Implementing Paris Agreement Article 6 and the Role of International Development Organizations

Jione Jung, PhD, Executive Director
KIEP Center for International Development Research
Introduction

- Unlike the Kyoto Protocol, the Paris Agreement (PA) stipulates that each country should set its national greenhouse gas reduction target and contribute to solving the global climate change problem by implementing its own low-carbon or carbon-neutral policies.

- Each country can implement its ‘Nationally Determined Contribution (NDC)’ in various cost-effective ways, following the criteria and procedures set out in the PA.

- Article 6 of the PA is a cornerstone provision that underscores the collaborative nature of the agreement. It paves the way for countries to work together, pooling their resources and efforts, to achieve the agreement's objective of 'limiting the temperature increase to 1.5°C'.
  - The PA emphasizes the importance of voluntary cooperation among Parties.
  - The use of internationally transferred mitigation outcomes (ITMOs) is a key tool in achieving NDCs, further underlining the agreement's robust mechanisms.
  - The agreement of the implementation rules for Article 6, the so-called rulebook, at the Glasgow COP26 in 2021 is an improvement in the uncertainty of international mitigation activities.
Context in Korea

- Korea submitted a revised NDC to the UNFCCC Secretariat in 2021, increasing its emissions reduction target from 26% below 2018 to 40%.
  - Korea's 2018 emissions were 727.6 MtCO2e, and its 2030 emissions target is 436.6 MtCO2e.
- The government has established sector-specific reduction strategies:
  - Korea aims to phase out coal-fired power generation while increasing renewable energy.
  - It focuses on driving a low-carbon transition in emission-intensive sectors such as steel, petrochemicals, and cement industries.
  - Efforts will be made to promote zero-energy construction solutions for new buildings and zero-emission vehicles.
  - The methane gases emitted from landfills will be recovered as an energy source.
  - Korea will maintain and improve its carbon sinks through sustainable forest management, conservation, and restoration.
- Korea plans to use voluntary cooperation under Article 6 of the PA as a complementary measure to its domestic mitigation efforts.
- The expected reduction target through Article 6 is 37.5 MtCO2e, which is close to the building sector emission target of 35 MtCO2e.
- There is an urgent need to establish a plan to promote international emission reduction and to prepare specific implementation measures.
# Korea’s 2030 Emission Reduction Targets

<table>
<thead>
<tr>
<th>Sector</th>
<th>2030 Targets (Reduction from 2018)</th>
<th>Policy Direction</th>
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</thead>
<tbody>
<tr>
<td>Energy Transformation</td>
<td>145.9 (45.9%)</td>
<td>• Switch energy sources for decarbonization</td>
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<tr>
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<td>• Build infrastructure for renewable energy</td>
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<td></td>
<td></td>
<td>• Increase demand efficiency</td>
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<tr>
<td>Industries</td>
<td>230.7 (11.4%)</td>
<td>• Secure reduction technology</td>
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<td>• Improve ETS scheme</td>
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<tr>
<td>Buildings</td>
<td>35.0 (32.8%)</td>
<td>• Zero-energy building, green remodeling</td>
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<tr>
<td>Transport</td>
<td>61.0 (37.8%)</td>
<td>• Zero-emission vehicles (electric and hydrogen)</td>
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<tr>
<td>Agriculture, Livestock, and Fisheries</td>
<td>18.0 (27.1%)</td>
<td>• Smart-farm, low-methane feed</td>
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<td>• Low-carbon fishing vessels</td>
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<tr>
<td>Waste</td>
<td>9.1 (46.8%)</td>
<td>• Reduce disposable products</td>
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<tr>
<td>Overseas Reduction</td>
<td>-37.5</td>
<td>• Develop guidelines and projects</td>
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Issues related to implementing Article 6

- NDC implementation capacity
  - It is imperative to comprehend the mitigation activities and their costs to fulfill the host country's NDC (Spalding-Fecher et al., 2020)
    - Quantification of NDCs and analysis of mitigation sectors and instruments
  - When selecting countries for cooperation, it is of utmost importance to assess whether they have developed NDCs based on their LEDS, evaluate their capacity to implement NDCs, and provide capacity building support if needed to work with ITMOs.
  - Findings of the Paris Committee on Capacity Building's 2019 report on developing country NDC implementation capacities
# Capacity Gaps and Needs Related to NDCs

