Regional practical training Report:

Improving quality assurance process for GHG inventories through peer review in Central Asian countries

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Regional practical training Report:
Improving quality assurance process for GHG inventories through peer review in Central Asian countries

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Introduction

This report summarizes the regional practical training held within the framework of the Regional Hub for Climate Action Transparency in Central Asia Phase II (ReCATH II). The event took place from 8 December until 10 December 2025, in Almaty, Kazakhstan.

The objective of the workshop was to strengthen regional technical capacity in implementing peer review procedures to improve the quality of national greenhouse gas (GHG) inventories in line with the Enhanced Transparency Framework (ETF) under the Paris Agreement. Through a series of targeted technical sessions—ranging from cross-cutting inventory elements to sector-specific reviews in energy, industrial processes, and the waste sector—the event provided participants with practical tools and peer learning opportunities to enhance QA/QC systems at the national level.

Background

The Regional Climate Action Transparency Hub for Central Asia (ReCATH) supports five Central Asian countries—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—in building robust climate transparency systems and transitioning to reporting under the Enhanced Transparency Framework (ETF) of the Paris Agreement. Established with a team of national and regional experts, the Hub has become a center of expertise and coordination for technical support, capacity building, and peer learning. Since 2022, ReCATH has organized over 27 capacity-building events and supported the development of national GHG inventories, adaptation reporting, NDC tracking, and climate finance.

The second phase of ReCATH, launched in April 2025, aims to deepen the region's technical capacity in inventory, support the preparation of updated NDCs (NDC 3.0), improve climate reporting, and promote regional cooperation. Key activities include peer reviews of GHG inventories, sector specific capacity building for improving GHG inventories and assessment of mitigation measures, development of regional monitoring frameworks on adaptation, support for green taxonomy and climate finance, and enhanced collaboration with other international transparency initiatives. Through its activities, ReCATH continues to strengthen institutional frameworks and long-term transparency practices in Central Asia.

Objectives

The main objective of the regional practical training was to strengthen national capacity in conducting structured and effective peer reviews of GHG inventories as part of QA/QC process. The training aimed to provide members of national inventory teams and the ReCATH Technical Working Group with practical skills and methodological understanding necessary to implement peer review procedures in line with IPCC guidance and ETF requirements.

Specific objectives included supporting participants in identifying key elements of peer review procedures, clarifying roles and responsibilities, and improving documentation practices; facilitating practical exercises to review selected inventory components; promoting regional exchange of experience and peer learning; and contributing to the development of sustainable peer review mechanisms that can be systematically integrated into national QA/QC plans and support preparation of future Biennial

Transparency Reports.

Participants

The training was attended by representatives from environmental ministries and hydrometeorological services of Central Asian countries, including Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan. Participants included National experts on greenhouse gas inventory, members of the ReCATH Technical Working Group, representatives from ICAT, and GHGMI.

The full list of participants is provided in Annex 1.

Meeting summary

Day 1

The first day of the regional practical workshop opened with technical instructions regarding the meeting format, followed by the introduction of participants and an overview of the objectives of the workshop. In her welcoming remarks, Valeriya Orlova, ReCATH Project Specialist, emphasized the importance of strengthening regional cooperation on transparency and quality assurance of greenhouse gas inventories. She noted that the training represents a continuation of previous capacity-building activities implemented under the ReCATH project with the support of the Initiative for Climate Action Transparency (ICAT) and technical partners from the Greenhouse Gas Management Institute (GHGMI). It was highlighted that the current workshop builds on experience gained during earlier regional capacity building on inventory peer review (held in July 2025 in Tashkent, Uzbekistan) and aims to further institutionalize peer review practices within national QA/QC systems.

Alexander Cherednichenko, Manager of the Greenhouse Gas Inventory Department at JSC Zhasyl Damu, welcomed participants to Almaty and underlined the relevance of the training for improving the quality, consistency and sustainability of national greenhouse gas inventory processes. He shared reflections on recent experience in inventory preparation, noting tangible improvements in recent reporting cycles, including a reduction in errors and a clearer understanding of potential challenges during inventory compilation. It was emphasized that earlier peer learning and technical support had helped national teams anticipate challenges in advance and strengthen internal quality control processes.

