Enhancing perception and capacity for national and provincial leaders and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Viet Nam

The following collaborators worked on this project:

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2. Dr. Do Tien Anh, Institute of Meteorology, Hydrology and Climate Change, Viet Nam, atdo@mail.usf.edu
3. Dr. Nguyen Thi Tuyet Lan, Centre for Environmental Monitoring, Viet Nam, lan.ntt@hacem.com.vn
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Project Reference Number: CBA2016-03SY-Luong

“Enhancing perception and capacity for national and provincial leaders and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Viet Nam”

Final Report submitted to APN
OVERVIEW OF PROJECT WORK AND OUTCOMES

1. Project Information

| Project Duration        : 1 year |
|-------------------------:|-----------------|
| Funding Awarded         : USD 45,000 |
| Key organizations involved : The project is led by Dr. Luong Quang Huy of the Department of Meteorology, Hydrology and Climate Change, Viet Nam Ministry of Natural Resources and Environment (MONRE) in collaboration with Dr. Do Tien Anh, Deputy Director of the Institute of Meteorology, Hydrology and Climate Change; Dr. Nguyen Thi Tuyet Lan, Director of the Centre for Environmental Monitoring (HACEM), Hai Phong City; and Dr. Ha Minh Chau, Deputy Director of the Climate Change Bureau (CCB), Ho Chi Minh City. |

2. Project Summary

Viet Nam National Climate Change Strategy (2011) and other national policies recognize the significance of GHG emission monitoring and inventory. Department of Meteorology, Hydrology and Climate Change (DMHCC), recently changed to Department of Climate Change of Viet Nam Ministry of Natural Resources and Environment (MONRE), appointed as the national focal point for GHG emission monitoring and inventory, has developed the National Communications, the Biennial Updated Reports and the Intended Nationally Determined Contributions (INDC). These national reports include results from the National Inventory Report (NIR). The development of the NIR encountered various difficulties due to the lack of perception and understanding of GHG inventory at all levels, leading to limited supports to the implementation of the Nationally Appropriate Mitigation Actions (NAMAs) and low-carbon cities. The project has significantly improved the perception and capacity for leaders and practitioners on GHG emission monitoring and inventory through the development of a set of training materials on GHG monitoring and inventory, NAMAs and low-carbon pathways and organization of training workshops for leaders and practitioners in the three regions of Viet Nam.

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Outcomes</th>
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</thead>
<tbody>
<tr>
<td>Development of a set of training materials on GHG monitoring and inventory</td>
<td>Improved perception of GHG monitoring and inventory</td>
</tr>
<tr>
<td>Organization of training workshops for leaders and practitioners in Viet Nam</td>
<td>Improved national capacity on GHG monitoring and inventory</td>
</tr>
</tbody>
</table>

Keywords: GHG monitoring, inventory, NAMA, NDC.

3. Activities Undertaken

The project formed an expert team with participants from relevant ministries, including Ministry of Natural Resources and Environment (MONRE), Ministry of Industry and Trade (MOIT), Ministry of Natural Resources and Environment (MARD), Ministry of Construction
(MOC), Ministry of Transport (MOT), Ministry of Planning and Investment (MPI), the Government Office (GO) and the National Assembly, the private sector represented by various industrial associations, NGOs which are working in the field of GHG emission reduction to design the training materials for the project as a whole. The expert team reviewed the current status of GHG monitoring and inventory system in Viet Nam, making a comprehensive reports on how GHG monitoring and inventory has been implemented at both sectoral and national levels, using resources from other relevant projects and developed a capacity need assessment which forms the basis for the selection of key policymakers and practitioners to join the training workshops.

The training materials were developed by the expert team with both top-down and bottom-up approaches to ensure the context of the training materials fits with international standard and requirement for GHG monitoring and inventory (e.g. IPCC Guidelines 2006 on GHG inventory for non-annex 1 countries) and the current conditions of various economic sectors, line ministries and economic zones. The project team also designed the training courses which were then organized for national and provincial government agencies and stakeholders at two major economic cities (Hai Phong City in the North and Ho Chi Minh City in the South). As a result of the project, the perception and capacity of national and provincial leaders and practitioners on GHG monitoring and inventory to support the implementation of NAMAs and the development of low-carbon cities in Viet Nam have been significantly improved.

