Shaping Singapore's Climate Future: Achieving NDCs with the Use of Carbon Markets

Keynote Speech – Inaugural SR Nathan Young Leaders Seminar

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Good afternoon.

It is a great honour to be named the inaugural SR Nathan Young Leader. I would like to thank Janadas Devan, Director of the Institute of Policy Studies (IPS) and his team at IPS for inviting me and for putting this seminar together.

Thank you to everyone who made time to be here today for this hybrid event. I look forward to engaging with you later during the panel discussion.

I never met the late President SR Nathan in person, but I keep a copy of his memoir, *An Unexpected Journey*, on my bookshelf. In fact, I got the book from someone else through a book swap that I organised. The book swap initiative is called Books & Beer, and its goal is to encourage reading and recycling of books. It was founded in 2011, the year Mr Nathan stepped down as president of Singapore. He was president from 1 September 1999 to 1 September 2011. I entered secondary school in year 2000 and graduated from university in 2010. President Nathan was not only Singapore's longest serving President, but also one that served through most of my schooling years.

Like President Nathan, I consider my journey in this climate policy space to be an unexpected one. I often joke that I entered NUS as an undergraduate back in 2006 and never left. When I entered NUS as a young Geography major, the university was celebrating its centennial year, and this year it celebrates its 120th year! But unlike President Nathan, my journey has not been quite as extraordinary. As I will elaborate in this speech on "Shaping Singapore's Climate Future: Achieving NDCs with the Use of Carbon Markets", much of what I will share has not been a direct product of my work alone but of global shifts, translating to domestic changes here in Singapore. I have been privileged to witness the mindset shift here in Singapore and actions from around the world towards addressing climate change since I entered university till today.

During these last two decades, Singapore underwent significant changes partly in response to global developments, but also as the country recognised how vulnerable it was to the impact of climate change and that it was a global challenge that required, well, a global response.

In 2006, the year I entered the National University of Singapore, Singapore acceded to the Kyoto Protocol. In 2007, Prime Minister (PM) Lee Hsien Loong attended the United Nations Framework Convention on Climate Change (UNFCCC) COP13 in Bali, Indonesia, and delivered a speech outlining principles for a post-2012 framework.[1] The Inter-Ministerial Committee on Climate Change was also established, chaired by Senior Minister S Jayakumar.

In my final year of university in 2009, I had the opportunity to participate at the Copenhagen Climate Summit, otherwise known as COP15, as part of a self-funded youth delegation organised by Eco Singapore. PM Lee also attended COP15, alongside several heads of states. In his national statement, PM Lee announced Singapore's first climate target; in the context of a legally binding global agreement, Singapore would undertake to reduce emissions growth by 16 per cent below business-as-usual by 2020.[2]

PM Lee also spoke of the collective responsibility of countries to make progress in reducing greenhouse gas emissions, knowing that the outcome will not be the final or complete solution to climate change. Back in 2009, PM Lee said that over the next decades, countries will have to discuss and agree on further steps to manage the problem. On the sidelines of COP15, our youth delegation even got to meet with PM Lee to discuss our concerns — the video of our interaction is still up on YouTube for anyone interested! For me, this was the start of a journey of discovery as I dived headlong in to climate policy and began to understand the role of the UNFCCC in shaping countries' domestic climate policy.

The National Climate Change Secretariat (NCCS) was established on 1 July 2010 under the Prime Minister's Office (PMO) to develop and implement Singapore's domestic and international policies and strategies to tackle climate change. That same year, I joined the Energy Studies Institute here in NUS, and had the opportunity to listen to PM Lee deliver a speech at the 3rd Singapore International Energy Week on 1 November 2010. It was a pretty long speech, but looking back at it, it was then when Singapore broached the possibility of a carbon price. PM Lee noted that the Singapore government was already working with a shadow carbon price, and that such a price might eventually need to be made explicit to send the right price signals if there were a global legally binding agreement to curb greenhouse gas emissions in which Singapore would participate. However, it would not be until 2017 that Singapore formally announced plans to implement a carbon tax which forms the foundation of Singapore's International Carbon Credit Framework, allowing us to use such carbon credits to achieve our climate target, that I will discuss later in this speech.

