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Implications of the Energy Profits Levy for long-term UK Energy Strategy – Analysis

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1. Overview

On 26 May 2022, the UK government announced a windfall tax of 25%[1] on "the extraordinary profits that the oil and gas sector is making" (UK Government, 2022a). The Energy Profits Levy is effective immediately, with a sunset clause at the end of December 2025, or alternatively as soon as oil prices "return to historically more normal levels" (UK Government, 2022a). The Levy was introduced with an investment allowance – i.e. an allowance generated on investment expenditure of 80%, which could be used immediately by companies to reduce the amount of profits subject to the Levy.

The main qualifying criterion for the allowance is that investment is made into UK oil and gas exploration/production, "to provide an immediate incentive for the oil and gas sector to invest in UK extraction" (UK Government, 2022a). Therefore, for instance, companies that have expenditure already planned in the North Sea should be able to offset the impact of the Levy, while those that do not should be incentivised to spend on new exploration/production. In its announcement, the government highlighted three objectives for its policy: to support the UK economy, jobs, and energy security (UK Government, 2022a).

This analysis sets out some implications of the windfall tax for the UK's net zero commitments and energy strategy. Our analysis suggests that the Levy could have been leveraged more effectively to deliver its stated goals; it also highlights a gap in strategic longer-term thinking around the UK's transition to net zero.

2. Windfall taxes- precedent and application

Windfall taxes are typically imposed by governments on firms making supernormal profits – i.e. a return that is more than what would normally be needed to incentivise a company to go ahead with the investment and reward shareholders for the risk they are taking. In this context, windfall taxes are considered by many to be relatively efficient (NIESR, 2022).

There is precedent for windfall taxes in many countries, across a variety of sectors (e.g., banking, energy) (Sgaravatti et al., 2022). They have been applied frequently in the extractives sector – particularly oil and gas – as firms can earn unexpectedly high rents from the extraction and sale of exhaustible hydrocarbon resources, that are traded on prices set by international markets. Windfall taxes in this context are referred to as 'resource rent taxes' (Land, 2008).

Recent examples of windfall taxes being used specifically in the UK include: a 1997 tax on companies formed following the privatisation of utilities, which the government at the time argued had been sold at lower than optimal prices; and, a windfall levy on banks in 1981 which

[1] The windfall tax is an increment on existing tax rates and brings the total headline tax rate paid by oil and gas companies to 65% (including a 30% Ring Fence Corporation Tax and 10% Supplementary Charge). Companies will not be able to offset previous losses or decommissioning expenditure against profits subject to the levy.

the government at the time argued had overly benefited from high interest rates. In response to the recent rise in energy prices, five EU countries (Bulgaria, Italy, Spain, Romania and Germany) have also proposed or enacted windfall taxes (Sgaravatti et al., 2022)

'Windfall taxes' are so-called because they are imposed as a one-off measure to capture unusual rents (or 'windfalls') and it can be argued that by definition, they cannot be regularised or predicted.

Nevertheless, it is important to consider windfall taxes in their long-term strategic context. In the case of the Energy Profits Levy, this means, not least, the UK's commitment to net zero emissions. The risk of geopolitical disruptions suggests that fossil fuel prices are likely to continue to be volatile in the transition to net zero – signalling the need for strategic long-term policies to ensure a timely rapid transition. It is worth asking how the windfall tax interacts with structural fiscal measures, which take into account the likely shift in energy sector tax base, from firms producing fossil fuels to those producing renewables and zero carbon energy.

Windfall taxes can also be seen as cyclical policies. They respond to unexpected fluctuations in economic variables, in particular prices and profits. As such they may be informed by our understanding of how climate and energy policy should respond to economic fluctuations. It is rational for environmental taxes to be higher when firms do well and lower when times are hard. Building responsiveness into the design of tax instruments in this way can reduce the burden of regulation, by distributing it more evenly over time, and thus also reduce the burden on consumers (Doda, 2016).

