

UN CTCN-UNITAR CIFAL Jeju-Korea Institute of Energy Research 2026 Energy Storage System Workshop and Learning Visit

1(Tue.)-4 (Fri.), September 2026, Jeju, Republic of Korea

Concept Note

Background and objectives

For the past 12 years, the UN Climate Technology Centre and Network (CTCN) has facilitated the development and transfer of environmentally sound technologies for low-carbon and climate- resilient development at the request of developing countries. To implement the mandate of CTCN, the centre has focused on stimulating technology cooperation and enhancing the development and transfer of climate technologies to developing countries. To date, CTCN has supported over 110 countries through climate technology innovation, transfer, and knowledge sharing.

One of the main objectives of the CTCN Partnership and Liaison Office (PALO) launched on 21 July 2022 is to strengthen existing efforts on innovation and collaborative research, development, and demonstration (RD&D) through greater collaboration with various organizations working on climate change issues. Its specific role is to serve as a Centre of Excellence on Research, Development, and Demonstration (RD&D) on climate technologies, engaging key actors in national systems of innovation and RD&D of climate technology including research which are institutes, universities as well as the private sector. Among various work streams of CTCN PALO, collaborative RD&D is a major focus of the centre, particularly through training which is via learning visits, exchange programme, and joint RD&D projects and activities among researchers, research institutes and universities.

The global RD&D demand survey executed in 2024-2025 identified 41 National Designated Entities (i.e., NDEs, technology focal points to the UNFCCC) interested in participating in a learning visit programme on Energy Storage System (ESS). By region, 17 from Asia¹, 15 from Africa², 6 from Latin America and the Caribbean³, and 3 from Oceania⁴ indicated their interest in offering knowledge exchange opportunities to national climate experts on ESS. Based on this, the CTCN organized cRD&D Bridge-building workshop on Energy and Environmentally Sound Technologies in conjunction with the 2024-2025 World Climate Expo in Busan. During these workshops, 23 invited NDEs were introduced to the concept of cRD&D, CTCN's cRD&D strategy, exchanged country status, and most importantly, explored the related emerging technologies that could fit their country's ESS research and development landscape.

Against this backdrop, the 2026 Energy Storage System Workshop and Learning Visit has been designed with its partners, United Nations Institute for Training and Research (UNITAR) CIFAL Jeju and Korea Institute of Energy Research (KIER), as an advanced, on-site capacity development on-site activity focused on strengthening the endogenous capacity, knowledge, and human resources on ESS. Building on the 2024-2025 World Climate Expo experience in Busan, the programme will provide participants with opportunities to

¹ Kazakhstan, Iran, Mongolia, Vietnam, Malaysia, Sri Lanka, Kyrgyz Republic, Thailand, Israel, Uzbekistan, Tajikistan, Armenia, Syria, State of Palestine, Cambodia, Maldives, Timor-Leste.

² Malawi, Somalia, Algeria, Zimbabwe, The Gambia, Tunisia, Senegal, Chad, Republic of the Congo, Gabon, Côte d'Ivoire, Ethiopia, Uganda, Sudan, South Africa.

³ Suriname, Paraguay, Panama, Grenada, Belize, Saint Kitts and Nevis.

⁴ Papua New Guinea, Samoa, Palau.

contextualize the technological concept and knowledge of ESS and related technologies within enabling and implementation environment of Jeju, Republic of Korea, a region with 15 years of successful expansion of renewable energy expansion and continuous ESS research, development, and demonstration.

The four-day International Workshop and Learning Visit will be held from **1 to 4 September 2026 at the Jeju Global Research Center of the Korea Institute of Energy Research and UNITAR CIFAL Jeju, Republic of Korea**, as a flagship event of the 2026 Green and Climate Capacity Development Week for Asia and the Pacific hosted by the institution. The programme will bring together approximately 30 participants from developing countries across the world, ideally one NDE and one researcher from each of the following regions: Small Island Developing States, Asia, Latin America, and Africa.

Building on the continuous effort to facilitate the dissemination of low- carbon and climate-sound technologies in developing countries, the 2026 programme will provide a global research platform for collaborative RD&D where various types and development stages of ESS technologies will be explored with special consideration of each country's status of renewable energy dissemination and its enabling and implementation condition. It will support participants in strengthening both the technical, financial, and institutional foundations needed to foster RD&D and the dissemination of ESS and national systems of innovation in their respective countries. The programme will be in English-only.

