MINISTRY OF ENVIRONMENT AND TOURISM

ENVIRONMENT AND CLIMATE FUND

gef

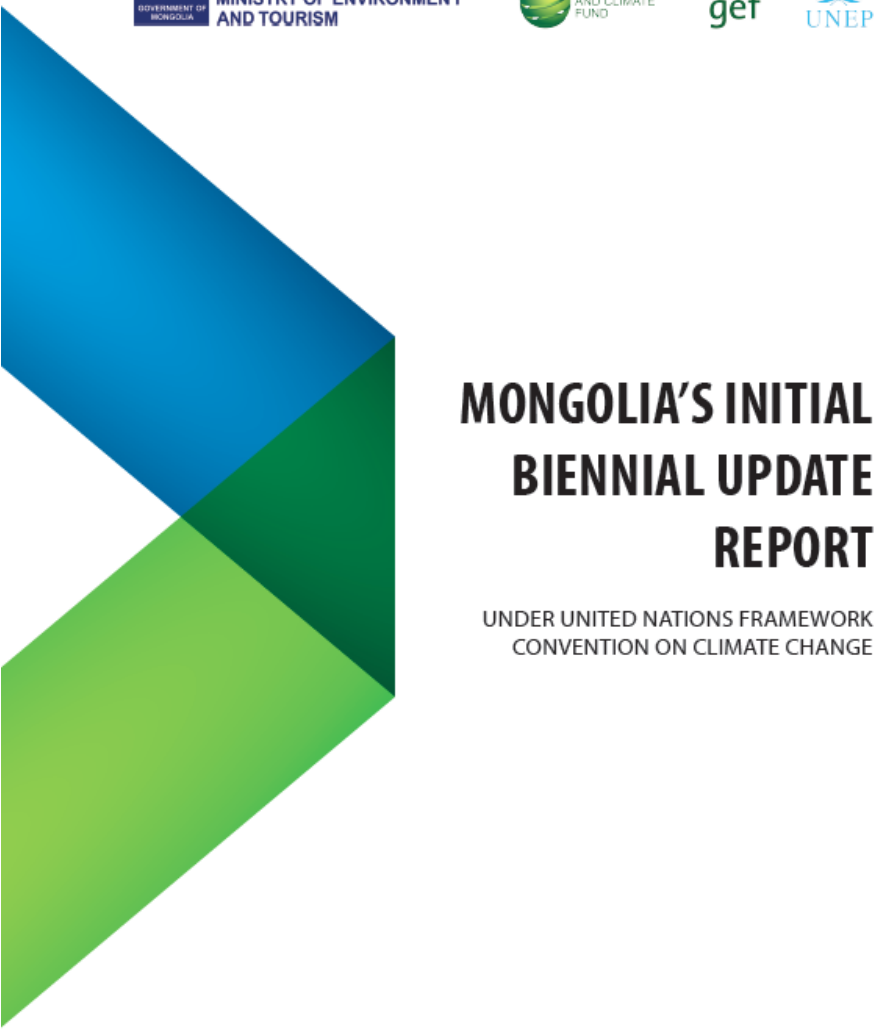
UNEP

FACILITATIVE SHARING OF VIEWS

MONGOLIA

December 7, 2018

SBI 49 – Katowice



SARUUL Dolgorsuren
Environment and Climate Fund
Ministry of Environment and Tourism

