

MONDAY, 06 OCTOBER 2025

## 10:00 Start Registration

13:00 – 13:15 SYMPOSIUM WELCOME – THOMAS ACKERMANN (ENERGYNAUTICS, GERMANY)

13:15 – 15:00 SESSION 1 – KEYNOTE SESSION

> Session Chair Eckehard Tröster (Energynautics, Germany)

13:15 – 14:45 Presentations (18 min. each)

- **eMobility Development in Germany**  
Fanny Tausendteufel (Agora Verkehrswende, Germany) (Submission-ID EMOB25-326)
- **Mobility4Grid – Solutions for the Grid Integration of BEVs**  
Jochen Bammert (TransnetBW, Germany) (Submission-ID EMOB25-310)
- **EV Grid Integration in Norway**  
Michele Garau (SINTEF, Norway) (Submission-ID EMOB25-311)
- **China's Electrification in the Mobility Sector**  
Felix Heider (Shell Global Solutions Deutschland, Germany)
- **Regulatory and Technical Barriers to Break for Successful V2G Implementation**  
Baerte De Brey (ElaadNL/, Netherlands) (Submission-ID EMOB25-349)

14:45 – 15:00 Discussions

## 15:00 – 15:30 COFFEE BREAK | GROUP PHOTO

15:30 – 16:55 SESSION 2A – BIDIRECTIONAL CHARGING I

> Session Chair Marcel Seger (University of Oxford, United Kingdom)

15:30 – 16:55 Presentations (17 min. each)

- **V2G Needs Interoperability – The Quest for a Unified and Overall System Architecture (UNOSAR)**  
L. Zehnder, S. Bothor, D. Bhavsar, J. Hernández Wolters (IE2S, Germany) (Submission-ID EMOB25-240)
- **Field-Level System Test Regarding Interoperability for Bidirectional Charging Using a Multi-Level Test Approach**  
C. Kondzialka, J. Essl, Z. Lu, G. Heilscher (Ulm University of Applied Sciences, Germany) (Submission-ID EMOB25-237)
- **Simulation of Daily Charging Needs in Ulm / Neu-Ulm**  
D. Krajewicz, M. Bergfeld (Deutsches Zentrum für Luft- und Raumfahrt – DLR, Germany), D. Langer (Stadtwerke Ulm/Neu-Ulm Netze, Germany) (Submission-ID EMOB25-246)
- **Towards Interoperable Bidirectional Charging: The EEBUS Approach in the InterBDL Project**  
A. Abromeit (EEBus Initiative, Germany) (Submission-ID EMOB25-248)
- **OctoFlexBW – EV Pilot Project for the Redispatch 3.0 Market**  
H. Neugebauer (Octopus Energy, Germany) (Submission-ID EMOB25-339)

– 16:55 Discussions

<b>15:30 – 16:55</b>	<b>SESSION 2B – GRID CODE ASPECTS</b>
> Session Chair	<b>Birgit Koeppen (Hamburg University of Applied Sciences, Germany)</b>
<b>15:30 – 16:38</b>	<b>Presentations (17 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>Testing &amp; Certification in Germany</b> <b>M. Keller</b> (CharIN e.V., Germany) (Submission-ID EMOB25-306)</li> <li>• <b>The importance of network codes on EV charging</b> <b>T. Schlößer</b>, N. Martensen (Energynautics, Germany) (Submission-ID EMOB25-212)</li> <li>• <b>New Grid Connection Requirements for Electromobility - Vehicles' Contribution to the Power Grids</b> <b>B. Schowe-von der Brellie</b> (FGH Research Association (FGH e.V.), Germany), M. S. Ali (FGH GmbH, Germany) (Submission-ID EMOB25-274)</li> <li>• <b>Development of EV Charging Station Distribution and their Impact on Grid Stability Considering Different Regulatory Measures</b> <b>S. Hussein</b> (Fraunhofer IEG, Germany), H. Diermann (Fraunhofer IEG, Germany)   FH Aachen – University of Applied Sciences, Germany), H. Al Rakouki (Fraunhofer IEG, Germany) (Submission-ID EMOB25-70)</li> </ul>
<b>16:38 – 16:55</b>	<b>Discussions</b>