During the introductory discussion, participants from different institutions and sectors presented their professional backgrounds and outlined their expectations for the training. These included gaining practical skills related to peer review, improving understanding of QA/QC requirements under the Enhanced Transparency Framework, and acquiring tools to formalize review processes within national systems. Several participants stressed the importance of structured QA/QC plans that clearly define roles, responsibilities and timelines, noting that such arrangements help reduce inefficiencies and strengthen accountability in inventory preparation.

The technical sessions throughout the workshop were delivered by Dr. Olia Glade. She introduced peer review as a core component of quality assurance for greenhouse gas inventories, explaining its role in ensuring the transparency, accuracy, completeness, consistency, and comparability of inventory data. She emphasized the alignment with the 2006 IPCC Guidelines and the ETF (Modalities, Procedures, and Guidelines) under the Paris Agreement. It was clarified that peer review is intended as a systematic and planned process, conducted by experts independent from the direct preparation of the inventory being reviewed, and that it complements internal quality control procedures.

The afternoon sessions were dedicated to the integration of peer review process into the GHG inventory QA/QC plan. This included country presentations on existing QA/QC plan elements and national practices, followed by a facilitated hands-on exercise focused on developing draft language for integrating peer review into QA/QC plans

Country presentations

Country presentations were delivered focusing on national approaches to quality assurance and quality control of greenhouse gas inventories, as well as proposals for strengthening peer review mechanisms. In line with the tasks shared in advance, the presentations outlined national institutional arrangements for GHG inventory preparation, including responsible organizations and allocation of responsibilities; sectoral contributions to GHG emissions and removals with identification of priority key categories for QA/QC; the organization of existing QA/QC processes and assigned responsibilities; key challenges of current QA/QC systems, particularly in relation to quality assurance; and priority areas for future improvements of QA/QC systems.

Kazakhstan presented its national GHG inventory system implemented on a permanent institutional basis, with JSC Zhasyl Damu designated as the national working body responsible for inventory preparation, including data collection, processing, calculations, storage, and coordination of QA/QC procedures. Sectoral emission trends for 1990–2023 were presented, showing that the main contributors to national emissions are the energy sector, agriculture, and LULUCF, while waste currently plays a smaller role but is expected to increase due to urbanization. Key categories prioritized for QA/QC included fuel combustion in the energy sector, selected land-use categories, and fugitive emissions. The existing QA/QC process was described as a structured system with defined roles, timelines, cross-checks of activity data, and additional review by participating government institutions prior to publication. Key challenges highlighted included insufficient data accuracy for certain categories, methodological limitations of emission factors (particularly for coal mining), limited digitalization of data flows, time constraints, and limited technical capacity within some government institutions. Proposed improvements focused on updating and disaggregating emission factors, improving data transparency, expanding automated data exchange with data providers, strengthening digital data management, and developing a unified training programme for government officials involved in the inventory process.

The Kyrgyz Republic presented its national GHG inventory implemented on a project basis, with overall coordination by the Ministry of Natural Resources, Ecology, and Technical Supervision, and sectoral institutions responsible for data provision and participation in QA/QC discussions. Sectoral emission profiles for 2023 were presented, showing that energy accounted for about 55% of total emissions, followed by agriculture (around 30%), industrial processes (about 10%), and waste (around 5%), while the LULUCF sector acted as a significant net sink. Key categories for QA/QC were identified using the CRT key category analysis, including fuel combustion, enteric fermentation, transport, and cement production. The QA/QC process was described as being applied across all stages of the inventory cycle, from planning and data collection to sectoral and cross-sectoral review and ETF submission. Key challenges included the absence of formalized QA/QC regulations and protocols, limited awareness of QA/QC procedures, and insufficient systems for systematic data archiving, with proposed improvements focusing on formal integration of QA/QC into national frameworks, capacity building, and improved data management.