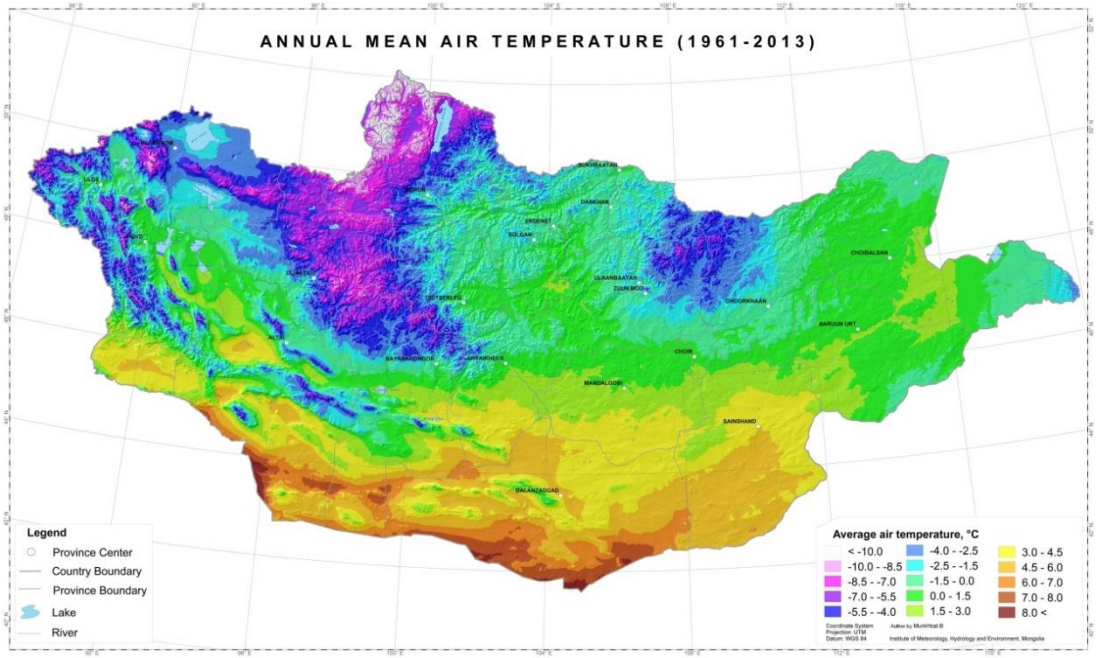
Country presentation outline:

- Country profile and Institutional arrangement
- National GHG inventory
- Climate change mitigation policies and action
- Challenges
- ICA process

COUNTRY PROFILE

Mongolia is a land-locked country located at high elevated between Russia and China.

- **Area:** 1.56 Million sq.km
- **Total population**: 3,1 Million
- **Population density:** 1.7 person per sq.km



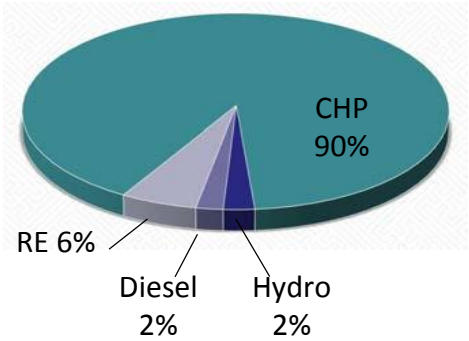
✓ Annual mean T ° **↑2.24°C** /1940-2015, compared with 1961-1990/