4. Key facts/figures

Two workshops were organised in Hai Phong City and Ho Chi Minh City in April 2017. This timing was chosen as this is the end of the planning cycle and the focal points from line ministries can use the knowledge from the workshops for their research and policy making plans. This was also agreed upon by all relevant stakeholders before the organisation of the workshop.

The first workshop was organised from April 11-14, 2017 in Hai Phong City with participants from 40 focal points of the line ministries and provinces in the North of Viet Nam. The second workshop was organised in Ho Chi Minh City from April 18-21, 2017 with also 40 focal points of provinces in the South of Viet Nam.

Both workshops were participated by key members of line Departments under the provinces in the North and the South. Even though only 80 people were directly trained during the workshops. The materials and knowledge gained from the training have benefited more than 400 people working for those agencies.

5. Potential for further work

With the highly promising result of the project, there are a number of key capacity areas that need to be improved, including:

1. Guidelines for mitigation measures to be developed for sectoral levels;
2. MRV system to be developed for sectoral levels with capacity building activities;
3. Capacity building for market-based instruments for GHG emission reduction in Viet Nam.
6. Publications

No publication is produced. However there are training materials that have been produced during the implementation of the project and circulated to other line ministries and provinces for further use.

7. Awards and honours

Not applicable

8. Pull quote

Mr. Nguyen Van Tue, Director General of the Department of Climate Change (DCC), has stated during his conclusion speech of the workshop that “This particular project has supported the DCC to overcome a hurdle that we have been faced during the past few years and opened up various opportunities for policymaking and putting GHG emission reduction efforts in Viet Nam to another level. The result of the project certainly helps the Viet Nam NDC implementation and all those national and sectoral policies related to GHG emission reduction”.

9. References

Not applicable.

10. Acknowledgments

The project has been accompanied and supported by many organisations and people. It is a pleasant aspect that we have now the opportunity to express our gratitude for all of them.

The first organisation we would like to thank is The Asia-Pacific Network for Global Change Research (APN) with which we have been working with for many years. Without the support from the APN, this project could not be realised.

We would like to thank our collaborators, Dr. Do Tien Anh, Deputy Director, Institute of Meteorology, Hydrology and Climate Change; Dr. Nguyen Thi Tuyet Lan, Director of the Centre for Environmental Monitoring (HACEM), Hai Phong City; Dr. Ha Minh Chau, Deputy Director of the Climate Change Bureau (CCB), Ho Chi Minh City, who kept an eye on the progress of the project and always was available when we needed their advises.

Many Vietnamese scientists also substantially contributed to the development of this work. Especially the strict and extensive comments and many discussions and interactions with line ministries had a direct impact on the development of this project. I would like to thank all those focal points on climate change at Viet Nam line ministries for our discussions and providing us advises and tips that helped us a lot in staying on the right track.

The chain of my gratitude would be definitely incomplete if we would forget to thank the people of the Department of Climate Change, MONRE, the inspirer of not only this project but many other significant activities.
1. Introduction

In October 2015, Viet Nam Government has submitted the Intended Nationally Determined Contributions (INDC) which states “with domestic resources by 2030 Viet Nam will reduce GHG emissions by 8% compared to BAU and 25% if international support is received through bilateral and multilateral cooperation, as well as through the implementation of new mechanisms under the Global Climate Agreement”. To achieve these targets, the Government of Viet Nam must have a comprehensive GHG monitoring and inventory system as well as supporting policies and human resource. There are some projects supporting mitigation actions in Viet Nam such as the Project to Support the Planning and Implementation of nationally appropriate mitigation actions (NAMAs) in a measurable, reportable and verifiable (MRV) manner (SPI-NAMA project) with overall objectives to support capacity of MONRE and line ministries on developing NAMAs. These projects, however, focus on developing the mandates and functions, protocols and procedures for each line ministries to develop NAMAs. There remains a gap that the perception and capacity on GHG monitoring and inventory at both national and local levels are highly limited. This project aims to address this gap by not only enhance the national GHG monitoring and inventory but also support the implementation of NAMA, low-carbon cities and GHG emission reduction at national level.