Tajikistan presented its national GHG inventory system coordinated by the Agency for Hydrometeorology through the National GHG Inventory Coordinator, with sectoral institutions responsible for energy, industrial processes, agriculture, LULUCF, and waste providing activity data and participating in QA/QC procedures. National GHG emissions in 2022 amounted to about 20.2 Mt CO_2 eq excluding LULUCF, representing a decrease of approximately 17.7% compared to 1990 levels. Key categories identified for QA/QC included methane emissions from enteric fermentation, CO_2 emissions from cement production, and transport, both in terms of emission levels and trends, with and without LULUCF. The QA/QC system was described as being implemented across the full inventory time series, with defined roles and responsibilities, documentation of QA/QC measures, and involvement of an independent expert supporting the implementation of the QA/QC plan. Key challenges highlighted included limited technical and human capacity, insufficient centralized coordination of QA/QC across sectors, and insufficiently structured data management systems. Planned improvements focus on systematizing quality assessment in each inventory cycle from 2025 onwards, developing a formal quality assessment protocol, strengthening national data systems, and enhancing capacity building in inventory methodologies, data management, and use of software tools.

Turkmenistan presented its national GHG inventory system developed in line with its international commitments under the UNFCCC and the Paris Agreement and as part of the national climate change strategy. The Ministry of Environmental Protection coordinates the inventory process through sectoral working groups covering energy, transport, industrial processes, agriculture, waste, and LULUCF, with participation of ministries, the national statistical authority, and energy and oil and gas companies. Primary activity data are collected annually by sector, including fuel production and consumption, gas infrastructure and fugitive emissions, industrial production, livestock and agricultural practices, waste management, and land-use changes, using standardized IPCC-based templates. QA/QC measures include cross-checks of data between institutions, comparison with previous years, identification of abnormal emission trends, resolution of discrepancies in coordination with data providers, and independent review by international experts. Key categories were identified in the energy sector, particularly emissions related to fuel extraction and energy production. Priority improvement areas highlighted included further strengthening data verification procedures, expanding mitigation measures in the energy, transport and agriculture sectors, enhancing the role of LULUCF in achieving mitigation targets, and continuing development of institutional and technical capacity, in the context of preparation of the next national communication.

Following the country presentations, a short technical discussion was facilitated by Dr. Olia Glade to illustrate how peer review can help address complex methodological issues that are not always explicitly covered in IPCC guidance. A concrete example discussed concerned land-use classification challenges in the LULUCF sector, particularly situations where land cannot be clearly categorized as forest or non-forest under national definitions. Participants examined cases such as pastureland planted with saxaul, agroforestry systems, shelterbelts within agricultural land, and large urban green areas, which are often excluded from forest land in national legislation but are functionally similar in terms of biomass accumulation and carbon dynamics.

During the discussion, it was noted that such “borderline” land-use categories frequently lead to inconsistent treatment across inventory cycles and between countries, resulting in repeated review comments. Participants highlighted that the IPCC Guidelines provide a limited but applicable land-use classification framework that can be used in these cases, including the use of forest land subcategories or the treatment of such areas as land converted to forest land where appropriate. It was emphasized that biomass growth rates and carbon stock changes should be determined based on ecological characteristics (e.g. species type, soil conditions, and growth patterns), rather than on formal land-use labels alone.

As a practical solution, participants agreed that applying a consistent methodological approach over time—such as classifying saxaul-planted pastures as forest land for inventory purposes and using forest-based growth parameters—can help preserve time-series consistency and improve transparency. The discussion also underlined the importance of clearly documenting these methodological choices, assumptions, and justifications in the inventory report to support both national QA/QC processes and external reviews. Overall, the exchange demonstrated how expert peer discussion can support the resolution of interpretation challenges, alignment of assumptions across sectors, and prevention of recurring methodological issues in future inventory submissions.

At the end of the first day, the facilitators introduced the practical tasks to be carried out during the second day of the workshop. Participants were divided into sectoral working groups to prepare for the hands-on peer review exercises and the development of draft language for integrating peer review into national QA/QC plans. The grouping was organized by sector and level of experience, ensuring that each group included participants with relevant technical background as well as those with less prior exposure, in order to promote peer learning. Sectoral groups were formed for energy (including transport and fugitive emissions), industrial processes and product use, agriculture, waste, and cross-cutting issues, with experienced inventory compilers supporting groups working on more complex sectors.