<b>15:30 – 16:55</b>	<b>SESSION 2C – CHARGING INFRASTRUCTURE PLANNING I</b>
> Session Chair	<b>Felix Heider (Shell Global Solutions Deutschland, Germany)</b>
<b>15:30 – 16:38</b>	<b>Presentations (17 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>Classifying Electrical Demand Profiles at EV Charging Hubs: Insights from Arrival and Departure Data</b> <b>L. Hunter</b>, C. McGarry, I. S. Bayram, S. Galloway (University of Strathclyde, United Kingdom) (Submission-ID EMOB25-74)</li> <li>• <b>Electrifying the Trucking Sector in the Lower Rhine Region – Challenges and Opportunities</b> <b>F. Berger</b>, S. Kippelt, K. Burges (ef.Ruhr, Germany) (Submission-ID EMOB25-57)</li> <li>• <b>Multi-Use Concepts for Charging Infrastructure in Retail: Charging Needs and Potential for Reducing Demand for Charging Points in Berlin</b> J. Wegner, R. Hirschberg, <b>F. Reisch</b> (Reiner Lemoine Institut, Germany), A. Moritz (German Aerospace Center, Germany) (Submission-ID EMOB25-261)</li> <li>• <b>Smart Charging Strategies for Heavy Electric Construction Vehicles: Synergies with Renewables and Grid Load Management</b> <b>R. Fachrizal</b>, M. Azaza, O. Gillström, A. Knutsson, H. Li (Mälardalen University, Sweden) (Submission-ID EMOB25-53)</li> </ul>
<b>16:38 – 16:55</b>	<b>Discussions</b>

## **16:55 – 17:10 COFFEE BREAK**

<b>17:10 – 19:00</b>	<b>SESSION 3A – PROJECT BDL NEXT: LEVERAGING THE POTENTIAL OF BIDIRECTIONAL EVS FOR GRIDS, MARKETS, AND USERS</b>
<b>&gt; Session Chair</b>	<b>Vincenz Regener (FfE, Germany)</b>
<b>17:10 – 18:30</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"> <li><b>Grid Integration of Bidirectional EVs – Flexible Connection Agreements as a Framework for Equitable Grid Fees in the V2G Context</b> <b>V. Regener</b> (FfE   HM Hochschule München University of Applied Sciences, Germany), C. Müller, M. Hinterstocker (FfE, Germany) (Submission-ID EMOB25-142)</li> <li><b>Harmonisation and Reporting Function as an instrument to coordinate Grid and Market needs</b> <b>W. Duschl</b>, P. Adlhoch, F. Müller (Bayernwerk Netz GmbH, Germany) (Submission-ID EMOB25-92)</li> <li><b>Scaleable Bidirectional Charging – BMW Group's Approach from Research to Mass-Market Implementations</b> <b>J. Berger</b> (BMW Group, Germany) (Submission-ID EMOB25-173)</li> <li><b>Potential of Bidirectional Charging from the Customer's Perspective Considering Metering Concepts, §14a EnWG Modules 1–3, and Grid Fee Exemptions on Temporarily Stored Energy</b> <b>F. Sehr</b>, D. Reiners, A. Beblek, V. Grinewitschus (EBZ Business School, Germany) (Submission-ID EMOB25-215)</li> </ul>
<b>18:30 – 19:00</b>	<b>Discussions</b>

