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KGID 2026 SEJONG

KCCI Carbon Standard (KCS) at a glance towards a greater Voluntary Carbon Market

May 2026

Korea Chamber of Commerce and Industry (KCCI)

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Role of KCCI : Advocates for Korean Industries

As the very first entity representing Korean Industries, KCCI have paved the way to promote the nation's economic development with its global network and influences

Overview

KCCI

"As the most influential economic entity representing Korean economy since 1884, the non-profit KCCI represents the voices of big conglomerates and SMEs, closely tied with the central and local government"

Fast Facts

- *based in Seoul since April 1884*
- *201.7 thousand firms & affiliates enrolled*
- *recognized as a public legal entity by law in 1953*

- *Chairman Taewon CHEY (2021~Current) (known as CEO of SK Group)*

Global & Local Network

International Chamber of Commerce

ICC WORLD CHAMBERS FEDERATION

- *KCCI role as ICC Korea, a national committee of ICC which connects to the world*
- *ICC networks can be utilized when KCCI center build up its network and branches abroad*

130+	2,000+
states connected	sub-org. involved

- *KCCI has its regional offices by each province that makes to easily create a connection between enterprises that are potential suppliers of offset credit and the KCCI center*

73	700+
regional offices	field-specific member assn.

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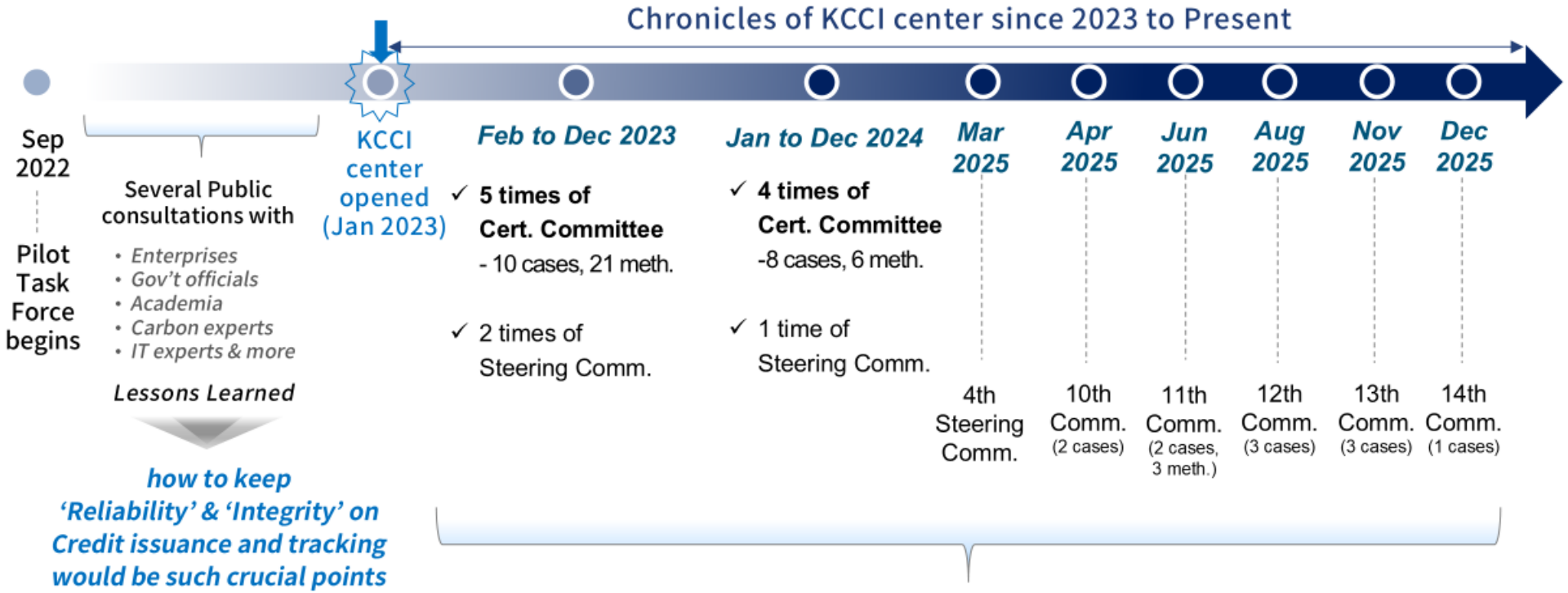
Establishment of KCCI center

