Partnership on Transparency
in the Paris Agreement

Workshop of the Asia-Pacific Regional Group 2018

'Strengthening MRV capacities and preparing for the Enhanced Transparency Framework'

Bangkok, Thailand

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Table of Contents

Introduction

The Partnership on Transparency in the Paris Agreement

The Partnership on Transparency in the Paris Agreement aims to promote ambitious climate action through practical exchange in order to achieve the goal of keeping the global temperature rise well below 2° Celsius and to pursue efforts to limit the increase to 1.5° Celsius.

The main focus of the Partnership is on transparency issues related to the different building blocks of global climate governance, in particular the Enhanced Transparency Framework (ETF) of the Paris Agreement. It serves as a platform for dialogue and peer-to-peer exchanges between countries, thus helping to build mutual understanding and trust.

Through its regional groups the Partnership seeks to enhance cooperation and exchange with various partners in a specific region. The Asian-Pacific Regional Group met before in 2014 in the Republic of Korea and the Philippines and in 2016 in Viet Nam. The objectives of the regional groups and their workshops are:

- Share experiences, challenges and potential solutions related to implementing the Paris Agreement, with a specific focus on transparency.
- Facilitate regional networking.
- Promote capacity building in different fields of climate policy and action, with a specific focus on transparency.

Workshop context

2018 is a critical year for the development of the Enhanced Transparency Framework of the Paris Agreement, with negotiators discussing the modalities, procedures and guidelines (MPGs), the rulebook that will dictate how transparency of actions and support will be implemented in practice. As more details emerge from these negotiations, countries will need to consider the status of the national systems for measurement, reporting, and verification (MRV) and the extent to which they might need to be updated/improved to meet the needs of the ETF. They will also want to consider what information they might need to effectively track progress in implementing and achieving the Nationally Determined Contributions (NDCs) that each country has submitted under the Paris Agreement.

It was therefore an opportune time for practitioners involved in MRV to come together, discuss the requirements of the ETF and progress in developing domestic transparency systems and to share experiences, ideas and best practice on suitable approaches.

Workshop scope

The aim of the workshop was to bring together government representatives working on MRV to help shape ideas around appropriate transparency systems to support

national decision-making and to meet the needs of the ETF. The agenda had four broad elements to it:

- Overview of the ETF and consideration of what this means for national MRV systems.
- Parallel sectoral sessions on the transport, waste and AFOLU[1] sectors. This was important as sectoral line ministries will have a key role to play in implementing NDCs and collecting data for the ETF. The invitation was hence extended to sectoral experts in these three sectors.
- Case clinics, to work collectively to address specific challenges facing participating countries.
- A session on monitoring and evaluation (M&E) of adaptation and sustainable development benefits, to raise awareness of the specific needs and issues involved.

Participants and speakers

The workshop included 34 participants from 17 countries. Participants came from a range of government institutions – most were from environment ministries (or their equivalents) but there were also participants from transport ministries, foreign affairs ministries, energy ministries and the Office of Attorney General or of other national agencies such as JSC Zhasyl Damu in Kazakhstan, the REDD Implementation Centre in Nepal and the Korea Transport Institute from the Republic of Korea.

The workshop was facilitated by Ricardo Energy & Environment, and speakers included them, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, the Food and Agriculture Organisation (FAO), the secretariat of the UN Framework Convention on Climate Change UNFCCC), the International Institute for Environment and Development (iied) and the International Centre for Climate Change and Development (ICCCAD).

[1] Agriculture, Forestry and Land Use.

Main findings

All presentations and some pictures from the workshop can be found at: https://www.transparency-partnership.net/news/workshop-asia-pacific-regional-group-2018-strengthening-mrv-capacities-and-preparing-enhanced.

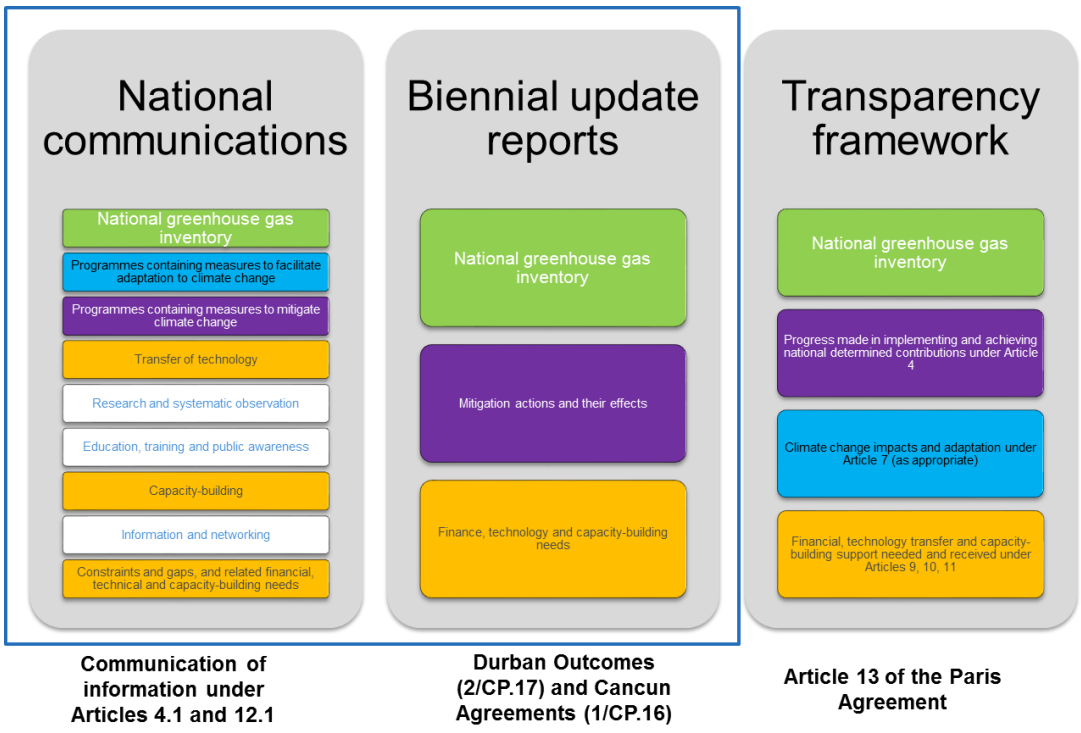
A brief account of the main discussion topics is provided below.

