NSO involvement in climate reporting

An example

Turkish Greenhouse Gas Inventory

CGE Regional Webinar

14 September 2021

Introduction

- The Republic of Turkey is Party to the UNFCCC since May 2004 (after 26/CP.7)
- Submission of the **first annual inventory in 2006** for the period 1990-2004
- Coordination and involvement of the Turkish Statistical Institute (TurkStat) **from the very beginning**
- **2006 IPCC Guidelines are used** since the 2015 submission
- Preparations are ongoing for the **17th annual** GHG inventory for the reporting period 1990-2020

Institutional Arrangements

Legal Base

- The Official Statistics Programme (OSP) based on Statistics Law of Turkey No. 5429 and Presidential Order No.4
- Coordination Board on Climate Change and Air Management's decision (formerly known as Coordination Board on Climate Change) to appoint TurkStat as the **Coordinator of the GHG Emission Inventory Working Group** established under the Coordination Board

Institutional Arrangements

The Turkish Statistical Institute (TurkStat)

- Member of the Coordination Board on Climate Change and Air Management
- Responsible for compiling the National GHG Inventory and official submission

Institution/Ministries involved in the preparations

- TurkStat
- Ministry of Energy and Natural Resources (**MENR**)
- Ministry of Transport and Infrastructure (**MoTI**)
- Ministry of Environment and Urbanization (**MoEU**)
- Ministry of Agriculture and Forestry (**MoAF**)

Institutional Arrangements

- Responsible for the annual **Greenhouse Gas Emissions Statistics** Press Release
- For every reporting cycle a **Working Group** meeting is organized in autumn to agree on a working plan for the next inventory submission
- Key governmental institution on compiling and collecting data
- Institutional experience gained extensively in preparations since the first GHG inventory submission

Institutional Arrangements

Sector	CRF Category	Collection of Activity Data	Selection of Methodology and Emission Factors	GHG Emission Calculation	Filling in CRF Tables and preparing NIR	Quality Control
Energy	Energy - 1 (Excluding 1.A.1.a-Public electricity and heat production and 1.A.3-Transport)	MENR TurkStat	TurkStat	TurkStat	TurkStat	TurkStat
	Public electricity and heat production – 1.A.1.a	MENR	MENR	MENR	MENR	MENR
	Transport – 1.A.3	MoTI TurkStat	MoTI	MoTI	MoTI	MoTI
IPPU	IPPU – 2 (except F-gases)	TurkStat	TurkStat	TurkStat	TurkStat	TurkStat
	F -gases	MoEU	MoEU	MoEU	MoEU	MoEU
Agriculture	Agriculture – 3	TurkStat	TurkStat	TurkStat	TurkStat	TurkStat
LULUCF	Forestry – 4.A Other Land Use – 4.B-F	MoAF	MoAF	MoAF	MoAF	MoAF
Waste	Waste – 5	TurkStat	TurkStat	TurkStat	TurkStat	TurkStat

Inventory Planning, Preparation and Improvement

- All emission statistics are calculated by using Excel.
- All cross-cutting topics of the inventory are performed by TurkStat.
- Robust QA/QC activities performed over the years contributed to the improvement of calculation and reporting processes to be in line with transparency, accuracy, completeness, comparability, and consistency (**TACCC**) principles.
- Three further quality objectives for the inventory are considered: **improvement**, **sustainability** and **timeliness**.

Inventory Planning, Preparation and Improvement

- Several capacity building activities, study visits, research on available activity data are undertaken
- Inventory reviews act as a contributor
- The 2006 IPCC Guidelines (GLs) facilitate emission estimations

Inventory Improvement and Management

- Annual meetings of GHG Emission Inventory Working Group with involved institutions on annual review reports, issues, challenges & improvements
- Improvement efforts (investment and EU related projects, QA/QC activities)
- The embracement of the Inventory by TurkStat's senior management
- Annual meeting on results before submission to the senior management

Key Takeaways

- The inventory is reported according to TACCC principles, which are similar to the principles related to official statistics. **Reliability**, **consistency**, **impartiality, statistical confidentiality**, **timeliness, and transparency are some of the principles to be followed for improving the quality of official statistics** according to the Statistical Law No. 5429.
- Core business strengths on producing statistical data also serves fulfilling GHG inventory data requirements.
- TurkStat, which has extensive experience in managing databases and all aspects related to high quality statistics, is a key governmental institution on compiling & collecting data.
- Having access to a variety of datasets facilitates inventory preparations.

Key Takeaways

- Having trained **national experts** working on the inventory **in-house** is critical for the sustainability of the entire inventory process.
- Providing a reporting year of intensive training for newcomers coupled with the obligation of four years of work on the inventory might be helpful.
- Building and improving a GHG inventory is a complex undertaking serving the party's climate reporting and policy making. Having the NSO directly involved as early and as much as possible can facilitate this process.
- Variety of efforts are needed for transition from the 1996 IPCC GLs depending on tier level & subsector category.

Key Takeaways

- Building a QA/QC system is indispensable for a sustainable inventory system over the long term.
- In general, the **introduction sections of** national inventory reports (**NIRs**) submitted under the UNFCCC provide valuable information on measurement, reporting and verification (MRV) components.
- Overall, the GHG inventory is a key component of the reporting obligations of the **MRV** system under the Convention and the Enhanced Transparency Framework (**ETF**) under the Paris Agreement.
- The language of statistics is the same worldwide.

Thank you & any questions?

Kadir Aksakal

GHG Inventory Expert

kadir.aksakal@tuik.gov.tr