Study on cooperative MRV as a foundation for a potential regional carbon market within ASEAN

Brunei Darussalam Country Report

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IGES
Regional Collaboration Centre – Bangkok
Promoting Action Against Climate Change

National Environment Agency
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Abbreviations

ADB	Asian Development Bank
AFOLU	Agriculture, Forestry and Land Use
APEC-EGEDA	Asia Pacific Energy Cooperation Expert Group on Energy Data and Analysis
ASEAN	Association of Southeast Asian Nations
AWGCC	ASEAN Working Group on Climate Change
BAU	Business as usual
BCCS	Brunei Climate Change Secretariat
BNERI	Brunei National Energy Research Institute
BUR	Biennial Update Report
CDM	Clean Development Mechanism
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
DNA	Designated National Authority
ESCO	Energy service company
GDP	Gross domestic product
GHG	Greenhouse gases
GWP	Global warming potential
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
IPPU	Industrial processes and product use
MEMI	Ministry of Energy, Manpower and Industry
MRV	Monitoring, Reporting and Verification
NC	National Communication
NDC	Nationally Determined Contribution
QA/QC	Quality assurance / Quality control
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar

Executive Summary

Brunei Darussalam is a small country in South-East Asia, whose net GHG emissions in 2014 totaled 8.4 MtCO2e. Of these, 11.2 MtCO2e corresponded to gross emissions and 2.8 MtCO2e to removals from the AFOLU sector. While Brunei Darussalam's contribution to global GHG emissions is relatively minor, emissions have been steadily increasing over the years.

The energy sector is responsible for the largest share of GHG emissions in the country, accounting for 98 percent of gross emissions. Of these, 49 percent are due to energy industries, such as power plants, 34.5 percent are fugitive emissions from the oil & gas industry, and 13 percent from the land transport sector. In light of this, emission reduction targets proposed by Brunei Darussalam on its NDC are mostly focused in the energy sector.

Brunei Darussalam does not currently have a policy or plan for the introduction of carbon pricing instruments. In fact, having a national economy that is driven by the oil & gas sector, the country has traditionally maintained low prices of fossil fuels and electricity. This has made the country one of the largest consumers of energy on a per capita basis in the ASEAN region. Nonetheless, the national government is gradually introducing policies to reverse course and promote a more efficient use of energy, including an electricity tariffs reform for the residential sector and the development of incentive mechanisms to foster energy efficiency and conservation.

There are, however, possible "quick wins" that Brunei Darussalam could explore with the introduction of a carbon pricing instrument. A case in point is that of fugitive emissions: putting a price on these could lead to several benefits in addition to that of curbing the release of a greenhouse gas (methane), such as tapping a resource that has commercial value or fostering efficiency opportunities in oil & gas industries. In other words, carbon pricing could trigger the mobilization of mitigation measures at low or negative cost while fostering energy conservation.

Brunei Darussalam's MRV framework is still at early stages of development. Currently, MRV-related processes and procedures are carried out for the preparation of national GHG inventories. However, a set of challenges and gaps remain, for instance on the availability and reliability of data, or the generalized lack of expertise and experience on MRV. In addition to this, sectoral, policy and facility level MRV frameworks do not currently exist in Brunei Darussalam.

Nevertheless, the establishment of a nation-wide MRV has been identified as one of the major priorities of the national government for its action on climate change. In this respect, there is a potential to leverage a number of opportunities. Among these, the government could prioritize exploring synergies on GHG emission reporting with some of the major private companies operating in Brunei Darussalam, some of which are already monitoring GHG emissions on a voluntary basis or as part of internal corporate requirements. This could be an avenue, on the one hand, for the collection of more accurate and reliable data on GHG emissions for the purposes of the national GHG inventory. On the other, it could be a starting point for the formulation of harmonized MRV guidelines at the facility-level for these specific industries. Sectoral or industry best practices or standards – for example from monitoring and reporting protocols of emissions trading schemes in operation around the globe or standards such as ISO 14064 – could serve as basis for the establishment of facility level MRV for the targeted industries. These opportunities could first be explored in the regional context of ASEAN and build on collaboration platforms that Brunei Darussalam is already part of or familiar with, such as the ASEAN Working Group on Climate Change.