Preparing for the Enhanced Transparency Framework

Article 13 of the Paris Agreement sets out the key elements of the Enhanced Transparency Framework (ETF), distinguishing between the elements that are mandatory ('shall) and the elements that are strongly encouraged ('should'). For example, all Parties to the Agreement have to report a greenhouse gas (GHG) inventory and information necessary to track progress on implementing and achieving Nationally Determined Contributions (NDCs). In addition, developed country Parties have to report on support provided to developing countries. All Parties are encouraged to report information on climate impacts and adaptation, while developing country Parties are also encouraged to report on their support needs and on support received.

The Paris Agreement states that the ETF will 'build on and enhance the transparency arrangements under the Convention'. This includes reporting under National Communications and Biennial Update Reports (BURs) / Biennial Reports (BRs). This will involve a consolidation and rationalisation of what is being reported under the current transparency arrangements, as outlined in Figure 1 below.

Figure 1: ETF vis-à-vis existing transparency arrangements: reporting



Source: UNFCCC

The detailed rulebook for the ETF – known as the modalities, procedures and guidelines (MPGs) – are being discussed this year. The latest status is captured in the note issued on 14 November 2017 by the co-facilitators of the Ad-Hoc Working Group on the Paris Agreement (APA) item 5, which is dealing with the ETF. This begins to set out different Parties' views and a common understanding of what constitutes key elements for reporting, technical review and facilitative multilateral considerations. The work being discussed in APA item 5 also has linkages across to the discussions in many of the other APA 'items' (e.g. on mitigation, adaptation and the global stocktake), as well as other bodies such as SBI and SBSTA[2].

As well as thinking about what they need to report under the ETF, it is also important for countries to think about how they might benefit from the ETF and how they might use the information it gathers for their own purposes, for example raising awareness, better policy-making, guiding investment decisions etc.

Download the PPT by Bhava Dhungana, UNFCCC, **here**.

After the presentation by the UNFCCC, participants were put into groups and asked to come up with their views on:

- Their experiences so far with the current transparency framework
- Their expectations for the ETF
- The challenges they expect to face in setting up domestic transparency arrangements

Experiences with the current transparency framework

A number of participants reflected that the existing framework helped increase awareness on MRV and transparency and had helped to highlight how strong MRV systems are in the national interest. Capacity was another key issue that came out of these discussions. On the one hand, the existing framework had helpfully highlighted the importance of capacity building and where this was most needed. On the other hand, some participants felt that there was still a lack of capacity, in particular for certain aspects of transparency, such as tracking mitigation actions. But while tracking mitigation actions was seen as a challenge, a positive of the existing framework is the firm establishment of a national GHG inventory process in all countries, even if this process could still be further developed. Another reflection was that whilst guidelines exist for transparency at the national level, sectoral guidelines and verification guidelines were also needed.

Expectations for the ETF

A number of groups hoped that the ETF would lead to a rationalisation of transparency systems, for example having more streamlined systems that do not place additional burden on countries. In particular, one group felt that it was important to have a narrower scope for reporting than National Communications, with a strong focus only

[2] Subsidiary Body for Implementation and Subsidiary Body for Scientific and Technological Advice

on information that had changed, and not reporting background information that rarely changed. There was also an expectation that the ETF would effectively identify linkages between key actors in relation to transparency, for example a link to the private sector. There were a few expectations around having clear guidelines, in particular on what is meant by tracking NDCs. There were also expectations of continuing capacity building support as well as having a system that clearly linked support needs to support received.

Challenges in setting up domestic transparency arrangements

A key challenge that a number of participants identified was the need for permanent institutional structures with clear roles and mandates, that incentivised actors to participate in the transparency system. There were also challenges around building capacity but also how to retain that capacity and to avoid a 'brain drain'. A further challenge was how to move to a system of more in-house experts rather than relying on external support (e.g. to develop a GHG inventory) on an ad-hoc project basis. As well as capacity, awareness and understanding of the benefits of transparency were also important. Data was also a common challenge, including the need for standardised data provision and clear access to data. There were also specific methodological and technical challenges such as improving the GHG inventory in key sectors and shifting to the 2006 IPCC guidelines.

Support options and tools for transparency

There are a range of tools, guides and processes that can be accessed by countries looking for support on transparency issues.

- **Initiative for Climate Action Transparency (ICAT)**, http://www.climateactiontransparency.org/: ICAT integrates guidance, capacity building and knowledge sharing to engage countries in the use of a common framework to assess the impacts of their policies and actions and report progress, fostering greater transparency, effectiveness and ambition.
- **Capacity Building Initiative for Transparency (CBIT)**, https://www.thegef.org/topics/capacity-building-initiative-transparency-cbit: CBIT was established under the Paris Agreement to strengthen the institutional and technical capacities of developing countries to meet the ETF requirements.
- **UNDP Global Support Programme**, http://www.un-gsp.org/: The UNDP GSP provides support to non-Annex I Parties in order to prepare National Communications (NCs) and Biennial Update Reports (BURs) that are submitted to the UNFCCC, as well as identifying priority areas of support for the implementation of NDCs.
- **Information Matters**, https://www.transparency-partnership.net/network/information-matters: The project implemented by

GIZ strengthens the in-country capacities for enhanced climate reporting under the UNFCCC in the selected partner countries. It has produced various knowledge products for that aim and provides ad-hoc support for further developing MRV systems in developing countries.

- **FAO E-Learning Center**, curriculum for "Building a sustainable national greenhouse gas inventory for Agriculture, Forestry and Other Land Use" http://www.fao.org/elearning: These e-learning courses aim at strengthening institutional and technical capacities in national entities and allow them to meet the enhanced transparency requirements of the Paris Agreement.
- **NDC Helpdesk**, https://www.ndc-cluster.net/helpdesk: A platform established by the NDC Support Cluster for providing flexible, short-term technical support to deal with a number of challenges around NDC implementation in developing countries.
- **Good Practice Database**, https://gpd.transparency-partnership.net/: A joint initiative by the Transparency Partnership and the UNDP Low Emission Capacity Building Programme, which documents examples of good practices worldwide which demonstrate how climate policies are being effectively designed and implemented.
- **Knowledge Portal of the NDC Partnership**, http://ndcpartnership.org/knowledge-portal: The Knowledge Portal empowers countries to accelerate climate action and take on more ambitious goals by ensuring that they have easy, quick access to climate data, climate finance, essential tools, technology platforms, help desks and other technical resources, highlights of members' experiences with tools and technologies, and links to knowledge resources and platforms developed by NDC Partnership members.

