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National University of Singapore

Decoding the Paris Rulebook for Southeast Asia: Implementation and Its Challenges

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The Centre for International Law (CIL) was established as a university level research institute at the National University of Singapore (NUS) in 2009, in response to the growing need for international law thought leadership and capacity building in the Asia-Pacific region. The mission of CIL is to enable Singapore and the Asia-Pacific region to play a more significant role in the promotion and development of international law.

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'We have to understand the extent of climate change impacts in Southeast Asia, how our respective governments and how ASEAN as an institution respond to these impacts in terms of law, policy, and governance.'

LUCY REED
Director, NUS Centre for International Law

'While ambition is crucial, we must not lose sight of the equally important act of "implementation". It is important for all Parties to fulfill their existing commitments, and more broadly, for Parties to implement all provisions under the Paris Agreement.'

JOSEPH TEO
Singapore's Chief Negotiator for Climate Change

'Working together in regional coalitions is a great way to encourage best practice through information-sharing, and to maximise collective ambition.'

JO TYNDALL
New Zealand's High Commissioner to Singapore

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Acknowledgments

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This workshop outcome report has been developed based on the presentations and inputs from the speakers, moderators, and participants who are experts and experienced professionals in climate change law and policy from across the ten ASEAN Member States, the ASEAN Secretariat, the UNFCCC Secretariat, academia, international and regional organisations, and the business sector.

The workshop was ably assisted by student rapporteurs—Carol Yuen, Edwina Shaddick, Felicia Liu, Keila Garcia and Gu Mingyue. CIL commends them for their time and efforts.

Due credit and recognition must be accorded to important individuals in the CIL administrative team—Ms Gerry Ng, CIL's indomitable Events Manager, her assistant Ms Christine Tham and Ms Angela Lim—without whom the workshop could not have proceeded smoothly.

Finally, deepest appreciation goes to Professor Tommy Koh, Chairman of the CIL Governing Board, who has always been a champion for the environment and ASEAN, and Professor Lucy Reed, Director of CIL for her strong support for research in climate change.

NCCS NATIONAL CLIMATE CHANGE SECRETARIAT SINGAPORE | STRATEGY GROUP PRIME MINISTER'S OFFICE

Ministry of the Environment and Water Resources SINGAPORE

NEW ZEALAND FOREIGN AFFAIRS & TRADE

List of Abbreviations

AFOLU	Agriculture, Forestry and Other Land Use
AMS	ASEAN Member State/s
ASCC	ASEAN Socio-Cultural Community
ASEAN	Association of Southeast Asian Nations
ASEC	ASEAN Secretariat
AWGs	ASEAN Working Groups
AWGCC	ASEAN Working Group on Climate Change
AWGEE	ASEAN Working Group on Environmental Education
AWGNCB	ASEAN Working Group on Natural Conservation and Biodiversity
AWGCME	ASEAN Working Group on Coastal and Marine Environment
AWGESC	ASEAN Working Group on Environmentally Sustainable Cities
AWGCW	ASEAN Working Group on Chemicals and Waste
AWGWRM	ASEAN Working Group on Water Resources Management
BAU	Business As Usual
BTRs	Biennial Transparency Reports
BRs	Biennial Reports (for developed countries)
BURs	Biennial Update Reports (for developing countries)
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CGE	Consultative Group of Experts
COP	Conference of Parties
ESG	Environmental, Social and Governance
ETF	Enhanced Transparency Framework
ETS	Emissions Trading System
FMCP	Facilitative multilateral consideration of progress
GHG	Greenhouse Gas
GST	Global Stocktake

GTP	Global Temperature Potential
GWP	Global Warming Potential
IAR	International Assessment and Review
ICA	International Consultation and Analysis
ICTU	Information necessary for clarity, transparency and understanding
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least Developed Countries
LGU	Local Government Unit
LT-LEDS	Long-Term Low Emission Development Strategies
MPGs	Modalities, Procedures and Guidelines
MRV	Measurement, Reporting and Verification
NBS	Nature-Based Solution
NCs	National Communications
NDCs	Nationally Determined Contributions
NIR	National Inventory Report
PSIDs	Pacific and Small Island Developing States
REDD+	Reducing Emissions from Deforestation and Degradation, and fostering conservation, sustainable management of forests, and enhancement of forest carbon stocks
RSPO	Roundtable for Sustainable Palm Oil
SBTs	Science-Based Targets
SDGs	Sustainable Development Goals
SIDS	Small Island Developing State
TACCC	Transparency, Accuracy, Completeness, Consistency and Comparability
TEC	Technology Executive Committee
UNFCCC	United Nations Framework Convention on Climate Change
WRI	World Resources Institute
WWF	World Wide Fund for Nature

Executive Summary

This report is a synthesis of the discussions during the two-day workshop comprising participants from regional governments, scientists, academia, lawyers, policy-makers, students and civil society.

Setting the context

The workshop started with an overview of the international climate change law regime and the obligations that State Parties are committed to. Participants sought clarity on 'hard' legal obligations under the UNFCCC and the Paris Agreement, and the deadlines for submissions to the UNFCCC Secretariat in respect of their treaty obligations. The discussions then moved to understanding climate science and potential impacts based on projections by the IPCC, in particular the impacts on Southeast Asia. Increased intensity and frequency of natural disasters and rising sea levels are some of the most serious climate change concerns that Southeast Asian countries have. The workshop explored the nexus between science, policy and law. Solid scientific data and information that is made available to governments, academia, private sector and civil society can guide decision making and lead to better, sustainable policies at the regional, national, sub-national and organisational levels. Sound policymaking will aid countries in achieving the implementation of NDCs.

ASEAN's challenges in NDC implementation

Three common but significant challenges facing AMS in the implementation of NDCs were identified during the workshop.

AMS reported data-related challenges in the implementation of NDCs such as data gathering, the use of different methodologies, the integrity of data sets, and the consistency in data collection. The absence of basic knowledge management systems to collect and store data was also cited as a challenge for some AMS. Many of the data-related challenges are linked to technical and human resource capacity limitations. In the discussion on implementation of NDCs, AMS identified energy, transport, agriculture, and forestry as main sectors of concern. Specifically, there were data calculations and GHG inventory difficulties faced in these sectors, particularly with the transition from the Revised 1996 IPCC Guidelines on National GHG Inventory to the 2006 IPCC

Guidelines. The transition from the MRV systems to the new ETF by 2024 would bring about new challenges for developing countries and LDCs.

The second challenge is the lack of funding and financial assistance. The achievement of NDC implementation targets for developing countries and LDCs depends on external financial support. However, public sector budgets have to be managed carefully so that unconditional targets are met, and private finance could be a source to tap on to meet conditional targets. ASEAN countries require three levels of assistance: first, to assess climate finance needs and flows at the regional level, second, to develop a regional climate finance access strategy, and third, to be able to access readily available finance.

The third challenge lies in the difficulty of coordination at various levels and between different actors. Where NDC mitigation targets are sector based, AMS cited challenges of cross-sectoral coordination between ministries and line agencies, between implementing agencies and the private sector, and coordination between national and sub-national entities to meet their NDC mitigation targets. AMS recognised that coordination between the government and relevant actors in the private sector is equally important in planning and conducting adaptation measures. Coordination work is required not only for the transfer of policies, information and targets, but also in the collection of data, the choice of methodologies used, data analysis and the implementation of measures.

Conclusion

Responding to climate change is one of the top priorities for individual ASEAN governments and collectively for ASEAN. Participants recognise that more actions are needed to achieve existing NDC targets and raise collective ambition. These include more efficient data management, tighter ministerial and cross-sectoral coordination nationally and greater engagement with businesses, civil society and academia in order to balance top-down and bottom-up approaches to addressing the climate crisis.

Participants of the 'Decoding the Paris Rulebook: Implementation and Its Challenges' workshop, 1-2 October 2019

Introduction

The Southeast Asian countries share many common interests in mitigating and adapting to climate change impacts. Some of the most serious concerns facing the region today include increasing intensity and frequency of natural disasters, population vulnerability to extreme weather phenomena, and rising sea levels. This workshop was conceptualised for regional stakeholders to share common implementation challenges in their respective NDCs, enhanced transparency reporting and preparations for the 2023 GST, knowledge and best practices at the regional, national and sub-national levels on the steps needed to be taken by Parties to fulfil their Paris Agreement obligations and contribute towards global efforts to address climate change. The workshop was a platform to engage non-governmental stakeholders.