1. National Climate Change Context

Brunei Darussalam is a small country in Southeast Asia which borders the Eastern Malaysian states of Sabah and Sarawak. It has a total surface area of 5,765 km2, out of which approx. 75 percent consists of forest cover[1]. As of mid-2016, Brunei's population was estimated at 423,000 inhabitants, having experienced an annual average growth rate of 1.5 percent over the 10-year period from 2007 to 2016[2].

In 2016, the GDP of Brunei Darussalam at current prices was 15.8 billion Brunei Dollars (11.4 Billion USD)[3]. The national GDP per capita that year was 26,950 USD/capita, with Brunei Darussalam ranking second on this indicator within the ten ASEAN Member States. The oil & gas sector is the major driver of the national economy, contributing to 60 percent of the country's GDP and employing 24,000 people. On the other hand, the significant weight of the sector also makes the country vulnerable to the fluctuations of oil & gas prices in international markets. This was one of the leading causes for Brunei Darussalam's GDP decreasing by almost a third from 2012 to 2016. In this context, one of the eight key strategies laid out in Brunei's Vision for 2035 – so-called "Wawasan 2035" – is a reduction of the dependency on the oil & gas sector through the development of other economic clusters[4].

The latest officially published GHG emissions data of Brunei Darussalam can be found in its Second National Communication (NC) to the UNFCCC, submitted in 2017[5]. This document displays the national GHG inventory for 2014, when the country recorded net emissions of 8.4 MtCO2e, of which 11.2 MtCO2e corresponded to gross emissions and 2.8 MtCO2e to removals. This represents an increase of 10.2 percent in gross emissions and of 12.5 percent in net emissions in relation to the year 2010, respectively[6] (see Fig.1). 2010 was the first year a national GHG inventory had been prepared for Brunei Darussalam.

The national GHG inventory for 2014 is presented in Table 1. As may be observed, GHG emissions in Brunei Darussalam can mostly be attributed to the energy sector, which accounts for 98 percent of total gross emissions.

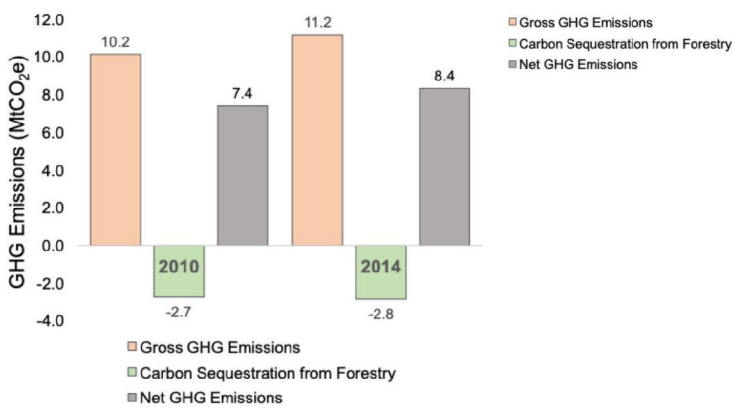
Table 1: GHG emissions by source in Brunei Darussalam, 2014, in MtCO2e

Greenhouse Gas Source and Sink Categories	CO2	CH4	N20	Total (MtCO2e)
Energy	**7.557**	**3.400**	**0.026**	**10.983**
Energy Industries	5.342	0.002	0.003	5.347
Manufacturing industries & construction	0.376	-	0.001	0.377
Land transportation	1.353	0.009	0.020	1.382
Residential sector	0.090	-	-	0.090
Fugitive emissions from oil & gas	0.397	3.389	0.002	3.788
IPPU	**-**	**0.030**	**-**	**0.030**
Methanol production	-	0.030	-	0.030
AFOLOU	**-2.840**	**-0.014**	**0.013**	**-2.811**
Enteric fermentation	-	0.004	-	0.004
Manure management	-	0.007	0.001	0.008
Forest land	-2.840	-	-	-2.840
Aggregate sources & non-CO2 emission sources on land	-	0.002	0.012	0.014
Waste	**-**	**0.143**	**0.009**	**0.152**
Solid waste disposal	-	0.107	-	0.107
Wastewater handling and discharge	-	0.036	0.009	0.045
Total Gross Emissions	**7.557**	**3.587**	**0.048**	**11.192**
Total Net Emissions	**4.717**	**3.587**	**0.048**	**8.352**