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[1] Speech by Mr Lee Hsien Loong, Prime Minister, at the UNFCCC Conference in Bali, 12 December 2007, https://www.nas.gov.sg/archivesonline/data/pdfdoc/20071212988.htm

[2] Singapore's National Statement Delivered by Prime Minister Lee Hsien Loong at Copenhagen, 17 December 2009, https://www.nccs.gov.sg/media/speeches/singapores-national-statement-delivered-by-prime-minister-lee-hsien-loong-at-copenhagen-17-december-2009/

Singapore's carbon tax was announced shortly after the Paris Agreement's adoption in 2015 and entry into force in 2016. Now at this point, usually in lectures that I give on this subject or the Paris Agreement, I ask for a show of hands of who has downloaded and read the Paris Agreement. May I have a show of hands please?

Now, it is only been 10 years since the Paris Agreement was signed in December 2015 so it is not too late to pick it up. For those of you who have read it, I am sure you will agree with me that the Agreement is actually very easy to read — surprisingly perhaps. At just 16 pages long, the Paris Agreement was intentionally written in a way that would be accessible to people. Also, unlike the Paris Agreement's predecessor, the Kyoto Protocol, which required 37 developed countries to come up with Quantified Emissions Limitations and Reduction Objectives (QELROs) over a five-year commitment period, the Paris Agreement applies to *all* countries and has *no expiry date* since it has a built-in ratchet and review system every five years. So, it really is not too late to pick it up to read and to understand its contents. What drew me to the Paris Agreement all those years ago was the opportunity for us to refresh our ability to address climate change.

One of the key features of the Paris Agreement is the Nationally Determined Contributions (NDCs). I do not have time today to go into the history of NDCs, and how the term came about but I do want to say that Singapore had a hand in helping to broker that term, which helped countries become more comfortable with the idea of submitting a Intended Nationally Determined Contribution, or INDC, prior to the Paris Summit COP21, which in turn led to the early entry into force of the Paris Agreement just 11 months after it was signed.

Singapore, like many countries that are party to the Paris Agreement, also submitted an Intended Nationally Determined Contribution in 2015, which then became our NDC in 2016. We agreed to reduce emissions intensity by 36 per cent by 2030, compared to 2005 levels and announced our intention to stabilise emissions around 2030. Fast forward to 2020, Singapore submitted an updated NDC, aimed at peaking emissions at around 65 million tonnes of CO2 equivalent by 2030, shifting from an emissions intensity target to a more concrete emissions cap. It also marked the first time Singapore set a specific emissions peak target.

Then in 2022, following a call by the Glasgow COP26 President Alok Sharma for parties to "review and strengthen" their NDCs, Singapore along with just 20-odd countries updated their NDCs. In this second update, Singapore announced its intention to reduce emissions to around 60 million tonnes of carbon dioxide equivalent (MtCO2e) in 2030 after peaking its emissions earlier. Through a parliamentary clarification, we learnt that the emissions peak level would not exceed the first NDC update level of 65 MtCO2e and would likely to happen between 2025 and 2028.

There is more. NDCs are underpinned by two important pillars of the Paris Agreement: the Enhanced Transparency Framework and the Global Stocktake. Due to time constraints, I will discuss just the transparency framework today. Under the Paris Agreement, countries must submit a Biennial Transparency Report every two years (as the name suggests) starting from 31 December 2024 to track progress in implementing and achieving NDCs. Not doing so means the country is not compliant with the Paris Agreement. But more than this, the Biennial Transparency Report is also an important vehicle for reporting on the use of international carbon credits towards meeting countries' NDCs, as I will explain shortly.

In Singapore's first biennial transparency report submitted on 11 November 2024, the country announced two very important things: (1) that it would peak in 2028 at 64.43 MT CO2e and (2) that it estimates the use of 2.51 MTCO2e per annum of Internationally Transferred Mitigation Outcomes (ITMOs), or international carbon credits, over the NDC implementation period. I have provided a table and graph taken from the Biennial Transparency Report to illustrate the projections of Singapore's overall emissions, inclusive of the projected use of international carbon credits.

On 10 February this year, Singapore submitted its 2035 NDC, which for the first time features a downwards emissions trajectory from 60 MtCO2e to 45–50 MtCO2e in 2035. This marks the first time Singapore announced a downward emissions trend, though it remains to be seen how we will get there. It will likely have to be a mix of decarbonisation using low-carbon technologies and switching to alternative fuels such as hydrogen or adoption of carbon capture utilisation and storage, and carbon offsets.