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create, collect, and analyze data</td>
<td>• GHG emissions data from forestry, energy, and transportation sectors</td>
</tr>
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<td></td>
<td>• Data on climate change impacts</td>
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<tr>
<td></td>
<td>• Lack of legal framework for coordination between data generators and collectors</td>
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<tr>
<td></td>
<td>• Data collection methods, storage, and lack of software</td>
</tr>
<tr>
<td></td>
<td>• Lack of ability to record and analyze data</td>
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<tr>
<td>Governance and coordination</td>
<td>• Inter-ministerial coordination mechanisms for integration of NDCs with sector policies, budgets, and programs (e.g., climate change laws and regulations, inter-ministerial committees)</td>
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<tr>
<td></td>
<td>• Climate change ministries lack the authority to coordinate with other ministries</td>
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<tr>
<td>Dependence on international community support</td>
<td>• High reliance on foreign consultants and experts → need for developing countries to build their own capacity</td>
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<tr>
<td>Access to climate finance</td>
<td>• Lack of capacity to develop climate finance business proposals</td>
</tr>
<tr>
<td>Gender</td>
<td>• Importance of implementing NDCs with gender considerations (climate vulnerability and gender equality)</td>
</tr>
</tbody>
</table>

Issues related to implementing Article 6 (cont.)

- Environmental Integrity
  o Transfer of credits does not increase global GHG emissions.
  o Environmental integrity in the Paris Agreement
    - Article 4.13 requires Parties to promote environmental integrity when accounting for their NDCs.
    - Article 6.1 requires Parties to promote environmental integrity when pursuing voluntary cooperation in the implementation of NDCs.
    - Article 6.2 requires Parties to ensure environmental integrity when engaging in cooperative approaches.
  o The establishment of a robust legal framework is crucial to ensure the entity responsible for implementing the NDC can operate with confidence, coordinate among relevant ministries, select projects and approve mitigation outcomes, and manage the transfer of emission reductions and the flow of financial resources.
  o Only 5% of ERUs issued by Joint Implementers (JIs) during the Kyoto Protocol's first commitment period have high environmental integrity. → Overcredits are not issued due to additionality requirements and related regulations (Kollmuss et al., 2015).
    - Ensuring environmental integrity in offset projects requires transparency in project design, monitoring, and reporting, the use of internationally agreed GHG accounting methods, and well-functioning accounting functions.
Issues related to implementing Article 6 (cont.)

- **Article 6 Readiness**
  - Precondition for capitalizing on Article 6: R&D, institutions and procedures, information exchange, carbon market infrastructure, capacity building, and stakeholder partnerships.
    - (Institution and procedure) Bilateral agreements between selling and buying countries, certification of mitigation outcomes and establishment of MRV systems following other provisions of the Paris Agreement (e.g., Article 13), and procedures for reconciling the mitigation outcomes generated and reflecting them in the NDCs of both countries.
    - (Carbon market infrastructure) registries, governing bodies, emissions trading platforms
    - (Capacity building) Capacity of host country national authority, project developers, auditors, and financial institutions to understand Article 6
  - Insights from the German (GIZ) Advisory Report to the Ministry of Energy in Chile
    - Preliminary considerations when selecting a partner country for Article 6 implementation.
### Consideration for Article 6 Cooperation

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<th>Considerations</th>
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| **National greenhouse gas inventory** | - Review key GHG reduction areas  
- Setting baselines and monitoring trends  
- National inventory quality (inventorying key GHGs according to IPCC guidelines)  
- Measuring emission factors |
| **NDC targets and accounting** | - Quantified economy-wide reduction targets in NDCs  
- Corresponding targets, emission units (metrics), accounting methods, and MRV procedures between host and purchasing countries  
- Harmonization of NDC formulas |
| **Long-term climate action strategy** | - Identify long-term net-zero pathways → inform short-term policy and investment decisions  
- Determine the role of Article 6 (e.g., identify sectors that are necessary for net-zero emissions but are difficult to achieve without international support, technical and financial) |
| **Institutional framework for ITMOs** | - Capability to evaluate and approve ITMO business proposals  
- Registry management  
- Analyzing the impact on national inventories and NDC targets due to transferring emission reductions  
- Interagency coordination mechanisms |

Source: Fuchs, D., M. Ramos, I. Villanueva, and J.P. Searle. 2021. “Strategies to Avoid Overselling Chile’s Mitigation Outcomes under Article 6 of the Paris Agreement.” The publication was published by GIZ and funded by the BMU, pp. 36-40.
Issues related to implementing Article 6 (cont.)

