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Singapore's Carbon Tax Hike and Climate Ambition

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SYNOPSIS

Singapore recently announced that it will progressively raise its carbon tax and target the achievement of net-zero emissions "by or around mid-century". This move comes amid international developments in technology and carbon markets, particularly with the conclusion of Article 6 rules in Glasgow at COP26 last November. An increase in utility bills of around SGD4 per month for an average 4-room household is expected, though measures to cushion the impact will be announced next year ahead of the hike in 2024. This policy brief examines Singapore's carbon tax hike and climate ambition.

KEY POINTS

- The carbon tax increase and trajectory, as well as the new net-zero target are seen as bold moves by the Singapore Government, and comes as more than eighty countries have communicated net-zero targets following COP26 in Glasgow last November.
- Singapore's move to increase its climate ambitions will facilitate the development of well-functioning and regulated carbon markets locally and in the region, and enable companies based here to reap the benefits of a growing carbon services sector.
- However, there remains complex policy designs that have to be fine-tuned for this ambition to turn into action. This includes the availability of expertise, engagement with Article 6, as well as cost concerns for businesses and the public.

INTRODUCTION

On 18 February 2022, Minister for Finance Lawrence Wong made two major announcements that seek to advance Singapore's transition to a more low-carbon economy. He used his Budget 2022 speech to announce that Singapore's carbon tax will increase from SGD5 per ton of carbon dioxide equivalent (tCO2e) to SGD25/tCO2e from 2024 and 2025, SGD45/tCO2e from 2026-2027, and fall within the range of SGD50-80/tC02e by 2030. He also said the Government will raise climate ambition to achieve net-zero emissions "by or around midcentury", a step forward from an earlier commitment to achieve the same target "as soon as possible".

More than eighty countries have communicated net-zero targets so far, covering most of the world's emissions. The International Energy Agency (IEA) estimated that if all targets are implemented, temperature increase could be limited to 1.8°C by 2100. The Government will consult closely with industry and citizen stakeholder groups before deciding on the exact date of achieving net emissions, which will result in a formal revision of the Long-term Low Emissions Development Strategy (LEDS), which Singapore had communicated in accordance with Article 4, paragraph 19, of the Paris Agreement in March 2020.

ANALYSIS

Riding on Strong International Momentum and Domestic Interest

Singapore introduced its carbon tax in 2018 at a "transition" tax rate of SGD5/tCO2e across a period of five years from 2019 to 2023. Singapore's carbon tax, under the Carbon Pricing Act, works as a Fixed Price Credit Based (FPCB) system. For the past two years, companies have had to pay the carbon tax by



surrendering fixed-price carbon credits that they buy from the Government, and that are non-tradable. The carbon tax is part of a range of mitigation measures in Singapore. Its role is to provide a price signal to incentivise decarbonisation.

In 2021 and 2022, two parliamentary motion debates on climate change saw several Members of Parliament calling on the government to review the tax level, which many considered to be too low. Benchmarked against global standards, the initial rate also fell short of estimations by the High-Level Commission on Carbon Prices, that carbon prices of at least USD40-80/tC02 by 2020 and USD50-100/tC02 by 2030 are required to cost-effectively reduce emissions aligned with the Paris Agreement's threshold temperature increase of 1.5 degrees Celsius. With the newly announced trajectory, Singapore's carbon tax is set to be one of the highest in pricing carbon in Asia, barring future policy changes.

Notably, a series of public consultation engagements were conducted throughout 2021, to gather feedback on policies that can help Singapore move to a low-carbon and sustainable future. Domestic interest in climate action has increased with more Singapore-based businesses setting ambitious climate commitments, and also engaging in the voluntary carbon market to achieve their targets.

Carbon Tax Hike Supports Singapore's Hub

Contrary to views that environmentalism and economic benefits are mutually opposing, the providence of carbon services can yield potential economic opportunities, according to a summary report by the South Pole-Vivid Economics-Engeco consortium. In Singapore's case, the report found that opportunities and value could be created if the country provides services that support its decarbonisation strategies. Such a move towards decarbonisation may happen through voluntary demand from corporate firms, aviation and shipping demand and by compliance instruments such as an ETS or carbon tax. In these cases, a percentage of the decarbonisation is done via carbon offsets and the remaining is via carbon credits equivalent to allowances in an ETS.