✓ Annual precipitation **↓7.3%** /1940-2015, compared with 1961-1990/

✓ Coal reserves: 173B.tons

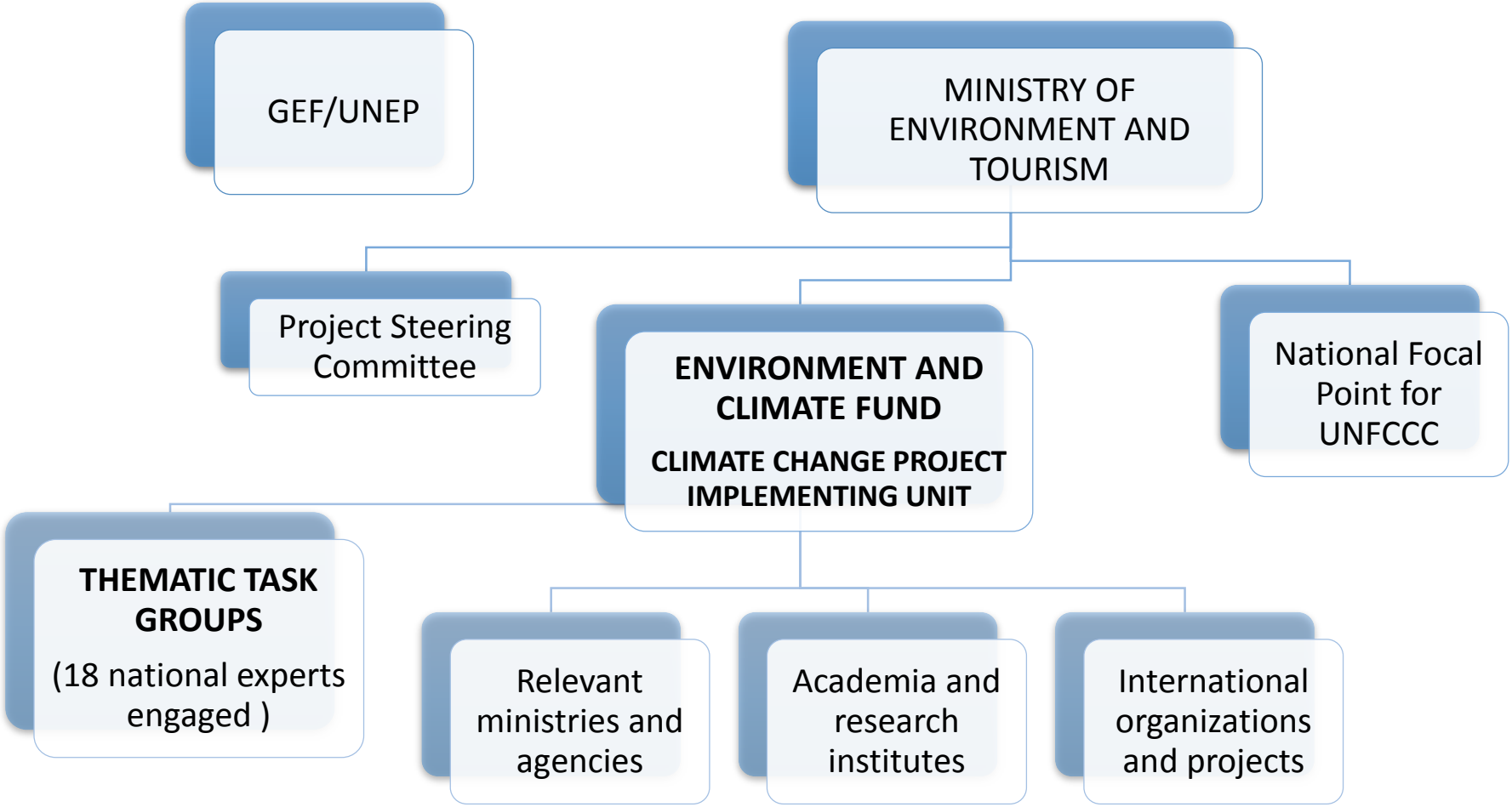
✓ Primary source of energy: coal

✓ Total Inst. Capacity



- Landscapes and climate: *diverse and severe continental*
- Resource dependent economy: *setbacks and declines*

INSTITUTIONAL ARRANGEMENT OF FIRST BUR



Law on air (2012)

24.2. The Office shall organize the census of greenhouse gas emission and absorption in accordance with the methodology adopted by the Conference of the Parties to the Convention.

