

..... 2022 Workshop on GHG Inventory in Asia (WGIA19)

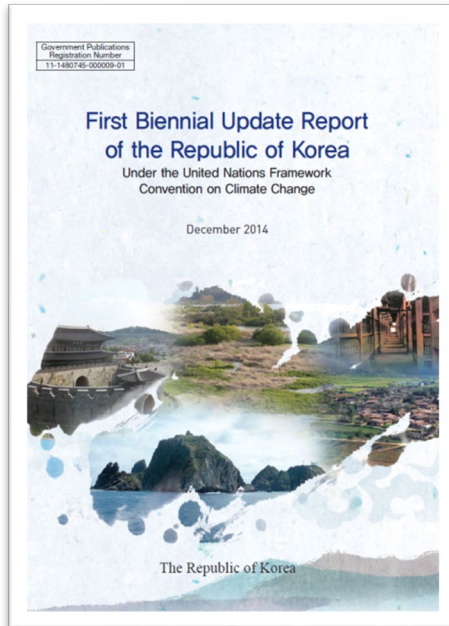
4th BUR of the Republic of Korea (GHG Inventory)

July 11, 2022
Sohyang Lee

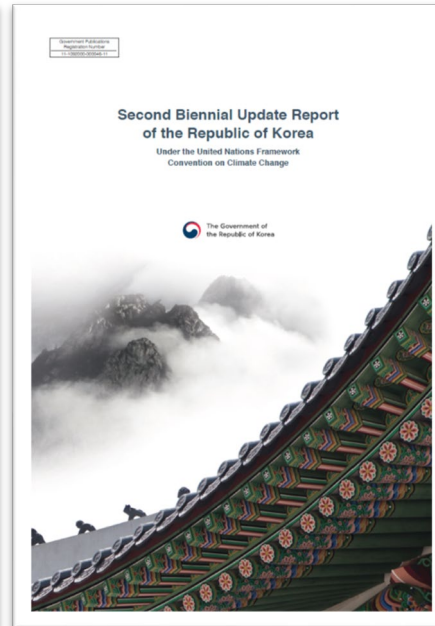
Greenhouse Gas Inventory and Research(GIR) Center of Korea

