



GOVERNMENT OF  
MONGOLIA

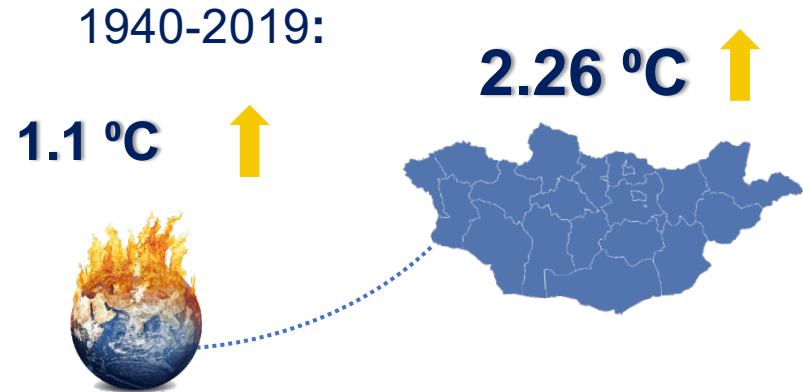
# Zero Carbon City International Forum 2023

## SESSION 1-1: SYNERGIES OF DECARBONIZATION AND RESILIENCE

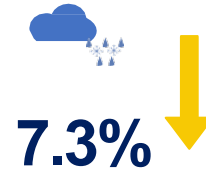
1 March 2023

**SUKHRAGCHAA Mijidsuren**  
NDC National Coordinator

# CLIMATE CHANGE IN MONGOLIA



Total annual precipitation



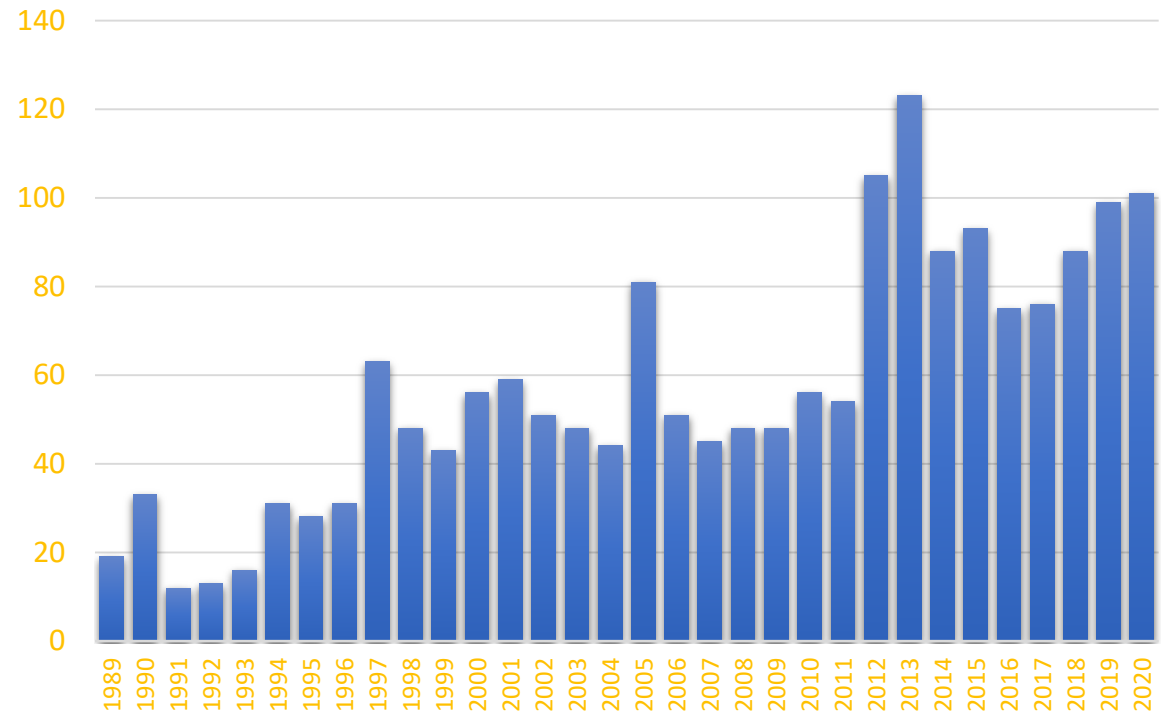
Amount of precipitation in winter 128 mm,  
Amount of precipitation in summer 22 mm



2020 surface water sources:

Rivers	Springs	Lakes	Spa
<b>6356</b>	<b>13222</b>	<b>6356</b>	<b>584</b>
<b>Drained</b>			
<b>116</b>	<b>381</b>	<b>180</b>	<b>5</b>

Number of disasters increased



# NATIONALLY DETERMINED CONTRIBUTION

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## Goal:

Implementation of the "Nationally Determined Contribution to the Paris Agreement" approved by Government Resolution No. 407 of 2019

