NUS National University of Singapore
Source: *The Business Times*, p13
Date: 10 August 2021

Singapore's global lead towards no net-carbon emissions

Because economic interests of different players are not always aligned, this effort needs to be driven by governments and guided by countries with experience in carbon pricing and green investments, including Singapore.

By Eduardo Araral and Vinod Thomas

CLIMATE catastrophes make the urgent case for a coordinated response from governments, but global actions to cut rising carbon emissions remain thin on the ground. To get the support of advanced and developing countries alike, fears that robust climate action will hurt economic competitiveness – which are very real in these fraught times – need to be allayed.

That is why the International Monetary Fund's (IMF) proposal for setting a minimum price for carbon emissions across countries is so appealing. Yet to achieve a sharp drop in emissions, it needs to go hand-in-hand with a massive increase in green investment – in other words, a global price-and-invest approach that not only discourages polluting fuels but also encourages clean expenditures.

The stakes are very high for South-east Asia, among the most vulnerable regions to climate change and one seeing the biggest jump in greenhouse-gas emissions. Singapore contributes only around 0.1 per cent of global carbon emissions. Even so, because it has among the highest per-capita incomes in the world, a seat at the policy table, and much to gain from slowing climate change, it could be a powerful voice. Singapore has had a carbon tax since 2019, gaining experience valuable to others. The Republic also has set out a Green Plan 2030, a framework within which it could become a role model for a climate-smart economy.

Setting a minimum carbon price as the floor for countries would make sense because of its universality and flexibility in adoption. More than 40 countries are already using a carbon price, covering one-fifth of global greenhouse-gas emissions. Some countries levy a tax on carbon discharges, as Singapore is doing for major emitters such as power stations.

Others are setting limits on carbon effluents and allowing companies to trade their surpluses and deficits (that is, carbon trading). China took this path with online trading starting on July 16, initially for coal and natural gas. Getting a global agreement on a carbon price would be huge but doable, considering that the G-7 nations in June supported a global 15 per cent minimum corporate tax.

The first step is to increase the coverage and rate of the carbon price. The average world price of carbon is only US$3 per gigatonne of equivalent carbon dioxide – about the current price in Singapore. This price is far below the IMF-estimated US$75 needed to achieve limiting global warming to 2 deg C, let alone the more desirable 1.5 deg C threshold. Of the 38 countries from the Organization for Economic Co-operation and Development (OECD) and G-20 combined, covering 80 per cent of world emissions, only 10 countries are pricing carbon at half the mid-range of the estimated cost of carbon dioxide emissions for 2020.

For worldwide acceptability, the carbon price and the pace of implementation will need to differ according to broad groupings based on per-capita income. The IMF proposal suggests price floors of US$75, US$50, and US$25 per tonne of carbon for high-, middle-, and low-income countries respectively. It believes this could help achieve a 23 per cent reduction in worldwide emissions by 2030 to keep global warming below 2 deg C. To reinforce the price–investment link, the proceeds of a carbon tax should be allocated for investments in climate action.

MODEST START

The pricing step needs to be accompanied by a boost to alternatives to polluting infrastructure. Expanding green investments is also a way to make carbon taxes more acceptable in the face of conflicting economic interests. By one estimate, global capital investments (public and private) to replace fossil fuels by renewables to keep the global temperature rise below 1.5 deg C is US$2.4 trillion a year up till 2035. Considering that government stimulus packages for Covid-19 totalled US$20 trillion in 2020, the needed climate investments can be mobilised if seen as a priority.

Green public spending is still modest, making up 12 per cent of the Covid-19 stimulus spending across countries. Examples are recent investments in renewable energy, electric vehicles (EVs) and afforestation in Canada, China and Germany. Singapore's Green Plan 2030 promotes investments in EVs, renewable energy, and food security. The infrastructure proposal of US President Joe Biden has spending provisions to boost EVs, shift away from gas-powered cars, and make electric grids more climate resilient. All this is a start – and a fraction of what is needed.

Because green investments, such as solar and wind energy, continue to present business risks, they need mechanisms for risk sharing, such as government guarantees for prices at which energy is sold. Providing carbon credits, mentioned earlier, can promote green investments. For example, investors can receive tradeable carbon credits for reforestation, use of recycled materials for road construction, and making energy grids more efficient.

Carbon credits can receive a big push if they can be traded in international carbon markets, such as the emission trading systems in Singapore, the European Union (EU) and South Korea. Making carbon credits applicable for offsetting carbon taxes would mutually reinforce the price-invest approach.

In the face of runaway climate change, a bold global approach of a minimum price of carbon and sizeable public and private spending for green infrastructure would be a game changer. Because economic interests of different players are not always aligned, this effort needs to be driven by governments and guided by countries with experience in carbon pricing and green investments, including Singapore.

The big carbon emitters, starting with China, the US, India, the EU, and Russia, need to be at the front of any climate plan. They must make strong commitments at the United Nations Climate Change Conference in Glasgow in November.

The writers are from the Lee Kuan Yew School of Public Policy, National University of Singapore. Eduardo Araral is associate professor and director. Vinod Thomas is a visiting professor.