KCCI focused on VCM as a net zero solution for industries and opens a certification center with carbon crediting program based on its carbon standard (KCS) in 2023

Time Lapse



- Approx. 2.8 mil. tons of offset credits are being made
- Totally 31 projects with 32 meth. listed on KCS registry

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KCS Program in brief (1/2)

KCS is a carbon offset program which provides the standard and framework for independent validation of projects and verification of carbon reductions and removals

Basic Concept of Program

Offset Credits in VCM,
"Necessary solution to Net Zero"

Reduction Activities

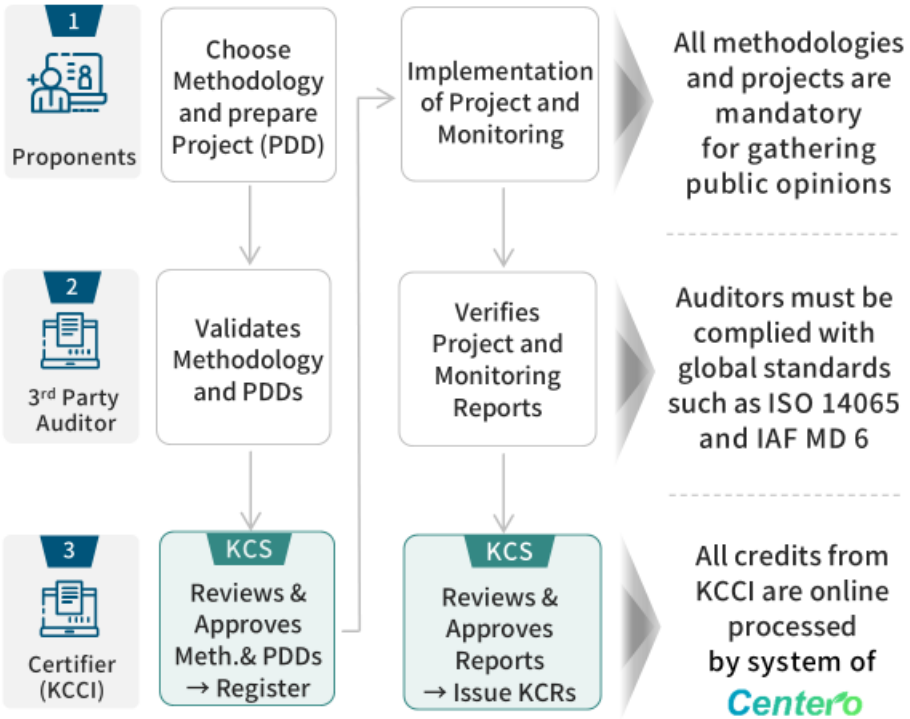
- All reduction and removal activities, according to the accredited methodologies that meet basic principles are eligible

Offset Credits (KCRs*)

- It can be utilized as a mean to achieve net zero, along with on-site physical efforts in reducing carbon emissions

(*) KCCI Certified Reductions

Process of Certification



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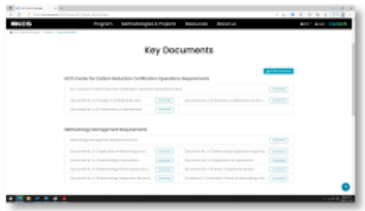
KCS Program in brief (2/2)

After offset credits (KCRs) are confirmed, their issuance and retirement records are secured and publicly available on the KCS registry based on blockchain technology

Key Features of KCS Registry

Centero

"means Center of Net Zero"
supports registry services
that enable monitoring, reporting, and
verification (M-R-V) of projects
and credit issuance and various credit
transactions for promoting Net Zero.