<b>17:10 – 19:00</b>	<b>SESSION 3B – POWER SYSTEM ASPECTS</b>
<b>&gt; Session Chair</b>	<b>Bernd Engel (TU Braunschweig, Germany)</b>
<b>17:10 – 18:30</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"> <li><b>Spatial-Temporal Assessment of Electric Vehicle Charging Network Quality of Service Under Prolonged Power Outages: A Berlin Case Study</b> <b>M. Abdelfattah</b> (TU Berlin, Germany) (Submission-ID EMOB25-200)</li> <li><b>P2P Energy Trading and Labelling of Green Energy</b> <b>C. Köbel</b> (Honda R&amp;D Europe (Deutschland) GmbH, Japan) (Submission-ID EMOB25-309)</li> <li><b>High Resolution Projections for Load and Generation Growth in Distribution Networks</b> <b>L. Hülsmann</b>, E. Tröster, P. Henzel (Energynautics, Germany) (Submission-ID EMOB25-333)</li> <li><b>Optimizing EV Charging Flexibility in Parking Lots under Grid Constraints: A Case Study of Congested Secondary Substations</b> <b>S. Matias</b>, M. Brandão (EDP R&amp;D, Portugal), A. Janežič (University of Ljubljana, Slovenia), L. Dias, J. Mateus (EDP R&amp;D, Portugal) (Submission-ID EMOB25-178)</li> </ul>
<b>18:30 – 19:00</b>	<b>Discussions</b>

<b>17:10 – 18:40</b>	<b>SESSION 3C – CHARGING INFRASTRUCTURE PLANNING II</b>
<b>&gt; Session Chair</b>	<b>Karsten Burges (efRuhr, Germany)</b>
<b>17:10 – 18:10</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"> <li><b>Mobility at a Glance - how Salzburg Netz GmbH is preparing for E-Mobility</b> <b>W. Schaffer</b> (Salzburg Netz GmbH, Austria) (Submission-ID EMOB25-257)</li> <li><b>Firm Level Optimisation Strategies for Sustainable and Cost Effective Electric Vehicle Workplace Charging</b> <b>M. Seger</b> (Environmental Change Institute, University of Oxford, United Kingdom), C. Brand (Environmental Change Institute, University of Oxford, United Kingdom   Transport Studies Unit, University of Oxford, United Kingdom), C. Clement (Center for Artificial Intelligence in Medicine, Switzerland), J. Dixon (University of Strathclyde, United Kingdom), C. Wilson (Environmental Change Institute, University of Oxford, United Kingdom   International Institute for Applied Systems Analysis, Austria) (Submission-ID EMOB25-3)</li> <li><b>Impact of Network Tariffs on EV Charging</b> <b>T. Lundblad</b>, E. Perotti, M. Taljegård, F. Johnsson (Chalmers University of Technology, Sweden) (Submission-ID EMOB25-38)</li> </ul>
<b>18:10 – 18:40</b>	<b>Discussions</b>

## 19:00 NETWORKING EVENT / POSTER RECEPTION / - FOYER

## TUESDAY, 07 OCTOBER 2025

<b>08:30 – 10:10</b>	<b>SESSION 4A – CHARGING EXPERIENCE</b>
<b>&gt; Session Chair</b>	<b>Lewis Hunter (University of Strathclyde, United Kingdom)</b>
<b>08:30 – 10:00</b>	<b>Presentations (18 min. each)</b>
	<ul style="list-style-type: none"><li>• <b>Charging smarter, not harder: Modelling the optimal mix of V1G and V2G with infrastructure constraints in Europe</b> <b>F. Sanvito</b>, F. Lombardi, S. Pfenninger-lee (Technology University Delft, Netherlands) (Submission-ID EMOB25-268)</li><li>• <b>Performance Indicator for Residential Solar Optimised EV Chargers</b> <b>J. Bergner</b>, N. Orth (University of Applied Sciences HTW Berlin, Germany), B. Wille-Haußmann (Fraunhofer ISE, Germany), V. Quaschnig (University of Applied Sciences HTW Berlin, Germany) (Submission-ID EMOB25-80)</li><li>• <b>Separate Billing at Private EV Charging Points through an Advanced Smart Meter Infrastructure: From Technical Realisation to Practical Use Cases</b> <b>M. Grandel</b>, C. Kübler, Y. Ennulat, J. Fu (University of Applied Science Biberach, Germany), E. Niehs, J. Essers, B. Engel (Technical University Braunschweig – elenia, Germany) (Submission-ID EMOB25-123)</li><li>• <b>BDL Next – Unlocking the Potential of Bidirectional Charging</b> <b>M. Rahi</b> (E.ON Innovation GmbH, Germany) (Submission-ID EMOB25-49)</li><li>• <b>Solar PV-Based EV Charging Station for Urban Mobility: A Case Study of the BRT Line N1 in the Maputo Metropolitan Area</b> <b>M. Da Costa</b> (ISPS, Mozambique), L. Chea, B. Cuamba (UEM, Mozambique) (Submission-ID EMOB25-282)</li></ul>
<b>10:00 – 10:10</b>	<b>Discussions</b>

