МОНГОЛ УЛСЫН ЗАСГИЙН ГАЗАР

MINISTRY OF ENVIRONMENT, GREEN DEVELOPMENT AND TOURISM

CLIMATE CHANGE POLICY IN MONGOLIA

The 14th Workshop on GHG Inventory in Asia (WGIA14), 27th July, Ulaanbaatar, Mongolia

GERELT-OD Tsogtbaatar,
Green Development Policy, Strategy Planning Department, MEGDT

Mongolia Overview

Location: Northern Asia between Russia and China

Total area: 1,564,116 sq.km (99% land, less than 1% water surface)

Population: 3.0 million

Urban population: 67.9%

Rural population: 32.1%

Population density: 1.76 person per sq.km

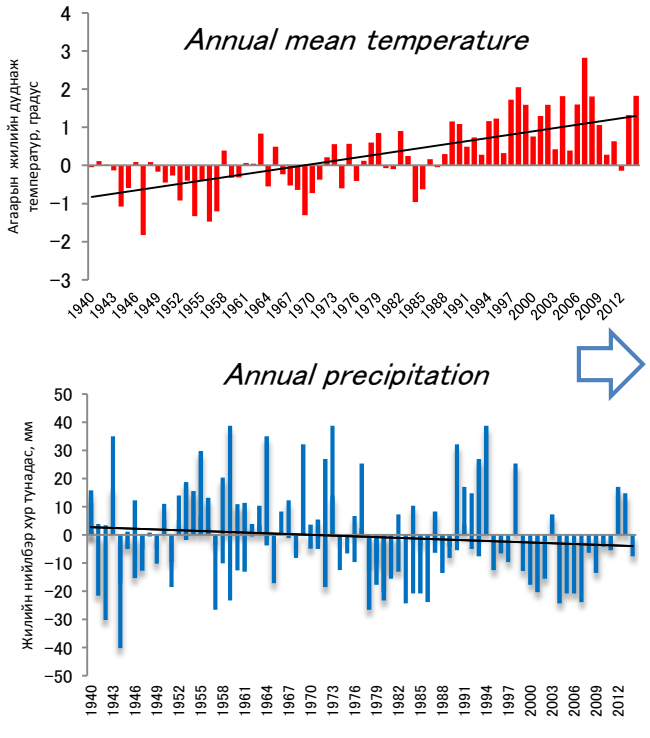
Capital city: Ulaanbaatar (home to nearly 1.2 million people, accounting for over 43% of the country's population). = 220 people per square meter

Climate: severe continental climate with distinctive 4 seasons

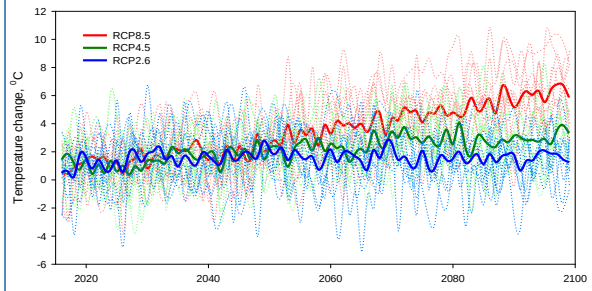
Natural zone: High Mountain, Taiga forest, Mountain forest steppe, Steppe , Desert Steppe, Gobi desert

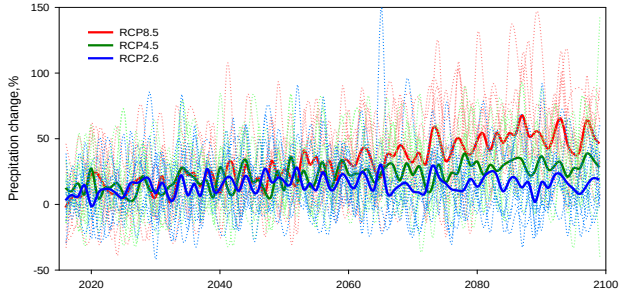
Climate Change in Mongolia

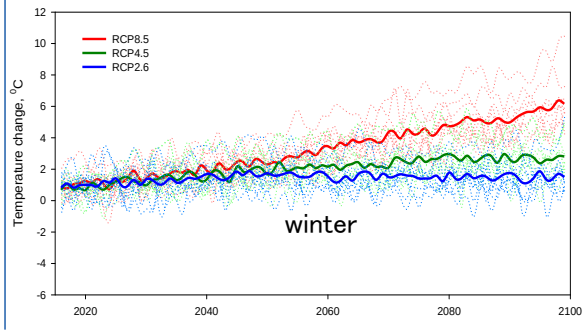
Present change and trends

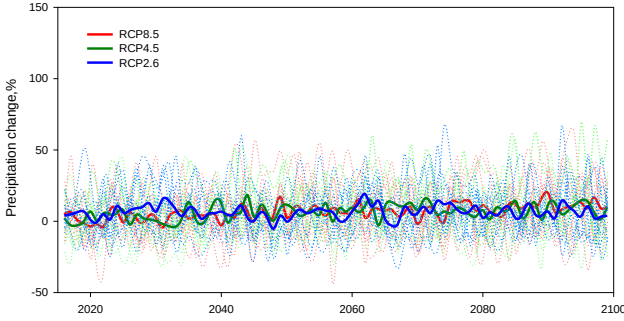


Future projection





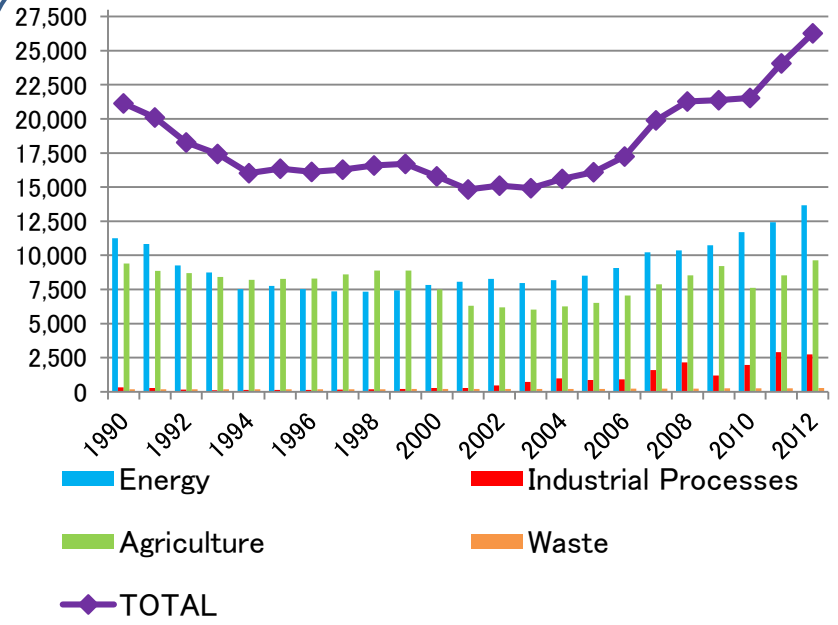




- According to the records at 48 meteorological stations which are distributed evenly over the territory of Mongolia, the annual mean temperature of Mongolia increased by 2.07°C during the last 70 years.
- Temperature in all four seasons continue to increase. Precipitation will increase in winter and keep in summer