Setting the Context

Professor Daniel Bodansky, Regents Professor at the Sandra Day O'Connor College of Arizona State University gave a broad overview of the international climate change regime, setting out the provisions and the mechanics of the Paris Agreement vis-a-vis the Paris Rulebook. He discussed three recurring issues: whether the Paris Agreement should take a top-down or bottom-up approach, how legally binding the Agreement is, and how uniform the rules should be. He also highlighted the nuanced differentiation of the Paris Agreement in its abandonment of annex system that was evident in the UNFCCC and the Kyoto Protocol (Annex 1 vis-a-vis non-Annex 1 parties), the self-differentiation of mitigation targets and the bifurcation of financial commitments.

Other key components of the Rulebook relevant to the AMS, particularly the developing countries and LDCs, were also discussed. One of these components is the ETF, with specified flexibilities for the least developed and developing countries. Adjunct to ETF is the requirement, especially for the second and succeeding NDCs, to provide ICTU in mitigation targets. Adaptation communication is another crucial component since some AMS prioritise adaptation over mitigation.

Participants clarified the legally binding nature of certain obligations contained in the Paris Agreement and the Paris Rulebook. For instance, on whether the submission deadline of NDCs to the UNFCCC Secretariat applied to this current or the next round of submissions, paragraph 25 under section III in Decision 1/CP.21 stipulates that Parties are to submit their NDCs at least 9–12 months prior to the relevant session of the COP.[1] The UNFCCC Secretariat confirmed that countries should communicate their updated NDCs by March 2020 which will be consistent with the 9-month deadline.

Regarding the legal character of Article 4(19) of the Paris Agreement on the formulation and communication of a country's long-term

1 UNFCCC 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 15 December 2015, Addendum, Part two: Action taken by the Conference of Parties at its twenty-first session' (29 January 2016) UN Doc FCCC/CP/2015/10/Add.1, para 25.

GHG strategies, Professor Bodansky noted that while it is not a hard obligation for States to communicate their long-term GHG emissions strategies in their NDC, it was nonetheless advantageous and desirable to do so. There is, however, a hard obligation to communicate an NDC every five years pursuant to Article 4(9) of the Paris Agreement.

The workshop also noted that there has been no agreement so far on the establishment of common time frames for NDCs. Common time frames can make the comparison of NDC implementation easier, facilitate reporting and ICTU.

Southeast Asia and Climate Change

The workshop explored the nexus between science, policy and law through the three themes of climate science for Southeast Asia, the role of cities in climate action and the policies pursued by the ASEC on behalf of its members.

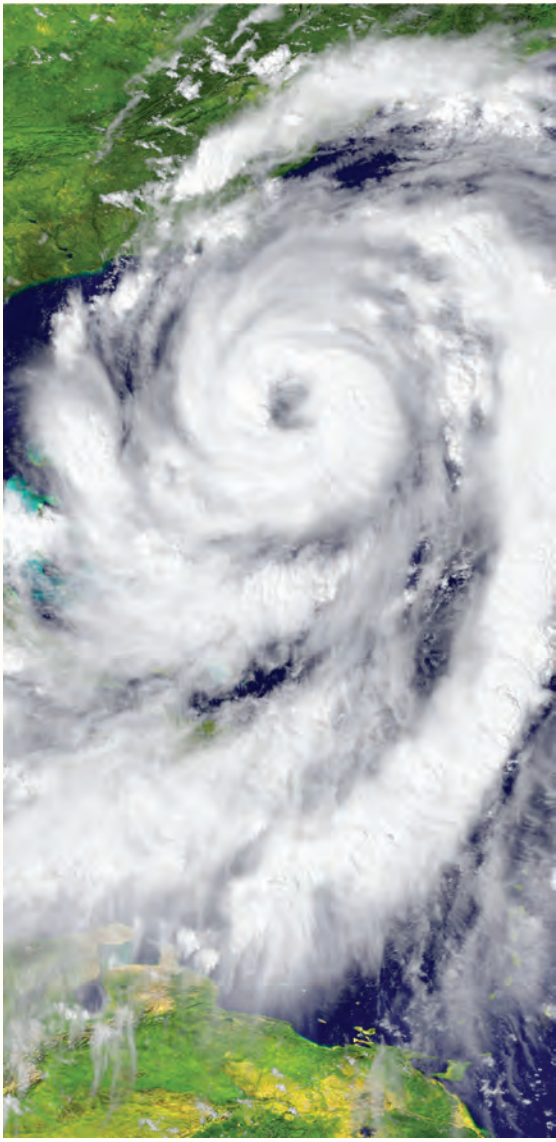
Considering a 2°C World in Southeast Asia

Associate Professor Winston Chow from the Singapore Management University examined the science of climate change, beginning with an outlook of a 2°C temperature increase for Southeast Asia. Based on 2016 projections, the region faced a 50% chance of reaching 1.5°C warming by 2026 and a 50% chance of reaching 2°C warming by 2044 under BAU conditions. Five risks in particular stood out for Southeast Asia that included:

1. An increase in high heat-related mortality rates (high confidence)
2. An increase in the risk of drought-related water and food shortages (high confidence)
3. Exacerbated poverty, greater inequality, urban-related vulnerabilities (high confidence)
4. Increased risk of crop failure and lower crop production (medium confidence)
5. Water shortage in arid regions (medium confidence)

While the science may not reveal any new impacts, the many IPCC reports had contributed to enhanced confidence levels of scientific projections. The IPCC Special Report on Oceans and Cryosphere in a Changing Climate, published in September 2019, highlighted that a greater frequency and intensity of tropical cyclones, an increase in hazards for coastal cities, and an increase in the incidence of extreme sea level events would be expected in the Southeast Asian region.

ASEAN's population is expected to increase from 640 to 717 million by 2030, with a large concentration of its population in megacities. Exposure to climate risks, such as flooding and sea-level rise is particularly high in ASEAN coastal cities. The informal settlements in these cities are likely to be the most vulnerable from these climate risks.



The Future We Want: How Cities Get Us There

Mr Joselito Guevarra of C40 examined the role of cities in climate action and how cities can work to raise ambition was examined. More than half of the world's population live in cities, which represent over 70% of global CO_2 emissions. At a 1°C temperature increase, 81 out of 94 C40 member cities are already experiencing a new climate reality. According to the International Monetary Fund, the world should be prepared for a new climate regime by the turn of this century. Mr Guevarra discussed Deadline 2020, a roadmap for cities that identified 12 strategic actions that can deliver 90% of the required emissions targets under the Paris Agreement. Five Southeast Asian cities—Hanoi, Ho Chi Minh, Quezon, Kuala Lumpur and Jakarta—are participating in C40's Climate Action Planning Programme 2018–2020. Under this programme, cities commit to achieve carbon neutrality by 2050 at the latest, produce a climate action plan and deliver science-based decisions. The programme details how the city governments engage with their private-sector partners on matters concerning health issues, for example, and outline inclusivity and co-benefits in implementing their plans. Cities under this programme enjoy technical assistance and capacity building.

The workshop noted a lack of discussion on how cities can play a part in the formulation of NDCs and how they can help State Parties achieve the NDC targets. The barriers to greater climate action from cities are:

Lack of a robust framework for cities to access finance with most financial institutions with cities having to go through national-level institutions;

Jurisdictional and governance issues (for example, there are special cities in Viet Nam that come under the direct jurisdiction of its national government);

Difficulty in making a case for action (for businesses);

Difficulties working with the private sector.