<b>08:30 – 10:10</b>	<b>SESSION 4B – POWER SYSTEM ASPECTS II</b>
<b>&gt; Session Chair</b>	<b>Eckehard Tröster (Energynautics, Germany)</b>
<b>08:30 – 09:50</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"><li>• <b>Statistical Evaluation of Real-World EV Data for Intraday Electricity Markets</b> <b>Z. Özdemir Aydin</b> (Technical University of Munich, Germany   Karadeniz Technical University, Turkey), M. Cornejo (Technical University of Munich – TUM, Germany), S. J. Plathottam (Argonne National Laboratory, USA), İ. H. Altas (Karadeniz Technical University, Turkey), A. Jossen (Technical University of Munich – TUM, Germany) (Submission-ID EMOB25-265)</li><li>• <b>EV Fleet Integration in Urban and Semi-Urban Areas: A Field Data-Based Analysis</b> <b>G. Ram Mohan</b> (Ampcontrol Technologies, United States), J. Schiller, M. Pruckner (University of Würzburg, Germany), J. Schlund (Ampcontrol Technologies, United States) (Submission-ID EMOB25-106)</li><li>• <b>Implications of E-Mobility on the power system - case study of Rwanda</b> N. Jacob (Economic Consulting Associates – ECA, United Kingdom), T. Schlößler (Energynautics, Germany), <b>S. Landau</b> (Economic Consulting Associates – ECA, United Kingdom) (Submission-ID EMOB25-218)</li><li>• <b>Hosting Capacity analysis for E-Bus charging in Kigali, Rwanda</b> <b>T. Schlößler</b>, E. Tröster (Energynautics GmbH, Germany) (Submission-ID EMOB25-217)</li></ul>
<b>09:50 – 10:10</b>	<b>Discussions</b>

<b>08:30 – 10:10</b>	<b>SESSION 4C – CHARGING INFRASTRUCTURE PLANNING III</b>
> Session Chair	<b>Bernhard Schowe-von der Brelie (FGH Research Association (FGH e.V.), Germany)</b>
<b>08:30 – 09:50</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>The European Union’s Charging Infrastructure Needs to Power Up Battery-Electric Trucks by 2030</b> H. Basma, J. Schmidt (The International Council on Clean Transportation, Germany) (Submission-ID EMOB25-22)</li> <li>• <b>Challenges in Heavy-Duty Charging Infrastructure in Germany: Battery Storage as a Bridging Solution for Heavy-Duty Vehicle Charging Infrastructure Deployment</b> A. Mertins, J. H. Prause, S. Lahmann (NOW GmbH/ Nationale Leitstelle Ladeinfrastruktur, Germany) (Submission-ID EMOB25-263)</li> <li>• <b>Adapting ISO 15118 for Railway Transportation for the Integration of Battery Electric Multiple Units into the Grid</b> L. Ebbert, C. Biedermann, G.-L. Di Modica, B. Engel (Technische Universität Braunschweig – elenia, Germany) (Submission-ID EMOB25-23)</li> <li>• <b>Unlocking the Potential of Charging Infrastructure Sharing: Lessons from Project FAMOUS</b> G. Vladova (hySOLUTIONS, Germany), M. Meinert (Hamburger Energienetze, Germany) (Submission-ID EMOB25-293)</li> </ul>
<b>09:50 – 10:10</b>	<b>Discussions</b>