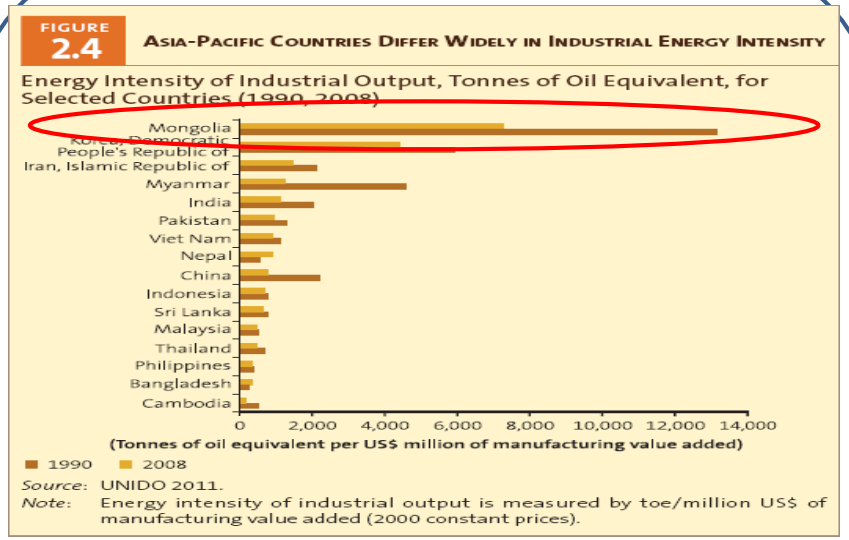
(Source: MARCC 14).

GHG EMISSIONS IN MONGOLIA

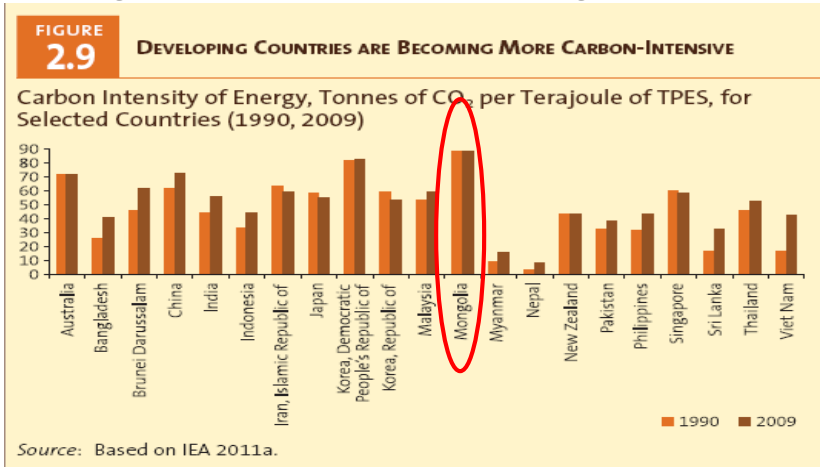


The total GHG emissions in Mongolia excluding the Land Use Change and Forestry sector and including Energy, Industrial Processes, Agriculture and Waste sectors in Gigagram Carbon dioxide equivalent unit for from 1990 to 2012 are presented in this figure. In 1990, the net GHG emissions were 21,146 Gigagram Carbon dioxide equivalent and reduced to 14,827 Gg CO2-eq in 2001. The reduction mostly due to a socio-economic slowdown during the transition period from centrally planned to a market economy.

Source: MARCC, 2014



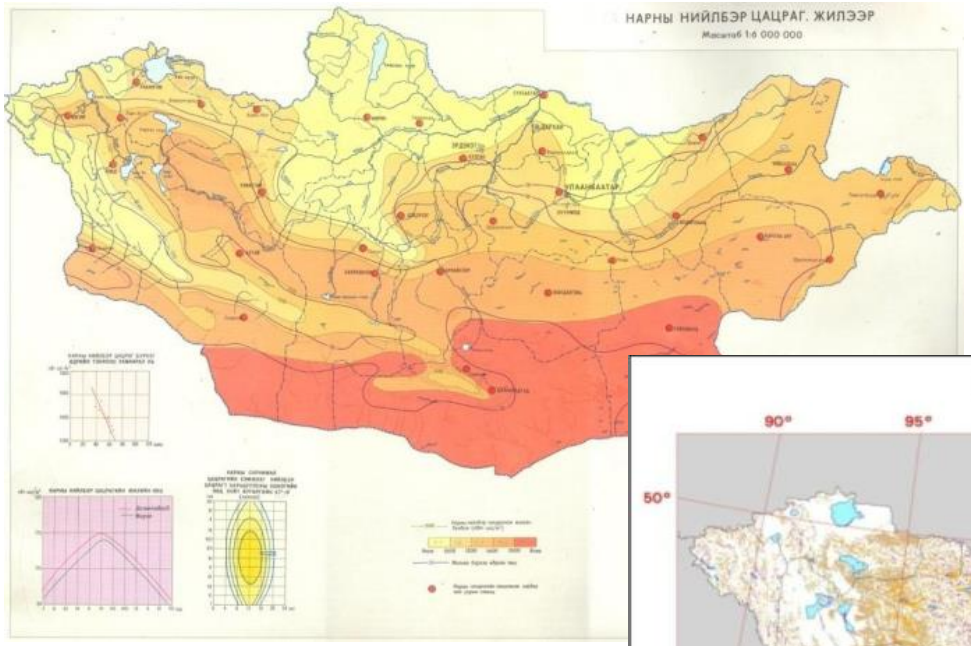
Energy intensity of industrial production in Mongolia is several times higher than other countries in the region.



Carbon intensity of Mongolian energy sector **is highest among regional countries** due to extensive use of coal for electricity and heat production.