History of BUR Submissions

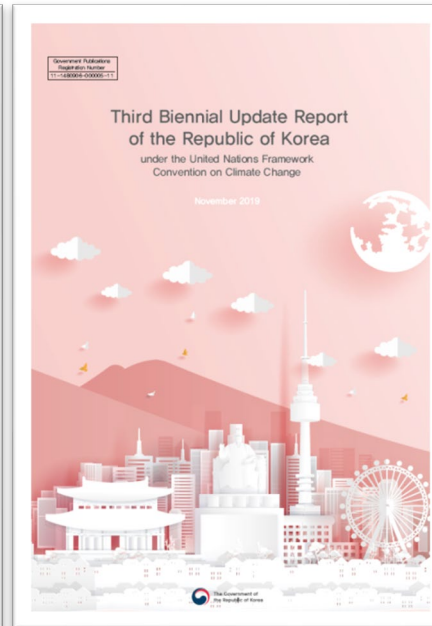
1st BUR in 2014



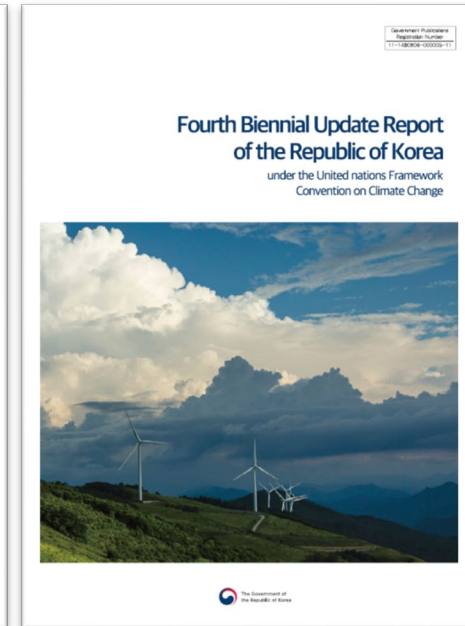
2nd BUR in 2017



3rd BUR in 2019

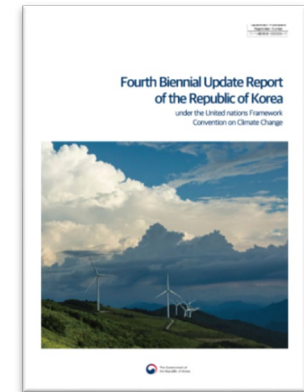


4th BUR in 2021



Contents of 4th BUR

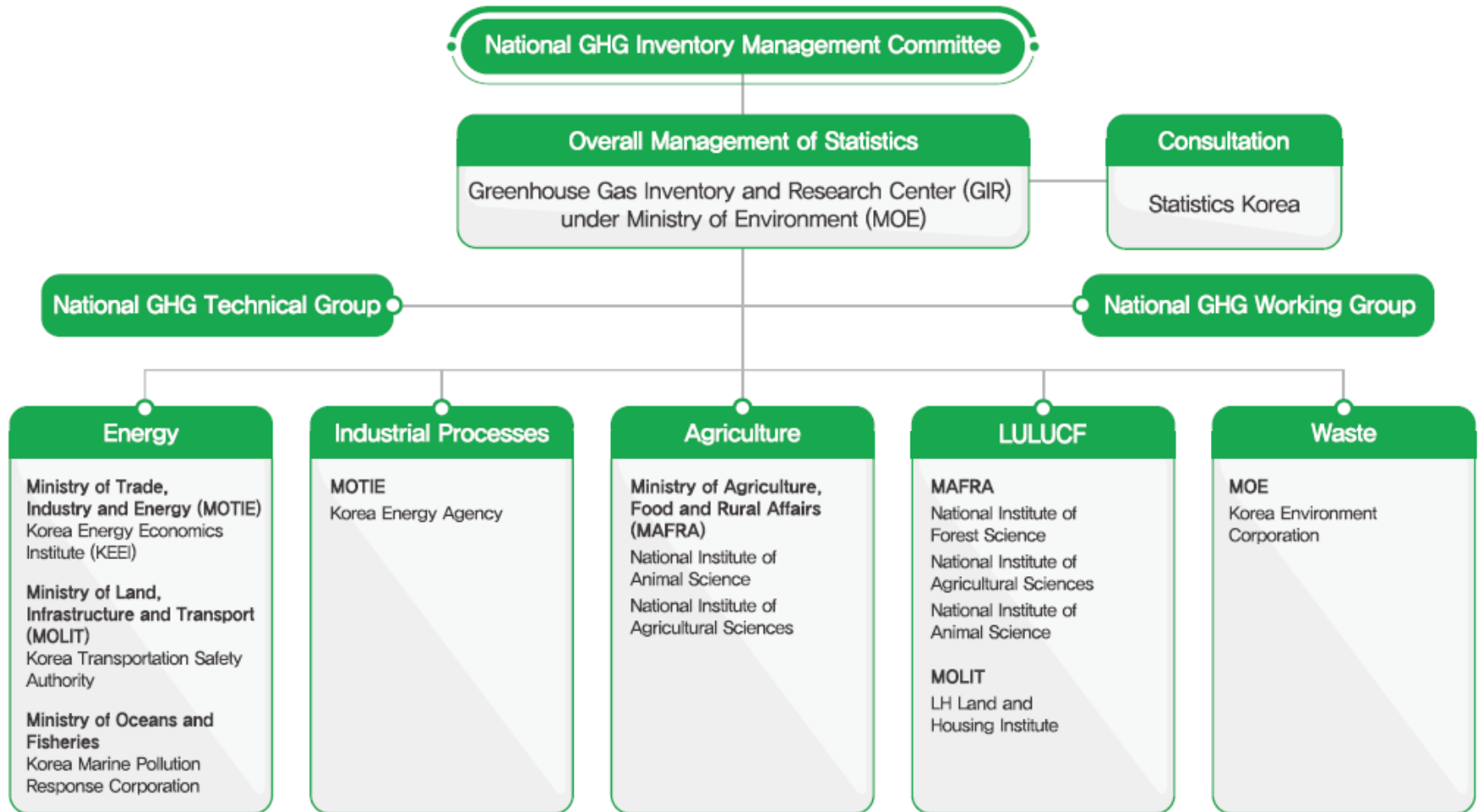
- National Circumstances
- National GHG Inventory
- Mitigation Policies and Actions
- INT'L Support and Awareness of Climate Change



Institutional Arrangement for Preparation of 4th BUR

- **To draft a BUR** : Relevant Ministries and GIR
- **To approve a final BUR** : 2050 Carbon Neutrality and Green Growth Commission
- **To submit the final BUR to UNFCCC** : Ministry of Foreign Affairs