Sectoral working groups

Throughout the afternoon of day 1 and the morning of day 2, participants split into three parallel sessions that covered the waste, transport and AFOLU sectors. These sessions took a deeper dive into the three sectors and discussed specific approaches, challenges and methodologies.

Waste

The waste working group focused on improving transparency in this sector by enhancing data generation and management. Participants learned ways to enhance the quality of the GHG inventory and generate data to track progress of mitigation actions in the waste sector by improving understanding of waste generation, as well as management and treatment options relevant for GHG emissions in the sector. The session further provided participants with ideas to strengthen networking among relevant stakeholders to improve data flow in the sector.

The session followed the approach developed by GIZ at its "Training concept on GHG emissions in the waste sector" and included 3 of its modules: Module 1 – Policy and

institutional framework, Module 2 – GHG inventory in the waste sector and Module 3 – Waste data management. The agenda covered the following topics:

- Introduction to the UNFCCC reporting requirements,
- Introduction to the IPCC 2006 Guidelines for national GHG Inventory development in the waste sector,
- Country case: Bangladesh's GHG inventory for the waste sector,
- Waste data collection and management,
- Institutional arrangements for data flow in the waste sector.

In the afternoon of day 1, a short introduction on UNFCCC reporting requirements, institutional arrangements needed to comply with these and an overview on policy instruments for mitigation in the waste sector was provided to set the scene.

Afterwards, a presentation on a country case from Bangladesh highlighted the emissions profile from the waste sector in a developing country and the relevance of the sector in terms of mitigation. The country case displayed the existing challenges in compiling the GHG inventory and planning mitigation policies in the waste sector, which are common to most developing countries. Data collection for this sector heavily relies on the involvement of sub-national actors, as waste management is mainly a responsibility of regions and cities. Given the lack of capacities, both technical and financial/personnel at the sub-national level, data collection and management is poor and mitigation in the waste sector is consequently not addressed, which is a common problem in many countries. In the case of Bangladesh, the waste sector is not considered in its NDC.

Day 1 finished with an overview of the 2006 IPCC guidelines for national GHG inventories in the waste sector. An overview of emission sources and greenhouse gases relevant to the sector was provided, followed by detailed descriptions on methods to estimate emissions from the relevant categories, which are:

- Solid Waste Disposal
- Biological Treatment of Solid Waste
- Incineration and Open Burning
- Wastewater Treatment and Discharge

This presentation focused on the relevant data needed to estimate GHG emissions from all of the above categories. It further highlighted the importance of avoiding double counting, by allocating emissions to the energy and AFOLU sectors where appropriate, such as methane recovery from landfills for energy generation or sludge use as fertiliser in the agricultural sector. An overview of developing country examples on data collection practices and assumptions taken for the different categories of the waste sector GHG inventory rounded up the presentation.

Day 2 started with a short recap of day 1 and an exercise on key category analysis and double counting. Participants were given process flow diagrams to visualise different

waste streams for three population groups – high, middle and low income. Participants had to determine the key categories to be reported under the waste sector GHG inventory and discard those management options that are not relevant for the sectoral inventory, so to avoid double counting.

The remainder of day 2 was dedicated to waste data management. Starting with waste data collection, the presentation stressed the diversity in data generation and collection in the sector, as a large variety of stakeholders (may) have interest in data and this data may be collected both at origin or at treatment/disposal sites and on different time intervals, depending on the interests of practitioners. In terms of the inventories, it is both relevant to understand waste quantities and characterisation at origin and treatment, as well as the different treatment options in country. Further, other parameters, such as climatic conditions and income by population are also important, as they have impacts on GHG emissions and on volumes and type of waste generated. The importance of generating accurate data was highlighted by comparing IPCC default data and national averages with more detailed municipal data. Through two exercises participants were given the opportunity to familiarise themselves with the concepts of classification of waste treatment options and waste management data at the subnational level.

As a summary of the waste session, participants realised the importance of the following for producing more accurate GHG estimates:

- Differentiating into income groups or urban/rural population to generate more accurate waste data
- Avoidance of double counting, e.g. from waste to energy or fertiliser use of sludge
- Understanding of treatment options available in country
- Familiarisation with methods for waste characterisation
- Enhanced cooperation with the sub-national level and with the private sector
- The need to train staff working on waste management on GHG inventory and data collection methods
- Increased stakeholder awareness to target mitigation in the waste sector

The GIZ “Training concept on GHG emissions in the waste sector” is available to countries at no cost on request. More information on the training and on how to apply can be found here.

Transport

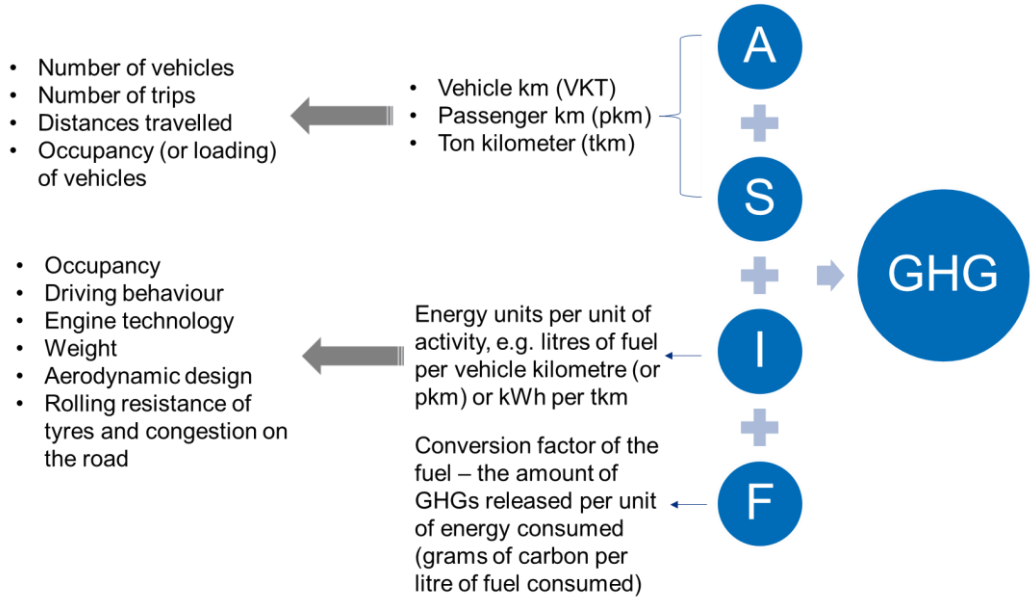
The session started with a discussion on the key requirements of the ETF and what this might mean for a transparency system specifically for transport. As a key part of the ETF will be reporting information necessary to track progress in implementing and achieving NDCs, how a transparency system for transport might be set up would depend partly on the NDC for a specific country. Key questions to ask include where

there is a quantified target in the NDC, whether this is just for transport or for all or a number of sectors, what sort of target it is (e.g. against business-as-usual – BAU, or an intensity target) and whether non-GHG targets are also mentioned (e.g. commitment to a specified share of vehicles to be hybrid). Other important questions include what kind of policies are outlined in the NDC (and other relevant documents, e.g. transport master plans) and whether the NDC specifically says something about the proposed approach on transparency. A transport transparency system might include a GHG inventory for the transport sector (broken down by sub-sector), an element of reporting on transport policies and their impacts, and possibly also projections of GHG emissions for the sector. The presentation from James Harries (Ricardo Energy & Environment) can be found here.

