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'COOPERATIVE APPROACH'

- PARIS AGREEMENT & CARBON MARKET -

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- Visiting Professor, Seoul National University
- 1994~2021, Work for Korea Energy Agency(KEA)
- 2019~2021, Executive Director, KEA
- 2018~2019, Member, Environmental Policy Committee, MOE
- 2015~2018, CDM EB Member, UNFCCC (Asian group)
- 2003~2019, Member, Korean Delegation to UNFCCC
- 2008~2012, Co-convener, ISO 14067 'Carbon Footprint of Product' WG
- 2013~2015, Member, ISO Climate Change Coordinating Committee
- 2004~2005, Expert on Industry and Energy, Presidential Committee on Sustainable Development
- 2018~2019, Member, Environmental Policy Committee, MOE, ROK

CONTENTS

- UN FCCC, Kyoto Protocol (Mechanism)
- Paris Agreement, Carbon Neutrality
- COP 27 Decision of PA 6.2, 6.4
- PA 6 & Carbon Market

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UN FCCC (1994)

"stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"

- **Principle**
 - Common but Differentiated Responsibilities and Respective Capabilities (CBDR)
 - Full consideration of special circumstances of developing countries
 - Precautionary measures to anticipate, prevent or minimize the cause of climate change
 - A right to promote sustainable development
- **Commitments**
 - develop and publish national inventories of emission by sources and removals by sinks
 - formulate and implement national programmes containing measures to mitigate climate change

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KYOTO PROTOCOL (1997)

Implementation of
UN FCCC

- Adopted at COP 3 (Kyoto, Japan)
- Entered into force in 2005
 - * 55% of worldwide emissions in 1990 and ratification by over 55 Parties

- Established the Emission Target of Annex I Parties**
- Differentiated target : avg. 5.2% reduction from 1990 emission level from 2008 to 2012

- GHGs : CO₂, CH₄, N₂O , SF₆, HFCs, PFCs

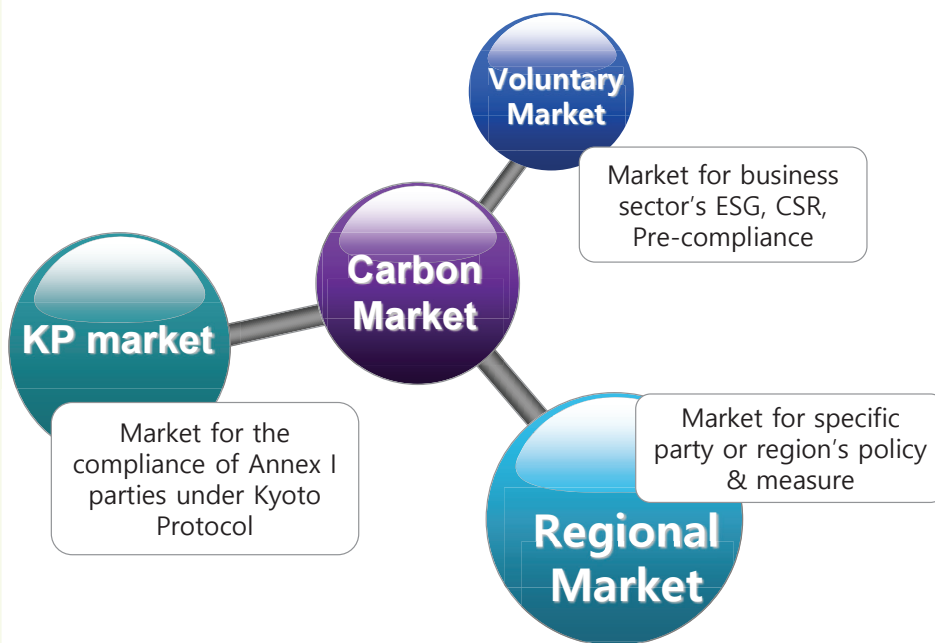
- Introduction of (flexibility) Mechanism**
- Emission Trading Scheme
 - Clean Development Mechanism
 - Joint Implementation

CARBON MARKET

Emissions Trading
Scheme

Clean Development
Mechanism

Joint
Implementation



"experience of cooperative approach"

CLEAN DEVELOPMENT MECHANISM

Mechanism which developed and developing Parties could participate

- Single governance
- Well defined MRV
- High Reputation
- **No double counting**

