



Capacity Development for the Implementation of a Monitoring, Reporting and Verification System (MRV) on GHG Emissions in Turkey

Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ)

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Agenda

1. General information about the project
2. Project context
3. Project approach
4. Main achievements



MRV Capacity Development Project

Supported by:	German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMBU)
Partner Ministry:	Ministry of Environment and Urbanization of Turkey
Implemented by:	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration:	October 2013 – February 2018
Budget :	3,4 Mio. Euro



International Climate Initiative

- The IKI is a **key element** of Germany's climate financing; based on a decision taken by the German parliament a sum of at least 120 million € is available annually
- For the first few years the IKI was financed through the auctioning of emission allowances, now it is funded from the budget of the BMUB
- The Initiative places clear emphasis on climate change mitigation, adaption to the negative impacts of climate change and the protection of biological diversity
- Support is provided in form of knowledge transfer, technology cooperation, policy advice and investment measures
- IKI projects in category **"Mitigation of GHG emissions"** are focused on the development of:
 - Low Emissions Development Strategies (LEDS)
 - Nationally Appropriate Mitigation Actions (NAMAs)
 - Systems for Monitoring, Reporting and Verifying greenhouse gas emissions and mitigation actions (MRV)



GIZ at a glance

The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) is implementing the project on behalf of the BMUB

- GIZ is an international enterprise owned by the German Federal Government
- GIZ is a leading provider of international cooperation services for sustainable development
- Most of the work is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), GIZ also operates on behalf of other ministries e.g. BMUB, the Federal Ministry of Economic Affairs and Energy, etc.
- GIZ operates throughout Germany and in more than 130 countries worldwide, registered offices are in Bonn and Eschborn near Frankfurt
- More than 16,410 staff worldwide, app.70 % are employed locally as national personnel; around 890 development advisors work for GIZ



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Context

- Although Turkey had no obligations under the Kyoto Protocol, Turkey has taken important steps to combat climate change and plans efforts to decarbonise its economy
- The National Climate Change Strategy and the National Climate Change Action Plan 2011 – 2013 (NCCAP) outline important activities in emission relevant sectors by using climate policy instruments
- On April 2012, the MoEU has issued the MRV Regulation which makes it mandatory for companies in emission industry sectors to monitor and report their greenhouse gas emissions
- According to the Turkish MRV regulation, monitoring of GHG emissions started in 2014, installation operators have to report their GHG emissions in 2017



Turkish MRV framework

- **Regulation on Monitoring of Greenhouse Gas Emissions** (MRV Regulation) which is adapted from 600/2012/EC ve 601/2012/EC excluding CCS and aviation) has been started to be implemented in 2014.

Goals:

- Adoption of EU Environmental Legislation, UNFCCC responsibilities
 - Contribution to policy making process and support to international climate change negotiations process
 - Capacity building and awareness raising
 - Register the abatement activities (plan, program, project, investment...) of GHG Emissions
 - To facilitate integration into carbon markets
- **Communique on monitoring and reporting:** MR procedures for each activity category, including Tier approaches, QA/QC procedures, uncertainty calculation, etc.
 - **Communique on verification and accreditation:** accreditation and authorization rules and requirements for verifiers, verification principles
 - **Communique on Monitoring and Reporting , Sectoral Calculation Examples**