Source: Asia Pacific HDR , 2012

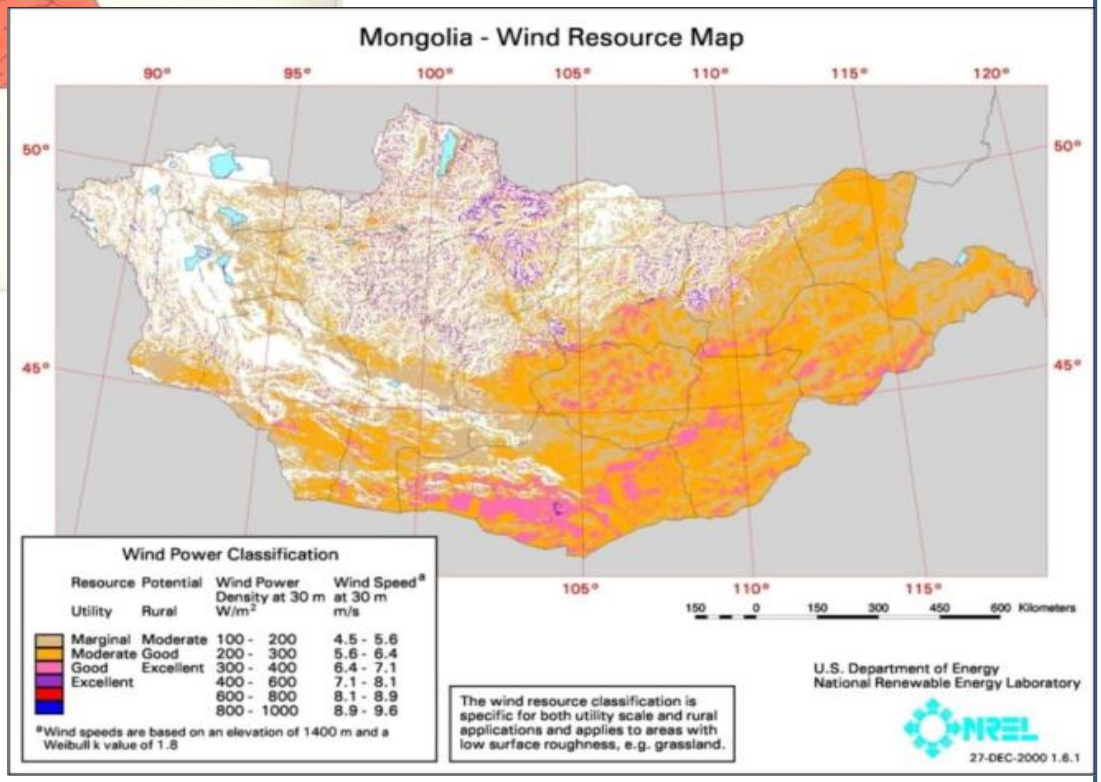
INCREASE UTILIZATION OF RENEWABLE ENERGY



Source: Ministry of Energy, Mongolia

Mongolia has extensive renewable energy resources (solar, wind …) yet to be utilized.

An annual average amount of solar energy is 1,400 kWh/m2/y with solar intensity of 4.3–4.7 kWh/m2 per day.



Source: U.S Department of Energy

Mongolia has potential to be a major wind power producer. Mongolia has enormous wind power resources; Good-to-excellent wind resources equivalent to **1,100 GW of wind electric potential.**

Legal background

Group of environmental laws /more than 30/

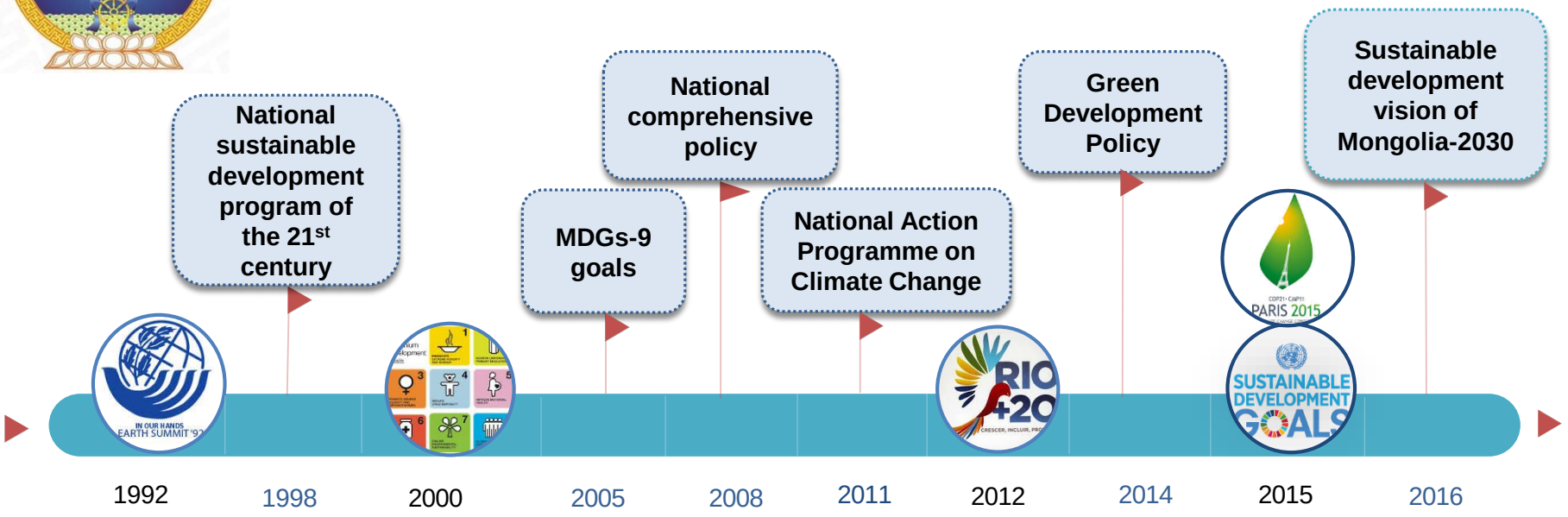
- **Law on Environmental Protection**
- **Law on Water**
- **Law on Forest**
- **Law on Special Protected Areas**
- **Law on Air**
- **Law on Environmental Impact assessment**
- **Law on Soil protection and combat desertification**
- **Others**

No	Name of program	Time frame
1.	State Policy on Ecology /1997/	1997–
2.	The Mongolia Action Programme for the 21st Century	1998–
3.	State Policy on Food and Agriculture /2003/	2003–
4.	National Renewable Energy Program /2005/	2005–2020
5.	Green belt national program /2005/	2005–2035
6.	Master Plan on Development of Science and Technology /2007/	2007–2020
7.	The Millennium Development Goals–based Comprehensive National Development Strategy of Mongolia /2008/	2008–2015
8.	State Policy on Herders /2009/	2009–
9.	New Reconstruction midterm Development Program /2010/	2010–2016

