historical investments in the low-carbon space".^{viii} We therefore specify that we are referencing future investment targets. These figures are not intended to compare fossil fuel companies performance over time, but rather to show the future trajectory of low-carbon investments by

these companies and illustrate some of the obstacles to a swift enough transition to renewable energy.

Note that investments in nuclear energy would count as non-fossil fuel investments. However, this tax proposal does not address the level of nuclear energy in the energy mix. As establishing renewable energy is consistently significantly cheaper than new nuclear power facilities,^{ix} a government that wishes to limit the building of new nuclear energy facilities could simply achieve this by avoiding or limiting subsidies to the nuclear industry.

6. Three per cent of the 2019-2023 average total assets is subtracted from the remaining profit so that only the return on assets above 3% is taxed at the higher rate.
7. All negative values are removed, leaving 585 companies to whom the 50% tax applies.

Rationale: Under most historical examples of excess profit taxes there have been varying forms of allowances for using losses to offset future tax liabilities. Following the IMF Staff Working Paper^x and the study by Heck et al,^{xi} we excluded losses from our model for estimating potential revenue but recognize that some element of loss-offsetting could be considered by countries that wish to introduce excess profit taxes such as the rich polluter profit tax. Before deciding on whether losses should be recognized for tax purposes, and if so, what the tax treatment of such losses should be, the options should be carefully assessed to avoid undermining revenue collection and incentives to shift away from fossil fuels. If loss-offsetting is allowed, clear limitations could be considered such as restricting the number of years that losses can be carried forward to avoid undermining the effect of the tax.

8. The result is multiplied by 50% (the modelled tax rate).

Rationale: An IMF Staff Working Paper looking at the use of excess profit taxes throughout modern history finds that rates and designs have varied considerably, with the rates ranging all the way up to 95 percent under the excess profit tax used by the United States during the period of 1940-43.^{xii} This implies that there is not one objectively 'right' design, and that tax rates used have been both higher and lower than what we use in this model. The 50% tax rate we have used is set at a rate that is significantly above the current statutory corporate tax rate found in most countries and at a level that will significantly impact the profitability of fossil fuel companies as this is a key aspect of the intention of the tax.

Careful analysis should be conducted by policy makers to determine a rate that is suitable for their context. Measures could be considered to cap the highest effective tax rate from the combined effect of the rich polluter profit tax and corporate income tax, such as an 80 percent maximum rate suggested in a recent proposal for a windfall profit tax.^{xiii} Accounting for such measures is beyond what is feasible with the data we have available but could impact the revenue collected.

9. To calculate the revenue below the 3% threshold, we subtracted 96% (accounting for clean energy sales) of the 2024 EBIT from the calculation in step 6, which gives the EBIT below the 3% threshold. We then multiplied this amount by 20% to reflect the 20% tax rate set for sales below the 3% threshold.
10. The total amount calculated in step 9 (at 20%) was then added to the amount calculated in step 8 (at 50%).

11. The sum of the potential additional tax revenue from the polluter profits tax would then be US\$400,084,039,336. The amount is comparable to the estimated \$290-\$1045 billion needed annually by 2030 to pay for the loss and damage caused by the climate crisis in the Global South. We draw on a widely-cited study by Markandya and González-Eguino (2018) which provides a range of estimates for costs for each region in the world. That study, however, incorrectly adds up these regional estimates to stipulate that loss and damage costs for the Global South range from \$290 billion – 580 billion by 2030. The correct total, which Oxfam has confirmed with the authors, is \$290–1,045 billion in 2030.^{xiv}

Formula to calculate tax revenue projections: ((EBIT 2024*96%)- (Total Assets average 2019-2023*3%)) * 50% + ((EBIT 2024*96%)-result of profit taxed at 50%) * 20%).

The final sample of 585 companies have a total combined revenue of over \$7 trillion in 2024 and come from 74 countries.