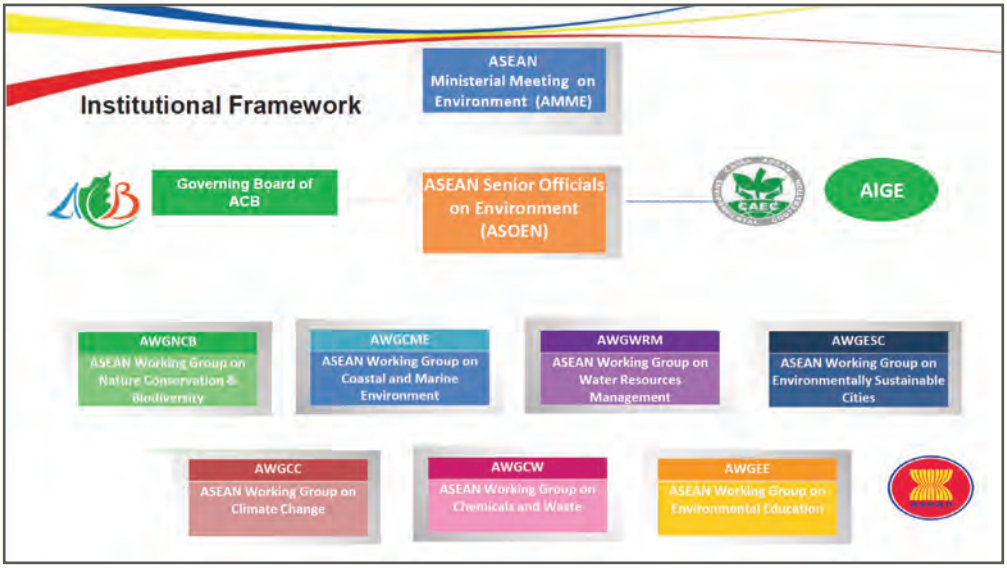
Cities face the challenge of balancing on the one hand the desire for a greater greening of city eco-systems and higher climate ambition, and on the other hand, pressing demands and pressures of housing the population and apportioning land for development. In addition, there are also the jurisdictional challenges of working with national authorities that maintain a purview of national parks. The need for contextualisation of each city's or country's climate problems is therefore a real one.

ASEAN Cooperation on Climate Change

ASEC provided an overview of ASEAN's mandate and institutional framework governing environmental and climate change issues and updated the workshop participants on the various initiatives to address climate change. The ASCC Blueprint 2016–2025 framed and articulated environmental and climate change issues. The ASCC Blueprint 2016–2025's Section C1-C4 covered the four key areas of biodiversity and natural resources, environmentally sustainable cities, sustainable climate and sustainable consumption and production. The four key areas were then translated into seven strategic priorities in the environmental cooperation framework. In turn, AWGs were established to examine the seven strategic priority areas:

- Nature conservation and biodiversity (AWGNCB)
- Coastal and marine environment (AWGCME)
- Water resources management (AWGWRM)
- Environmentally sustainable cities (AWGESC)
- Climate change (AWGCC)
- Chemicals and waste (AWGCW)
- Environmental education (AWGEE)

The ASEAN institutional framework on environmental cooperation is illustrated below:



Source: ASEAN Secretariat, Environment Division

The AWGCC, chaired by Cambodia (2019—2022), meets annually to report on the group's action plan. AWGCC activities that are already in progress or planned for 2020 include the following:

*A project proposed by **Indonesia** in conjunction with the **European Union**, to strengthen the link between science and policy interface in related decision-making processes. The project is expected to be implemented by early 2020.*

*An ongoing project on setting up a facility/company-level MRV system for GHG emissions in AMS, arising from a scoping study led by **Singapore**. The long-term aim is to prepare AMS to deal with carbon pricing with a view to establishing a form of carbon trading among AMS.*

*A project, proposed by **Thailand**, for capacity development and institutional strengthening for the establishment of an ETS.*

*A project, co-led by **Brunei** and the **Philippines**, on ASEAN Climate Finance Strategy in cooperation with the **UNFCCC**, to review existing support for ASEAN countries, assess current needs of ASEAN members and explore ways to facilitate access to finance at a regional level. The project began with an inception meeting at the end of October 2019.*

***Viet Nam** is leading a training workshop to strengthen the capacity of ASEAN climate change negotiating teams.*

***ASEC** is in the initial stages of developing an 'ASEAN State of Climate Change Report', which can also contribute to the GST process in 2023. The project will be conducted in cooperation with each of the AMS' nominated national think tanks/research institutions.*

ASEAN recognises that climate change is a cross-cutting issue, as the scope of several AWGs overlap on climate change and its impacts. For instance, the AWGNCB is examining linkages between biodiversity and climate change in the restoration of forests in relation to preservation of carbon sinks. The AWGESC organises an annual Model Cities programme that recognises cities that adopt environmentally friendly policies, while the AWGEE organises youth programmes focussing on climate change. The AWGCME has concluded a study on the impact of climate change on marine coastal areas. Notably, the ASEAN Taskforce on Peatlands also has its work cut out for climate change given that transboundary haze pollution is linked to climate impacts.

An annual ASEAN Climate Change Partnership Conference was initiated in 2018 to foster closer cross-sectoral coordination and explore potential collaboration with dialogue/development partners and the private sector. The second ASEAN Climate Change Partnership Conference was held in Singapore in August 2019. Concept notes from the two conferences will be developed and implemented under the AWGCC action plan which will be open to collaboration with potential partners.

The workshop participants heard perspectives at the global, sub-national and national levels. They explored how ASEAN can be better prepared to respond to climate hazards. The recommendation was to use scientific data and evidence which will lead to better decision-making and therefore better policy-making. Good science can result in better policy in both governmental and business decisions. Some practical steps that can be taken include better monitoring, putting in place enhanced levels of data sharing among ASEAN countries, and sharing information on climate and weather projections on specific climate hazards, which will be useful to many regional stakeholders including governments, cities, businesses and communities.

Commonalities in Challenges

This session drew out the common problems, issues and challenges in the implementation of NDCs within Southeast Asia. The UNFCCC and the Paris Agreement represent a paradigm shift from a top-down to a bottom-up approach in meeting international commitments. The challenge for AMS is understanding the new approach under the Paris Agreement and the kind of actions needed on the ground. The fact that climate change was such a deep and cross-cutting problem meant that no single actor can be excluded in the dialogue between States and States, States and non-State actors, and States and citizens. It would mean a reframing of national conversations on climate change. A bottom-up approach necessitates engagement with non-State actors such as businesses, banks, industries, cities, civil society organisations, international and regional organisations, academic institutions, students and youths. For instance, AMS recognise that their ability to meet mitigation targets

depends on industries' cooperation to reduce emissions in business activities, yet government representatives face the difficult task of convincing industries to make climate change a priority in their business. On adaptation, participants recognise that community-based ideas, indigenous knowledge and NBS can prove more effective in the long-run, but questions remain on how these ideas and solutions make their way to the national policy level and how central governments can play a role in coordinating and scaling up these solutions for provinces, districts and cities.

As can be gleaned from the NDCs of the AMS and their inputs during the workshop, the sectors of common concern were energy and transport, which are large emitting sectors in many AMS, agriculture, the main driver of economy for most AMS, and forestry for carbon sink and sequestration. In the implementation of their NDC targets in these sectors, several AMS face challenges in establishing and maintaining GHG inventory, data calculations, and stakeholder coordination both among concerned government agencies or ministries, and between the government and private sector. The specific challenges articulated by each AMS can be found in the **Annex**.

The next section highlights three significant challenges facing AMS in NDC implementation.

Data Gathering, Methodology, and Technical Capacity

The workshop participants examined the reporting requirements under the UNFCCC and the Paris Agreement. The discussion on the transition from the existing MRV systems to the new ETF under the Paris Agreement provided greater clarity in the mandatory elements to be undertaken, deadlines to be observed and transitional issues faced by State Parties.

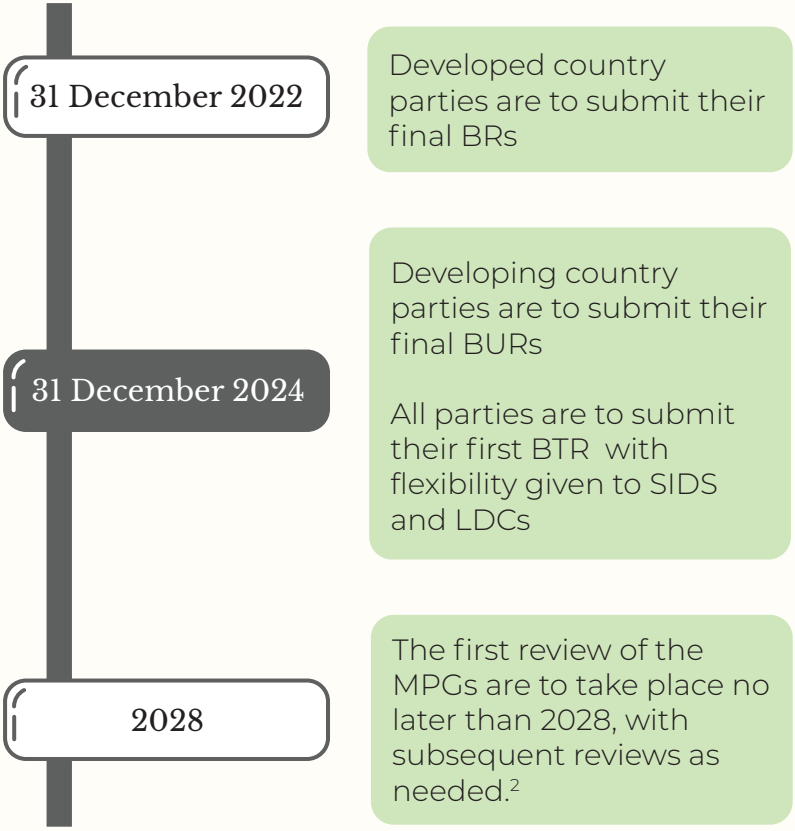
Main Elements of ETF and Reporting Deadlines

The UNFCCC Secretariat highlighted that the main elements of the ETF (under Article 13 of the Paris Agreement)—reporting, technical expert review and FMCP—are based on the existing MRV framework. In essence, the ETF is an extension of the MRV systems.