Implementation period: 2021-2025

## Methodology:

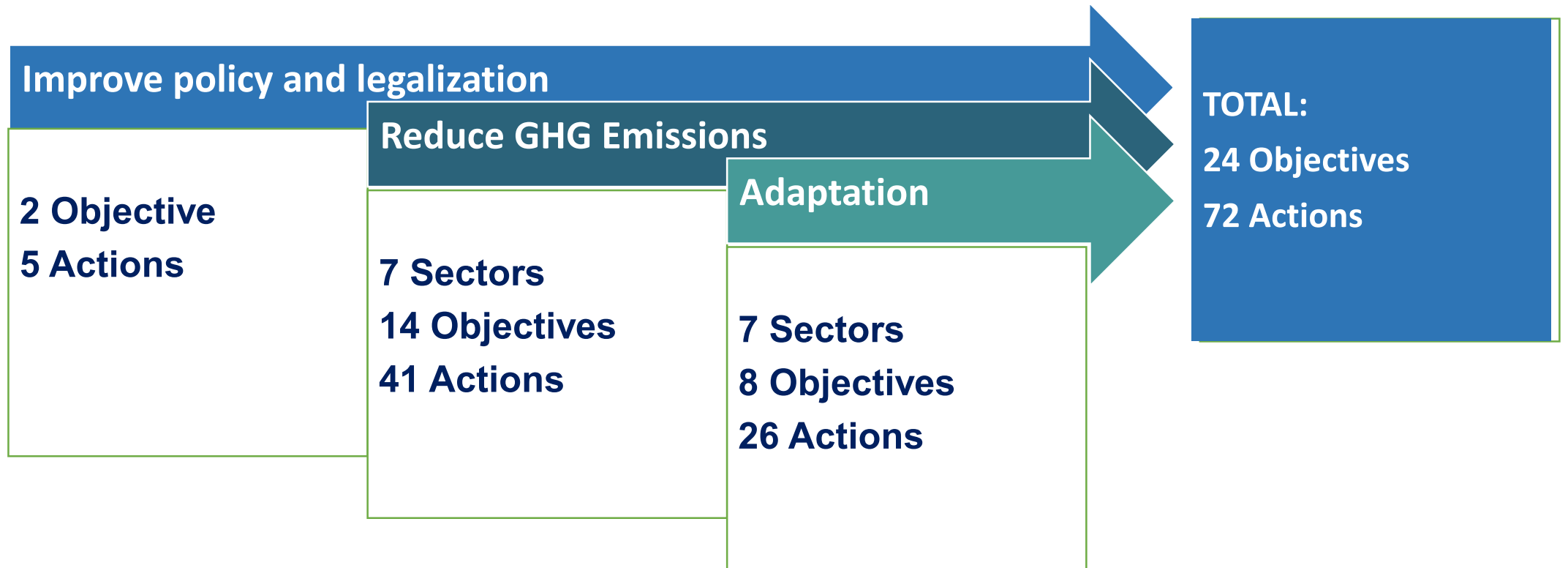
Law on Development Policy, Planning and Its Management (2020),  
Common Procedures for Developing Development Policy Documents (2016)  
Paris Agreement, and related international guidelines (IPCC),  
recommendations

**From 2026 to 2030**, another 5-years NDC Action Plan will be implemented.

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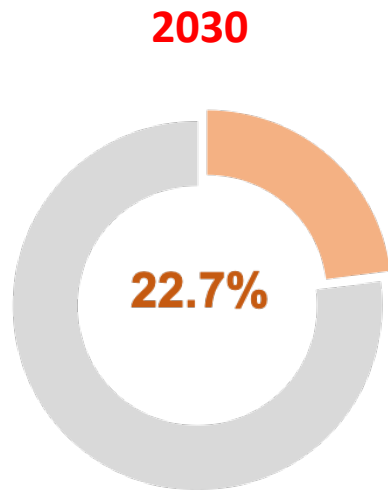
# NDC IMPLEMENTATION

