

## **Special Session 32: Building a New Ecology of Sustainable Electricity Consumption: Policy Driven, Energy Transformation and Multi-Party Synergy**

### **Session Organizers:**

Shu Yang, China Agricultural University, yangshuxy@126.com

### **Brief Description of the Session Thematic:**

This special session aims to explore how to promote sustainable consumption of electricity through policy, technology and multi-party synergies. The conference will focus on how government policies are guiding green power consumption, how new energy technologies (e.g., solar, wind, energy storage, etc.) are affecting the structure of power consumption, and how companies and residents can realize energy saving and emission reduction through innovative initiatives.

### **Topics and Keywords:**

This session will consist of lots of topics such as

- 1 Policy and market-driven sustainable consumption of electricity
- 2 Application of new energy technologies in sustainable consumption of electricity
- 3 Digital transformation of power systems and green power consumption
- 4 Business practices and innovations in sustainable consumption of electricity
- 5 Residential Electricity Consumption Behavior and Energy Conservation Awareness
- 6 Strategies to Increase Public Awareness of Sustainable Consumption of Electricity
- 7 Paths and Practices for Residents' Participation in Sustainable Consumption of Electricity
- 8 The Role of Education in Fostering Sustainable Consumption Habits in Electricity

The aim of this session is to bring together leading researchers and practitioners in the field of power systems, thereby showcasing the latest advances in the field of sustainable consumption of electricity. We welcome original research articles, review papers, and case studies that explore new energy technologies, policy innovations, and how businesses and residents can drive a sustainable transition in electricity consumption in new ways. Through close collaboration between academia, industry and policy makers, we expect to work together to share experiences, promote exchanges and cooperation, and further promote the green transition and sustainable development of power systems.

**Keywords:** Sustainable consumption of electricity; Policy-driven; Energy transition; New energy technologies; Green power; Power system digitization; Smart grid; Wind energy; Solar energy; Energy storage; Enterprise Innovation; Resident participation; Green power; Energy saving and emission reduction; Public awareness enhancement; Multi party collaboration