3. Could the Energy Profits Levy have been leveraged more strategically for the UK energy transition?

The most contentious part of the Levy from a net zero point of view is that it lacks a comparable incentive for investment into low-carbon technologies, including intermittent renewables, storage, and green hydrogen. Some have argued that it amounts to an effective fossil fuel subsidy, which is likely to be inefficient, fiscally unsustainable and difficult to remove (Gencer and Akcura, 2022).[2] The absence of a clear and increasing incentive to clean technology investments[3] also potentially contradicts UK government ambitions around the imperative for increased investment in both North Sea oil and gas as well as clean technologies (BEIS, 2022). Some have argued that the issue is a systemic one based on the structure of the wider fiscal regime, i.e. the ringfenced tax regime for oil and gas requires that the investment allowance is applied against profits from oil and gas only. [4]

We argue that the Energy Profits Levy could have been better aligned with the UK's net zero commitment, while meeting its stated objectives (primarily: taxing supernormal profits, and secondarily: supporting the UK economy, jobs, and energy security), if other plausible alternatives were to be considered in its implementation.

[2] Also relevant here is the UK government's own Subsidy Control Act and the definition of a subsidy within it. See Draft Statutory Guidance on the Subsidy Control Act 2022.
[3] Notwithstanding existing incentives to renewables, which could be expanded/extended.
[4] See online thread by Chris Stark, Climate Change Committee, which discusses systemic issues and risks. Expanding the investment allowance beyond the oil and gas sector without wider fiscal reform may blur the distinction between ring-fenced trades in the tax regime for oil and gas, vis-à-vis the 'general' tax regime; in the same vein, potential competitiveness concerns are an issue, if oil and gas companies are given an incentive for renewables that is not available to other types of energy companies.

3.1 Supporting the UK economy

While there are medium-term economic benefits of substituting imports with UK domestic production, including an improved ability to supplement government revenues (by capturing rent), the policy does not resolve the fundamental structural problem of economic exposure to the volatility of oil and gas prices, which continue to be determined on international markets.

The focus on fossil fuel investment also risks creating stranded oil and gas assets and misses the opportunity to better capitalise on 'green growth', either through supporting emerging technologies (e.g., green hydrogen) or more established (e.g., wind; heat pump) technologies. This is especially pertinent when there is a visible need for public funding into alternative clean technologies, particularly in the innovation and scaling phases.

Based on a 'thought experiment' we estimate what a maximum value of the investment allowance[5] from the windfall tax could have translated to if it had been entirely diverted to different low-carbon technologies within the domestic economy:[6]

- **An addition in UK renewable power generation capacity**: the allowance could support a trebling in the UK's installed offshore wind capacity – by adding ~20GW to the existing 10GW. This would have helped meet (or exceed) the Climate Change Committee's recommended target for 2030 (CCC, 2020)

- **An increase in installations of low-carbon heat management technologies**: the allowance could have funded the deep retrofits of ~500,000 semi-detached houses, or, the installation of ~1 million air source heat pumps in UK homes

- **Supporting electric vehicle charging infrastructure:** the allowance could have helped expand Electric Vehicle (EV) charging infrastructure by more than doubling the number of domestic EV chargers. For instance, the allowance could support the installation of ~6 million domestic EV chargers, through targeted top-up funding (e.g. to vulnerable households)

On the other hand, windfall taxes could raise the risk premium for investors in sectors on which they are imposed and thus the required return on capital on both clean and dirty investment. In the energy sector, this may be passed through to consumer bills, impacting affordability (although the recycling of revenues may partially offset this).