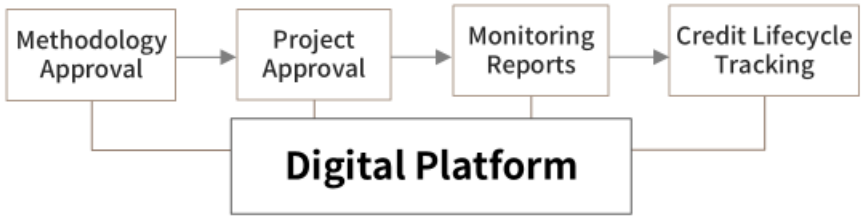
【 KCS Documents 】

【 Digital Tracking 】

【 Credit Updates 】

【 Resources 】

Basic Algorithm



Fully optimized for efficient process

Accumulates with public disclosure of Verification data
&
Prevents data forgery and falsification using blockchain technology

Managing Credit Lifecycle

Manages all transactions such issuance, transfer, retirement/cancellation
&
Utilizes blockchain technology to track all history following transfer of ownership

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KCS Achievements(1/2)

Various type of 32 KCS methodologies and its 31 projects were being executed and accredited 2.8 million offset credits known as KCCI Certified Reductions (KCRs)

Eligibility criteria for offset activities

KCCI center holds competency and experiences in developing all kinds of methodologies

	Carbon Reduction	Carbon Removal
Tech-based	Reduce primary source of CO_2 from energy & industrial processes	Capture emitted CO_2 and store under ground/water, etc.

	ARR*	REDD+**
Nature-based	Encourage planting, seeding and natural renewal	Prevent forest degradation, support eco-friendly farming

(*) Afforestation, Reforestation and Revegetation
(**) Reducing Emissions from Deforestation and Forest Degradation

Project Types & Sectors

KCCI plans to develop 40+ methodologies soon (currently owns 32 listed on the registry)

Item	Type
Reducing CO_2 in production through plastic chemical recycling	Plastic
Manufacturing chemicals from biomaterials	Biofuel
Pyrolysis of waste tires to produce refined oil and carbon black	Pyrolysis
Reducing fossil fuel use of battery-powered electric vehicles	Battery
⋮	
Afforestation and reforestation methodology in degraded mangrove habitats in Vietnam	ARR
Forest management by extending age of final cutting in Forestry and Mountain Villages	REDD+

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KCS Achievements(2/2) - KCS methodologies by sector

Methodology for improved forest management through extension of rotation age	*Energy efficiency measures in thermal applications of non-renewable biomass*	*Methodology of Electricity Consumption Reduction by Improving Low Power eSSD Performance*	*Methodology on reduction of fossil fuels by manufacturing warm mix asphalt concrete*	*Methodology for improving vehicle fuel use efficiency through low-viscosity engine oil*
Methodology for fossil fuel reduction according to batteries for electric or hybrid vehicles	*Afforestation and reforestation methodology in degraded mangrove habits*	*Methodology for reduction generated during the transportation of salt water*	*Methodology of chemical products from raw materials applying depolymerization*	*Methodology of building cooling and heating energy saving through smart window film*
Methodology for replacing single-use containers with reusable containers	*Methodology for vehicle fuel use efficiency through mineral-based lube base oil*	*Methodology for carbon storage and incineration disposal by using biomaterials*	*Methodology of electricity loss reduction due to Si Wafer-based semiconductor devices*	*Methodology for using pyrolysis oil and carbon black produced using pyrolysis technology*
Methodology for the disposable products inhibition project	*Methodology for Reduction through Eco-friendly De-icers with the Application of Starfish*	*Methodology for Non-driving Refrigeration and Refrigeration Devices for Cold Chain Vehicles*	*Methodology for Reducing Greenhouse Gas by the Carbon Sequestration of Biochar*	*Methodology for reducing electricity consumption by improving low-power DRAM products*
Methodology for reducing power usage in home appliances through power saving technologies	*Power consumption reduction by Arm Appliance server products*	*Capture and utilization of carbon dioxide in the atmosphere through DACCU technology*	*Methodology for Products Originating from Hydrogen, Fertilizer, and Metal Compounds*	*Methodology for Refining Waste Organic Solvents to Replace New Products*
Methodology for producing and using carbon-reduced concrete	*Methodology to reduce the use of electricity and/or fossil fuels using heat pump products*	*Greenhouse gas removal methodology using enhanced rock weathering (ERW) technology*	*Methodology for Material Recovery and Recycling of Industrial solid waste*	*Methodology for Greenhouse Gas Reduction Using Mechanical Foaming based Warm Mix Asphalt*
Fuel Switch, process improvement and energy efficiency in brick manufacture	*Methodology of Greenhouse Gas Reduction by Using High Efficiency Air Heater in Construction Site*	...		

