



# Climate Change Projects by KDI GKEDC

Date: November 4, 2024



# 1. GKEDC by KDI

## KDI Since 1971

### [KDI] Korea Development Institute

- Involved in Policymaking Throughout Korea's Development Trajectory
- Data-driven & Evidence-based Policy Research Covering Comprehensive Research Areas

## GKEDC by KDI

### [GKEDC] Global Knowledge Exchange & Development Center

#### 'Global Knowledge Exchange Platform'

#### - Main Pillars-

- ① Global Knowledge Cooperation
- ② Exhibition & Education

## Global Knowledge Cooperation of GKEDC

### WHAT

- Climate Change
- Digital Transformation
- Socio-economic Development

### HOW

- Knowledge Exchange Days(KED)
- Capacity Building Workshop & Seminar

### WITH WHOM

- IO and ODA Agencies
- Regional Cooperation Frameworks
- Embassy/Chamber of Commerce

### FOR WHOM

- Partner Country Governments
- Public and Private Sectors (& Academia)

## 2. Climate Change Projects



### Recent Research by KDI

- Weather Condition Changes on Prices: Effects and Implications (2024)

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- Impact of Carbon-Neutrality Policies: Focusing on Trade and Environment (2023)

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- Green Transition Strategy and Implementation (2023)

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- Renewable Energy Policy in Korea (2023)

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- A Study on Impact of Korea's Policy Instruments for Battery Electric Vehicles and Fuel Cell Electric Vehicles (2023)

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- Impacts of Climate Policies on Industrial Competitiveness in Korea (2022)

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- Carbon Taxation Policy in Korea (2021)

### Knowledge Exchange Projects by KDI GKEDC

Sub-sector/ Title	Program	Partner
Digital Transformation (& Digital Twin) in 2024; <i>Climate Change in 2025</i>	KED	Organized by KDI GKEDC
<b>Annual Climate Change Projects and Programs (CCPP)</b>	Forum	MOEF <b>(UNFCCC)</b>
AI Water Resource Management	Capacity Building Workshop	MRC
Waste Management		WB (OLC)
Forestry		AFOCO
Environmental Subsidies	Seminar	WB
Energy Transition	Capacity Building Workshop	WB EAP
Climate Change TF (Climate Financing, etc)	Inter-Ministerial Task Force (&/ Committee)	MOEF (GCF, IFC, Ministries, Exim Bank, KDB, etc)
Smart Mobility in 2024; <i>Climate Change in 2025</i>	Embassy Community (Forum/Seminar)	Embassies in Seoul (ASEAN/GRULAC(TBD))

# 3. 2024 ROK Investment Forum with UNFCCC



## Overview

- **Date:** November 28<sup>th</sup> ~29<sup>th</sup>, 2024
- **Venue:** GKEDC
- **Participating Entities:** Southeast Asian Governments, AF, GCF, GGGI, Major Central Banks of Partner Countries, ODA Implementing Agencies, Relevant Investors and Private Firms
- **Targeted Projects:** NBF, UNFCCC

## UNFCCC와 함께하는 기후변화 투자 포럼 Republic of Korea-UNFCCC Asia Needs-based Finance (NBF) Investment Forum

2024. 11. 28. (목) ~ 29. (금) 서울 글로벌지식협력단지(GKEDC)



## Tentative Program (TBD)

### < LDC Asia and NBF Projects >

#### Introduction of the NBF Projects

- Climate Resilient Water Governance
- Coastal and Marine Ecosystems
- Climate Resilient Infrastructure
- E-Mobility
- Agriculture
- Ecosystems-based Adaptation

#### Breakout Sessions: Partners-Private Companies-Governments

- Moderators: UNFCCC

### < Presentations on Projects on Climate Change by Partners and Funders >

#### Presentations and Discussion

- Invesco
- FAO
- KDB
- GIZ
- Global Environment Facility
- Adaptation Fund

# Appendix. Carbon Free Future: VCM

## WHY VCM

- **Need to meet the global emission gaps** (\$1 trillion per year between '20 and '25 (COP 27))
- **Advancing climate initiatives requires high capital investments from firms** (i.e. CCUS).
  - ✓ long-term investment is necessary (short-term profitability ✗)

## VCM TREND

- **Increasing Corporate Climate Change Commitments**
  - ✓ i.e. Fortune Global 500 Companies: 23%(2019)→42%(2022)



**U.S.:** White House announced the formalization VCM



**Australia:** VCM credits are allowed in government-supported carbon neutrality programs.



**Singapore:** Allows 5% of the carbon tax to be offset via VCM

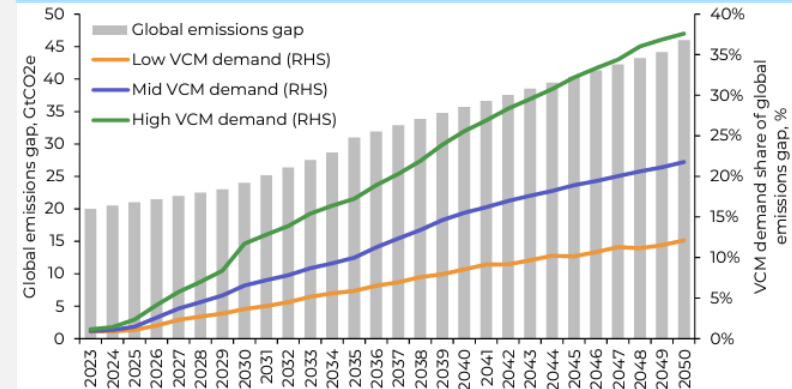


**AU:** Launched the African Carbon Markets Initiative in 2022, aiming to sell VCM credits (\$100 billion) annually by 2050

## VCM: Challenges/Expectation

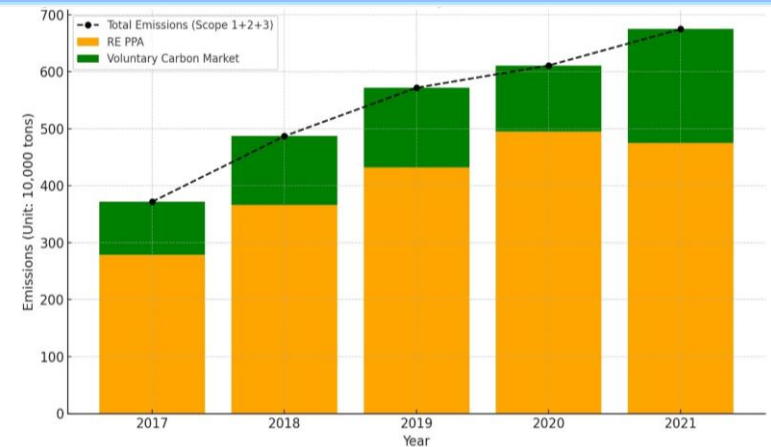
- Different certification bodies and rules in issuing credits; risks of double counting; integrity concerns of VCM credits?
- Paris Agreement 6.4 (COP29)

**[Figure 1] Potential Scenario of VCM's Contribution to Global Emission Gaps by 2050 (MtCO<sub>2</sub>e)**



Source: GenZero Carbon Market 2.0 (2023)

**[Figure 2] Google's Greenhouse Gas Emissions**



Source: Google Environmental Report (2022)

