Rein in carbon emissions with a global carbon tax

There is growing consensus that we need an international carbon price floor as well as a global carbon price to achieve climate change goals in the Paris Agreement.

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Carbon pricing is widely viewed as an effective policy tool to direct spending and investment away from dirty energy to green alternatives. PHOTO: REUTERS

Countries are increasingly committing to mid-century "net-zero" targets under the Paris Agreement, but achieving the goal of limiting global warming to 1.5 deg C to 2 deg C – the threshold to avoid catastrophic climate change – requires cutting greenhouse gas emissions by a quarter or up to half in this decade.

Making sufficient progress in stabilising the climate therefore requires ratcheting up mitigation measures in the near term, and it is a challenging task indeed to get all 195 parties in the Paris Agreement to do so simultaneously.

FEAR OF LOSING INTERNATIONAL COMPETITIVENESS

Many countries remain reluctant to introduce carbon pricing, which is widely viewed as among the most effective policy tools to direct spending and investment away from dirty energy to green alternatives. Those who are hesitant fear a loss of international competitiveness, especially in high-emission sectors such as steel or chemicals.

The complexities in global trade have led many to question how best to address the issue of equity in how countries should be treated when it comes to their environmental impact on others.

There is now growing consensus among economists, scientists, policymakers and businessmen that we need an international carbon price floor (ICPF) to set the path towards a global carbon tax.

The International Monetary Fund (IMF) has recommended that by 2030, economies should implement a carbon price floor based on a tiered system, to reduce emissions enough to keep global warming below 2 deg C. Based on the IMF's recommendation, the price floor should be US$75 (S$102) per tonne of emissions for advanced economies, US$50 for high-income emerging-market economies such as China, and US$25 for lower-income emerging markets such as India.

Reinforcing the Paris Agreement with the ICPF initiative could therefore jump-start emissions reductions through substantive policy action, circumventing emerging pressure for merely borderline carbon adjustments.

THE CASE FOR A GLOBAL CARBON TAX

There are several advantages to a global carbon tax. Pricing carbon, specifically through such a tax, is one way to address equity issues and reduce emissions.

It can also benefit countries needing funds to take action on climate change, as carbon taxes are sources of revenue for governments. Carbon credits can be used to offset the amount of tax.

Revenues from a carbon tax can be given back to households affected negatively in the short term by high carbon taxes. In addition, such revenues can fund research and development for improving energy efficiency and developing cleaner-energy technologies that will benefit everyone in the long term.

A global tax will also plug one of the key weaknesses of the existing international legal framework for climate mitigation, namely the risk of carbon leakage. Carbon leakage takes place when a country's climate policy leads to higher levels of greenhouse gas emissions in other countries. It can be caused by the relocation of domestic enterprises to foreign jurisdictions with no (or a lower) carbon price, or by an increase in demand for carbon-intensive goods from those jurisdictions.

The traditional tool used by countries to mitigate this risk has been to grant preferential treatment to carbon-intensive enterprises. For example, in the European Union, enterprises considered to be at risk of carbon leakage have been granted free allowances under the EU's Emissions Trading System, which is a "cap and trade" scheme where a limit is placed on the right to emit specified pollutants over an area and companies can trade emission rights within that area.

A counter-solution is to introduce carbon border adjustment measures (CBAMs), which impose a price on importers of a selection of carbon-intensive imported products. This is intended as a necessary adjustment to ensure that the carbon price paid by importers will be the same as that paid by domestic enterprises.

Having a global uniform carbon tax would eliminate any unfairness arising from preferential carbon tax regimes and render CBAMs unnecessary if all countries agree on this uniformity.

At present, those with a significant carbon tax include Argentina, Canada, Chile, China, Colombia, Denmark, the EU countries, Japan, Kazakhstan, South Korea, Mexico, New Zealand, Norway, Singapore, South Africa, Sweden, the United Kingdom and Ukraine. Others considering joining them include Brazil, Brunei, Indonesia, Pakistan, Russia, Serbia, Thailand, Turkey and Vietnam.

A RADICAL SHIFT

Finally, a global tax will do away with the convention of having a bottom-up approach to the Paris Agreement, which requires countries to adopt climate mitigation measures reflecting their "highest possible ambition" in the light of national circumstances.

Under the Paris accord, no one is obliged to introduce an explicit carbon price. Rather, countries can choose to mitigate climate change by resorting to other mechanisms, such as by introducing standards or through a ban on carbon-intensive activities (for example, a ban on coal-fired power stations).

A global carbon tax would be a radical shift away from the bottom-up approach, with all countries agreeing to abide by the introduction of a tax at a uniform rate. A uniform tax rate is critical, especially for Singapore, which puts a premium on absolute transparency and accountability in the governance of all policy-related administration, including climate change.

It may be a difficult task, but a global carbon tax is necessary in the near term.

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