* Legend : Energy Forestry CCU/S Transportation Waste Recycling ETC.

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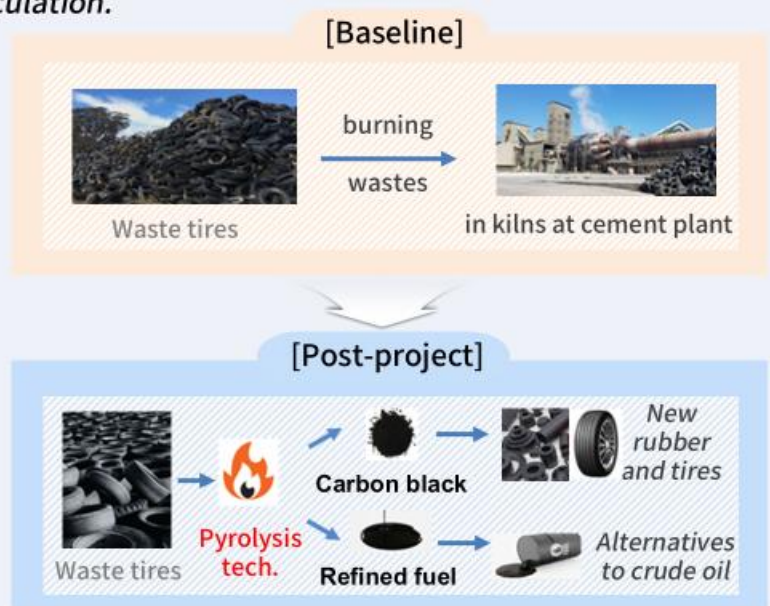
Featured Cases(1/2)

- *Type : Reduction*
- *Sector : Waste Management and Disposal*
- *Reduction volume : 22,200 tCO_2eq/y*

Methodology for using pyrolysis oil and carbon black produced using waste tire pyrolysis technology as raw materials for fuel and naphtha reduces greenhouse gas emissions by producing pyrolysis oil that can replace fossil fuels and naphtha cracking facilities and carbon black, the main ingredient of tires, by recycling waste tires(cement kiln or solid fuel products) from the perspective of resource circulation.



- *Type : Removal*
- *Sector : Construction*
- *Reduction volume : 27,175 tCO_2eq/y*

A strategic approach for the substitution of conventional de-icers with eco-friendly alternatives utilizing starfish extract. The objective of this methodology is to suppress the emission of greenhouse gases throughout the entire lifecycle of overall de-icers, including their production, application, and the treatment of starfish used as raw materials.