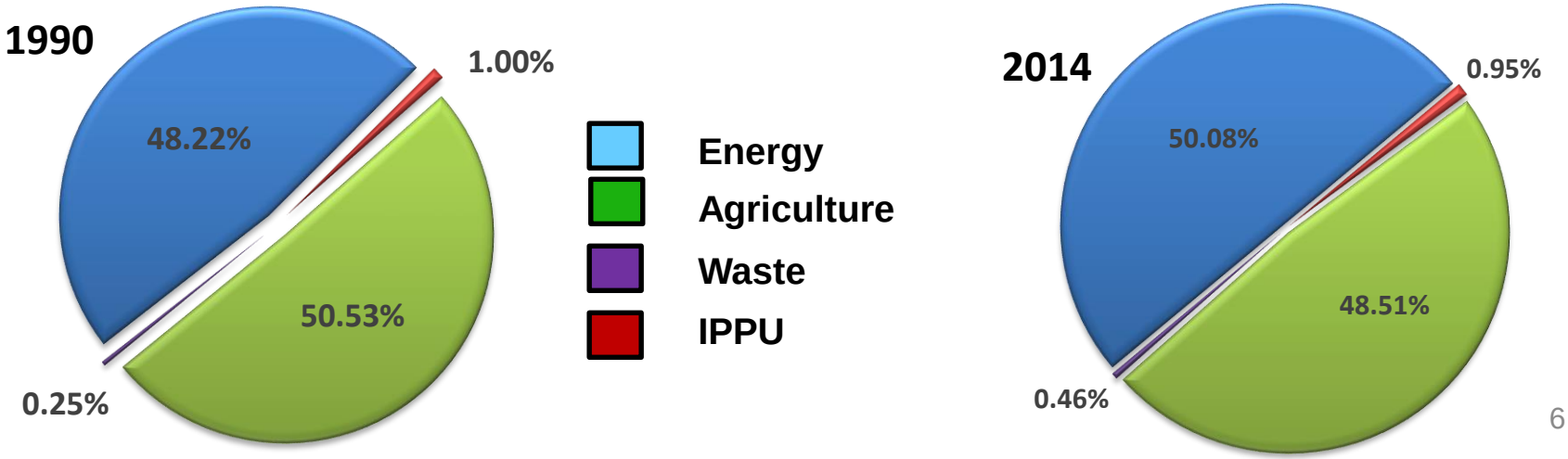
Mongolia's NC and BUR reports

Report	Submission Year	GHG Inventory Year	Methodology
First National Communication	2001	1990-1998	1996 IPCC Revised Guidelines
Second National Communication	2010	1990-2006	1996 IPCC Revised Guidelines
Initial BUR	2017 August	1990-2014	**2006 IPCC Guidelines**
Third National Communication	2018 May		