Source: Second National Communication (2017)

Fig. 2 provides a breakdown of emissions from this sector, where it may be observed that energy industries (i.e. power generation) and fugitive emissions from oil & gas production contribute to the largest shares, of 49 percent and 34.5 percent, respectively.

Figure 1 – GHG emissions and removals in Brunei Darussalam, 2010-2014



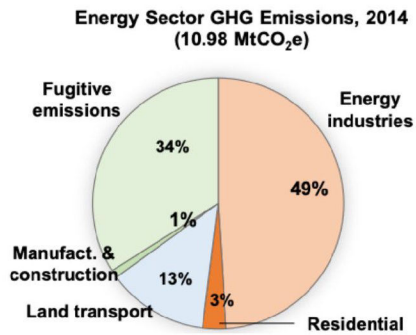
Source: First and Second National Communications (2016, 2017)

1 Brunei Darussalam's Second National Communication, 2017.
2 ASEAN Statistical Yearbook 2016/2017.
3 Ibid. Exchange rate used as of 30 June 2016.
4 Brunei Vision 2035 – Wawasan 2035.
5 Brunei Darussalam's Second National Communication,, 2017.
6 Brunei Darussalam's Initial National Communication, 2016.

Brunei Darussalam ratified the Paris Agreement on September 21, 2016, and submitted its Intended Nationally Determined Contribution (INDC) on November 30, 2015[7]. On the INDC, emission reduction targets are proposed for three sectors: energy, land transport and forestry, as follows:

Energy: a reduction in total energy consumption by 63 percent by 2035 compared to a Business-As-Usual (BAU) scenario, and an increase in the share of renewables in power generation to 10 percent of the total by 2035;
Land transport: a reduction in CO2 emissions from morning peak hour vehicle use by 40 percent by 2035 compared to a BAU scenario;
Forestry sector: an increase in the total gazette forest reserves to 55 percent of the total land area, compared to the current levels of 41 percent.

Figure 2 - Energy sector GHG emissions in Brunei Darussalam, 2014



Source: Second National Communication (2017)

Energy efficiency is one of the major priorities for reducing energy sector emissions. Specific measures in support of the INDC goal were laid out in Brunei Darussalam's Energy White Paper (2014)[8], with the following highlighted: i) progressive reform of electricity tariffs; ii) introduction of energy efficiency and conservation guidelines for buildings in the non-residential sector; iii) introduction of standards and energy labelling for products and appliances; iv) introduction of energy management processes (e.g. promotion of ESCOs, energy audits for buildings and industries, etc.); v) passing of fuel economy regulation; vi) provision of financial incentives to stimulate energy efficiency in appliances and vehicles; and vii) promote awareness raising on energy efficiency. A summary of major policies rela-ted to climate change mitigation in Brunei Darussalam is summarized in Table 2.

Table 2: Major policy documents in Brunei Darussalam related to climate change mitigation

IPCC Sector	Policy document / initiative
Energy	>> Energy White Paper >> Energy efficiency and conservation guidelines >> Regulation on urban buildings and development >> Renewable energy sectoral plan >> Land Transport Master Plan >> Land Transport White Paper
IPPU	>> Introduction of ISO 14001 on environmental management system certification
AFOLU	>> Zero burning policy >> Peat land rehabilitation project >> Biodiversity Action Plan >> Heart of Borneo Project
Waste	>> 3Rs policy >> Recycle 123 initiative >> Establishment of eco-clubs

As of November 2018, Brunei Darussalam was in the process of preparing a revised NDC which will include an absolute GHG emissions target and a trajectory for reductions. The proposed target will be the basis for the formulation of a white paper on "Brunei Darussalam's climate policy", which will set out detailed strategies and action plans on how the target would be achieved. In addition to the NDC document, a framework will be developed to track progress in implementation of the targets proposed on a quarterly basis[9].