The two mandatory ETF elements for all Parties to the Paris Agreement to observe are one, the provision of a national GHG inventory report, and two, regular reporting on the progress made towards achieving the NDCs. In addition, developed country parties have to observe an additional mandatory element which is to provide support in terms of financial, technology transfer and capacity-building support to developing countries under Articles 9, 10 and 11 of the Paris Agreement. Reporting on climate change impacts and adaptation is non-mandatory.

The guiding principles of the ETF are essentially to improve reporting and transparency over time, give flexibility to developing countries, achieve TACCC, avoid double counting, and ensure environmental integrity. The flexibility aspect of the ETF is more critical now than ever in order to enable developing countries—recognising the different capacities and circumstances—to adhere to the requirements because of the move towards one common framework. Flexibility is self-determined at the provision-level. Parties may determine which flexibility provisions to use. However, in doing so, Parties must indicate clearly which provisions they wish to use, clarify their capacity constraints and provide self-determined estimates of time frames for improvements in capacity constraints. The MPGs that were adopted in the Paris Rulebook will supersede the reporting of BRs, BURs and IAR, and ICA processes.

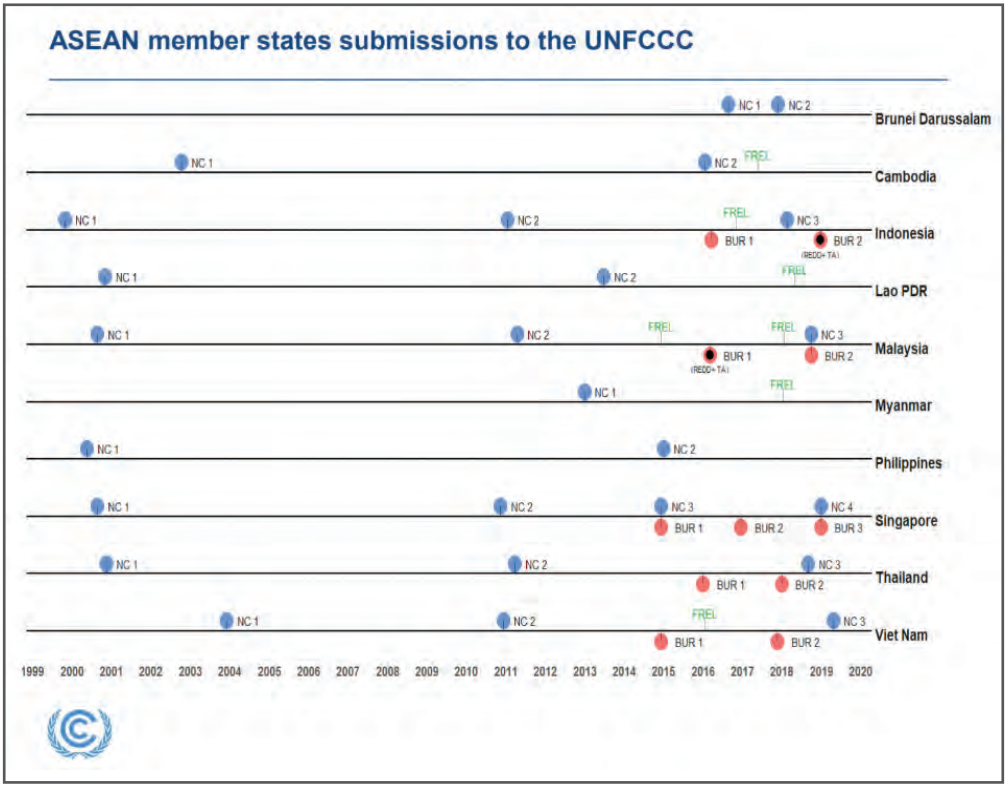
The UNFCCC Secretariat highlighted the following important deadlines that Parties should take note of:



It is important to note that the new ETF process under the Paris Agreement does not replace the obligation of reporting NCs, an annual GHG inventory for developed country Parties, and a technical annex on REDD+ for Parties that have already done so under the MRV.

2 See also UNFCCC Secretariat, 'Moving Towards the Enhanced Transparency Framework' United Nations Climate Change <https://unfccc.int/enhanced-transparency-framework#eq-2> accessed 7 November 2019.

The table below shows the status of ASEAN countries' submission to the UNFCCC Secretariat. To date, all ten ASEAN countries have submitted their NCs, five ASEAN countries have submitted their second BURs, two ASEAN countries have submitted their Technical Annexes on REDD+ and one ASEAN country has submitted its third BUR.[3]



Source: UNFCCC Secretariat

The UNFCCC Secretariat clarified that countries can decide which BUR will be their final, bearing in mind the two-year cycle of BUR submissions, before transitioning to the ETF process. There is no guideline that specifies how many BURs a country should submit prior to 31 December 2024 or which BUR would be a country's final.

3 According to the UNFCCC website, seven Parties have submitted their third BURs to-date.

Implementation Challenges under the MRV and ETF

Southeast Asian countries face several challenges in fulfilling their NDC commitments. Most of these challenges relate to the technical capacities in the domestic MRV systems, the transition to the new ETF, and the corresponding financial assistance necessary to transition to a low-carbon economy. Since submission of the first BURs in 2014, developing countries have reported several practical challenges related to reporting and submitting of reports. A transition to the new ETF would include the following challenges:

Current challenges in MRV	New Challenges in transition to ETF
Problem of human resource capacity.	Require additional human resource capacity and institutional requirements to support the BTR technical expert review assessments expected in 2024, as developing countries are also expected to contribute assessors in order to ensure fair and equitable representation from developed and developing parties.
Data-related issues such as data monitoring, collation and ensuring data-set consistency, obtaining private sector cooperation in submitting data to build up inventory reports under 2006 IPCC guidelines, and expensive data reporting tools that are out of reach, especially at the sub-national levels. Absence of a proper knowledge management system which can result in the loss of historical data/information.	The 2006 IPCC Guidelines' requirement for a transition to more robust methodologies may require developing countries to change reporting templates, and track sources of emissions that were not previously tracked.

Current challenges in MRV	New Challenges in transition to ETF
Difficulty faced in accessing financial support, eg resources are needed to track mitigation data in the preparation of submission of a BUR which must be submitted every two years.	Higher demand on numbers of gases to report, time series period and requirements for a more recent inventory year, which translates to a shorter time lag in between reporting years.
Difficulties in communicating reporting guidelines across different line agencies and sectors, and making sure that the correct inputs are collected from the correct stakeholders.	New processes and institutions required to support adaptation and climate change impacts reporting.
Highly technical transparency guidelines require reporting teams to share a correct interpretation of guidelines. This is difficult as translation from the English language to local languages may produce different interpretations.	Lack of recommended reporting tabular formats in the progress reporting of NDCs and lack of recommended tables for the reporting on support needed and received by Parties.