The project includes two main activities to improve the perception and capacity on GHG monitoring and inventory of both leaders and practitioners at national and provincial levels, implemented by DMHCC (the Viet Nam focal point of climate change), started with (1) development of a complete set of training material on GHG monitoring and inventory and (2) organization of training workshops for relevant leaders and practitioners at national and provincial levels. These activities were implemented in two years 2016 and 2017 with the participation of key experts and policymakers from line ministries, private sector and NGOs. Training materials and workshops were designed in a manner that provide the trainees in-depth knowledge and skills to carry out GHG monitoring and inventory at national and provincial levels.
The proposed project meets the second target of CAPaBLE Programme on “Awareness raising and dissemination activities for policy and decision-making communities, civil society and the public”.

2. Methodology

The project has achieved the following:

1. A set of comprehensive training materials on GHG emission monitoring and inventory was developed to serve the need of national and provincial leaders, practitioners and private sector. These materials were tailor-made for each target of the project to ensure the efficiency and duplicability. The materials have been officially endorsed by Viet Nam MONRE for further usage and updates in the future.

2. Enhanced perception and capacity for national and provincial leaders and practitioners on GHG emission monitoring and inventory to support implementation of NAMAs and development of low-carbon cities in Viet Nam at two large cities of Viet Nam (Hai Phong and Ho Chi Minh), representing two key industrial zones and geographical areas of Viet Nam. Approximately 80 key officials at both national and city levels were trained, followed by around 200 practitioners in the relevant sectors benefited from the projects.

3. After these training workshops, neighbouring cities and provinces are motivated to duplicate the activities of this project by using their own budget. The materials have been a significant reference for the line ministries and provinces in developing the Government Decree on Roadmap and Measures for Vietnam to participate in global GHG emission reduction. The key economic and industrial zones in the North (7 provinces), the Central (5 provinces) and the South (9 provinces) will be direct beneficiaries from the projects. They will be encouraged to duplicate the project’s activities in their areas, contributing to broaden the effect of the project.

The project employed various methodologies through a coordinated work plan to achieve the set objectives:

- An expert team was formed with participants from relevant ministries, including Ministry of Natural Resources and Environment (MONRE), Ministry of Industry and Trade (MOIT), Ministry of Natural Resources and Environment (MARD), Ministry of Construction (MOC), Ministry of Transport (MOT), Ministry of Planning and Investment (MPI), the Government Office (GO) and the National Assembly, the private sector represented by various industrial associations such as that of steel association, solid waste management authorities, cement companies, NGOs such as Vietnam Energy Efficiency Organisation, Green Building Council who are working in the field of GHG emission reduction helped with designing the training materials for the project as a whole.

- The expert team reviewed the current status of GHG monitoring and inventory system in Viet Nam, made a comprehensive report on how GHG monitoring and inventory has been implemented at both sectoral and national levels, using resources from other relevant projects on GHG mitigation such as the project to Support the Planning and Implementation of NAMAs in a MRV manner (SPI-NAMA).
A capacity need assessment was developed by the expert team upon the completion of the above-mentioned review, this formed the basis for the selection of key policymakers and practitioners to join the training workshops.

Based on the capacity need assessment on GHG monitoring and inventory, the key aspects of the training materials were identified, the characteristics of GHG monitoring and inventory at local, provincial and national levels were differentiated in order to develop appropriate materials for various targets of the project.

Training materials was then developed by the expert team with both top-down and bottom-up approaches to ensure the context of the training materials fits with international standard and requirement for GHG monitoring and inventory (e.g. IPCC Guidelines 2006 on GHG inventory for non-annex 1 countries) and the current conditions of various economic sectors, line ministries and economic zones.

The materials were tested at national level through a range of piloting in-house training at MONRE to ensure its contents and appropriateness consistent with the project objectives.

The expert team revised the training materials upon the completion of the testing phase and circulated to key experts at line ministries, industrial associations and NGOs for comments before finalization.

The final revision of the training materials was made and endorsed by leaders of DCC/MONRE before they were use at the training workshops.

Based on the capacity need assessment on GHG monitoring and inventory, DMHCC/MONRE issued a formal letter of invitation to line ministries and provinces to nominate their key policymakers and practitioners to join the training workshops.