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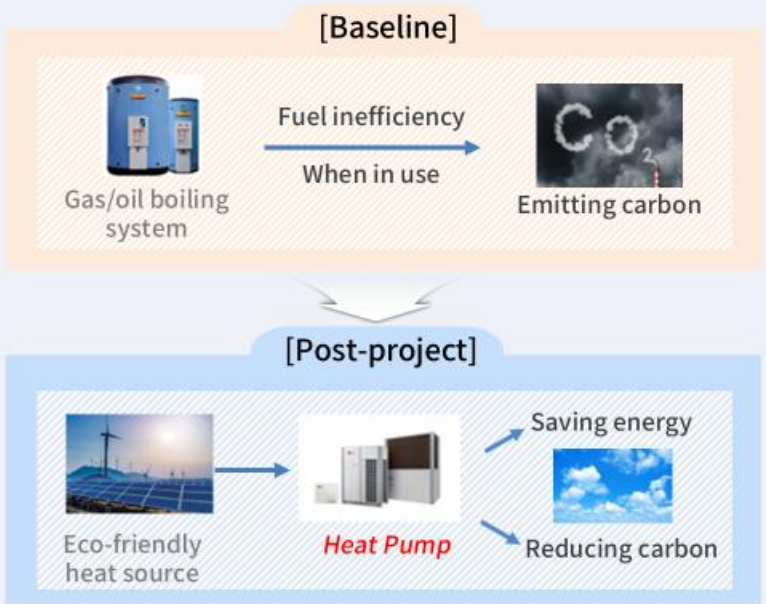
Featured Cases(2/2)

LG Electronics

- *Type : Reduction*
- *Sector : Manufacturing*
- *Reduction volume : 5,461 tCO_2eq/y*

Methodology of the project to reduce the use of electricity and/or fossil fuels using heat pump products is applicable to projects that utilize heat pump* products to replace some or all of the fossil fuels and electricity used in the heating and cooling production facilities prior to the project.*

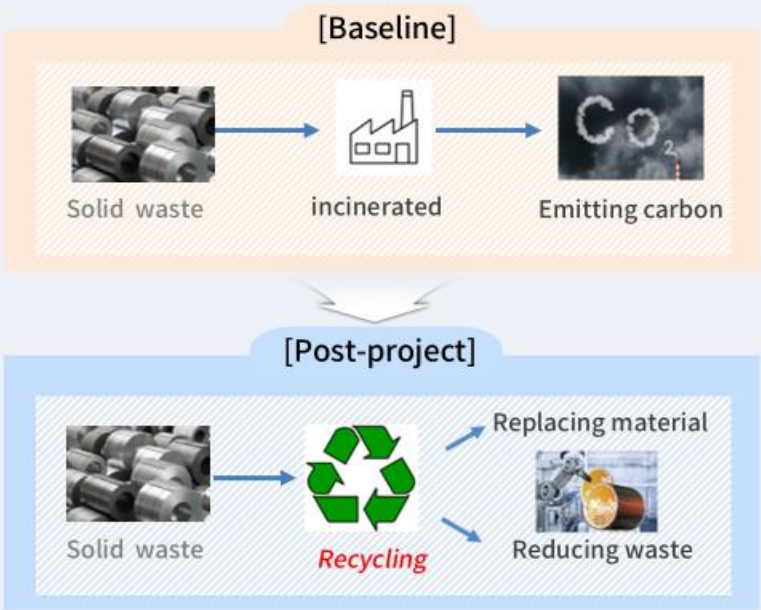
** A supply device that absorbs heat energy from the outside and uses it for indoor heating and cooling.*



SAMSUNG ELECTRONICS

- *Type : Reduction*
- *Sector : Waste Management and Disposal*
- *Reduction volume : 213 tCO_2eq/y*

Methodology for Material Recovery and Recycling of Industrial solid waste is applicable to projects that reduce greenhouse gas emissions by recovering and recycling materials from industrial solid waste generated during business operations, thereby substituting virgin materials and avoiding waste disposal.