Under the new ETF, all countries must use the new 2006 IPCC Guidelines.[4] Presently, some developing countries are using the Revised 1996 Guidelines while other countries are using a hybrid of both the 1996 and 2006 Guidelines, or have already transitioned to the new 2006 IPCC Guidelines. By the time of reporting the first BTR by 2024, all Parties are to fully use the 2006 IPCC Guidelines with flexibilities applied.[5] Transition is a common challenge for many AMS, because it will cause problems in the translation and synthesisation of data. Moreover, this may require reporting of activity data that previously had no methodology for accounting under the Revised 1996 Guidelines. Drawing from the IPCC's 5th Assessment Report, paragraphs 20 and 37 of the Annex to Decision 18/CMA1—which are both 'shall' provisions of the Paris Rulebook—stated that Parties must use the 2006 IPCC Guidelines and 'any subsequent version or refinement of the IPCC guidelines' as agreed by the CMA. The two paragraphs also stated that the metrics shall be based on 'the 100-year time-horizon GWP values from the IPCC Fifth Assessment Report, or 100-year time horizon GWP values from a subsequent IPCC assessment report,' as agreed by the CMA.[6]

The UNFCCC Secretariat reported an analysis of the ASEAN countries' arrangements for reporting and their domestic MRV systems based on reports submitted. Nine out of ten ASEAN countries have existing institutional arrangements to support the submission of NCs and BURs. Eight out of ten ASEAN countries have a domestic MRV system for the development of GHG inventory while only two out of ten have MRV support, which is an area that AMS can look into.

Countries realise an urgent need to establish and enhance their existing MRV to collect and analyse data in order to track progress towards NDCs. Existing MRV systems provide useful testing ground for countries to transition to the ETF system. Consolidated domestic MRV systems will not only serve the purpose of the UNFCCC reporting but also inform domestic policy-making, long-term climate strategy and broadly, towards the monitoring of the implementation of SDGs.

4 See IPCC Task Force on National Greenhouse Gas Inventories, '2006 IPCC Guidelines for National Greenhouse Gas Inventories' <https://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html> accessed 7 November 2019. See also '2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories' <https://www.ipcc-nggip.iges.or.jp/public/2019rf/index.html> accessed 7 November 2019.

5 See UNFCCC Secretariat, 'FAQs on the Operationalisation of the Enhanced Transparency Framework' 13-15 (on the summary of flexibility provisions in MPGs to those developing country Parties that need it considering their capacities) <https://unfccc.int/sites/default/files/resource/FAQs_ETF.pdf> accessed 7 November 2019.

6 UNFCCC, 'Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on the third part of its session, held in Katowice from 2 to 15 December, Addendum, Part two: Action taken by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement' Decision 18/CMA.1, Annex, (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.2, paras 20 and 37.

The UNFCCC Secretariat's analysis of challenges facing the AMS as follows:

Information is inconsistent, because of separate reporting for NC, BUR, NIR, and REDD+. Each reporting requirement may fall under the responsibility of different agencies. Information inconsistencies can be reduced if reporting systems are synchronised and agencies coordinate among themselves. AMS are encouraged to participate in the technical review exercise which is in itself a capacity-building exercise and to take the opportunity to analyse the information gaps in their reporting.

Some Parties do not understand the implications of choosing certain indicator types necessary to obtain relevant data for reporting requirements under the new ETF every two years. Hence, Parties need to ensure that they are able to collect the data that is required to report progress. Understanding the reporting requirements in order to track progress will help AMS in updating their NDCs which is an important but overlooked aspect.

Additional institutional support that developing countries and LDCs may need in order to implement the ETF include:

Setting up a multi-agency coordination body with clear accountability lines with high-level oversight.

Appointing national climate change focal points/secretariats to communicate reporting requirements and engage with sub-national bodies.

Setting up clear sectoral bodies for the collection and storage of data.

Conducting cross-sectoral review of data.

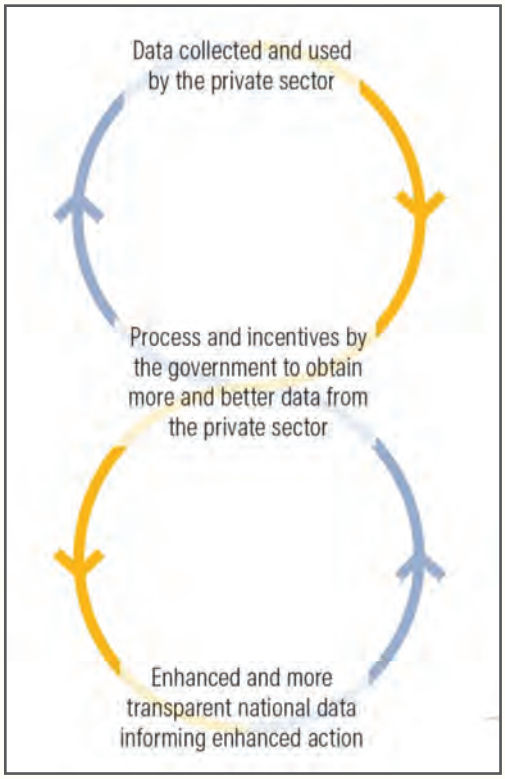
Establishing tighter coordination across agencies, sectoral bodies and the private sector with the use of legal instruments to facilitate sharing of data/information, if needed.

Private Sector as a Data Provider

The role of the private sector in helping governments achieve their NDCs under the Paris Agreement cannot be neglected. A WRI study on the use of data and ambition loops shows that data collected by the private sector can be used to inform government decisions. Greater transparency in national data collection could in turn lead to higher ambition. One example is in the use of data to design carbon pricing policies that can provide confidence and clarity to businesses. Another example is in the use of data to encourage the private sector to adopt science-based emission reduction targets that are aligned towards achieving the 2°C and pursue further the 1.5°C temperature goal, thereby encouraging governments to set higher national targets. To date, 600 companies around the world have agreed to set SBTs but only three of them are from ASEAN.

The WRI presented several challenges in its case study of Indonesia's MRV system. First, data is handled by four line agencies across five reporting platforms, and second, the absence of an integrated MRV system and presence of unclear incentives makes it difficult to encourage the participation of non-State actors. Recognising that all reporting platforms in Indonesia are underpinned by legal arrangements, the WRI proposes to establish a One-Gate Reporting system to develop uniform data sets and synchronise all the different data sets. The aim is to reduce the cost of data collection for the private sector, improve companies' reputation and provide assurances of data security and privacy. The WRI is also studying different incentive options, such as non-financial incentives that can attract greater private sector participation.

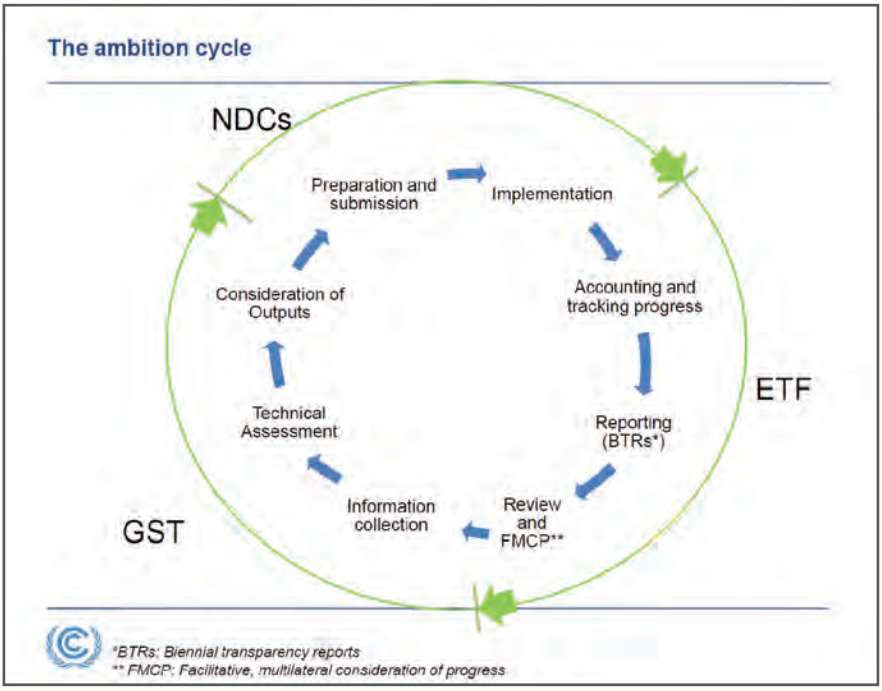
The UNFCCC Secretariat plans to release several knowledge products to help parties understand the Paris Rulebook, including two technical guides—one on understanding the new ETF, and the other on institutional arrangements required to support the ETF—both of which were prepared with oversight from the CGE. Separately, the Secretariat will also release a guidebook on NDC accounting to help parties understand the ICTU process and a user manual to explain the ETF in simple terms. Additionally, the Secretariat has scheduled capacity-building programmes for Parties.