It was clarified that the remaining agenda items originally planned for the first day—namely the hands-on exercise on drafting QA/QC plan language for peer review and the discussion on the development of a regional peer review process—were rescheduled to the second day to allow sufficient time for practical group work. The first day thus concluded with clear guidance on the objectives, structure, and expected outputs of the forthcoming exercises, providing a solid technical foundation for the intensive hands-on work to follow.

Day 2

The second day of the regional practical training focused on intensive practical work related to the design and structuring of peer review procedures within national and regional quality assurance and quality control systems for greenhouse gas inventories. The sessions were facilitated by Dr. Olia Glade, who guided participants through practical tasks and discussions on how peer review procedures should be formulated in a clear, structured and transparent manner and reflected in national QA/QC plans.

The following items of the agenda have been addressed:

- Hands-on exercise: Develop draft language for QAQC plan to include peer review
- Discussion: Development of regional peer review process
- Peer-review session of the selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar)

Develop draft language for the QA/QC plan to include peer review

The hands-on exercise focused on the development of draft language for the inclusion of peer review procedures in national QA/QC plans. Participants

During the exercise, both groups developed proposals covering the following core elements to be reflected in QA/QC plans:

- object of peer review (sectors, categories, methodologies, documentation);
- roles and responsibilities of national coordinators, sectoral experts, and external reviewers;
- timing and frequency of peer review within the inventory cycle;
- forms of peer review (desk review, expert discussion, workshops);
- documentation and follow-up of review findings.

Both groups proposed that peer review should be embedded as a formal and recurring element of national QA/QC systems rather than conducted on an ad hoc basis. Draft QA/QC language developed by the groups emphasized that:

- peer review should be applied at key stages of inventory preparation, particularly after initial sectoral calculations and before finalization of the inventory;
- review findings should be documented in a standardized format and stored as part of the national inventory archive;
- responsibilities for organizing peer review and tracking follow-up actions should be clearly assigned within the QA/QC plan;
- peer review results should explicitly inform recalculations, methodological improvements, and documentation updates in subsequent inventory cycles.

The draft texts prepared by the groups demonstrate how peer review language can be integrated into existing QA/QC plans in a way that is compatible with IPCC guidance and the requirements of the Enhanced Transparency Framework.

Development of the regional peer review process

Participants discussed the scope, objectives, and organization of a potential regional peer review mechanism, with particular attention to sustainability and practical feasibility.

Proposals of Working Group 1

Working Group 1 proposed a structured regional peer review cycle aligned with national inventory preparation timelines. The group suggested that regional peer reviews should focus on selected priority sectors or key categories, rather than full inventories, to ensure effective use of regional expertise.

Key proposals included:

- conducting regional peer reviews on a rotational or thematic basis, focusing on common methodological challenges across countries;
- applying standardized review templates and workbooks to ensure consistency and transparency of review outcomes;
- clearly defining the scope of review, including methodologies, activity data sources, emission factors, and documentation;
- systematically documenting review findings and sharing results with reviewed countries to support integration into national QA/QC plans.

Proposals of Working Group 2

Working Group 2 emphasized the institutionalization and sustainability of a regional peer review mechanism. The group highlighted the importance of formal arrangements to ensure continuity beyond individual workshops.

Key proposals included:

- formalizing regional peer review through an agreed framework for cooperation among participating countries;
- clearly distinguishing regional peer review from UNFCCC inventory reviews, while maintaining alignment with core quality principles;
- defining clear criteria for selecting reviewers and reviewed inventories, including expertise and avoidance of conflicts of interest;
- linking regional peer review outcomes directly to national QA/QC plans and follow-up actions;
- using regional peer review as a capacity-building tool, enabling learning through participation for less experienced inventory teams.