Each participating country then presented on its NDC to share information on the points outlined above. This raised some interesting case studies. Cambodia was a strong example of thinking creatively about transport-specific targets. Not only is there a specified expected GHG reduction from the transport policies outlined in the NDC, there are also a range of transport-specific progress indicators outlined in the Climate Change Action Plan for Transport that complements the NDC. These included input indicators (e.g. numbers of people trained), quantified output indicators (e.g. share of hybrid vehicles) and combined mitigation/adaptation indicators. Mongolia also had some interesting transport indicators set out in its NDC, such as 'increasing the share of private hybrid road vehicles from approximately 6.5% in 2014 to approximately 13% by 2030' and 'improving Ulaanbaatar city road network to decrease all traffic by 30-40% by 2023'.

Day 2 started with a presentation from James Harries on methodological approaches for transport transparency systems. This ran through aspects of key guidance documents such as the Intergovernmental Panel on Climate Change (IPCC) guidance on mobile combustion, the Policy and Action Standard (and accompanying transport sector guidance) by the World Resources Institutes (WRI), the GIZ/TRANSfer Reference Manual on MRV in the transport sector and the Compendium on Greenhouse Gas Baselines and Monitoring for the passenger and freight transport sector. This included consideration of top-down and bottom-up approaches to estimating GHG emissions in transport, assessing lifecycle emissions from transport, developing indicator sets for transport policies, data collection approaches and institutional structures for transport MRV systems. The presentation from James Harries can be found here.

Figure 2: Example of transport indicators



A participant from the Republic of Korea gave a presentation on their transport MRV system. This explained the national GHG reduction targets, the roadmap for GHG emissions reductions in the transport sector, the GHG reduction plan for transport and the data landscape for transport in the Republic of Korea. This demonstrated the variety of institutions that need to be engaged with for a transparency system for transport, including Ministry of Land, Infrastructure and Transport, Korea Transportation Safety Authority, Korea Railroad, Korea Maritime Institute and Korea Energy Economics Institute. The Republic of Korea has developed an online transport statistics portal which gives key transport data. Key next steps include linking fuel consumption to activity data and building a high-level framework for transport MRV using ICT and big data. The presentation from Republic of Korea can be found here.

The group then split into two and ran a number of exercises. The first one involved taking a causal chain for a specific transport policy, outlining the expected impacts (both positive and negative). The groups were also given a list of possible transport indicators and had to match the indicators to different policy impacts. The groups were then given a list of possible data holders (generic, rather than country-specific) and asked to match them to the indicators, to understand who would need to be engaged to access the data.

The overall group then discussed challenges of accessing data from key institutions and possible approaches to address this. A number of ideas were raised on how to ensure better access to data, including:

- Institutionalising data collection through a law or through MoUs.
- Offering capacity building so data providers better understand GHG inventory issues and approaches.

- Setting up clear institutional structures with focal points assigned to sectors (and possible sub-sectors). It can also help to set up an institutional structure for analysts/economists. This can provide a 'safe-space' for technical discussions to be held without concerns around more 'political' issues.
- Offering incentives for providing good quality data.
- Explaining how the data will be used, in case this allays concerns. For example, it might not be clear to data providers that only estimated GHG data will be published, and underlying data may not be.
- Encouraging their participation by better explaining what the benefits of transparency might be to them.

AFOLU

The AFOLU session aimed at raising awareness on the importance of an inclusive sustainable institutional arrangement that leads to an improvement of data collection and management. This would enhance the quality of GHG inventory reporting and generating valuable information to track progress of mitigation actions in the AFOLU sector. The AFOLU session started with a presentation from Mirella Salvatore on the main elements of the ETF and an overview of FAO support to enhance county capacity to be compliant with the ETF requirements. Two main key messages were provided: 1. The ETF is envisaged as a common-to-all-countries transparency framework with built-in flexibility to those developing country Parties that need it in the light of their capacities, even though not yet fully defined. 2. It is important to establish a sustainable transparency system that should consider the national circumstances, take stock of the available technical and financial resources and be simple and robust. In addition, it is not advisable to set up a separate monitoring system for each mitigation action. Conversely, it is suggested to use a national system that covers all sectors, based on existing technical, financial and human capacity, but flexible and inclusive to accommodate specific needs. The main challenges of the MRV system for the AFOLU sector in Non-Annex I countries were identified as the lack of activity data and limited technical capacity, mostly to set-up baseline and monitor progress. In order to overcome these challenges in the AFOLU sector, FAO facilitates mechanisms for building sustainable institutional arrangements; provides guidance and technical support to improve data collection; delivers capacity development activities and tools to enhance country's capacity and transparency in assessing emissions, baseline and projections and in tracking progress of mitigation actions; helps to identify gaps and opportunities to increase NDC ambitions; and leverages climate finance. To outreach efficiently to a large number of countries, FAO collaborates in several international activities and joins forces with partners such as UNFCCC, NDC-Partnership, UNDP, GIZ and many others. More details can be found here in the presentation from Mirella Salvatore.

A participant from Australia gave a presentation on Australia's GHG inventory for the AFOLU sector. This explained the importance of AFOLU GHG emissions and the trend over a period from 1990 to 2016, highlighting in particular the effort the country made over time to move the Land Use, Land-Use Change and Forestry (LULUCF) sector from a

source to a sink. After a brief discussion around the inclusion of the AFOLU sector in Australia's NDC, the presenter provided an overview of the history of the institutional arrangements, explaining clearly that the actual centralised system based on remote sensing data, in particular for LULUCF, was mainly due to specific national circumstances, specifically the lack of an existing forest-sampling program and a federal system with many agencies with regulatory responsibility. Having developed over twenty years, the Australian institutional arrangement is: owned and operated by the Department of Environment and Energy; based on the latest science; and using data cube and modelling system as data management capabilities (Australian Greenhouse Emissions Information System - AGEIS). The presentation from Australia can be found here.