Sample size	Number of countries	Combined revenue (2024)	Combined EBIT (2024)	Combined Total asset average 2019-2023	Combined tax revenue projection
585	74	\$7,228,367,255,073	\$997,288,492,373	\$8,734,937,444,770	\$400,084,039,336

Statistic 2: An additional 50% tax on the excess profits of all companies other than fossil fuel energy companies with a revenue above US\$100 million would raise US\$681bn

Using the S&P Capital IQ database, a filter was created for all companies on the database (private and public) not in fossil fuel energy sector with an Earnings Before Interest and Tax (EBIT) greater than 0 and 2024 revenue above US\$100 million. This created a 20,593-company sample.

The projected revenue for the excess profit tax was calculated using the following steps:

1. Calculate ROTA (based on EBIT) for each year from 2019 to 2023 by dividing EBIT by Total Assets.
2. Calculate the mean average of the ROTA from 2019-2023
3. Filter out all companies with EBIT average below 10%. 4,030 companies remained in the sample.
4. Calculate mean average assets for 2019 to 2023
5. 10% of the 2019-2023 total asset average are subtracted from 2024 EBIT so that only the return on assets above 10% are taxed.
6. All negative values are removed leaving 3,335 companies to whom the 50% tax applies.
7. The result is multiplied by 50% as the proposed tax rate.

The sum of the tax revenue projection is US\$681,232,730,553.

Formula to calculate tax revenue projections: ((EBIT 2024-(Total Assets average 2019-2023*10%)) * 50%.

Rationale: The application of an excess profit tax to returns over 10% is consistent with models advanced by the IMF Staff Working Paper and the study by Heck et al.^{xv} Governments will need to consider a wide range of factors in determining the precise threshold to apply such a tax. A threshold of US\$100 million was selected to make the data calculations feasible. To be clear, however, this threshold is not a policy position. In addition, government may need to ensure the overall tax system retains incentives for investors to engage in economic activities with a high risk of failure.

To demonstrate revenue potential at a lower threshold for being covered by an excess profit tax, the calculation was also repeated so that it included companies with an EBIT above 5% instead of 10%. This yielded a modelled tax revenue of US\$1.5 trillion.

Sample size	Number of countries	Combined revenue (2024)	Combined EBIT (2024)	Combined Total asset average 2019-2023	Combined tax revenue projection
3,335	100	\$13,573,533,031	\$2,687,536,383	\$13,250,709,216	\$681,232,730,553

Statistic 3: 585 of the world's largest and most polluting fossil fuel companies made \$583 billion in profits in 2024, a 68% increase since 2019. They enriched their shareholders to the tune of \$403 billion in 2024 alone

The total 2024 net profits (i.e. profits after taxes, interest and operating costs have been deducted) of the 585 fossil fuel companies in our sample was \$583,394,503,857 in 2024 and \$347,432,000,468 in 2019 according to data from S&P Capital IQ – this is a 68% increase.

Total dividends to these 585 companies in 2024 was \$403 billion.

Statistic 4: The 2023 emissions of 340 fossil fuel companies is enough to cause 2.7 million heat related excess deaths over the next century

Of the 585 companies in the scope of the polluter profit tax, Carbon Emission data: Scope 1, 2, and 3 in 2023 were available on the S&P Capital IQ database for 340 companies. Their total CO2 equivalent (CO2e) emissions were 27,012,342,238 tonnes. CO2 equivalent refers to the amount of CO2 required to have the same amount of warming as that produced by other greenhouse gases. Total human-caused global CO2e emissions in 2023 were 53.0 Gt CO2e.^{xvi} The CO2e emissions of these 340 companies (27 Gt CO2e) was therefore 50.9% of the total.

Heat related excess deaths are assessed on the basis of CO2 rather than CO2e. To calculate the impact of the emissions of the 340 fossil fuel companies, their emissions in CO2e terms was divided by the 1.375 conversion coefficient (to convert CO2 equivalent to CO2), which gives 19,645,339,809 tCO2.^{xvii}

Excess deaths are calculated by multiplying these emissions by the estimated mortality cost of carbon per metric ton coefficient 1.37E-04.^{xviii}

This calculation uses a concept called the mortality cost of carbon, which assesses excess deaths due to temperature changes caused by the climate crisis. It is one of the metrics used to calculate the social cost of carbon (SC-CO2).