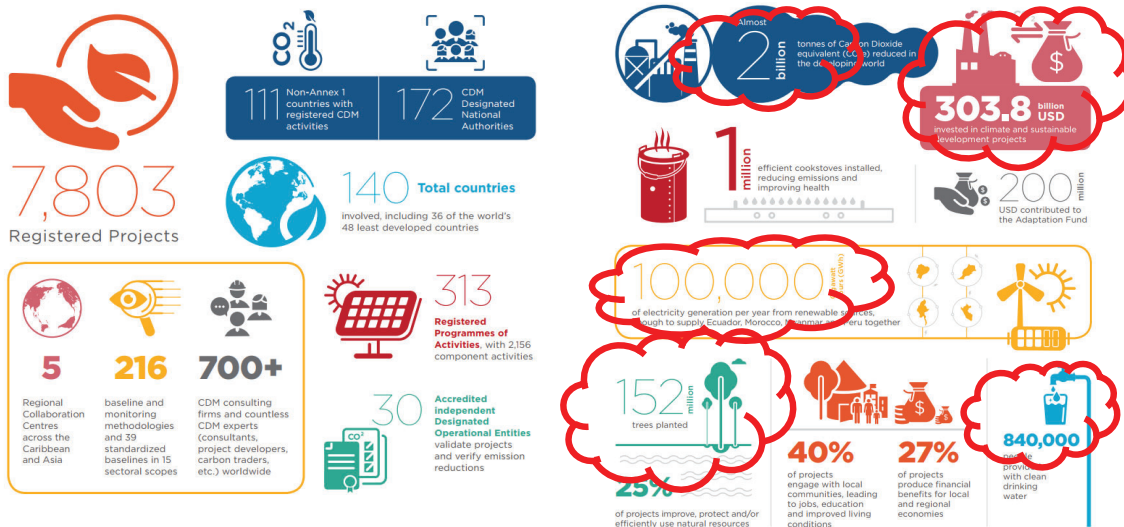
Best Practice of Emission Reduction



PA 6.2 Mechanism
(Governed by Parties)

PA 6.4 Mechanism
(Governed by UN)

*** Accomplishment of CDM (2001~2018)**



Paris Agreement and Carbon Neutrality

PARIS AGREEMENT

Paris Agreement

New regime of UN FCCC after Kyoto Protocol, to combat to global Climate Change since 2021

CARBON NEUTRALITY

All parties of UN FCCC to submit 2050 LEDS(Long-term low greenhouse gas emission development strategies) including mid-, long-term energy and climate policy until 2020

* Paris Agreement article 2.1 & 4.19, COP21 decision para.35

Implementation of UN FCCC

KYOTO PROTOCOL

PARIS AGREEMENT

Annex I parties, FCCC	participation	All parties
GHG emission reduction	scope	Mitigation, Adaptation, MOI(finance, technology, capacity building)
GHG emission reduction (1st: 5.2%, 2nd: 18%)	target	limit global warming to well below 2 °C , preferably to 1.5 °C
Top-down	setting	Bottom-up (declaration)
Punitive (1.3 times the unachieved amount)	compliance	Non-punitive (non-binding, global stocking)
-	strengthening	Principle of progress, Implementation every 5 years
Negotiation for every period	continuation	No ending, periodic NDC renewal

Paris Agreement 6.2, 6.4

ARTICLE 6.2

'Cooperative Approaches' that involve the use of **internationally transferred mitigation outcomes** towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, **the avoidance of double counting**

ARTICLE 6.4

A mechanism to contribute to the mitigation of greenhouse gas emissions and **support sustainable development**

- To promote the mitigation of greenhouse gas emissions while fostering sustainable development
- To **incentivize and facilitate participation** in the mitigation of greenhouse gas emissions by **public and private entities** authorized by a Party
- To **contribute to the reduction of emission levels in the host Party**

PA 6.2

cooperative approach

Internationally Transferred Mitigation Outcomes

- **Voluntary cooperation** between Parties
- **Issuance of MO** (mitigation outcomes)
- **IT(International Transfer)** of MO between parties
- Usage of MO in participating parties (NDC, markets(compliance, voluntary))



Carbon Capture & Storage

PA 6.2

Decisions in COP27

* no decision of key elements (the use of ITMOs and the method of corresponding adjustment)