Source: Dagnet et al., 2019

Preparing for the First GST

Related to the data concerns in transitioning from MRV to ETF is the amount of information needed to prepare for the first GST in 2023. Participants recalled Article 14(1) of the Paris Agreement which provides for a hard obligation (use of 'shall') for the CMA to periodically take stock of the implementation of the Agreement in order to assess the collective progress towards achieving the purpose of the Agreement and its long-term goals. The UNFCCC Secretariat explained that the GST is the third piece—after NDC and ETF—that completes the Paris ambition cycle.



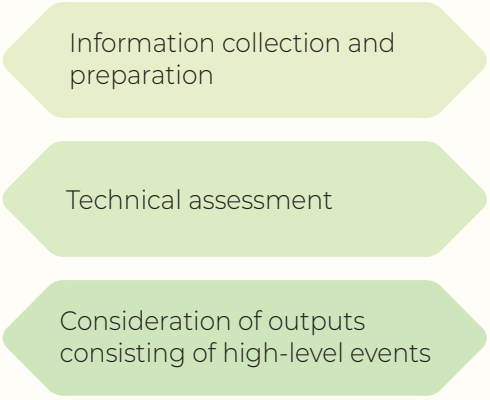
Source: UNFCCC Secretariat

However, the GST is not a single event or point in time, but rather a process to 'assess collective progress', a term that has not yet been clarified. What is clear is that this collective progress will be sourced from inputs coming primarily from the reports and communications of State Parties. Other sources include reports from the IPCC, Subsidiary Bodies, relevant constituted bodies and forums, the UNFCCC Secretariat, other UN agencies supportive of UNFCCC process, voluntary submissions from State Parties, regional organisations and institutions, and non-Party stakeholders and UNFCCC observer organisations. Although the primary source of information is from the State Parties, GST is not meant to review the individual country's effort but the collective effort of countries to limit the temperature increase to 2° C and strive for 1.5° C. The GST is meant to provide an opportunity for countries to identify challenges and share best practices to help others.

Nevertheless, the path towards GST in 2023 is not beyond question. The workshop tackled some GST ambition blockers, such as the fear of doing it alone, the fear of damaging

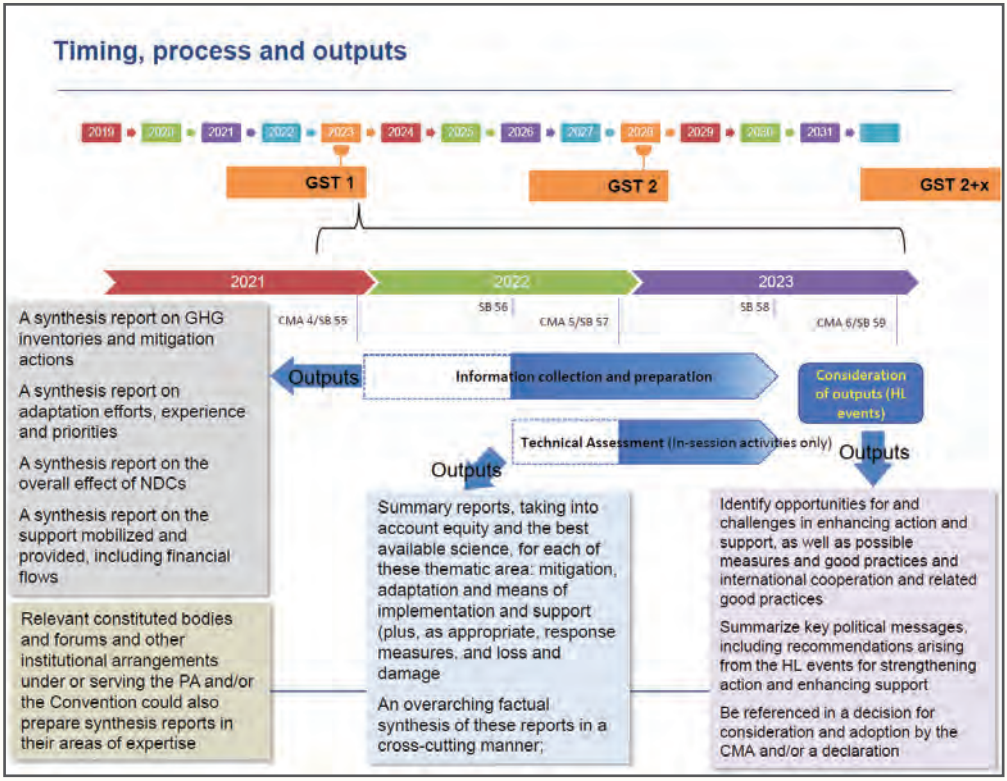
economies and competitiveness, including the lack of knowledge and capacity. The last two points are essentially consistent with the issues raised by AMS in the discussions on NDC implementation and MRV/ETF systems. One salient observation raised in the workshop was that the main blocker of GST was essentially politics. Specifically, there is a need to drive political leaders to increase ambition in climate action. The formulation and communication of LT-LEDS will be critical. This point is related to what some of the developing AMS raised about having LT-LEDS without compromising economic development, poverty reduction, among other non-negotiable considerations.

The first GST will be organised around three themes: mitigation, adaptation, and means of implementation and support. Stocktaking will consist of three stages:



The first stage will begin in 2021 during CMA 4/ SB55 with the UNFCCC Secretariat's submission of synthesis reports on GHG inventories and mitigation actions, adaptation efforts, experience and priorities, overall effect on NDCs, and support mobilised and provided.

A table showing the GST processes, timelines and outputs is below:



Source: UNFCCC Secretariat

The GST will be a time-consuming learning process with a large amount of data and information submitted by State Parties. The question then is how to make these sets of information manageable and formulate them in a way that will impact on the climate discourse in each country.

Funding and Financial Assistance

Aside from data-related challenges, the ability of the least developed and developing AMS to meet mitigation targets is largely conditioned on receiving financial support. External funding or investment is particularly important in for example, the energy sector, in shifting to renewable energy sources, and transport sector in the production of electric cars, as articulated by some AMS. Besides the issue of accessing financial assistance, other concerns are about how to project financial budgets and meet the incremental costs of adaptation. The participants shared their experiences and concerns, including budgeting for incremental cost of climate mitigation and adaptation projects, issues of definition, building of government capacity, the challenge of attracting investment in adaptation projects seen as 'unprofitable', and a case study of a multi-pronged approach by Singaporean banking regulators, stock exchange and banking associations to promote private green finance.

In sum, ASEAN countries needed three levels of assistance:

- To assess climate finance needs and flows at the regional level
- To develop a regional climate finance access strategy
- To be able to access readily available finance once this is identified by Member States

Participants gained an understanding of the ASEAN regional banking landscape and the use of a climate budgeting tool.

The sustainable performance of ASEAN banks still vary greatly but in general, banks have yet to transition to a low-carbon economy. That said, ASEAN banks are facing increasing pressure from regulators, institutional investors and clients, as well as rapid international developments in standardisation of sustainable finance best practice, to be more ambitious in their commitment to sustainability.

Engagement and networking between banks and regulators and international players to enhance capacity building to unlock green finance opportunities are recommended. Capacity building is also required for the finance sector in providing guidance and solutions to ensure that the banking policy environment is conducive to climate change–aligned financial flows.

According to a 2019 WWF Sustainable Banking assessment report,[7] ASEAN banks acknowledge that climate change is an issue but have not developed their day-to-day business activities to align with climate change risks and opportunities. Only 18 out of 35 ASEAN banks have innovated products that are mainly focused on renewable energy. The findings suggested that more sophisticated climate risk disclosures would contribute to a better alignment of banking business models and portfolios that will include climate change targets. The report also observed that governance is important and regulators play a crucial role in ensuring a level playing field and in holding banks accountable for sustainability performance. A better understanding of climate science is needed for banks to engage with clients. Adherence to international standards for certain specific sectors, eg RSPO for the palm oil sector, should be encouraged.

