**Official Side Event** 

### COP 27 SHARM EL-SHEIKH

# CDM transition in the context of ambition increase through Article 6



Room 9, Tutankhamun | Area C/9

17 November, 2022

















## Agenda







### Topic

### Speaker(s)

Setting the scene: why CDM transition and ambition contributions are linked	Ms Ximena Samaniego, Perspectives Climate Research
Georgia's approach on carbon markets	Ms Maia Tskhvaradze, Ministry of Environmental Protection and Agriculture, Georgia
CDM transition in Korea	Mr Sangsun HA, Ecoeye, Korea
CDM transition in Vietnam	Ms Dang Hong Hanh , VNEEC, Vietnam
How the KliK Foundation can contribute to ambition increase and a smooth CDM transition	Mr Mischa Classen, KliK Foundation, Switzerland
Ambition increase through Article 6: key considerations	Ms Raphaela Kotsch, Zurich University of Applied Science, Switzerland
Panel discussion on CDM transition	Panel discussion with representatives of Georgia, Korea and Vietnam
Discussion with the audience	









# **Presentation:**

# Georgia's approach on carbon markets. Speaker:

### Maia Tskhvaradze

### Ministry of Environmental Protection and Agriculture, Georgia

# **CARBON MARKET AND GEORGIA**



MAIA TSKHVARADZE

MINISTRY ENVIRONMENTAL PROTECTION AND AGRICULTURE OF GEORGIA, (MEPA)

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### NATIONALLY DETERMINED CONTRIBUTION (NDC)

- Unconditional target- 2030 -35%
- Conditional target- 2030 -50%-57%
- Study of the capacities of adaptation and implementing adaptation measures
- Base year- 1990



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### CLIMATE CHANGE STRATEGY 2030



# CLIMATE CHANGE COUNCIL

Mandate- Coordinate the implementation of the Paris Agreement of the UNFCCC

Members of the Council:

- Minister of Environmental Protection and Agriculture of Georgia (Chairman)
- I Minister of Finance
- I Minister of Economy and Sustainable Development
- I Minister of Regional Development and Infrastructure
- I Minister of Education and Science
- Minister of Internally Displaced Persons from the Occupied Territories, Health,

Labor and Social Affairs

- Chairman of Autonomous Republic of Adjara
- Chairman of Autonomous Republic of Abkhazia
- Director of National Statistics office of Georgia
- Coordinator of Covenant of Mayors





# BILATERAL AGREEMENT BETWEEN THE GOVERNMENTS OF SWITZERLAND AND GEORGIA

- Agreement signed in 2021
- Bilateral cooperation for implementation of the Art.6 of the Paris Agreement
- Joint intergovernmental committee for validation and authorization of the projects
- Details of the cooperation
  - Results-based payment





# BILATERAL AGREEMENT BETWEEN THE GOVERNMENTS OF GEORGIA AND JAPAN

- Agreement signed in September 2022
- Bilateral agreement within the framework of the joint crediting mechanisms
- Joint crediting committee for validation and authorization of the projects
- Details of the cooperation
  - Preliminary grant funding





# CARBON MARKET READINESS NEEDS ASSESSMENT

- Funding SECO
- Executor UNDP/Neyen Consulting
- Mission Assessment of carbon market gaps and needs
- Recommendations capacity building; creating the policy framework

Assessment Area	Party's Readiness	Article 6 Implementation	Future Outlook
Transparency score			Ž
Double counting prevention score			<b></b>
Alignment of MOs with NDCs Score			$\Rightarrow$
Environmental integrity score			4
Groups Score			$\checkmark$
NDC Completeness			$\Rightarrow$
Units Transfer Authorization processes			$\overline{\langle}$

### CARBON MARKET POTENTIAL ASSESSMENT

- Funding EBRD
- Executor Carbon Limits
- Mission Carbon Market Assessment and identifying the priority sectors and measures





## **THANK YOU!**



#### MAIA TSKHVARADZE

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# Presentation: CDM transition in Korea Speaker:

**Sangsun HA** Ecoeye, Korea

Side Event: CDM transition in the context of ambition increase through Article 6. Thu., 17 November 2022. 13:14 – 14:45 UTC+2

### **Article 6 and Korean Carbon Markets**

"Overseas CDM projects invested by Korean entities for K-ETS since 2018 is an early action for Paris Agreement NDC."