No	Name of program	Time frame
10.	Water national program /2010/	2010–2015 2016–2021
11.	National program on combat desertification /2010/	2010–2015 2016–2020
12.	National action programme on Climate change /2011/	2011–2016 2017–2021
13.	Green development action plan /2014/	2016–2030
14.	National program on Waste management /2014/	2014–2020
15.	National program on biodiversity /2015/	2015–2030
16.	National program on tourism /2015 /	2016–2020 2021–2025
17.	Forest Policy /2015/	2015–2020 2021–2030
18	State Policy on Energy /2015/	2015–2030
19.	Mongolian Sustainable Development Vision /2016/	2016–2030

Key Policy Documents

CHRONOLOGY OF SUSTAINABLE DEVELOPMENT AND GREEN DEVELOPMENT



National Action Programme on Climate Change

- ✓ NAPCC was approved by the State Great Khural (Parliament) in 2000 and upgraded in 2011.
- ✓ The main goals of the program are to ensure environmental sustainability, development of socio-economic sectors adapted to climate change, reduction of vulnerabilities and risks, and mitigation of GHG emissions as well as promoting economic effectiveness and efficiency and implementation of 'green growth' policies.
- ✓ The implementation of the NAPCC will help Mongolia to create the capacity to adapt to climate change and establish a foundation for green economic growth and development.
- ✓ NAPCC includes both Adaptation and Mitigation strategies and measures for key socio-economic sectors of the country.

National Action Programme on Climate Change

Strategic Objectives

"Set up legal, structural and management systems that support measures against climate change"

"Ensure ecological balances and reduce socio economic vulnerabilities and risks step by step through strengthening of national adaptation capacity to climate change"

"Mitigate GHG emission step by step and set up low carbon economy through introduction of environment friendly technologies and improvement of effectiveness and efficiency"

"Enhance national climate observation network, research and assessment "

"Conduct public awareness and support citizen and community participation in actions against climate change"

First Phase Implementation Plan Of The National Action Program On Climate Change

First

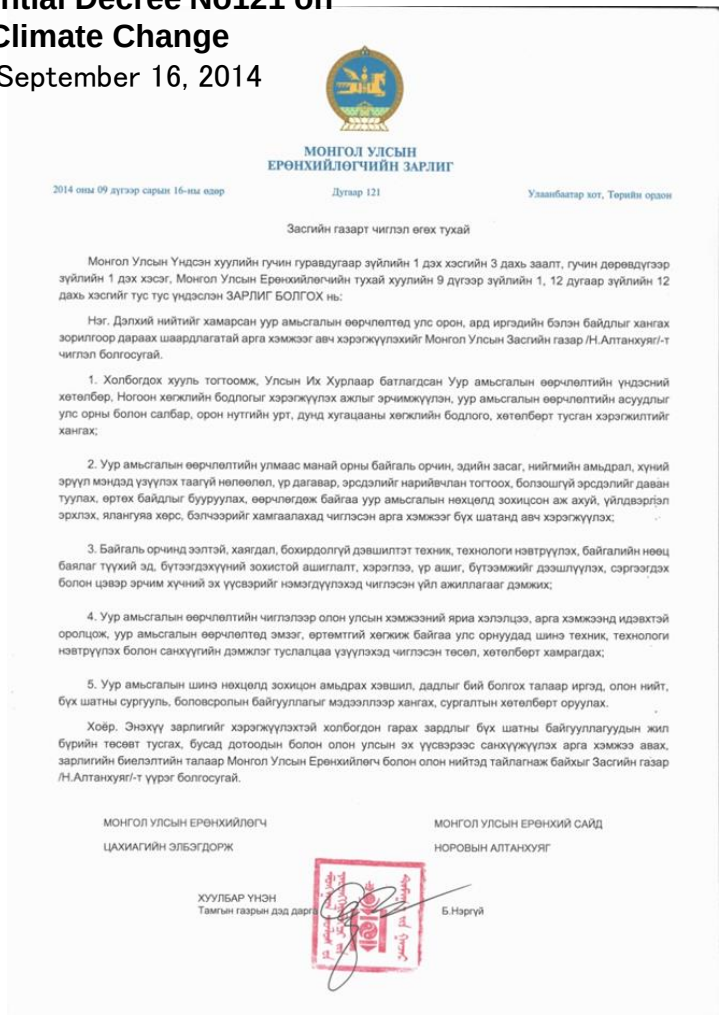
- national
  capacities
- legal, struc nt
  systems will be
- community and public participation will be improved.

Second phase(2016-2021)

- climate change adaptation and mitigation measures will be started up to implement.

Presidential Decree on Climate Change

Presidential Decree No121 on Climate Change
as September 16, 2014



МОНГОЛ УЛСЫН
ЕРӨНХИЙЛӨГЧИЙН ЗАРЛИГ

2014 оны 09 дүгээр сарын 16-ны өдөр | Дугаар 121 | Улаанбаатар хот, Төрийн ордон

Засгийн газарт чиглэл өгөх тухай

Монгол Улсын Үндсэн хуулийн гучин гуравдугаар зүйлийн 1 дэх хэсгийн 3 дахь заалт, гучин дөрөвдүгээр зүйлийн 1 дэх хэсэг, Монгол Улсын Ерөнхийлөгчийн тухай хуулийн 9 дүгээр зүйлийн 1, 12 дугаар зүйлийн 12 дахь хэсгийг тус тус үндэслэн ЗАРЛИГ БОЛГОХ нь:

Нэг. Дэлхий нийтийг хамарсан уур амьсгалын өөрчлөлтөд улс орон, ард иргэдийн бэлэн байдлыг хангах зорилгоор дараах шаардлагатай арга хэмжээг авч хэрэгжүүлэхийг Монгол Улсын Засгийн газар /Н.Алтанхуяг/-т чиглэл болгосугай.

