THE STATE OF THE NATION

SPECIAL REPORT ON THE 12TH MALAYSIA PLAN 2021–2025

The Malaysian case for carbon tax

BY ADAM AZIZ

The recently tabled 12th Malaysia Plan 2021-2025 sets an ambitious goal for the country to achieve net zero carbon emission by "as early as" 2050, ahead of Singapore and Indonesia.

Part of the equation involves the introduction of carbon pricing, which is meant to incentivise clean energy adoption, encourage better energy efficiency and ultimately reduce greenhouse gas (GHG) emissions. But what is the impact of this new development on businesses and Malaysians at large?

What is carbon tax?

"Generally, carbon pricing means there is an economic value or price tag attached to carbon emissions. A simple way of implementing a carbon price is by implementing a tax per tonne of carbon dioxide equivalent (tCO_2e)," PwC Malaysia tax partner Lavindran Sandragasu tells *The Edge* in an email reply.

Another mechanism is carbon trading, where each company may be given a cap on how much GHG they can emit. Low-emission companies could sell their excess quota while companies with a huge carbon footprint could purchase that additional quota to meet regulatory requirements.

Carbon trading could be implemented alongside a carbon tax. For example, Company A may have reduced its emissions below the taxable threshold, but would have to purchase a quota from the government or other companies to completely offset its minimal GHG emissions.

"Implementing a carbon price would help to determine who is responsible for emissions and by how much," says Arina Kok, partner, climate change and sustainability services at Ernst & Young Consulting Sdn Bhd. Those who "continue to emit will pay a price now for their emissions, rather than pushing down the cost to future generations", she adds.

When could it be imposed?

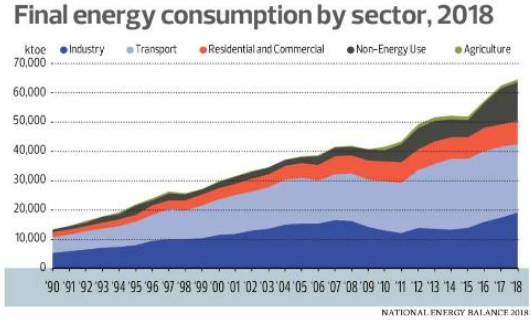
Carbon pricing is not a new phenomenon. Interestingly, the government explored carbon trading in 2010 but it did not take off at the time. Europe's emissions trading platform was introduced 16 years ago. Now, more than 78 countries have some form of carbon tax mechanism, including Singapore and Japan.

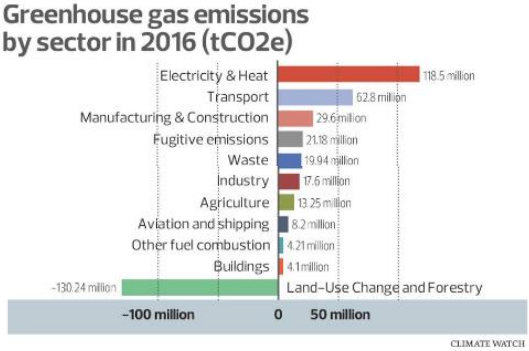
Implementation hinges on credibility of data on carbon emissions, says Kok. "Most companies in Malaysia have only just begun to track emissions under Scope 1 (controlled source) and Scope 2 (indirect emissions from the generation of purchased electricity, steam, heating and cooling) with few mature enough to track Scope 3 emissions (all indirect emissions throughout the value chain). To effectively enforce a carbon price, the government would require strong data and monitoring systems to ensure that all stakeholders pay their fair share."

After the power sector, the transport sector emits the most greenhouse gases. It also consumes the most energy.

Kok: The government requires strong data and monitoring systems to fairly and effectively enforce a carbon price

Lavindran: Ideally, carbon tax should have no sector exemptions as that would dilute its impact on reducing emissions





Not revenue source or added costs, but incentive to innovate

The Penang Institute forecast in its 2019 report that a carbon-pricing scheme would raise an average of RM21.8 billion to RM24.6 billion annually in federal revenue over the next decade.

But carbon tax should not be looked at as a means to beef up federal government revenue, says KPMG Malaysia head of tax Tai Lai Kok. "In so far as the government is concerned, it should be, 'If I don't collect anything, even better' as it means the tax is effective in pushing businesses to reduce their carbon footprint," he tells *The Edge*.

"And if the tax is still collected, it makes sense that the collection goes back to green energy development and sustainability efforts. Then the story line will be right as the law should push us to actively reduce emissions."

Such mechanisms are long-term positive as it would nudge companies to use cleaner energy, increase automation and improve efficiency, which supports margins in the long run, he adds. "It also opens up our products to a wider market, including ESG-conscious clients that would not consider emissions-heavy products."

To ensure the tax's effectiveness, the rates must be priced correctly, KPMG Malaysia executive director of governance and sustainability Phang Oy Cheng points out. "Carbon tax should not be viewed as an additional cost but an incentive to facilitate innovation and investments.