In the following exercise, each participating country then had the opportunity to share their experience on institutional arrangements in the AFOLU sector, identifying main actors, modalities and mechanisms. In order to provide some insights on sustainability, participants were also asked to indicate technical and financial resources and whether incentives were in place. As result, two main modalities were identified: a centralised versus a decentralised MRV system. In the group discussion, pros and cons were analysed in terms of data ownership, technical knowledge and capacity building for large groups, as well as inconsistencies and comparability issues around data. Participants described the national circumstances that influenced the process (i.e. large countries versus small and/or fragmented territories, data collection challenges, existing governmental structure and so on). Regarding the mechanism, it was recognised that there were rare cases with internal legal agreements for data sharing; in the majority of the cases, the systems rely on personal relationships to ensure the availability of information. The issue of mapping the right stakeholders and data owners was also raised. Financial resources was considered a main challenge (project-funded versus government-funded) and, in particular, it was discussed how to convince finance authority to invest in a sustainable MRV system. Country participants agreed that they should make the authority aware that investment for a sustainable and comprehensive MRV system will pay back as it attracts finance and responds to multiple requirements to track progress of policy actions.

Day 2 addressed country needs to overcome technical challenges in the AFOLU sector. The group then split into two. The agriculture group was mainly a peer-to peer sharing exercise between Bangladesh and Kazakhstan, where participants learned from each other in several aspects (i.e. data sharing, GHG inventory, guidelines). The forestry/land use group discussed various technical issues, such as double counting in Energy and LULUCF sector for bioenergy production/use; challenges estimating emissions from forest degradation, mainly due to illegal logging, fires, grazing; lack of guidelines for mangrove forests; and challenges for classification and mapping of land-use.

Case clinics

The case clinics were an opportunity for the various participants to work together in a collaborative manner to tackle specific challenges or problems that certain countries were facing. Four case clinics were run in parallel, addressing the following challenges:

Case 1: How to set up appropriate institutional arrangements to access data from relevant institutions? (Bangladesh)

Case 2: How to increase political buy-in and capacity for GHG emissions monitoring and the use of GHG emissions data for designing mitigation options in the agricultural sector? (Mongolia)

Case 3: How to improve the activity data required to improve emission estimates from Land Use, Land Use Change and Forestry sector? (Thailand)

Case 4: Limitations in modelling – how to strengthen capacities for modellers? (Malaysia)

More information on the outcomes of the discussions can be found at Annex III.

Transparency relating to adaptation and SDGs

The morning of day 3 was devoted to the issue of transparency related to adaptation, and links with reporting on the Sustainable Development Goals (SDGs). Andre Fabian (GIZ) gave an initial presentation on the evolving landscape of transparency of adaptation and SDGs. This outlined why it is important to adapt to climate change and looked at how this is done, through reducing vulnerability, minimising climate risks and increasing resilience, with a central aim being to increase adaptive capacity. It then looked at what is meant by monitoring and evaluation (M&E) of adaptation, as well as the crucial role of learning. Doing this can lead to many benefits in addition to supporting learning, including improving the ongoing management of adaptation actions and providing accountability on results. Adaptation M&E faces a number of specific challenges, including the long-time horizon for interventions to take effect, the lack of a single unifying metric (unlike mitigation, which has the GHG emissions metric) and the uncertainty and complexity inherent in measuring the effectiveness of adaptation measures. Nonetheless, a suite of tools and guidance is available, including guidebooks for national-level and project-level adaptation M&E systems, the M&E Navigator[3] and Vulnerability Sourcebook[4].

The workshop then heard from four countries all at different stages of adaptation M&E and taking slightly different approaches:

Philippines:

Philippines has a developed a strong Results-Based Monitoring System (RBMS) to assess progress of its National Climate Change Plan (NCCP). A representative from the Climate Change Commission of Philippines reflected on how RBMS is being used for national planning and decision making as well as to measure SDG outcomes.

[3] http://www.adaptationcommunity.net/monitoring-evaluation/me-navigator/
[4] http://www.adaptationcommunity.net/?wpfb_dl=203

Vanuatu:

Monitoring and evaluation of climate change adaptation is very sector-specific in Vanuatu. A representative of Ministry of Foreign Affairs, International Cooperation & External Trade reflected on what are the key challenges that they have experienced in monitoring and evaluating adaptation outcomes and highlighted their core M&E needs to ensure the system works effectively.

Cambodia:

Cambodia has developed a national M&E framework for climate change to measure performance against their National Climate Change and Strategic Action Plan (NCCSP). An expert from the General Secretariat of National Council for Sustainable Development, Ministry of Environment spoke about the national framework and its linkages to sectoral M&E and climate action plans.

Civil Society (ICCCAD):

Feisal Rehman from International Centre for Climate Change and Development (ICCCAD) discussed the role of a university consortium in supporting and sustaining bottom up M&E processes.

Neha Rai (IEED) gave a presentation on what constitutes success in relation to adaptation M&E and how the challenges outlined above can be addressed. Adaptation M&E indicators could include output indicators (e.g. no. of water sources constructed for livestock), outcome indicators (e.g. no. of livestock with access to water in the dry season) and impact indicators (e.g. change in no. of livestock in extreme climate stress). The importance of learning was also further stressed, showing how it was crucial to not just understand (as an example) whether a road damaged by floods had been repaired and climate proofed, but whether it then went on to withstand the next extreme flood event.

An activity was then held whereby participants were split into groups, given a list of transparency indicators and asked to decide whether they were indicators for M&E of adaptation or M&E of development. Many groups found points of overlap and indeed the over-arching message from this activity was that there is considerable overlap between the two and that it is beneficial to consider them in parallel, and how they can reinforce each other, rather than in isolation.

Takeaway points and recommendations for the Partnership

At the end of the workshop, participants were asked to comment on their main 'takeaways' and to provide recommendations for the Partnership. Some of the topics are mentioned below. Participants were also asked to think about their next steps and actions that they would take forward following the workshop. These were not reported back to the workshop, but were for each participant to take back to their country and to ensure some concrete outputs from the workshop.

