Inception Workshop Report on
Development of the Measurement, Reporting, and Verification (MRV) System for the Transport Sector in Cambodia

29th April 2021
Phnom Penh, Cambodia
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PREPARED UNDER

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**List of Acronyms**

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<th>Description</th>
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<tbody>
<tr>
<td>CC</td>
<td>Climate Change</td>
</tr>
<tr>
<td>CCAP</td>
<td>Climate Change Action Plan</td>
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<td>CCTWG</td>
<td>Climate Change Technical Working Group</td>
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<td>DCC</td>
<td>Department of Climate Change</td>
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<td>EAC</td>
<td>Electricity Authority of Cambodia</td>
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<td>EDC</td>
<td>Electricité du Cambodge</td>
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<tr>
<td>ETF</td>
<td>Enhanced Transparency Framework</td>
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<td>GACMO</td>
<td>Greenhouse Gas Abatement Cost Model</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<tr>
<td>GSSD</td>
<td>General Secretariat of the National Council for Sustainable Development</td>
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<tr>
<td>ICAT</td>
<td>Initiative for Climate Action Transparency</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<tr>
<td>MISTI</td>
<td>Ministry of Industry, Science, Technology and Innovation</td>
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<tr>
<td>MME</td>
<td>Ministry of Mines and Energy</td>
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<tr>
<td>MOE</td>
<td>Ministry of Environment</td>
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<td>MOP</td>
<td>Ministry of Planning</td>
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<tr>
<td>MOT</td>
<td>Ministry of Tourism</td>
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<tr>
<td>MPWT</td>
<td>Ministry of Public Works and Transport</td>
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<td>MRV</td>
<td>Measurement, Reporting and Verification</td>
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<td>NCDD</td>
<td>National Committee for Sub-National Democratic Development</td>
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<td>NCSD</td>
<td>National Council for Sustainable Development</td>
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<td>NDC</td>
<td>Nationally Determined Contributions</td>
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<td>RGC</td>
<td>Royal Government of Cambodia</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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</table>
1 Background and organization of the workshop

1.1 Project background


Under the Paris Agreement, the Parties agree to limit global temperature well below 2 degrees Celsius above pre-industrial levels and pursue efforts to limit the increase in temperature even further, to 1.5 degrees Celsius. In response to the Paris Agreement, Cambodia submitted her first Nationally Determined Contributions (NDCs) in 2015 and the updated NDC in 2020.

Article 13 of the Paris Agreement establishes an Enhanced Transparency Framework (ETF) for action and support to build mutual trust and confidence among the Parties and to promote the effective implementation of the Paris Agreement. Therefore, the Initiative for Climate Action Transparency (ICAT) has been supporting Cambodia for the development of the Measurement, Reporting and Verification (MRV) system through the UNEP DTU Partnership (UDP).

The Department of Climate Change (DCC), the General Secretariat of the National Council for Sustainable Development/Ministry of Environment is the implementing agency of ICAT in Cambodia. The ICAT will support Cambodia on establishing institutional arrangements for MRV at the national level and piloting a sectoral guidance to improve MRV in the transport sector.

1.2 Overview of the workshop

The inception workshop was organized virtually on 29th April 2021. The workshop was mainly divided into four sessions including the opening session, presentation session, discussion session, and closing session. Few presentations on the ICAT project, policies of the Transport sector, and GACMO model were introduced and shared by international and national consultants to make participants aware of the project and to collect feedback. Discussions were conducted based on the presented data. Please see Annex I for the agenda of the workshop. Around 60 participants representing Climate Change Technical Working Group (CCTWG), Ministry of Public Works and Transport (MPWT), Phnom Penh Department of Public Works and Transport, The Ministry of Planning (MOP), National Committee for Sub-National Democratic Development (NCDD) the General Secretariat of the National Council for Sustainable Development, academia, private sector, and other relevant institutions attended the inception workshop.
1.2.1 Objectives

- To raise awareness about the project among stakeholders to seek synergy with complementary initiatives;
- To share and obtain feedback from key officials on the findings from the transport policy reviewing;
- To discuss and decide on transport policy and institutional arrangement in charge of implementing MRV for transport policy including monitoring plan for MRV framework for Cambodia; and
- To discuss and get recommendations from key stakeholders on the integration of the ICAT’s MRV methodology into Cambodian transport policy and its implementation plan and responsible institutions.

1.2.2 Target audience

The Department of Climate Change, the General Secretariat of National Council for Sustainable Development/Ministry of Environment of Cambodia (GSSD/MoE) which is the implementing agency of the ICAT.

