

Grid Integration of Electric Mobility

Combining resources

3rd International ATZ Conference

5 and 6 June 2018 | Berlin | Germany



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German and English

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**POWER GRID
AND CHARGING
INFRASTRUCTURE**

**BACKGROUND CONDITIONS
AND STANDARDIZATION**

MARKETS AND APPLICATIONS

STORAGE TECHNOLOGY

/// PANEL DISCUSSION **Will electric mobility fail because of the power grids?**

/// KEYNOTE LECTURES **Ralf W. Barkey**, Genossenschaftsverband |

Prof. Dr. Hans-Martin Henning, Fraunhofer Institute |

Dr. Holger Krawinkel, MVV Energie

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Grid Integration of Electric Mobility

WELCOME

All carmakers are expanding their model range with the addition of electric powertrains. With its high levels of investment, the Volkswagen Group is becoming a major player in the field of electric vehicles. Electric mobility is picking up speed. But to maximize its success, the energy supply for these vehicles must also be suitably managed. At the ATZ Conference “Grid Integration of Electric Mobility”, we will therefore examine the situation in the markets.

Electric mobility will make sense only if it consistently uses regenerative energy. When will electricity networks be able to store volatile wind and solar power? How are our power transmission networks designed? Can they deal with peak load situations? Is it possible to supply sufficient power to a nationwide network of fast charging stations? Is there an overall plan that considers all cause-and-effect relationships from energy generation to the charging point and from which the necessary investment can be derived?

A breakthrough in electric mobility will not take place until the product and the infrastructure perfectly interact and the financial issues have been resolved. In order to optimize interaction between representatives of the automotive industry, energy providers, data services, politics, and the financial sector, both nationally and internationally, we are offering you an interdisciplinary discussion forum on 5 and 6 June 2018 at the Steigenberger Hotel Am Kanzleramt in Berlin. You will have the opportunity to make direct contact with all key partners to discuss the very latest topics and to exchange ideas and experience. We cordially invite you to take part.

On behalf of the Scientific Advisory Board

Dr. Johannes Liebl

Editor-in-Charge ATZ | MTZ | ATZelektronik



PARTICIPANTS

This ATZ conference is aimed at managers and engineers from car manufacturers, suppliers, development service providers, research institutes and universities and at employees of telecommunications services providers, IT companies, financial services providers, energy suppliers and grid operators, federal and state ministries, associations and NGOs who work in the field of electric mobility.

PROGRAM

TUESDAY 5 JUNE 2018

9:15 **Welcome and opening of the conference**

Dr. Johannes Liebl, Editor-in-Charge ATZ | MTZ | ATZelektronik;
Xaver Pfab, Project Manager E-Mobility Grid Integration,
BMW Group

KEYNOTE LECTURES

Moderator: Xaver Pfab, Project Manager E-Mobility Grid Integration,
BMW Group

9:30 **Sector coupling and system integration – key elements
of the next phase of the energy system transformation
and the role of the mobility sector**

Prof. Dr. Hans-Martin Henning, Director, Fraunhofer Institute
for Solar Energy Systems ISE

10:00 **Ways out of the dilemma zone**

Dr. Holger Krawinkel, Head of Staff Department Customer
Experience and Innovation, MVV Energie AG

10:30 **Live-Voting**

Dr. Kathrin Goldammer, Managing Director,
Reiner Lemoine Institut gGmbH

10:45 Refreshment break with coffee and tea in the exhibition area

GRID INFRASTRUCTURE

Moderator: Asmus Schütt, Head of Press and PR,
Genossenschafts-verband – Verband der Regionen e. V.

11:15 **E-Mobility Workshop Bregenz 2017 – results and to do's**

Reinhard Nenning, Responsible for distribution grid planning,
Vorarlberger Energienetze GmbH

11:45 **Load management of charging stations for EV fleet –
proof of concept and development potentials**

Dr. Hans Henning Thies, Team Leader Product Development,
M. Klockenhoff, Dr. F. Sösemann, GP JOULE GmbH;
J. Eickelmann, M. Janssen, K. Suttikus,
PHOENIX CONTACT Deutschland GmbH

12:15 **Future power supply for electric mobility: investigation of
cooperative charging management on the basis of the
“smart grid” and solutions for maintaining grid stability,
as illustrated by the example of Esslingen am Neckar**

Dr. Harald Braun, Senior Manager EV Services, Daimler AG;
Dr. Reha Tözün, Senior Consultant, BridgingIT GmbH;
Prof. Dr. R. Wörner, F. Raubach, Faculty of Management,
University of Applied Sciences Esslingen

12:45 Lunch in the exhibition area



APPLICATIONS

Moderator: Markus Schöttle, Deputy Editor-in-Chief ATZelektronik

- 14:00 **Electrification of urban bus fleets: challenges and solutions**
Martin Ufert, Scientific Assistant, A. Bunzel, Dresden Institute of Automobile Engineering (IAD), TU Dresden
- 14:30 **Electric vehicles – enablers for the energy transition?**
Ursel Willrett, Senior Consultant for Electromobility Infrastructure Systems, IAV GmbH
- 15:00 Refreshment break with coffee and tea in the exhibition area

STANDARDIZATION

Moderator: Prof. Dr. Ulrich Wagner, Chair of Energy Economy and Application Technology, TU Munich

- 15:30 **The impact of China's changing role in technology standardization**
Dr. Sabrina Weithmann, Consultant, Weithmann & Partner
- 16:00 **Intelligent integration of electric vehicles in the field of tension between network, market, and customer**
Dr. Georg Kerber, Chairman of the FNN Project Group "Control Interfaces", LEW Verteilnetz GmbH (LVN)
- 16:30 **Interoperability as the framework for smart charging services**
Christian Hahn, CEO, M. Schneider, Hubject GmbH
- 17:00 **Grid integration – development levels (CharIN roadmap), market needs and potential based on international examples**
Marcus Fendt, Managing Director, The Mobility House and Deputy Head of CharIN Focus Group Grid Integration

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- 19:00 **Evening of encounters at the Sarah Wiener Restaurant at the Hamburger Bahnhof**
Enjoy a delightful evening and interesting conversations over dinner with colleagues and speakers.

