



Final Program

2025 IERE-TPC Taipei Net-Zero Workshop

Towards Net-Zero: Strategies and Innovations in the Power Industry

In-Person Event



Downtown Taipei, Taiwan

Taipei, Taiwan May 26–29, 2025

Organized by TPC and IERE





Towards Net-Zero: Strategies and Innovations in the Power Industry

About the theme

To meet the challenges of a world moving toward net-zero emissions, the power industry must accelerate the adoption of innovative strategies. This conference will focus on how low-carbon technologies, digital transformation, smart energy management, and renewable energy integration can drive industry-wide change. It will also explore ways to maintain the resilience and stability of power systems in the face of extreme climate conditions. Topics such as circular economy practices and sustainability in the energy sector are also key, aiming to reduce carbon footprints and enhance resource efficiency. Participants will share the latest advancements, innovations, and policy trends to contribute to the global net-zero transition, driving the sustainable development of future energy systems.

Who should attend?

The workshop is intended for experts actively involved in the selected themes, from IERE members and non-members, as well as all those interested in the evolution of the electrical power industry and the technology development and business development opportunities associated to this evolution. IERE and TPC will invite prominent speakers for keynote speeches.





Schedule Outline:

Monday,	May 26, 2025	Welcome Reception
Tuesday,	May 27, 2025	2025 IERE-TPC Taipei Net-Zero Workshop (Day 1)
		Official Dinner
Wednesday,	, May 28, 2025	2025 IERE-TPC Taipei Net-Zero Workshop (Day 2)
Thursday,	May 29, 2025	Technical Tour (Optional)

Outline of Program and Session Themes

Please note that the session structure and list of speakers are subject to change based on submitted contributions.

Technical Sessions 2 and 3 have been swapped for scheduling purposes; however, the session content remains unchanged. Technical Session 5 has also been canceled due to a lack of presentation applications.

Opening Session: Opening Address, Welcome Speech

Plenary Session: Keynote Speeches

Panel Session: Towards Net-Zero: Strategies and Innovations in the Power Industry

Technical Session 1: Innovations in Low-Carbon Technologies

As the global shift towards net-zero intensifies, low-carbon technology innovation is pivotal in driving the energy sector forward. This session highlights advancements in carbon capture and storage (CCS), hydrogen and ammonia power generation, and the integration of renewable energy sources like geothermal, wind, and solar energy.

Potential topics include:

- · CCS
- Hydrogen and Ammonia in Power Sector
- Geothermal Energy
- Onshore and Offshore Wind Energy
- Solar Photovoltaic (PV)

Technical Session 2: Smart Energy Management and Optimization

Efficient energy management is crucial for maximizing the use of available resources. This session explores smart grid technologies, energy efficiency practices, and demand response, including the





role of advanced energy management systems (xEMS), predictive analytics, and virtual power plants (VPP) in optimizing energy distribution.

Potential topics include:

- Smart Grid
- Energy Efficiency
- Demand Response
- Predictive Analytics
- Energy Dispatch
- Deep Energy Saving
- xEMS
- VPP

Technical Session 3: Resilience and Stability of Power Systems under Extreme Climate Conditions

Increasingly frequent extreme weather events challenge power systems, requiring new approaches to ensure resilience and stability. This session focuses on strategies for enhancing grid resilience and system stability, including disaster recovery and the use of advanced energy storage systems and distributed energy resources.

Potential topics include:

- Grid Resilience,
- System Stability
- Disaster Recovery
- Energy Storage Systems
- Microgrids
- Distributed Energy Resources
- Grid Hardening
- Predictive Maintenance
- Natural Disaster Prediction and Management

Technical Session 4: Environmental Sustainability Practices in the Power Industry (Canceled)

To reduce the environmental impact of power generation, this session covers key sustainability topics such as circular economy principles, sustainable supply chain management, waste-to-energy initiatives, and the adoption of green energy policies and practices to minimize the industry's carbon footprint.

Potential topics include:

- Circular Economy
- Sustainable Supply Chain
- Carbon Footprint
- Waste-to-Energy
- Green Energy Policy
- Green Building and Sustainable Construction Engineering





Technical Session 5: Digital Transformation and AI Applications in Power Systems (Canceled)

This session explores how digital technologies—including AI analytics, digital twin technology, IoT, automation, and advanced telecommunications and robotics—are transforming the power industry to enhance efficiency and optimize operations.

