

# Should the Government Impose a Carbon Tax?

The carbon tax intends to reduce emissions of carbon dioxide and other greenhouse gases and is a tax that the UK government should consider, as global warming becomes an increasingly pressing concern. Carbon pricing measures have been implemented in over forty countries worldwide (including some cap-and-trade systems which differ from taxes). The UK, in the midst of the coronavirus pandemic, recently exited the European Union which resulted in their exit from the EU Emissions Trading System (ETS), leaving the UK without this climate change scheme in place. Currently, a carbon tax seems unlikely to be imposed in the near future even though it should be, with an abundance of proof to back this up.

First, it is important to address the difference between a direct tax and a cap-and-trade system. Despite both being forms of carbon pricing, in general terms the former establishes the price of carbon dioxide emissions allowing the market to decide the quantity, whereas a cap-and-trade system has a maximum level of pollution set whilst allowing markets to determine prices. Both entail risks because estimating the prices and amounts of CO<sub>2</sub> – for a cap-and-trade and tax system respectively – is tremendously difficult as also mentioned by the Brookings Institution<sup>1</sup>. However, a cap-and-trade has fluctuating costs in the market as the prices are not controlled like a tax which is a much more significant issue than varying emissions. This can ultimately instigate *regulatory instability*<sup>2</sup> – essentially the failure of financial regulation in a market, causing it to be unstable. This would result in several economic problems such as falling long term income, unstable prices, and loss of bargaining power. Additionally, although minor, a tax is easier administratively as setting a price is much simpler than a cap-and-trade's requirement to issue permits in each sector, which ends up being a much more time-consuming, resource-intensive task. Surveys have shown that over 50% would prefer a straightforward tax to a cap-and-trade<sup>3</sup>, which implies people have already expressed their support for a carbon tax.

If correctly implemented, there is likely to be a decline in CO<sub>2</sub> emissions. The UK currently has no form of carbon pricing but if they utilise a model similar to Sweden's, they would surely retain low pollution levels. In 1991, Sweden, along with a pre-existing energy tax, introduced their carbon tax system. Since their voluntary exit from the ETS, their system has thrived. Their tax discourages businesses to emit greenhouse gases due to the high levy

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<sup>1</sup> Frank C. *Pricing Carbon: A Carbon Tax or A Cap-And-Trade* (2014)

<https://www.brookings.edu/blog/planetpolicy/> Accessed January 2021

<sup>2</sup> Friedrich M., Fries S., Pahle M., Edenhofer O. *Rules vs Discretion in Cap-And-Trade Programs: Evidence from the EU Emissions Trading System* (2020) Abstract, Page 3

<sup>3</sup> The Initiative on Global Markets, *Carbon taxes are a better way to implement climate policy than cap-and-trade* (2021)

of 114€ per ton<sup>4</sup>. This has officially led to a 27% decrease in CO<sub>2</sub>eq emissions<sup>5</sup> since 1991 (CO<sub>2</sub>eq equals approximately 80% CO<sub>2</sub>). Now Sweden is amongst the greenest countries of the world, with this in place. Sweden's example is compelling evidence to the UK that a carbon tax would preserve our environment via the reduction of carbon emissions. Not only does global warming have devastating effects on several species and ecosystems, but melting ice can increase flood risk, meteorological hazards will become stronger, and forest fires will become more severe. Despite the diminution of gases being the primary goal, the secondary effects are arguably more favourable.

Another advantage of a carbon tax is that it encourages innovation with more eco-friendly alternatives. Not only will this incentivise more efficient renewable energy in the future, but it could also provide an abundance of job opportunities. Innovation will occur because companies will most likely not be able to afford burning fossil fuels in the long term. Therefore, other energy resources will have to be considered such as wind, nuclear, and hydroelectric which will become more profitable than less eco-friendly forms of energy. Secondly, more environmentally friendly resources and technology will open a new window which could create a new, very competitive market along with thousands of new employment opportunities. A competitive market is widely known to boost the economy in terms of productivity, but companies also focus more on their customers. Moreover, with this new eco-friendly sector, several additional jobs will be available as well as new educational opportunities to help maintain a sustainable environment and benefit the public. In essence, a carbon tax would indirectly stoke all of these activities, and although this could be costly at first, is likely to be a worthwhile investment in the long run.

A carbon tax could also generate lots of revenue for the government. This is because – as well as the taxes already in place – the government will obtain money from the tax levied on fossil fuels. This can especially be seen in the predictions of the US Congressional Budgets Office's. Several years ago they claimed their carbon tax model would generate a potential \$120 billion annually<sup>6</sup> which would have been funnelled into further production of renewable energy but these plans were later put aside. On the other hand, Canada's Parliamentary Budgets Officer predicts that their fuel charge – their tax issued on domestic transportation – will only earn the government \$5.77 billion with a \$50 per tonne tax<sup>7</sup>

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<sup>4</sup> Ministry of Finance, *Sweden's Carbon Tax* (Updated January 2021)

<sup>5</sup> Swedish Environmental Protection Agency, Statistics Sweden, *Sweden's Carbon Tax* (2018)

<sup>6</sup> Congressional Budgets Office, USA, *Effects of a Carbon Tax on the Economy and the Environment* (2013)

<sup>7</sup> Parliamentary Budgets Officer, *Fiscal and Distributional Analysis of the Federal Carbon Pricing System* (April 2019)

because 90% must be rebated according to Canadian law which helps in *revenue neutrality*<sup>8</sup>. This involves nearly all the money for taxes being paid back to households, but by repaying individual households with tax credit, consumption increases, which would ultimately fuel the economy, favouring a carbon tax.