**NDC (2021-2025)**  
**Main 3 directions:**



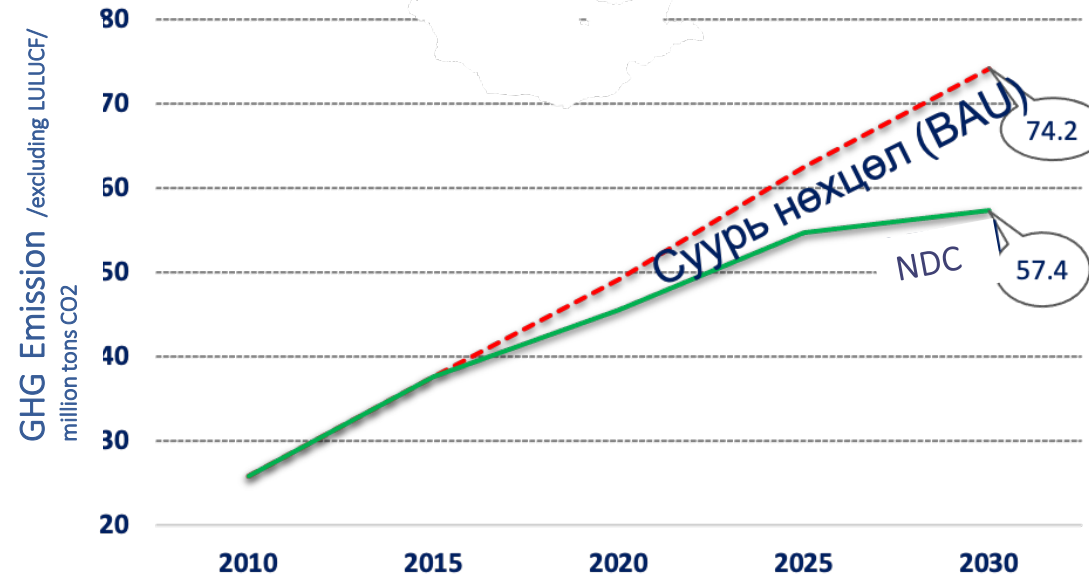
# NATIONALLY DETERMINED CONTRIBUTION (NDC) - TARGETS

## NDC TARGET

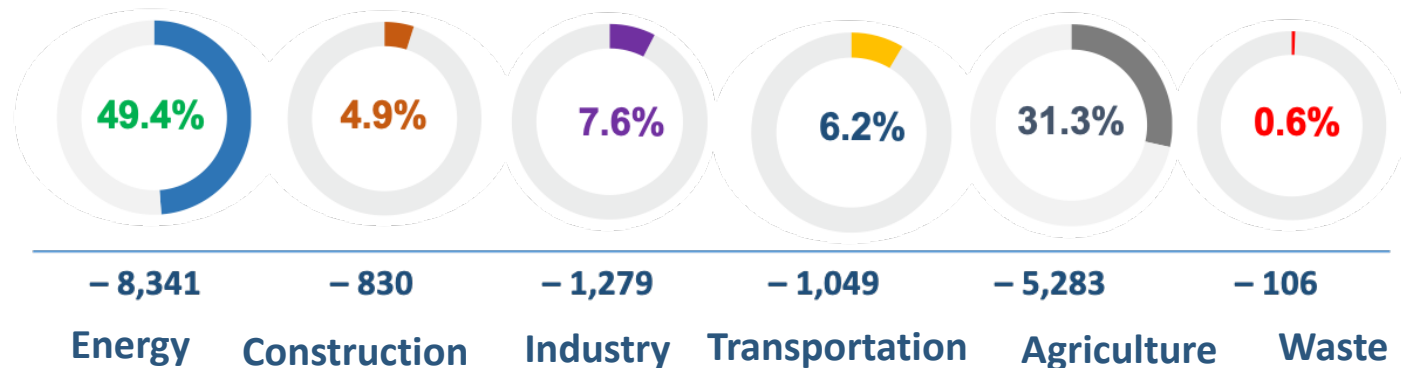


**+**  
LULUCF  
+  
NSPA  
**=**

**33.9%**



Total GHG reduction – 16.899 million tons CO<sub>2</sub>

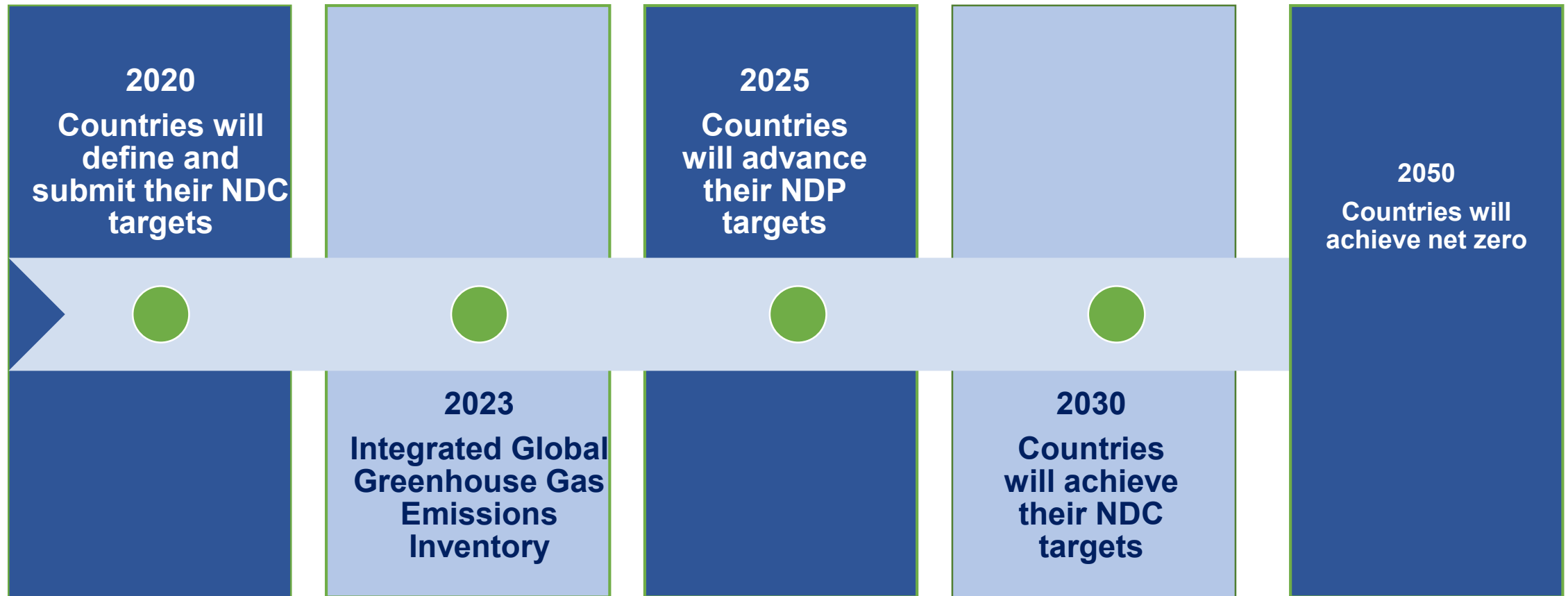


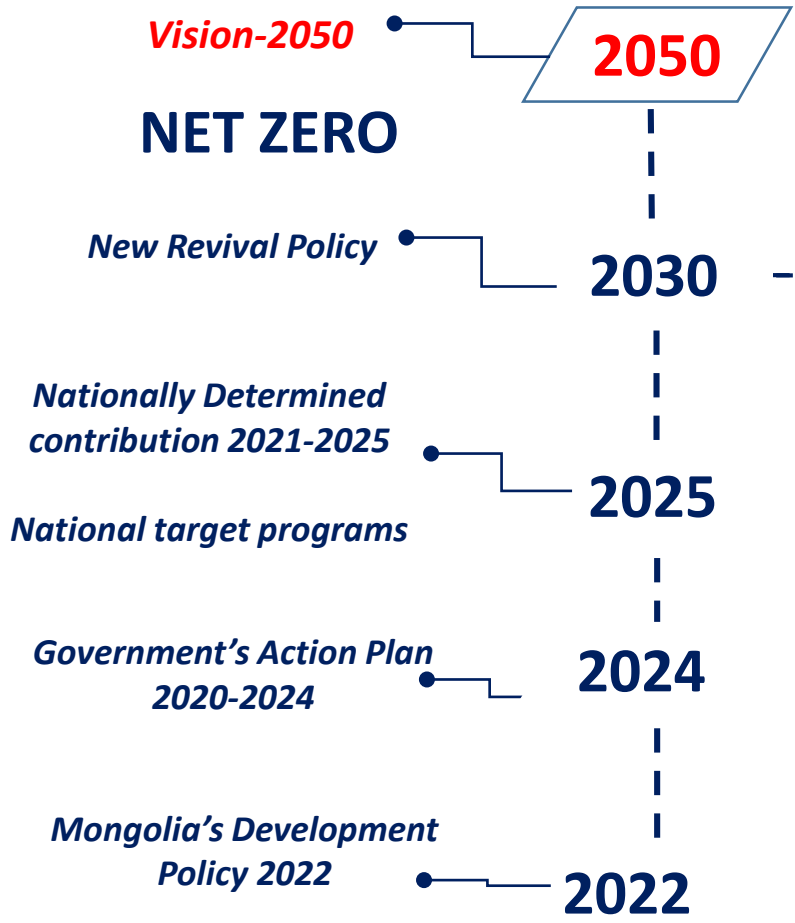
# COMMITMENT OF MONGOLIA

The President of Mongolia, U. Khurelsukh, announced during the COP 27 in Sharm El-Sheikh, Arab Republic of Egypt, that "by 2050, we are setting the goal of zeroing the gap between greenhouse gas emissions and absorption."



# IMPLEMENTATION OF PARIS AGREEMENT





**SUSTAINABLE DEVELOPMENT GOALS**



**NATIONALLY DETERMINED CONTRIBUTION TO PARIS AGREEMENT**

**1 Mitigation**

**22.7% - 2030**  
**16.89 mil. ton CO<sub>2</sub>**



**2023-2050**  
**NET ZERO**

Energy 8.34 mil tonn	Agriculture 5.28 mil tonn	Industry 1.28 mil tonn	Road, transport 1.05 mil tonn	Construction 830 thous, tonn	Waster 106.1 thous.tonn
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**2 Adaptation**

Water	Husbandry, pasture	Disaster management	Social care
Forest	Arable farming	Public Health	Biodiversity



# LEGAL AND POLICY FRAMEWORK

## Phase 1: 2020-2030

Establish and develop a national green financial system, to promote environmentally friendly, efficient, clean technology and efficient use