Potential topics include:

- AI Analytics
- Digital Twin
- Internet of Things (IOT)
- Data-Driven Operations
- Automation
- Advanced Telecommunications
- Robotic Technology

Special Session: Featured Company Overviews, Strategies, and Roadmaps etc.

Closing Remarks

Technical Tour (Optional)





Program (subject to change)

Session structure, speakers and timetable are subject to change.

Welcome Reception

Monday, May 26, 2025 Longevity, Taipei Marriott Hotel

17:30-	Registration
18:00-21:00	Welcome Reception

2025 IERE-TPC Taipei Net-Zero Workshop (Workshop Day 1)

Tuesday, May 27, 2025 Junior Ballroom I, Taipei Marriott Hotel

08:00–08:30 Registration

General Chair:	Chin-Tun WANG
	(Researcher, Taiwan Power Research Institute, TPC, Taiwan)

Opening Session

- 08:30–08:40 O-1 Opening Address Munib AMIN (IERE Chair)
- 08:40–08:50 O-2 Welcome Speech Nien-Mien CHUNG (General Manager, Taiwan Power Research Institute, TPC, Taiwan)

Plenary Session: Keynote Speeches

08:50-09:20	K-1	Future Energy System - Viewpoints of Decarbonization, Energy
		Security and Industry
		SHIBATA Yoshiaki
		(Senior Research Director, Clean Energy Unit, The Institute of
		Energy Economics, Japan)



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09:20–09:50	K-2	Performance Evaluation of Three Semi-Submersible Floating Offshore Wind Turbine Designs for the Taiwan Strait Shiu-Wu CHAU (Professor and Department Chair of Engineering Science and Ocean Engineering, National Taiwan University, Taiwan)
09:50–10:20		Coffee Break and Group Photo
10:20–10:50	K-3	Taiwan Grid Resilience and Innovation Research Partnership Initiative Chan-Nan LU (Professor of Electrical Engineering Department, National Sun Yat- sen University, Taiwan)
10:50–11:20	K-4	Taiwan Power Company Actions under High Renewable Energy Penetration Chih-Sheng CHANG (Deputy General Manager, TPRI, TPC, Taiwan)
Panel Session	: Towa Indu	ards Net-Zero: Strategies and Innovations in the Power stry
11:20-12:00		Moderator:
		Nien-Mien CHUNG
		(General Manager, Taiwan Power Research Institute, TPC, Taiwan)
		Panelists:
		SHIBATA Yoshiaki
		(Senior Research Director, Clean Energy Unit, The Institute of Energy Economics, Japan)
		Shiu-Wu CHAU
		(Professor and Department Chair of Engineering Science and Ocean Engineering, National Taiwan University, Taiwan)
		Chan-Nan LU
		(Professor of Electrical Engineering Department, National Sun Yat-sen University, Taiwan)
		Chih-Sheng CHANG

(Deputy General Manager, TPRI, TPC, Taiwan)

12:00–14:00 Lunch Break





Technical Session 1: Innovations in Low-Carbon Technologies (Part 1)

Chair Person:		Ingo BIRNKRAUT
		(Director Strategic Head of Development, Strategic Development, GEP Organization, RWE Generation SE, Germany)
14:00-14:20	T1-1	Development status of ammonia combustion technology for thermal power generation facilities NOMURA Hiroshi (Assistant Manager, Basic Design Gr., Life Cycle Management Department., Carbon Solution Business Unit, IHI, Japan)
14:20-14:40	T1-2	Demonstration of hydrogen co-firing power generation at existing thermal power plants UTSUNOMIYA Daichi (Technical Engineer, Hydrogen Business Strategy Division, The Kansai Electric Power Company, Inc., Japan)
14:40–15:00	T1-3	Hydrogen Production Effect in Biomass Gasification TLUD Reactor based on variation ER in Sago Bark material Benny SUSANTO (Senior Officer Researcher PLN, Power Plant Research Department, PT PLN (Persero), Indonesia)
15:00-15:30		Coffee Break