Main takeaways

The importance of considering domestic needs. Whilst domestic transparency systems clearly need to provide the necessary information to report under the ETF, it is also important that each country considers what the domestic transparency needs are. For example, who is the intended audience, what data do they need, in what format? It might be that even if not required by the ETF, certain information would be important for a domestic audience or purpose, for example raising public awareness on the benefits of climate action, or informing decisions on policies that can improve the cost effectiveness of interventions. The domestic transparency arrangements in each country are likely to have many common elements but each is also likely to be tailored to the specific needs and circumstances of that country.

Evaluation and learning is critical. It is also crucial to think about how the information reported under the ETF can lead to evaluation and learning. Transparency of adaptation action arguably leads the way here – adaptation transparency practitioners refer to M&E (monitoring and evaluation) rather than MRV (measurement, reporting and verification, the terminology often used for GHG emissions and mitigation actions) and even sometimes refer to ME&L (monitoring, evaluation and learning). The mitigation community would do well to adopt this approach, to ensure that information on GHG emissions and mitigation actions is not just gathered and reported, but also used to improve future decision-making.

A holistic transparency system is key. Rather than think about transparency of mitigation and adaptation in silos, it helps to consider them closely, so a more holistic system is developed. It is also useful for transparency practitioners to consider other transparency systems/processes and how the systems under the ETF can feed into this, for example reporting on SDGs or other M&E processes in a country.

Multiple stakeholders need to be involved in the transparency systems. To date there has been a tendency for environment ministries to take the lead on MRV/transparency. But many of the policy levers are held by other line ministries and agencies, and these institutions will usually hold the relevant expertise needed to effectively gather and interpret data. It is therefore crucial that transparency systems are multi-stakeholder affairs, with adequate representation from key data providers and sectoral coordinators. It is likely to be more effective to not just include such institutions when data is needed from them but to include them from the early stages of designing and setting up the transparency systems in a country, to ensure their buy-in and engagement.

Institutional arrangements and engagement are key. One of the most common challenges around transparency is getting the buy-in from key partners. Indeed, behind many (if not most) challenges in setting up and running successful transparency systems lie issues around how to get people bought into the system and fully engaged. Often what may initially appear as a technical or methodological challenge, may, at its root, have this issue of engagement and buy-in at its core. It is therefore crucial that countries address this core issue in a way that works for them. An important aspect is the right legal framework in the respective national context that assigns clear mandates and defines processes and responsibilities.

Peer-to-peer exchange helps building capacities for MRV. Providing platforms and formats for sharing of countries' experiences and providing peer-advice is very useful to strengthen capacities for MRV. Countries can learn from one another by discussing common challenges and how they have been addressed. A lot of knowledge on how to develop and implement transparency systems in different contexts has already been accrued in countries that can now be harnessed to prepare for the ETF and improve policy making.

Recommendations for the Partnership

Priority topics for the Partnership to explore further included:

- Institutional arrangements for domestic transparency systems
- Developing a holistic transparency system (all sectors, adaptation, sustainable development benefits)
- M&E of adaptation
- Specific sectoral MRV approaches (e.g. energy, AFOLU, transport)
- Modelling
- Capacity building for MRV

Annex I – Agenda

Wednesday, March 28th

Time	Session	Speaker/s and facilitator/s
9:00 15’	Welcome	Dr. Raweewan Bhuridej, Secretary General of ONEP Tim Mahler, Country Director, GIZ
09:15 15’	Introduction to the Partnership on Transparency in the Paris Agreement and to the Regional Group	Jaein Kim, Republic of Korea Hanna Reuter, GIZ
09:30 15’	Introduction of agenda, facilitators, support team and logistics	Hanna Reuter
09:45 30’	Group exercise/ game: Introduction of participants	James Harries Ricardo, E&E
10:15 30’	Coffee break	
10:45 45’	Input: Status of international negotiations related to the enhanced transparency framework	Bhava Dhungana, UNFCCC
11:30 30’	Discussion in small groups: Preparing for the ETF – requirements, experiences, challenges	James Harries
12:00 30’	Small groups: Expectations	James Harries
12:30 60’	Lunch	
13:30 15’	Group picture	
13:45 45’	Input and market place: Support options and tools for transparency	Hanna Reuter Oscar Zarzo, GIZ Mirella Salvatore, FAO Lee Cando, Support Unit NDC Partnership
14:30 15’	Introduction of sectoral working groups	James Harries Oscar Zarzo Mirella Salvatore
14:45 30’	Coffee break	
15:15	**Parallel sessions for three sectors** - Group 1: Waste - Group 2: Transport - Group 3: AFOLU	Group 1: Oscar Zarzo Md. Mokhtar Ahmed, Bangladesh Group 2: James Harries Sangjune Park, Republic of Korea Group 3: Mirella Salvatore Max Collett, Australia
17:00 15’	Wrap up and look ahead to day 2	
18:00	Dinner cruise	

Thursday, March 29th

Time	Session	Speaker/s and facilitator/s
9:00 10’	Welcome and agenda for the day	
09:10 125’	Parallel sector sessions continued	James Harries Oscar Zarzo Mirella Salvatore
	Groups decide when to make a coffee break	
11:15 60’	Parallel sector sessions continued	James Harries Oscar Zarzo Mirella Salvatore
12:15 15’	Summary: Key aspects for tracking progress in the two sectors	All participants
12:30 60’	Lunch	
13:30 30’	Report back from sectoral groups	Selected participants
14:00 20’	Introduction to clinics (method and cases)	Hanna Reuter
14:20 165’	Peer advise session – case clinics hosted by: - Bangladesh - Mongolia - Thailand - Malaysia	Rahman Md. Hasan Hasibur, Bangladesh Saruul Dolgorsuren, Mongolia Suphat Phengphan, Thailand Dayang Ratnasari Abu Bakar, Malaysia
	Groups decide when to make a coffee break	
17:00 15’	Wrap up and look ahead to day 3	

