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Record of the facilitative sharing of views under the Subsidiary Body for Implementation at the UNFCCC Climate Dialogues 2020: Singapore

Note by the secretariat

Abbreviations and acronyms

AD	activity data
BUR	biennial update report
CO ₂ eq	carbon dioxide equivalent
COP	Conference of the Parties
ETF	enhanced transparency framework
FSV	facilitative sharing of views
GHG	greenhouse gas
ICA	international consultation and analysis
LULUCF	land use, land-use change and forestry
MRV	measurement, reporting and verification
NC	national communication
non-Annex I Party	Party not included in Annex I to the Convention
SBI	Subsidiary Body for Implementation

I. Background and mandate

1. COP 16 decided to conduct, under the SBI, ICA of BURs from non-Annex I Parties, in a manner that is non-intrusive, non-punitive and respectful of national sovereignty, with the aim of increasing the transparency of the mitigation actions and their effects reported by those Parties.¹
2. COP 17 adopted² the ICA modalities and guidelines,³ according to which the ICA process consists of two steps: technical analysis of non-Annex I Parties' BURs by teams of technical experts, resulting in a summary report for each Party; and FSV, to which the BURs and summary reports serve as input.⁴

¹ Decision 1/CP.16, para. 63.

² Decision 2/CP.17, para. 56.

³ Decision 2/CP.17, annex IV.

⁴ Decision 2/CP.17, annex IV, para. 3.

3. Pursuant to the ICA modalities and guidelines, the SBI convened remotely, from 24 to 27 November 2020 at the UNFCCC Climate Dialogues 2020, the ninth FSV workshop, open to all Parties, for the 17 non-Annex I Parties, including Singapore, for which there was a BUR and final summary report by 31 July 2020.⁵ Interested Parties were able to submit written questions in advance through the secretariat. Singapore received 16 written questions in advance from Australia, Canada, the European Union, Japan, New Zealand, Switzerland and the United States of America and addressed some of them in the course of its presentation.
4. The workshop, chaired by the SBI Vice-Chair, Yeonchul Yoo, and SBI Rapporteur, Constantinos Cartalis, comprised five sessions and covered the 17 Parties.
5. This FSV record for Singapore summarizes the proceedings and, together with the summary report on the technical analysis of its third BUR,⁶ constitutes the outcome of the third round of ICA for the Party.

II. Summary of proceedings

6. On 25 November 2020, Singapore made a brief presentation on its third BUR. The presentation was followed by a question and answer session.
7. The Party was represented by Alyssa Ng Shu Hui from International Policy, National Climate Change Secretariat, Strategy Group, Prime Minister's Office of Singapore.
8. In its presentation, Singapore provided an overview of its national circumstances and institutional arrangements, national inventory of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, mitigation actions and their effects, lesson learned and challenges ahead.
9. Singapore mentioned that it is a small, low-lying, highly urbanized and dense island State accommodating housing, commercial centres and transport hubs. Limited land area and intermittency are the constraints for generating solar power and the climatic conditions are less favourable for large-scale deployment of hydropower, wind and geothermal energy. Given the limits of the alternative energy, most of Singapore's electricity is generated from natural gas. Owing to the lack of domestic hinterland and natural resources, Singapore is reliant on a strong export-oriented manufacturing base, producing goods and services for the global market. On institutional arrangements, the Party highlighted that climate change is a complex challenge in Singapore and it takes a 'whole of government' approach to tackle this issue.
10. Singapore presented its pledge to reduce GHG emissions by 16 per cent below the 'business as usual' scenario by 2020. Its mitigation efforts are funded by domestic resources and are not contingent on international support. Singapore clarified that it remains well on track to achieve its 2020 pledge. Beyond its mitigation actions, the Party adopted a long-term approach to adaptation to enhance its ecological resilience, protect coastlines and boost flood resilience. As Singapore strives to become a 'city in nature', it will plant 1,000,000 trees by 2030 and include other nature-based solutions where feasible to reinforce its resilience to climate change.
11. Singapore highlighted that its total GHG emissions were 50.90 million tonnes of carbon dioxide equivalent (Mt CO₂ eq) including LULUCF in 2014 and that they increased between 2000 and 2014 by 32.8 per cent with emissions and removals from LULUCF, owing mainly to fuel combustion in the energy sector, with emissions in 2014 at 48.40 Mt CO₂ eq.
12. Singapore presented key policies and measures for achieving its target in six broad sectors (energy, industry, transport, buildings, households and waste), with the carbon tax being part of and complementing its measures to reduce emissions. The carbon tax implemented by Singapore in 2019 was the first carbon pricing scheme in South-East Asia. It applies to all facilities emitting at least 25 kt CO₂ eq of GHG emissions per year without

⁵ The BURs and the summary reports are available at <https://unfccc.int/BURs> and <https://unfccc.int/ICA-cycle3>, respectively.