Further discussions compared expert peer review approaches with formal UNFCCC inventory review processes, highlighting differences in scope, flexibility, level of formalization, and publication of results. It was emphasized that, unlike UNFCCC reviews, expert peer reviews can be more targeted and adapted to national priorities while applying core principles of transparency, accuracy, completeness, consistency, and comparability.

The day concluded with the presentation and discussion of group proposals, clarification of roles during the practical exercises, and reflection on how the proposed regional peer review activities could be further developed and implemented through a dedicated follow-up project. Overall, the discussions reflected a strong focus on practical implementation, shared learning, and the development of sustainable peer review mechanisms within and across Central Asian countries.

Day 3

The third day of the regional practical workshop was dedicated to an in-depth hands-on peer review exercise of the National Inventory Report on the GHG Emissions and Removals of the Kyrgyz Republic, published on the UNFCCC website. The technical sessions were facilitated by Dr. Olia Glade and focused on applying peer review tools and procedures to real inventory content in line with the 2006 IPCC Guidelines for National GHG Inventories, and the Enhanced Transparency Framework.

The peer review exercise focused on selected sectors and categories of the Kyrgyz Republic's NID, including:

- Energy
- Industrial Processes and Product Use (IPPU)
- Agriculture
- Waste

The review was conducted using the officially published National Inventory Report on the GHG Emissions and Removals of The Kyrgyz Republic available on the UNFCCC website.

Participants were divided into sector-specific working groups, each assigned to review one inventory sector using the peer review workbooks introduced during the previous ReCATH workshop. The review process followed a structured approach and included:

- examination of methodological descriptions, activity data, emission factors, tables, and time-series consistency;
- assessment of completeness, transparency, and clarity of documentation;
- identification of inconsistencies, missing explanations, and areas requiring clarification;
- documentation of review comments and observations directly in the review workbooks.

The peer review was conducted with the active participation of Mr. Alexander Temirbekov, representative of the Kyrgyz Republic GHG inventory team, who attended the exercise and provided detailed technical explanations to reviewers on behalf of the national compiler. His inputs supported clarification of methodological choices, data sources, assumptions, and national circumstances, and enabled a constructive dialogue between reviewers and the inventory team.

During the peer review discussions, participants identified several recurring issues across sectors, including:

- cases where numerical results were presented without sufficient narrative explanation;
- insufficient referencing between text, tables, and figures;
- limited documentation of trends and methodological changes over time;
- the need for clearer explanations of data limitations and assumptions.

Participants emphasized that even when data are included in tables or graphical form, accompanying textual explanations are essential to ensure transparency and facilitate both national and international reviews. The discussions also highlighted the importance of version control and institutional memory, noting examples where information had been removed or altered during editing without adequate documentation.

As a result of the exercise, completed peer review workbooks were produced for each reviewed sector:

- Energy
- IPPU
- Agriculture
- Waste

The filled-in review workbooks document sector-specific findings, comments, and suggested follow-up actions. The results of the peer review were shared with all workshop participants and specifically communicated to the Kyrgyz Republic inventory compiler to support follow-up actions and continuous improvement of the national inventory.

In the concluding plenary discussion, participants reflected on key lessons learned from the exercise, highlighting the importance of version control, institutional memory, and consistent use of standardized templates across sectors. The discussion also emphasized how peer review results can be effectively integrated into national QA/QC plans to support continuous improvement and preparation for Biennial Transparency Reports.

The day concluded with a discussion on next steps and overall reflections from the workshop. Closing remarks were delivered by Oleg Bulanyi, Senior Program Manager at the Initiative for Climate Action Transparency (ICAT), who highlighted the practical value of peer review exercises for strengthening national inventory systems and advancing sustainable regional cooperation.

Conclusion

The regional practical training held in Almaty on 8–10 December 2025 provided Central Asian countries with an opportunity to deepen practical understanding of peer review as a key component of quality assurance for greenhouse gas inventories. Through hands-on exercises, structured discussions and peer exchange, participants strengthened their capacity to design, implement and document peer review procedures in line with IPCC guidance and ETF requirements.