1. Холбогдох хууль тогтоомж, Улсын Их Хурлаар батлагдсан Уур амьсгалын өөрчлөлтийн үндэсний хөтөлбөр, Ногоон хөгжлийн бодлогыг хэрэгжүүлэх ажлыг эрчимжүүлэн, уур амьсгалын өөрчлөлтийн асуудлыг улс орны болон салбар, орон нутгийн урт, дунд хугацааны хөгжлийн бодлого, хөтөлбөрт тусган хэрэгжилтийг хангах;

2. Уур амьсгалын өөрчлөлтийн улмаас манай орны байгаль орчин, эдийн засаг, нийгмийн амьдрал, хүний эрүүл мэндэд үзүүлэх таагүй нөлөөлөл, үр дагавар, эрсдэлийг нарийвчлан тогтоох, болзошгүй эрсдэлийг даван туулах, өртөх байдлыг бууруулах, өөрчлөгдөж байгаа уур амьсгалын нөхцөлд зохицсон аж ахуй, үйлдвэрлэл эрхлэх, алангуяа хөрс, бэлчээрийг хамгаалахад чиглэсэн арга хэмжээг бүх шатанд авч хэрэгжүүлэх;

3. Байгаль орчинд эерэгдэл, хохирдолгүй дэвшилтэт техник, технологи нэвтрүүлэх, байгалийн нөөц баялаг түүхий эд, бүтээгдэхүүний зохистой ашиглалт, хэрэглээ, үр ашиг, бүтээмжийг дээшлүүлэх, сэргээгдэх болон цэвэр эрчим хүчний эх үүсвэрийг нэмэгдүүлэхэд чиглэсэн үйл ажиллагааг дэмжих;

4. Уур амьсгалын өөрчлөлтийн чиглэлээр олон улсын хэмжээний яриа хэлэлцээ, арга хэмжээнд идэвхтэй оролцож, уур амьсгалын өөрчлөлтөд эмзэг, ертөнцтий хөгжиж байгаа улс орнуудад шинэ техник, технологи нэвтрүүлэх болон санхүүгийн дэмжлэг туслалцаа үзүүлэхэд чиглэсэн төсөл, хөтөлбөрт хамрагдах;

5. Уур амьсгалын шинэ нөхцөлд зохицон амьдрах хэвшил, дадлыг бий болгох талаар иргэд, олон нийт, бүх шатны сургууль, боловсролын байгууллагыг мэдээллээр хангах, сургалтын хөтөлбөрт оруулах.

Хоёр. Энэхүү зарлигийг хэрэгжүүлэхтэй холбогдон гарах зардлыг бүх шатны байгууллагуудын жил бүрийн төсөвт тусгах, бусад дотоодын болон олон улсын эх үүсвэрээс санхүүжүүлэх арга хэмжээ авах, зарлигийн биелэлтийн талаар Монгол Улсын Ерөнхийлөгч болон олон нийтэд тайлагнаж байхыг Засгийн газар /Н.Алтанхуяг/-т үүрэг болгосугай.

МОНГОЛ УЛСЫН ЕРӨНХИЙЛӨГЧ
ЦАХИАГИЙН ЭЛБЭГДОРЖ

МОНГОЛ УЛСЫН ЕРӨНХИЙ САЙД
НОРОВЫН АЛТАНХУЯГ

ХУУЛБАР ҮНЭН
Тамгын газрын дэд дарга Б.Нэргүй

- 1.1 To intensify the implementation of the National Action Plan on Climate change and other climate change related policies
- 1.2 To take actions on adaptation counter measures at any levels
- 1.3 To introduce environmentally friendly and zero waste technologies, to increase efficient use of natural resources and raw materials, and to support actions to increase Renewable Energy and clean energy sources
- 1.4 To activate the participation for international negotiations and get financial and technological support via implementing projects
- 1.5 To increase awareness for citizens and develop curriculum for schools

2. To issue budget for each fiscal year to implement this decree , take actions to get internal and external financial support and the government is obligated to fulfill and report the implementation of this decree for president and public.

Green Development Policy

Resolution No43 by the Parliament, 2014

The goal of the Green Development Policy is to advance Mongolia's national development in an environmentally sustainable manner, building the conditions for future generations to benefit and gain in the long term and to ensure environmental sustainability through creation of growth based on green development concepts and through citizens' participation and inclusiveness.

6 Strategic objectives

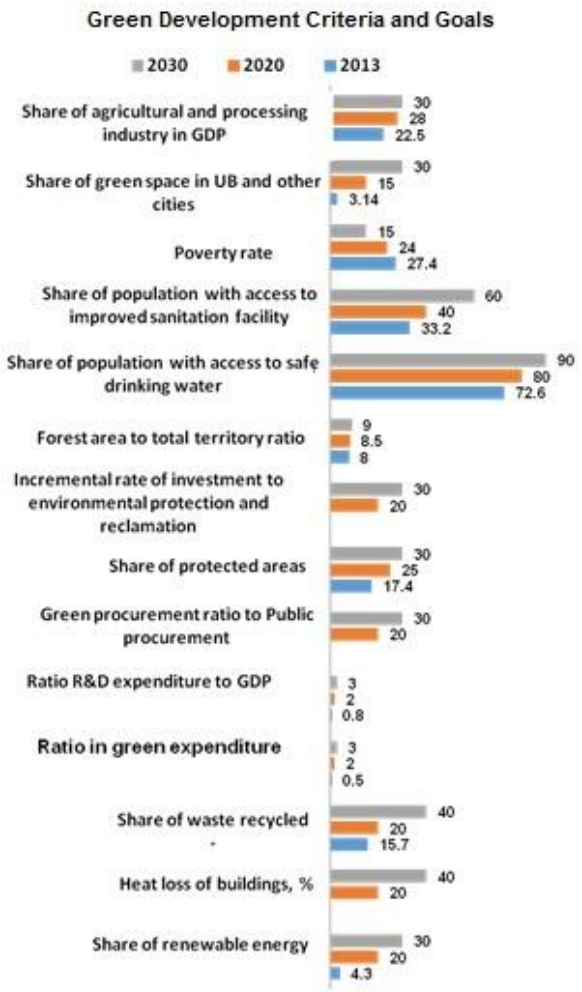
1. Promote resource efficient, low carbon production
2. Maintain ecosystem balance and reduce environmental degradation
3. Promote investment in environmental protection, human development and clean technology
4. Promote green jobs, reduce poverty and promote green lifestyle
5. Make education, science and technology and innovation
6. Plan and implement human settlement adapted to climate change