3.2 Impact on UK jobs

An unintended consequence of the Levy and investment allowance is the risk of creating stranded assets in the oil and gas sector in the longer-term, potentially exacerbating the risk

[5] The government estimates that revenues raised from the Levy will be £5 billion in the first 12 months; we assume for simplicity that companies use up the full 80% investment incentive on an equivalent amount of investment to reduce their tax burden, which equates to £4 billion. This is comparable to an estimate from a similar analysis (see 'Fracking firms could share in UK fossil fuel tax breaks', *The Guardian,* 28 June). This could possibly be a conservative estimate, if the £5 billion referred to revenues collected by government *after* the investment allowance deductions had been claimed.
We use data from Climate Change Committee (CCC, 2020), BEIS (2021), assumptions on UK renewable load factors and on UK offshore wind capacity factors to arrive at our estimates.
[6] Alternatively, these options could also be thought of as representative of what the additional revenues raised from the Levy could have translated into, had the investment allowance not been included.

of stranded *jobs* in regions of the UK. Notwithstanding ongoing and future geopolitical shocks, there is now a broad consensus that oil demand is likely to plateau in the next two decades or less[7] - indeed persistently high oil and gas prices could lead to faster 'demand destruction'.[8]

Analysis by Unsworth et al. (2020) suggests that the 10 most deprived constituencies across Great Britain, where thousands of workers are exposed to the risks of the zero-carbon transition, are also constituencies that would benefit from the new jobs and industries associated with the transition – including renewable power generation, housing energy efficiency, EV production, and hydrogen with CCUS (Unsworth et al., 2020). It is estimated that an average of 13.5% of jobs in these 10 constituencies will require reskilling, higher than the national average of 10.5%, while at the same time, 14.2% of the jobs in these areas will be in higher demand in the transition, again above the national average of 10.3% (Robins et al., 2020; Unsworth et al., 2020).

Tying the investment allowance to reskilling the labour force in low carbon technologies, particularly in these 'at-risk' regions, could lead to positive spill overs and more sustainable employment in lagging areas of the UK (Zhou et al., 2022).[9]

3.3 Impact on wider UK energy objectives

The circumstances around the Levy potentially represent a 'sensitive intervention point' for climate policy (i.e. a small policy measure that creates disproportionately positive impacts by 'kicking' or 'shifting' the UK energy system onto a net zero pathway (Farmer et al., 2019). But to achieve this, the Levy needed to be designed in a way that addresses the stated energy security issues more quickly, and without polarising trade-offs for consumer affordability and emissions. For instance:

- Directing the investment allowance at alternative technologies, including energy efficiency (e.g., insulation) or low-carbon supply technologies (e.g., renewable energies) could have displaced fossil fuel demand in the medium term.

- Short-term energy security issues could be addressed more quickly by investing in and deploying alternative low-carbon technologies that have a quicker timeline to operationalisation (e.g. around 1-2 years for the development process for commercial solar)[10] than domestic oil and gas exploration and production (e.g. 4-10 years for gas, if already appraised), most of which is exported on international markets.[11]

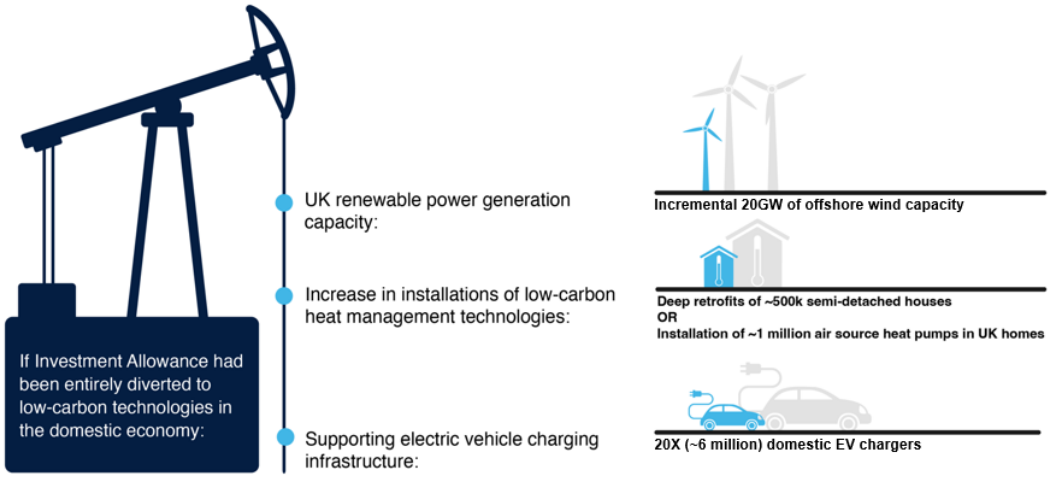
The above interventions would have contributed not just to energy security, but also the other trilemma dimensions of affordability and sustainability (see Figure 1). For instance, energy efficiency measures could help towards resolving the energy trilemma by reducing import dependence, reducing emissions and by extension, helping with affordability (BEIS, 2018).

