

4th Expert Workshop, 14-15 May 2025

Design and Operation of Digitalized Sector-Coupled Energy Systems

Shape the future of sector coupling and digitalization of energy in Europe!

Venue

OFFIS - Institute for Information Technology in Oldenburg, Germany
(Industriestraße 11, 26121 Oldenburg, Germany)

Registration

Please register at www.digisect.eu
The number of participants is limited.

Scope

Following the great success of the previous workshops in Hamburg, Vienna and Stockholm, we aim again to bring together experts from Europe to exchange insights and create a roadmap on possible trends and research directions for design and operation of digitalization of sector-coupled energy systems and sector integration

- **Sector-coupling:** Challenges, applications, and best practices in sector coupling and integration at both system and component levels, including pilot projects, energy communities, innovative technologies, and more
- **Energy Data:** Leveraging potential enablers in data spaces, interoperability, regulations, and standardization for effective sector coupling
- **Digitalization:** Digital technologies that support sector coupling and integration, such as AI, digital twins, IoT, communication systems, cloud solutions, cybersecurity, and simulations.
- **Flexibility:** System architectures and operational strategies to enhance flexibility management, energy markets, TSO-DSO-Customer coordination, congestion management, etc.

Organization Committee:

OFFIS: Prof. Dr.-Ing. Astrid Nieße, Dr.-Ing. Jirapa Kamsamrong, Dr.-Ing. Anand Narayan
KTH: Assoc. Prof. Dr. Qianwen Xu, Prof. Lars Nordström
TUHH: Prof. Dr.-Ing. Christian Becker, Dr.-Ing. Payam Teimourzadeh Baboli
Hamburger Energienetze GmbH: Dr. Davood Babazadeh
AIT: Priv.-Doz. Dr. Thomas Strasser, Dr. Edmund Widl
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Wednesday, May 14, 2025 (11:30-18:00)

11:30 – 12:45	Lunch and registration at Industriestraße 11, 26121 Oldenburg, Germany
12:45 – 13:00	Welcome / Introduction - Prof. Dr.-Ing. Astrid Nieße
13:00 – 13:40	<p>Keynote</p> <ul style="list-style-type: none"> Clean Hydrogen Coastline - Scaling up the Green Hydrogen Economy in Northern Germany, <i>Peter Schmidt</i>, Managing Director, EWE GASSPEICHER GmbH
13:40 – 14:40	<p>Session 1 – Energy Data (Presentations & Panel Discussion, Chair: Priv.-Doz. Dr. Thomas Strasser)</p> <ul style="list-style-type: none"> Digital Transition on DSO-Level – It’s all about flexibility, <i>Dr. Enno Wieben</i>, Head of Energy Systems Development, EWE NETZ Waiting for the ImageNet moment: on the State of Open Energy Data and Models in 2025, <i>Asst. Prof. Dr. Hussain Syed Kazmi</i>, Professor, KU Leuven Data Management Services as Foundation for Digitalization in Energy, <i>Prof. Dr.-Ing. Astrid Nieße</i>, Professor and Board of Directors, OFFIS – Institute for Information Technology
14:40 – 15:10	Coffee Break and Group Photo
15:10 – 16:30	<p>Session 2 – Flexibility (Presentations & Panel Discussion, Chair: Dr. Davood Babazadeh)</p> <ul style="list-style-type: none"> Large-scale Sustainable Electrification and the Value of Flexibility, <i>Dr. Venizelos Efthymiou</i>, Director, PHAETHON University of Cyprus Flexibility Services for TSOs and DSOs, <i>Tara Esterl</i>, Head of Competence Unit Integrated Energy System, Austrian Institute of Technology (AIT) Sector-Coupling at Hamburg HOCHBAHN - Electrification of the Urban Transport System, <i>Sören Clausen</i>, Project Manager for Coordination and Load Management, Hamburger Hochbahn AG Incentivizing Flexibility through Dynamic Grid fees, <i>Prof. Dr. Anke Weidlich</i>, Professor, University of Freiburg
16:30 – 17:30	Discussion & Brainstorming (Moderator: Dr.-Ing. Jirapa Kamsamrong)
17:30 – 18:00	Project Pitching
19:00 – 22:00	Dinner at Ratskeller, Markt 1, 26122 Oldenburg