7 See Chen Ted Kin, Jeanne Stampe, and Naomin Tan, 'Update 2019: Sustainable Banking in ASEAN' WWF Singapore <https://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_sustainable_finance_report_2019.pdf> accessed 7 November 2019.

For national governments to effectively budget for climate finance, an integrated approach is needed in identifying the most relevant, climate-sensitive ministries, integrating the policy objectives and improving the tracking and management of climate finance. Several factors must be in place in order for national governments to effectively budget for climate finance:

1. Draw up a national plan to coordinate and manage climate action.

2. Align the industry to ensure cross-sectoral commitment to achieving climate action.

3. Set in place long-term objectives that are aligned with national development growth strategies.

4. Secure political buy-in from the Ministry of Finance.

5. Form a 'constellation of players' inside and outside of the government to form a system of accountability in reviewing the budget performance.

Indonesia was cited as an example of a country leveraging private finance for climate action. Indonesia reviewed its financing gaps and developed the sovereign Green Sukuk (Green Bond) fund in order to fulfil its climate targets.

A representative from the Singapore government said that the country had encouraged sustainable financing among banks and companies to adopt ESG indicators, including guidelines for responsible financing. In 2016, the Singapore Exchange introduced a 'comply or explain' sustainability reporting guideline. The Monetary Authority of Singapore also introduced a Green Bond Grant Scheme to subsidise the cost of external review of issued bonds. This was to address a query on how to mitigate the additional costs of sustainability measures.

In sum, climate budget tagging is a helpful tool for AMS to check whether they meet their unconditional mitigation targets. Meanwhile, tapping the resources of private finance and the banking sector is a way for AMS to achieve their conditional targets without completely relying on funds from the developed countries and/or financial facilities. This is an important consideration for some AMS like the Philippines, for example, which undertakes to reduce 70% of GHG emissions relative to its BAU scenario.[8] However, this mitigation contribution is conditioned on the extent of financial resources that will be made available to the Philippines.

During the workshop, a representative from the Philippines said that social services, particularly healthcare, and technology development and transfer are the areas where assistance is most needed. Indonesia is another case in point. Indonesia pledges to reduce emissions by 26% against its BAU scenario, and aim further to reduce up to 41% with international support.[9] The Indonesian representative said that the targets for concerned sectors will require significant amounts of investment from private stakeholders. Reaching out to the banks signals that the AMS are serious in cross-sectoral coordination by involving the banking sector in climate action.

8 Intended Nationally Determined Contribution (Philippines, October 2015) 3 <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf > accessed 7 November 2019.

9 First Nationally Determined Contribution (Indonesia, November 2016) 2 <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia_submitted%20to%20UNFCCC%20Set_November%20%202016.pdf> accessed 7 November 2019.

Cross-sectoral and Inter-ministerial Coordination

Where NDCs are sector based, the third major challenge that emerged in the workshop discussion pertains to coordination among different government agencies and private entities involved in each of those sectors. For instance, a representative from Thailand said that there is a need for coordination between relevant government agencies involved in energy, transport, waste, industrial waste processes, and the policy and planning office in developing the corresponding action plans to ensure the achievement of its NDC targets. Similarly, a representative from Malaysia said that the different ministries involved (for example, forestry and agriculture) need to balance priorities and power sharing. There are also coordination issues between national and sub-national agencies, as in the case of Indonesia. In addition, there was a call to harmonise efforts with non-State actors. A representative from Viet Nam, for instance said that to achieve NDC mitigation targets, efforts should mainly come from the private sector because the government only lays down the policy, but has no control over the emissions of industrial processes.

Coordination between the AMS governments and relevant actors in the private sector is equally important in adaptation measures. In adaptation financing, for instance, participants noted that banks need to understand

that adaptation is a critical part of sustainability and a networked approach of public finance could help. This is in view of the concerns raised by banks regarding the lack of profit in adaptation projects. Meanwhile, it remains an ultimate responsibility of the State to ensure the wellbeing and livelihood of its population.

A coordinated multi-sectoral response is similarly crucial in notable projects mentioned during the workshop. For instance, some participants were interested in whether the reduction targets in blue carbon projects can be integrated into mitigation targets. Blue carbon needs to be integrated into mitigation solutions, and blue carbon projects are particularly conducive for Southeast Asia because of the abundance of sea grasses and mangroves around the region's coastal areas. As NBS, blue carbon strategies are not only cost-effective but also play a role in adaptation, as their deployment can enhance coastal adaptation infrastructure and reduce impact vulnerabilities for many coastal settlements. In this situation, better coordination is needed between the national government, LGU, concerned coastal community, non-governmental organisations working in the area, if any, and even local banks. The ministries involved in fisheries, forestry,[10] banking, labour, and even education, among other sectors, will have to coordinate with one another and integrate their coastal adaptation programmes into the mainstream.

Coordination is also important in integrating NBS into city eco-systems. Some participants are interested in this type of project which might be more cost-effective in the long-term. City LGUs will play a greater role in this endeavour.

Adjunct to cross-sectoral coordination is the principle of co-benefits. A representative from New Zealand said that using better methods of crop production can reduce methane gas emissions (mitigation) and produce greater yield (adaptation). This type of project deserves greater consideration given the findings of climate scientists that a 2° C scenario for Southeast Asia would not only reduce local yield, but also reduce the nutritional value of crops.

10 For example, in the Philippines, mangrove areas are legally classified as "forest" [Forestry Reform Code of the Philippines 1975, Section 3(o)].

Conclusion

A major concern of all AMS in the practical implementation of the Paris Rulebook revolves around data. There is a question on how data is gathered, and thereby, a question of the integrity and consistency of data. Credible data will be a catalyst for other climate activities that aim to achieve the goal of the Paris Agreement—to hold temperature increase to 2°C, with efforts to limit it further to 1.5°C. This credibility will depend on the methodology used to obtain the data and ability to consistently gather data inputs. For AMS, using the appropriate methodology is an issue of technical capacity whereas data-gathering is a matter of human resource capacity. One way for AMS to level up their technical capacity, as suggested by the UNFCCC Secretariat, is to take part in the technical review exercises which are a form of capacity-building. Another suggestion was to explore ways to seek help from the academic sector in designing knowledge management systems, data-gathering, conducting cross-sectoral review, analysis and research.

Other than data, financial assistance and mobilisation are other concerns particularly for the least developed and developing AMS. Climate finance is no longer defined exclusively by how developing countries access public financial facilities and/or secure funding from developed countries. A sustainable climate finance ecosystem for Southeast Asia also means ensuring that the national fiscal framework integrates climate change agenda, such as climate budget tagging. Since developing countries face budget constraints, encouraging and involving the participation of the private banking sector are crucial. In Southeast Asia, while there are already initiatives to blend environmental and safety factors in capital allocation decisions of some of the biggest listed banks, more could be done in terms of ensuring that bank portfolios contribute to delivering, targets in mitigation, adaptation, and nature restoration. On a positive note, the pressure to make banking practices more sustainable is no longer coming solely from regulators but also from investors. Initiatives such as the ASEAN Climate Finance Strategy that will be conducted in cooperation with the UNFCCC Secretariat will be useful in helping

AMS to assess their current needs and explore ways to access finance at the regional level.

Related to data and knowledge management is cross-sectoral and inter-ministerial coordination, a concern for Southeast Asia. AMS recognise that the private sector can also be an important data-provider for example, where economy-wide mitigation targets require emissions data at the facility-level, cooperation with the private sector is necessary. However, governments face the problem of securing cooperation from the private sector due to an absence of business interests to do so. There is a spectrum of actions that can be taken ranging from outreach to companies and businesses to the use of legal instruments to facilitate the sharing of data and information. A related issue is in the coordination and harmonization of data-sets from public and private sources. Without coordination, information will be fragmented. In the lead-up to GST in 2023, information will be incomplete if it only comes from State Parties. Information from other sources has to be taken into consideration. One suggestion is to establish stronger institutional processes to support coordination such as a multi-agency coordination body with clear lines of accountability and high-level oversight. Another is the appointment of national focal points to communicate reporting requirements and engage with sub-national entities.

While synchronisation remains a challenge overall, there is no doubt that responding to climate change is a high priority for all AMS and ASEAN as a regional organisation. Consistent with its communal way of addressing regional issues, ASEAN's strategies and actions aim to strengthen regional and international cooperation in mitigation, adaptation, technology transfer, capacity building, finance, cross-sectoral coordination and global partnerships. However, more work is needed in terms of exploring carbon market, climate financing, and providing consistent and coherent policies and guidance in adaptation and climate risks across different sectors.

