A carbon tax could both help to pay for the enormous costs of the pandemic and encourage investment to combat climate change. Ralf Martin and John Van Reenen explain how, noting, crucially, that the tax should be levied in a few years’ time, when the UK economy has begun to recover.

Climate change policy: the case for a Covid-19 carbon tax

Life on earth has changed fundamentally in recent months. While in the short run, the immediate response to the Covid-19 crisis is paramount, many have started to ask about the impact of the pandemic on the looming climate emergency.

Optimists hope that the shock of the pandemic, coupled with the experience of lockdown, translates into a new momentum for transition to a ‘clean’, green economy. Attitudes towards scientific advice might have changed. New and less pollution-intensive ways of working remotely might have been learned. Governments might embark on stimulus spending with a strong emphasis on investment in clean infrastructure and innovation.

But our big concern is that despite good intentions, governments and business will be severely constrained in their spending once the immediate crisis is over because of the extraordinary financial burden of lockdown. Hence, far from an increase in investments needed for the transition to a clean ‘net-zero carbon’ economy, there could be a reduction.

In this situation, a moderate carbon tax – of say £50/€56 per tonne of carbon dioxide emitted – that was announced now, but imposed only at some point well into the recovery period (say, around 2025), could solve several problems simultaneously.

First, a tax of this kind would help governments to bolster the public finances. For example, the UK government put together a package of around £400 billion to help the Covid-19-stricken economy. If the UK reaches its net-zero carbon goal by 2050, the total remaining revenue from a £50 carbon tax starting in 2025 would amount to something in the order of £150 billion, which would recover a large chunk of the government’s Covid-19 spending.

Second, the tax would send the right signals to businesses and households to invest in reducing carbon emissions. It would also safeguard against the potential threat to clean investments due to the low cost of fossil fuels in response to the
Covid-19 fallout (including, at one point, negative oil prices). At the same time, it would not have cash flow implications for businesses struggling with the fallout from the crisis, as no actual tax would be levied immediately.

Third, it would help to promote growth. In our research, we have identified that carbon and fuel price increases spur clean innovation and deter ‘dirty’ innovation with a net-positive impact (Aghion et al, 2016). Furthermore, we have evidence that clean innovation also raises productivity elsewhere in the economy (Martin, 2014). Moreover, some of the revenues raised by the tax could be used to subsidise green technologies. Since innovation is the key driver of sustained economic growth, a carbon tax is therefore likely to lead to more economic growth, which is exactly what is needed to recover post-lockdown.

Fourth, while the efficiency-improving elements of a carbon tax or other forms of carbon pricing have long been stressed by economists, political opposition has hampered their widespread adoption. But if done carefully, the post-pandemic economic and political landscape might prove an opportune environment for carbon pricing. People realise that the crisis spending must be recouped in the long run, so some revenue raising will be inevitable. In this case, why not do it in a way that helps to tackle the climate crisis? Success would in part depend on how fairly the carbon tax is implemented, as well as how it is communicated. For fairness, we must address the distributional impact of carbon pricing to avoid the poor being hit harder than the rich.

This could be accomplished by paying back some of the revenue in the form of an allowance to lower-income households. It also provides an opportunity for making a carbon tax popular – as seems to be indicated by the recent experience of British Columbia (where all money raised by the carbon tax was returned to the people in tax cuts).

Our efforts must also be sensitive to existing carbon-pricing schemes. Even though in terms of impact on the climate it does not matter how a given unit of a greenhouse gas is emitted, existing regulations treat different emitters (and even different emissions from the same emitter) vastly differently. This makes carbon regulation inefficient and therefore more expensive than it needs to be. A Covid-19-related general increase in carbon pricing could be used to rectify some of these differences.

To implement this policy successfully in the future would need a cross-party consensus. This seems feasible in the UK as the Conservatives have recently committed to the net-zero carbon target by 2050 and Labour has been championing climate change action over recent decades.

Is paying down the government’s Covid-19 debt the best use for the carbon tax revenue? Our view is that some of it could be used for this purpose, but with low interest rates for the foreseeable future, the revenues should also be used in a variety of ways we have discussed – from equitable tax reforms to long-run public investment. These policies should be part of a new ‘Marshall Plan for Growth’ after the pandemic, one that is tilted towards the green transition.

Carbon and fuel price increases spur ‘clean’ innovation and deter ‘dirty’ innovation

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Further reading