The preparation of this white paper is one of the three core activities foreseen for 2019 that are part of a national Climate Change Work Plan. The two other activities are the development of a Monitoring, Reporting and Verification (MRV) system for GHG emissions, and the conduct of a comprehensive assessment of climate change impacts in Brunei Darussalam[10]. Additionally, the revised NDC is expected to be submitted to the UNFCCC in the first quarter of 2020.

The NDC drafting is a process led and coordinated by the Ministry of Energy, Manpower and Industry (MEMI). MEMI fulfils the role of national focal point to the UNFCCC, and is host to the Brunei Climate Change Secretariat (BCCS). The Secretariat is mandated with the national climate change policy, the development of the national MRV framework, and of dealing with matters related to multilateral agreements

7 Brunei Darussalam's Intended Nationally Determined Contribution, 2015.
8 Brunei Darussalam Energy White Paper, 2018.
9 Based on information provided in a stakeholders' consultation on October 18, 2018. See Section 4 for further details.
10 "Briefing on Climate Change Policies of Brunei Darussalam" presented to the authors on 18 October 2018.

on climate change. BCCS also serves as the Secretariat to three technical working groups and to two high-level bodies: the National Council on Climate Change and the Executive Committee on Climate Change. The National Council of Climate Change was established in 2010, but was subject to a restructuring in 2018. It is now expected to become the main advisory and decision-making body on strategic matters related to climate change in Brunei Darussalam.

2. Analysis of National MRV Systems

2.1 Carbon pricing status and outlook

Brunei Darussalam does not currently have a policy or plan for the introduction of carbon pricing instruments. In fact, having a national economy that is driven by the oil & gas sector, Brunei Darussalam has historically maintained low prices of fossil fuels and electricity, as compared with the international norm. This has made the country one of the largest consumers of energy on a per capita basis within the ASEAN region, which suggests there is a potential for tapping on opportunities for energy savings. On the other hand, the national government has been gradually introducing policies to reverse course and bring end-user energy prices to parity with production costs while at the same time reducing the wasteful consumption of energy. These policies are acknowledged in the NDC, and include, for instance, conducting awareness campaigns to sensitize end-user consumers about the real costs of energy, and a review of electricity tariffs alongside an incentive mechanism to foster energy efficiency and conservation[11].

Another potential challenge associated with the introduction of carbon pricing instruments in Brunei Darussalam is the limited national experience with market-based mechanisms. In particular, no CDM projects have been developed by the country as a CDM DNA was never established. On the other hand, there is some interest in the development of crediting mechanisms like the CDM[12], which could be developed in articulation with Articles 6.2 and 6.4 of the Paris Agreement.

2.2 National GHG inventory and MRV processes

Brunei Darussalam has submitted two national GHG inventories, for years 2010 and 2014. The preparation of these inventories did not follow specific MRV processes or procedures, and was conducted on an ad-hoc basis for the purposes of preparing the NC documents. The preparation of the 2014 inventory was led by the Brunei National Energy Research Institute (BNERI).

Table 3: Sources of activity data for the preparation of national GHG inventory in Brunei Darussalam

IPCC Sector	Data Owner
Energy	>> Ministry of Energy, Manpower and Industry (MEMI)
IPPU	>> Ministry of Energy, Manpower and Industry (MEMI)
AFOLU	>> Department of Agriculture and Agrifood, Ministry of Primary Resources and Tourism (MPRT) >> Forestry Department & the Heart of Borneo, MPRT
Waste	>> Department of Environment, Parks and Recreation (JASTRe), Ministry of Development (MoD)

The 2014 inventory was based on Tier 1 methodologies, with emissions being calculated as the product of activity data by an emissions factor. 2006 IPCC Guidelines were used to estimate the emissions of CO2, CH4 and N2O, whe-reas GWP values from the Second Assessment Report of the IPCC[13] were applied to convert emissions into a CO2 equivalent basis. Activity data was obtained from different agencies/ministries, as indicated in Table 3, while emission factors were based on defaults recommended in 2006 IPCC Guidelines. This suggest that there is a potential to further increase the accuracy of baseline emissions through enhanced MRV as a means to better identify priority actions for Brunei Darussalam.

