

# IERE

Electric Power Technology Platform





























JAPAN CARBON FRONTIER ORGANIZATION







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## Outline of IERE



An international, non-profit organization established in 1968 as the International Electric Research Exchange. It serves executives, senior managers, engineers, and researchers who are responsible for electricity and energy-related research & development (R&D) and solutions.





To be a unique global platform serving its members through the exchange of technical expertise and know-how of advanced and appropriate technologies and R&D in the electric power sector.





- Evaluate innovative and emerging technologies and promote their implementation to realize safe, sustainable, affordable, and resilient electric power systems.
- Help establish corporate strategy related to R&D given the emerging trends influencing the evolving power industry landscape.



## General Meetings / Forums

General meetings/forums are platforms for members' interactions held annually, where all IERE members and guests from a variety of fields can meet over a specific targeted theme of global issue or interest.



## Workshops

Workshops are organized to discuss specific technical, socio-economic, and regional issues at the expert level. The objective is to provide multilateral communication opportunities for members to respond to energy needs.



## Webinars

Webinars are a newly launched initiative that take advantage of the development of Internet of Things (IoT) technology. The aim of webinars is to increase member participation by involving experts in technical themes useful to members, by delivering lectures online.



## Technology Foresight

Technologies are changing rapidly, and they affect the conventional utility business models. Technology Foresight (TF) Project, initiated in 2016, aims at leveraging the existing capabilities and experiences of IERE members to find some commonalities and joint work. Identification of the key areas of technology development thorough the project can benefit all IERE members.



### R&D Collaboration

The R&D Collaboration project is based on the concept of "burden sharing." Participants share their work by providing technological knowledge, information, skills, and work force. Members can anticipate equal or comparable benefits from the projects.



### Chair's Message

Even though political and economic situation of the world are changing rapidly, it is absolutely necessary to accelerate the activities to carbon neutral. On the other hand, resilient and affordable supply of electricity have to be achieved though the sustainable development of electric power sector. Situation is different from country to country, and there would be various methods and ways to these goals. That is why mutual understanding and exchange information of novel ideas and technologies are quite important.

IERE is a unique global platform to exchange technical expertise and know-how of advanced and appropriate technologies and research and development. IERE's annual workshop and forum offer the excellent opportunities for this purpose. In addition, IERE promote joint research, detailed study about selected technologies through the technology foresight project and webinars on interesting topics. These activities are quite valuable to get deeper knowledge and different ideas, to know each other well, and to foster close relation among members.

It is my great honor and pleasure to have the opportunity to serve IERE as the Chair. Together with the board members and the central office, I will do my best to make IERE more valuable for all members. Please attend IERE activities. I am looking forward to discussing and collaborating with you all.



MINO Yoshiaki Chair



### IERE Board Member

Chair	MINO Yoshiaki (CRIEPI, Japan)		
Vice Chair	Jan MERTENS (ENGIE, France)		
Treasurer	Brendon JOE (CLP, Hong Kong SAR)		
Board Members	WANG Weisheng (CEPRI, China) Munib AMIN (E.ON, Germany) Pierre MALLET (Enedis, France) Maria MARTIN (EPRI, US)	TAKANISHI Kazumitsu (Kansai EPCO, Japan) Eun Bo SIM (KEPCO, South Korea) SHAN Shewu (NARI, China)	
Advising Chair Emeritus	Roger BALLAY (France) Gregory TOSEN (South Africa)		

### **IERE** Member

### **Executive Members**

- CEPRI (China)
- Chubu EPCO (Japan)
- CLP (Hong Kong SAR)
- CRIEPI (Japan)
- E.ON (Germany)
- Enedis (France)

- ENGIE (France)
- EPRI (US)
- Eskom (South Africa)
- GPG (China)
- Kansai EPCO (Japan)
- KEPCO (South Korea)

- Mitsubishi Electric (Japan)
- NARI (China)
- RWE TI (Germany)
- TenneT (Netherlands)
- TEPCO (Japan)
- TOSHIBA (Japan)

### Regular Members

- APC (Philippines)
- CEZ (Czech)
- Chugoku EPCO (Japan)
- CSIRO (Australia)
- EnBW (Germany)
- FEPC (Japan)
- Fuji Electric (Japan)
- Hitachi (Japan)
- Hokkaido EPCO (Japan)
- Hokuriku EPCO (Japan)
- Hydro-Québec (Canada)
- Hyundai Electric (South Korea)
- IEC (Israel)
- IHI (Japan)
- INEEL (Mexico)