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Thursday, May 15, 2025 (08:30 – 15:30)

08:30 – 09:10	Keynote <ul style="list-style-type: none"> Talent Development in the Energy Sector, <i>Rosalia Virga</i>, Head of VDE Young Net, VDE Young Net
09:10 – 10:30	Session 3 – Sector Coupling (Presentations & Panel Discussion, Chair: Assoc. Prof. Dr. Qianwen Xu) <ul style="list-style-type: none"> System requirements for grid connection of electrolyzers and fault behaviour, <i>Dr.-Ing. Tobias Hennig</i>, Head of Network and System Analysis, Amprion GmbH Modelling and Simulation of Coupled Dynamics for Resilient Future Energy Grids, <i>Prof. Dr.-Ing. Christian Becker and Prof. Dr.-Ing. Arne Speerforck</i>, Professor, Hamburg University of Technology (TUHH) Unleashing the Full Potential of the North Sea - Identifying Key Energy Infrastructure Synergies for 2030 and 2040, <i>Prof. Dr. Madeleine Gibescu</i>, Professor, Utrecht University Flexibility provision through energy systems integration, <i>Prof. Dr. Meysam Qadrdan</i>, Professor, Cardiff University
10:30 – 10:50	Coffee Break
10:50 – 12:10	Session 4 – Digitalization (Presentations & Panel Discussion, Chair: Prof. Dr.-Ing. Astrid Nieße) <ul style="list-style-type: none"> A Journey towards Digitalization and Standardization at a Wind Energy Utility: Challenges and Opportunities, <i>Dr. Moustafa Chenine</i>, Principal Engineer, Vattenfall Netherlands Two Examples of How Simulation Tools accelerate Decision-Making, <i>Dr. Matthias Postina</i>, Center Manager Digital Factory Market, EWE AG Data-Driven Strategy Development for energy transition, <i>Dr. Luis-Martin Krämer</i>, Project Manager, e-regio GmbH Digital Tools for Increasing Efficiency and Flexibility Management in Energy Systems, <i>Shari Maria Alt</i>, Senior Digitalization Professional, August-Wilhelm Scheer Institute
12:10 – 13:10	Lunch at Fleiwa
13:10 – 14:00	Lab Tour at OFFIS
14:00 – 15:00	Discussion & Brainstorming (Moderator: Dr.-Ing. Jirapa Kamsamrong)
15:00 – 15:30	Wrap-up and Closing by Prof. Dr.-Ing. Astrid Nieße

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Travel and Stay



Hotels

- **B&B:** Alexanderstraße 1-5, 26121 Oldenburg
- **Altera:** Herbartgang 23, 26121 Oldenburg
- **Best Western:** Melkbrink 47-52, 26121 Oldenburg
- **Hive:** Rosenstraße 4, 26122 Oldenburg
- **Other hotels**

Event Location

OFFIS – Institute for Information Technology

Address: [Industriestraße 11, 26121 Oldenburg, Germany](#)

Dinner Location

Ratskeller Oldenburg, [Markt 1, 26122 Oldenburg](#)

From OFFIS, it is 15 mins by bus or 30 mins by foot.



Reaching OFFIS: <https://www.offis.de/offis/kontakt/anfahrt.html>

Flight to Bremen

- Bremen airport is around 45 km away from Oldenburg.
- You can take a tram from the Bremen airport to Bremen main station (Hauptbahnhof)

From Bremen to Oldenburg

- **Train:** From Bremen main station, trains to Oldenburg run every 30 minutes
- **Taxi:** Approximate 150-170 EUR

From Oldenburg train station to OFFIS – Institute for Information Technology

- It is about about 3 km from Oldenburg main station to OFFIS.
- **Bus:** You can take **bus 308 (Direction: Rauhehorst or Wechloy)** and get off at Industriestraße station. A one-way bus ticket costs €2.90 and can be purchased from the bus driver
- **Taxi:** You can also take a taxi (around €10)
- **Walk** from the city center (around 2 km)

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4th Expert Workshop, 14-15 May 2025

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Impression from the previous 2024 workshop in Stockholm, Sweden



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