The training reinforced the importance of formalizing peer review within national QA/QC systems and highlighted the value of regional cooperation in addressing common challenges, optimizing expert resources and promoting consistent approaches across countries. The outcomes of the training are expected to contribute directly to improving the quality of future inventory submissions and to supporting preparation of upcoming Biennial Transparency Reports, while advancing sustainable peer learning mechanisms within the ReCATH framework.

Annex II. Concept and agenda of the event

CENTRAL ASIA REGIONAL CENTRE FOR CLIMATE ACTION TRANSPARENCY (RECATH)

Regional practical training: Improving quality assurance process for GHG inventories through peer review in Central Asian countries

December 8 – 10, 2025 | Almaty, Kazakhstan (TBC)

Background

The Regional Climate Action Transparency Hub (ReCATH) in Central Asia is a project supported by the Initiative for Climate Action Transparency (ICAT). The project aims to enhance countries' capacities in building and managing robust, transparent frameworks that allow them to effectively meet their obligations under the Paris Agreement and facilitate the transition of countries to the new reporting under the Enhanced Transparency Framework (ETF). The ReCATH is hosted by the Central Asia Regional Environmental Centre (CAREC) with a technical implementing partner, the Greenhouse Gas Management Institute (GHGMI).

Addressing climate change involves implementing mitigation and adaptation activities. Thus, countries need to integrate climate change considerations into all national planning instruments; strengthen institutional and technical capacity; implement activities in relevant sectors, address data gaps and improve estimation methodologies; and collect accurate and relevant information to establish and regularly update greenhouse gas emission inventories.

The ReCATH is a collaboration between the five Central Asian states (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) and supports technical experts and expert institutions in the region to establish sustainable and integrated Measurement, Reporting, Verification (MRV)/transparency systems.

Continuing the work started in Phase I of this project, the project aims to further strengthen the MRV system in the region by focusing on the following modules of support: (1) improving the quality of GHG inventories and enhancing mutual learning through strengthening peer review quality assurance mechanisms (2) enhancing technical capacity in the LULUCF sector, (3) conducting policy GHG impact assessments, (4) strengthening regional monitoring and evaluation frameworks for reporting on climate adaptation, and (5) enhancing knowledge among decision-makers on green taxonomy to facilitate access to climate finance.

Aims and objectives of practical regional training

This training workshop is the second activity of the module 1, improving the quality of GHG inventories and enhancing mutual learning through strengthening peer review quality assurance mechanisms

It is designed to build national capacity on the GHG inventory peer review process. The primary objective is to equip members of the ReCATH Technical Working Group (TWG) and other members of the national inventory compilation teams with the knowledge and skills required to conduct structured and effective peer reviews of GHG inventory and enable other members of the respective national inventory teams to master the review process. The training will also support the establishment of a formalized peer review mechanism that can be systematically integrated into the country's Quality Assurance/Quality Control (QA/QC) framework.

The first training provided specific guidance on how to apply QA procedures during the review process in line with the IPCC 2006 Guidelines and Modalities, Procedures and Guidelines (MPGs) under the Enhanced Transparency Framework (ETF) of the Paris Agreement and document findings, utilizing review checklists and templates. The second workshop will focus on providing additional practical exercises and technical support in the area of peer review. Participants will conduct more hands-on review activities reviewing components of national inventory documents, discuss common feedback and how to address it, and work to integrate peer review into national QAQC plans. The teams will discuss how to establish an ongoing peer review process in the region. Improved QA processes and findings documented during the review of inventory chapters will contribute directly to the preparation of the next Biennial Transparency Reports (BTR2).

The workshop will also reinforce the train the trainer (ToT) ideas by engaging members of the inventory team across levels of experience enabling more senior members to guide and support those with less experience.

Structure and format of the event

Participants are expected to attend a preparatory webinar prior to the in-person training workshop, which will be held to introduce participants to the objectives, scope, and structure of the training. This session will ensure that all participants are adequately prepared to actively participate during the workshop.

The practical regional training is intended for **experts** from Central Asian countries who are involved **in the preparation of GHG inventories across all levels of experience**.