Expected Outcomes

1. Enhanced endogenous capacity and knowledge on ESS of NDEs, researchers, and professors of developing countries
2. Identified and implemented North-South, South-South and triangular RD&D collaboration activities and projects on ESS with the possible expansion to other low carbon and climate technologies
3. Strengthened collaborative RD&D capacities in respective countries

2026 Programme

1. Dates and venue:

- 1-2 September, 2026, KIER Jeju Global Research Center
- 3-4 September, 2026, UNITAR CIFAL Jeju

2. Co-hosting organizations: UN CTCN, UNITAR CIFAL Jeju, KIER

3. List of countries invited

- Africa - Chad, Côte d'Ivoire, Lesotho, Liberia, Somalia, Tanzania, The Gambia
- Asia and the Pacific - Fiji, Kyrgyzstan, Papua New Guinea
- Latin America and the Caribbean - Haiti, St Kitts and Nevis

Provisional Agenda

Arrival on 31st August: Check-in Gloster Hotel, Hamduck, Jeju-do

Day 1. Technology Discussion I (1st September)

Arrival and Registration	
08:30~09:00	Arrival and Registration Bus pick-up available from the hotel to the venue (Time: 8am) Venue: KIER Jeju Global Research Center
Official Opening and Introduction to the programme	
Moderator: Jeawon Kim, CTCN	
09:00~09:05	Welcome Remarks I Lee Chang-heum, Vice Governor for Climate and Economy of Jeju Special Self-Governing Province
09:05~09:10	Welcome Remarks II Han Dong-hoon, Member of the Future & Economic Industry Committee, Jeju Special Self-Governing Provincial Council
09:10~09:15	Opening Remarks Mr. Sungchul Shin, Director, UNITAR CIFAL Jeju
09:15~09:20	Congratulatory Remarks Yong-seog Seo, Chief, Jeju Global Research Center, KIER
09:20~09:25	Group photo
09:25~10:00	Round of Introductions · NDE/NDE representative: Name, country · NDE-nominated expert: Name, country
10:00~10:20	Overview of the Agenda Suil Kang, Coordination Officer, CTCN
Roundtable Discussion: Scene-setting	
Moderator: Suil Kang, Coordination Officer, CTCN	
10:20~10:50	2 guiding questions for each panel with simultaneous translation How do you assess the current pace of technological development in clean energy, and is it fast enough to meet our climate goals? Why is international collaboration with developing countries particularly important in addressing climate change and the energy transition? Panellist: Lee Chang-heum, Vice Governor for Climate and Economy of Jeju Special Self-Governing Province Han Dong-hoon, Member of the Future & Economic Industry Committee, Jeju Special Self-Governing Provincial Council Mr. Sungchul Shin, Director, UNITAR CIFAL Jeju Yong-seog Seo, Chief, Jeju Global Research Center, KIER
10:50~11:05	Open discussion with NDEs and experts

Coffee Break – 5 minutes

Session 1. Enabling Environment – Understanding the Concept of National Systems of Innovation (NSI)

Moderator: Jeawon Kim, CTCN

11:10~11:50	Keynote Lessons learned from establishing and enhancing an NSI: Case of RoK Hwanil Park, Chief Director, Division of Global Innovation Strategy Research, Science & Technology Policy Institute (STEPI)
11:50~12:10	Q&A
Lunch Break – 90 minutes (Venue: Chil-boon-eu-Oh)	
13:40~14:20	Lecture with translation Realizing Carbon Free Island with Renewable Energy System Yoon Hyeong-seok, former Director-General of the Future Strategy/Future Industry Bureau of Jeju Special Self-Governing Province
14:20~14:25	Q&A
Coffee Break – 5 minutes	

Session 2. Peer to peer exchange - Country Status

Moderator: Suil Kang, Coordination Officer, CTCN

14:30~15:40	Country status on NSI and Energy System In this session, NDEs and Experts are invited to share their country's NSI and Energy -related policy and/or activities within 10 minutes Africa 1. Chad 2. Côte d'Ivoire 3. Lesotho 4. Liberia 5. Somalia 6. Tanzania 7. The Gambia
Coffee Break – 10 minutes	
15:50~17:40	Country status on NSI and Energy System In this session, NDEs and Experts are invited to share their country's NSI and Energy -related policy and/or activities within 10 minutes Asia and the Pacific 8. Fiji 9. Papua New Guinea 10. Kyrgyzstan Latin America and the Caribbean 11. Haiti 12. St Kitts and Nevis
17:40~18:00	Reflections and comments

Welcome Dinner

18:30~	Jeju Milanesa (Buffet Style Dining)
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Day 2. Technology Discussion II (2nd September)

Session 4. Deep-dive into Energy Storage System I

Moderator: Suil Kang, CTCN

09:00~09:30	Lecture Renewable Energy Ecosystem & Energy Storage System in PNG Hanki Kim, KIER
09:30~10:00	Open discussion with NDEs and experts <i>Morning coffee served</i>
10:00~10:30	Lecture Microgrid Technology Powered by Renewable Energy and Battery Storage Systems Daejin Kim, KIER
10:30~11:00	Open discussion with NDEs and experts
11:00~12:00	Lab Tour (KIER centre)
Lunch Break – 90 minutes (Venue: Café Shim-pang, KIER. Dosirak (lunch-box) served)	