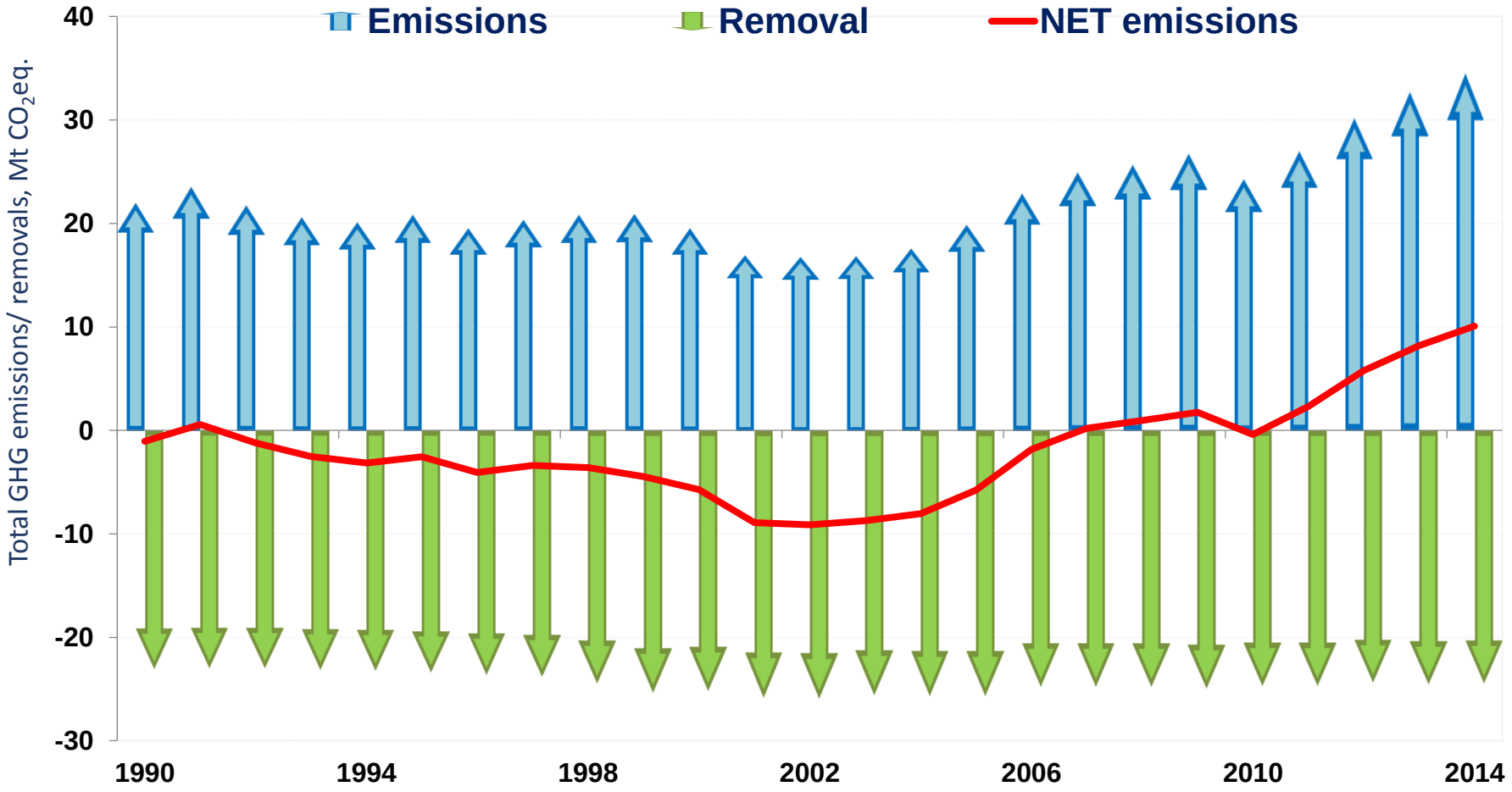
Total GHG emissions/removals Gg CO_2e

GHG categories	GHG emissions/removals ($Gg\ CO_2e$)		Difference 1990 ($Gg\ CO_2e$)	Difference (%)
	1990	2014		
Energy	11,091.14	17,267.79	6,176.64	55.69
Industrial processes and product use	218.66	328.06	109.39	50.03
Agriculture	10,585.30	16,726.98	6,141.68	58.02
Waste	55.62	159.91	104.29	187.49
Total (excl. LULUCF)	**21,950.73**	**34,482.73**	**12,532.00**	**57.09**
LULUCF	-23,024.18	-24,451.93	-1,427.75	6.20
Total (incl. LULUCF)	**-1,073.46**	**10,030.80**	**11,104.26**	**1,034.44**

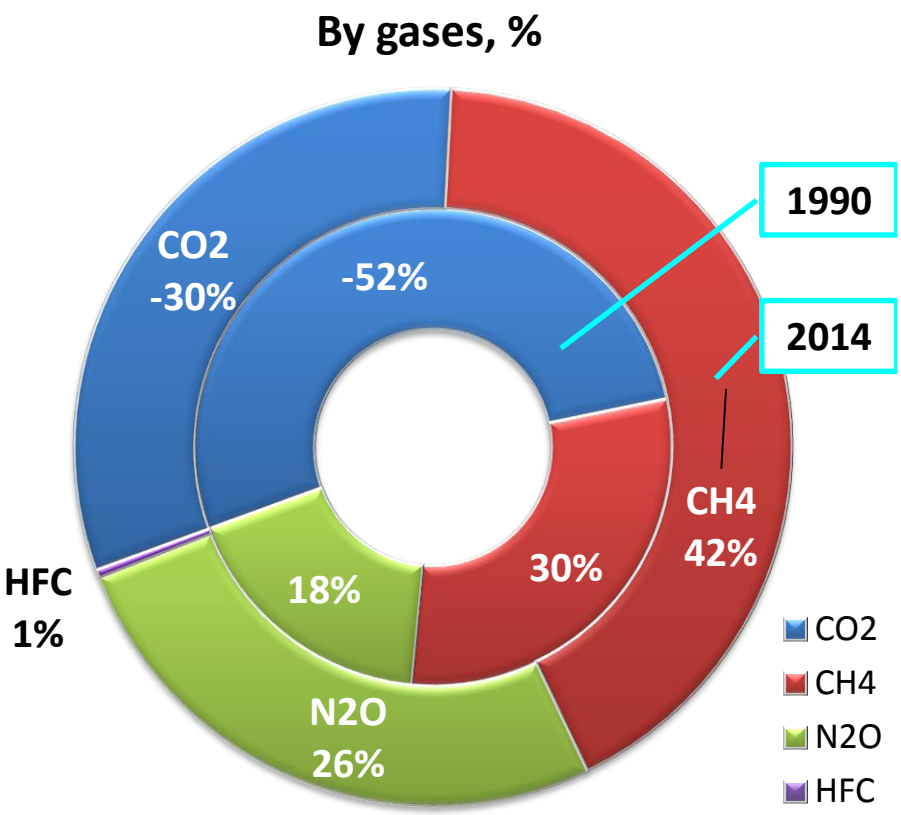
GHG emissions (by sectors 1990, 2014)