- J-POWER (Japan)
- JAPC (Japan)
- Karachi Electric (Pakistan)
- KERI (South Korea)
- KOMIPO (South Korea)
- KOWEPO (South Korea)
- Kyushu EPCO (Japan)
- LS ELECTRIC (South Korea)
- MERALCO (Philippines)
- MHI (Japan)
- NATURGY (Spain)
- NGK (Japan)
- PIESA (South Africa)
- PLN (Indonesia)
- Powertech Labs (Canada)

- Prolec GE (Mexico)
- SEI (Sumitomo Electric) (Japan)
- Shikoku EPCO (Japan)
- SINTEF (Norway)
- SPPA (Singapore)
- SwRI (US)
- TNB (Malaysia)
- Tohoku EPCO (Japan)
- TPC (Taiwan)
- Vaisala (Finland)

#### Academia Members

N/A

### Individual Members\*

- Mark Stephen DUDZINSKI (US)
- Mark LAUBY (US)
- \* The individual members shall be recommended by the Board

General Meeting / Forum				
Year	Venue	Theme		
2023	Singapore	Accelerating the Carbon-Neutral Energy Transition for Industry and Territories		
2019	Sun City, South Africa	Electricity & the 4th Industrial Revolution – an Africa perspective		
2018	Kyoto, Japan	Power Transmission and Distribution Systems in the Next Generation		
2017	Vancouver, Canada	Electric Power Storage, Energy Conversion and Impact on the 21st Century Power Grid		
2016	Beijing, China	Power Grid Development in the New Situation of World Energy Transition		
2015	Berlin, Germany	International Energy Systems in Transition - Perspectives from Science and Industry -		
2014	Charlotte, US	The Integrated Grid - Realizing the Full Value of Central and Distributed Energy Resources		
2013	Arusha, Tanzania	R&D Road Map for Efficient Electrification / Renewable Energy in Support of Rural Electrification		
2012	Seoul, South Korea	Post-Fukushima / Technologies overcoming Economic and Natural Disaster		
2011	Cancún, Mexico	Electricity and Major Issues for IERE in the Next Decade / Reliable and Sustainable Energy Systems		
2010	Montréal, Canada	R&D Roadmap / From Low Carbon to No Carbon / Optimal Control for the Integration of Renewable Energy		
2009	Bucharest, Romania	R&D Roadmap / More Electricity - Less CO2 / Challenge for Next Two Decades with Advanced Technologies and Renewable Power		

More information from 2001 to 2008 on our website

Workshop		
Year	Venue	Theme
2024	San Antonio, US	Enabling Technologies for the Energy Transition
2023	Brisbane, Australia	Hydrogen in Clean Energy Transition
2019	Bali, Indonesia	Smarter and Cleaner Electricity for Better Life
2018	Munich, Germany	Power Generation in Transition
2017	Putrajaya, Malaysia	Technologies Reshaping the Electricity Supply Industry
2016	Hong Kong SAR, China	Smart Cities - A Convergence of People, Technologies and Big Data
2015	Tokyo, Japan	Advanced Electric Power Management - Thermal Power Generation against Huge Impact by Renewable Energy Penetration -
2014	Brussel, Belgium	Energy at Home
2013	Bangalore, India	Emerging Automation and Information Technologies for Power Industry Growth
2011	Nanjing, China	Smart Grid and Energy Efficiency
2011	Düsseldorf, Germany	Integration of Renewable Energies
2010	Rome, Italy	Carbon Capture & Storage, Concentrated Solar Power, Electric Vehicles, IT-Integration

More information from 2002 to 2009 on our website

Web	inar	
Year	Month	Theme
2024	July	8th IERE Webinar "Webinar on Advanced Metering Infrastructure (AMI)"
2024	March	7th IERE Webinar "Webinar on Al Collaboration Project (2nd Round)"
2022	November	22nd IERE General Meeting and 6th IERE Webinar "Toward Enhanced Resilience for Electric Power Systems"
2022	March	5th IERE Webinar "Webinar on Al Collaboration Project"
2021	November	4th IERE Webinar "Towards a Carbon Neutral Energy Future"
2021	October	21st IERE General Meeting and 3rd IERE Webinar "Key Technologies in the Next Chapter of the Energy Transition"