Annex

Specific Challenges Faced by ASEAN Countries in Implementing NDCs

Brunei

The main challenge is getting commitment from stakeholders. Whenever the government engages them, they are reluctant to cooperate as they are not convinced that climate change is a business priority. Moreover, calculations in the AFOLU sector are inaccurate. Brunei has a lot of forest coverage than its reported, 25%.

Cambodia

Many barriers exist in the areas of financing and technology. Technical assistance can pave the way to achieving major emissions cuts. For instance, there are very few electric vehicles in Cambodia. Therefore, investment from the private sector is needed.

The government prioritises adaptation measures, and has allocated more funds in agriculture upscaling and malaria control. This affects the government budget to finance technology development for the mitigation of GHG.

Indonesia

Like other countries, Indonesia faces issues with the national GHG inventory system, which will not be completed by 2019. The challenge is to aggregate the achievements of cities and the private sector because they have different baselines and there might be double counting. Furthermore, the private sector has a different methodology and may not have an incentive to participate in the process.

At the national level, there are challenges in national programme integrations and budgeting vis-a-vis the number of ad hoc institutions. At the provincial level, there are issues of data availability and validity, as well as the presence of several ad hoc institutions. At the city level, the local governments have limited mandates in forestry and energy sectors. At the community level, public awareness is still an issue.

Indonesia is developing a domestic carbon market. The challenge is in the uncertainty of carbon pricing and the size of the carbon market.

Lao PDR

While the government has exceeded its rural electrification target (93% compared to 90%), it is unsure whether it will meet its target to increase forest cover to 70% of the total land area by 2020. This target is too high to meet because of the expansion of industrial and agricultural sectors, and the lack of collaboration between concerned ministries and stakeholders in these sectors.

Lao PDR has changed its focus from expanding large-scale hydroelectric power supply to neighbouring countries to maintaining and preserving hydroelectricity for sustainable use.

Lao PDR is facing challenges in aligning its NDC in different sectors. Lao PDR still lacks the tools to analyse and monitor NDC implementation in each sector. There is limited technical capacity at the provincial and district levels of the government. The local communities also have limited understanding on how they are affected by climate change.

Malaysia

As in other developing countries in ASEAN, Malaysia faces challenges in finance and technical capacity. For instance, there is a need to improve GHG inventory in agriculture sector.

Different ministries need to balance their priorities and power sharing. For example, although forests should be preserved to capture emitted carbon dioxide, forest products are also sources of revenue.

Working with non-State actors and implementing NDC at the sub-national level will have to be improved.

Myanmar

Myanmar identified some weaknesses in its INDC, such as: (a) no strong alignment with the Paris Rulebook; (b) lacking in planning and institutional mechanisms, covered GHG, fairness of NDC vis-a-vis Article 2 of the Paris Agreement; (c) no emission factors were used for accounting of electricity sector; (d) the target on provision of fuel-efficient stoves is too ambitious in numbers, and thus, there is a possibility of double-counting.

There are gaps in data collection and gathering. The data sets are generated in an ad hoc manner, when funding is available. Hence, there is no continuity in data collection and management. As a result, when data is required for MRV purposes, the required information cannot be obtained, because the data is outdated or the required information is not on record.

In accounting for national GHG inventory, Myanmar applied the Revised 1996 IPCC Guidelines, and is in transition to the 2006 IPCC Guidelines. Capacity building is needed for this transition.

Financial assistance is needed in the energy sector. Solar technology is expensive for Myanmar. For an LDC like Myanmar, its government has to subsidise 60% of the technological cost for rural electrification. While the government is receiving some funds, its domestic financial framework needs adjustments.

On the conduct of technical assessments, a representative from Myanmar said that external consultants and government personnel require a mutual understanding of each other's work expectations and pace in order to work effectively.

Philippines

Since it is a non-negotiable consideration for the Philippines to pursue sustainable industrial development alongside the implementation of its NDC, the main challenge is how to industrialise and at the same time decrease emissions by 70%. Energy is the issue. There should be less dependence on coal, and more funds for health and education. For instance, in the greening of hospitals, if electricity can be supplied by cheaper renewable energy sources, more funds can be allocated for medicine.

The Philippines has a Green Jobs law (Republic Act No 10771), which incentivises import of capital equipment to promote green jobs in business enterprises. However, the law is silent when it comes to incubating the locally developed technology. The Philippines has to incubate its own scientific technology at the university level, so that its domestic research and development agenda will be aligned with sustainable development.

Because the Philippines has very long coastlines, it is a challenge for the Climate Change Commission of the Philippines to take care of vulnerable sectors of the community, especially those in low-lying territories and coastlines, considering that 60% of economic activity is conducted along coastlines.

Singapore

Geographical constraints limit alternative energy options such as hydroelectric, geothermal, and nuclear energy. The key opportunity to reduce emissions is by making the buildings and industries more energy efficient and greener. Singapore is developing floating solar energy panels to be installed in reservoirs.

Thailand

Transparency is an issue. Thailand has already achieved more than 7% of its target, but this is only in the energy sector. It is important to track other sectors to achieve its NDC's target of 20% emissions reductions by 2030.

Coordination is needed between relevant government agencies involved in the energy, transport, waste, industrial processes, and the policy and planning office in developing the corresponding action plans to ensure that Thailand achieves its NDC targets.

For mitigation, there is a roadmap for NDC implementation at the sectoral level, but none yet at the local government level.

Viet Nam

The lack of data is one of the biggest challenges. Viet Nam is also in transition from 1996 to 2006 IPCC Guidelines for GHG inventory. The data requirements for these two Guidelines are quite different. Like Thailand, Myanmar and Cambodia, Viet Nam faces the same problem of poor coordination between relevant government agencies. For the NDC mitigation targets to be achieved, efforts should mainly come from the private sector because the government only lays down the policy, but has no control over the emissions of industrial processes.

Speakers and Moderators

Speakers:

Alyssa NG, National Climate Change Secretariat, Singapore

Anna BATENKOVA, World Wide Fund for Nature, Singapore

Apar PAUDYAL, United Nations Development Programme

Chanutsakul SUPIRAK, Office of Natural Resources and Environmental Policy and Planning, Thailand

CHEA Chan Thou, National Council for Sustainable Development, Cambodia

Daniel BODANSKY, Sandra Day O'Connor College of Law, Arizona State University, USA

Daovinh SOUPHONPHACDY, Ministry of Natural Resources and Environment, Lao PDR

Dedy MAHARDIKA, World Resources Institute, Indonesia

Emma RACHMAWATY, Ministry of Environment and Forestry, Indonesia

Jerome ILAGAN, Climate Change Commission, Philippines

Joselito GUEVARRA, C40 Cities, Singapore

Natalia DERODOFA, ASEAN Secretariat, Indonesia

San WIN, Ministry of Natural Resources and Environmental Conservation, Myanmar

Stephanie LEE, Ministry of Foreign Affairs and Trade, New Zealand

Vinna PRESCYLIA, Ministry of Environment and Forestry, Indonesia

WANG Xuehong, UNFCCC Secretariat, Germany

Winston CHOW, Singapore Management University, Singapore

Moderators:

Albert MAGALANG, Department of Environment and Natural Resources, Philippines

CHEAH Sin Liang, National Climate Change Secretariat, Singapore

Jo TYNDALL, New Zealand's High Commission, Singapore

Melissa LOW Yu Xing, NUS Energy Studies Institute, Singapore

Rohaya SAHAROM, National Environment Agency, Singapore

Lead Rapporteurs

Ms Sharon Seah Li-Lian is Associate Director at the NUS Centre for International Law (CIL). She oversees the Centre's strategic planning and external engagements and is starting a climate change law and policy programme in CIL. She graduated with an LLM in Public and International Law at the University of Melbourne, Australia in 2018.

Mr Amiel Ian Valdez is a Research Associate at the NUS CIL. He is involved in CIL's Teaching and Researching International Law in Asia, and climate change law and policy. Prior to joining CIL, he was an Attorney at the Department of Environment and Natural Resources of the Philippines, and a lecturer at the De La Salle University. He finished his LLM in Environmental Law in 2018 at the University of Melbourne, Australia., and his Juris Doctor in 2011 at the Ateneo de Manila University.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