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Asia Alliance

KCCI center aims to expand VCM in Asia and discover new activity cases by building such its regional alliance with strategic partners

Goal & Vision

Aiming to strengthen the influence of Asia entities and expand VCM demand in Asia

To find solutions for accelerating Asian VCM through the collaboration with VCM related entities specializing in Asia's natural and industrial environments

【 Expected Achievements 】

- Enhancing carbon crediting program with standard and helping to implement its scheme to developing countries
- Raising awareness of the necessity of VCM by each country and encouraging the public to participate in VCM as suppliers or buyers
- Exchanging capabilities and resources such expertise and experiences to certify activities more integrated and professional

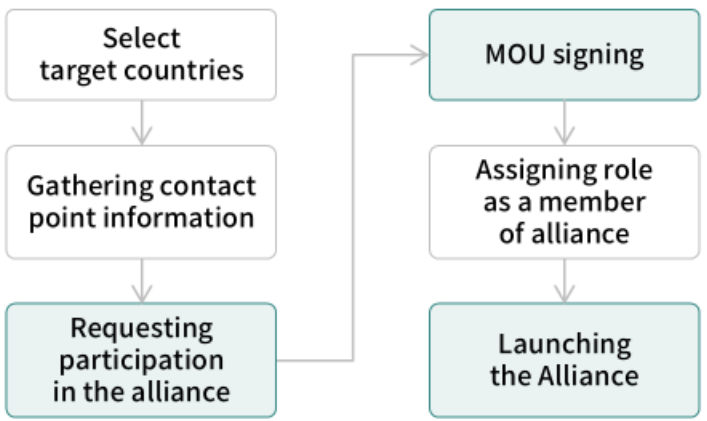
Way to build up Alliance

Connecting with influential institutions or potential countries in Asia

【 Alliance Candidates 】

- Influential countries in VCM: Thailand, Singapore and more
- Countries have no VCM entity : Laos, Vietnam, India and more

【 Simplified Process 】



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Asia Alliance

KCCI begins a strategic partnership with Singapore's Asia Carbon Institute (ACI) and New Delhi-based Carbon Markets Assn. of India (CMAI) and more since COP29

KCCI Asia Carbon Institute

【MOU Signed on Nov 2024】

【News Released】

- To Participate in discussions to accelerate VCM
- To design the Training scheme for carbon experts
- To share of methodologies and credit transfer history on each registry and collaborative study

KCCI CMAI Carbon Markets Association of India

【MOU Signed on Nov 2024】

【Agreements】

- To Disseminate carbon information for net zero
- To share of knowledge and experience to support designing the contemplated VCM scheme in India
- To organize workshops and in all trainings

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Asia Alliance

We formalized a Strategic Partnership with Laos and Thailand's NSTDA, TGO in March 2025, following high-level discussions with TGO and NSTDA during our business trip

【MOU Signed on Mar 2025】

【Agreements】

- Establishing Laos's Carbon Certification Framework
- Developing VCM Market Infrastructure
- Asia Alliance Participation & Vitalization
- Organizing Global VCM Events
- Advisory for Laos Pilot Projects

【MOU Signed on Apr, May 2025】

- Share and Utilize VCM Methodologies
- Jointly Host & Participate in Carbon Neutrality Events
- Explore Strategies to Vitalize the Asia VCM
- Enhance and Promote VCM Integrity and Credibility

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Asia Alliance

In 2026, we pledged to strengthen cooperation with MEX at the Macau forum and identified OECC as a key partner for friendly cooperation during our institutional visits in Japan.

澳門碳交所
Macao Emission Exchange

Participation in a Macao government-hosted panel discussion with Xpansiv, Verra, and others, as well as an MEX-led seminar, enabled us to identify potential opportunities for Asia Alliance collaboration.

【 Panel Discussion 】

【 Closed-door Seminar 】

一般社団法人 海外環境協力センター
Overseas Environmental Cooperation Center, Japan

We visited Japan to promote the expansion of the Asia Alliance and discussed the establishment of a positive collaborative relationship with the OECC in Japan.

【 Face-to-face Meeting 】

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Thank you for your attention.

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