



United Nations
Climate Change



[#Together4Transparency](#)

THE 7th GREENHOUSE GAS INVENTORY SYSTEM TRAINING WORKSHOP

15 - 18 July 2025 – Almaty, Kazakhstan

Concept Note

Background

Existing data shows that the year 2024 had record high greenhouse gas level emissions.¹ Climate change is a threat multiplier with the potential to worsen some of humanity's greatest challenges, including health, poverty and hunger. With climate change affecting billions of people around the world, we are facing a global crisis that requires urgent action more than ever. Climate action is more than just one of the 17 Sustainable Development Goals (SDGs). As climate change and sustainable development are closely interlinked, achieving SDGs by 2030 heavily relies on addressing the climate crisis.

This global imperative aligns with the 7th Greenhouse Gas Inventory System Training Workshop to enhance the capacity of countries in the Asia-Pacific region for providing a national inventory report of greenhouse gases in accordance with the modalities, procedures and guidelines of the Enhanced Transparency Framework (ETF) and utilizing such national Greenhouse Gas (GHG) inventories for the effective design and implementation of Nationally Determined Contributions (NDCs) under the Paris Agreement. In this context, the landmark decision at COP28 on December 13, 2023 to transition away from fossil fuels marks a pivotal shift in the global approach to combating climate change. UN Secretary-General António Guterres stressed the inevitability of a fossil fuel phaseout, underscoring the need for a just and equitable end to the era of fossil fuels.²

The workshop will focus on giving intensive hands-on training on GHG inventories including a demonstration on the estimation of emissions and removals using the IPCC Inventory Software, reporting of emissions and removals using the ETF reporting tool and interoperability of IPCC software with ETF reporting tool for GHG inventories. The workshop will also focus on the Enhanced Transparency Framework (ETF), an integral component of Paris Agreement, the Biennial Transparency Report (BTR), electronic reporting of the information in the national inventory report and the ETF reporting tools in line with the evolving international climate architecture. The ETF under the Paris Agreement builds on the current, solid measurement, reporting and verification (MRV) system under the Convention, which for developed countries is biennial reports, [the annual greenhouse gas \(GHG\) inventories](#) and the [International Assessment and Review \(IAR\)](#); and for developing countries is the biennial update reports and [International Consultation and Analysis \(ICA\)](#). Parties under the Paris Agreement are required to submit their first biennial transparency report (BTR1) and national inventory report, if submitted as a stand-alone report, in accordance with the modalities, procedures and guidelines, by 31 December 2024 at the latest.

¹ <https://wmo.int/publication-series/state-of-global-climate-2024>

² <https://news.un.org/en/story/2023/12/1144742>

Underpinning all this work is activity data. Activity data measures activities that generate GHG emissions such as energy consumption, transportation mileage, or agricultural yields. This data is the backbone of emissions and removals calculations as it is multiplied by corresponding emissions factors to derive overall emissions and removals estimates. High quality, comprehensive and reliable data is essential to ensure (i) accuracy and reliability, (ii) transparency and comparability, (iii) policy relevance and (iv) continuous improvement. The ability to deliver accurate and detailed inventories gives countries the opportunity to develop high quality carbon credits which could be a significant source of income for Least Developed Countries (LDC), Landlocked Developing Countries (LLDC) and Small Island Developing States (SIDS).

Objectives and Expected Outcomes

The 7th Greenhouse Gas Inventory System Training Workshop aims to provide an opportunity for countries from the Africa and Asia-Pacific regions to build capacity and engage in policy dialogue on providing a national inventory report of greenhouse gases and utilizing national GHG inventories for the design and implementation of NDCs under the Paris Agreement with an emphasis on improving the collection of activity data in the energy sector as well as considering overlaps in the IPPU (industrial processes and product use) and waste management sectors. While Asia, including the Pacific region, emits the largest volume of GHG, producing about half the world's carbon dioxide,³ member states are still having difficulty managing and collecting the GHG-related data.⁴ Whilst Africa contributes less than 4% of GHG emissions⁵, it needs capacity training in order to meet the ETF requirements and also improve their ability to access climate finance. Working with Asia-Pacific countries through South-South exchanges can assist African countries in further developing their capacities. Therefore, the workshop is expected to have the following outcomes:

- Enhance capacity of government officials and experts on enhancing GHG inventory system through deeper understanding of the Enhanced Transparency Framework (ETF) and its modalities, procedures and guidelines, outline of Biennial Transparency Report (BTR), electronic reporting of information through the ETF reporting tools.
- Exchange of advanced knowledge and experiences of national governments on developing GHG inventory systems, including electronic reporting of information through the reporting tools.
- Develop skills in collecting, managing and reporting raw activity data and emission factors in the energy sector.
- Engage participants on NDC 3.0 updates, while advancing networks among participating organizations, countries, and regions to promote the implementation of the Paris Agreement.