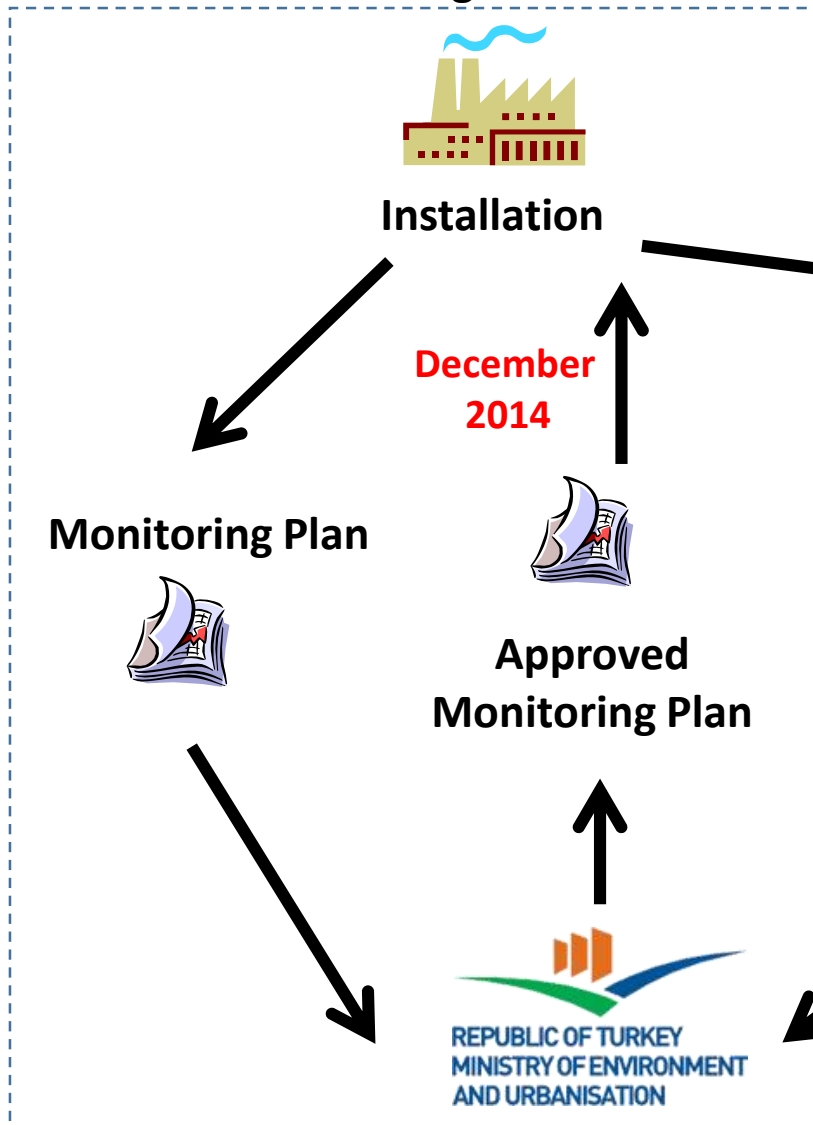


Organizational Structure of MRV System in Turkey

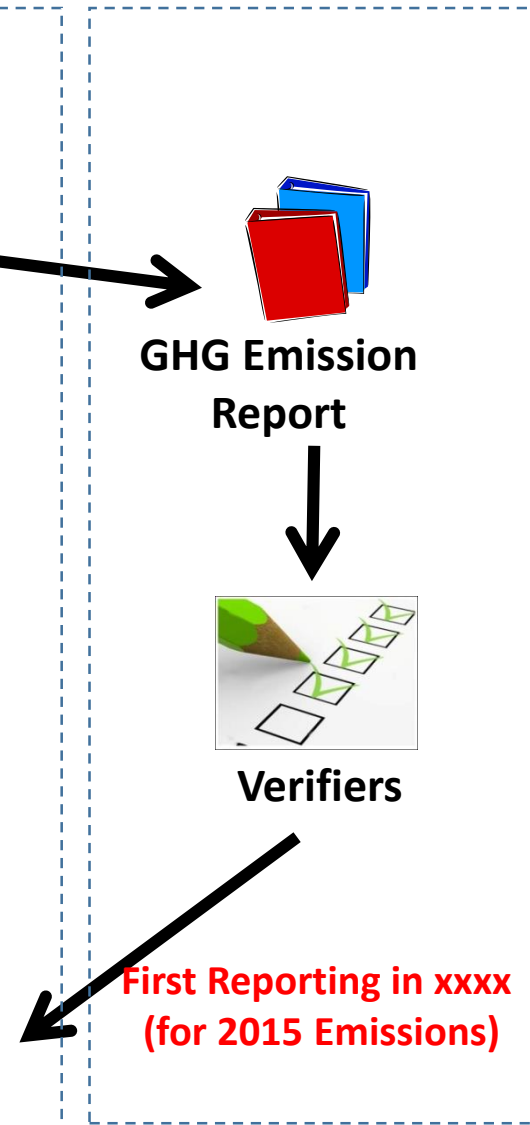
Accreditation of Verifiers



Step 1: Monitoring Plan



Step 2: Annual Reporting



Key players in the Turkish MRV system

Turkish Accreditation
Agency
(TURKAK)

- Assessment of verifiers' competence to carry out verifications
- Assessment if verifiers perform the verifications in accordance with the regulation

Third party verification

- Verification that the emissions data report is free of misstatements
- Assessing compliance with the relevant regulation

MoEU
Environmental
Management and Climate
Change Department

- Providing guidance for operators
- Cross-check/approval of monitoring plan or emission reports
- Compliance with regulation

Installation Operators

- Continuous Monitoring
- Timely Submission of reports



Goal of MRV Capacity Building Project

Overarching project goal (outcome):

The provision of the necessary prerequisites for monitoring, reporting and verification (MRV) of greenhouse gas emissions in Turkey

Specific project goals (outputs):

1. A data management system for an installation based MRV system is operational
2. Monitoring Guidelines are elaborated
3. Relevant actors e.g. installation operators, verifiers, are enabled to carry out their tasks in the MRV system
4. Contributions to ETS development
5. Dissemination of lessons from MRV implementation in ECO region