Technical Session 1: Innovations in Low-Carbon Technologies (Part 2)

Chair Person:		TBA
15:30–15:50	T1-4	Advanced Geothermal Reservoir Evaluation MORIFUJI Yohei (Research Scientist, Sustainable System Research Laboratory, CRIEPI, Japan)
15:50–16:10	T1-5	Unlocking the Potential of CO2 Capture and Utilization for a Sustainable Energy Future: A Case Study of Thermal Power Plants in Malaysia Noraziah MUDA (Head, Decarbonization and Renewable Energy Centre, Sustainable Energy and Environment Department, TNB Research Sdn. Bhd, Malaysia)





16:10–16:30	T1-6	Fundamental Study On CO ₂ Fixation of Existing Concrete Structures MIYAZAKI Taiju (Researcher, Energia Research Institute, The Chugoku Electric Power CO., Inc., Japan)
16:30–16:50	T1-7	Towards Net Zero: Decarbonising flexible generation Ingo BIRNKRAUT (Director Strategic Development, Strategic Development Department, GEP Organization, RWE Generation SE, Germany)
Technical Ses	sion 2:	Smart Energy Management and Optimization
Chair Person:		Chi-Shiang CHO (Senior Research Specialist, TPRI, TPC, Taiwan)
16:50–17:10	T2-1	Development of a Demand Response Programme to Resolve Local Network Congestion Brian Tze Yin MAK (Senior Engineer, Smartgrid & Innovation Department, CLP Power Hong Kong Limited, Hong Kong SAR)
17:10–17:30	T2-2	Advanced Metering Infrastructure (AMI) Development in Taiwan Kuan-Hua SU (Senior AMI Engineer, Smart Meter Session, Power Distribution Department, TPC, Taiwan)

Official Dinner

Tuesday, May 27, 2025 Prosperity and Longevity, Taipei Marriott Hotel

19:00-21:00

Official Dinner





2025 IERE-TPC Taipei Net-Zero Workshop (Workshop Day 2)

Wednesday, May 28, 2025 Junior Ballroom I, Taipei Marriott Hotel

Special Session: Featured Company Overviews, Strategies, and Roadmaps etc.

Chair Person:		TAKEI Katsuhito (Secretary General, IERE)
08:30–08:55	S-1	From Player to Playmaker: E.ON's Role in Shaping Europe's Energy Future Munib AMIN (Managing Director, Head of Research & Technology, E.ON Group Innovation GmbH, Germany)
08:55–09:20	S-2	Leading Diversified Innovation to Shape the Energy Future The R&D Strategy of TPC Hsiao-Wei CHEN (Director of R&D Planning Office, Taiwan Power Research Institute, Taiwan)
09:20–09:45	S-3	RWE's strategic role in the energy transition - focus on grid scale battery storage Ingo BIRNKRAUT (Director Strategic Development, Head of Strategic Development, GEP Organization, RWE Generation SE, Germany)
09:45-10:30		Coffee Break

Technical Session 3: Resilience and Stability of Power Systems under Extreme Climate Conditions (Part 1)

Chair Person:	Yi-Kuan KE
	(Director, EISBG Advance II Department, Power System R&D, Delta Electronics, Inc., Taiwan)