Institutional Arrangement for preparation of the National GHG Inventory

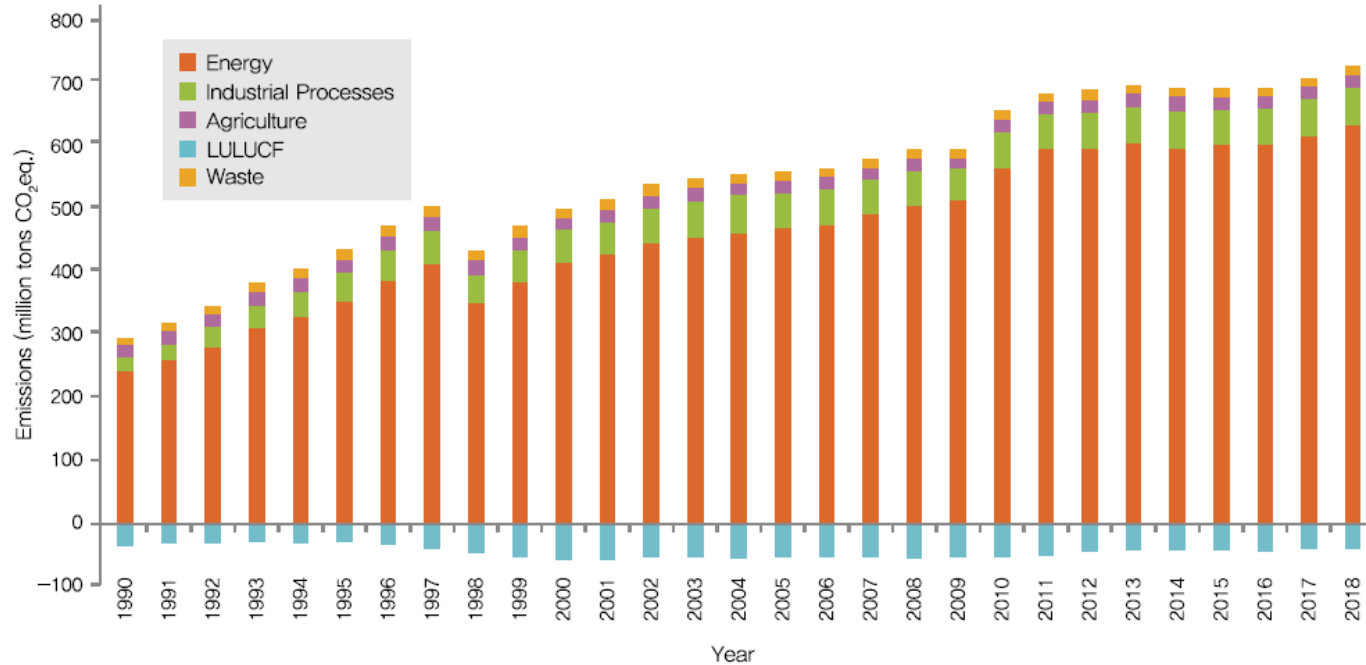


Scope and Methodology for National GHG Inventory

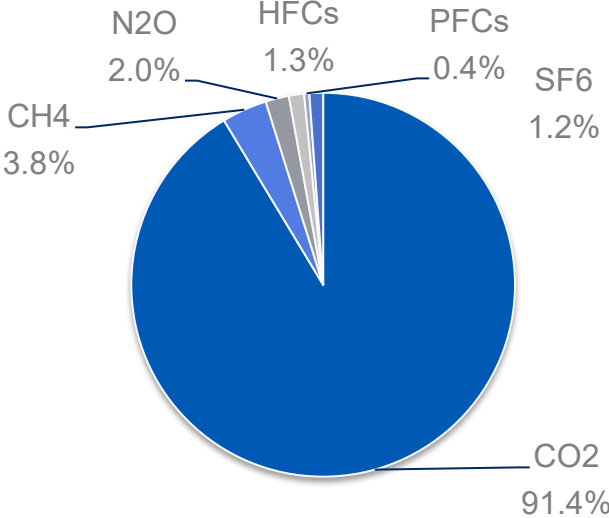
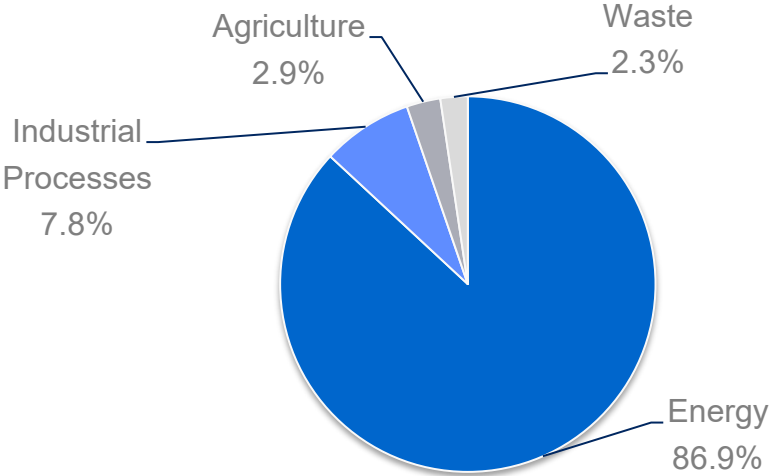
- **GHG** : CO₂, CH₄, N₂O, HFCs, PFCs, SF₆
- **GWP** : Second Assessment Report
- **Methodology** : 1996 IPCC Guidelines
 - ※ 2006 IPCC Guidelines, GPG 2000 & GPG LULUCF are applied to some sub-categories
- **Sector** : Energy, Industrial Process, Agriculture, LULUCF, Waste
- **Time period** : 1990-2018(29 years)
 - ※ 1st BUR : 1990-2012, 2nd BUR : 1990-2014 3rd BUR : 1990-2016