Period

Phase 1
2014-2020

Phase 2
2021-2030

Total budget required:
17 trillion MNT



Green Development Policy

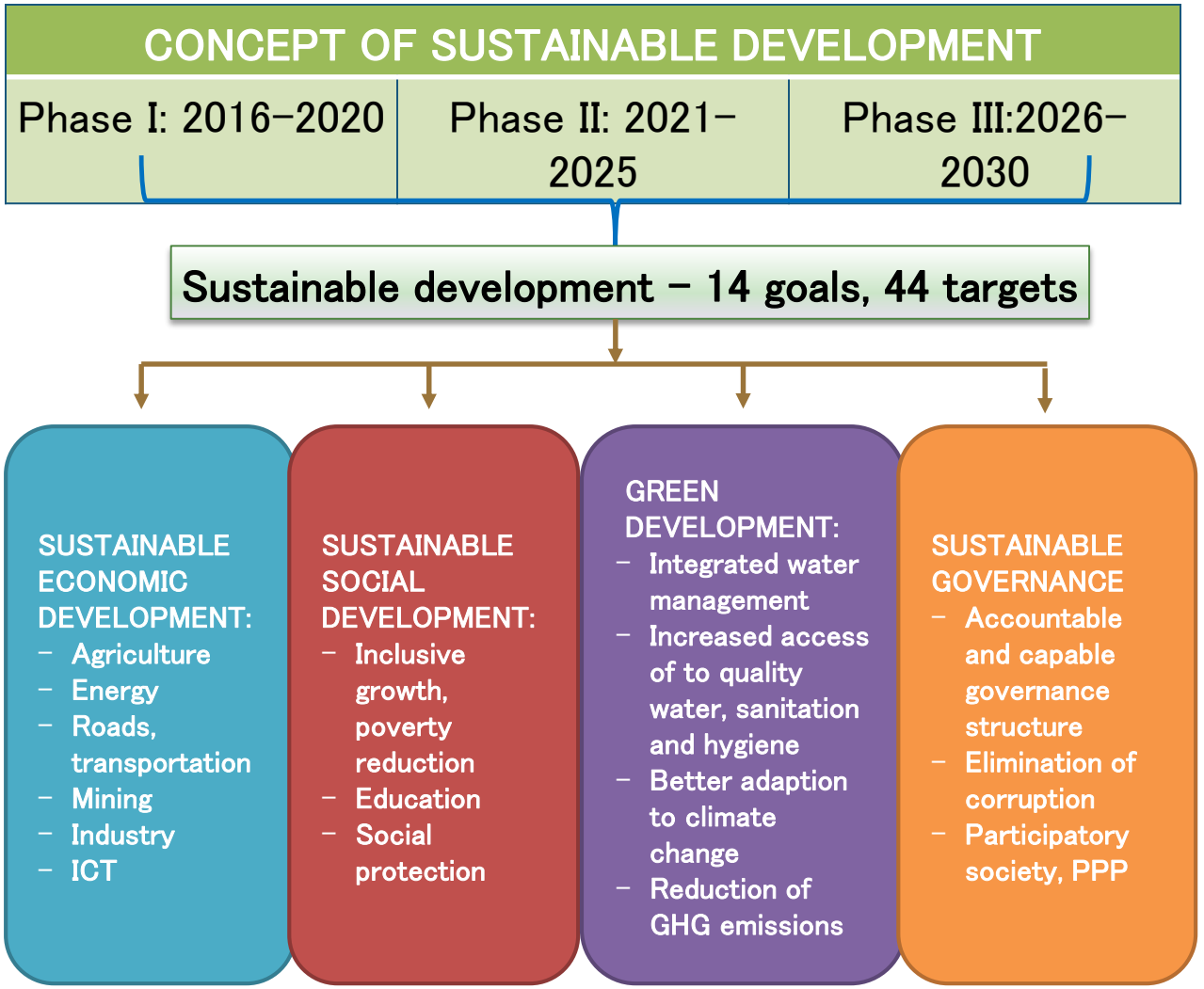
The Action plan for implementation of the Green Development Policy

Goal 1	• Renewable energy, energy efficiency, green building, extractive industry, processing industry transparency and accountability, environmental protection, restoration, environmentally friendly technology, sustainable agriculture 70 actions
Goal 2	• Ecosystem balance, use of environmental resources, environmental pollution, safe and healthy environment, climate change, desertification, land deterioration, eco tourism 63 actions
Goal 3	• Promotion of green economy, financing, tax, credit, incentive, subsidies, advanced technology, investment, sustainable public procurement 34 actions
Goal 4	• Green jobs, decent work, livelihood, mitigation and adaptation to climate change, coping with environmental disasters, green lifestyle 36 actions
Goal 5	• Education, science, innovation, technology, green technology investment, ISO 14000 environmental management standard, sustainable development and green economy education 17 actions
Goal 6	• Environmentally friendly infrastructure, transportation system, green and eco city, village, convienient living environment 34 actions

Mongolian Sustainable Development Vision - 2030

BY 2030, MONGOLIA WILL

- ✓ Become one of the leading MICs by per capita income;
- ✓ Have a diversified sustainable economy;
- ✓ Eradicate income inequality and have a majority of its population with average and higher levels of income;
- ✓ Maintain its pristine natural environment and sustainable ecology; and
- ✓ Promote sustainable democratic governance.



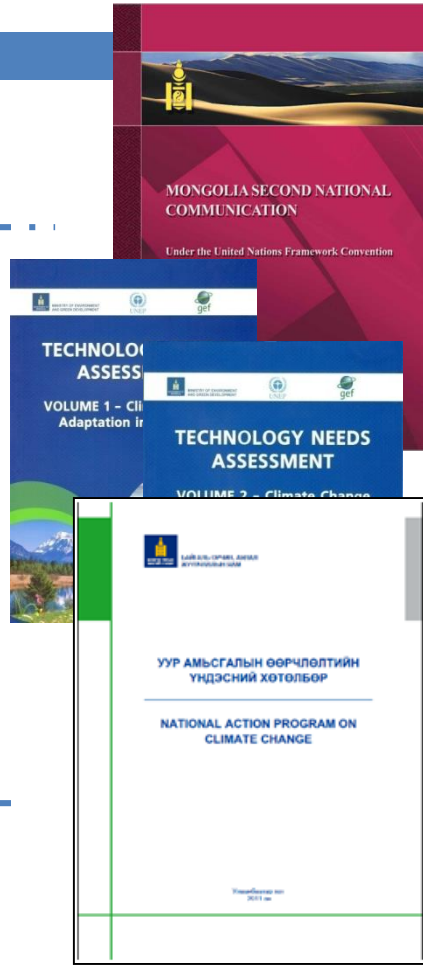
Source: Ministry of Finance of Mongolia

Current status of Mongolia under the UNFCCC

- Ratification of the UNFCCC (1993)
- Ratification of the Kyoto Protocol (1999)

Undertaken steps to implement UNFCCC's goal

- Initial national communication (1st November 2001)
- Submission on NAMAs (28th January 2010)
- Second national communication (10th December 2010)
- National Action Program on Climate Change (6th January 2011)
- Technology Needs Assessment (2013)
- Intended Nationally Determined Contributions (September 2015)
- Preparation of NAP (2016)



Upcoming steps to implement UNFCCC's goal

- Ratification of the Paris Agreement
- Ratification of the Doha Amendment
- Preparation of first Biennial Update Report (BUR)
- Preparation of Third National Communication (TNC)

