

## Introduction

Greenhouse Gas Inventory & Research Center of Korea (GIR) was established on June 15th, 2010 under 「Framework Act on Low Carbon Green Growth」 and it has taken the pivotal roles in the climate change mitigation and greenhouse gas (GHGs) inventory management in Republic of Korea.

Key functions of GIR are supporting establishment of the national/sectoral GHGs mitigation target through modeling analysis, management of national GHGs inventory MRV system, operation of the National Greenhouse Gas Management System (NGMS) and the Greenhouse Gas and Energy Target Management System (TMS) and supporting the operation of Emissions Trading Scheme (ETS), expanding international cooperation and etc.

GIR has unique expertise and scientific research capacity which enables leading research in a comprehensive, but an independent way. GIR also systemizes distributed statistics and information in cooperation with relevant ministries and institutes across the country and establishes networks with various domestic and international stakeholders related to climate change mitigation.

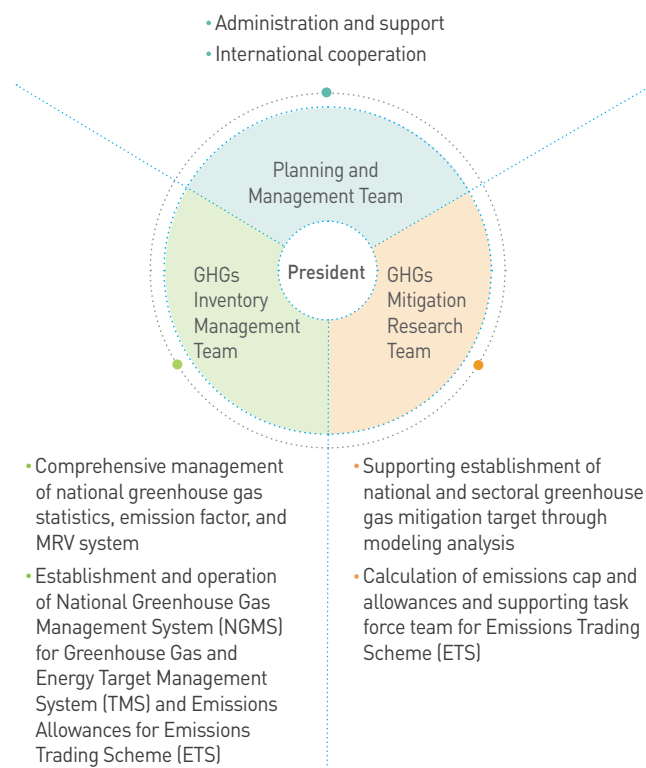
As an information hub and think-tank for climate change mitigation effort in Republic of Korea, we will put our best efforts to be one of the best greenhouse gas management organizations in the world.

Thank you.

President

Greenhouse Gas Inventory & Research Center of Korea

## Organization of Greenhouse Gas Inventory & Research Center of Korea



## Legal status : Affiliated institute of the Ministry of Environment

※ Article 45 of 「Framework Act on Low Carbon Green Growth」 and Article 36 of the Enforcement Decree

For further information or inquiries, please contact :  
[www.gir.go.kr/eng](http://www.gir.go.kr/eng)



## Greenhouse Gas Inventory & Research Center

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## Realization of Global GHGs Think-Tank



## 6 Core Functions

- Operation of a world-class national GHGs management (MRV) system
  - Supporting Greenhouse Gas and Energy Target Management System (TMS) and Emissions Trading Scheme (ETS)
  - Supporting setting national and sectoral GHGs mitigation targets
  - Research on national and international GHGs mitigation actions
  - Enhancement of international cooperation for global climate mitigation
- Preparation for a linkage of domestic market to the international emission trading markets

## We systematically support the setting of national and sectoral GHGs reduction targets

### GHGs emissions projections

- Emissions projection considering international trend, national policies, and other socio-economic factors

### GHGs mitigation potential analysis and supporting setting targets

- Mitigation potential analysis based on existing national/sectoral policies/ measures and mitigation technologies considering minimization of marginal mitigation cost
- Expansion of mitigation technology database and operation mitigation models (Bottom-up and Top-down models)

### Economic impact analysis

- Macro-economic impact analysis on GDP, industrial structure of policy scenarios (emission trading scheme, R&D investment, and etc.) and technology scenarios (energy efficiency improvement and etc.)

### Supporting development of implementation plan and monitoring performances of GHGs reduction policies and measures

## We operate a world-class national GHGs information management system

### Establishment of national GHGs information management system

- Operation of the 「National Greenhouse Gas Statistics Management Committee」 - Review and approval of the national GHGs inventories and emission factors
- Preparation and publication of 「National Greenhouse Gas Inventories Measurement, Report, and Verification Guideline」, 「Country- and Facility-Specific Greenhouse Gas Emission Factors Development and Review Guideline」

### Preparation and publication of the National Inventory Report (NIR)

- Annual publication of NIR after GIR's verification of sectoral GHGs inventories prepared and reported by relevant ministries

### Maintenance of national greenhouse gas information management database

- Database establishment for the country and facility-specific GHGs emission factors and national GHGs inventories

## We support successful implementation of Greenhouse Gas and Energy Target Management System and Emissions Trading Scheme

### Operation of 「Greenhouse Gas Management System (NGMS)」

- Establishment of a systematic information management system for reporting and verification of annual inventory of the firms under Target Management System and Emissions Trading Scheme
- Periodic examination of the Target Management System's performance

### Operation of 「Emissions Allowances Registry」 and 「Offset Registry System」

- Establishment of registry and management system for emissions allowances and offset

### Supporting preparation for the integrated guidelines for Target Management System and Emission Trading Scheme

- Research and technical advice for the setting mitigation target, emissions measurement, report, and verification (MRV), and etc.

## We will actively contribute to the post-2020 climate change mitigation actions in cooperation with the international community

### *Knowledge-sharing and capacity-building for developing countries and strengthening multilateral network for global GHGs mitigation*

#### 「GIR Training Program for GHGs Inventory & Mitigation Modeling」

- Operation of an annual 4 weeks training course (including sectoral lectures and in-class hands-on exercises) for developing countries since 2010

#### 「Cooperative Green Growth Modeling Forum (C2GMF)」 and international conferences

- Sharing country's GHGs-related policies and measures, activity data collection, inventory compilation, mitigation scenario analysis methodology

### International Projects

- Bilateral research on greenhouse gas mitigation modeling methodology (with Lawrence Berkeley National Laboratory, USA) and supporting establishment of national greenhouse gas inventory system, mitigation potential modeling analysis, and etc. for overseas countries (UAE, Azerbaijan, and etc.)

### Preparation of the National Communication (NC) and Biennial Update Report (BUR)