Friday, March 30th

Time	Session	Speaker/s and facilitator/s
9:10 10’	Welcome and agenda for the day	James Harries
09:10 20’	Report back from clinics	Case givers
9:30 20’	Input: Evolving landscape of transparency and MEL of adaptation and SDGs Q&A	André Fabian
09:50 55’	World Café/ Panel discussion 1. What are the challenges and country needs to measure and evaluate adaptation progress? 2. What are the current M&E systems in place in the country to monitor, report and evaluate adaptation, mitigation and development actions? 3. How does M&E for climate change link with departments that assess progress against SDGs? Q&A	Neha Rai, IIED Sophal Leang, Cambodia Aimee Evangelista, Philippinen Ana Kalpoicas and Sanlan William, Vanuatu
10:45 15’	Coffee break (short)	
11:00 20’	Input: What solutions can be drawn from several M&E approaches?	Neha Rai Feisal Rahman, ICCCAD
11:20 65’	Work in 4 small groups Developing an integrated framework for assessing progress against adaptation, mitigation and development action	Group facilitators Neha Rai James Harris Hanna Reuter André Fabian
12:25- 12:30	Session wrap-up	Neha Rai
12:30 60’	Lunch	
14:00 30’	Action planning: Countries’ next steps in improving transparency and preparing for the ETF	James Harries All participants
13:30 30’	Discussion: Lessons learnt from the workshop and how this effects the participants’ view on the ETF	James Harries
14:30 15’	Input: workshop results	James Harries
14:45 20’	Evaluation, outlook and farewell	Hanna Reuter
	Coffee	

Annex II – List of participants

Country participants

Country	Mr/ Ms	Name	Organisation	Position
Australia	Mr.	Max Collett	Department of the Environment and Energy	Environmental Official
Australia	Mr.	Robert George Sturgiss	Department of the Environment and Energy	Assistant Secretary
Bangladesh	Mr.	Md. Rahman Hasan Hasibur	Department of Environment (DoE)	Deputy Director
Bangladesh	Mr.	Md. Mokhtar Ahmed	Bangladesh Climate Change Trust, Ministry of Environment & Forests	Deputy Director
Bhutan	Mr.	Tshering Dorji	National Environment Commission Secretariat	Deputy Chief Environment Officer
Bhutan	Mr.	Thsering Dendup	National Environment Commission Secretariat	Environment Officer
Cambodia	Mr.	Sophal Leang	General Secretariat of National Council for Sustainable Development, Ministry of Environment	Chief of Office
Cambodia	Mr.	Khom Chhay	General Secretariat of National Council for sustainable development, Ministry of Environment	Environmental Official
Fiji	Ms.	Timaima Diqa Vakadewabuka	Office of Attorney General	Principal Legal Officer
Indonesia	Mr.	Wawan Gunawan	Ministry of Environment and Forestry	Environmental Official
Kazakhstan	Ms.	Akbota Mendigarina	JSC Zhasyl Damu	Chief Specialist
Kazakhstan	Mr.	Zufar Tokpayev	JSC Zhasyl Damu	Leading Specialist
Kyrgyz Republic	Mr.	Ruslan Mamyrov	Center on climate finance of the Kyrgyz Republic	Director
Kyrgyz Republic	Mr.	Azamat Shamiev	Ministry of Agriculture, Food Industry and Melioration of the Kyrgyz Republic	Environmental Official
Malaysia	Mr.	Yuzmazy Yusup	Ministry of Natural, Resources and Environment	Principal Assistant Secretary
Malaysia	Ms.	Dayang Ratnasari Binti Abu Bakar	Ministry of Energy, Green Technology and Water	Principal Assistant Secretary
Mongolia	Ms.	Saruul Dolgorsuren	Environment & Climate Fund	Project Manager
Mongolia	Ms.	Anand Tsog	Ministry of Environment and Tourism	Environmental Official
Myanmar	Mr.	Kyaw San Naing	Environmental Conservation Department	Director

Country	Mr/ Ms	Name	Organisation	Position
Myanmar	Ms.	Su Su Lwin	Environmental Conservation Department	Staff Officer
Nepal	Mr.	Ritu Pantha	Ministry of Population and Environment	Director
Nepal	Mr.	Mohan Chandra Bishwakarma	REDD Implementation Centre	Under-Secretary
Philippines	Ms.	Aimee Evangelista	Climate Change Commission	Senior Science Research Specialist
Republic of Korea	Mr.	Sangjune Park	The Korea Transport Institute	Research Fellow
Republic of Korea	Ms.	Jaein Kim	Greenhouse Gas Inventory & Research Center of Korea (GIR)	Associate Researcher
Singapore	Mr.	Santhosh Manivannan	National Climate Change Secretariat, Prime Minister's Office	Assistant Director (International Policy)
Thailand	Ms.	Raweewan Bhuridej	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Secretary General
Thailand	Ms.	Natthanich Asvapoositkul	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Director of Climate Change Policy Mechanism and Development
Thailand	Ms.	Seetala Chantes	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Environmental Official
Thailand	Ms.	Suphat Phengphan	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Environmental Official
Thailand	Ms.	Chanutsakul Supirak	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Environmental Official
Thailand	Ms.	Punvadee Arayawongwarn	Office of Natural Resources and Environmental Policy and Planning (ONEP)	Environmental Official
Vanuatu	Mr.	Sanlan William	Ministry of Foreign Affairs, International Cooperation & External Trade	Head
Vanuatu	Ms.	Anna Kalpokas	NAB Secretariat, Ministry of Climate Change	Manager
Vietnam	Ms.	Thi Thanh Huong Chu	Department of Climate Change	Deputy Head
Vietnam	Mr.	Hoa Xuan Vuong	Vietnam Institute of Meteorology, Hydrology and Climate Change Science	Managing Editor
Vietnam	Mr.	Vu Hai Luu	Ministry of Transport	Environmental Official

Further experts and organizational staff

Mr/ Ms	Name	Organisation	Position
Mr.	James Harries	Ricardo E&E	Principal Technical Consultant
Ms.	Bhava Dhungana	UNFCCC Secretariat	Programme Officer
Ms.	Lee Cando	WRI / NDC Partnership Support Unit	Regional Specialist for Asia and the Pacific
Ms.	Mirella Salvatore	Food and Agriculture Organization of the United Nations (FAO)	Climate Change Officer
Ms.	Neha Rai	International Institute of Environment and Development (IIED)	Senior Researcher
Mr.	Feisal Rahman	International Centre for Climate Change and Development (ICCCAD)	Research Coordinator
Mr.	Tim Mahler	GIZ	Country Director
Ms.	Kirsten Orschulok	GIZ	Policy Advisor
Ms.	Piyaporn Perre	GIZ	Project Coordinator
Ms.	Imporn Ardbutra	GIZ	Project Technical Officer
Ms.	Chayapan Dulyarat	GIZ	Senior Professional
Mr.	Papondhanai Nanthachatchavankul	GIZ	Professional
Ms.	Hanna Reuter	GIZ	Policy Advisor
Mr.	André Fabian	GIZ	Head of Porject Component
Mr.	Oscar Zarzo Fuertes	GIZ	Policy Advisor

Annex III – Summary of 'Case Clinics'

CASE 1: How to set up appropriate institutional arrangements to access data from relevant institutions? (Bangladesh)

Goal

Increase buy-in of stakeholders to participate in MRV and contribute data in general.