Of course, all of this followed significant developments under Article 6 of the Paris Agreement and I am very proud to say that Singapore contributed to these outcomes. The first set of decisions came out of the Glasgow COP26 back in 2021, where Singapore's Minister for Sustainability and the Environment Ms Grace Fu co-chaired ministerial level negotiations alongside her counterpart from Norway's environment ministry, Mr Espen Barth Eide. Minister Fu was later invited again with New Zealand's Minister of Climate Change Mr Simon Watts to co-chair negotiations on Article 6 at COP29 in Baku, Azerbaijan last year. These decisions provided clear signals to the market to unlock investment in activities that reduce emissions and enable countries to work together to meet their climate targets.

Let us now zoom in on the use of international carbon credits to meet Singapore's NDC. The main legislative tool is the Carbon Pricing Act, first introduced in 2018 and entered into force in 2019, requiring Singapore's top emitters to pay a carbon tax under

a fixed-price credit-based framework. As I understand, carbon tax-liable companies calculate their likely emissions and procure fixed-priced carbon credits from the government and then surrender it at the end of given taxable year. The Carbon Pricing Act of 2018 was then amended in 2022 to support Singapore's raised climate ambition of achieving net-zero emissions by 2050. These legislative amendments allowed carbon tax liable firms to surrender one eligible international carbon credit in place of one fixed-price carbon credit from 2024 onwards, but capped at just 5 per cent of their tax liability. This means companies still need to pay at least 95 per cent of their carbon tax liability at the prevailing carbon price, which as of this year is at S$25/tCO2e. Next year, the carbon tax will be increased to S$45/tCO2e and by the end of the decade, between S$50–80/tCO2e (this rate has not been announced yet).

Note that while reading legislation, it is also important to pay attention to the accompanying regulations as well as any updates to the eligible methods list — to be reviewed every year — and the International Carbon Credits Guidance Document.

In October 2023, Singapore released these seven environmental integrity principles to ensure credibility and integrity of Article 6 cooperation. On 19 December 2023, the Eligibility List under the International Carbon Credit (ICC) Framework was formally published by the Ministry of Sustainability and Environment and the National Environment Agency. Upon close reading of the Singapore eligibility criteria, this was based on the Article 6 outcomes from COP26, which gave us the definition of an Internationally Transferred Mitigation Outcome (ITMO). For example, ITMOs must be "real, verified and additional" and "quantified" and cannot be double counted in the host country and acquiring country. This is avoided through corresponding adjustments.

Singapore's eligibility principles also note that international carbon credits must be "permanent", cause "no net harm" and "do not cause leakage". In including these specific requirements, Singapore appears to be adding guidance to the Article 6.2 set by stating its preference and taking additional precautions around the type of international carbon credits that it allows to be used towards its NDC. Based on my reading of Singapore's eligibility criteria, we have gone beyond the requirement in Article 6.2, which only requires "providing information on the risk of non-permanence" in the initial report and regular information.

On leakage, there are references to "addressing uncertainties in quantification and potential leakage" in the Article 6.2 guidance where countries need to report this in their initial report and regular information as well (decision 2/CMA.3, annex, para 18hii, 22bii). There are however, four such references to "avoidance of leakage", "minimize the risk of leakage", "adjust for any remaining leakage", "avoid leakage" and the

inclusion of mechanism methodologies to measure leakage in the guidance for Article 6.4 (decision 3/CMA.3, para 6c, 31biii, 33 and 34). Note that the language in Article 6.4 guidance is stronger than that of Article 6.2 — in that while the latter's guidance only requires participating countries to addressing uncertainties in the quantification of potential leakage, it does not specify that countries have to avoid leakage altogether. Singapore has gone a step further to require this. Noting that the Article 6.4 guidance does require the minimisation of leakage risk and adjustment for remaining leakage in the calculation of emissions reductions or removals (para 31biii) and the avoidance of leakage in mechanism methodologies (para 33), it can perhaps be said that Singapore's eligibility criteria considers not just the Article 6.2 ITMO definition but also the Article 6.4 guidance.

On the no net harm criteria, my understanding is that this came from the International Civil Aviation Organisation (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)'s carbon offset credit integrity assessment criteria (International Civil Aviation Organisation, 2019). Singapore's definition of the no net harm criteria nearly matches the one found in the CORSIA emissions unit eligibility criteria word for word. For the CORSIA criteria, "offset projects should not violate local, State/provincial, national or international regulations or obligations", whereas the Singapore criteria state that no net harm means that "the project or programme that generated the certified emissions reductions or removals must not violate any applicable laws, regulatory requirements, or international obligations of the host country." The key difference being that Singapore's no net harm criteria is mandatory while CORSIA's is not. In this way, Singapore's has set a higher standard for international carbon credits than in Article 6.2, Article 6.4 and CORSIA.