National Transport MRV of Cambodia will be developed based on the multi stakeholder approach. Therefore, all the potential institutions which will be collaborate through providing, processing, reporting data and also consulting to improve the deliverables, to identify barriers and gaps in the national MRV system, to establish roles, responsibilities and procedures that will allow a robust MRV system in the future were identified. These institutions include:

- The Ministry of Environment (MoE);
- The Ministry of Public Works and Transport (MPWT);
- The Ministry of Planning (MOP);
- The Ministry of Industry, Science, Technology and Innovation (MISTI);
- National Committee for Sub-National Democratic Development (NCDD) and;
- The National Council for Sustainable Development (NCSD).
- The Ministry of Mines and Energy (MME);
- Electricite du Cambodge (EDC); and
- Electricity Authority of Cambodia (EAC).
2 Workshop process and Discussion

Despite the prevailing COVID-19 situation in Cambodia, the inception workshop on the development of MRV system for the transport sector was conducted successfully with fruitful discussions. Key comments and discussion points are listed below:

▪ The green logistics policy is a part of the “Climate Change Action Plan for the Transport Sector (CCAP) 2020-2023”. Two actions of the green logistics will be formulated and put into the CCAP with support of the Japanese Adviser Team;

▪ Number of NDCs that will be considered for development of the MRV system was questioned by a participant due to a mismatch between presented information and number of NDCs they have considered for their own studies. This was clarified by indicating that presented NDCs were extracted from the updated NDC report of Cambodia. However, consultant will provide further clarifications in this regard to the participant in future.

▪ NDCs are submitted every five years to the UNFCCC secretariat. Therefore, Cambodia needs to submit its updated NDCs in 2025. As such, the ICAT project is an opportunity to collect as much data as possible in order to have a good understanding of the measures in the transport sector and to apply it in the context of the long-term strategy;

▪ The GACMO model will be used to assess the mitigation potential and marginal abatement costs of mitigation policies and actions in Transport sector NDCs. Further discussions between consultant and expert will be held on this regard, once mitigation actions are selected and sufficient data are collected to apply the model.;

GACMO is a good tool for the NDC tracking (it was used by a few countries already), yet ICAT also offered other tools such as Transport Sector Climate Action Co-benefits Evaluation (TRACE) tool which can be used to assess the impacts of reduced traffic congestion on air pollution and public health. However, these tools are just complementary to the GACMO model.;

▪ The analysis for the MRV system would cover the road and rail transport based on the updated NDC actions on the transport sector. The consultation meetings and discussions with relevant stakeholders would provide an opportunity for the national team to gather all possible mitigation activities and projects and to prioritize key actions and projects before categorized them under different NDCs.; and

▪ Cambodia has limitations to the data that it required to scale down the scope in the future to develop the MRV. The ICAT has been supporting some countries to collect data related
climate change actions from different levels within the countries (city, municipality level, etc.). Therefore, support of the ICAT is essential to Cambodia as well in order to improve its climate change mitigation actions and MRV.

3 Conclusion and follow up actions

The inception workshop on the development of MRV system for the Transport sector of Cambodia was conducted successfully, despite the COVID-19 challenges. The inception workshop provided an excellent opportunity for stakeholders from key ministries/institutions to learn and discuss the MRV system for the transport sector. Information on the current status and existing policy and strategy of the transport sector and the training on the GACMO model were two key takeaways from the inception workshop. By the end of the workshop, participants are more aware of transport-related tools in developing the MRV system and expressed their support and cooperation for this initiative.
**Table 1 Follow up actions of the inception workshop on development of Transport MRV system in Cambodia**