"When a company calculates its cost of investment versus the costs on carbon, that carbon tax should be high enough to encourage all companies to embark on greener technology. If the rate is too low, it is just viewed as an additional tax burden, as the comparative return on investment does not make it viable to invest in technology change."

How would carbon tax be imposed?

The International Monetary Fund (IMF) has recommended a rate of US$25 (RM104.66)/$tCO_2e$ as a start, rising to US$75 by 2030 to really incentivise the industry transition.

For comparison, Singapore's carbon tax comes in at an introductory rate of S$5 (RM15.38)/$tCO_2e$ until 2023, while Japan's tiered carbon tax starts at ¥289 (RM10.81)/tCO_2e.

The Penang Institute, in its 2019 proposal for carbon tax in Malaysia, proposed an introductory rate of RM35 per tCO_2e, before rising to RM150/tCO_2e by end-2030.

Ultra-supercritical coal plants would be subjected to a levy of roughly 2.87 sen/kWh at the start. For gas plants, the levy would start at 1.48 to 1.98 sen/kWh.

An addition of the average carbon tax levy on the power sector, if passed on to the end-user, translates into a 2.11 sen or 5.3% increase from the current average base tariff of 39.45 sen/kWh.

At the introductory rate, the Penang Institute's 2019 study anticipates residential electricity cost to rise between RM5.40 and RM27.10 per month, depending on power usage.

Who could be impacted by the tax?

"Ideally, the scope should be industry-agnostic, meaning there should preferably be no exemptions as it would dilute the impact of the tax," says PwC's Lavindran.

Singapore imposes a blanket tax on all entities regardless of sectors that emit 25,000 tCO_2e and above annually. The US has a similar emissions cap. This floor captured some 7,600 facilities covering about 50% of the total US emissions in 2019.

On the home front, the carbon pricing will be felt first by industries with a high carbon footprint or energy-intensive industries, ranging from power generation and oil and gas processing to the production of food, steel, cement and fertilisers.

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Mechanisms should incentivise public to choose greener options

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Based on 2016 data compiled by Climate Watch, the power industry emits about 39.6% of the total GHGs in Malaysia, followed by the transport sector (21%) and manufacturing (9.9%). Other non-conventional operations such as data centres could be a significant GHG emitter.

What about individuals?

In Europe, individuals are taxed on emissions through ownership of internal combustion engine vehicles — albeit with mechanisms in place to support the use of electric vehicles (EVs).

Experts have also explored levies on transport fuels, although this is unlikely in Malaysia, which already imposes a price ceiling on RON95 petrol and diesel.

But consumers could still be impacted as the cost of doing business would go up, at least in the early stages. This could impact lower-income earners more, as the portion of tax as a percentage of income would be higher.

Lavindran says that ideally a cost pass-through should not be the result "as that would simply delay meaningful impact in addressing climate change" and does not translate into less emissions.

"Some businesses may not change the way they do things and will just pass on the higher costs to consumers," says KPMG's Tai. "Instead of giving them options to pay tax, opponents against the tax suggest that measures should be taken to mandate businesses to go greener by making use of government machinery like the Department of Environment."

Lavindran says, "Mechanisms such as a carbon tax rebate should be made available to consumers of essential items such as water, food, transport and municipal services."

Part of the mechanism should also incentivise the public to take on greener options, such as making EVs more attractive than conventional cars.

More needed in path to net zero

Carbon tax is just one component in the journey towards net zero for Malaysia, a country where fossil fuel is a key contributor to the government's coffers and is the main source of energy to keep factories and cars running.

A realistic approach to the 2050 target would require a strategy to move away from petroleum-related revenue, which this year makes up nearly one-fifth of federal revenue.

It is also critical to address the transport sector, which accounted for more than 36% of total energy consumption or over 23,500 ktoe in 2018, the bulk comprising fossil fuel.

A clear enabling structure should be put in place to integrate small and medium enterprises in the transition.

The big boys are leading the way with their own 2050 net zero pledge, including Petroliam Nasional Bhd (Petronas) and Tenaga Nasional Bhd. But these are individual efforts. For example, Petronas is exploring carbon capture technology and the production of clean hydrogen as well as other forms of renewable energy. Tenaga, which has exposure to six coal-fired plants, will retire four by 2033, with the last one to be phased out by 2044.

To be sure, the Ministry of Environment and Water aims to finalise the Long-Term Low Emissions Development Strategies (LT-LEDS) by end-2022, which would outline strategies and actions for the country's key economic sectors to mitigate GHG emissions.

More importantly, the 2021 United Nations Climate Change Conference (COP26), to be held a month from now, will see more countries asking for more legislation to combat climate change.

Taking a cue from the gloomy Intergovernmental Panel on Climate Change (IPCC) report that the world will miss its Paris Agreement targets in slowing global warming, Malaysia will need to do more to bring its 2050 net zero target into effect, sooner rather than later. E