Having set out how Singapore intends to use international carbon credits or ITMOs towards achieving its NDCs, I would like to turn to some observations about how these guidance and rules can or cannot be enforced at the international level, and areas where we need more clarity.

First, to participate in Article 6 mechanisms, and specifically Article 6.2 — the bilateral trading of carbon credits — countries need to meet certain reporting requirements under the rules set out from COP26 and subsequent COPs. For instance, countries need to submit an Initial Report containing comprehensive information to demonstrate it fulfils its participating responsibilities, and its ability to authorise use of ITMOs and has arrangements in place to track and report, as well as to apply corresponding adjustments. Such descriptions increase the trust between participating countries by reducing uncertainties and provides a roadmap to follow. Countries also need to submit Annual Information and Regular Information containing information about the authorisation of ITMOs for use towards NDCs or other international mitigation purposes. Some of this information goes into a Centralised Accounting and Reporting Platform, or the Article 6 Database using an Agreed Electronic Format and the Biennial Transparency Report.

Thus, the Biennial Transparency Report (BTR) is an important vehicle for the reporting of use of ITMOs towards a country's NDC. However, because a set of countries is involved in a bilateral carbon credit trade, both countries' information must tally for it to count.

Although Singapore has had a stellar track record in submitting its Biennial Update Reports (BURs) — on time, usually being one of the first three countries to do so since 2014, and it has submitted its first BTR — countries that host carbon projects and from whom we originate and buy ITMOs from must also submit their BTRs.

The second concern I have with BTRs is its intrinsic time lag. As some of you may be aware, the data requirement within BTRs is two years old, i.e., X minus 2. In the 2024 submission, countries submitted 2022 data, and so on, because of the time required for countries to collate and process the activity data for their national greenhouse gas inventories. Thus, the first time we will know if countries met their 2030 NDC targets is not 2030, but in 2032. There is a time lag of two years. And because the next set of NDCs are for 2035, which is an odd year, the next BTR that would show if Singapore has met its NDC of achieving 45–50 MtCO2e will be in 2038, because the 2036 BTR will only report 2034 data and not in time for 2035.

The Article 6.2 decisions that came out of COP29 last year provided some additional clarification on timing. The Centralised Accounting and Reporting Platform will need to be updated in between BTR submissions and must be done so one year ahead of the BTR submission. This should help to catch any inconsistencies in transactions or applying corresponding adjustments.

The observation that I have made here is that we have focused a lot in Singapore on our own transparency reporting. Clearly, Singapore can submit our BURs and BTRs on time. However, as we enter bilateral carbon trading with host countries, transparency must be co-produced by the set of countries. Thus, Singapore would do well to focus more attention on host countries' abilities to fulfil the terms of participation. Put plainly, we do not have jurisdiction over another country's domestic processes. We cannot make them submit a BTR or update their Annual Information or Regular Information. But if they do not, then transactions will be marked as inconsistent. At COP29, Parties in transactions were "requested" not to use ITMOs identified as having reporting inconsistencies for their NDCs (under paragraph 40 of the CMA decision). Using transactions labelled as "checked, inconsistencies identified" may open the door for buyers who have contracted volumes to be subject to unresolved issues and hence to potential integrity concerns.

A second update from COP29 is that Article 6 technical expert review team (TERT) can also determine whether an identified inconsistency is significant and/or persistent; and, if so, highlight it as such in its report on the review. The new decision coming out of Baku also encourages the lead reviewer(s) of the Article 6 TERT, through the secretariat, to liaise with the Article 15's Paris Agreement Implementation and

Compliance Committee (PAICC) with respect to significant and persistent inconsistencies.

However, as far as I understand, the PAICC can only initiate a review if a party fails to respond to repeated recommendations to improve its performance and inconsistencies persist, and when the "significant and persistent" inconsistency threshold may have been crossed (Voigt, 2025: 264). The PAICC also only initiates a consideration of issues derived from a recommendation from the Technical Expert Review report after the review of a country's BTR submission, *and not the Article 6 consistency check and review*, and this can only be done with the consent of the respective country (Voigt, 2025: 263).