### Sangsun Ha

Head of Carbon Desk sangsun\_ha@ecoeye.com



### 1. South Korea Paris Agreement NDC

2030 Nationally determined contribution : 40% reduction from the 2018 level by 2030
The government has increased its mitigation ambition by another 100 million tons.





### 2. South Korea considers to use Article 6

South Korea plans to use Article 6 of Paris Agreement as a complementary measure.
Compliance entities under K-ETS may use Article 6 for 5% of their emission (20~30M a year)
The government may use Article 6 (33.5M at the point of 2030)

information submitted by the Republic of Rorea
The Republic of Korea's updated NDC target is to reduce 40%
from the total national GHG emissions in 2018, which is 727.6
MtCO2eq, by 2030. The Republic of Korea plans to use

Information submitted by the Depublic of Karee

voluntary cooperation under Article 6 of the Paris Agreement as a complementary measure to its domestic mitigation efforts including LULUCF to achieve its target.

	PA Article 6 for South Korea NDC		
Responsible	K-ETS	South Korea	
entity	compliance entities	Government	
Demand*	around 20MtCO2eq 33.5MtCO2eq		
Preferred	6.4 (including CDM	6.2	
option	transition)	(bilateral agreement)	

\* At the point of 2030, accumulated demand is several times more than the year of 2030 demand



### 3. K-ETS price development

KAU\* started from circa 8USD in Jan 2015 and peaked to circa 34USD in March 2020.
KAU total traded volume is 70million and weighted average price is circa 16USD.





\* KAU : Korea Allowance Unit

### 4. K-ETS international offset credit rule

K-ETS covering around 70% of national emissions is the major measure for NDC.
K-ETS intl offset in Ph2 was Art6.4 pilot using CDM because of delay of A6.4 operationalization.

	Phase 1	Phase 2	Phase 3	Phase 4	
	(2015~2017)	(2018~2020)	(2021~2025)	(2021~2025)	
Special Condition		Direct implementation by Korean entity from the point of Project registration (In case of PoA, from the point of the CPA registration)		TBD	
Mechanism	Only domestic offset credit	CDM	<ul> <li>Pre-2021</li> <li>issued</li> </ul>	<ul> <li>Pre-2021 CERs can be issued for i-KOC</li> </ul>	
Vintage	(KOC) can be eligible	After 1 <sup>st</sup> JUN 2016 <sup>*</sup>	<ul> <li>Post-2020 6.4ER can be issued for i-KOC</li> </ul>		
Product		i-KOC can be issued based on submission of C ER	<ul> <li>Article 6.2 ITMO also may be possible for i-KOC issuance</li> </ul>		
Registry		Korea Offset Registry System (K-ORS)		K-ORS linked with A6Registry	

\* Enforcement date of a revised "ENFORCEMENT DECREE OF THE FRAMEWORK ACT ON LOW CARBON, GREEN GROWTH" to address Kr NDC



## 5. K-ETS eligible overseas project

Either of the following Kr direct implementation conditions from the registration of project.
Korean entity should be focal point or project participant at the time of project registration.

A. In the case of **domestic enterprises**, etc. directly participating in GHG emission reduction projects as a business entity, <u>the</u> ratio of the domestic enterprises ownership for a GHG emission reduction facility shall be more than 20%.

(ex., Mitigation project in overseas facility of domestic enterprises)

B. In the case of domestic enterprises participating in GHG emission reduction projects as a stockholder of a business entity, the ratio of stock having the voting right of a domestic enterprise shall be more than 20%.