The event is held **in-person** to facilitate discussion, exchange of ideals, and implementation of hands-on learning activities and exercises that are conducted during the training. Each participant must have his/her own personal computer and internet access will be provided by the organizers of the event. The language is **Russian**.

A training approach and next steps

Prior to the training, all nominated expert participants are expected to prepare for the training by selecting sections of their inventory reports that will be subject to review as part of the hands-on exercises during the workshop. Furthermore, participants will need to review their national inventory QAQC plan.

After the in-person training, participants will complete their review and make revisions to the QAQC plan. They will receive consultations from the trainers virtually as necessary. The participants will submit their prepared review documents to the trainers for additional review and validation.

Further information on the dates of the remote webinars-consultations will be provided at a later date.

ZOOM link: [to be added]

Agenda

Regional practical training:
Improving quality assurance process for GHG inventories through peer review

December 8 - 10, 2025 | 10 am – 17:30 pm | Almaty, Kazakhstan

	December 8, 2025, Monday
Opening session	*Moderator: Valeriya Orlova, ReCATH Project Specialist*
10:00 – 10:15	Technical instructions on the format of the meeting Introduction of participants Introduction to the agenda of the seminar
10:15 – 10:30	**Welcome remarks:** • Valeriya Orlova, Education for Sustainable Development programme manager, CAREC (5min) • Alexander Cherednichenko, Manager of the Greenhouse Gas Inventory Department, JSC Zhasyl Damu (10 min)
Technical session	*Trainers: Dr Olia Glade*
10:30 – 11:30	**Overview:** Expert peer-review as a part of the quality assurance (QA) mechanism
11:30 – 11:45	Coffee break
11:45 – 13:00	**Case study presentation:** Common feedback during review and strategies to address **Discussion and Q&A**
13:00 – 14:00	Lunch
14:00 – 14:30	**QAQC plan integration:** Presentation from countries of QAQC plan elements
14:30 – 15:30	**Hands-on exercise:** Develop draft language for QAQC plan to include peer review
15:30 – 15:45	Coffee break
15:45 – 17:15	**Discussion:** Development of regional peer review process (CAREC)
17:15 – 17:30	**Closing discussion:** What did we learn today?
	December 9, 2025, Tuesday
Technical session	*Trainers: Dr Olia Glade*
10:00 – 10:15	**Recap of Day 1**
10:15 –	**Hands-on instructor-led exercise:** Mock peer-review session of the

11:15	selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar)
11:15 – 11:30	Coffee break
11:30 – 13:00	**Hands-on exercise (continued):** Mock peer-review of selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar) with instructor support
13:00 – 14:00	Lunch
14:00 – 15:30	
15:30 – 15:45	Coffee break
15:45 – 17:15	**Hands-on exercise (continued):** Mock peer-review of selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar) with instructor support
17:15 – 17:30	**Closing discussion:** What did we learn today?
	December 10, 2025, Wednesday
Technical session	*Trainer: Dr Olia Glade*
10:00 – 10:15	**Recap of Day 2**
10:15 – 11:15	**Hands-on exercise (continued):** Mock peer-review of selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar) with instructor support
11:15 – 11:30	Coffee break
11:30 – 13:00	**Hands-on exercise (continued):** Mock peer-review of selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar) with instructor support
13:00 – 14:00	Lunch
14:00 – 15:30	**Hands-on exercise (continued):** Mock peer-review of selected sections of the GHG inventory from Central Asian countries using the peer-review workbook (specific selections will be confirmed during the preliminary webinar) with instructor support
15:30 – 15:45	Coffee break

15:45 – 16:30	**Discussion**: Key points from the training and next steps
Closing session	*Moderators: Valeriya Orlova and Olia Glade*
16:30 – 17:15	**Technical assignment:** Validation of updated QAQC plan, additional feedback on regional peer review process **Plenary session**: Discussion and workshop reflections **ICAT Survey**
Closing session	*Moderators: Valeriya Orlova and Olia Glade*
17:15-17:30	**Closing Remarks:** Oleg Bulanyi, Senior Program Manager, Initiative for Climate Action Transparency (ICAT) (5 min)