Session 5. Deep-dive into Energy Storage System II

Moderator: Daejin Kim, KIER

13:30~14:10	Lecture ESS and Energy Grid Integration Kang Ji-Sung, CEO, Korea Grid Forming
14:10~14:30	Open discussion with NDEs and experts <i>Relocation transportation provided</i>
15:00~16:00	Field Trip – Jeju Global Research Center for Bukchon Battery Energy Storage System (BESS) Power Plant Address: Bukchon-ri <i>Relocation transportation provided</i>
16:00~17:00	Premier to Day 3 – Jeju Carbon Free Island (CFI) Promotion Center, Haengwon-ri Address: 712-3, Haemajihae-ro, Gujwa-eup

Networking Reception – Café Shim-pang

18:30~20:00	Reflections, unresolved burning questions, expert consultations continue <i>Light refreshments and finger food provided</i>
20:00~21:00	Move to Seogwipo City, Check-in JS Hotel

Day 3. Policy and Finance Discussion I (3rd September)

Venue: UNITAR CIFAL Jeju

Session 6. Enabling Mechanisms – Policy Support

Moderator: Hyunju Grace Lee, UNITAR CIFAL Jeju

09:00~09:40	Policy brief on Energy Storage System (recording) Marie Goss, Future Cleantech Architects
09:40~10:00	Open discussion with NDEs and experts <i>Morning coffee served</i>

10:00~10:40	cRD&D support: Technical Assistance, capacity building, and knowledge sharing Suil Kang, CTCN
10:40~11:00	Open discussion with NDEs and experts
Lunch break - 60 minutes (Venue: The Seaes Hotel & Resort)	

Culture Session 1 - Jeju's Natural Heritage

12:00~13:30	Sightseeing at Jungmun Daepo Jusangjeolli Cliff and Walking along the Olle Trail
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Session 7. Enabling Mechanisms – Public Financial Support

Moderator: Hyunju Grace Lee, UNITAR CIFAL Jeju

13:30~14:00	A Framework and Guidelines for Using Public Funds to Incubate the Climate Technology Market and the Green Climate Fund's Strategy on Incubation and Acceleration for Mitigation Julien Taris, Senior Expert Strategy and Innovation Department of Strategy, Policy and Innovation, Green Climate Fund
14:00~14:30	Open discussion with NDEs and experts
14:30~16:30	Introduction to Idea Note Creation <i>Overarching facilitator: Jeawon Kim, CTCN</i> This participatory session will allow NDEs and nominated experts in translating a priority national energy-system challenge into an initial climate-led technical assistance concept. Participants will define the climate and development problem, identify key technical, institutional, policy, capacity and financing barriers, and formulate preliminary objectives, activities, outputs and expected outcomes. The session will draw on insights from the country exchanges, technical presentations, laboratory visits and field trip. <i>Afternoon coffee served</i>
16:30~17:00	Summary for peer-to-peer exchange <i>Light dinner box shared</i>

Day 4. Policy and Finance Discussion II (4th September)

Venue: UNITAR CIFAL Jeju

Session 8. Enabling Mechanisms – Private and Philanthropic Financial Support

Moderator: Jeawon Kim, CTCN

09:00~09:40	Promoting Domestic and International Climate Technology Markets through Private Investment and Strengthening the Private-Sector Acceleration Ecosystem (Video) KyungJin Hyung, CEO, Blissvine Ventures
09:40~10:20	Climate Start-Ups - Human Resource and Capacity Development Programmes Prof. Jaehong Park, Department of Future Science and Technology Business, Korea University
10:20~11:20	Idea Note Enhancement <i>Overarching facilitator: Jeawon Kim, CTCN</i>

	This session will focus on strengthening the technical and implementation components of their idea notes. NDE-expert pairs will refine the proposed ESS or low-carbon energy application, clarify the scope of feasibility studies and capacity-building activities, identify data and technical requirements, map institutional responsibilities and assess potential implementation frictions. Participating experts will provide targeted technical feedback.
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Culture Session 2 & Lunch - Jeju's Cultural Heritage

11:20~14:30	Jeju Haenyeo (Women Divers) Culture Lecture and Lunch (Buena Sora)
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Session 9. Reflection for action points

Moderator: Jeawon Kim, CTCN

14:30~15:30	Idea Note Enhancement (Continued) with Consultation <i>Overarching facilitator: Jeawon Kim, CTCN, KIER</i> This session will support participants in connecting the proposed technical assistance to a realistic M&E and financing pathway. Participants will sequence activities from technical assessment and feasibility studies to pilot development, investment preparation and scale-up; identify measurable M&E indicators and potential financing actors and instruments; stress-test expected results and indicators; and complete a peer review of their draft technical assistance request idea.
15:30~17:00	Idea Note Presentation & Reflections from NDEs, experts, and stakeholders

Closing

Moderator: Hyunju Grace Lee, UNITAR CIFAL Jeju

17:00~17:05	Closing Remarks Hanki Kim, KIER
17:05~17:10	Closing Remarks Suil Kang, CTCN
17:10~17:20	Closing Remarks Mr. Sungchul Shin, Director, UNITAR CIFAL Jeju
17:20~17:30	Certificate & Photo Session <i>Light dinner box shared</i>