



GHG Inventory and MRV of GHG emissions from industrial installations for officials and representatives of industry

Draft Concept note and Agenda

27-28 March 2017, Tbilisi

Background	<i>Clima East: Support to Climate Change Mitigation and Adaptation in Russia and ENP East Countries</i> is an EU-funded project providing technical assistance to the Eastern Partnership Countries and the Russian Federation in climate change mitigation and adaptation by fostering development of policies and measures in the Partner Countries. The project commenced in October 2012 and it is due to end in April 2017.
	MRV of large industrial sectors and emitters has formed a Core Action area for Clima East under each annual Workplan in parallel to support provided for national inventory improvements. In September 2014 the project delivered a study tour enabling the participants from all Clima East countries to become familiar with the MRV component of the EU ETS, in line with initial focus of the project on emissions trading and EU experience. The participants travelled to Berlin where they visited the ETS Competent Authority (DeHST), they learnt about the key aspects of emissions verification system in the EU ETS, and subsequently visited a local power plant in order to see monitoring and reporting of emissions from the perspective of an installation. From Germany where they visited a power plant, they travelled to Poland, where they visited a modern brick factory, and learned about the functioning of the MRV system in Poland.
	MRV activities were subsequently introduced into the 2015 workplan of the Clima East project – both with regional and national components and with additional Expert Facility support - and have continued in 2016/17. The aim of this activity is to build up capacities of Partner Countries to understand the concept of MRV, leading to development of a Roadmap for the introduction of appropriate MRV systems at national level.
	The proposed activity is based on two pillars. Pillar one has been defined in the context of support to reporting and inventory obligations under the United Nations Convention on Climate Change (UNFCCC). The Clima East project provides support to developing in Clima East Partner Countries MRV capacity for policies and measures implementing Nationally Determined Contributions that the countries submitted as their share to the Paris Agreement. Preparatory steps and capacity building are beneficial especially as MRV systems will either be developed in the UNFCCC context, and Clima East countries should be equipped to understand and actively shape the MRV debate, or it will be left to countries to decide how to monitor and report their policies and measures. Whatever the decision on MRV in the UNFCCC context, knowledge of (I)NDC, Nationally Appropriate Mitigation Action (NAMA) and Low Emission Development Strategy (LEDS) monitoring, reporting and verification, building capacity for setting up robust MRV systems







	benefit Partner Countries. Additional reason of selecting the IPPU sector for providing the support for MRV is the sector's specificity in terms of complex nature of the technological processes, and needs of capacity enhancement of local experts in dealing with GHG inventory compilation and monitoring the mitigation actions from it. Georgia has already been provided technical assistance from CE in the IPPU-related mitigation part of its LEDS. In addition, F-Gases is of particular interest of Georgia in line with the commitment under the EU-Georgia Association Agreement approximating the EU regulations on F-gases and ODS, the area where the CE project has also already provided technical support for Georgia. The event will approach IPPU both form the top-down inventory approach and from the bottom up, installation focused MRV approach. It aims at familiarizing the participants further with the MRV system implemented in the EU in sectors covered by the emissions trading system or falling under the F-gases / ODS regulations of the EC.
Participants	 Approximately 20 participants from the following groups are envisaged: Government representatives (ministerial: environment, economy, energy); GHGI compliers (experts with various affiliations engaged with IPPU, F-gases and ODS); Industrial installations (e.g. cement, ammonia, ferroalloys with IPPU activities; commercial entities engaged with F-gases and ODS).
Methodological approach	 The workshop will address the following thematic areas: the concept of MRV; the definition of IPCC GHG inventory and what it is for; the practical use of MRV in the context of the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol (KP), and upcoming obligations under the Paris Agreement (PA); the use of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Methodologies of GHG inventories for industrial processes and product use (IPPU); MRV in the EU ETS (institutional and regulatory framework, responsibilities of the competent authority, permitting, compliance check, database management, monitoring at the level of installations, verification of emissions, verifiers and their accreditation); Inventory/MRV obligations of Georgia under the UNFCCC and the possible use of MRV of emissions from industrial installations; Possible GHG mitigation measures for IPPU and F-gases and ODS. It will enable the participants to: understand the application of MRV systems in various contexts, including UNFCCC and ETS, and become familiar with IPCC guidelines and other reporting standards – such as the EU ETS MRV and ISO: become familiar with MRV institutional framework, permitting, data collection, a full compliance cycle under emission trading vs MRV obligations;