Target Audience

This workshop aims to engage up to 40 participants from the government, national research institutions, and academia concerned directly with the development and management of national GHG inventory systems and reporting of national inventory report to the UNFCCC. Priorities for participation will be given to the previous attendees, and national experts who are directly engaged in delivering the national inventory report to the UNFCCC and have access to the ETF reporting tools. Priority will also be given to member states that have expressed a request for policy support or further capacity development related to preparing and reporting their GHG inventory to the UNFCCC.

Schedule and Format

The workshop will be held on-site from 15 to 18 July 2025, Almaty, Kazakhstan. The workshop will be conducted in English.

³ <https://www.imf.org/en/Blogs/Articles/2021/03/25/asia-pacific-the-gigantic-domino-of-climate-change>

⁴ <https://www.unescap.org/kp/2024/asia-and-pacific-sdg-progress-report-2024>

⁵ <https://www.afdb.org/en/cop29/focus-africa>

Organizers

This workshop will be organized by the United Nations Office for Sustainable Development (UNOSD) of the UN Department of Economic and Social Affairs (UNDESA), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC), Capacity-building Initiative for Transparency - Global Support Programme (CBIT-GSP) and hosted by the Government of Kazakhstan.

Venue

The workshop will be held in Almaty, Kazakhstan.

DRAFT



United Nations
Climate Change



#Together4Transparency

THE 7th GREENHOUSE GAS INVENTORY SYSTEM TRAINING WORKSHOP

15 - 18 July 2025 – Almaty, Kazakhstan

Agenda

Day 1, 15 July 2025 (Tuesday)	
Time	Module
8:30-9:00	Registration – survey
9:00-9:20	<p>Opening and Welcome Remarks Moderator: Mr. Simon Gilby, Sustainable Development Officer, United Nations Office for Sustainable Development (UNOSD)</p> <p>Welcome Remarks H.E. Mr. Mansur Oshurbayev, Vice-Minister of Ecology and Natural Resources, Republic of Kazakhstan</p> <p>Opening Remarks Mr. Chun Kyoo Park, Head of Office, UNOSD</p> <p>Photo session</p>
9:20-9:45	<p>Outline of the workshop and introduction of participants Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p>
9:45–10:30	<p>Session 1: Enhanced Transparency Framework Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, Economic and Social Commission for the Asia Pacific (ESCAP)</p> <ul style="list-style-type: none"> • BTR 1 preparation and submission updates, including challenges and support available. • Outline of Enhanced Transparency Framework (ETF) and its modalities, procedure, and guidelines. • Outline of Biennial Transparency Report (BTR), national inventory document (NID) and common reporting tables (CRT) for electronic reporting of information on national inventory report <p>Presenters:</p>

	<ul style="list-style-type: none"> • Mr. Tomoyuki Aizawa, Programme Officer, United Nations Framework Convention on Climate Change (UNFCCC) • Mr. Jaypalsingh Chauhan, Asia Coordinator, Capacity-building Initiative for Transparency - Global Support Programme (CBIT-GSP) • Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP
10:35 – 10:45	Coffee Break
10:45-11:30	<p>Session 2: Country Progress Updates – Status, Lessons learned, Challenges and Support Needed for preparing NDC 3.0 and BTR1 Moderator: Mr. Tomoyuki Aizawa, Programme Officer, UNFCCC and Ms. Kristina Kaar, Associate Programme Officer, UNFCCC</p> <ul style="list-style-type: none"> • Country presentations (t.b.c)
11:30–13:00	<p>Session 3: Main Contents of 2006 IPCC Guideline - Vol.2 (Energy) Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD Presenter: Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP</p>
13:00 –14:00	Lunch
14:00–15:15	<p>Session 4: Deep Dive into Activity Data and Emission Factors Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD Presenters: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP and Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP</p> <p>Topic 1: Energy Balance Topic 2: Reference and Sectoral Approach Topic 3: Decision trees and key category assessment Topic 4: Activity data, conversions and comparison with international database (practical exercise with key categories) Topic 5: Emission factors (default and country specific)</p>
15:15-15:30	Coffee break
15:30–17:00	<p>Session 4: Deep Dive into Activity Data and Emission Factors (continued) Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD Presenters: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP and Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP</p> <p>Topic 1: Energy Balance Topic 2: Reference and Sectoral Approach Topic 3: Decision trees and key category assessment Topic 4: Activity data, conversions and comparison with international database (practical exercise with key categories) Topic 5: Emission factors (default and country specific)</p>
18:30-19:30	Welcome Reception
Day 2, 16 July 2025 (Wednesday)	
Time	Module