10:30–10:50	T3-1	Impact of Inverter-Based Resources with Dynamic Reactive Current Control on Protection Relay under Three-Phase to Ground Fault YAMAOKA Fumichika (Research Scientist, Grid and Communication Technology Division, Grid Innovation Research Laboratory, CRIEPI, Japan)
10:50–11:10	T3-2	A Two-Stage Framework for Power System Resilience Assessment: Process Design and a Case Study in Kinmen Yu-Hsuan WU (Research Specialist, TPRI, TPC, Taiwan)
11:10–11:30	T3-3	Introduction of Regional Power Grid Battery Storage Project Yu-Hsuan TAI (Engineer, Department of Power Distribution, Distribution Green Energy, TPC, Taiwan)
11:30–13:30		Lunch
Technical Ses	sion 3:	Resilience and Stability of Power Systems under Extreme Climate Conditions (Part 2)
Chair Person:		Yu-Hsuan WU (Researcher Specialist, TPRI, TPC, Taiwan)
13:30–13:50	T3-4	An Innovative Platform for DER Simulation, Testing, and Grid Integration Chi-Shiang CHO (Senior Research Specialist, TPRI, TPC, Taiwan)
13:50–14:10	T3-5	Micro Grid in Black Start and Seamless Technology Yi-Kuan KE (Director, EISBG Advance II Department, Power System R&D, Delta Electronics, Inc., Taiwan)
14:10–14:30	T3-6	Application and Study of Virtual Synchronous Generator in icrogrid and International Standards Wen-Zhuang JIANG (Electrical Engineer, Electric Power Research Laboratory, TPRI, TPC, Taiwan)
14:30–14:50	Т3-7	Improvement on The Hamaoka Tsunami Observation and Prediction System in Hamaoka Nuclear Power Plant WATANABE Kosuke (Researcher, Nuclear Safety Research & Development Center, Chubu Electric Power Co., Inc., Japan)





Closing Remarks

14:50-14:55	Nien-Mien CHUNG
	(General Manager, Taiwan Power Research Institute, TPC, Taiwan)

14:55–15:00 TAKEI Katsuhito (Secretary General, IERE)





Technical Tour (Optional)

Thursday, May 29, 2025 Visiting TPC's Hydroelectric Power Plants etc. with Lunch

(For participants who have booked the optional Technical Tour)

09:00	Gathering at the Taipei Marriott Hotel Lobby
	Bus Transfer & Site Entrance: 60 minutes
10:00	Visit Xiaochukeng Power Plant (40 minutes)
	Bus Transfer & Site Entrance: 15 minutes
10:55	Visit Xindian River Basin Hydropower Heritage Museum (25 minutes)
	Bus Transfer & Site Entrance: 10 minutes
11:30	Visit Gueishan Power Plant (30 minutes)
	Bus Transfer & Site Entrance: 20 minutes
12:20	Lunch at Indigenous cuisine (70 minutes)
13:30	Leave for Taipei Marriott Hotel
	Bus Transfer: 60 minutes
14:30	Arrive at Taipei Marriott Hotel

• The itinerary time may change due to different traffic, weather, or unforeseen conditions, circumstances.

Xiaochukeng Power Plant

The Xiaochukeng Hydroelectric Power Plant, completed in 1909, is **the oldest existing hydroelectric power plant in Taiwan**. Although the turbines were updated in 1991, the original three waterwheel generators have been preserved as part of the cultural heritage, witnessing the history of electricity development in Taiwan.







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TAIWAN POWER COMPANY

Panoramic view of the Xiaochukeng Power Plant

The architecture of the Xiaochukeng Power Plant is constructed of red bricks and features a large-span steel truss structure. The roof is equipped with high skylights to aid in ventilation and heat dissipation. The building's facade is adorned with rounded arches, and the entrance gable retains the "Tai" emblem from the former Governor-General's Office, showcasing the architectural style of the Japanese colonial period.



View of the Generators and water turbine

Due to its long history and well-preserved architectural features, the Xiaochukeng Hydroelectric Power Plant has been designated as a historical building by the New Taipei City Government and was selected as one of the "Top Ten Civil Engineering Heritage Sites" in 2001.

Xindian River Basin Hydropower Heritage Museum

The highlight of the museum is a collection of nearly 30 tools and handwritten documents used in power plants during the 1950s and 1960s. For example, there is a duty log from 1953 written by the operators of the Wulai Power Plant, who endured the sweltering environment and high-decibel noise from the machines. This log records daily weather, dispatch communications, and power generation data. Additionally, when the Wulai Power Plant acquired its second unit in 1954 with support from U.S. aid funds, a handwritten installation log was also preserved. Another notable item is a vinyl record recorded by the fifth director of the Wulai Power Plant, Ye Shanxun, who returned from studying in the United States in 1967 and used his spare time to teach English to the staff.