(ex., Renewable energy project implemented by Special Purpose Company)

- C. A project wherein a domestic enterprise <u>distributes or sells products or technology</u> for the GHG emission reduction as much as <u>more than 20% of the total cumulative expenses to an unspecified majority</u> (in this case end-users).
   (ex., Micro-scale mitigation technology dissemination/sales project such as improved cookstove, LED and water purifier.)
- D. A project, wherein a domestic enterprise jointly supports the expenses of the GHG emission reduction project <u>in</u> cooperation with the central government, local governments, or public institutions, or with the foreign <u>central government or foreign local governments. (Only LDCs)</u>

(ex., Forest Project in LDCs, tCER/ICER eligibility is unclear.)



## 6. CDM CER to KOC Conversion procedure

- PP shall register a UN registered project as an Kr Offset Project in ORS<sup>1</sup>).
- Once a project is registered in ORS, PP shall submit UN credits and i-KOC may be issued.



1) Offset Registry System, 2) Chair of the Committee is Vice-Minister of Ministry of Environment. It is usually held quarterly, but no fixed schedule.



### **Improved Cooking Stove Projects invested by K-ETS**



#### ECOEYE and several Korean companies have invested in millions of ICS by using CDM

\* As Post 2020 CER issuance is not possible,

Korean companies need to make transition of the CDM projects into Paris Agreement Article 6.4

### Clean Cooking Alliance 🤗

"Other governments can learn from South Korea's experience & support greater investment into #CleanCooking through their national carbon markets" says CCA Senior Director Peter George in a new Allafrica.com op-ed highlighting innovative climate finance.

Read more http://ow.ly/tunB50BSmwG #SDG7



allafrica.com Africa: The Importance of Clean Cooking in a Low Carbon Future

Of particular note is the admirable leadership demonstrated by the government of South Korea, which in 2017 adapted its national Emissions Trading Scheme to enable the import of credits from international CDM projects implemented in partnership with Korean entities. Korean utilities and industrial conglomerates have focused on clean cooking because of the multiple co-benefits it can deliver – from family health to gender equity. It is due to these co-benefits that carbon market experts believe clean cooking projects are amongst the most likely to easily transition to the Sustainable Development Mechanism being established through Article 6.4.

As a result of the government of South Korea's actions, there are now significant carbon finance inflows to clean cooking projects in many developing countries, enabling companies to scale up their operations. This decision to move early, ahead of the finalisation of Article 6.4, has enabled South Korea to gain a competitive advantage over other countries, and allowed it to secure a strong pipeline of high-quality projects that can be transitioned to Article 6.4 to meet their Paris Agreement compliance obligations.

### 7. Host country early approval for the CDM Transition

Paris Agreement Article 6.4 and 6.2 full operationalization would take several years.
 Korean Private sectors wants to continue the existing project and invest a new project by using provisional CDM measure and CDM Transition process







http://www.ecoeye-int.com

Monthly Korean Carbon Market Report is available.

Sangsun Ha

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# **Presentation:** CDM transition in Vietnam

# Speaker:



### **Dang Hong Hanh**

## VNEEC (Energy and Environment Consultancy Joint Stock Company ), Vietnam



CDM transition in the context of ambition increase through Article 6 COP27 Side event, Sharm el Sheik, 2022

# **CDM Transition in Vietnam**



Dang Hong Hanh, Co-founder & Managing Director Energy and Environment Consultancy Joint Stock Company (VNEEC) Website: www.eec.vn



# CDM statistic data in Vietnam

- 273 registered projects, including 258 CDM project activities and 15 PoAs
- 74.1% are hydropower projects
- 22 projects registered after 2012





- Most CDM registered projects are renewable energy
- All power generation projects have to be included in National Power Development Master Plan (PDP):
  - Recently valid: the Revised National PDP for the 2011-2020 period with the Vision to 2030 is approved in 2016 (revised PDP VII)
  - Under approval: PDP for the 2021 2030 period with a vision to 2045 (PDP VIII)
- Power sector BAU scenario in the revised NDC 2020 and the latest revised NDC 2022 is based on revised PDP VII



