



CGE hands-on training workshop on institutionalization of data management for national GHG inventory

DAY 1	
Time	Sessions
08:00-09:00	Registration
09:00-09:25	Opening session of the workshop <ul style="list-style-type: none"> - Welcome remarks - Workshop opening remarks - Key note address
09:25-09:45	Introductory session <ul style="list-style-type: none"> A. Introduction – workshop participants B. Overview of workshop – Objectives, agenda and expectations
09:45-10:15	Coffee break
10:15-11:00	Technical Session I: Scene-setting – Recap of the pre-workshop webinar <i>This session will cover a recap of the materials covered during the pre-workshop webinar, and provide space for the participants to ask questions that they may have as a result of further reflection on the topic covered.</i> <ul style="list-style-type: none"> A. Recap of the existing MRV arrangements under the Convention and the enhanced transparency framework under Paris Agreement B. Recap of national GHG inventories: key data types to include in the inventory and their sources
11:00-13:00	Technical Session II: Institutional arrangements and data management – techniques, approaches and tools <i>This session provides overview of key components of national institutional arrangements for preparing and submitting national reports. It also includes examples of institutional arrangements put in place by some developing countries, which managed to support the increased frequency of the preparation of national reports. The session uses the following logic: good practices and key requirements for IAs → approaches and tools to implement good practices → how others are doing it.</i> <ul style="list-style-type: none"> A. Presentation (10 min): Institutional arrangements: good practices and lessons learned B. Presentation (10 min): Institutional arrangements: compilation and documentation C. Presentation (20 min): Overview of IA techniques, approaches and tools D. Small Group Discussion (30 min): Review and answer discussion questions related to the Ghana case-study example of a developing country's IAs E. Large Group Discussion (30 min): Report out key discussion points from small group discussions
Time	Sessions
13:00-14:00	Lunch break
14:00-15:30	Technical Session III: Group baseline mapping exercise <i>Summarize and update how data is managed under the current institutional arrangements (based on homework submissions), including software tools, processing procedures, stakeholder engagement, challenges, experiences, and lessons learned.</i> <ul style="list-style-type: none"> A. Small Group Discussion (60 min):



	<p>a. Break into sector groups and briefly present your homework data maps.</p> <p>b. Discuss your map similarities, differences? After seeing other data maps, how would you revise your map?</p> <p>c. Discuss the major input-output data flows for the whole sector and identify data/process gaps for the next sessions:</p> <ul style="list-style-type: none">• Where are the data associated with different emission sources coming from?• Who does the data processing?• Which tools/software are used to process the data?• What happens to the processed data? <p>B. Large Group Discussion (30 min):</p> <ul style="list-style-type: none">• What challenges were identified?
15:30-16:00	Coffee break
16:00-17:30	<p>Technical Session IV: Group functional design exercise –</p> <p><i>Brainstorm the system scope, functions and capabilities that would be desired for a national MRV data management system.</i></p> <p>A. Presentation (30 min): Data management system and their overview; what is meant by functional, non-functional elements; decision tools in prioritization of design elements (i.e. how-to ID needs, scoping levels, reporting outputs)</p> <p>B. Small Group Discussion (60 min): What functional and non-functional elements or capabilities would you design for a national MRV data management system, identifying minimum requirements. Then categorize them as “must-have”, “do without”, etc. (i.e. the “MoSCoW rules”)</p>
End of day 1	



DAY 2	
Time	Sessions
09:00–10:30	<p>Session V: Quality control/quality assurance of data in-line with the TACCC quality standards and IPCC good practices on QA/QC and verification <i>This session will address the QA/QC requirements associated with IPCC good practices and the inventory quality standards (TACCC = transparency, accuracy, completeness, comparability, consistency) and explain commonly used and recommended techniques, approaches and tools to implement these practices. This will be followed by the hands-on exercise aiming to identify and categorize the QA/QC issues in the given case study and discuss how they best could be mitigated using the suggested techniques, approaches and tools.</i></p> <p>A. Presentation (30 min): Techniques, approaches and tools to address QA/QC B. Hands-on exercise in small groups (60 min): Do a QC of an example case-study report and flag issues, based on the principles and procedures described in part A and linking each issue with the TACCC principle assigned to your small group. Work through other TACC principles as time allows.</p>
10:30-11:00	Coffee break
11:00-13:00	<p>Session VI: Data documentation and archiving <i>This session will explain the IPCC good practices in archiving and documentation associated with GHG data collection and processing and include a practical exercise to identify issues associated with archiving and documentation in a given case study.</i></p> <p>A. Presentation (30 min): Data collection and documentation to ensure transparency principle, introduction to example data collection exercise B. Hands-on Exercise (60 min):</p> <ol style="list-style-type: none"> a. Small Groups: Document a particular data type to resolve a selected data documentation issue: <ul style="list-style-type: none"> • Identify 1-2 issues associated with data collection and processing in the case study and discuss how these could be resolved (10 min) • Identify the data attributes so that data documentation is transparent (10 min) • Design a simple template reflecting identified data attributes and record relevant data values in the template (20 min) • Draft a simple questionnaire/form that would allow a person to populate the designed template correctly based on the list of the data attributes (20 min)
13:00-14:00	Lunch break