Despite its rich cultural heritage and historical significance spanning over a century, the Guishan Power Plant has faced challenges in preserving its artifacts due to their age. To recreate the human aspect of Taiwan's first hydroelectric power plant, the exhibition features watercolor paintings of the old Guishan Power Plant created by contemporary artists, provided by the Hsinchu Science Park Cultural Foundation. This plant, Taiwan's first hydroelectric facility, was abandoned in 1943, and the remaining structures collapsed in 2012. Through the artists' brushstrokes, the beautiful exterior of the power plant is vividly depicted, evoking endless imagination and nostalgia among visitors.





View of the Xindian River Basin Hydropower Heritage Museum





Gueishan Power Plant

Built in 1941 during the Japanese colonial period, the Gueishan Power Plant was originally known as the New Guishan Power Plant. After the Nationalist government took over Taiwan, it was renamed the Gueishan Power Plant. Today, it serves as the administrative center for five power plants under its jurisdiction and **has been designated as a historical building by the New Taipei City Government**.



View of the Gueishan Power Plant

In recent years, the power plant has focused on environmental beautification and sustainability initiatives. It is committed to implementing sustainable practices and promoting cultural heritage preservation. The plant aims to integrate local culture, industrial history, and ecological education, transforming the Gueishan Power Plant into an "Ecological Power Plant" within the power generation industry.







Call for Presentations (Closed) << Abstract Submission: No later than <u>February 17, 2025</u> >>

Abstract Submission: No later than March 17, 2025

You are kindly invited to submit abstracts for the Oral Session or Poster Session for the 2025 Taipei Net-Zero Workshop by Email.

to: register (at) iere.jp [Please substitute "(at)" with "@"]

As for the **format of the Abstract**, please refer to "Events" page on IERE website. <u>https://www.iere.jp/events/workshop/2025-taipei/forspeakers.html</u>

- Change of presentation session (oral or poster) may be requested depending on the number of submitted abstracts.
- Abstract will be posted on the IERE website and open to the public.
- Presentation Slides will be posted on the IERE website and open to IERE members and Workshop participants.
- The official language of the IERE Workshop is English.

<< Presentation Slides Submission: No later than <u>April 21, 2025</u> >> << Presentation Slides Submission: No later than <u>April 30, 2025</u> >>

You are kindly requested to submit presentation slides (PowerPoint) via Email.

- The official language of the IERE Workshop is English.
- Note: Presentation Slides will be open to all participants of this workshop and IERE members on the IERE website. If you do not wish to have your presentation slides made public, please contact the IERE Central Office.





Registration

Total number of participants is limited to 100 persons.

If possible, please register using the method (a) below. If you are unable to use Google Forms due to limitations in your system environment or other reasons, please register using method (b) below. (a) On-Line Registration (Google Forms)

URL: https://forms.gle/oySRk3gjv27Xujj18

or

(b) Submit a Registration Form (Format 1) to IERE Central Office via Email

Photos and videos taken by IERE at this Event will be used for publication on websites and/or in magazines. Therefore, at the time of your application of registration, IERE deems you have granted IERE the right to use the above photos or videos.

Registration Fee

The Registration fee will cover attendance at both workshop days (include lunches & refreshments at coffee breaks), welcome reception on May 26, official dinner on May 27 and conference package:

IERE Members:	USD 850 per person
Non-IERE Members:	USD 1,300 per person
Academic Participants:	USD 850 per person
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Welcome Reception:	USD 30 per person (accompanying person)
Official Dinner:	USD 100 per person (accompanying person)

Recommended Options

Technical Tour (Optional) May 29: USD 50 per person

Note.

- Accommodation and travel costs will be borne by the participants.





Payment

On-Line Credit Card Payment and Bank Transfer are available. Deadline: <u>April 21, 2025</u> April 30, 2025

(a) On-Line Credit Card Payment

URL: https://www.iere.jp//Payment/paypal_25WS.html

(b) Bank Transfer

MUFG Bank, Ltd.
Seijo branch
IERE
0068198
15-1 Seijo 6-chome, Setagaya-ku, Tokyo, 157-0066 JAPAN
BOTKJPJJT

VISA (Closed)

For participants from some countries needing a VISA to enter Taiwan, please check the below or consult with travel agent in your country for the details.