# VISION 2050

Phase 1: 2020-2030

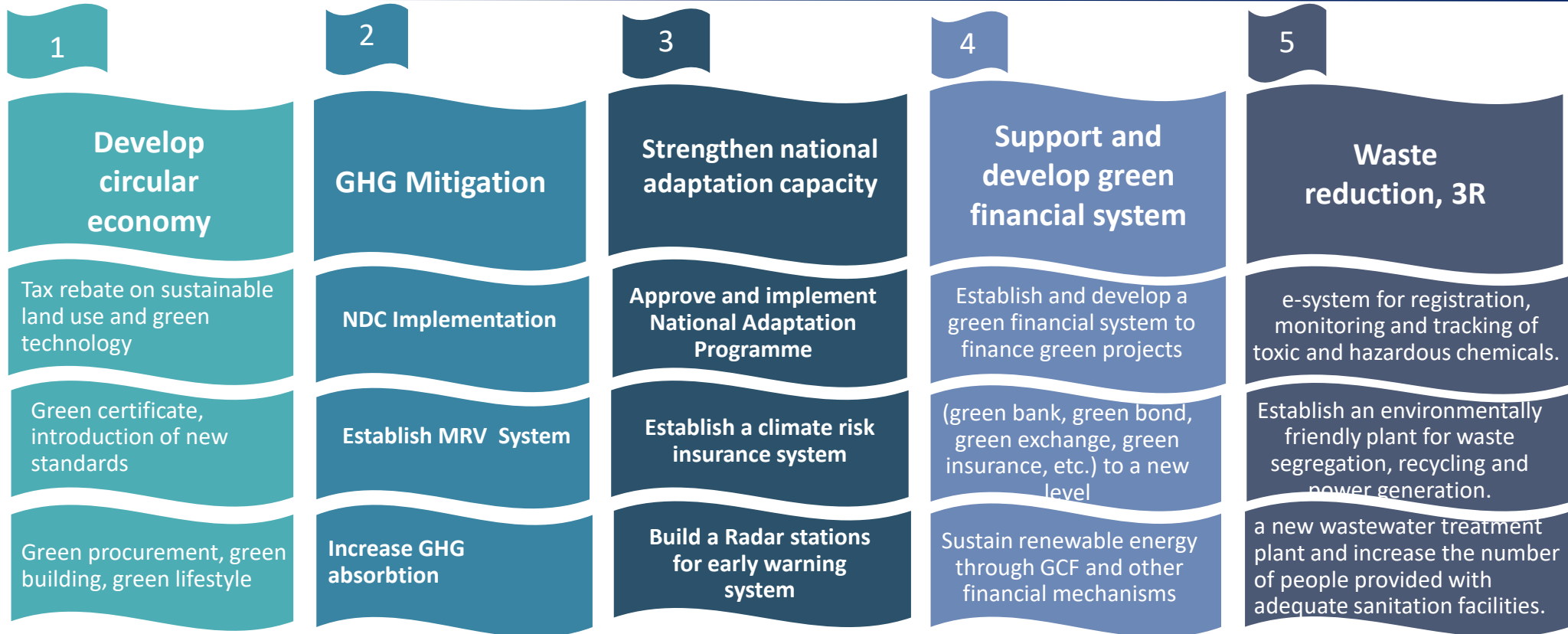
**Green technology, green economy**

Phase 2: 2031-2040

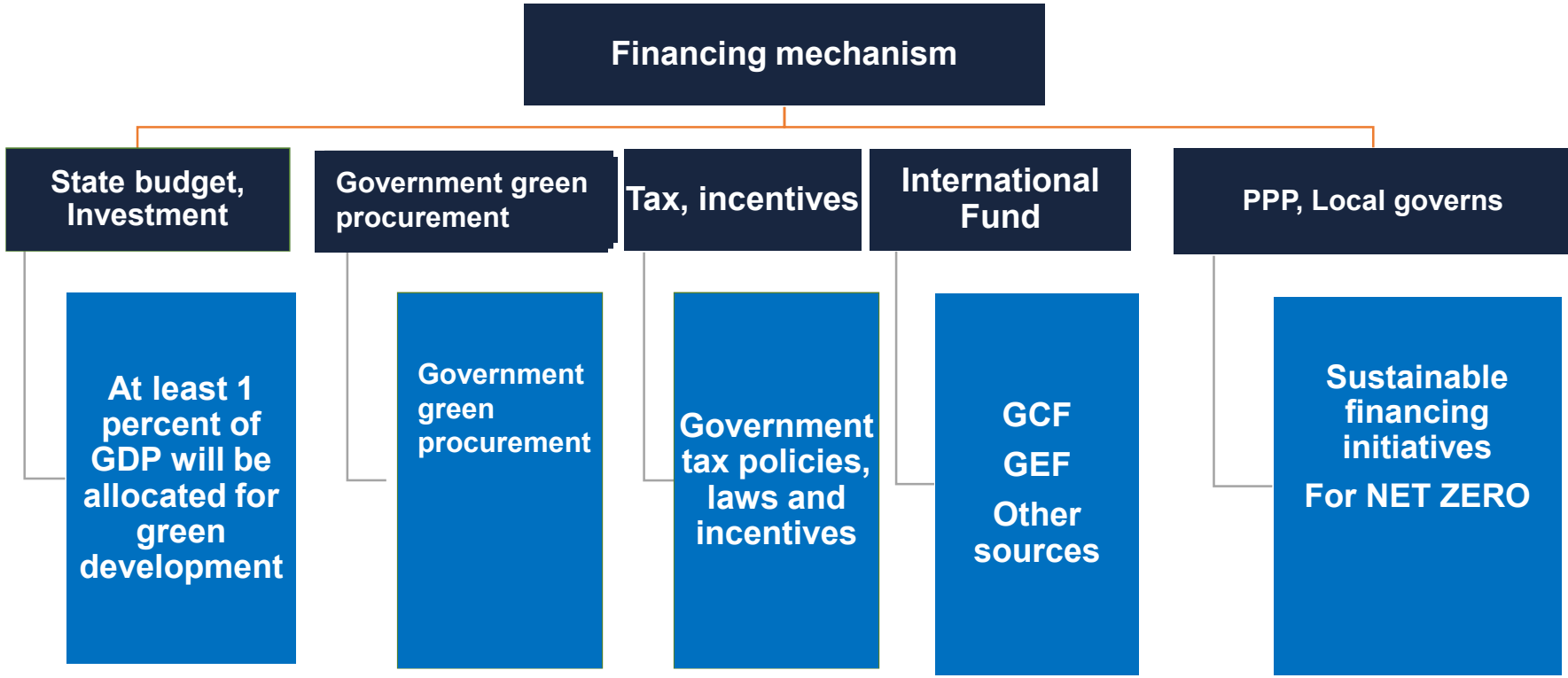
**Basis of Green development**

Phase 3: 2041-2050

**Sustainable Green Development**



# FINANCING MECHANISM



# CLIMATE FINANCE IN MONGOLIA

**Green Climate Fund:** Mongolia has 10 GCF approved projects through XacBank LLC and other international partners including:

**XacBank:** *Energy Efficiency Loan Program & Mongolian Green Finance Corporation*

**EBRD:** *Green Cities & Green Energy Facility Programs*

**ADB:** *Ulaanbaatar Affordable Green Housing & Aimags and Soums Green Regional Development Investment Program*

**UNDP:** *Improving Adaptive Capacity and Risk Management of Rural communities in Mongolia*

**Conclusion:** Majority of carbon and climate projects in Mongolia have been implemented in the energy sector – energy industries, energy demand, energy distribution.

*Low cost or additional financial sources from the international funds and/or carbon trading attract the private sector engagement; otherwise...*

*No policy framework triggers the private sector actions towards green investment or carbon offsetting*

*No carbon registry – do not track how much emissions reduced/avoided from carbon & climate projects*



# MONGOLIA'S EXPERIENCE

- ✓ 15 carbon projects under CDM, JCM and voluntary carbon markets
- × Emissions reductions are NOT reflected in Mongolia's national GHG inventory

## CDM – Participants

- *National Designated Authority (NDA):* Ministry of Environment and Tourism (MET) authorizes the projects;
- *Proponents:* Government Agency, International Partners, and Private company
- *Designated Operating Entity (DOE):* CDM EB authorized for validation and verification – non from Mongolia

## JCM – Participants

- *The Joint Committee*
- JCM Secretariat in Mongolia under MET
- *Proponents:* Consortiums of Japanese-Mongolian companies
- *Third Party Entity (ISO14065)* for Validation & Verification – in Mongolia, (i) Low Carbon Technology Center NGO & (ii) National Renewable Energy Center

## Voluntary Market – Participants

- Unregulated or no involvement of the Mongolian Government
- *Proponents:* Private companies of Mongolia
- *Validation & Verification Bodies* – authorized by the given standard e.g., Verra, Plan Vivo, Gold Standard – but non from Mongolia.