	 understand the EU ETS angle of MRV and how does ETS MRV help in collecting data on industrial emissions from installations; improve national capacities on national inventory compilation for the respective gases; increase the potential for and likelihood of mitigation measures implantation and corresponding MRV. The following methodological approaches are envisaged during the workshops: presentations, facilitated discussion following presentations, moderated panel discussions,
Materials	 presentations; relevant documents and legal and regulatory framework on MRV of industrial installations in the EU discussed/referenced during the workshops; relevant case studies, if appropriate, for use during the workshop; report from the workshop published online and distributed (in Georgian) to participants.
Organizers/co- organizers and their roles	Clima East: in charge of logistics and overall organisation of the workshop; providing materials (presentations) to participants, drafting reports, disseminating results, providing follow up help desk advice. <u>Experts</u> : Clima East KE1, KE2 and KE4 (presentations, moderating sessions), NKEs / from various EU MS, IPPU and F-gases/ODS experts
Venue requirements	Conference room for up to 25 participants
Timing	27-28 March 2017







Agenda

Venue: Betsy's Hotel, 32/34 Makashvili St., Tbilisi, Georgia

<u>Day 1</u> : 27 March 2017	
9:15 - 9:20	 Welcome remarks MoENRP Mr Alvaro Ortega Aparicio, Project Manager – Environment and Rural Development, Delegation of the European Union to Georgia (TBC) Clima East
9:20 - 9:30	Tour de table / Introduction of the participants
9:30 - 9:45	 Brief Introduction to the MRV support activity of the Clima East project Mr Zsolt Lengyel, Clima East Team leader and Key expert
9:45 - 10:00	 The MRV concept in climate change policy: formulation and implementation MRV – definition (bottom-up; top-down; standards etc); MRV - international context: UNFCCC, KP, Paris Agreement; Regulatory framework (covering both international and national – such as ETS – systems) Mr Zsolt Lengyel, Clima East Team leader and Key expert
10:0 0 - 10:10	IPPU sector in the Clima East project support to Georgia
10:10 - 10:30	 Mis Medela mashvili, Clima East Key Expert and Regional coordinator Georgia's IPPU sector Inventory/BUR overview Mr. Kakhaber Mdivani, Chief Specialist, Climate Change Division, Department of Integrated Management of Environment, Ministry of Environment and Natural Resources Protection of Georgia, UNFCCC expert reviewer for IPPU sector.
10:30 - 11:00	 Georgia's GHG Inventory for IPPU – system overview, inventories completed to date and GHG emissions trend IP in Georgia: Source categories, Characteristics and Statistics, Development perspectives Mr. Kakhaber Mdivani, Chief Specialist, Climate Change Division, Department of Integrated Management of Environment, Ministry of Environment and Natural Resources Protection of Georgia, UNFCCC expert reviewer for IPPU sector