URL: https://www.roc-taiwan.org/portalOfDiplomaticMission_en.html

If you need an Invitation Letter^{*}, please send 'Invitation Letter for VISA Request Form' to IERE Central Office via Email by <u>March 31, 2025</u>.

- * TPC will be able to issue an invitation letter for participants who need to apply for Visa. It will take approximately 1–2 weeks for TPC to prepare this after receiving all information, so please submit the form as soon as possible.
- Disclaimer: TPC reserves the right to fulfill or decline, at TPC's discretion, requests for letters of invitation for visa application support purpose.





Submission Items & Deadlines

For Participants [including Technical Session Speakers]

Items	Format No.	Deadline/ Limitation	To:
Registration Form	1	April 21, 2025 April 30, 2025	On-Line registration or <u>register(at)iere.jp</u> [Please substitute (at) with @]
Invitation Letter for VISA Request Form (If necessary)	2	March 31, 2025 (It takes 1–2 weeks to issue)	register(at)iere.jp [Please replace (at) with @]
Registration Fee	_	April 21, 2025 April 30, 2025	Please refer to Page 18-19
Technical Tour Fee [optional]	_	April 21, 2025 April 30, 2025	Ditto
Hotel accommodation reservations at special rates		May 13, 2025	Please refer to Page 23

The formats (No. 1 and 2) can be downloaded from IERE website.

URL: https://www.iere.jp/events/workshop/2025-taipei/register.html

For Speakers

Items	Format No.	Deadline	То:
Abstract & Speaker's Information	3	March 17, 2025	register(at)iere.jp
Presentation Slides (PowerPoint File)	_	April 21, 2025 April 30, 2025	[Please substitute (at) with @]

The formats (No. 3) can be downloaded from IERE website.

URL: https://www.iere.jp/events/workshop/2025-taipei/forspeakers.html

Speakers are kindly requested to submit their Presentation Slides (PowerPoint File) by <u>April 21,</u> <u>2025</u> April 30, 2025.

Note: Presentation Slides will be open to all participants of this workshop and IERE members on the IERE website. If you do not wish to have your presentation slides made public, please contact the IERE Central Office.





Conference Venue & Accommodations

Conference Venue

Taipei Marriott Hotel, Taipei, Taiwan

Location: No. 199, Lequn 2nd Rd, Zhongshan District, Taipei City, Taiwan 10491 website: <u>https://www.marriott.com/en-us/hotels/tpetm-taipei-marriott-hotel/overview/</u>



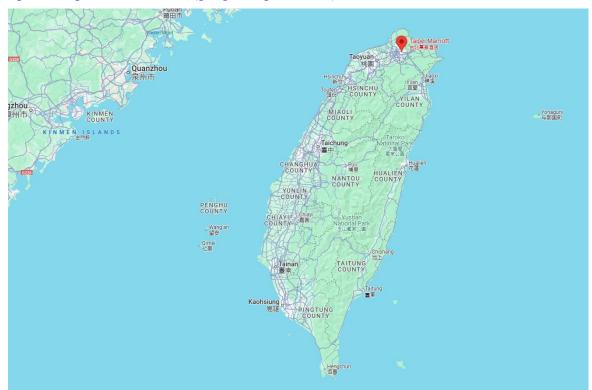


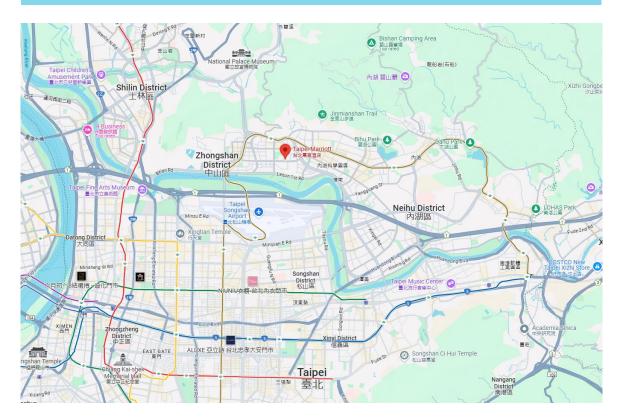




Location of Taipei Marriott Hotel

Link:place/Taipei Marriott Hotel(google.maps website)









Accommodations

Taipei Marriott Hotel, Taipei, Taiwan Location: No. 199, Lequn 2nd Rd, Zhongshan District, Taipei City, Taiwan 10491 website: <u>https://www.marriott.com/en-us/hotels/tpetm-taipei-marriott-hotel/overview/</u>

Rooms of the Taipei Marriott Hotel at special rate of NTD 6,700* per night (included breakfast at hotel restaurant, excluded taxes and services) has been available for conference participants between May 26-29, 2025.