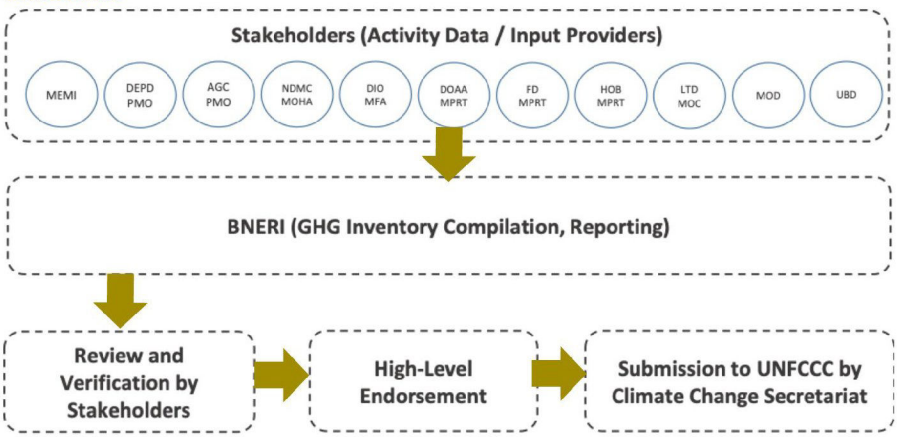
11 Brunei Darussalam's Second National Communication, 2017.
12 Based on information provided in the stakeholders' consultation of October 18, 2018.
13 GWP conversion factors used: CO2: 1; CH4: 21; N2O: 310; Second Assessment Report of the IPCC, 1996.

Brunei Darussalam does not have an institutionalized or standardized QA/QC framework in place associated with the inventory preparation. However, certain QA/QC procedures are adopted. For instance, emission calculations are reviewed and cross-checked within the same BNERI team which prepares the inventory, while activity data is internally reviewed by the national ministry or agency before being used for GHG calculations. In particular, activity data related to the energy sector, which accounts for the bulk of national GHG emissions, is the same used to populate the APEC-EGEDA database[14]. In addition, GHG emissions are estimated both using a reference approach and a sectoral approach[15] as a way of identifying statistical differences between the supply and demand of energy and spot potential errors in the calculations.

After the QA/QC process completed, the inventory is submitted for endorsement by a High-Level Segment, a decision making body presided by the Minister of Energy, Manpower and Industry (MEMI) and which counts with high-level representation of other ministries. Finally, the inventory is incorporated into the National Communications document and submitted by the Brunei Climate Change Secretariat to the UNFCCC. The institutional processes associated with the preparation of the national GHG inventory are illustrated in Fig. 3.

Brunei Darussalam is currently planning to start preparation for its Third NC in 2019. On this document, the national GHG inventory will be updated with data for 2018. While inventories have been so far prepared on an ad-hoc basis, Brunei Darussalam intends to make this a regular process. Brunei Darussalam also plans to submit its first Biennial Update Report (BUR) in 2024.

Figure 3: Institutional processes associated with the preparation of national GHG inventories [16]



Source: "National Communications Preparation Process" presentation delivered by BNERI during stakeholders' consultation of October 18, 2018.

As noted in section 1, the development of a national MRV framework has been identified as a priority for Brunei Darussalam. Some of the main challenges and gaps that would need to be addressed with this framework vis-à-vis the national GHG inventory system were identified as follows[17]:

- General lack of technical know-how and experience on how to prepare a national GHG inventory and the application of accounting methodologies for calculating national GHG emissions;
- Limited availability of data and means of verification of its accuracy, reliability and robustness from the different sources/data owners;
- Inexistence of clear roles and responsibilities and formal arrangements for the collection of activity level data, both among government agencies and the private sector;
- Limited data, resources and technical know-how for the development of tier 2 and tier 3 methodologies;
- Lack of legislation and means of enforcement for addressing climate change issues in general, and GHG emission MRV in particular;
- Lack of a holistic and synchronized framework integrating MRV with other climate-related efforts at a macro level, such as a monitoring framework to track progress of the NDC implementation.