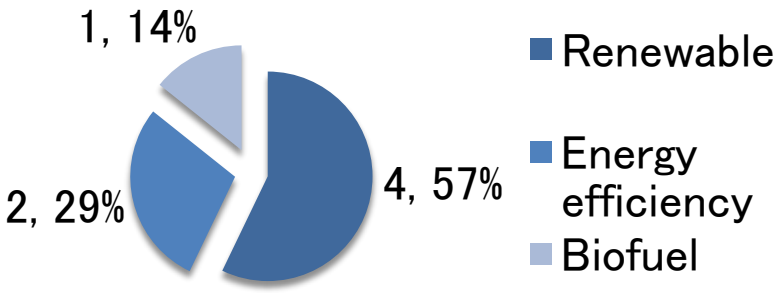
NAMA submission list

Publication date: 28th January 2010

No	Sector and Actions
1	Energy supply: Increase renewable options
2	Energy supply – Improve coal quality
3	Energy supply – Improve efficiency of heating boilers
4	Energy supply – Improving household stoves and furnaces
5	Energy supply – Improve CHP plants
6	Energy supply – Increase use of electricity for local heating in cities
7	Building – Building energy efficiency improvement
8	Industry – Energy efficiency improvement in industry
9	Transport –Use more efficient cars
10	Agriculture– Limit the increase of the total number of livestock by increasing the productivity of each type of animal, especially cattle
11	Forestry –Improve forest management

Current status of Clean Development Mechanism/CDM/ under Kyoto Protocol

Approved project type



Project Status	Num.
CDM projects registered at CDM executive board	5
CDM projects approved by DNA	7
CDM projects at or after the validation stage	2

	Registered CDM Projects					Rejected
	Num. of projects	Average annual emission reduction(tCO_2)	Total ERs by 2012 (tCO_2)	Amount of issued CERs (tCO_2)	Review Conducted	
Hydro Power	2	30,000	302,173	51,269	0	0
Wind Power	1	178,778	0	0	0	0
Energy Efficiency	1	11,904	83,328	0	0	0
Total	4	62,670	385,501	51,269	0	0

Source: CDM National Bureau, CCCO, MEGD

JOINT CREDITING MECHANISM (JCM)

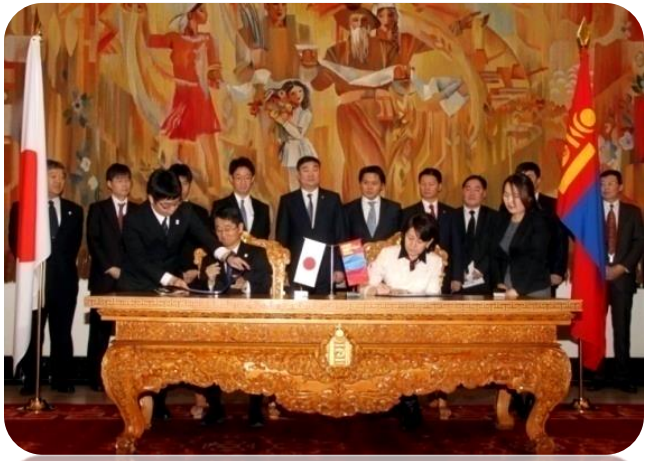
Road to "LCDP"

Governmental consultation
(Ulaanbaatar –3 July 2012)

Governmental consultation
(Tokyo –1 November 2012)

Governmental consultation
(Doha –30 November 2012)

Joint Statement
(Doha –6 December 2012)



Signing of the "Low Carbon Development Partnership" (bilateral document for the JCM)

(Ulaanbaatar– 8 January 2013)

Start of "JCM"

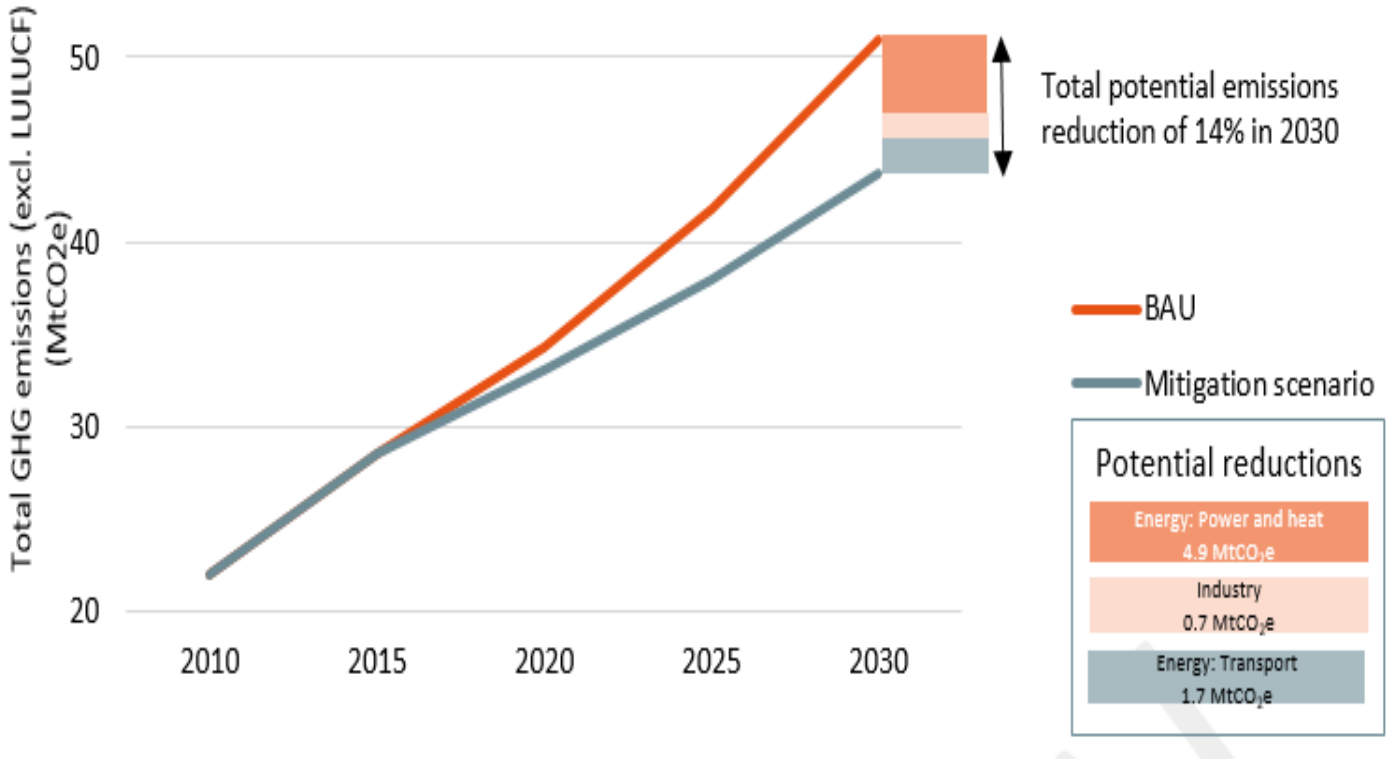
Technical Meeting between Mongolian and Japanese Government Officials (Ulaanbaatar – 28 Feb – 01 March, 2013)