Consider the case of the two biggest registered CDM hydropower projects (starting date of the 1<sup>st</sup> crediting period in Nov 2012):

- Annual CERs estimated: ~0.98 million CERs
- Already included in the BAU scenario for the revised NDC 2020 and 2022 since they are included in revised PDP VII (2016)
- If they are eligible to be transferred and registered under Article 6.4:
- Estimated credits issued from 1 Jan 2021 to end of 2nd crediting period: ~
   5.9 mil credits
- What happens if issued A6.4ERs are transferred to a buyer country: after CA, they would possibly contribute to miss the commitment target in energy sector (reduction of about 51.5 mil tones CO2eq by 2030)



## CDM transition in Vietnam: avoiding the overselling risk

Important question for approval of CDM projects applying for transition under Article 6.4:

# Is activity already included in the BAU scenario for the NDC?





# CDM transition in Vietnam: next steps

### Next steps for the host country:

- 1. Should the country apply a first come-first serve approach or should there be "fast track" for specific activity types/sizes?
- 2. The **private sector** has been the main player in the CDM implementation in the country. How do **private sector CDM developers** will consider **approach CDM transition**? Do they have a **strong interest?** Is there a **large share of "zombie" CDM projects**?

Crediting period status of CDM activities				
Activity type	Registered total	Crediting period expired before 01/01/2021, renewal no longer possible	Crediting period active as at 01/01/2021	
<b>Project activities</b>	258	147	111	
Programmes of activities	16	N/A	N/A	



Next steps for the host country approval of CDM transition activities:

1.Confirmation on fostering sustainable development:

Should the country develop the new criteria? No specific criteria available for CDM so far

2. Approval of potential renewal of crediting period:

Before NDC was submitted? Or before the Updated NDC was submitted? When is the crediting period of a project really started? Deviation from the registration?

- 3. Relation to the implementation of NDC:
  - Is the sector covered by the NDC?
  - Would the types of projects be included in the baseline for that sector?
    - Details of the (revised) NDC on the BAU scenario
    - Details of the NC, BUR, and (revised) NDC on existing mitigation efforts



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# **Presentation:**

# How the KliK Foundation can contribute to ambition increase and a smooth CDM transition

<u>Speaker:</u>

# Mischa Classen

Klik Foundation, Switzerland

Side Event**: CDM transition in the context of ambition increase through Article 6.** Thu., 17 November 2022. 13:14 – 14:45 UTC+2 **CDM Transition** 

# Klik Foundation's approach to ambition in CDM Transition

Mischa Classen Foundation for Climate Protection and Carbon Offset KliK KIK

SSH 17 Nov 22

# **Framing Conditions**

# **Swiss national legislation**

- Obligation under Swiss Law to purchase ITMOs
- Swiss Authority to set requirements for eligibility (revision per 2025)
- Klik Foundation purchase 6.4ER eligible for compliance

# **Eligibility of Transitioned CERs**

- ► No old CERs generated prior to 2021
- Fresh projects implementation after registration
- Technology restrictions apply on Swiss side: e.g. no Forest



#### CDM Transition

## **Relevance of the Mechanism**



# Important pillar in KliK procurement strategy

- Continued bilateral 6.2 relations, 6.4 to provide residual to target
- Primary market: contract activities with implementation after 2021
- Klik Foundation purchase 6.4ER eligible for compliance

## **Early action**

- New activities need lead time, ready when mechanism is live
- Explore and pilot early action
- Identifying suited mitigation activities based on 6.2 experience

# Learning from 6.2 bilateral cooperation

# **Promotion of national framework for 6.4**

- NDC implementation
- Baseline-Setting
- Initial Report, also for 6.4 participation