- Management of PA 6 DB (central platform)
 - : ensuring transparency, digital base, including international registry
- National registry for mitigation outcomes
 - : management of ITMOs, use of specific identifier
 - : record of approval, transfer, acquisition, use, cancellation etc.
 - : tracking 'International Transfer' of MO
- Guidance of technical review
 - : principle (transparency, accuracy, completeness, comparison)
 - : Report (initial, updated, BTR, article 6 DB)
- According to technical expert : institutions, review guide, review report, training

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PA 6.4

PA 6.4 Mechanism

Issuance of 6.4ERs

- Governed by 'Supervisory Body' designated by CMA
 - Issuance of 6.4ERs(MO, mitigation outcomes)
 - Centralized governing structure
 - Likely mechanism with an advanced 'CDM'
 - Use of 6.4ERs (NDC, market mechanism(compliance, voluntary))
- ❖ Main content
- Voluntary participation
 - Contribute to Overall Mitigation in Global Emissions
 - Outcomes : 6.4ERs
 - Contribute to host party's national goal

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PA 6.4

Decisions in COP27

* **Transition of CDM projects, SOP**(Share of Proceed) for execution of 6.4 mechanism
 ** **Decision suspended** to COP28 for the recommendation of 'Removal activity'

- Effective crediting period of CDM projects
 - : the earliest date (2025'12'31, the date decided by host party)
 - : transition request to the host DNA (until 2023.12.31)
 - : request to 'SB' by the host DNA (until 2025.12.31)
- Transition of CERs to 6.4ERs
 - : including the whole serial number of CER, get a new identifier
- Share of Proceed (sop)
 - : registration, inclusion of CPA, certification, renewal etc.
 - : registration (2,000~12,000 U\$, according to the amount of 6.4ERs)
 - 1,000 U\$ per each inclusion of CPA
 - : certification (0.2 U\$/6.4ERs)

SCHEDULE FOR PA 6.4 (2023)

Works to be finalized until 4th quarter 2023

	Work
Structure	SB meetings, expert group
Host party	Designation of DNA
	Requirement and procedure for the approval by host party
Project cycle	6.4 activity type and the contribution to SD of host party
	standard, procedure, verification, certification
Accreditation	Standard, procedure and accreditation of Operational Entity
Approval of methodology	Review existing/other methodologies, development of new methodology
Information system	Submission and managing system of project
Project DB	DB for registration, issuance, renewal
Capacity building	Institution of host party, project baseline
	Support of CDM project transition
	Capacity building of project developer in host party
	Regional collaboration center program

USE OF PA 6

Future Issue

* Purpose of use of ITMOs
 * Method of
 'corresponding adjustment'

- Considerations of the application of PA 6.2
 - : collaborative party – party of Paris Agreement
 - : ensuring the issuance and transfer of ITMOs (policy and act)
 - : national inventory, approval and tracking system
 - : business model, administrative process in host party
 - support for the project developing

- Considerations of the application of PA 6.4
 - : policy and act related to the issuance and transfer of 6.4ERs
 - : crediting period (5 years (fixed), max. 15 years(2 times renewal), forestation 15 years (2 times renewal)
 - : NDC scope and DNA of host party, contribution to SD, coincidence of host LEDS
 - : SOP 5% of 6.4ERs (for Adaptation Fund)
 - : cancellation of 2% of 6.4ERs (contribution to OMGE)
 - : 'Corresponding Adjustment' by host party

