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Policy brief

Pricing carbon during the economic recovery from the COVID-19 pandemic

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Headline issues

- The global recovery from COVID-19 has to make society less vulnerable to future climate, ecological or public health risks.
- Careful implementation of carbon pricing with reductions in fossil fuel subsidies should be included in the economic recovery in all countries.
- Any revenues raised can support the COVID-19 recovery by boosting consumption and investment or softening the hit on fiscal deficits.

Summary

While businesses require government assistance during the economic crisis caused by COVID-19, it is the wrong moment to slow down the global progress in carbon pricing or to delay the removal of fossil fuel subsidies. Carbon pricing removes the implicit subsidy for greenhouse gas emissions yet less than 5 per cent of global emissions covered under carbon pricing initiatives are priced at a level consistent with achieving the goals of the Paris Agreement and global fossil fuel subsidies remain large.

If the post-COVID-19 recovery is distorted in favour of a high-carbon economy, we will rebuild economies that are more vulnerable to future risks and lock in a high-carbon path that is more costly to reverse later. The COVID-19 recession has significantly lowered the price of oil. A strong carbon price is needed to prevent a recovery in demand for oil driven by the lower price and to incentivise the shift to cleaner sources of energy.

Governments have responded to the pandemic with an unprecedented increase in public spending. This is sound economic stewardship but eventually debt levels will need to be brought down. Policymakers must avoid 2010s-style austerity. Carbon pricing raises revenue in a better way than labour or income taxes. However, most carbon price revenues should be recycled. A 'citizen dividend' can help build popular support for carbon pricing and would help to keep up consumer spending.

Policy briefs provide analysis on topical issues, presenting specific recommendations to inform ongoing policy debates. Drawing on the Grantham Research Institute's expertise, they summarise either our research findings or the state of knowledge about a particular issue.

This policy brief has been written by **Josh Burke, Sam Fankhauser and Alex Bowen.**

"If carbon is not priced and fossil fuels are subsidised, the post-COVID recovery will be distorted in favour of a high-carbon economy, with unavoidable future vulnerability to climate change"

Why carbon pricing, why now?

The COVID-19 pandemic is causing human tragedy and economic damage at an unprecedented scale. While the immediate focus of rescue packages has been on the public health emergency, in the recovery attention will inevitably turn to measures that stimulate economic growth and reduce unemployment. Calls to 'build back better' have focused on the importance of clean investment in stimulating a sustainable economic recovery. But what role could carbon pricing play?

Currently, carbon pricing levels are too low and fossil fuel subsidies too high. Less than 5 per cent of global emissions covered under carbon pricing initiatives are priced at a level consistent with the goals of the Paris Agreement, estimated to be US$40–80 per tonne of carbon dioxide (tCO_2) by 2020 and US$50–100/$tCO_2$ by 2030 (World Bank, 2019). A study for the IMF notes that in 2017, global pre- and post-tax fossil fuel subsidies remained large, at US$296 billion and $5.2 trillion (6.5 per cent of global GDP), respectively (Coady et al., 2019). This suggests that the current crisis is the wrong moment to slow down global progress in carbon pricing (in coverage terms and in the level of pricing) or to delay removing fossil fuel subsidies.

Businesses urgently need support but this should not be through the extension of harmful policy failures. Although the speed of the recovery is unlikely to be influenced by the choice of carbon pricing instrument or the abolition of fossil fuel subsidies, it will have a major effect on the sustainability, inclusivity and resilience of the recovery.

The recovery has to make society less vulnerable to future ecological, public health and climate risks. Pricing in such risks will direct financial capital and political focus towards a more resilient economy. However, given the existence of multiple market failures, carbon pricing on its own is not sufficient. Standards and regulations in non-price-sensitive sectors and support for clean technology innovation will also be needed.

Once the immediate rescue has been secured and countries move towards recovery, carefully implementing carbon pricing while reducing fossil fuel subsidies should be at the core of any stimulus package. This carbon price need not be uniform, but may reflect sectoral differences in investment costs, price sensitivity and distributional effects. There are two strong arguments to support this: (i) to prevent a distorted recovery; and (ii) to raise revenues to soften the hit on fiscal deficits or support consumption and investment.

Preventing a distorted recovery

Carbon pricing is fair and efficient and sends a clear message that the polluter must pay. But if carbon is not priced and fossil fuels are subsidised, the post-COVID-19 recovery will be distorted in favour of a high-carbon economy. It would lock in a high-carbon path that is costly to reverse later, with unavoidable future vulnerability to climate change and reduced resilience to future environmental shocks. It increases the risk of stranded assets and misses an opportunity to realise the full benefits of sustainable growth. Carbon pricing with complementary measures will encourage the substitution of high-carbon goods and services with lower-carbon technologies, stimulating sustainable growth rather than driving down economic activity.