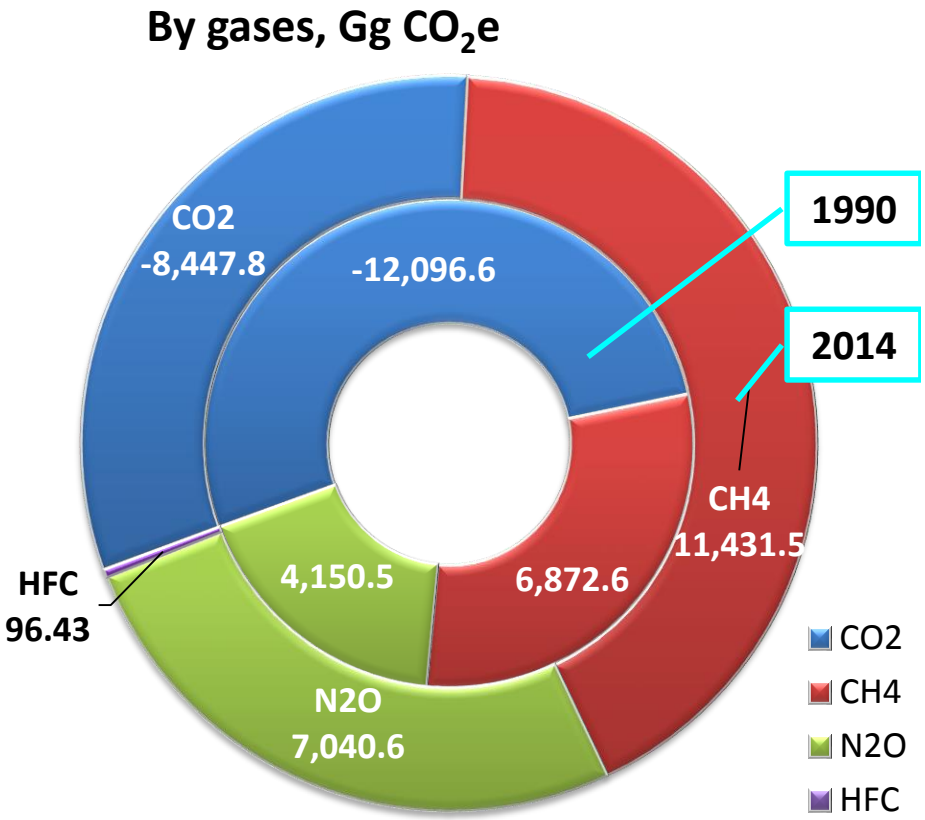


Total GHG emissions/removals
Mt CO_2e between 1990 and 2014



GHG emissions (by gases)