Context

- For its first and second National Communications (NCs), Government of Bangladesh (GoB) relied on consulting firms to prepare the GHG inventory.
- For the third NC, GoB set up institutional arrangements with relevant agencies to ensure sharing of good quality data.
- But these arrangements didn't really become operational and DoE (the GHG inventory focal body) met a number of challenges in getting data from key agencies.

Challenges/barriers:

- Lack of awareness and capacity in key data providing institutions, primarily lack of familiarity with GHG inventory.
- Reluctance to provide data according to the guidelines.

Possible approaches:

- Develop MoU's with relevant agencies (potentially as an interim solution until a more overarching and binding framework has been developed).
- Organise a high-level political meeting/conference as a kick-start to establish a committee/task-force including all relevant stakeholders for more continuous coordination related to climate policy and MRV (higher political level, not only technical staff).
- Make use of resources under the Bangladesh Trust Fund for capacity building for MRV; a basis for developing a capacity building plan for MRV could be the gaps identified in the 3rd NatCom.
- Early engagement of relevant stakeholders and long-term building of good working relationships.

CASE 2: How to increase political buy-in and capacity for GHG emissions monitoring and the use of GHG emissions data for designing mitigation options in the agricultural sector? (Mongolia)

Goal

Increasing ownership on GHG emissions monitoring and the use of GHG emissions data for designing mitigation options in the agricultural sector.

Context

Mongolia still stands at the beginning of building its GHG emissions monitoring system. The Ministry of Environment and Tourism, which is responsible for the national inventory preparation, has limited human resources for setting up a domestic transparency system. Also, the related institutional arrangements for motivating and integrating other line ministries need to be further defined and reinforced.

Challenges/barriers

- building awareness and political buy-in for GHG emissions mitigation across agricultural stakeholders
- improving data quality as a result of the whole process of statistic production (data collection, processing, analysis)
- specifically, developing data collecting tool/template
- improving mobilization of data providers
- improving knowledge, capacity and motivation of local environmental officers for supporting GHG relevant data collection
- developing data inputting/sharing network between ministry, agencies and local authorities

Possible approaches

- Provide targeted capacity building on GHG emissions monitoring and on how to apply this to the design of mitigation actions. The aim of this is to create awareness on GHG emissions and mainstreaming climate change mitigation in the sector.
- Allocate responsibility for measurement and reporting of GHG emissions arising from the agricultural sector to the Ministry of Agriculture, as this practice has increased ownership in the process in other developing and developed countries. This should also improve coordination and cooperation among the Ministries of the Environment and Agriculture.
- Identify synergies between GHG emission monitoring data gathering and other specific data needs in the agriculture sector.
- Integrate GHG and climate change adaptation action monitoring in a linked approach, as it has been practiced e.g. by Philippines or Kenya.

CASE 3: How to improve the activity data required to improve emission estimates from Land Use, Land Use Change and Forestry sector? (Thailand)

Goal

Enhance country ambition in the next round of NDC submission by including Land Use, Land Use Change and Forestry (LULUCF) and later on to monitor progress.

Context

LULUCF has the unique feature to be both a source and sink of carbon dioxide (CO_2). The amounts of CO_2 emitted and sequestered from LULUCF are very difficult to estimate because of complex biological factors and the lack of reliable data, especially with regard to the rate of change of land use, the use of converted forest land and the biomass density of forests.

To date, net emissions and removals from LULUCF in Thailand's National GHG Inventory have been estimated using the Revised 1996 IPCC Guideline. ONEP, in charge of estimating emissions for all sector, is enhancing GHG estimates using the 2006 IPCC guideline and the Thailand Greenhouse Gas Inventory System (TGEIS), supported by the Australian Government.

In addition, ONEP has to develop templates to collect activity data from several agencies. Every agency is using different methodologies and formats for data collection. Therefore, it is difficult to harmonize and compare the submitted data.

Challenges

The main challenge is to produce one unique product, a time-series land cover map, following IPCC specifications and any data required for GHG emission estimation of the LULUCF sector, despite already existing inconsistent products produced by different agencies.

Possible approaches

- Use remote sensing data (i.e. LandSat) with some ground truthing
- Produce land cover map from 2000 to 2017 at two-year interval
- Ministry of Environment will be responsible during the initial phase with the involvement of Geo-Informatics and Space Technology Development Agency (GISTDA) that in the long term will take over and ensure the consistency and sustainability of the product
- Initial project will be financially supported by Thai Government from annual budget with additional funds from GEF for NC and BUR

- There is the need to review IPCC guideline for Approaches and Methods and make a decision in order to identify the correct data needs. Consequently, it should raise awareness among other stakeholders on data requirements.

CASE 4: Limitations in modelling – how to strengthen capacities for modellers? (Malaysia)

Goal

Encourage Ministry of Finance in Malaysia to support up-scaled and improved emissions modelling to inform better policy-making.

Context

Malaysia has set a goal to reduce its GHG emissions in terms of carbon intensity (emissions per unit GDP) of up to 45% by 2030 compared to 2005 levels. To achieve this goal, a long-term low carbon pathway has not yet been modelled that can actually be followed due to the limitations of the modelling approach being used. The Government is focusing on mitigation strategies especially in the energy sector and is trying to create a long-term low carbon energy pathway against which progress can be measured.

There is therefore a desire to strengthen capacity building for modellers in Malaysia. In particular, the Government is trying to upgrade the model from an accounting model (LEAP) to an optimisation model (TIMES) which can capture the long-term investment needed to help us reach our climate goal.

Challenges

- Lack of priority given to climate change issues by Ministry of Finance.
- Ministry of Finance not able to see the benefits that would derive from having better modelling of long-term low carbon pathways.
- Lack of funding, especially for the modelling software, training, workshops, etc.

Possible approaches

- Conduct an assessment of the economic case for action on climate change (e.g. similar to Stern Review, but specifically for Malaysia), to encourage Ministry of Finance of the need to take early action and the need to better understand low carbon pathways from a cost effectiveness perspective.
- Develop clearer business case on green jobs, to show Ministry of Finance the potential gains from low carbon development.
- Think about other models/tools that could also be used to raise awareness of low carbon pathways, e.g. a 2050 calculator.

- Consider putting key contacts from Ministry of Finance in touch with counterparts in other countries that have taken a progressive approach to GHG modelling and low carbon pathways.