11:00 - 11:30	Coffee Break
11:30 – 13:00	 MRV in the EU emissions trading scheme Objectives and scope of the EU ETS Regulatory framework: Directive 2003/81/EC; Directive 2008/101/EC Monitoring and reporting in the EU ETS (MRV requirements for installations, competent authorities and verifiers) Verification of emissions in the ETS and accreditation of verifiers Dr Marzena Chodor, Clima East Key expert
13:00 - 14:00	Lunch break
14:00 – 15:30	 Cement sector MRV in the EU ETS from Poland: relevant lessons Historic overview: technological changes; from wet to dry processes along the way of transition Multiple regulatory frameworks emerging: IPPC. IED and ETS Monitoring and reporting on the plant level Verification of emissions Mr Andrzej Werkowski, Clima East expert Discussion
15:30-16:00	 Panel discussion: What would be the key benefits from introducing bottom up approach to MRV and setting up MRV system for Georgia's industrial installations in domestic and international context? Mr Zsolt Lengyel, Clima East Team leader and Key expert Mr Andrzej Werkowski, Clima East expert Georgian experts
16:00 - 16:30	Coffee break
16:30 – 17:30	 Implementation of the MRV requirements in a Member State Example Poland: Marzena Chodor, Clima East Key expert Implementation of MRV requirements in EU MS Institutional arrangements and responsibilities GHG registry Government systems for monitoring/verification Dr Marzena Chodor, Clima East Key expert Mr Andrzej Werkowski, Clima East expert Discussion
17:30 – 18:00	 Panel discussion: What are the key MRV lessons from the EU ETS for mitigation policies elsewhere? How economic instruments, such as emission trading and carbon markets operate? Dr Marzena Chodor, Clima East Key expert Mr Andrzej Werkowski, Clima East expert







<u>Day 2</u> : 28 March 2017	
9:30 – 10:00	Georgia's commitment for F-gases under the AA and Clima East activities in the IPPU and F-gases/ODS sectors
	 Ms Medeia Inashvili, Clima East Key expert and Regional coordinator, Dr Marzena Chodor, Clima East Key expert
10:00 – 10:30	F-gases in Georgia's IPPU sector Inventory/BUR: requirements and reporting
	 Mr. Kakhaber Mdivani, Chief Specialist, Climate Change Division, Department of Integrated Management of Environment, Ministry of Environment and Natural Resources Protection of Georgia, UNFCCC expert reviewer for IPPU sector.
10:30 - 11:00	Coffee break
11:00 - 12:15	 GHGs in the IPPU sector & F-gases – the bottom-up approach: Installation level MRV experiences form the EU ETS and F-gases regulations: Experience with introducing F-gases MRV system to industry Experience with introducing GHG MRV system to the cement industry
	 Dr Marzena Chodor, Clima East Key expert Mr Martin Beckmann, VERICO SCE, EU ETS Auditor / F-Gas Auditor - presenting via videoconferencing
	Mr Andrzej Werkowski, Clima East expert
12:15 - 13:15	Lunch break
13.15 – 14:30	Introduction to Methodology for GHG inventories for IPPU sector – the IPCC 2006 Guidelines
	 Overview of the Guidelines GHG Inventory – Elements, Principles, Cycles What are the changes between the 1996 and 2006 IPCC Guidelines? Introduction to the IPCC Inventory software Ms Sina Wartmann, Clima East expert, presenting via videoconference
14:30 – 15:00	Introduction to Methodology for GHG inventories for IPPU sector – the IPCC
	2006 Guidelines (continued)
	 Overview of the Guidelines GHG Inventory – Elements, Principles, Cycles What are the changes between the 1996 and 2006 IPCC Guidelines? Introduction to the IPCC Inventory software Ms Sina Wartmann, Clima East expert, <i>presenting via videoconference</i>
15:00 - 15:30	Coffee break







15:30 – 16:15	GHGs in the IPPU sector & F-gases in the GHG:
	 ✓ Requirements to their reporting ✓ Presentation ✓ Georgia's envisaged mitigation measures in the IP sector: by subsectors/source categories (as recommended by the CEEF-GE051); what parameters will be changed in emission calculations in the mitigation measures?
	Ms Sina Wartmann, Clima East expert, presenting via videoconference
	Q&A, Discussion
16:15 – 17:00	IPPU Sector Inventory overview with emphasis of the relevant sources/ sub- sectors for F-gases (2006 GL and software)
	✓ Presentation
	 Software Approaches taken in Georgia's GHG inventory/BUR1
	• Ms Sina Wartmann, Clima East expert, presenting via videoconference
	Q&A
17:00 – 17:15	Conclusion