14 APEC-EGEDA: Asia Pacific Energy Cooperation –Expert Group on Energy Data and Analysis.
15 Brunei Darussalam's Second National Communication, 2017,, p. 28.
16 "National Communications Preparation Process" presentation delivered by BNERI during stakeholders' consultation of October 18, 2018.
17 Based on information provided in the stakeholders' consultation of October 18, 2018.

2.3 Sectoral and policy-level MRV

In Brunei Darussalam there are no sectoral or policy specific MRV frameworks for GHG emissions. Nonetheless, a number of sectoral policies and programmes could be considered entry points for the development of MRV systems.

Energy efficiency is one of those areas. As reported in the Second NC, Brunei Darussalam has considered the adoption of an energy management system that is aligned with ISO 50001. This policy is now being piloted in government buildings, which are required to develop an energy management plan, appoint an energy manager, and submit an energy audit report. Government buildings have been the focus of this pilot not only as a means of showing leadership of the government by example, but also because these buildings are responsible for a relatively high share of energy consumption[18].

The land transport sector is another area where opportunities could be explored for MRV development. In 2014, a Land Transport White Paper was finalized, which identifies a number of options for Brunei Darussalam's transport system up until 2035. The options selected by the national government could be an opportunity for implementing a monitoring and tracking system that is aligned with the MRV of GHG emissions, e.g. on activity level data (e.g. person-km travelled), fuel consumption, CO2 emissions from fuels, etc. This is also in line with the government intention of introducing diesel vehicles that follow Euro 5 standards, which hold the potential of reducing GHG emissions by 74 percent in relation to the current Euro 1 standards[19].

2.4 MRV at facility level

Brunei Darussalam does not have an MRV framework for GHG emissions at the facility level. It should be noted, however, that some large multinational companies operating in the oil & gas sector of Brunei Darussalam already monitor GHG emissions as part of their internal processes. MEMI requested this data from some of these companies for the preparation of the 2010 and 2014 national GHG inventories. Nonetheless, the companies have not disclosed to MEMI details on the methodologies used to calculate their emissions. It was also noted that these figures do not find correspondence with those calculated for the national GHG inventory based on IPCC guidelines[20].

In addition to the above, some companies have recently approached MEMI to inquire about the existence of guidelines, requirements or regulations for the reporting of GHG emissions in Brunei Darussalam. While the government does not have any such documents, the interest demonstrated by these companies coupled with the need of the national government for having more reliable GHG emissions data suggest that there is an opportunity for developing facility level MRV guidelines or standards in Brunei Darussalam, even if not necessarily linked with a carbon pricing instrument.

Another opportunity for introducing facility-level MRV stems from the fact that major emitters in Brunei Darussalam are restricted to a relatively limited number of industries and companies. More so, as approx. one third of national GHG emissions are due to the release of methane missions from oil & gas industries, making this sector a possible priority for both GHG emission reductions and MRV enhancement. In addition to companies operating in the upstream of the oil & gas sector, other industries present in the country are refinery and petrochemicals, methanol, and cement production facilities. In the near future it is foreseen the start of operations of steel production and fertilizer production industries in new industrial zones being promoted by the government[21].

18 Based on information provided in the stakeholders' consultation of October 18, 2018.
19 Brunei Darussalam's Second National Communication, 2017.
20 Based on information provided in the stakeholders' consultation of October 18, 2018.
21 Brunei Darussalam's Second National Communication, 2017.

3. Concluding Remarks and Future Outlook

The establishment of an MRV framework is one of the main priorities set by Brunei Darussalam on its action on climate change. A robust MRV will be the basis for monitoring GHG emissions in a reliable and accurate manner, track implementation of targets proposed as part of the NDC, and help better identifying opportunities for mitigation. Furthermore, and in case the national government considers so in the future, for the introduction of carbon pricing instruments.