Conversely, despite being beneficial for individuals and households, some may argue a tax could unfairly penalise companies that are unable to avoid, or have no alternative to emitting carbon. This would affect the sectors leaving the largest carbon footprint such as the technology, transportation, and agricultural industries. It may be thought that they would suffer tremendously as a large fraction of their profits involve environmentally unfriendly processes. This is false due to its many loopholes: the first is that these companies obtain billions from the government, solely from tax subsidies to compensate for their losses. On average, the UK (before leaving the EU ETS) spent approximately \$10 billion to support the highest emitters each year<sup>9</sup>. The second, more significant point is that companies will continue to pay the tax, but in order to make up for this they hike the prices of their own products. These two factors could have multiple effects on society. The first effect on society would be that when companies increase their prices, there would be inevitable inflation, although its contribution would be noticeable only in the long run. Patently, if subsidies are given and companies unconcernedly fulfil the tax requirements – because they can just increase the prices of their own products – the whole cause would become less effective. Fortunately, the G7 countries came to an agreement in 2016 to phase out the subsidies to help with the climate change fight, however, little action can be taken against companies disregarding their emissions and directly passing the tax on to the general public to improve their income. This point also explains why many oil giants have showed their support for a carbon tax, as explained by former BP CEO Bob Dudley in a recent Bloomberg interview<sup>10</sup>, because these oil companies are fully aware that a carbon tax will hardly affect their profits. Finally, a carbon tax can be avoided simply by shifting productions to a tax free country. By doing this, companies would pay no levy when burning carbon, therefore increase their profits whilst emitting equal amounts of carbon as before. In a company's point of view it could be expensive at first, but it would become a rewarding investment over time. These loopholes, to summarise, would lose a lot of the public's backing and heavily discourage its implementation because the main purpose in reducing

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<sup>8</sup> The Guardian, Jacoby H.D., *There's a simple way to green the economy – and it involves cash prizes for all* (January 2021)

<https://www.theguardian.com/commentisfree/2021/jan/05/> Accessed February 2021

<sup>9</sup> Overseas Development Institute (ODI), *Are the G7 on track to phase out fossil fuel subsidies by 2025?* (June 2018)

<sup>10</sup> Bloomberg, *Many Oil Companies Support Carbon Tax: Former BP CEO Bob Dudley* (October 2020) <https://www.bloomberg.com/news/videos/2020-10-19/> Accessed February 2021

carbon's presence is lost.

Evidently, although a carbon tax may initially seem a commendatory idea there are numerous loopholes as well as its regressivity and devaluation of coal stockpiles which may somewhat reduce its effectivity. Despite this, the three major benefits of reducing emissions, generating government revenue and encouraging sustainable alternatives collectively outweigh the disadvantages because loopholes can be rectified in the long term, whereas the benefits will be permanent. Consequently, if the UK government can map out a scheme with the correct and necessary enforcements made, a carbon tax should be imposed.

## Bibliography:

Bloomberg, *Many Oil Companies Support Carbon Tax: Former BP CEO Bob Dudley* (October 2020) <https://www.bloomberg.com/news/videos/2020-10-19/> Accessed February 2021

Catapult Network, *Sweden Energy and Carbon Tax Policy*

Congressional Budgets Office, USA, *Effects of a Carbon Tax on the Economy and the Environment* (2013)

Forbes, Ghilarducci T. *Why Big Business Might Welcome A Carbon Tax* (March 2019) <https://www.forbes.com/sites/teresaghilarducci/> Accessed February 2021

Frank C. *Pricing Carbon: A Carbon Tax or A Cap-And-Trade* (2014) <https://www.brookings.edu/blog/planetpolicy/> Accessed January 2021

Friedrich M., Fries S., Pahle M., Edenhofer O. *Rules vs Discretion in Cap-And-Trade Programs: Evidence from the EU Emissions Trading System* (2020) Abstract, Page 3

The Guardian, Jacoby H.D., *There's a simple way to green the economy – and it involves cash prizes for all* (January 2021) <https://www.theguardian.com/commentisfree/2021/jan/05/> Accessed February 2021

The Guardian, *Carbon tax v cap-and-trade: which is better?* (2013) <https://www.theguardian.com/environment/2013/jan/31/> Accessed February 2021

The Initiative on Global Markets, *Carbon taxes are a better way to implement climate policy than cap-and-trade* (2021)

Ministry of Finance, *Sweden's Carbon Tax* (Updated January 2021)

Overseas Development Institute (ODI), *Are the G7 on track to phase out fossil fuel subsidies by 2025?* (June 2018)

Parliamentary Budgets Officer, *Fiscal and Distributional Analysis of the Federal Carbon Pricing System* (April 2019)

Swedish Environmental Protection Agency, Statistics Sweden, *Sweden's Carbon Tax* (2018)

Swedish Government, *Carbon Taxation in Sweden* (January 2021)

UN Climate Change Conference 2021, *Uniting the World to Tackle Climate Change*, <https://ukcop26.org/>