<table>
<thead>
<tr>
<th>No</th>
<th>Action</th>
<th>Deadline</th>
<th>In charge Body</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Inception Workshop Report</td>
<td>Being submitted</td>
<td>International &amp; National Consultants</td>
</tr>
<tr>
<td>3</td>
<td>Deliverable 2: Capacity Building Workshop reports on GACMO and ICAT SD methodology</td>
<td>June 10, 2021</td>
<td>International &amp; National Consultants</td>
</tr>
<tr>
<td>4</td>
<td>Deliverable 3: Report on MRV assessment of the existing national MRV system and report on designing an institutional governance structure for the Transport sector as a part of a unified national MRV System in the country for NDCs and providing recommendations on how best to remove the most significant visible barriers documented (other may only become visible after the pilot stage)</td>
<td>July 20, 2021</td>
<td>International &amp; National Consultants</td>
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<tr>
<td>5</td>
<td>Deliverable 4: Final report on the assessment of methodologies for the development of MRV system, including assessing of GHG emission impacts of policies and actions in the Transport sector. The report will also include selected methodology and workshop report (capacity building for selected methodology)</td>
<td>August 15, 2021</td>
<td>International &amp; National Consultants</td>
</tr>
<tr>
<td>6</td>
<td>Deliverable 5: Report on designing the national MRV system, establishment of roles and responsibilities and providing recommendations on how to address barriers</td>
<td>September 30, 2021</td>
<td>International &amp; National Consultants</td>
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<td>gaps issues to improve data collection and reporting for transport sector emissions</td>
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<tr>
<th>Time</th>
<th>Contents</th>
<th>Timeline &amp; Facilitators</th>
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<td>1:30-2:00</td>
<td>Registration</td>
<td>DCC</td>
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<tr>
<td>2:00-2:20</td>
<td>Remarks by the GSSD’s representative</td>
<td>H.E. Chea Chanthou, Deputy Secretary General of GSSD</td>
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<tr>
<td>2:20-2:40</td>
<td>Overview of the ICAT Project</td>
<td>Mr. Sum Cheat, National Coordinator</td>
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<tr>
<td>2:40-3:00</td>
<td>Coffee break</td>
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<tr>
<td>3:00-3:30</td>
<td>Overview of Policy and Strategy of the Transport Sector in Cambodia</td>
<td>Mr. Pich Sokhim, National consultant</td>
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<tr>
<td>3:30-4:00</td>
<td>The overview of the GACMO model</td>
<td>H.M. Buddika Hemashantha, International consultant</td>
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<td>4:00-4:30</td>
<td>Group discussion</td>
<td>Dr. Hak Mao, Director of the DCC</td>
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<tr>
<td>4:30-5:00</td>
<td>Wrap up and closing</td>
<td>Dr. Hak Mao and Dr. Henning Wuester, UNOPS ICAT project Director</td>
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6  Annex III: Welcoming speech

H.E. Chea Chanthou
Deputy Secretary General of the General Secretariat of the National Council for Sustainable Development (GSSD)

Inception Workshop on
“The Development of Measurement, Reporting, and Verification (MRV) System in the Transport sector”

29th April 2021

Excellencies, Ladies, and Gentlemen, Members of the Climate Change Technical Working Group (CCTWG)!
Excellencies, Ladies, and Gentlemen from line-ministries and institutions other stakeholder! All participants!
I would like to welcome you all and thank for organizing this important workshop that will focus on
The Development of Measurement, Reporting, and Verification (MRV) System in the Transport sector.

Climate change is one of the most difficult development challenges that Cambodia is facing, in great part due to her high vulnerability to the impacts of climate change and her low adaptive capacity.
The Royal Government of Cambodia is committed to combating climate change and accelerating the transition to climate-resilient, low-carbon sustainable modes of development, being a Party to the UNFCCC since 1995, and has ratified all relevant subsequent protocol and agreements, such as Kyoto Protocol and the Paris Climate Agreement. The Cambodia Climate Change Strategic Plan (CCCSSP) 2014-2023 was approved aiming to develop Cambodia a more climate resilience, low carbon, and knowledge based society. The National Policy on Green Growth and National Strategic Plan on Green Growth 2013-2030 was developed to uphold stable economic growth, while simultaneously preserving natural resources and ecosystems with sustainability by prioritizing the environment as a core domain in the country’s development.
Under the Paris Agreement, the Parties agree to limit the rise in global temperature well below 2 degrees Celsius above pre-industrial levels and pursue efforts to limit the increase in temperature even further, to 1.5 degrees Celsius. In response to the Paris Agreement, Cambodia submitted her first Nationally Determined Contributions (NDCs) in 2017 and the updated NDC in 2020.
Article 13 of the Paris Agreement establishes an Enhanced Transparency Framework (ETF) for action and support to build mutual trust and confidence among the Parties and to promote the effective
implementation of the Paris Agreement. Therefore, the Initiative for Climate Action Transparency (ICAT) has been supporting Cambodia for the development of Measurement, Reporting and Verification (MRV) system through the United Nations Environment Programme (UNEP) DTU Partnership (UDP). It is the second phase, while the first one focused on MRV in Renewable Energy. In Cambodia, the Project “the Initiative for Climate Action Transparency (ICAT)” is implemented by the Department of Climate Change (DCC), the General Secretariat of the National Council for Sustainable Development/Ministry of Environment. The ICAT will support Cambodia’s focus on the establishment of institutional arrangements for MRV at the national level and piloting a sectoral guidance to improve MRV on the transport sector.