GHG Emissions Trends

- **GHG emission in 2018** : 727.6 million tCO₂eq.
 - Rate of increase or decrease in emissions compared to 2017 : 2.5% ↑
 - Net emissions(including LULUCF) : 686.3 million tCO₂eq.

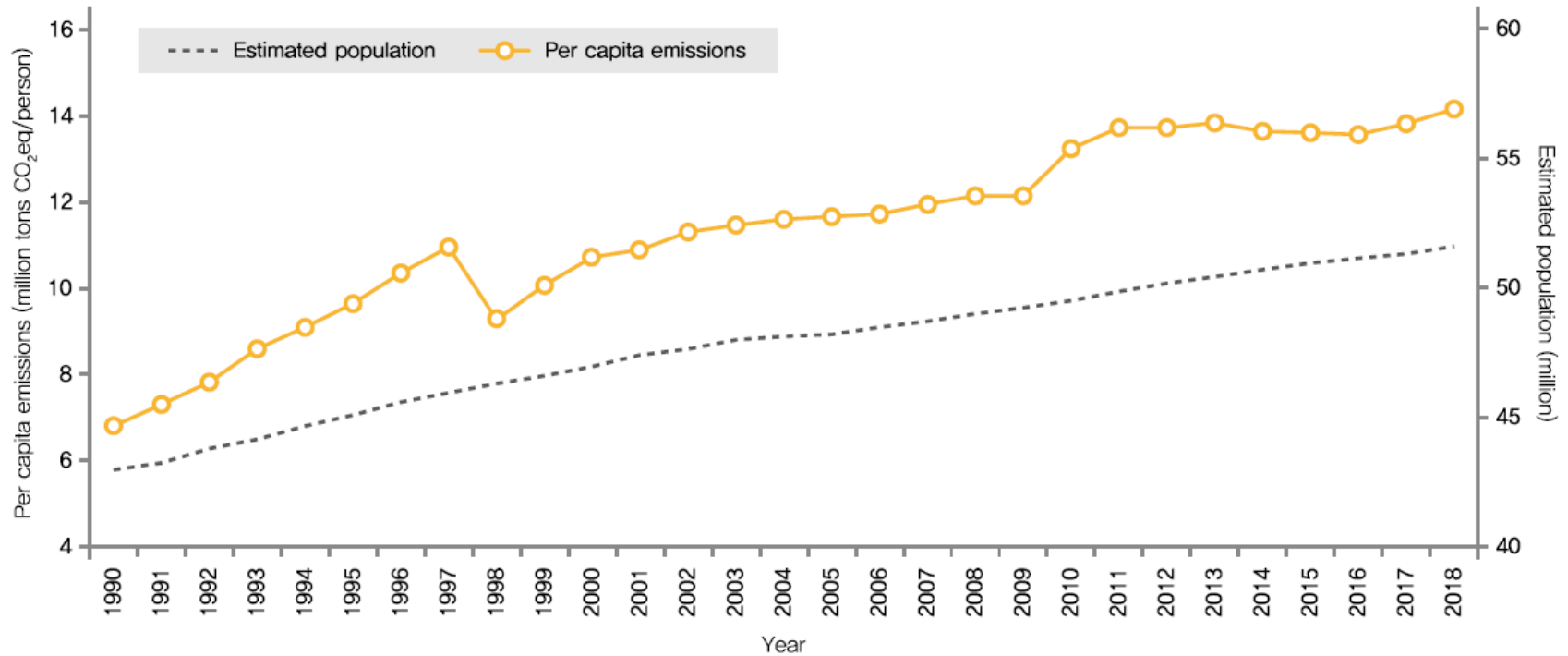


GHG Emissions by sector and gas(2018)