Challenges

- Turkey had to implement an entire system including monitoring, reporting and verification
- Deadline for submission of the first Monitoring Plans was October 1st, 2014.
- Given the small number of available expertes to handle the submission of the MPs, a fast establishment of the Data Management System was required
- Different stakeholders with different task and capacities need to be involved, in particular the private sector on which the MRV regulation has the largest impact
- No overview which and how many companies fall under the MRV regulation

Advantages

- German Emission Trading Authority DEHSt is experienced and strong cooperation partner
 - A number of guidance documents available:
 - EU: Monitoring Plan and Annual Emission Report templates
 - EU: „The Monitoring and Reporting Regulation - General Guidance for Installations“, AVR Explanatory Guidance, Key guidance notes on objective and scope of verification, sampling, verifier's risk analysis, site visits concerning installations, verification report, competence, time allocation in verification
 - DEHSt: Leitfaden Monitoring und Emissionsbericht
 - DAkkS: Rules and procedures for accreditation of verifiers
 - Verification procedures and templates used in Germany

Training needs assessment for installation operators

- Prepared and conducted jointly with the MoEU in July 2014
- Goal: To assess capacities and identify the training needs of major GHG emitting companies in Turkey
- Main source for information: Sector association, they delivered the current status as well as expectations of companies



Associations visited

- Iron and Steel Manufacturers Association (DÇÜD)
- Pulp and Paper Industry Foundation (TSKV)
- Turkey Foundry Association (TÜDOKSAD)
- Cement Producers Association (TÇMB)
- Turkey Ceramic Federation 15
- Bricks and Roof Tiles Manufacturers Association
- Lime Manufacturers' Association , Anatolian Lime Producers Association
- Electricity Producer Association (EU'AŞ EUD)
- Foundation of the Turkish Chemical Manufacturers Association (TCMA)



Methodology

- Face to face interviews
- Guiding questions:
 - How would you rate the awareness and readiness of the sector concerning the regulation on monitoring of the GHG emissions?
 - How many facilities are there in your sector that is subject to the regulation?
 - How effective are the environment and/or energy teams of the facilities in the sector? What is the competency of these teams in terms of fulfilling the obligations by the regulation?
 - What are the trainings required for the sector within the scope of the regulation?
 - Please state your suggestions on the framework and content of the training



Results

- Early involvement of main stakeholders of the private sector facilitated good cooperation spirit which could be maintained throughout the implementation of the project
- Trainings for companies were designed according to findings of needs assessment
- TNA delivered a first indication how many companies fall under the MRV regulation
- Approach was highly appreciated by private sector



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Main Achievements (1/3)

- Study tour with representatives from the Turkish Ministry for Environment and Urbanization (MoEU) to German Emission Trading Authority (DEHSt) to exchange know-how on data management and basic aspects on MRV
- Elaboration of practical guidelines for the development of Monitoring Plans and Annual Emission Reports
- Conduction of capacity needs assessment
- Conduction of sectors specific trainings for more than 500 participants for the development of Monitoring Plans, development of sector examples as orientation for emission calculation
- Establishment of an web-based data management system for industrial GHG emissions; around 600 Monitoring Plans have been submitted by 1 October 2014
- Development of sectors specific check lists for the evaluation of submitted Monitoring Plans
- Training for assessing Monitoring Plans for MoEU experts



Main Achievements (2/3)

- Further development of data management system:
 - inclusion of checks and routines to assure consistency and quality of data submitted
 - development of analytical functions to work with data
 - **Data Management System ready for emission reporting!**
- Capacity building on all aspects of verification, support in designing the Turkish verification system, conduction of study tour on verification, development of verification guideline
- Conduction of training for companies on developing emission reports
- Conduction of summer school 2016

Main Achievements (3/3)

- Development of Carbon Management Training Centre KAREM

www.karem.org.tr

to continue training activities on MRV and other climate related issues for different target groups.

- Realization of Conference „From Paris to Antalya“ May 11, 2016 in Ankara
- with the participation of

Planned activities 2016/17

- Conduction of summer school in the ECO region
- Development of training moduls and conduction of trainings on ETS for installation operators
- Initial advice on MRV in ECO region
- Development of best practice on MRV



Characteristics of the Turkish MRV System

- The Turkish MRV regulation has been developed in accordance with the EU Monitoring and Reporting Regulation
- The Turkish MRV system is designed in a way that it is compatible with other European MRV systems (Monitoring and reporting follows EU approaches, EU templates are used, data model is based on EU spread sheet templates)
- Guiding principle: **“A tonne must be a tonne”** - stakeholders (carbon market participants and competent authorities) want to have assurance that one tonne CO₂ equivalent emitted finds its equivalent of one tonne reported
- To ensure robust, transparent, consistent and accurate monitoring and reporting of greenhouse gas emissions, the MoEU has a transparent definition of tasks and responsibilities, clear rules and methodologies



Thank you for your attention.