## 10:10 – 10:30 COFFEE BREAK

<b>10:30 – 12:05</b>	<b>SESSION 5A – BIDIRECTIONAL CHARGING III</b>
> Session Chair	<b>Eckehard Tröster (Energynautics, Germany)</b>
<b>10:30 – 11:42</b>	<b>Presentations (18 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>Enabling Intelligent Bidirectional Charging: A Real-World Communication Interface Between Electric Vehicles, Charging Infrastructure, and a Control Optimizer</b> S. Wang, A. Sain, C. Lehmann, S. Shen, R. Habeeb, F. H. P. Fitzek (TU Dresden, Germany) (Submission-ID EMOB25-307)</li> <li>• <b>Plugging into Potential: Unleashing the Untapped Flexibility of EVs</b> G. Clark (Eurelectric, Belgium) (Submission-ID EMOB25-214)</li> <li>• <b>Open-Source-Based Test Bench for Bidirectional Charging to Evaluate Charging Strategies</b> L. Ebbert, N. Hebler, B. Engel (TU Braunschweig – elenia, Germany) (Submission-ID EMOB25-126)</li> <li>• <b>An SGAM-based Computational Independent Model to enable Frequency Containment Reserve as a V2G service</b> F. Maldonado (CARIAD SE, Germany), D. Vereno, S. Eschlberger, C. Neureiter (Center for Dependable Systems Engineering, Salzburg University of Applied Sciences, Austria), D. Göhlich (Department Methods for Product Development and Mechatronics, Technische Universität Berlin, Germany) (Submission-ID EMOB25-68)</li> </ul>
<b>11:42 – 12:05</b>	<b>Discussions</b>

<b>10:30 – 12:05</b>	<b>SESSION 5B – ANCILLARY SERVICE PARTICIPATION</b>
> Session Chair	Walter Schaffer (Salzburg Netz, Austria)
<b>10:30 – 11:42</b>	<b>Presentations (18 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>Frequency and Voltage Support of EV Connected to an AC Charging Station – A Practical Application Based on a Smartcable</b> F. Colas (University of Lille, France), T. Cleton, L. Rossini (RossiniEnergy, France), H. Fakham (University of Lille, France), T. Prevost (RTE, France) (Submission-ID EMOB25-241)</li> <li>• <b>Understanding Risk And Revenue in the Nordic 15-Minute mFRR Market: An EV Aggregation Study</b> T. Hagström (Fortum   Hiven Energy, Sweden), L. Herre (Fortum, Sweden   Hiven Energy, Sweden   Technical University of Denmark – DTU, Denmark) (Submission-ID EMOB25-232)</li> <li>• <b>Assessing the Energy Supply Potential of Corporate Fleets for Grid Services using Data from a Charge Point Management System</b> H. Neue, M. Engel (Hamburger Energienetze GmbH, Germany), H. Schäfers (HAW Hamburg, Germany) (Submission-ID EMOB25-128)</li> <li>• <b>The Potential of Electric Vehicle Workplace Availability Forecasts for Participating in Spot and Frequency Markets Using Vehicle-To-Grid</b> M. Koubar, Z. Yan (Uppsala University, Sweden), R. Fachrizal (Mälardalen University, Sweden), J. Munkhammar (Uppsala University, Sweden) (Submission-ID EMOB25-37)</li> </ul>
<b>11:42 – 12:05</b>	<b>Discussions</b>

<b>10:30 – 12:05</b>	<b>SESSION 5C – NORWEGIAN E-TRUCK RESEARCH PROJECT MEGACHARGE</b>
> Session Chair	T. Schlößer (Energynautics, Germany)
<b>10:30 – 11:30</b>	<b>Presentations (20 min. each)</b>
	<ul style="list-style-type: none"> <li>• <b>Optimizing Conditional Connection Agreements for Megawatt Charging Infrastructure: A Framework for DSO-CPO Coordination</b> M. Garau, O. Skjeppestad, I. Bakken Sperstad (SINTEF Energy Research, Norway) (Submission-ID EMOB25-165)</li> <li>• <b>Architecture and Evaluation of a Charging Station for Heavy-duty Vehicles</b> L. Araujo (SINTEF Energy Research, Norway) (Submission-ID EMOB25-318)</li> <li>• <b>Developing Fast Charging in Long-Haul Trucking in Europe: Conceptualising user-centric booking system for charging for heavy-duty vehicles</b> S. Rostad Sæter (SINTEF Energy Research, Norway) (Submission-ID EMOB25-319)</li> </ul>
<b>11:30 – 12:05</b>	<b>Discussions</b>