Furthermore, Article 15 of the Paris Agreement provides that the PAICC functions in a facilitative manner, "rather than a punitive or adversarial body", seeking to "encourage Parties' compliance with the Paris Agreement, rather than to sanction issues of non-compliance" (Voigt, 2025: 260). There is no enforcement within the PAICC (Voigt, 2025), and it does not "consider, adjudicate or even take mandatory measures on whether or not NDCs are met" (Sun et al., 2022: 602). Furthermore, the effectiveness of the PAICC is "largely determined by the willingness of Parties to engage with its process" (Voigt, 2025: 260).[3]

It is important to point out that there is no defined threshold for "significant and persistent" in the Modalities and Procedures or the Rules of Procedure for PAICC, though the term's "plain language meaning suggests that where a Party fails to respond to repeated recommendations to improve its performance and inconsistencies persist, the 'significant and persistent' inconsistency threshold may have been crossed" (Voigt, 2025: 264; Voigt and Gao, 2020; 51). *This means that non- compliance will only be addressed after multiple cycles of the BTR have been submitted and reviewed, and recommendations made by the TER.* Assuming multiple cycles to be at least three cycles starting from 2032, it could be at least six to seven years before the PAICC is able to address if countries (1) did not meet their NDCs and (2) corresponding adjustments were not made.

What can Singapore do then, to reduce the risk of this?

Singapore, as a responsible acquiring country, should engage closely with host countries to ensure that they have ambitious climate targets, robust climate policies and domestic legislation and institutional arrangements to participate in Article 6. Importantly, they must have measurement, reporting and verification (MRV) capabilities, i.e., its track record for submitting BURs and BTRs. If the Singapore government, or carbon tax paying companies are looking to buy nature-based carbon credits, then they should also make sure that the host country has a forest reference emissions level or forest reference level.

[3] The PAICC may initiate consideration of issues in three ways: (1) self-referral by a party, (2) committee initiation and (3) discretionary initiation, in cases of significant and persistent inconsistencies of reported information.

Singapore must continue to have an excellent track record, but we must also start — if we have not already — to pay attention to and seek clarity on facilitation of implementation and compliance under the Paris Agreement, as well as helping our counterparties and host countries build the necessary skills and knowledge in the area of transparency and accountability, so as to operationalise the government-to-government Article 6 carbon credits implementation agreements. I understand Singapore has made some strides in this area, such as through the Partnership to Strengthen Transparency for Co-Innovation, a collaboration between Singapore and Japan to improve the transparency of greenhouse gas emissions in the ASEAN region and through the Sustainability Action Package and Singapore Cooperation Programme.

I would argue also that BURs may not be a sufficient pre-requisite for Singapore any more, as BTRs have much higher transparency requirements, and there are many new complexities relating to the BTRs. These include using common reporting tables and common tabular formats; providing detailed national circumstances and NDC details; using the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines; IPCC Assessment Report 5 Global Warming Potentials (GWPs); estimating emissions values from lack of activity data across seven gases; providing time series from 1990; reporting year of X-2 (compared to X-4 in the BURs); reporting on support needed/received/ provided/mobilised, and so on.

The BTRs are an important vehicle for compliance with both Article 6 reporting requirements, and more generally, a “shall” mandate under the Paris Agreement. Thus, it must be a requirement for bilateral engagements on Article 6. It is concerning that less than half (47 per cent) of the countries with whom Singapore has signed memorandums of understanding (MOUs) have submitted their first BTRs by the deadline of 31 December 2024. But of course, as discussed earlier, we cannot will or make another country submit a BTR if they are not ready. But perhaps Singapore can help build capacity and to nudge them through our eligibility criteria or requests for proposals.

On the matter of our eligibility criteria and requests for proposals, perhaps it would also be prudent to ensure that they are aligned as well. Singapore would do well to ensure that the published whitelist of methodologies are up-to-date, and to ensure that all discussions are as transparent as possible. One noticeable gap I have observed, for instance, is the lack of nature-based methodologies beyond Jurisdictional REDD+ on the eligible methodologies list for Ghana. For Papua New Guinea, there are allowable exceptions that are nature-based (NbS) methodologies, but the processes for project applications are not very clear at the moment and forms are not yet available unlike in the case for Ghana.