08:30-9:00	Registration
09:00-9:15	Recap of Day 1 and participants' feedback Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD
9:15-10:45	<p>Session 5: Experience of Building and Operating National GHG Inventory Systems Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, ESCAP.</p> <ul style="list-style-type: none"> Country presentations (t.b.c) <p>Q&A</p>
10:45-11:00	Coffee break
11:00–12:00	<p>Session 6: Building a National Data Collection and Archiving Framework Moderator: Ms. Kristina Kaar, Associate Programme Officer, UNFCCC</p> <p>Presenter: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP</p> <p>Topic 1: Institutional Arrangements for data collection Topic 2: Data gaps analysis and standard gap filling techniques Topic 3: Data archiving and storage Topic 4: Designing inventory improvement plans and continuous enhancement and flexibilities provisions Topic 5: CBIT GSP NID Template</p>
12:00-13:00	Lunch
13:00–14:00	<p>Session 7: Building a National Data Collection and Archiving Framework (continued) Moderator: Ms. Kristina Kaar, Associate Programme Officer, UNFCCC</p> <p>Presenter: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP</p> <p>Topic 1: Institutional Arrangements for data collection Topic 2: Data gaps analysis and standard gap filling techniques Topic 3: Data archiving and storage Topic 4: Designing inventory improvement plans and continuous enhancement and flexibilities provisions Topic 5: CBIT GSP NID Template</p>
15:00-15:15	Coffee break
15:15 –16:30	<p>Session 8: Establishing Effective Governance for GHG Inventory Management Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, ESCAP</p> <p>Presenter: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP and Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP</p> <p>Topic 1: Examples of national legislation and policies supporting GHG inventory development Topic 2: National Inventory Management Systems Topic 3: Sharing experience through guiding questions</p>

16:30 –17:00	Session 9: Group Feedback and Wrap Up Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD

Day 3, 17 July 2025 (Thursday)	
Time	Module
08:30 –09:00	Registration
9:00-9:15	Recap of Day 2 and participants feedback, questions and comments Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD
9:15 - 10:30	Session 10: Experiences in Quality Assurance, Enhancing Data Certainty and Quality Control, Technical Expert Review (TER) preparation Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD Presenter: Mr. Jaypalsingh Chauhan, Asia Coordinator, CBIT-GSP and Ms. Aiyngul Kerimray, Scientist – Energy, CBIT-GSP Topic 1: Introduction to QA/QC principles for GHG inventories (TACCC) Topic 2: Design and documentation of QA/QC activities Topic 3: Uncertainty Assessment Topic 4: Prepare for Technical Expert Review of NID
10:30 - 10:45	Coffee Break
10:45 - 12:00	Session 11: Practical Training on IPCC Inventory Software and interoperability with ETF GHG Inventory Tool Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, ESCAP Presenter: Ms. Lisa Hanle, Consultant to the Technical Support Unit of the Intergovernmental Panel on Climate Change Task Force on National Greenhouse Gas Inventories (IPCC TFI TSU)
12:00-13:00	Lunch
13:00-15:15	Session 11: Practical Training on IPCC Inventory Software and interoperability with ETF GHG Inventory Tool Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, ESCAP Presenter: Ms. Lisa Hanle, Consultant to the IPCC TFI TSU
15:15-15:30	Coffee break

15:30-16:30	<p>Session 11: Practical Training on IPCC Inventory Software and interoperability with ETF GHG Inventory Tool (continued) Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p> <p>Presenter: Ms. Lisa Hanle, Consultant to the IPCC TFI TSU</p>
16:30–17:00	<p>Session 12: Wrap and Summary Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p>
Day 4, 18 July 2025 (Friday)	
Time	Module
8:30-9:00	Registration
9:00-9:15	<p>Recap of Day 3 and participants feedback, questions and comments Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p>
9:15-10:30	<p>Session 13: Practical exercises on inputting information into the ETF GHG inventory tool and generate common reporting tables Moderator: Ms. Aneta Nikolova, Climate Policy Lead, Environment and Development Division, ESCAP</p> <p>Presenters:</p> <ul style="list-style-type: none"> • Ms. Kristina Kaar, Associate Programme Officer, UNFCCC
10:30 - 10:45	Coffee Break
10:45 – 13:00	<p>Session 13: Practical exercises on inputting information into the ETF GHG inventory tool and generate common reporting tables (continued) Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p> <p>Presenters:</p> <ul style="list-style-type: none"> • Ms. Kristina Kaar, Associate Programme Officer, UNFCCC
13:00-14:00	Lunch
14:00-15:00	<p>Session 14: Facilitated discussion on BTR, ETF, NDC 3.0, IPCC software feedback and follow-up capacity development needs Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p>
15:00-15:30	<p>Wrap Up and Closing Remarks Moderator: Mr. Simon Gilby, Sustainable Development Officer, UNOSD</p>
15:30–18:00	Site Visit (t.b.c)