- Articles 6.2 vs. 6.4
  - Cooperative approaches allow for flexibility in operationalization among Parties to the agreement but may be less attractive to host countries than Article 6.4 from an efficiency (requiring capacity, institutions, and infrastructure, including double counting, countervailing adjustments, etc.) or transparency perspective.
  - Compared to the 6.4 credits managed by the UNFCCC Secretariat, the 6.2 performance is less fungible.
  - Additional funding for adaptation: A share of proceeds from the trading of Article 6.4 mitigation credits can be used for adaptation activities.
  - Advantages for host countries: Article 6.4 is a more favorable option for countries with limited implementation capacity due to its pre-established international rules and methodologies.
### PA Articles 6.2 vs. 6.4

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<tr>
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<th>6.2 Cooperative Approach</th>
<th>6.4 Sustainable Development Mechanism</th>
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| **Fungibility and standardization** | • Customizable to local needs and conditions  
• Close bilateral partnerships  
• MOs are unlikely to be universally accepted in the marketplace, and fungibility is low. | • Internationally standardizable and recognizable  
• Centralized process with support from the UNFCCC Secretariat  
• Clear accountability  
• Highly fungible |
| **Transparency and oversight** | • No international supervisory requirements other than correspondent adjustment  
• No central registry required | • Unified rules exist for methodologies, procedures, MRV, etc.  
• International oversight by multilateral organizations  
• Central registry |
| **OMGE and SOP** | • Lack of guidance on overall mitigation of global GHG Emissions and share of proceeds | • Guidance on clarifying OMGE and share of proceeds |

Issues related to implementing Article 6 (cont.)

- Utilizing ODA or climate finance
  - “The rules and norms of Official Development Assistance (ODA) do not permit donor countries to use ODA (including climate finance) to realize a domestic benefit
    - Donor countries may not use climate finance to advance their economic self-interests or to help achieve their NDCs.
  - Any payments for the ITMO portion of the bundle may not be reported as climate finance, and by extension, any emission reductions funded by receipts of climate finance may not be re-sold to a third country as ITMOs.” Submission by Canada on Article 6 and adaptation finance (5-7-2021)
## ITMOs Cases: Demand Side

<table>
<thead>
<tr>
<th>County/Organization</th>
<th>Activities</th>
<th>Related technical cooperation support</th>
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</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Transferring a portion of emission reductions from countries with bilateral agreements to Japan</td>
<td>Article 6 Implementation Partnership announced at COP27: Provides knowledge-sharing, capacity-building platform for host countries</td>
</tr>
<tr>
<td>Canada</td>
<td>Exploring the Transferability of Reductions through Bilateral Environmental Agreements (Canada-Chile Waste Sector Methane Reduction Project)</td>
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<tr>
<td>Sweden</td>
<td>Trading emissions reductions from renewable energy projects (Chile pilot)</td>
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<tr>
<td>Switzerland</td>
<td>Funding national projects that utilize low-carbon technologies and leverage the emission reductions generated (Switzerland-Peru bilateral agreement, Swiss Ministry of Energy-Ghana ITMOs agreement)</td>
<td>Swiss Agency for Development and Cooperation (SDC) engagement</td>
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</table>
| World Bank Transformative Carbon Asset Facility | • The trust fund will purchase a portion of the emission reductions generated, and host countries will utilize the remainder in their NDCs.  
• Donors can use it toward their national emissions reduction targets or use it toward their climate finance commitments. | • Helping developing countries formulate environmental, energy, and climate change policies  
• Help implement carbon pricing and mitigation measures  
• Use trust funds as leverage to create favorable conditions for private investment |
## ITMOs Cases: Host Country Perspectives

<table>
<thead>
<tr>
<th>Name</th>
<th>Activities</th>
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</table>
| German Climate Finance Innovators               | • Part of the International Climate Initiative of the German government (BMZ-GIZ)  
• Establishes innovative linkages between the UNFCCC market mechanisms and international financing institutions.  
• Strengthened capacity of partner countries (Ethiopia, Senegal and Uganda) to prepare Mitigation Activity Design Documents (MADDs) and scale up mitigation activities  
• Publish reports (West African Alliance on Carbon Markets and Climate Finance)                                                                 |
| ADB Article 6 Support Facility                  | • Provide technical, capacity-building, and policy development support to developing countries in Asia to prepare for carbon markets, identify mitigation measures, and pilot projects.  
• Funding sources: ADB Technical Assistance Trust Fund, German Ministry for the Environment (BMU), Swedish Energy Agency                                                                                   |
| World Bank Mitigation Action Assessment International Transfer Readiness Module | Develop modules for transparency, avoiding double counting, mitigation activities included in NDCs, establish key indicators for environmental integrity, and review partner countries' readiness for ITMOs |
| UNDP NDC Support Programme                      | Help developing countries prepare to engage with ITMOs, with technical assistance on seven topics                                                                                                        |
| GGGI Mobilizing Article 6 Trading Structure Program | Works with ITMOs host countries by providing capacity-building support while identifying suitable activities for Article 6 transactions and developing necessary documents, such as a MOPA template. |
## ITMOs Cases: Building Infrastructure and Methodologies