This workshop aims to discuss and get recommendations from key stakeholders on the integration of the ICAT’s MRV methodology into Cambodian transport policy and its implementation plan and responsible institutions.

I wish you all a very active and fruitful discussion today. We look forward to our discussions and take this opportunity to review the process of implementing the transport policy we have carried out together, and to continue to formulate the next Strategic Plan and Action Plan for Measurement, Reporting, and Verification (MRV) on the transport sector. In line with international standards and meet national demand.

Thank you!
Annex IV: Minutes of Meeting

Agenda Item 1: Remarks by the GSSD’s Representative

H.E. Chea Chan Thou, Deputy Secretary General of the General Secretariat of the National Council for Sustainable Development (GSSD) on behalf of H.E. Vann Monyneath, Secretary General of the GSSD, had warmly welcomed all the distinguished participants and thanked them for taking their valuable time to participate in this important workshop.

In his remarks, he mentioned that climate change is one of the most difficult development challenges that Cambodia is facing due to her high vulnerability to climate change, and her low adaptive capacity. He further stressed that the Royal Government of Cambodia is accelerating the transition to low carbon development mode by being a party to the UNFCCC and subsequently, ratified the Kyoto Protocol, and the Paris Agreement. In response to the Paris Agreement, Cambodia submitted her Initial Nationally Determined Contribution in 2015, and the updated Nationally Determined Contribution in 2020.

He also highlighted the support received from the Initiative for Climate Action Transparency (ICAT) regarding the development of the MRV system through the United Nations Environment Programme (UNEP-DTU Partnership). This is the second phase while the first phase focused on the MRV in renewable energy. The ICAT will support Cambodia focusing on the establishing of institutional arrangement at the national level and pilot sectoral guidance to improve the MRV system in the transport sector.

Finally, he wished all the distinguished participants a very active and fruitful discussion, and urged all of them to take this opportunity to review the process of implementing the transport policy that had been carried out and to continue to formulate the next Strategic Plan and Action Plan for the MRV on the transport sector.

Agenda Item 2: Overview of the ICAT Project

Mr. Sum Cheat, the National Coordinator of the ICAT Project, gave a presentation on the overview of the ICAT project, including the ICAT project’s objectives and the project work plan. The ICAT’s project objectives are to develop the MRV system for the transport sector and to build capacity on the use of transparency related tools, ICAT SD assessment tools and GACMO. On the work plan, the project is expected to finish within 7 months from March to September, 2021.
Agenda Item 3: Review and Outcomes of Previous Activities

Mr. Pich Sokhim, National Consultant of the ICAT Project, gave a presentation on the Overview of Policy and Strategy of the Transport Sector in Cambodia. The presentation touched upon the current situation of the transport sector in Cambodia and the existing policy and strategy related to the transport sector. The presentation also indicated actions related to the transport sector in the Cambodia’s updated NDC. The presentation also provided an overview of the next steps to be undertaken after the inception workshop.

Comments

Mr. CHREANG Phollak, Deputy Director General of General Department of Planning and Policy of the Ministry of Public Works and Transport (MPWT), provided comments related to the Green Logistics Policy. He pointed out that the MPWT is working with an advisory team from Japan to create two actions on Green Logistics and put these two actions into the Climate Change Action Plan for the Transport Sector 2020-2023. The Green Logistics Policy is not a separate policy. He also raised a question related to the five actions of the updated NDC. He questioned whether the five actions could be updated to be included in the updated NDC or whether the updated NDC has already been finalized. He indicated that some actions in the updated NDC are outdated based on the MPWT’s action plans. For example, activities No. 4 and 5 were included in the previous action plan of the Climate Change Action Plan for the Transport Sector (2014-2018).

Mr. Buor Chhay Ya, Vice Chief of Office of the MPWT, had comments related to Cambodia’s Updated NDC actions on the transport sector. He would like to know whether all of these actions are taken from the updated NDC. According to him, the MPWT only submitted four actions (two mitigation actions and two adaptation actions) to be included in the updated NDC.

Mr. Henning Wuester, UNOPS ICAT Project Director, stressed that firstly, the focus must be put on the implementation of actions and tracking whether they are effective or whether they have an impact. Secondly, the NDC is supposed to be further developed and there will be requirements to submit a new NDC in 2025. As such, he encouraged to use the ICAT project as an opportunity to collect as much data as possible to have a good understanding of the measures in the transport sector and to
apply it in the context of the long-term strategy. He also suggested keeping the NDC in mind during the work of the ICAT project.