PROGRAM

WEDNESDAY 6 JUNE 2018

KEYNOTE LECTURE

Moderator: Klaus Baumgärtner, Managing Director, BridgingIT GmbH

- 8:30 **Rethinking infrastructure – a case for cooperative solutions**
Ralf W. Barkey, Chief Executive Officer,
Genossenschaftsverband – Verband der Regionen e. V.

MARKET DEVELOPMENT

Moderator: Klaus Baumgärtner, Managing Director, BridgingIT GmbH

- 9:00 **Electric mobility in local authorities from the perspective of a public sector financier**
Holm Vorpapel, Director of Infrastructure, DKB AG
- 9:30 **E-mobility and requirements for grid integration**
Hannes Georg Wiech, Unit Manager Mobility, Dr. J. C. Strobel,
BDEW Bundesverband der Energie- und Wasserwirtschaft e. V.

10:00 Refreshment break with coffee and tea in the exhibition area


BACKGROUND CONDITIONS

Moderator: Gero Lücking, Managing Director Power Industry,
LichtBlick SE

- 10:30 **Digitization of the energy transition and grid integration of electric mobility**
Alexander Kleemann, Consultant for Energy Law
and Network Regulation, Federal Ministry for
Economic Affairs and Energy (BMWi)
- 11:00 **Grid integration of electric mobility from the perspective of energy law**
Dr. Katharina V. Boesche, Lawyer and Leader of the
legal framework group of the project ICT for e-mobility,
Rechtsanwaltskanzlei Boesche

PANEL DISCUSSION

- 11:30 **Will electric mobility fail because of the power grids?**
Participants: Klaus Baumgärtner, BridgingIT GmbH
Steffen Bilger, MdB
Alexander Kleemann, BMWi
Dr. Markus Obergünner, E.ON SE
Xaver Pfab, BMW Group
Dr. Stephanie Ropenus, Agora Energiewende
Moderator: Dr. Kathrin Goldammer



12:30 Lunch in the exhibition area

CHARGING INFRASTRUCTURE

Moderator: Armin Vielhauer, Senior Project Manager E-Mobility
Product Development, E.ON Solutions GmbH

13:30 **Well-planned charging infrastructure –
benefits for all participants**

Oliver Arnhold, Team Leader, Dr. K. Goldammer, N. Pieniak,
E. van der Wel, Reiner Lemoine Institut gGmbH

14:00 **Mobile metering – electric mobility integrated
into the energy economy**

Knut Hechtfischer, Founder, ubitricity GmbH

14:30 **The impact of electric mobility on power demand –
challenges and solutions for grid infrastructure and
building owners**

Delphine Clement, Mobility Segment Leader EMEA,
L. Shaffer, J. Robb, F. Roudet, Eaton Manufacturing GmbH,
Switzerland

15:00 Refreshment break with coffee and tea in the exhibition area

STORAGE TECHNOLOGY

Moderator: Dr. Gunnar Bärwaldt, Project Leader Grid Integration Electric
Mobility, Volkswagen AG

15:30 **Batteries (also used ones from electric vehicles)
as stationary energy storage in a smart environment**

Dr. Jürgen Kölch, Research – Advanced Development,
EVA Fahrzeugtechnik GmbH

16:00 **BMW Battery Storage Farm Leipzig –
an example of BMW Group digital business models**

Dominik Becks, Head of Product Management Energy
Services, BMW Group

16:30 **Closing remarks**

Xaver Pfab, BMW Group;
Dr. Johannes Liebl, Editor-in-Charge ATZ | MTZ | ATZelektronik



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bridgingIT was founded in 2008 as an independent IT consulting company. The enterprise sees itself as an innovative service provider and connects the requirements of IT with the business. Located in Frankfurt, Karlsruhe, Cologne, Mannheim, Munich, Nuremberg, Stuttgart and Zug (Switzerland) the employees consult medium sized businesses and large customers with the implementation of company strategies and the utilization of modern technology. Being a full service provider bridgingIT offers a focused portfolio and operates vendor independent steadily.

Operating one of the biggest fully electric long-distance fleets in Germany in combination with an innovative corporate mobility concept, including charging infrastructure, bridgingIT takes a leading role with respect to future oriented mobility.



www.bridging-it.de/content/index.html

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€ 1,395.– plus VAT

This includes the conference documentation, coffee breaks, soft drinks, two lunches, and the evening reception.

VENUE

Steigenberger Hotel Am Kanzleramt
Ella-Trebe-Straße 5
10557 Berlin | Germany

HOTEL

The hotel has room blocks at reduced prices for the participants.

Please make your reservation quoting the reference “ATZlive” by 4 May 2018 the latest.

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LANGUAGES USED IN THE PRESENTATIONS

German and English with simultaneous interpreting
(German – English / English – German)

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CONDITIONS

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Should a speaker be unable to attend at short notice by reason of force majeure, illness, accident, or other circumstances for which ATZlive cannot be held responsible, another qualified person will be appointed to the exclusion of any claim for compensation. Should the event be canceled altogether, we will of course refund the registration fee.

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ATZlive

// Spotlight on Powertrain and Vehicle Engineering //

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CONFERENCE REGISTRATION

Grid Integration of Electric Mobility

5 and 6 June 2018 | Berlin | Germany

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☐ Participation in the conference at a price of € 1,395.– plus VAT

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