The SC-CO2 is widely used, for instance, by the US Environmental Protection Agency (prior to 2025) to evaluate the impact of mitigation policies. The concept is used to calculate the cost-benefit analysis required when agencies propose environmental rules.

Oxfam chose to use the mortality cost of carbon as it shows the impact on human lives of excess heat. This assumes income-based adaptation (that countries will become richer) and that additional income is available and used to invest in adaptation measures – such as air conditioning – to reduce the risk of deaths due to heat. The deaths calculated span the 100-year period between 2023 and 2123.

ⁱ This methodology note was written by Alex Maitland, Ashfaq Khalfan and Christian Hallum, drawing on formulation of a tax by Martin Brehm Christensen, and with inputs from Didier Jacobs, Anders Sypniewski Dahlbeck, Inigo Macias Aymar and Nafkote Dabi.

ⁱⁱ Companies defined in the Global Industry Classification Standard under Oil, Gas and Consumable Fuels and Energy Equipment and Services.

ⁱⁱⁱ <https://www.investopedia.com/articles/fundamental/04/012804.asp>

^{iv} <https://www.elibrary.imf.org/view/journals/001/2022/187/001.2022.issue-187-en.xml>,
https://gala.gre.ac.uk/id/eprint/45941/7/45941_TIPPET_A_progressive%20_excess_profit_tax_for_the_European_Union.pdf

^v <https://www.iea.org/news/investment-in-clean-energy-this-year-is-set-to-be-twice-the-amount-going-to-fossil-fuels#:~:text=Clean%20energy%20investment%20by,the%20highest%20since%202015>

^{vi} <https://www.ft.com/content/c9fee776-1471-442c-aae8-8d78fe60faeb>

^{vii} <https://www.ft.com/content/ce4da4e0-192a-494a-a1a7-bea940b146f3>

^{viii} <https://www.ft.com/content/ce4da4e0-192a-494a-a1a7-bea940b146f3>

^{ix} <https://www.lazard.com/research-insights/2023-levelized-cost-of-energyplus/>

^x <https://www.elibrary.imf.org/view/journals/001/2022/187/001.2022.issue-187-en.xml>

^{xi}

https://gala.gre.ac.uk/id/eprint/45941/7/45941_TIPPET_A_progressive%20_excess_profit_tax_for_the_European_Union.pdf

^{xii} <https://www.elibrary.imf.org/view/journals/001/2022/187/001.2022.issue-187-en.xml>

^{xiii} https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3560806

^{xiv} https://link.springer.com/chapter/10.1007/978-3-319-72026-5_14. The authors' state on pages 349 and 356 that loss and damage costs for the Global South range from 290 billion – 580 billion by 2030.

However, that figure does not correctly add up the regional figures set out in Table 14.1 (p. 350) of the same chapter. Oxfam has confirmed with the authors that the correct range of estimates for loss and damage in the Global South is \$290–1,045 billion in 2030. The regional breakdown for these estimates are: Middle East and North Africa: \$36-130 billion, Sub-Saharan Africa: \$31-112 billion, South Asia: \$96-345 billion, China: \$8-28 billion, East Asia (Not including Japan and Korea): \$34-122 billion, and Latin and Central America and the Caribbean: \$86-308 billion.

^{xv}

https://gala.gre.ac.uk/id/eprint/45941/7/45941_TIPPET_A_progressive%20_excess_profit_tax_for_the_European_Union.pdf

^{xvi} https://edgar.jrc.ec.europa.eu/report_2024

^{xvii} https://www.oxfamfrance.org/app/uploads/2024/10/Methodology-note_carbon-inequality-kills-28-October.pdf, p. 9.

^{xviii}

<https://static1.squarespace.com/static/59bf26af29f187c6f3a9fbbf/t/678f111666f6b97afdd39e9c/1737429272631/JMP.pdf>