

Towards the Enhanced Transparency Framework in the Republic of Korea: Improved Energy Inventory

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Abstract

As a main entity of preparing the national GHG inventory, the Greenhouse Gas Inventory & Research Center of Korea (GIR) has been tasked with comprehensive managing for the first GHG inventory under the Paris Agreement. For an effective implementation of the enhanced transparency framework, the GIR established the “2nd National GHG Inventory Management Plan 2020-2024” in cooperation with the relevant ministries and agencies in 2020. The plan includes the detailed goals and tasks of each sector to improve the inventory, whose progress is monitored and assessed annually.

In addition to facilitating the first GHG inventory, the GIR has been developing an independent electronic reporting system, which is ‘Greenhouse gas Inventory Reporting System (GIRS)’. The GIRS’s main function is to compile database, verify the inventory, and integrate the QA/QC procedures. The GIRS, designed in the linkage with the CRT reporting tool, is expected to support the submission of CRT.

The National MRV Guideline of Korea has been continuously revised in accordance with 2006 IPCC Guideline. Especially, the methodologies and activity data in energy sector have been mainly improved to provide reliable and transparent inventory information. The scope of fuel consumption is expanded and the inventory is more specified. For example, coke ovens emission from fuel combustion occurring at iron and steel industry, which had been included in the manufacturing category is newly estimated as the energy streams clarify in the revised energy balance. The first inventory of the Republic of Korea is currently in the process of preparation and is expected to be submitted by Dec. 2024.