

IEEE Workshop on Microgrid and Energy Communities

Location: KTH Royal Institute of Technology

Date: Oct 9–10, 2025

Theme: Enabling Integrated, Resilient, and Sector-Coupled Local Energy Systems

Microgrids and energy communities are gaining increasing attention in Europe and worldwide as key enablers for the energy transition. This two-day workshop, hosted at KTH Royal Institute of Technology and organized by the IEEE Power & Energy Society (PES) and Power Electronics Society (PELS) Joint Chapter Sweden, will bring together leading academic and industrial experts to address the latest innovations, regulatory frameworks, and deployment challenges.

The workshop will feature keynote talks, industry leaders' perspectives, and interactive discussions, providing a unique forum for shaping the future of integrated, resilient, and sector-coupled local energy systems.

IEEE Workshop on Microgrid and Energy Communities

Day 0 — October 8, 2025

Visit Arholma Microgrid

Location: B1, Brinellvägen 23, at KTH main campus, Stockholm

Date: Oct 9, 2025

Day 1 — October 9, 2025

Theme: Microgrids — Technologies and Grid Integration

Morning Session

08:00–09:00 Registration

09:00–09:15 Opening Remarks

Welcome from IEEE PES/PELS Sweden Chapter and KTH Hosts – Qianwen Xu, KTH, Sweden

Academic Keynotes

09:15–9:45 Claudio Cañizares, University of Waterloo, Canada – Microgrid Overview

9:45–10:15 Marija Ilić, MIT, USA – The Future of the Electric Power Grid

10:15–10:30 Coffee Break

Industry Leaders' Perspectives

DSO Perspectives on Microgrids and Energy Communities

10:30–10:45 Swedish Energy Agency

10:45–11:00 Vattenfall

11:00–11:15 Plexigrid

11:15–11:30 E.ON

11:30–12:00 Panel Discussion

12:15–13:15 Lunch & Networking

Afternoon Session

13:15–13:45 Pedro Rodriguez, LIST, Luxembourg – Revolutionising intelligent grid-forming buildings

13:45–14:15 Yunwei Ryan Li, University of Alberta, Canada – AC/DC Microgrids: A Modern Solution for Grid Challenges in DERs, EVs, and AI Data Centers

14:15–14:30 Coffee Break

Industry Leaders' Perspectives

From Pilots to Scalable Microgrid Solutions

14:30–14:45 ABB
14:45–15:00 Epiroc
15:00–15:15 Schneider Electric
15:15–15:30 Siemens
15:30–16:00 Panel Discussion

Interactive Session

16:00–17:30 Brainstorming and discussion

End of Day

18:30–20:30 VIP Dinner (VIP only, not in the public schedule)

Location: Gradängssalen, Teknikringen 1, at KTH main campus, Stockholm

Date: Oct 10, 2025

Day 2 — October 10, 2025

Theme: Energy Communities — Governance, Digitalization & System Integration

Morning Session

09:00–09:30 Johanna Lakso, CEO, Power Circle – Flexible Grids and Energy Communities: A Swedish Perspective
09:30–10:00 Chongqing Kang, Tsinghua University, China – TBA
10:00–10:15 Coffee Break

Industry Leaders' Perspectives

Deploying Smart Buildings and Real-World Energy Communities

10:15–10:30 WSP
10:30–10:45 nstallatörsföretagen
10:45–11:00 ÖrebroBostäder
11:00–11:15 Innovatum science park
11:15–11:45 Panel Discussion

12:00–13:15 Lunch & Networking

Afternoon Session

13:15–13:45 Vladimir Terzija, Newcastle University, UK – Energy Communities in UK
13:45–14:15 Hong Li, Zhejiang University, China – Microgrid deployment in China
14:15–14:45 Qianwen Xu, KTH, Royal Institute of Technology – Microgrid for smart buildings and communities with Swedish cases
14:15–14:30 Coffe Break

Roadmap & Collaboration Session

14:30–16:30 Shaping the Future Together
▪ Joint White Paper

- Joint Projects
- Collaboration Platform

End of Day

Organization Committee

- **Chair:** Qianwen Xu, KTH
- **Co-Chair:** Ambra Sannino, Vattenfall
- Pär Lundström, Installatörsföretagen
- Lars Nordström, KTH
- Jonas Anund Vogel, KTH
- Fredrik Carlsson, Vattenfall