



台灣電力公司  
TAIWAN POWER COMPANY

## First Announcement

### 2025 IERE-TPC Taipei Net-Zero Workshop

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

In-Person Event

**Keynote Speakers Confirmed**



Downtown Taipei, Taiwan

Taipei, Taiwan  
May 26–29, 2025

Organized by TPC and IERE



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## **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.

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## 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)

## Program and Session Themes:

Session structure and speakers are subject to change according to the submission of contributions.

### Opening Session:

Opening Address: TBA

Welcome Speech: TBA

**Keynote Speeches:** 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, Taiwan Power Research Institute, TPC, Taiwan)

## 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.

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Potential topics include:

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

## **Technical Session 2: 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 3: 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

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## **Technical Session 4: Environmental Sustainability Practices in the Power Industry**

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**

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

### **Panel Session**

TBA

### **Special Session**

TBA

### **Poster Session**

TBD

### **Closing Remarks**

TBA

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## Technical Tour (Optional)

Visiting TPC's Hydroelectric power plants: Xiaocukeng Power Plant

Xiaocukeng Power Plant is the oldest operational hydroelectric power plant in Taiwan. Among its three generating units, the German AGE turbine unit is still preserved on site.

The red brick building features white continuous arched band decorations above the windows, large span steel truss frames, and protruding skylights along the roof ridge, maintaining the architectural style from its initial construction during the Japanese colonial period.

In 2010 it was declared a municipal historic site by the New Taipei City Government.



Panoramic view of Xiaocukeng Power Plant

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## Program

The program may be subject to change according to the registration of speakers and participants.

### **Monday, May 26, 2025**

#### **Welcome Reception**

Registration and Welcome Reception in the evening

### **Tuesday, May 27, 2025**

#### **Opening Session**

Opening Address: TBA

Welcome Speech: TBA

Keynote Speeches: TBA

#### **Technical Session 1: Innovations in Low-Carbon Technologies**

#### **Technical Session 2: Resilience and Stability of Power Systems under Extreme Climate Conditions**

#### **(Poster Session)**

TBD

#### **Official Dinner**

### **Wednesday, May 28, 2025**

#### **Technical Session 3: Smart Energy Management and Optimization**

#### **Technical Session 4: Environmental Sustainability Practices in the Power Industry**

#### **Technical Session 5: Digital Transformation and AI Applications in Power Systems**

#### **Panel Session, Special Session, (Poster Session)**

TBD

### **Thursday, May 29, 2025**

#### **Technical Tour (Optional)**

TPC's Hydroelectric power plants: Xiaocukeng Power Plant , etc.



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## Call for Presentations (Closed)

<< ~~Abstract Submission: No later than February 17, 2025~~ >>

**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.

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

- 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 April 21, 2025** >>

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/oySRk3gfv27Xujj18>

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:

<b>IERE Members:</b>	<b>USD 850 per person</b>
<b>Non-IERE Members:</b>	<b>USD 1,300 per person</b>
<b>Academic Participants:</b>	<b>USD 850 per person</b>

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: **April 21, 2025**

### (a) On-Line Credit Card Payment

URL: [https://www.iere.jp/Payment/paypal\\_25WS.html](https://www.iere.jp/Payment/paypal_25WS.html)

### (b) Bank Transfer

Name of the Bank:	MUFG Bank, Ltd.										
Name of the Branch:	Seijo branch										
Name of the account:	IERE										
Account Number:	0068198										
Bank address:	15-1 Seijo 6-chome, Setagaya-ku, Tokyo, 157-0066 JAPAN										
SWIFT code:	<table border="1"><tr><td>B</td><td>O</td><td>T</td><td>K</td><td></td><td>J</td><td>P</td><td></td><td>J</td><td>T</td></tr></table>	B	O	T	K		J	P		J	T
B	O	T	K		J	P		J	T		

## VISA

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](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 **March 31, 2025**.