The government announced that Singapore will allow businesses that are emissionsintensive and trade-exposed to use "highquality international carbon credits" to offset a maximum of 5 per cent of taxable emissions, in lieu of surrendering fixed-price credits from 2024. This effectively creates a new, albeit small, compliance market in Singapore. On the one hand, it helps to mitigate the rising cost for businesses as they can choose cost-effective projects to buy carbon credits from, rather than paying the prevailing carbon tax rate. On the other hand, it creates local demand for carbon credits and, according to Mr Wong, "catalyses the development of well-functioning and regulated carbon markets". The report added that Singapore's clearest near-term opportunity is in the financing and trading of carbon credits originating in Southeast Asia. With large tracks of land, the region will be significant in the development of carbon projects that will have mitigation co-benefits such as conservation of rainforests. As the region develops, industrial abatement projects can also be a source of cost-effective carbon credits to be supplied to a global market. With these bold carbon tax rate increases, Singapore can indeed reap the benefits of first-mover advantage and service the local market in the near term starting 2024.

Talent Pipeline & Market Expertise Needed

While Singapore is considered well-positioned to become a climate leader in the region, as well as a carbon services hub, more needs to be done to ensure that there is enough talent and expertise to support the climate goals of corporations and governments in the region and beyond. It is tempting to treat carbon like any other commodity, where actual emission units are traded and sold by companies for compliance, or in a voluntary market to negate or diminish a company or individual's own unavoidable greenhouse gas emissions. But carbon credit projects have the potential to change lives for the better, and those are the projects that should be looked out for. For example, the best carbon offset projects should stimulate economic growth, create job opportunities, and help reduce poverty in the communities where the projects are located. These co-benefits can come in the form of positive social, economic, and environmental impacts to communities.

Singapore's domestic carbon market will play an important role in nurturing technical and experiential expertise to not only grow the market, but also to ensure that it is robust, accountable, and has environmental integrity. Sustainability skills and competencies must be incorporated into Singapore's education curriculum at appropriate levels to ensure that our students are equipped for a global green economy and ready to compete with global talent. Educators, in particular, must be given access to sustainability resources and training in order to deliver such curriculum, and to advise their students accordingly.

Many are also looking to make mid-career switches sustainability. into Career Conversion Programmes are being offered by Workforce Singapore (WSG) to reskill existing workers or train new hires in the sustainability sector. WSG will cover 90 per cent of salary support for a maximum of 3 months. These programmes are currently being offered by the Environmental Management Association of Singapore (EMAS), Waste Management & Recycling Association of Singapore (WMRAS). and NTUC Learning Hub. Continuing Education and Training (CET) Courses and Career Conversion Programmes (CCP) have also been developed by the National Environment Agency together with industry and partner stakeholders, and offered by Institutes of Higher Learning such as polytechnics, and institutes of technical education. Most of the universities in Singapore also offer a range of education programmes continuing specialised topics in sustainability and climate change including graduate and executive certificates, short courses, and executive education. This includes the newly launched Masters Programme in Sustainable and Green Finance, by the Business School at the National University of Singapore. But more can be done to incentivise experts to set aside time and effort to conduct training. Incentives in the form of adequate pricing for trainers and time that employers may set aside will be helpful. Singapore must take decisive steps to develop talent to meet the needs of the growing carbon services hub. Doing so also helps workers carbon-intensive within and possibly sunsetting industries to pivot. Mentorship and skills accelerator programmes may be helpful in this regard.

Open Questions about Article 6

At COP26 in Glasgow, countries were finally able to conclude negotiations on Article 6, which sets out rules on an international carbon market, six years after the adoption of the Paris Agreement. An important element of engaging in Article 6 mechanisms is the need for corresponding adjustments when crossborder carbon trading takes place. This could mean that Singapore will need to pay attention to this when it decides to use international carbon credits towards its Nationally Determined Contribution, which at the time of writing, is to peak emission at 65MtCO2e by 2030.

