

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](http://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  
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## Wednesday, May 14, 2025 (11:00-18:45)

11:30 – 12:45	Lunch and registration at <b>Industriestraße 11, 26121 Oldenburg, Germany</b>
12:45 – 13:00	Welcome / Introduction - Prof. Dr.-Ing. Astrid Nieße
13:00 – 13:40	<b>Keynote</b> <ul style="list-style-type: none"> <li><b>Clean Hydrogen Coastline - Scaling up the Green Hydrogen Economy in Northern Germany</b>, <i>Peter Schmidt</i>, Managing Director, EWE GASSPEICHER GmbH</li> </ul>
13:40 – 14:40	<b>Session 1 – Energy Data (Presentations &amp; Panel Discussion, Chair: Priv.-Doz. Dr. Thomas Strasser)</b> <ul style="list-style-type: none"> <li><b>Dr. Enno Wieben</b>, Head of Energy Systems Development, EWE NETZ</li> <li><b>Waiting for the ImageNet moment: on the State of Open Energy Data and Models in 2025</b>, <i>Asst. Prof. Dr. Hussain Syed Kazmi</i>, Professor, KU Leuven</li> <li><b>Data Management Services as Foundation for Digitalization in Energy</b>, <i>Prof. Dr.-Ing. Astrid Nieße</i>, Professor and Board of Directors, OFFIS – Institute for Information Technology</li> </ul>
14:40 – 15:00	<b>Coffee Break</b>
15:00 – 16:20	<b>Session 2 – Flexibility (Presentations &amp; Panel Discussion, Chair: Dr. Davood Babazadeh)</b> <ul style="list-style-type: none"> <li><b>Large-scale Sustainable Electrification and the Value of Flexibility</b>, <i>Dr. Venizelos Efthymiou</i>, Director, PHAETHON University of Cyprus</li> <li><b>Flexibility Services for TSOs and DSOs</b>, <i>Tara Esterl</i>, Head of Competence Unit Integrated Energy System, Austrian Institute of Technology (AIT)</li> <li><b>Sector-Coupling at Hamburg HOCHBAHN - Electrification of the Urban Transport System</b>, <i>Sören Clausen</i>, Project Manager for Coordination and Load Management, Hamburger Hochbahn AG</li> <li><b>Incentivizing Flexibility through Dynamic Grid fees</b>, <i>Prof. Dr. Anke Weidlich</i>, Professor, University of Freiburg</li> </ul>
16:20 – 17:20	<b>Discussion &amp; Brainstorming (Moderator: Prof. Lars Nordström)</b>
17:20 – 17:50	<b>Project Pitching</b>
18:30 – 22:00	<b>Dinner at Ratskeller, Markt 1, 26122 Oldenburg</b>

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

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

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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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Impression from the previous 2024 workshop in Stockholm, Sweden



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