If rooms are available, you may stay before or after the conference at a special rate. The reservation cutoff date is May 13, 2025.

Here's your reservation link you can use to make reservations:

Book your group rate for 2025 IERE-TPC Taipei Net-Zero Workshop (Closed)

* Please make reservations as early as possible if you need. These will be allocated on a first come first served basis.

** Please be sure to read cancellation policy of the form before application.

The online reservation site has reached the maximum number of reservations and has been closed. If you wish to make a reservation at the same special group rate thereafter, please download and complete the following card.

IERE Central Office 2025 Workshop HOTEL Accommodation Reservation Card Please send it to <u>reservation@taipeimarriott.com.tw</u>.

Please note that reservations at the special group rate are subject to availability.





IERE Members List (as of April 1, 2025)

A . 1	COMP O		
Australia	CSIRO		
Canada	Powertech Labs		
China	CEPRI	NARI	
Czech	CEZ		
Finland	Vaisala		
France	ENGIE		
Germany	E.ON	EnBW	RWE TI
Hong Kong SAR	CLP		
Indonesia	PLN		
Israel	IEC		
Japan	Chubu EPCO	Chugoku EPCO	CRIEPI
	FEPC	Fuji Electric	Hitachi
	Hokkaido EPCO	Hokuriku EPCO	IHI
	J-POWER	JAPC	Kansai EPCO
	Kyushu EPCO	MHI	Mitsubishi Electric
	NGK	Sumitomo Electric	Shikoku EPCO
	Tohoku EPCO	TEPCO	TOSHIBA
Malaysia	TNB		
Mexico	INEEL	Prolec GE	
Netherlands	TenneT		
Pakistan	Karachi Electric		
Philippines	APC	MERALCO	
Singapore	SPPA		
South Africa	Eskom	PIESA	
South Korea	Hyundai Electric	KEPCO	KERI
	KOWEPO	LS Electric	
Taiwan	TPC		
US	EPRI	SwRI	





About TPC

Established on May 1, 1946, TPC operates in generation, transmission, distribution, and the sale of electricity. According to the Electricity Act, TPC is responsible for providing a stable electricity supply. Revenue from electricity sales accounted for 91.7% of the total revenue in 2023. As of 2023, the installed capacity in the TPC System (including independent power producers) was 55.43 GW, consisting mainly of thermal power generation with hydroelectricity and renewable energy. In terms of transmission and distribution, TPC's system has 622 substations, and its total length of power transmission lines reached 18,230.3 circuit kilometers while its total length of distribution lines reached 422,640 circuit kilometers in 2023.

In response to the recent global trends toward sustainability and the development of future electricity markets, TPC has promoted an organizational transformation. In January 2016, the Company established four business divisions: the Power Generation Division, the Nuclear Power Division, the Transmission System Division, and the Distribution and Service Division. Following the establishment of these divisions, the headquarters and business divisions adopted a policy of centralization and management decentralization, in an effort to transform from a government agency into a highly efficient enterprise. In the future, TPC will continue to abide by the requirements of the Electricity Act and transform itself into a holding company with subsidiaries, which aims to promote market competition, enhance business operation efficiency, and promote corporate sustainability. This will allow TPC to become a prestigious and world-class power utility group that provides its customers with services of the highest quality.

https://www.taipower.com.tw/

About IERE

IERE is an organization for exchanging electricity and energy related cutting-edge technologies and R&D information among its members from the electricity and energy supply industry, equipment provider businesses, academic research, government, etc. This unique platform is of great help for executives, senior managers, engineers, and researchers who are responsible for R&D and solutions. It is a worldwide, non-profit organization, established as "International Electric Research Exchange" in 1968.

https://www.iere.jp

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1st issue: May 22, 2025