Training courses were designed and instructed by experts who developed the training materials. The training included field visits to selected facilities where GHG emission monitoring, inventory and reduction have been good practices in Viet Nam.

The training workshops were organized for national and provincial government agencies and stakeholders at two major economic cities (Hai Phong City in the North and Ho Chi Minh City in the South).

At the end of the training workshops, a forum was organised for the participants to discuss their knowledge and understanding obtained from the training to apply to actual activities and organisational system at their respective agencies.

The final training materials to duplicate to other provinces have been produced and endorsed by DCC/MONRE.

3. Results & Discussion

Capacity need assessment

There is lack of legal basis and supporting mechanisms for MONRE and DONREs to perform coordination role in GHG inventory in particular and mitigation actions in general. Currently, the role is presumed in accordance to Decree No.36/2016/ND-CP defining functions, responsibilities and authorities of MONRE and Decisions by PPCs for DONREs. However, it is expected by MONRE, line ministries and DONREs to have more improved legal framework for MONRE to take on coordination role for GHG inventory in particular and mitigation actions. Feedback from the assessment shows that participants expect it would be more or less similar to the established legal framework for implementation of CDM projects.
In the case of GHG inventory in particular and mitigation actions, however, the lead ministry and department at provincial level should be tasked more with technical capacity.

Present means of communication between MONRE and line ministries and/or DONREs and line departments at provincial level should be improved for better coordination and management of GHG inventory in particular and mitigation actions. The established communication means through the National Committee on Climate Change, National Steering Committee for UNFCCC and KP seem to be at high-level and not on regular basis. Therefore, participants to the assessment would like to have technical persons involved earlier in the process to have all technical problems solved before wide consultation for decision-making stage. To ensure strong communication and coordination, dedicated resources (human and financial resources) are necessary; participants cited JCM Joint Committee as a good example.

There is a common opinion that cooperation between MONRE and line ministries and/or DONREs and line departments at provincial level should be enhanced in order to ensure an effective and consistent approach from sector level to national level. This will also help improve the implementation of Vietnam NDC and the communication and organization of the Viet Nam’s negotiation delegation to international climate change events such as COPs, etc.

While MONRE/DONREs has relatively better understanding of climate mitigation and its progress at global and national level, the understanding of existing mitigation efforts (technical support and on-going NAMA projects), the major emission sources and profile in the sector and progress over GHG inventory and mitigation actions and NAMA development activities across sectors seem to be limited which is due to insufficient coordination role and capacity mentioned above.

There are no established means of systematically capturing of sectoral GHG inventory and mitigation actions by MONRE. The Prime Minister issued Decision No.2359/QD-TTg dated 22 December 2015 to approve the National framework for GHG inventory which prescribes the content, format and responsibility of line ministries to provide input to MONRE for compilation of the national inventory data. This is an effective basis for GHG inventory and mitigation actions in Viet Nam. However, a reporting system on NAMAs and a NAMA registry should be required for MONRE/DONREs to efficiently perform state management activities.

Line ministries would like MONRE/DONREs to be more proactive in the role of State management of GHG inventory and mitigation actions. While GHG inventory and mitigation actions are on-going efforts in almost all sectors, MONRE/DONREs seems to fall short in terms of providing effective legal framework, supporting mechanisms and guiding for GHG inventory and mitigation actions.

Line ministries and departments have been planning and actually implementing GHG inventory and mitigation actions in their sector. All ministries / departments in charge of technical areas have developed or in the process of finalizing their Action Plan for Green Growth and Climate Change at both national and provincial levels.

Some ministries / departments are understaffed for climate change mitigation. There is no clearly defined point for coordination and leading role for GHG inventory and mitigation actions in some line ministries and departments; depending on the nature of the GHG
inventory and mitigation actions, it will go to different divisions in charge. The main challenges in planning for NAMAs in mitigation at sector level, as expressed by line ministries include the following:

- Lack of legal framework and guiding document for GHG inventory and mitigation actions;

- Lack of inter-ministerial / departmental coordination for information sharing on GHG inventory and mitigation actions;

- Lack of data, problems of data transparency and consistency;

- Lack of prioritization criteria for selecting mitigation actions.