# CDM 5 PROJECTS: ENERGY INDUSTRIES & ENERGY DEMAND

- **1 PoA Retrofitting inefficient boiler units (4)** – registered in 2006
- Crediting period 2006-2016
- Mongol Zuukh XXI ltd & Prokon Nord Energiesysteme GmbH, Leer/ Germany
- **2 Hydropower Plants (11MW & 12 MW)** –registered in 2007
- Crediting period 2008-2015
- Energy Agency of Mongolia & Mitsubishi UFJ Securities Co., Ltd., Japan
- 50 MW Salhit Wind Park – registered in 2012
- 2013-2020, 2020-2027
- Clean Energy LLC
- Microfinance for Clean Energy Product Lines (PoA) – registered in 2012
- 2013-2020
- Microenergy Credits & XacBank LLC





# JCM 7 PROJECTS

Energy industries, Energy demand, Energy distribution

3 methodologies for the estimation of baseline & project emissions from three technologies – (i) solar PV, (ii) replacement of HOB and (iii) replacement of energy transmission lines.



Хэрэгжүүлэгч талууд:

- Ану сервис ХХК (Монгол талаас)
- Suuri Keikaku LLC (Япон талаас)

**2 Project:** High-efficient Heat only Boilers for 118<sup>th</sup> School UB, and Bornuur soum



Хэрэгжүүлэгч талууд:

- Эвридэй ферм ХХК, Бридж групп (Монгол талаас)
- Farmdo Co.,Ltd (Япон талаас)

**3 Solar Energy Projects:**  
10MW Darkhan, 12.7MW UB Suburb, 15MW New Airport

**1 Project:** High-efficient power transmission line



Хэрэгжүүлэгч талууд:

- Эм Си Эс Интэрнэйшнл ХХК/ Эм Си Эс Кока Кола ХХК (Монгол талаас)
- Saisan Co.,Ltd. (Япон талаас)

**1 Project:** Replacement of coal-fired boilers with advanced gas-fired boilers for MSC Coca-Cola factory



## VOLUNTARY CARBON MARKET 3 PROJECTS – Energy industries, Energy Demand and Pasture management

### ☉ Gold Standard

- Microfinance for Clean Energy Product Lines (PoA) – registered in 2012
- 2012-2019
- Microenergy Credits & XacBank LLC



### ☉ PlanVivo

- Pastures, Conservation, Climate Action –Mongolia
- 2015-2019
- Mongolian Society for Range Management (MSRM) & University of Leicester

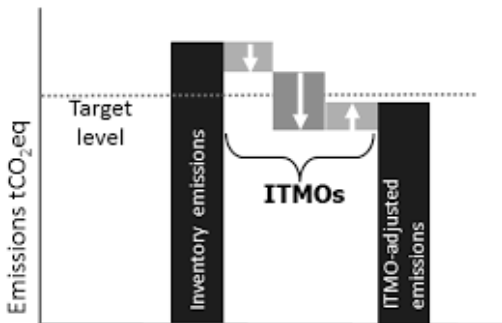
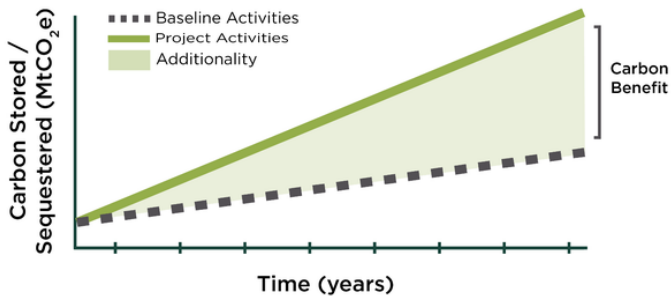


### ☉ Verra –Verified Carbon Standard

- 50MW Tsetsii Wind Park – registered in 2019
- 2017-2027
- Clean Energy Asia LLC



# GENERAL PRINCIPLES



**Additionality** – demonstrate that a project is additional or cannot happen without the carbon credits, because e.g. the first of its kind technology, not included in the country policy, not financially feasible.

\*NDCs – Conditional (additional) vs. Unconditional (not additional)

**Co-benefits** – not only having carbon benefits but other benefits contributing to SDGs.

\*No harm to the environment – assess impacts and mitigate

**No double-counting** – the emissions shall not be counted twice or recorded as reductions on both selling and buying sides.