Greenhouse gases	1990 (Gg CO_2e)	2014 (Gg CO_2e)	Difference 2014/1990
Carbon dioxide (CO_2)	-12,096.6	-8,447.8	-30%
Methane (CH_4)	6,872.6	11,431.5	66%
Nitrous oxide (N_2O)	4,150.5	7,040.6	69%

Data sources for the GHG Inventory

Data source levels	Energy	Industrial processes and product use	Agriculture, Forest and Other Land Use	Waste
1st	National Statistics Office*			
2nd	Ministry of Energy*, Ministry of Road and Transport, Ministry of Mining*, Mongolian University of Science and Technology (MUST)	Ministry of Industry*, Ministry of Agriculture*, Ministry of Finance	Ministry of Agriculture*, Ministry of Construction and Urban Development*, MAS: Research Institutes, Universities: NUM, MULS Ministry of Environment and Tourism: FRDC, Environmental Information Center GIZ, UNREDD, FAO	Municipality of UB city*/Mayor office of UB city, Ministry of Construction and Urban Development*, Ministry of Industry*, Ministry of Agriculture* Water supply and sewerage authority of UB city
3rd	IEA, FAOSTAT etc.,			

(*established MoU in May, 2015)

KEY CLIMATE CHANGE RELATED POLICY OBJECTIVES

National action program on Climate Change (approved: Parliament, 2011) /2011-2021/

- First phase (2011-2016), national mitigation and adaptation capacity will be strengthened; legal environment, structure, institutional and management system will be set-up; and community and public awareness and participation in climate change activities will be improved.
- Second phase (2017-2021), climate change adaptation measures will be implemented and GHG mitigation actions will commence.

Green Development Policy of Mongolia (approved: Parliament, 2014) /2014-2030 /

- To develop green and smart city
- Identify the smart city criteria and award the smart cities every year
- Reduce building heat losses by 20 percent by 2020, and by 40 percent by 2030, through the introduction of green solutions such as energy efficient and advanced technologies and standards, green building rating systems and energy audits, and the implementation of incentive and leverage mechanisms.

Intended Nationally Determined Contribution (approved: Parliament, 2016) /2020-2030/

- 14% reduction in total national GHG emissions excluding LULUCF by 2030, compared to the projected emissions under a business as usual scenario.

Sustainable Development Vision of Mongolia 2030 (approved: Parliament, 2016) /2016-2030/

- Improve the legal environment for urban and land development based on the extant population settlements and residential systems.
- Provide greater independence to urban areas and settlements, build roads and transportation, and engineering infrastructure, create a healthy, safe and comfortable living environment for citizens, and improve urban planning in the line with world-class green development model.

INTENDED NATIONALLY DETERMINED CONTRIBUTION (INDC) - 2015

Timeframe	**to 2030**
Type of contribution	Policies and measures
Sectors	All sectors which covered by GHG Inventory 1. Energy, 2. Industry, 3. Agriculture, 4. Land Use Change and Forestry, 5. Waste
Gases	CO_2, CH_4, N_2O
GHG emissions reduction	The expected mitigation impact of policies and measures will be a 14% reduction in total GHG emissions excluding LULUCF by 2030, compared to the projected emissions under a BAU scenario.
Base year	2010
Components	Mitigation, Adaptation, Technology, Finance, Capacity building

Clean Development Mechanism

№	Project	Main implementer		Duration of Implementation
1	Taishir Hydropower Project in Western Mongolia	Financial information: No information is available		Credit issuing period: 2008-2015 Project life: 50 years
		Japan: Mitsubishi UFJ Securities Co., Ltd	Mongolia (host): Energy Research and Development Center (ERDC)	Status: Registered, credit issued, normal functioning
2	Durgun Hydropower Project in Western Mongolia	Financial information: No information is available		Credit issuing period: 2007-2014 Project life: 100 years
		Japan: Mitsubishi UFJ Securities Co., Ltd	Mongolia (host): Energy Research and Development Center (ERDC)	Status: Registered, Credit issued, normal functioning
3	Salkhit Wind Farm in Tuv aimag	Financial information: No information is available		Credit issuing period: 2013-2020
		Sweden: Swedish Energy Agency (public entity)	Mongolia (host): Clean Energy LLC (private entity)	Status: Registered, Credit issuing, normal functioning