## 12:05 – 12:15 SHORT BREAK

<b>12:15 – 13:00</b>	<b>SESSION 5 – CLOSING SESSION</b>
> Session Chair	Lucija Rakočević (Energynautics, Germany)
<b>12:15 – 12:55</b>	<b>Panel discussion</b>
	<p><b>TOPICS ADDRESSED: NEXT CHALLENGES FOR GRID INTEGRATION OF E-MOBILITY</b></p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>- Gabrielle Clark (Eurelectric, Belgium)</li> <li>- Hussein Basma (International Council on Clean Transportation, Germany)</li> <li>- Walter Schaffer (Salzburg Netz, Austria)</li> </ul>
<b>12:55 – 13:00</b>	<b>Closing Remarks</b>

## 13:00 – 13:45 LUNCH

(START OF WIND+SOLAR WORKSHOP AT 13:30)

## POSTER PRESENTATIONS

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- **Charging Capacity at the Depot - Without Incentives, Heavy Commercial Vehicles Remain Inflexible**  
**S. Decher** (Hamburg University of Applied Sciences, Germany) (Submission-ID EMOB25-18)
- **Assessing the Economic Viability of Solar Carports in Urban Parking Infrastructure for EV Charging and Self-Consumption**  
**M. Koubar**, J. Munkhammar (Uppsala University, Sweden), R. Fachrizal (Mälardalen University, Sweden) (Submission-ID EMOB25-58)
- **Simulation of District Electricity and Heating with Mobility Integration**  
**E. Turhan**, K. Heidemann, M. Bergfeld, K. Waiz, T. Schneider, C. Muñoz, N. Reininghaus, P. Klement, M. Kroener, Y.-P. Flötteröd (German Aerospace Center – DLR, Germany) (Submission-ID EMOB25-133)
- **From Uncontrolled to Bidirectional: Analyzing Charging Strategies for Electric Vehicles**  
**H. Al Rakouki**, S. Hussain (Fraunhofer IEG, Germany) (Submission-ID EMOB25-146)
- **E-Mobility Infrastructure Utilisation and Planning in Scotland**  
**C. McGarry**, L. Hunter, S. Bayram, S. Galloway (University of Strathclyde, United Kingdom) (Submission-ID EMOB25-157)
- **Empowering the Electrification of Urban Mobility**  
**O. Kelly**, D. Catanase, E. Silke (ESB Networks, Ireland) (Submission-ID EMOB25-221)
- **Method to Synthesise Energy Demand Time Series and Identify Charging Demand of Electric Vehicles**  
**D. Feismann**, T. Oberließen, S. Peter, C. Rehtanz (TU Dortmund University, Germany) (Submission-ID EMOB25-234)
- **Optimizing Infrastructure and Charging Strategies for Bidirectional Electric Delivery Fleets under PV, Grid, and Cost Constraints**  
**J. Weingart**, M. Scherrer (ZHAW Zurich University of Applied Sciences, Switzerland) (Submission-ID EMOB25-292)
- **NSGA-II-Based Multi-Objective Optimization for PV-Coupled Heat Pumps and Vehicle-to-Home Energy Systems**  
**R. Habeeb**, T. Böttger, S. Shen, S. Irtaza Haider, R. Radeke, F. H. P. Fitzek (TU Dresden, Germany) (Submission-ID EMOB25-297)
- **Stable Grid Operation and Cost-Efficient Scheduling of HDV Fleets By Dynamic Toll and Electricity Prices**  
**O. Alaya** (Deutsches Zentrum für Luft- und Raumfahrt e. V. (DLR), Germany) (Submission-ID EMOB25-342)