**Agenda Item 4: Overview of GACMO Model**

H.M Buddika Hemashantha, International Consultant of the ICAT Project, started by explaining the importance of the MRV system on measuring the GHG impacts as well as sustainable development impacts and other co-benefits. The MRV system has become crucial in achieving the NDC as well as accessing climate finance. Afterwards, he gave a presentation on the GACMO model. Specifically, he focused on the model’s application and experience of use in other countries, the type of mitigation subsectors in the model, steps in applying the model, and how to develop the Marginal Abatement Revenue (MAR) Curve.

**Comments**

Dr. Hak Mao, ICAT Project Manager, informed the participants that the GACMO model would only be applied in the transport sector, and there would be more discussions between the consultants and experts on the model once the data are inputted in the model and when the mitigation actions are introduced.

H.M Buddika Hemashantha, as requested by Dr. Hak Mao, explained an example of the results generated from the GACMO model. He specifically explained calculations in the GACMO model for electric vehicles (1000 units). He pointed out how introducing electric cars could be environmentally beneficial and how much investment should be made.

Mr. Henning Wuester, UNOPS ICAT Project Director, commented that the updated national data are important and that GASMO is also good for the NDC tracking (it was used by a few countries already), yet he also mentioned that ICAT offer other tools such as the Transport Sector Climate Action Co-benefits Evaluation (TRACE) tool which can be used to assess the impacts of reduced traffic congestion on air pollution and public health. However, he stressed that these tools are just complementary to the GACMO model.

H.M Buddika Hemashantha said he has taken notes on the tool mentioned and there will be further discussion and training on which tool would be useful for Cambodia.
**Agenda Item 5: Group discussion**

**Mr. Chheng Vatanak,** deputy director PMSD of NCDDS, suggested that even though road transport has the biggest share in the transport sector, it is also good for the national team to look into the regional perspectives by taking into consideration other areas that contribute to GHG emissions from across the country if the time and resources allow.

**H.M Buddika Hemashantha** thanked for the comments and pointed out that there is a need to identify the mitigation actions, projects and policies that would fit within the identified five NDCs under the transport sector that Cambodia had already communicated to the UNFCCC. Therefore, the analysis would only cover the road and rail transport alone, and that the consultation meetings and discussions with relevant stakeholders would provide the opportunity for the national team to gather all the possible mitigation actions and projects and to prioritize key actions and projects before categorized them under different NDCs.

**Mr. Henning Wuester**, UNOPS ICAT Project Director, mentioned that ICAT has been working with some countries to support the actions related to climate change at different levels within the countries, even though these actions are at the city/municipality level.

**H.M Buddika Hemashantha** noted comments from the participants. He stated that now the national team has just started the work, but once they are in the process, they would definitely discuss with relevant experts to see if Cambodia needs any support to extend the efforts to accommodate the needs of other organizations such as the NCDDS.

**Dr. Hak Mao**, ICAT Project Manager, informed the participants that Cambodia has limited data and needs to scale down the scope in the future to develop the MRV system. He stressed the need for of support from ICAT to improve the areas of MRV and climate change mitigation. He really appreciated the support from ICAT for the current MRV system in the transport sector. In addition, he also requested **Mr. Henning Wuester** to consider initiatives for future cooperation that Cambodia has proposed.
Agenda Item 6: Wrap up and closing

Dr. Hak Mao, ICAT Project Manager, expressed his thanks to the participants and presenters for taking their time to join the workshop. He pointed out that there is a need for further discussion with relevant stakeholders and he believed that this seminar could be a chance to establish a usable MRV system for the transport sector. He hoped that all the participants will take this opportunity to use the model and other related information and apply them in the context of Cambodia. He also would like to convey his thanks to the ICAT colleagues and relevant ministries and institutions for the support of the project and wished everyone safe during the Covid-19 outbreak.

Mr. Henning Wuester, UNOPS ICAT Project Director, expressed his pleasure in joining the workshop and was happy to see good participation from relevant ministries and institutions such as Ministry of Tourism (MoT), Ministry of Planning, Ministry of Fisheries, etc. He stressed the importance of linking policies and actions to development activities. Further, importance of considering health, economic impacts of activities of Transport sector. He stressed that Cambodia should also look into long-term goal toward zero emission if the country does not want to be lagged behind. He also introduced a new model (TRACE), which included the air pollution and health, etc.