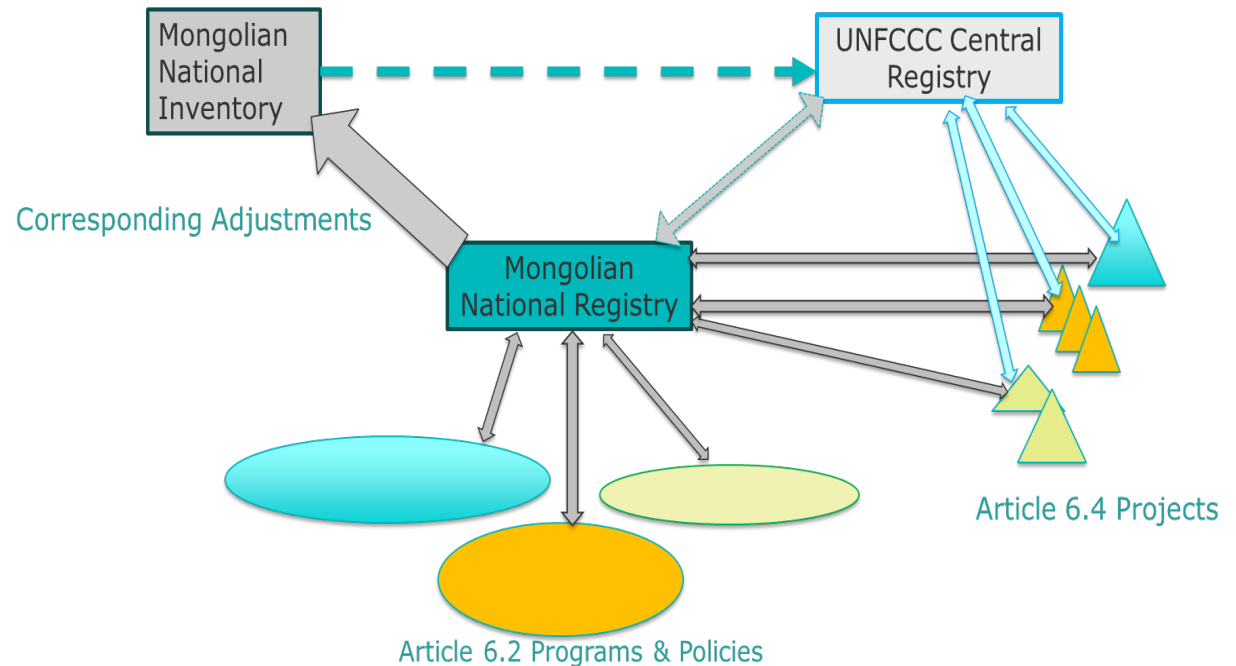
# CHALLENGES & GOVERNMENT PREFERENCES

Acknowledged **the risk of not-meeting the NDC target** due to the transferred ITMOs and/or carbon credits under Article 6.2 & 6.4, thus:

- Unless the high cost and advanced technology and know-knows to be introduced through Article 6.2 & 6.4, Mongolia has a low appetite for carbon projects with nearly commercial technologies e.g. RE and EE.
- But, depends on the claims the buyers would make – e.g. claim as NDC contributions or offset credits.
- **Preferable** - local and voluntary carbon offsetting mechanism as to engage more local private companies

## No policy & registry in place

- not ready to participate in international carbon schemes





# Options for Mongolia

Economy-wide national carbon market

**Not ready – legal and institutional framework and capacity**

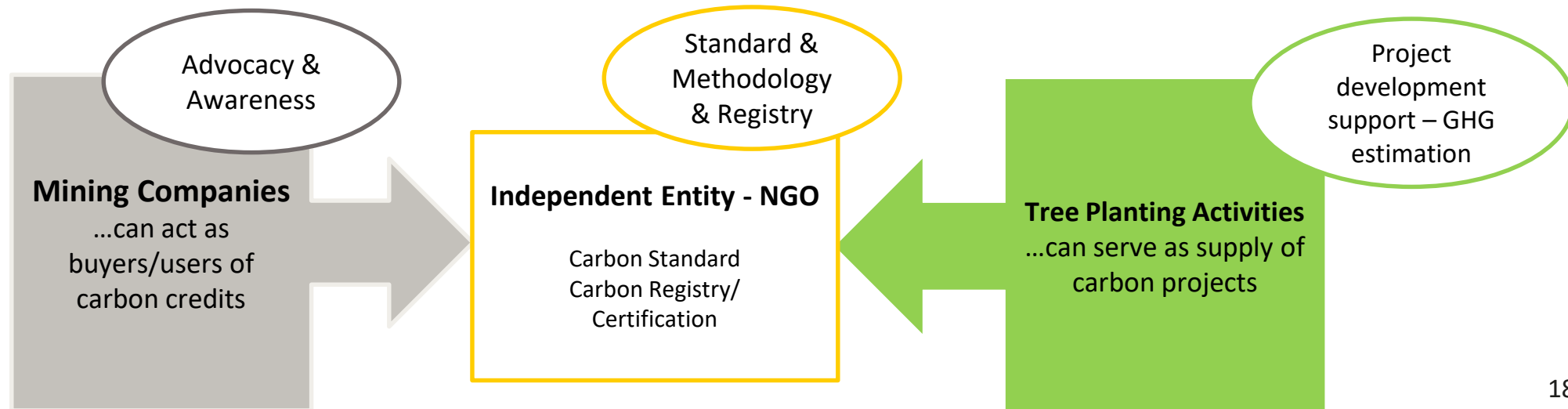
**Policy & Regulation:** Law on Environmental Impact Assessment mandates **biodiversity offsetting** especially for mining companies, but it does not comprise of climate risk assessment or offsetting carbon etc.

Strategic Policy & Framework Support

Vs.

**Ex. Based on the Presidents’ Billion Tree Campaign – a voluntary scheme can set up**

*Voluntary market on a specific sector e.g. forest*





## WHERE TO START

**Develop the carbon standard** which could comprise of the following standards and guidelines:

- Eligibility criteria – what forestry activities are eligible, any other requirements on the stakeholder engagement, gender etc.
- Methodologies for baseline and project emissions calculations and relevant guidelines, tools
- Standard for the validation and verification body or carbon councils
- Guidelines for project validation and verification
- Standard for monitoring activities
- Regulation of registration & issuance of acknowledgement for carbon removals
- Establishment of carbon registry/trading platform

## Consensus and capacity building

- Awareness raising of all stakeholders – decision makers, private sector and public;
- Build consensus with the government on monitoring carbon benefits of a billion-trees;
- Engage private companies and on the ground implementers in the scheme;
- Prepare human resources in carbon project development & emissions calculation;

\*It would be impactful if private companies (those committed to contribute to a billion tree campaign) to make arrangements with the forest user groups for carrying out tree plantation works.