## Mutual understanding of Article 6 scope

- Working relation between regulators
- Align activity development with requirements from inset
- Identify approaches and methodologies suited for both countries



## **Ensuring Ambition**



# High level and quality of mutual engagement

- Early buy-in and approval of both governments
- Build on Article 6.2 relations
- Contracting activities from start (Primary forward contracts, offtake)

## **Common understanding of Ambition**

- Close cooperation with host country and Switzerland
- Flag designated high ambition scope for A64ERs bound for Switzerland

# **Steamlining and scaling**

# Piloting the mechanism

- Early start developing activities for the mechanism
- "Dry run" development and national framework
- Explore registration under temporary measures

## **Standardisation of Ambition**

- Introduction of tools
- Mutually accepted "A6-ready" methodologies and scopes
- Whitelisting projects

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# **Presentation:**

# Ambition increase through Article 6: key considerations

Speaker:

# **Raphaela Kotsch** Zurich University of Applied Science

Side Event**: CDM transition in the context of ambition increase through Article 6.** Thu., 17 November 2022. 13:14 – 14:45 UTC+2







# CDM transition & ambition increase through Article 6

### **Raphaela Kotsch**

UNFCCC Side Event Nov 17, 2022





### **Components of the CDM transition**

- 1. Will CDM **baselines and monitoring methodologies** be used and how?
- Which activities (CDM projects and Programs of Activities [POAs]) can be transitioned?
- 3. How many **Certified Emission Reductions** (CERs) will be available for transition?
- 4. What are the lessons learned from CDM regarding the institutional **infrastructure** requirements?





### **CDM** activities to be transitioned

Decision on CDM of COP26 in Glasgow

- Cut-off: 1 January 2013 until the end of 2025
- CERs from forestry projects cannot be transferred
- 690 registered CDM projects and 551 projects at validation are "Article-6-ready"
- 142 registered PoAs and 136 PoAs at validation can continue
- These CDM and PoA projects have from 2013 until now issued 57 MCERs

Paris Agreement Article 6 projects

• 68 pilot projects in the UNEP Article 6 Pipeline





### **Registered "Article-6-ready" CDM projects**







### **Potential supply of CERs**

Expected accumulated issuance from "Article-6-ready" activities from 2013 until end of 2025:

### From CDM Projects

- Registered: 713 MCERs
- Under validation: **1,130 MCERs**

#### **From PoAs**

- Registered : 462 MCERs
- Under validation:36 MCERs

Total supply = up to 2.34 billion CERs

Annual global demand for carbon credits is estimated to be 340-510 MtCO2/year by 2030.  $\rightarrow$  Supply could cover 4.5 to 7 years of the demand of the voluntary carbon market





### Key considerations for ambition increase

- Different principles guiding Kyoto and the Paris Agreement
  - All countries contribute to reducing emissions, also host countries have NDCs
  - Long-term temperature goals of the Paris Agreement
- Challenges & perverse incentives for host and buyer countries can hinder ambition increase
- Unambitious NDCs might lead to up to 3'800 MtCo2eq of hot air based on estimates by Meinshausen et al. (2022)\*

<sup>\*</sup> https://www.nature.com/articles/s41586-022-04553-z





### **Lessons learned: Infrastructure**



Figure: Betz et al. (2022)

Fragmented & inconsistent reporting

- CDM Executive Board adopted definition of confidentiality that restrict public reporting to aggregate information only
- **Only few** governments publish disaggregated information from their registries
- Published data exists for different points in time and degree of detail

**Recommendations for Article 6:** 

- → Reporting on account level information and on specific transactions and holdings of ITMOs identifiable by a 'unique identifier'
- → To safeguard environmental integrity make reporting requirements and information publicly available to enhance transparency on international trading of ITMOs







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https://www.cambridge.org/core/elements/carbon-marketchallenge/9261122253200C956EAF02B5C9AF53C8





## Thank you!

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# **Discussion Panel:**

# CDM transition in the context of ambition increase through Article 6









