Panel 1: Grid Integration

This panel aims to explore the challenges and strategies for integrating renewable energy sources into the grid. We encourage poster submissions that focus on the outlook of systems with high renewable penetration, hydrogen-related grid supporting functionalities and stability aspects, and grid integration studies through real-time simulations. Topics of interest include:

- Operation of Converters in Grid-Forming Mode
- Converter-based Local Energy Systems (LES) Control
- (Future) Grid Compliance of Electrolyzers
- Flexible Operation of Loads and Electrolyzers:
  - How can loads, with a particular focus on electrolyzers, be operated in a more flexible manner?
  - Techniques for Fault Ride Through (FRT) in loads

Panel 2: Role of Hydrogen in Local Energy Systems

This panel aims to examine green hydrogen production technologies and their integration with renewables. Poster submissions should focus on the following topics:

- Large-Scale Hydrogen Operation and Control for Energy Transition:
  - How to operate and control large-scale hydrogen plants to serve the energy transition?
  - Business models for grid or energy transition serving electrolyzer operation.
- Hydrogen Framework Conditions and Infrastructure Development:
  - Identification of bottlenecks in infrastructure and the need for standards and norms for marketable hydrogen technological solutions, such as in power quality management.
- Energy Management of Systems including Electrolyzers, Fuel Cells, Storages, and Renewables:
  - Energy system optimization and usage optimization for integrated systems.

Important Facts:

Abstract Submission Deadline: 15.09.2023
Notification of Acceptance: 30.09.2023
Poster Submission Deadline: 31.10.2023
Workshop Date: 17.11.2023
Location: Hamburg, Germany

General Guidelines:

Candidates are welcome to submit further innovative approaches, case studies, and practical solutions within the scope of the panel, but not listed as topics of interest.

The selected posters will be presented on site and discussed amongst participants.

We encourage you to highlight the significance, methodology, and results of your work.

The 2nd Workshop on Integration of Local Energy Systems will offer an excellent opportunity to showcase your research, network with industry experts and academics, and contribute to the advancement of sustainable energy futures. We look forward to receiving your submissions!