All current mitigation-related activities in Vietnam are in the readiness stage. No NAMAs have been registered and put into implementation. Nevertheless, as expressed by the participants in the assessment, they are actually doing NAMAs in their sector although their activities are not officially named NAMAs. Therefore, support in GHG inventory and developing NAMA proposal, looking for financial sources and MRV of NAMAs are the main capacity needs for implementation of NAMAs and mitigation at sectoral level.

Current mitigation-related activities in Viet Nam are mainly project based and donors oriented. To ensure a harmonized approach that will effectively support Viet Nam in the way to pursue low carbon growth, there is a need for further capacity building to MONRE/DONREs and line ministries / departments to be more pro-active in GHG inventory, mitigation actions and low carbon initiatives.

**Training workshops**

During the workshop, the participants from various line ministries have come to some key consensus as described below.

This project, with a focus on GHG monitoring and inventory, has significantly improved the perception and capacity on GHG monitoring and inventory of both leaders and practitioners at national and provincial levels, implemented by DMHCC (the Viet Nam focal point of climate change), started with (1) development of a complete set of training material on GHG monitoring and inventory and (2) organization of training workshops for relevant leaders and practitioners at national and provincial levels. There are, however, areas that remain to be discussed and improved.

Currently Viet Nam has issued several policies related to GHG mitigation. These policies have the objectives, tasks, solutions to reduce the GHG emission; however, it was not until the promulgation of the Plan for GHG emission management and management scheme of carbon credit trading activities to the world market (under Decision No 1775/QĐ-TTg dated November 21st 2012 of the Prime Minister) that a specific target for NAMA and MRV tools is provided.

The specific targets of the Plan for GHG emission management and management scheme of carbon credit trading activities to the world market are as follows:

- Develop Viet Nam’s NAMA framework and registry, broad implementation of NAMAs;
• Develop and put into operation a national level MRV system.

However, so far these targets have not yet been realized. Meanwhile, in practice, some NAMAs are under research for development and access to international finance and monitoring and reporting schemes are being implemented. The MRV system for NAMAs should be based on the experience of the existing systems such as the MRV of CDM projects, the monitoring scheme of REDD+, energy audits, etc. The MRV system should follow the guidance framework of the Climate Convention.

Following are some assessment and support/guidance needs for NAMA development and implementation which have been identified.

To date, no legal documents have been issued by the Government on the development and implementation of NAMA, as well as a system of MRV. The lack of legal mechanism from the government makes it difficult for most of the ministries to research, make plans to develop and implement NAMA. Therefore, there should be:

• Support and guidance mechanisms, especially the official government documents on the development and implementation of NAMA/MRV;
• Transparent legal framework and guidance on the development and implementation of NAMA/MRV.

A long-term plan plays an important role in integrating climate change into the socio-economic planning process. When mentioned NAMA implementation, it is even more important and requires special attention for two reasons: (i) NAMA related issues need to be integrated into socio-economic development plans, and (ii) the national resources need to be allocated to other development plans in Viet Nam, often in the overall development plan. There is a need to take into account climate change issues and allocate necessary resources to implement appropriate mitigation activities, both in short terms and long terms.

The first thing to do for mitigation is to establish a unified GHG emission reduction target, which will be determined for individual Ministries.

According to the results of assessment programs, capacity building and improve awareness is necessary to create appropriate resources to implement NAMA and the Viet Nam NDC. Both NAMA and Viet Nam NDC are relatively new concepts to Viet Nam, therefore, the understanding and awareness of stakeholders, including policymakers, scientists and technical staffs on the development and implementation process of NAMA is not sufficient. It is very important to develop and perform awareness enhancing programs and improve the understanding of related stakeholders about the goal and objectives of NAMAs and NAMA implementation at national and ministerial level.

Strengthening of administration and management capacity in relevant organizations and government agencies is a top priority for implementing NAMA-related activities. Capacity development is one of the key factors for the success of Viet Nam in response to climate change and GHG mitigation. This can be provided in the forms of training, effective communication and creating enabling policy environment for the activities. The priority target groups should include Government official and managers, as well as staffs in research institutions and universities.