Joint Crediting Mechanism

№	Project	Main implementer		Implement period
1	Centralization of heat supply system by installation of high-efficiency Heat Only Boilers/118th School of Ulaanbaatar City, Bornuur soum Project/	Grant Funding from JCM: /50% of total cost/		2015-2020
		Japan: Suuri-Keikaku Co.,Ltd.	Mongolia: Anu-Service Co.,Ltd.	Status: Model project /Registered, credit issued/
2	10MW Solar Power Project in Darkhan City	Grant Funding from JCM: /50% of total cost/		2017-2030
		Japan: Sharp corporation	Mongolia: Solar Power International LLC	Status: Model project /Registered, credit issued/
3	2.1MW Solar Power Plant project in UB Suburb (Everyday Farm)	Grant Funding from JCM: /50% of total cost/		2017-2030
		Japan: Farmdo Co.,Ltd	Mongolia: Everyday Farm LLC	Status: Model project /Registered/
4	8.3MW Solar Power Plant project in UB Suburb (Everyday Farm)	Planning to grant from JCM: /40% of total cost/		2017-2030
		Japan: Farmdo Co.,Ltd	Mongolia: Everyday Farm LLC	Status: Model project
5	A high efficiency and low loss power transmission and distribution system in Mongolia	Planning to grant from JCM: No information is available		2017-2030
		Japan: Hitachi Ltd	Mongolia: National Power Transmission Grid	Status: Model project /Registered, Demonstration Project/
6	15MW Solar Power System near a new airport	Planning to grant from JCM: /26% of total cost/		2017-2030
		Japan: Sharp corporation	Mongolia: Tenuun Gerel Construction LLC	Status: Model Project
	6 projects	Grant from Japanese government: 29 million USD		

Nationally Appropriate Mitigation Actions (NAMA)

№	Sector	Project	Main implementer, financial information	Implementation period
1	Construction	Building energy efficiency	MEGD/ MCUD /UNDP	2009-2013 Status: Project completed
		NAMA in the construction sector to reduce GHG emission	MCUD/ Government/ MET/ MoE/UNDP Total budget: 8,169,863 USD GEF: 1,269,863 USD Government: 3,350,000 USD Private company: 3,450,000 USD UNDP: 100,000 USD	2017-2020 Status: In operation Expected GHG Emission Reductions: • During the project period: 10,709tonnCO2/per year • After the project completion:64,219tonnCO2/per year
2	Transport	Green Public Transport	MEGD/ MCUD/ GGGI	2012-2013 Status: Project completed
3	Livestock and grassland	Strengthening Carbon Financing for Regional Grassland Management in NE Asia	MEGD/ MOFA/ ADB	2011-2013 Status: Project completed
4	Forestry-REDD+	Biodiversity and Adaptation of Key Forest Ecosystems to Climate Change	MEGD/GIZ	2012-2022 Status: In operation
5	Energy	Joint study in Mongolia energy supply-improve CHP Plant	MEGD/OECC	2013 Status: Project completed

Crosscutting challenges

- Lack of technical and human capacity
- Insufficient data from sources
- Data gap
- Collecting data
  - Incomplete information or data format availability
  - Responsible person is unknown
  - Slow to provide information
  - There is no registration system
  - Lack of previous GHG inventories documentation

International Consultation and Analysis (ICA) The Technical Analysis

❖ The technical analysis of the BUR took place from **4 to 8 December 2017** in Bonn, Germany.

- Following the technical analysis of Mongolia's first BUR, the TTE prepared and shared a draft summary report with Mongolia on **1 March 2018** for its review and comment. Mongolia, in turn, provided its feedback on the draft summary report on **25 May 2018**.
- The TTE responded to and incorporated the Party's comments and finalized the summary report in consultation with Mongolia on **6 June 2018.**

Thank you very much!

Bayarlalaa!