NDCs

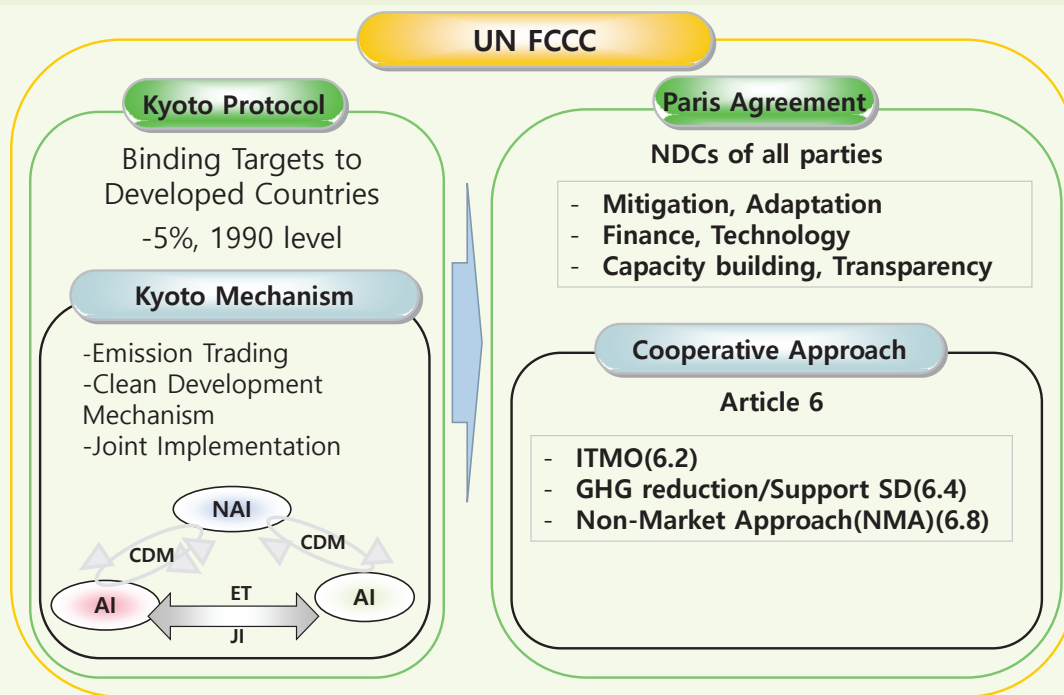
Parties in NEA Region

Party	2030 NDC	Base year
Japan	46% reduction relative to 2013	2013
ROK	40% reduction relative to 2018	2018
China	GHG/GDP ▼65% relative to 2005	2005
Russia	70% reduction relative to 1990	1990
Mongolia	22.7% reduction relative to BAU	2030
DPRK	16-52% reduction relative to BAU	2030

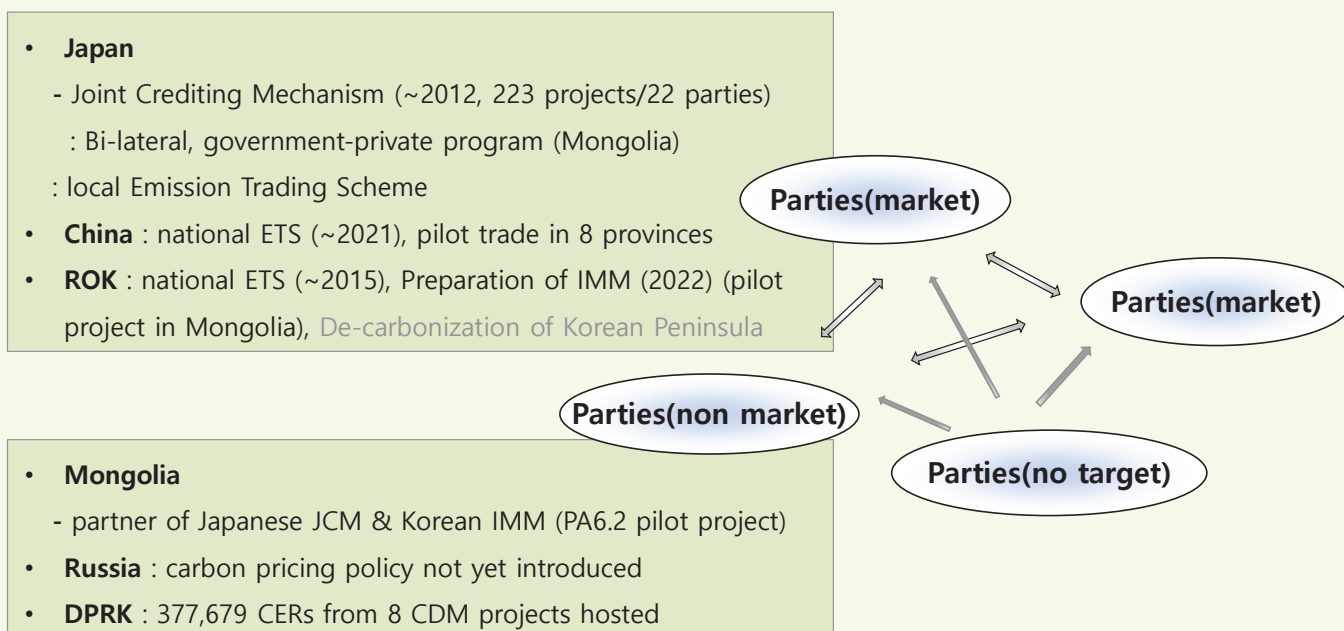
* 6 parties have their NDC targets including different type, base year and number.