JCM first Joint Committee meeting
(Ulaanbaatar – 11 April 2013)

Joint Committee

Mongolia	Japan
Co-Chair	Co-Chair
Members (7 Ministries and UB City Authority)	Members (2 Ministries and Japanese Embassy in Mongolia)
Secretariat	Secretariat
Observers	Observers

Intended Nationally Determined Contribution/INDC



- Mongolia submitted its INDC to UNFCCC in September, 2015
- Main goal is reduce GHG emission by14% in 2030 comparing to 2010

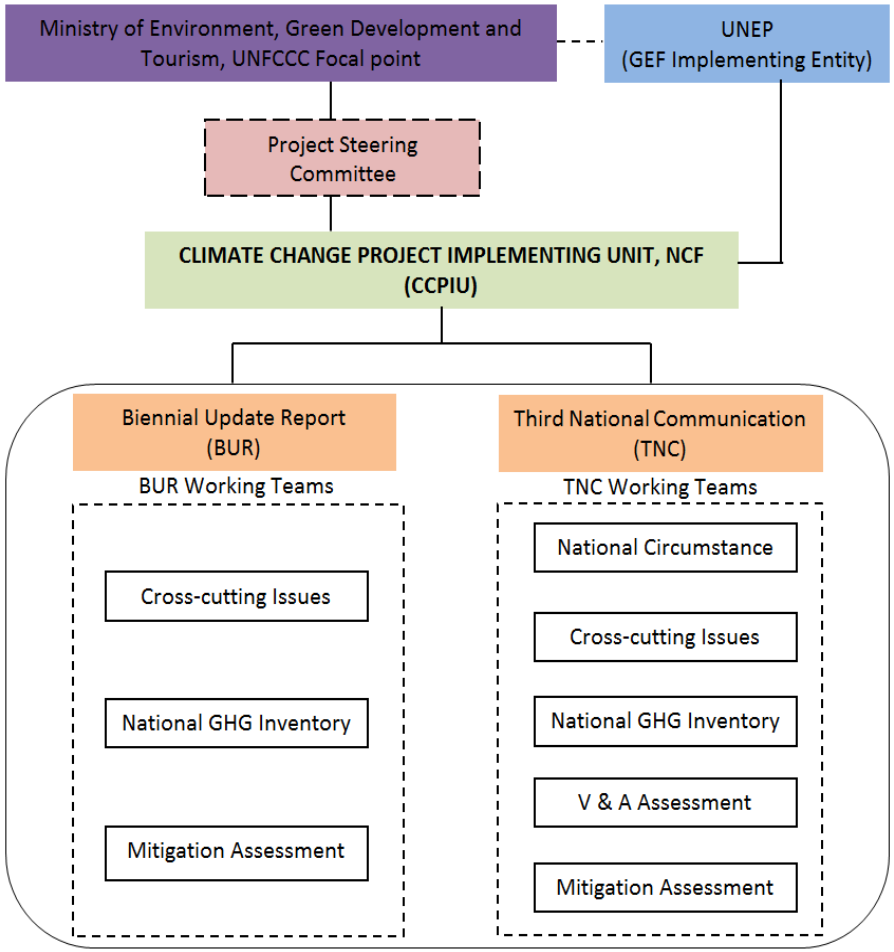
Preparation Progress of the Biennial Update Report of Mongolia

PROJECT NAME:	**Preparation of the Initial Biennial Update Report (BUR) under United Nations Framework Convention on Climate Change (UNFCCC) for Mongolia**
OBJECTIVE:	To prepare Mongolia's initial biennial update report consistent with the guidelines for the preparation of biennial annual report for Non-Annex 1 Parties, which contained in the Annex III to decision 2/COP.17 and submit it to the Secretariat
PROJECT NUMBER:	GFL-5070-2724-B36-2226
TYPE:	Enabling activity
EXECUTING AGENCY:	Nature Conservation Fund under the Ministry of Environment, Green Development & Tourism
IMPLEMENTING AGENCY:	UNEP
DURATION:	March 2015-July 2017
FUNDING:	GEF: USD 352,000 (Government of Mongolia: USD 30,000 in-kind contribution)
PROJECT COMPONENTS:	❑ 1. Strengthen the National GHG Inventory System and update the national inventory data between 2007 and 2012 ❑ 2.1 Describe mitigation actions and their effects, including associated methodologies and assumptions and progress of implementation in accordance with reporting guidelines ❑ 2.2 Define and establish domestic MRV arrangements for mitigation actions and its effects ❑ 3.1 Analyze and update national development priorities, circumstances and institutional arrangements for biennial update report ❑ 3.2 Establish framework for the continuous assessment and reporting of constraints, gaps and related financial, technical and capacity needs and support needed and received ❑ 3.3 Provide information on non-climate related impacts, opportunities and benefits on sustainable development objectives and

Preparation Progress of the Biennial Update Report of Mongolia

- Preparation of the BUR process officially began in April, 2015 (signing of agreement between MEGDT and UNEP as a GEF Implementing Entity)
- The Ministerial Order No A-118 on the appointment of Project Implementing Unit was issued on 27th February, the project management unit was established within the structure of the Nature Conservation Fund under the Ministry of Environment, Green Development and Tourism.
- First BUR of Mongolia will be submitted to UNFCCC in June, 2017

INSTITUTIONAL ARRANGEMENT OF THE NC & BUR, MONGOLIA



GHG Capacity Building

PROJECT FOR ESTABLISHMENT OF SUSTAINABLE NATIONAL GHG INVENTORY SYSTEM THROUGH CAPACITY BUILDING FOR GHG INVENTORY

Objective: Capacity development for improvement of greenhouse gas (GHG) inventories and establishment of national system on GHG inventory
Duration: ~4 year(expected)

Output 1. **Establish a national GHG inventory system** – Updated structure to improve National Inventory of GHG and institutionalization of the process of development of the inventory on a continuous and sustainable basis is developed and implemented.
Output 2. **Upgrade the reporting of GHG inventory** – An enhanced National Inventory of GHG emissions by sources and removal by sinks of Mongolia is presented to the UNFCCC via National Communications (NCs), Biennial Update Reports (BURs) and National GHG reports (NIRs).
Output 3. **Upgrade networking and policy guidance** – An improved knowledge and data sharing network on GHG inventory system between relevant institutions including *aimag* and *soum* authorities.

Thank you for your attention!