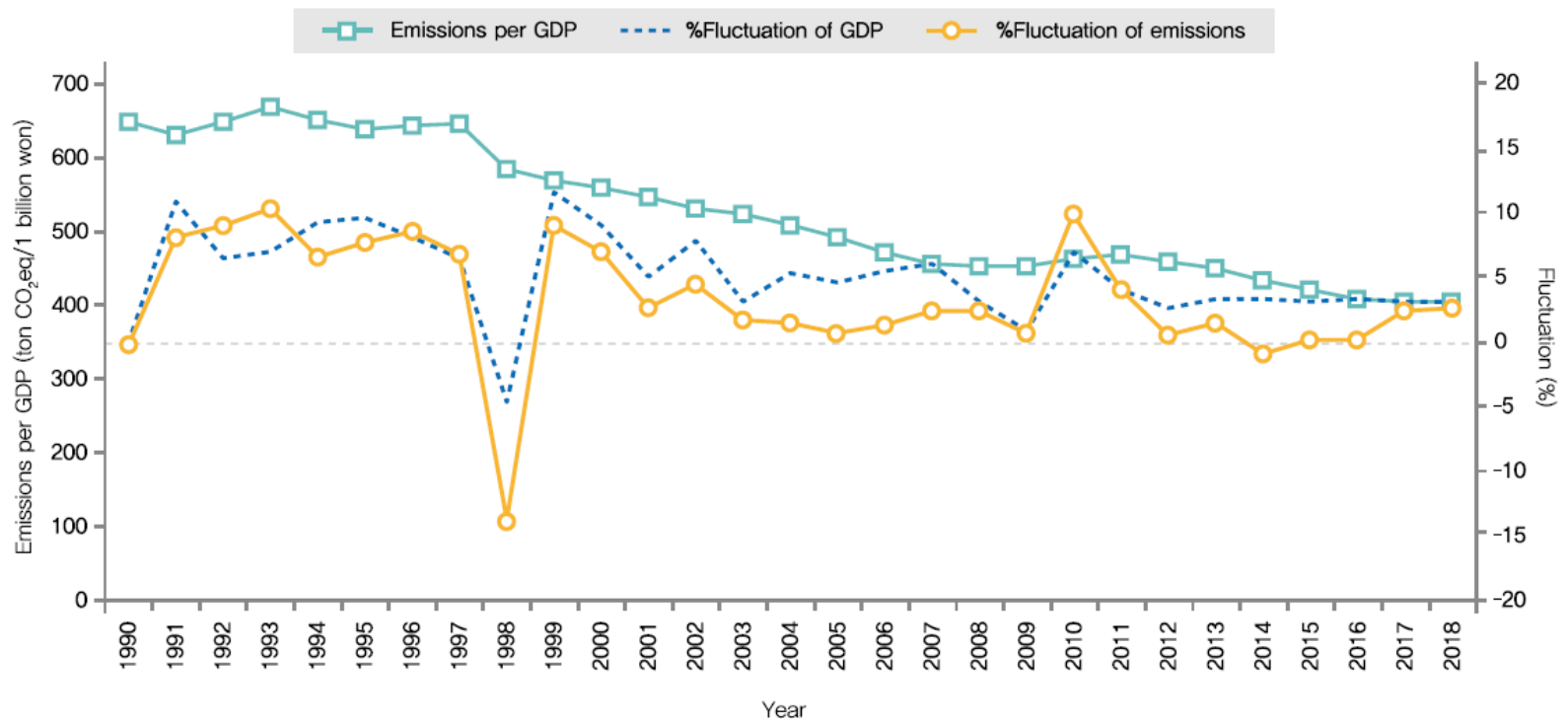
GHG Emissions per capita

- GHG emission per capita in 2018 : 14.1 tCO₂eq.



GHG Emissions per GDP

- GHG emissions per GDP in 2018 : 401.6 tCO₂eq./billion won



- GHG emissions trends(1990~2018) by sub-sector and by gas
- Country-specific emission and removal factors by sector(1990~2018)
- List of activity data
- Comparison between reference approach and sectoral Approach
- Not estimated emission sources of GHG inventory
- Result of key category analysis

Challenges and Plan for improvement

- **Latest reporting year for the national GHG inventories**
 - As for now, the latest reporting year is three years prior to the submission of the national GHG inventories in the BUR
- **Changes in the criteria for estimating GHG inventories**
 - 1996 IPCC Guidelines → 2006 IPCC Guidelines from 2023
- **Changes in IT system**
 - Establishing the MRV system for applying 2006 IPCC Guidelines
 - Establishing the CRT reporting system

Thank you.