<table>
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<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>World Bank Climate Warehouse</td>
<td>Climate Action Data Trust: World Bank-IETA-Government of Singapore collaboration to build carbon market registry open source metadata system</td>
</tr>
<tr>
<td>NDC Partnership</td>
<td>Matchmaking facility that supports countries by aligning NDC goals with financial resources through access to tools, data, guidance and funding opportunities (WRI, Germany)</td>
</tr>
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</table>
| IGES Article 6 Methodology                     | • Utilizing CDM methodologies to develop baseline, mitigation monitoring tools for Article 6 implementation  
• Supported by the Japanese Ministry of the Environment, Swedish Energy Agency, and AfDB                                                                                           |
| Nordic Initiative for Cooperative Approaches (NICA) | • Developed NICA framework and implemented pilot projects (rural electrification and e-mobility projects in East Africa)  
• Donors: Finland, Norway, Sweden, Nordic Cooperation, Nordic Environment Finance Corporation (NEFCO)  
• Donor countries have no intention for purchasing ITMOs.                                                                                                                  |
Implications

- Korea, with its ambitious 2030 emissions reduction target, stands uniquely poised to leverage Article 6.
- The government, as a key player, has the responsibility to secure funding and provide crucial support for international emissions reduction projects.
  - It should establish laws and regulations that actively promote emissions reduction activities abroad.
- Participation in Article 6 activities of the Paris Agreement offers host countries of emission reduction projects significant benefits, including financial resources and access to low-carbon technologies.
  - These resources can support meeting their NDCs and transitioning to a low-carbon economy.
  - Understanding the perspectives of host countries is not just important, it's crucial. This understanding can help the Korean government build more effective partnerships and ensure that the projects are truly mutually beneficial.
Implications (cont.)

- ITMO projects to implement the NDC require government financial support.
  - It is not appropriate to use ODA to pursue national interests (in this case, implementing greenhouse gas reduction targets).
    - The OECD Development Assistance Committee (DAC) concluded that ODA should not be used to acquire clean development mechanism (CDM) credits in developing countries.
  - The ongoing negotiations also discuss whether public funds invested in Article 6 activities of the Paris Agreement cannot be counted as ODA or climate finance.
  - ODA can be used for improving the readiness in the field – local enabling environment and institutional capacity.
  - ODA can provide the basis for participating in ITMO activities of partner countries (infrastructure, institutions, and human resources).
Implications (cont.)

- The Korean government has targeted increasing climate change-related ODA above the OECD DAC average of about 30% by 2025.

- The Green New Deal ODA strategy proposes the following policy directions:
  - Strengthening support for green transformation in developing countries
  - Leading global cooperation on green new deals
  - Expanding support for partnerships for shared prosperity

- Increasing climate change-related ODA can be utilized to construct infrastructure and capacity building in the host country, which is necessary for emission reduction projects in developing countries.

- Currently, the share of mitigation-related ODA in Korea’s bilateral ODA is only 3.2%, which is a significant imbalance compared to the share of support for adaptation (7.2%).

- Therefore, it is strategically possible to consider expanding the scale of mitigation-related support this time.

- In the case of the least developed countries, where natural resources are favorable for emission reduction projects, the importance of balancing adaptation and mitigation support is paramount.
Implications (cont.)

- Large-scale projects with private investment are needed to achieve the significant target of 37.5 MtCO2e of international emission reductions.

- It is essential to provide economic incentives to attract the private sector to emission reduction projects abroad, especially those in developing countries with political risks and high upfront costs.

- A blended finance approach can be helpful.
  - For example, it is possible to support feasibility studies and pilot projects using ODA resources while mitigating investment risk and securing private sector profits with other public financial resources based on various financial instruments.
THANK YOU