⁶ FCCC/SBI/ICA/2019/TASR.3/SGP.

exemption and covers around 80 per cent of the national emissions. The carbon tax provides an economy-wide price signal to encourage emission reductions where it makes the most economic sense. Despite its space constraints, Singapore is exploring ways to increase its use of solar energy and has adopted innovative approaches such as using floating, offshore and building-integrated photovoltaic systems. The deployment of Singapore's first large-scale floating solar photovoltaic system of 60 MWp, one of the largest of its kind in the world, will be completed in 2021. For transport, Singapore aims to increase the public transport modal share during peak hours to 70 per cent by 2020 and 75 per cent by 2030. Car and motorcycle population growth rates have been kept at zero. To reduce emissions from the waste sector, Singapore intends to increase its overall recycling rate to 70 per cent by 2030 through legislation as well as consumer education. The Party's efforts to combat climate change allowed it to grow its economy while moderating its emissions. In addition, Singapore's emission intensity improved by 37 per cent from 2000 to 2014 and the energy intensity improved by 33 per cent in the same period.

13. Furthermore, Singapore provided information on its experience in participating in the MRV process over time. The Party highlighted that it is increasingly clear that domestic MRV is a 'whole of government' effort. Clear institutional arrangements with roles specified for all stakeholders allow Singapore to coordinate its preparations for each NC, BUR and ICA process. The Party's understanding of the MRV framework and reporting guidelines has improved through its continuous participation in the BUR and ICA processes. In addition, the Party mentioned that as each country's circumstances and institutional arrangements are unique, the best way to improve capacity is simply to participate in the MRV process, learn from the recommendations made by teams of technical experts in their analysis of Singapore's BURs and questions from other Parties, and improve the quality of subsequent reports.

14. On challenges ahead, the Party mentioned that as it begins its transition to reporting under the ETF, it will need to enhance its understanding of the ETF guidelines and identify how its existing arrangements will allow meeting these enhanced reporting obligations to be met. The Party highlighted that, similar to its effort to enhance its MRV capacities with every ICA cycle, it will need to bridge its ETF-related capacity gaps over the next few years. It noted that maintaining sustainable institutional arrangements and systems will ensure that these enhanced capacities are retained for effective reporting over time.

15. Following the presentation, the following Parties made interventions commending Singapore on its efforts and asked questions seeking further clarification: China, European Union, India, Japan, Lebanon, Netherlands, Slovakia, Switzerland and United Kingdom of Great Britain and Northern Ireland. The questions were related to improvements to and challenges with GHG inventory reporting and the use of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*; confidence level of fugitive emission data; AD for the electronic industry; lessons learned in introducing the carbon tax and using the carbon tax revenue; energy efficiency measures in public transportation; the Green Mark buildings programme for improving the energy efficiency of new and existing buildings; experience and challenges in providing capacity-building training to other developing countries, especially South-East Asian countries, to meet the requirements of the ETF; key benefits that Singapore experienced through improving its domestic MRV system; tracking Singapore's progress in meeting its mitigation pledge; benefits or challenges in presenting NCs and BURs together; and planning for submission of the fourth BUR.

16. Singapore provided responses, in particular explaining that it will be applying the *2006 IPCC Guidelines for National Greenhouse Gas Inventories* in its fourth BUR; the confidence level of fugitive emission data is high; AD used for the electronics industry are from onsite audits conducted by the National Environment Agency personnel. On policies and measures and mitigation actions, the Party explained that by implementing the carbon tax it learned the necessity of planning to reduce the administrative burden for companies to submit their reports and the importance of communicating the purpose and the rationale of the carbon tax clearly to the different stakeholder groups and to actively seek their feedback and suggestions on it. The revenue is used to fund energy efficiency measures in the industry sector. The Party added that in addition to fuel switching measures to encourage the use of low-emission vehicles, it introduced the carbon emissions-based vehicle scheme and the fuel

economy labelling scheme in 2013. Singapore adopted a set of measures to harvest energy efficiency improvements in the building sector, which includes environmental sustainability regulations that have been put in place for new and existing buildings.

17. On capacity-building and the domestic MRV system, the Party explained that other developing countries in the region may need more capacity in reporting for the agriculture and LULUCF sectors, and for collecting AD from certain key sectors such as transport. It added that a better domestic MRV system allows the implementation of strategies to be tracked more closely and ensures continued progress with the target. AD used to estimate emission reductions vary for each mitigation action and are collected through different sources such as official surveys required under the different acts. Quadrennial matching of the NC and BUR reporting cycles makes it easier for the inter-agency working group to prepare and submit NCs and BURs together as it reduces the reporting burden; however, there are challenges in that some time is required for removing excessive repetition and the document is a longer one. The Party clarified its intention to submit its fourth BUR in December 2020.

18. The presentation and subsequent interventions are accessible via the webcast of the workshop.⁷

19. In closing the workshop, the SBI Vice-Chair congratulated Singapore for successfully undergoing FSV and completing the third round of its ICA process. He thanked Singapore and all other participating Parties for engaging in the workshop in a facilitative manner. He also thanked the secretariat for its support.

⁷ Available at <https://vimeo.com/484500980>.