If Singapore decides to use Article 6.2 to transfer Internationally-Transferred Mitigation Outcomes (ITMOs) with another country or countries, its purchases will need to be reflected in the selling country's greenhouse gas inventory. This prevents double counting of GHG emission abatement. Although there will be an elaboration of guidance to provide for a single method for corresponding adjustments, to be applied from 2031 onward, it is clear that Singapore will need to adhere to these rules.

Article 6.4 creates a new mechanism that succeeds the Kyoto Protocol's Clean Development Mechanism. Under this new A6.4 mechanism (A6.4M), new A6.4ers will be generated, alongside some carryover Clean Development Mechanism (CDM) credits from the Kyoto Protocol. A 12-member supervisory body was set up to take up further work and will be responsible for reviewing the baseline and monitoring methodologies of recognised credits. Notably, the Director for Strategic Issues at Singapore's National Climate Change Secretariat (NCCS), Strategy Group, Prime Minister's Office, Benedict Chia has been nominated as an alternate member to Kristin Qui of Trinidad and Tobago, to the Supervisory Body under Article 6.4 of the Paris Agreement. Mr Chia is also the Vice-Chairperson of the International Civil Aviation Organisation (ICAO) Technical Advisory Body (TAB) that looks at setting eligibility criteria for Carbon Reduction Offsetting and Scheme International Aviation (CORSIA) units. This puts Singapore in a good position to ensure that "high quality international carbon credits" are used in its own local carbon market.

Cost Pass-Through Concerns

One of the major concerns highlighted about the higher carbon taxes is that it will drive up costs for business and consumers. In his Budget 2022 speech, Mr Wong said that households will experience the higher carbon tax through an increase in utility bills. At SGD25 per tonne, an average 4-room HDB household should expect an increase of about SGD4 per month in the utility bill. To help mitigate this cost increase, the Government has announced support, in the form of U-Save rebates that will help households offset utility bills. The measures to cushion the impact will only be announced next year ahead of the hike in 2024.

The impact of the carbon tax will be widespread, since every consumer contributes to emissions. The increase in carbon taxes will also significantly increase costs for businesses, particularly the largest industrial emitters. Mr Wong said that a transition framework will also be put in place prior to 2024 to give allowances to businesses based on "efficiency standards and decarbonisation targets". The business sector's response to the tax increase has also been largely centred around the structural changes that have to be adopted – that is, a faster adoption of carbon capture technologies, low-carbon alternatives and electric vehicles.

While a transition framework helps to mitigate the cost effects, industry concerns raised during NCCS's 2020 public consultation exercise remain amidst the shift towards new technologies. This includes high upfront capital costs and the challenges of ensuring reliability and precision control. Support for small and medium enterprises (SMEs) to decarbonise and invest in energy-efficient equipment and solutions are especially important in this regard.

CONCLUSION

From its modest inception price, Singapore's revised carbon tax is a crucial step forward in matching the cost of emissions with the country's climate ambition. Domestic pressures as well as global and regional headways in the implementation and upscaling of carbon pricing policies – such as Indonesia's recent ETS announcement – have reinforced the relevance, effectiveness, and

support for a more ambitious carbon pricing policy in Singapore. The raised carbon tax in turn lends support to broader climate goals, such as the country's development as a carbon services hub.

Nonetheless, beyond the unlikeliness of "quick green gains" from the policy – as a commentary by *Eco-Business* puts it – there remains complex policy designs that have to be finetuned for ambition to be concretised into action. This includes the availability of expertise, engagement with Article 6, as well as cost concerns for businesses and the public. Singapore's carbon tax hike is an ambitious second step from the first, but it is no silver bullet in the path to decarbonisation.

WHAT TO LOOK OUT FOR

- Details on the transition framework for emissions intensive and trade-exposed sectors, and quantum of additional U-Save rebates to help cushion cost increases in 2023.
- Outcome of Singapore's review of its NDC and formal revision of Singapore's Longterm Low Emissions Development Strategy (LEDS) ahead of COP27 in Egypt, scheduled for 7–18 November 2022.

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