

RPG 2025

Invited Session Call for Papers

The 14th International Conference on
Renewable Power Generation

24-26 October 2025 | Shanghai, China

Full Paper Submission Deadline: 05 June 2025 | <https://rpg2025.theiet.org.cn/>

Session Chair:

■ Dr. Cheng LYU, Lingnan University, Hong Kong

Invited Session on:

06. Integrating ESG Principles and Carbon Management into Smart Grids

As the global focus on sustainability intensifies, the integration of Environmental, Social, and Governance (ESG) principles within smart grid systems has become a critical area of interest for researchers, industry leaders, and policymakers alike. ESG principles provide a comprehensive framework for evaluating the sustainability and societal impact of energy systems. Environmental criteria consider how energy practices affect the natural world, including carbon emissions, resource use, and waste management. Social criteria examine how these practices impact communities, including issues of equity, health, and safety. Governance criteria evaluate the transparency, accountability, and ethical conduct of organizations in the energy sector. The popularity of ESG has surged as stakeholders increasingly recognize the importance of sustainable and responsible energy practices in mitigating climate change and promoting social well-being. Achieving carbon neutrality involves balancing the amount of carbon dioxide emitted with an equivalent amount removed from the atmosphere or offset through various means.

This session welcomes submissions from cutting-edge research and case studies to comprehensive reviews that explore the intersection of ESG frameworks and carbon reduction technologies. We are particularly interested in papers that address advanced carbon management techniques, renewable energy integration, data analytics for ESG goals, and the regulatory and policy landscape shaping these initiatives. This is an excellent opportunity for researchers, industry professionals, and policymakers to contribute to the dialogue on creating a more sustainable and socially responsible energy future.

Session Chair: Dr. Cheng LYU, Lingnan University, Hong Kong

Chair's Bio:

Dr. Cheng Lyu received B.Sc and M.Sc degrees both in electrical engineering from Shanghai Jiao Tong University, Shanghai, China, in 2016 and 2019. He received Ph.D degree from The Hong Kong Polytechnic University, Kowloon, Hong Kong in 2022. He is now an Assistant Professor of Teaching with Lingnan University, Hong Kong. Before that, he spent two years as a researcher in the industry. He was a visiting scholar in Ecole Polytechnique, Paris, France and Southern University of Science and Technology, Shenzhen, China. He has published over 15 peer-reviewed papers, and was the twice recipient of IEEE PES General Meeting Best Paper Award in 2020 and 2021, and was the awardee of Hong Kong Ph.D Fellowship. His research interests include smart grid operation and control, low-carbon energy management and marketing.

BENEFITS OF SUBMITTING

- Successful Authors will receive **10% off the Adult Registration Fee** (early bird or standard registration) Please use code **INVITED25** during registration
- Accepted paper will be published in the RPG 2025 conference proceeding
- Accepted paper will be published on **IET Digital Library** and indexed by **IET Inspec, Scopus, IEEE Xplore and Ei Compendex**
- Around 30 papers from the conference will be awarded the Best Conference Paper prize and will be invited to submit an extended version to IET renewable Power Generation Journal (open access journal, APC fee applies)