[7] See Nakhle, C. (2022) 'Peak oil demand will change global market dynamics', *GIS Reports Online.*
[8] See 'Snapshot of global oil and gas demand', *McKinsey,* June 2022.
[9] Unsworth et al. (2020; p.11) provide a summary of *ex ante* estimates of job creation from net-zero aligned investments.
[10] See Beba Energy (2022).
[11] See UKAID (2014).

3.4 Implications for the UK's leadership on climate change

The policy implies an 'international signalling effect' both internationally and domestically on UK intentions around its climate targets and commitments. As the UK's Climate Change Committee outlined in their February 2022 letter to BEIS, there is a concern that further oil and gas extraction could weaken UK diplomacy to encourage other countries to adopt ambitious targets, in addition to weakening the UK public's perception of the government's intentions (CCC, 2022).

Figure 1: Potential impact of diverting the investment allowance entirely to low carbon technologies in the domestic economy – a 'thought experiment'



Credit: Liliana Resende, Smith School of Enterprise and the Environment

4. Need for a long-term strategic and integrated energy policy

Our arguments suggest that while a windfall tax can successfully capture some of the rents earned by oil and gas companies and recycle them back to households to mitigate the impact of higher fossil fuel prices, it is a stop-gap measure rather than a sustainable long-term strategy to effect a timely transition to net zero.

As a windfall tax, the Levy effectively raises the required rate of return and thus the cost of capital for fossil fuel investors (through a higher risk premium). While it is desirable in the long-term for fossil fuel investments to be viewed as 'riskier' investments, tying the investment allowance to the alternatives that we have identified could potentially have improved the relative cost of capital of clean energy, versus that of fossil fuels.

A net zero transition is inevitable[12], and along with it there will be implications for energy sector fiscal policy as the composition of the tax base shifts within the energy sector, from fossil fuel to renewable resources and firms producing energy. Sound energy policy should be underpinned by sound fiscal policy over the economic cycle.

Going forward, there is a need to develop an integrated energy sector fiscal strategy in order to provide more clarity to the sector, and to investors, and protection for vulnerable household consumers.

In recent interactions between the government and oil and gas companies, there were reportedly indications around a 'trigger' threshold price below which the Levy could cease to apply.[13] A medium-term UK energy sector fiscal strategy could contain some form of upstream carbon taxation over economic cycles, notwithstanding the existing coverage of fossil fuels in the Emissions Trading System (ETS), downstream. There are trade-offs that would need to be carefully considered in the policy debate over such a strategy (Foramitti et al., 2021).

Revenues from such a policy[14] would continue to be recycled back to vulnerable households to mitigate the impact of price volatility, while investments into net zero transition technologies would also need to continue.[15] A longer-term strategic policy would seek to integrate various fragmented strategies that currently exist (e.g. the British Energy Security Strategy in 2022; and the North Sea Transition Deal in 2021). In the interim, any increases in carbon emissions as a result of this short-term energy strategy shift should be considered as 'borrowing from the future', given the finite carbon budget and the need to maintain the credibility of the UK's net zero commitments.

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[12] The last UK CfD auction round has continued to push prices down for offshore wind energy. See *Results of Auction Round 4*.

[13] Reportedly $60-$70/barrel of oil, or around 35-40% below current price levels. See 'UK oil and gas producers warn Sunak over windfall tax', *Financial Times,* 23 June.

[14] Similar to a 'carbon dividend'. See Burke (2021).

[15] For examples of comparable strategies, see the RePower-EU Toolbox.

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