A substantial[1] carbon price is desirable even during an economic downturn (Doda, 2016). If the

Note

1. By 'substantial' we mean a carbon price that has a sufficiently high price level, large sectoral coverage and limited exemptions.

carbon price signal is insufficient, environmentally harmful behaviour will persist and the deployment of zero-carbon goods and services will not accelerate.

The oil market is a case in point. Oil is a flex-price sector, where most of the response to the sudden decline in demand comes in the form of price falls rather than output adjustments, especially if cartelised oil producers cannot agree production cuts. The COVID-19 recession is moving oil prices in the wrong direction, stimulating demand at a time when more oil (and other fossil fuel) consumption should be discouraged. A strong carbon price signal is needed to prevent a recovery in the demand for oil and staunch any rebound of goods and services that use oil. As the main demand is from surface transport, the carbon price would also serve to redirect demand to more sustainable means (e.g. electric vehicles and bicycles). At the same time, governments around the world need new policies to encourage and guide households and businesses towards making these shifts, especially as they begin to advise against mass transit in favour of walking, cycling and private vehicles.

Putting a price on carbon can achieve both economic and environmental objectives. Downturns are a good time to advance emissions abatement ambition, as production patterns are in flux and marginal capital stocks are written off through bankruptcies. This makes it easier, temporarily, to redirect economic systems in a zero-carbon direction, and a strong carbon price can help to guide recovery decisions.

To some extent, distortions can be addressed through conditionality on recovery packages (e.g. airline bailouts can be made conditional on carbon efficiency targets, as the Austrian and French government have indicated theirs could be). Conditional bailouts will be more effective if complemented by the right carbon price signal, either via the tax system or within the architecture of existing emissions trading schemes. Recognising this, the French authorities (2020) and the UK Committee on Climate Change (2020) have both recently reiterated the need for a strong carbon price.

An important consequence of carbon pricing and reduced fossil fuel subsidies in fossil-fuel-rich countries is that it helps to disincentivise an economic recovery that is overly reliant on a single commodity. The policy response to falling oil prices should not be additional support but a recognition that oil-producing economies need to diversify: a salutary lesson for OPEC members and Russia.

Using carbon tax revenues

Governments have responded to COVID-19 with an unprecedented increase in public spending, at a time when the global economy (and therefore tax income) is expected to contract. The immediate fiscal injection has been as high as 10.1 per cent of GDP in Germany, 9.1 per cent in the United States and 4.5 per cent in the UK (Anderson et al., 2020). The impact of this spending on debt and GDP will not be uniform, owing to countries' varying stages of development, economic structures and institutions. These interventions have been essential to stabilise economies. With interest rates at a record low, rescue and recovery packages can be financed cheaply through debt, at least in countries that can raise finance in their own currencies and do not have a history of defaulting or hyperinflation.

However, debt levels will eventually need to be brought down by

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prudent deficit finance rules. With a fragile global economy, policymakers must avoid 2010s-style austerity. Countries should follow the recommendations of modern Keynesian macroeconomics, which emphasises the growth effect of countercyclical fiscal spending. They should also prepare proactively, as the UK did in World War II when it published, in 1942, *The Beveridge Report*, laying the foundations for the post-war welfare state.

Carbon price revenues could be an important part of the post-COVID-19 fiscal landscape. A carbon tax or permit auctions are a temporary revenue source because the tax base is eroded over time, but structurally they can provide a large source of revenue. In the UK, this could be in the region of £15 billion a year over the next 10 years (Burke et al., 2020), equating to roughly three-quarters of annual public spending on adult social care. Globally, governments raised around US$44 billion in carbon pricing revenues in 2018, up from US$33 billion in 2017 (World Bank, 2019).

Carbon pricing is an alternative way of raising revenues that does not rely on labour or income taxes, which distort the economy. Taxes could be moved from people to polluters. How the proceeds are used is a political choice. Proponents of carbon pricing often advocate the return of tax or allowance auction revenues to consumers in a 'citizen dividend'. This is akin to a modest version of the universal basic income and helps build support for carbon pricing. In a post-COVID-19 recovery, a citizen dividend could be used to keep up consumer spending, similar to current US measures that put money directly in people's bank accounts ('recovery rebates'). As carbon pricing can have regressive impacts, targeting 'citizen dividends' at low-income households may be preferable.

While hypothecation risks sacrificing fiscal efficiency, conventional thinking – where all proceeds are treated as general tax – may have to be abandoned to foster greater political acceptability and durability.

Recommendations for governments globally

1. In planning for the economic recovery from COVID-19, include zero-carbon investment but also give serious consideration to the role of carbon pricing and reduced subsidies for fossil fuels.

2. Remove fossil fuel subsidies and put in place carbon pricing, increasing price levels over time as the economy recovers and carbon constraints tighten.

3. Use carbon pricing revenues for the economic recovery: for example, some citizen dividend can be used to stimulate consumption, some as stimulus for zero-carbon and climate-resilient investments, some as general government revenue.

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