While the development of the MRV framework will need to start from a relatively low base, there is potential for leveraging a number of strengths and opportunities, in particular the following:

- The recent establishment of a new governance structure on climate change in Brunei Darussalam, resulting in a clear definition of roles and responsibilities of the different ministries and agencies;

- A clear direction on climate action, which includes the definition of an absolute target for GHG emission reductions in the revised NDC that will be submitted to the UNFCCC in 2019 (making it easier to define "carbon budgets", and opening the potential for participation in international carbon markets in the future), and the elevated role of the recently restructured National Council on Climate Change;

- A pool of highly qualified staff in the Ministry of Energy, Manpower and Industry, whose capacities could be quickly built with tailor-made training programmes;

- A relatively small number of major GHG emitters, which are concentrated in specific industries (e.g. oil & gas, petrochemicals, etc.), enabling the development of sectoral or industry-focused approaches for the development of an MRV framework. This could be a basis for "quick wins", such as lower costs associated with the establishment of the MRV framework and shorter development timelines;

- The opportunity for developing a well-integrated MRV framework, with the potential of articulating the different levels of MRV in a seamless manner, i.e. at the facility, sector and national GHG inventory level.

Among these opportunities, the national government could prioritize exploring synergies on GHG emission reporting with some of the major private companies operating in Brunei Darussalam, some of which are already monitoring GHG emissions on a voluntary basis or as part of internal corporate requirements. This could be an avenue, on the one hand, for the collection of more accurate and reliable data on GHG emissions for the purposes of the national inventory. On the other, it could be a starting point for the formulation of harmonized MRV guidelines at the facility-level for these specific industries. Sectoral or industry best practices or standards – for example from monitoring and reporting protocols of emissions trading schemes in operation around the globe or standards such as ISO 14064 – could serve as basis for the establishment of facility level MRV for the targeted industries. These opportunities could be first explored in the regional context of ASEAN and build on collaboration platforms that Brunei Darussalam is already part of or familiar with, such as the ASEAN Working Group on Climate Change (AWGCC).

With regards to the plans foreseen for 2019 concerning the developing an MRV system, the following activities could be considered:

- Conduct a gap analysis of the institutional arrangements and existing capacities on MRV;

- Conduct a thorough assessment of existing gaps on activity data requirements for the purposes of estimating national GHG emissions, and chart out options for addressing gaps identified on data availability and collection processes (e.g. the preparation of sector-specific spreadsheets, technical guidelines, toolkits, etc.);

- Development of a national GHG database management system with a view of mainstreaming and making the preparation of the national GHG inventory a regular process;

- Develop an MRV framework in a holistic and integrated manner, seeking synergies with other climate change related processes and activities, such as the NDC preparation;

o Identify priority sectors for the development of MRV standards at the facility level, and work with selected industries to explore opportunities for synergies and the harmonization of accounting and reporting procedures, including for the development of country-specific emission factors;

o Explore synergies with existing and planned policies directly or indirectly related to the reduction of GHG emissions, such as policies on energy efficiency and the introduction of energy management standards in industries;

o Participate in regional cooperation and knowledge -sharing activities, e.g. as part of AWGCC and/or other initiatives such as UNFCCC's MRV Hub.

Last but not least, even though carbon pricing is not presently being considered by Brunei Darussalam, there are possible "quick-wins" that could be leveraged with the introduction of such instruments. A case in point is that of fugitive emissions from oil & gas industries, which account for around one third of national GHG emissions. To put a price on these emissions could result in benefits other than curbing the release of a greenhouse gas (methane), such as tapping a resource that has commercial value or fostering efficiency opportunities in the concerned industries. In addition, focusing first on industries rather than sectors that directly impact end-user consumers could be more politically manageable, while at the same allowing the development of experiences on these instruments which could be further expanded to other sectors in the future. To this end, the establishment of an MRV framework would be a key enabler for tapping these opportunities, in particular as a means of accurately quantifying sources of methane emissions, determining baselines that could serve as reference for their abatement and, eventually, as a way of attracting overseas investments for mitigation actions.

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