\* 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 Speakers]

Items	Format No.	Deadline/ Limitation	To:
Registration Form	1	April 21, 2025	<a href="mailto:register@iere.jp">register(at)iere.jp</a> [Please substitute (at) with @]
Invitation Letter for VISA Request Form (If necessary)	2	March 31, 2025 (It takes 1–2 weeks to issue)	Ditto
Registration Fee	—	April 21, 2025	Please refer to Page 7
Technical Visits Fee [optional]	—	April 21, 2025	Ditto
Hotel accommodation reservations at special rates		May 13, 2025	Please refer to Page 11

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	To:
Abstract & Speaker's Information	3	March 17, 2025	<a href="mailto:register@iere.jp">register(at)iere.jp</a> [Please substitute (at) with @]
Presentation Slides (PowerPoint File)	—	April 21, 2025	

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) and Copyright Permission by **April 21, 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

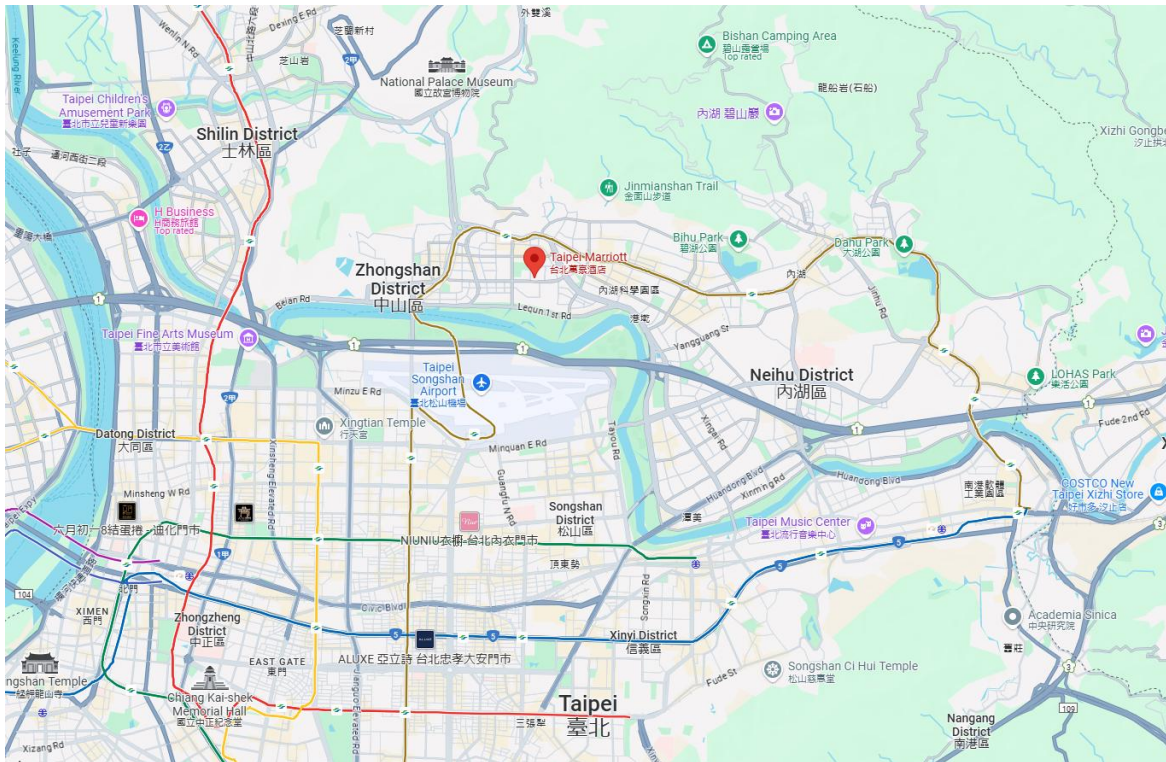
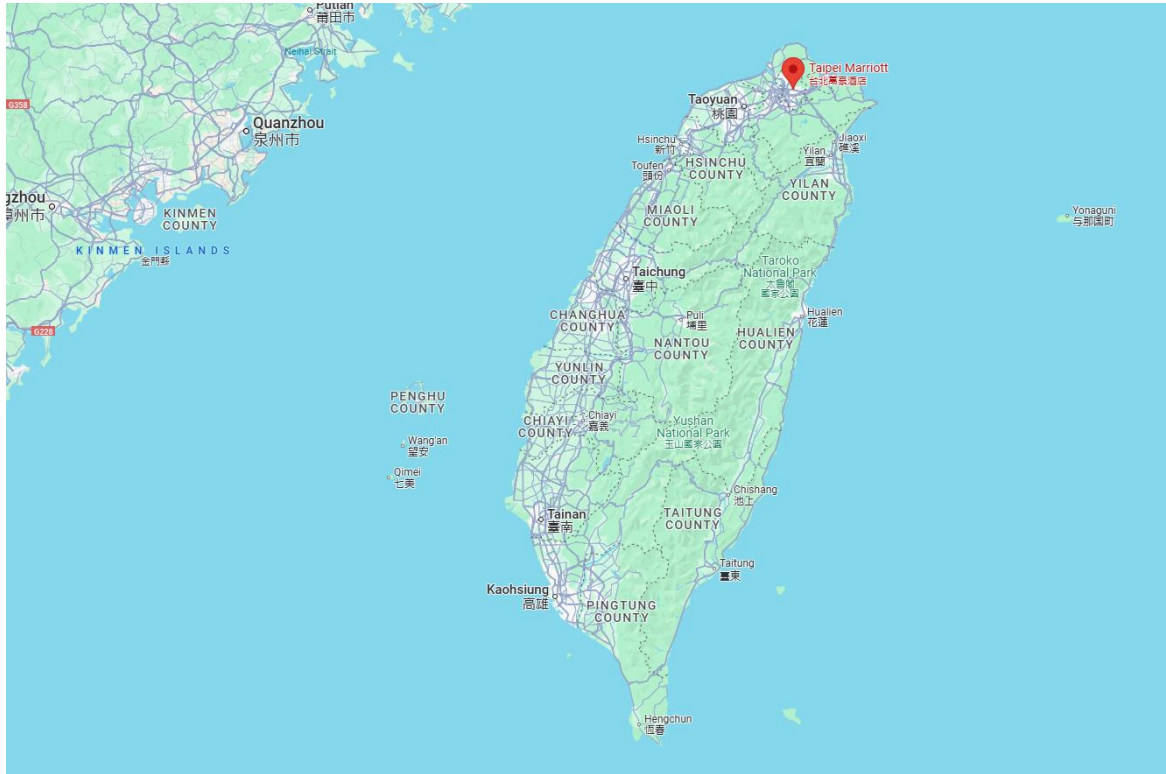
Location: No. 199, Lequn 2nd Rd, Zhongshan District, Taipei City, Taiwan 10491

website: <https://www.marriott.com/en-us/hotels/tpetm-taipei-marriott-hotel/overview/>



## Location of Taipei Marriott Hotel

[Link:place/Taipei Marriott Hotel\(google.maps website\)](https://www.google.com/maps/place/Taipei+Marriott+Hotel)





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## Accommodations

Taipei Marriott Hotel, Taipei, Taiwan

Location: No. 199, Lequn 2nd Rd, Zhongshan District, Taipei City, Taiwan 10491

website:

<https://www.marriott.com/en-us/hotels/tpetm-taipei-marriott-hotel/overview/>

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\*\*](#)

\* 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.



## IERE Members List (as of February 1, 2025)

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	
Spain	NATURGY		
Taiwan	TPC		
US	EPRI	SwRI	



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## 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>

## 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/>

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1st issue: February 21, 2025