It is necessary to establish and operate NAMA-MRV focal point in government agencies, research institutions and other related agencies at national and local level.
**On information and data base**

There is a need to create a national data base and effective mechanism to collect, manage, check, synthesize and disseminate the information and data related to climate change, especially GHG reduction and NAMAs.

The establishment and use of a database consisting of information about GHG mitigation and NAMAs is an important factor for the successful implementation of NAMAs in Viet Nam. The feedback from different target groups has confirmed that there is a need to strengthen the capacities of related organizations, individuals to review, manage and disseminate information and data on climate change and NAMAs. Special attention should be paid to the information and data about methodologies, research results and good practices on: (i) assessing the impacts of climate change and adaptation on all sectors and vulnerable regions; and (ii) climate change mitigation experience. Especially, there is a need of a format to present data and information, as well as an information sharing mechanism.

**On MRV system**

One of the biggest challenges for the development and implementation of NAMAs in Viet Nam as well as in many other developing countries is the lack of an MRV system with detailed operation mechanism and instruction. To implement NAMAs activities, an appropriate MRV system needs to be developed and maintained. There is a need to provide technical and financial support related to MRV.

**4. Conclusions**

The training activities for national and local participants contribute to the implementation of GHG inventory in particular and to the implementation of United Nations Framework Convention on Climate Change (UNFCCC) in Viet Nam in general. The training activities enhanced the capacity as well as knowledge and awareness of practitioners and leaders at both national and local levels to integrate the National Green Growth Strategy and National Climate Change Strategy into the process of designing and implementation of national and provincial development plans. It also contributes to achieve the commitment of GHG emission reduction of Viet Nam government to UNFCCC which is stated in the Viet Nam’s INDC.

The project is highly relevant to the implementation of UNFCCC in Viet Nam. Viet Nam has submitted its Nationally Determined Contributions in which one of the measures to enhance GHG emission reduction is to improve the country’s GHG monitoring and inventory system. The project supports the implementation of Viet Nam’s National Communications and Biennial Updated Reports as part of the obligation for the UNFCCC.

The project contributed to the implementation of Project of greenhouse gas emission management; management of carbon credit business activities to the world market (Project 1775 approved by the Viet Nam Prime Minister) which has set the general objective to manage the greenhouse gas emission in order to implement the United Nations Framework Convention on Climate Change (UNFCCC) and other international agreements in which Viet Nam is a party, at the same time took advantage of the opportunity to develop low carbon economy, green growth and together with the international community in the efforts to
reduce greenhouse gas emission, contributed to the implementation of the goal of country’s sustainable development. One of specific objective of the Project 1775 is to strengthen the capacity of national greenhouse gas inventory for the ministries, sectors and localities involved in the national inventory system of greenhouse gases. This project outcome contributes to the achievement of both general and specific objectives of the Project 1775.

5. Future Directions

With the highly promising result of the project, there are a number of key capacity areas that need to be improved, including:

1. Guidelines for mitigation measures to be developed for sectoral levels;
2. MRV system to be developed for sectoral level with capacity building activities;
3. Capacity building for market-based instruments for GHG emission reduction in Viet Nam.

Appendix

Conferences/Symposia/Workshops

Materials for all workshops organised by the project are sent in separately, including:

1. Review of current status of GHG monitoring and inventory in Viet Nam;
2. Technical need assessment for GHG monitoring and inventory in Viet Nam;
3. Training program and design for GHG monitoring and inventory;
4. Training materials (text version) for GHG monitoring and inventory in Viet Nam;
5. PowerPoint format files for training programs, including:
   - Overview of GHG monitoring and inventory in Viet Nam;
   - GHG monitoring and inventory for Agriculture;
   - GHG monitoring and inventory for Energy;
   - GHG monitoring and inventory for Industrial Processes;
   - GHG monitoring and inventory for LULUCF sector;
   - GHG monitoring and inventory in Viet Nam for waste management sector.

For the purpose of distribution of training materials after the workshops, all of materials were developed in Vietnamese.