So when the government issued and closed its request for proposal to procure high-quality correspondingly adjusted carbon credits derived from nature-based solutions, I was somewhat confused as to when we might see NbS methodologies added to

the eligible methodologies list. Some clarity and alignment here will be helpful, not just for researchers but also for host countries and market intermediaries as well. It is also difficult to find copies of the Implementation Agreement anywhere online, though I managed to locate the Ghana-Singapore implementation agreement on Ghana's Carbon Market Office website although the annexes, where important details about safeguards in place are noticeably missing. This will prove challenging when it comes to mapping the quality of credits against Singapore's eligibility principles — because as you recall, Singapore has gone beyond Article 6.2's guidance of "reducing risk of non-permanence" and instead uses the term "permanent" in its criteria.

Second, the ambition level of the NDC will affect the ability of the host country to undertake Corresponding Adjustments. If the country has an ambitious NDC, with high coverage of sectors for its mitigation, this affects additionality at both the NDC and project activity level and limits the volume of Article 6 compliance credits that can be availed to the international market. Over time, as countries are expected to increase their NDC ambition, it could get harder for Singapore to find countries and projects for international carbon credits for achievement of its own NDC.

And about NDCs, it is a requirement that countries that wish to participate in Article 6 must maintain an NDC. However, I checked last night and none of the countries with whom Singapore has signed MOUs or Implementation Agreements with have submitted new NDCs for 2035 by the deadline of 10 February 2025 — nine months ahead of COP30 per the Paris Agreement's rules. This means that our ability to trade ITMOs with these countries across the new NDC time frame is limited. Without clarity on whether their targets are planned to be more or less ambitious, Singapore could be at risk of having less ITMOs to buy if the host country's NDCs are more ambitious (since it affects additionality), or face reputational risk of buying ITMOs from a country whose new climate target is not particularly ambitious or has regressed from their earlier NDC.

While Singapore's emissions is now planned to go on a downward trajectory after peaking in 2028, this is only so on paper. To maintain credibility and our reputation as a leader on climate action, Singapore should be clearer as to how much of the downward emissions trajectory is planned to come from international carbon credits and how much from reviewing our consumption levels and embarking on meaningful decarbonisation from the deployment of low-carbon technologies. The reason this is important is because being clear on policies helps to send the right signals to the market.

Getting from the peak level of 64.43 MtCO2e (2028) to the lower bound of our 2035 NDC of 45 MtCO2e in absolute numbers is a difference of 19.43 MtCO2e in just seven years. How are we going to shave nearly 20 MtCO2e from our emissions profile? What are the tradeoffs? What will it cost us? How will Singaporeans cope with the possibility that some, or maybe most of this 20 MtCO2e will be from

international carbon credits, i.e., the reductions will be made in another country but put on our ledger — assuming this is correct for in the host country's national greenhouse inventory and reported in their BTR. Can Singaporeans accept this?

The National Climate Change Secretariat's most recent online public consultation results showed that some respondents' comments that companies should not be allowed to use carbon credits to pay their way out of decarbonisation, and their use should be accompanied by plans to reduce carbon emissions. Should the same be expected from the government if they are to be buyers of international carbon credits?

Where is the carbon accountability? Will Singapore be accused of carbon colonialism? A lot remains to be seen since we now have zero issuances of international carbon credits for use towards our NDCs. But as things progress, we must take temperature checks on what Singaporeans really want to see in terms of our achievement of our NDCs. What matters is not just that we get there but how we get there.

Singapore is considered a frontrunner in Article 6 but we are not the only buyers of international carbon credits. Switzerland, Sweden, Norway, Japan, South Korea, the United Arab Emirates, Australia and Monaco have all expressed interest or have already signed agreements and MOUs with close to 20 host countries. President SR Nathan shared in his memoir that when he took up office in 1999, he quickly discovered that he needed to develop his own approach and not feel he needed to accept the ways things had always been done by past presidents. In that same way, Singapore must also continually develop new approaches to this global challenge of climate change. With this level of competition, we cannot afford to rest on our laurels but must continue to work towards decarbonisation where possible and to ensure that the use of carbon credits can truly advance global climate action and ambition.

Singapore must do its best to engage our counterparties and we need more people to step forward in this journey. We need more of you to take an interest in how countries are addressing climate change, setting NDCs, asking the right questions and holding each other accountable. We must keep fighting the good fight to find solutions and forge pathways forward. To this end, my team at the NUS Centre for Nature-based Climate Solutions will be running some training courses on carbon markets and legal and regulatory issues on climate change in Singapore. Do register if you're interested to join us on this journey.

Thank you for listening.