Party	Base year Emissions (10 ⁶ tCO ₂)	2030 NDC target emissions
Japan	1,252.3	676.2
ROK	727.6	436.6
China	7,046.3	-
Russia	2,388.7	716.6
Mongolia	74.3	57.4
DPRK	218.0	182.2

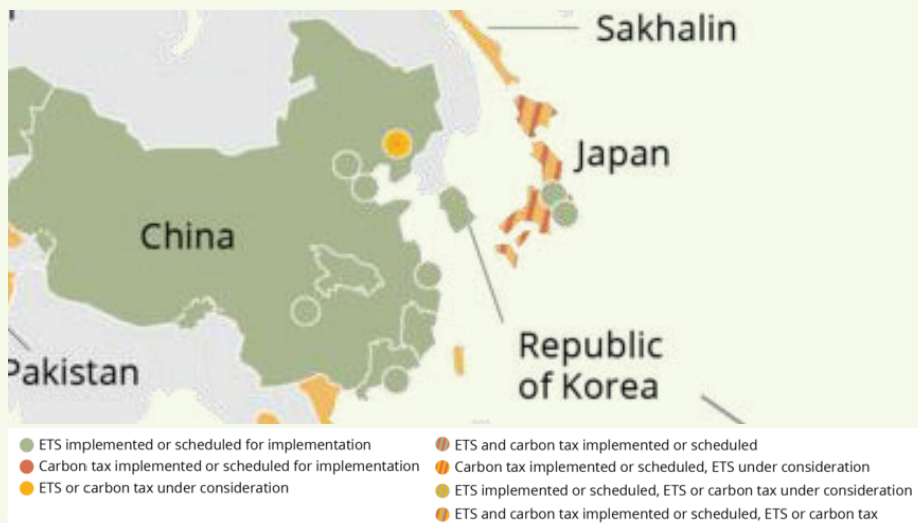
Implementation of KP and PA



Cooperative Approach on PA 6 (1)



Carbon Pricing Policy in NEA



* Extraction from World Bank, 2021

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Cooperative Approach on PA 6 (2)

- Use of mitigation outcome of PA6
- International transfer of the Mitigation Outcome

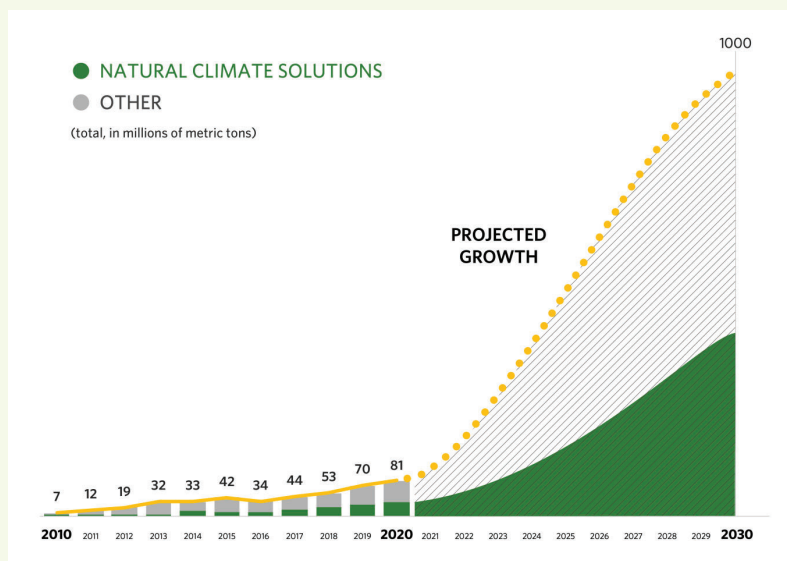
- Meet Parties' **NDC target** in the region
- Support carbon pricing policies (Emission trading, carbon tax)
- Result based **carbon finance**
- **Technology transfer**
- **SD in host party, Capacity building**

- **Main elements**
 - ✓ Eligibility(additionality)
 - ✓ Environmental Integrity
 - ✓ Avoid double-counting

**Overall Mitigation of
NEA Emissions**

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Voluntary Carbon Market



- Just started
- Projected rapid growth
- Strong Request for ESG
- Participation of non-policy (ETS, carbon tax) sector even with individual offsetting or climate action

Delicious and abundant: yes, we're talking about voluntary carbon markets - CPI

THANK YOU
VERY MUCH

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