There are also other training materials from invited professors and scientists on NDC and NAMA/MRV. However they are copyrighted by the authors and are not included in this report.
“Enhancing perception and capacity for national and provincial leaders and practitioners on GHG emission inventory to support the implementation of NAMAs and development of low-carbon cities in Viet Nam”

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**AGENDA**

**Training on GHG inventor and monitoring**

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<thead>
<tr>
<th>Time</th>
<th>Tasks</th>
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<tbody>
<tr>
<td><strong>Day 1</strong></td>
<td><strong>Presentation 1</strong></td>
</tr>
<tr>
<td>08.00 - 08.30</td>
<td>Registration</td>
</tr>
<tr>
<td>08.30 - 09.00</td>
<td>Opening of the workshop</td>
</tr>
<tr>
<td>09.00 - 11.00</td>
<td><strong>Overview of GHG inventory and monitoring</strong></td>
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<tr>
<td>11.00 - 11.20</td>
<td>Break</td>
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<tr>
<td>11.20 - 12.00</td>
<td>Q&amp;A</td>
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<tr>
<td>12.00 - 13.30</td>
<td>Lunch break</td>
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<tr>
<td>13.30 - 15.00</td>
<td><strong>Presentation 1</strong></td>
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<tr>
<td></td>
<td><strong>GHG inventory in energy sector</strong></td>
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<tr>
<td>15.00 - 15.20</td>
<td>Break</td>
</tr>
<tr>
<td>15.20 - 16.30</td>
<td>Group practice</td>
</tr>
<tr>
<td>16.30 - 17.20</td>
<td>Report on practice and discussion</td>
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<tr>
<td>17.20 - 17.30</td>
<td>Summary of day 1</td>
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<tr>
<td>Time</td>
<td>Tasks</td>
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<tr>
<td><strong>Day 2</strong></td>
<td><strong>Summary of day 1</strong></td>
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| 08.30 - 08.40 | **Presentation 3**  
*GHG inventory in industrial processes* |
| 08.40 - 10.00 | **Break**                                                             |
| 10.00 - 10.20 | **Group practice**                                                    |
| 10.20 - 11.30 | **Report on practice and discussion**                                 |
| 11.30 - 12.00 | **Lunch**                                                             |
| 12.00 - 13.30 | **Presentation 4**  
*GHG inventory in waste management sector* |
<p>| 13.30 - 15.00 | <strong>Break</strong>                                                             |
| 15.00 - 15.20 | <strong>Group practice</strong>                                                    |
| 15.20 - 16.30 | <strong>Report on practice and discussion</strong>                                 |
| 16.30 - 17.00 | <strong>Summary of Day 2</strong>                                                 |</p>
<table>
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<tr>
<td><strong>Day 3</strong></td>
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<tr>
<td>08.30 - 08.40</td>
<td>Summary of Day 2</td>
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<tr>
<td>08.40 - 10.30</td>
<td><strong>Presentation 5</strong></td>
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<tr>
<td>11.00 - 12.00</td>
<td><strong>Presentation 5 (continue)</strong></td>
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<tr>
<td>12.00 - 13.30</td>
<td>Lunch</td>
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<td>13.30 - 15.30</td>
<td>Group practice</td>
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<tr>
<td>15.30 - 15.50</td>
<td>Break</td>
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<tr>
<td>15.50 - 16.50</td>
<td>Report on practice and discussion</td>
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<tr>
<td>16.50 - 17.00</td>
<td>Summary of Day 3</td>
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<td>Time</td>
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<td><strong>Day 4</strong></td>
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<tr>
<td>08.30 - 08.40</td>
<td>Summary of Day 3</td>
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<tr>
<td>08.40 - 10.30</td>
<td><strong>Presentation 6</strong>&lt;br&gt;<strong>GHG inventory in agriculture sector</strong></td>
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<td>10.30 - 11.00</td>
<td>Break</td>
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<td>11.00 - 12.00</td>
<td>Group practice</td>
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<td>12.00 - 13.30</td>
<td>Lunch</td>
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<td>13.30 - 14.30</td>
<td>Report on practice and discussion</td>
</tr>
<tr>
<td>14.30 - 14.45</td>
<td>Break</td>
</tr>
<tr>
<td>14.45 - 16.45</td>
<td>Plenary discussion</td>
</tr>
<tr>
<td>16.45 - 17.00</td>
<td>Wrapping up of the workshop</td>
</tr>
</tbody>
</table>