Time	Agenda items
14:00-15:30	<p>Session VII: Data gaps <i>This session will explain practical ways to resolve issues associated with missing data for some/most years of the time series in-line with the inventory guidelines and international good practices followed by the hands-on exercise to apply different data splicing techniques to fill-in data gaps using in a given case study.</i></p> <p>A. Presentation (30 min): Techniques, approaches and tools to address data gap in terms of coverage and time-series</p> <p>B. Hands-on exercise in small groups (60 min): Work with provided case study to remedy gaps in the time-series:</p> <ul style="list-style-type: none">• Following the guidance provided in part A and the supplementary materials, identify most appropriate way(s) to remedy the lack of data. Justify your choice of method.• Apply the selected splicing technique (use the supplementary materials for external data sets as required) and resolve the issues with time-series consistency
15:30-16:00	<p style="text-align: center;">Coffee break</p>
16:00-17:30	<p>Continued Session VII: Data gaps <i>This session will allow small groups to complete the data gap exercise and present their results for a group discussion.</i></p> <p>Prepare a small group presentation for the whole group discussion following this format:</p> <ul style="list-style-type: none">• Describe the issue• Explain selection of the method to remedy data gaps• Comment on any concerns with the chosen method <p>A. Small groups present their results for the whole group discussion. When listening others, focus on the following:</p> <ul style="list-style-type: none">• Are the issues described transparently enough? If not, what is missing?• Do you agree with proposed remedy method? If not, explain why and suggest a different method.
End of day 2	



DAY 3	
Time	Sessions
09:00-10:30	<p>Session VIII - Clinic: Brainstorming session in smaller groups <i>This is an interactive session whereby problems and challenges shared during the course of the workshop will be discussed by the participants and critical or most common problems and challenges will be taken-up within groups in order to share experiences, lessons learned and identify possible solutions or alternatives to the problems or challenges to further share with the rest of the participants at plenary.</i></p> <p>Format of Clinic: Participants will form smaller groups and assign a theme to each group and work through their own country cases following one of the following themes:</p> <ol style="list-style-type: none"> a. Institutional arrangements b. Data collection c. QA/QC <ol style="list-style-type: none"> 1. In each group, the participant will take a case study of one or two countries, which are represented by the group members. 2. Using the chosen case study and the given theme, each group will: <ul style="list-style-type: none"> • Identify a case owner to present the details of its current data management arrangements and the gap with its design needs; • Other group members provide their reflection on how the gap may be addressed; • Discuss how regional cooperative expert communities could help resolving these issues. • Response from the case owner, including potential next steps that could help address the issue.
10:30-11:00	Coffee break
11:00-12:30	<p>Session VIII continued: Revisit group functional design exercise – Using combined work from Day 1 as a starting place. Working as individuals review the group results and tailor for your own country’s circumstances. This may involve adjusting ranking or categories. The goal is to walk away from this week’s workshop with your own starting place for a data management system for your country.</p> <ul style="list-style-type: none"> • Use Excel file circulated from Day 1 on functional and non-functional attributes
12:30-13:30	Lunch break
13:30-15:00	<p>Session IX: Opportunities for synergy <i>This session will identify and highlight areas where possible synergies exists, at the national level, between MRV/transparency, including national GHG inventories and tracking progress of NDCs, and indicators to monitoring the UN sustainable development goals.</i></p> <ol style="list-style-type: none"> A. Presentation (30 min): Opportunities for synergy between implementing MRV/ETF and monitoring progress towards SDGs B. Hands-on exercise in small groups (60 min): Identifying potential synergy in the SDG monitoring process and reporting process under MRV/ETF at the national level
15:00-15:30	Coffee break
15:30-16:45	<p>Closing session:</p> <ul style="list-style-type: none"> • Information on other training and capacity-building opportunities • Workshop evaluation and feedback, including identifying topics, if necessary, for the post-workshop webinar <p style="text-align: center;">Closing remarks</p>
End of day 3	