# CARBON NEUTRAL CITIES

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Greenhouse gas emissions are high in urban areas. Many countries around the world are taking initiatives to make some of their cities model cities to eliminate the gap between greenhouse gas emissions and absorption by 2050.

Mongolia

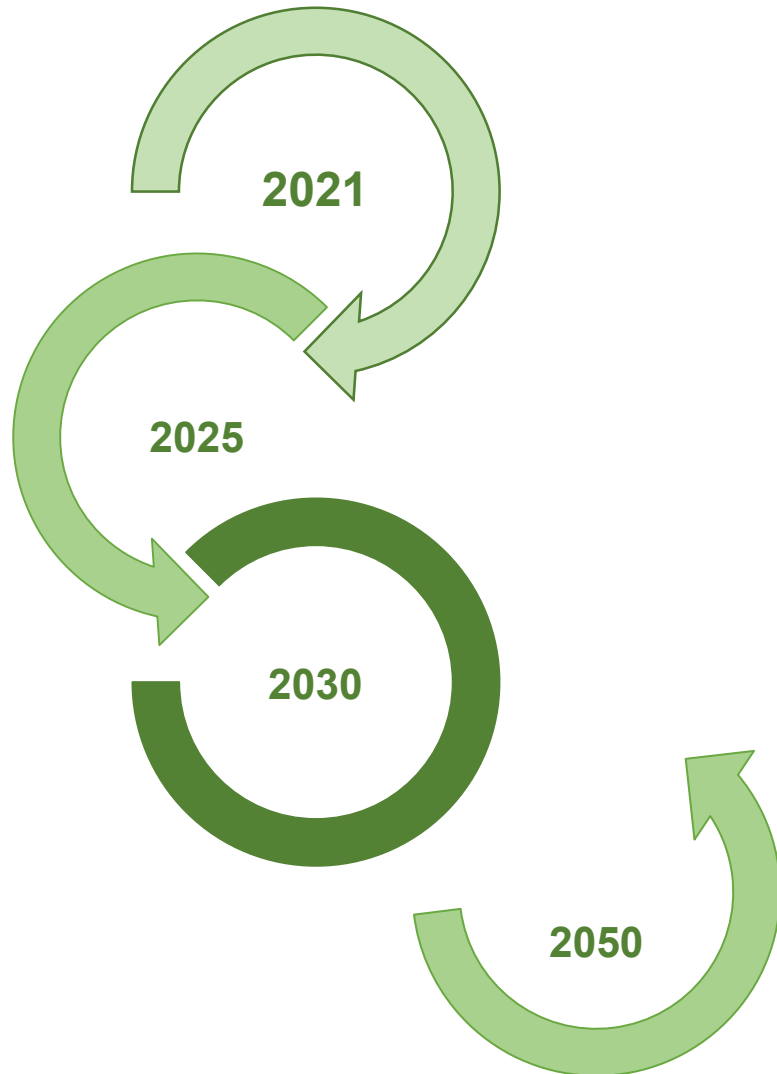


Green city initiative  
Urban planning



Erdenet  
Khovd  
Arvaikhair

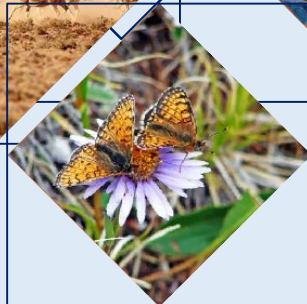
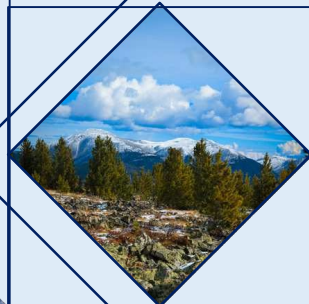
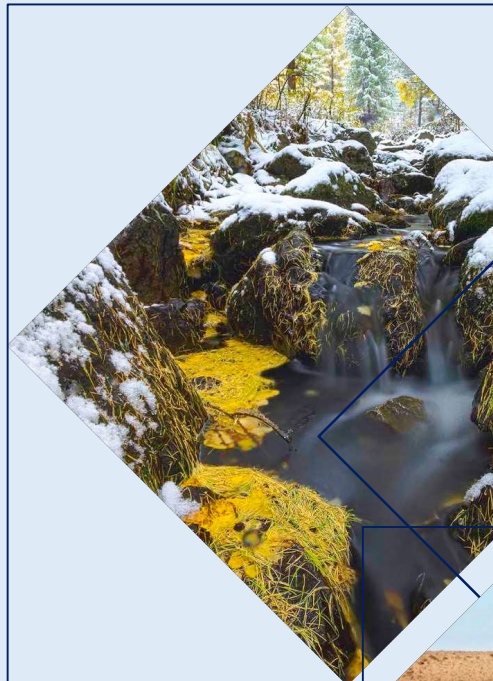
# NATIONAL COMMITMENT TO PARIS AGREEMENT



## Actions:

- Improving the legal environment
- Improve organizational and inter-sectoral organization
- Formation of financial mechanism
- Create a system of transparency
- Introduction of clean technology
- Capacity building
- Develop research and collaboration at the technical level
- Development of carbon markets

# THANK YOU



[ndc.mne.gov.mn](mailto:ndc.mne.gov.mn)

[ndc@met.gov.mn](mailto:ndc@met.gov.mn)