

Federal Ministry for Transport, Innovation and Technology

**Conference Guide** 

# SMART GRIDS WEEK BREGENZ 2012

May, 21<sup>st</sup> to 25<sup>th</sup>, 2012

Bregenz Festival House and illwerke vkw Bregenz / Austria

illwerke vkw

#### Preface Doris Bures, Federal Minister

Dear Sir or Madam!

The aim of technology policy is to develop the technological basis in order to secure a safe, climate-friendly and affordable power supply for the future, together with industry, researchers and other strategic partners.

For some years now, the development of our electric power systems has therefore been right at the top of the European agenda. Globally, too, great efforts are being made, above all to make this important infrastructure capable of handling a steadily growing share of renewable energy, in particular from fluctuating sources. Smart grids are aimed at supporting both traditional and new energy services efficiently in the future. More and more people want to play an active role in the power supply, and we are pinning high hopes on efficient, low-carbon electric vehicles.

Austria's innovative companies and research institutes are dedicated to help drive this development. The Federal Ministry of Transport, Innovation and Technology (bmvit) acts as a partner to them, helping the process to move forward and supporting Austrian initiatives with its entire funding portfolio.

Preface Markus Wallner, State Governor

We have set ourselves an extremely ambitious target, that of achieving energy autonomy by 2050. We consider this to be a sensible and necessary development and, at the same time, a strategy which provides us with both social and economic opportunities. Energy autonomy means being independent of fossil fuels and of any dependencies associated with them as well as being independent of incalculable price developments.

In order to achieve this, it is especially important to reduce energy consumption significantly without restricting the quality of services while simultaneously pursuing the development of renewable fuels.

Electrical energy will play an even more important role in energy systems of the future than it does today. Furthermore, due to the many decentralized entities, the expansion of renewable sources of energy for the generation of electricity will entail a significant shift in roles and tasks. Power supply operations in particular will change. Newer, smarter concepts will be needed for the ideal joint management of various types of generation and consumption. Started by BMVIT, the Smart Grids Week contributes to the debate within Austria on this issue. In addition, the event has also become a globally perceived platform for exchange in international cooperation. I am delighted that illwerke vkw and the Province of Vorarlberg are helping to support this year's event and are actively involved as cooperation partners. What we can look forward to in particular are the results of the smart grids demonet project in Grosses Walsertal, which can also be viewed during the event.



Doris Bures Federal Minister of Transport, Innovation and Technology (bmvit), Austria

The development of Smart Grids is therefore a sine qua non for the further expansion of renewable fuels and, thus, also for our target of achieving energy autonomy. A series of projects towards this objective are already underway in Vorarlberg, such as the smart grid region Großes Walsertal. Last but not least, smart grids also make economic sense as, thanks to them, the costs of expanding the grids can at least be reduced. And opportunities arise for technological innovations and new services.



Markus Wallner State Governor of Vorarlberg

#### Preface Ingolf Schädler, bmvit

Dear visitors of the Smart Grids Week 2012!

The development of smart grids has entered a new and exciting phase: Firstly we have received practical experiences from the ongoing pilot projects in Austria. These build the essential basis for the knowledge- and experience exchange in the Smart Grid D-A-CH (Germany-Austria-Switzerland) as well as with other European countries.

In Austria the pilot projects for active, bi-directional distribution grids in the "Großes Walsertal"/Vorarlberg and in Lungau/ Salzburg were currently integrated into business. In two sections of the network, the necessary components have been installed and therefore innovative power systems run a "live mode" test. If the new solutions prove themselves effectively, approx. twice as many decentralised power plants as before will feed renewable energy into the grid of those regions. At the same time complex and expensive grid extensions can be reduced.

In the further development and implementation of "Smart Grids" our focus will be on various aspects of data protection, such as safety and security. It is also important to establish long-term, cost- and resource efficient and interoperable systems that are prepared for requirements and developments in the future systems, which are capable of being integrated e.g. in the field of communication technologies, the miniaturisation and the convergence of systems and applications.

During the Smart Grids Week 2012 future strategies will be discussed and current developments and trends are going to be presented. As I am born in Vorarlberg it is my great pleasure to welcome you in Bregenz this year.



Ingolf Schädler Deputy Director General, Federal Ministry for Transport, Innovation and Technology (bmvit), Austria

#### Preface illwerke vkw

Smart grids: the basis of energy autonomy.

The Province of Vorarlberg's goal of achieving energy autonomy by 2050 has a huge impact on illwerke vkw's strategy and dayto-day work as the largest energy service company in the region. We advise our customers on how they can reduce their power consumption, we invest in new technologies such as electric vehicles and we rise to the challenge when it comes to developing renewable energy sources.

There are various pillars of energy autonomy, but they are all based on smart grids that meet the technical challenges of distributed electricity generation and smart control of consumer loads, thus continuing to guarantee security of supply.

With our demonstration smart grid in the Grosses Walsertal Biosphere Reserve we will gain initial experience and test innovative approaches to solutions in the field. It is all the more gratifying for us that this year's Smart Grids Week is being held in Vorarlberg and that we can also welcome international experts to the workshops here. We hope that you will feel at home here and find the appropriate environment to address the central issue of smart grids with a view to development at different levels.



Ludwig Summer CEO, illwerke vkw (f.l.t.r.)

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Christof Germann Member of the Board, illwerke vkw

#### May 23<sup>rd</sup>, 2012

#### Venue: Bregenz Festival House Language: German and English

Chair: Hubert Fechner, University of Applied Sciences Technikum Wien, Austria

#### 09:00 Welcome and opening

 » Ingolf Schädler, Deputy Director General, Federal Ministry for Transport, Innovation and Technology (bmvit), Austria
 » Christof Germann, Member of the Board, illwerke vkw, Austria

» Deputy State Governor Karlheinz Rüdisser, Federal State of Vorarlberg, Austria

# STRATEGIES AND CURRENT DEVELOPMENTS IN AUSTRIA AND INTERNATIONAL

09:40 Topic management Smart Grids – Strategy contributions for the development of future intelligent energy systems Michael Hübner, Federal Ministry for Transportation,

Innovation and Technology (bmvit), Austria

#### Smart Grids – Perspectives at the Austrian climate and energy fund

Theresia Vogel, Managing Director, Klima- und Energiefonds, Austria

**The IEA – Smart Grid Action Network (ISGAN)** Russell Conklin, Policy Analyst, U.S. Department of Energy, U.S.A.

European Electricity Grids Initiative (EEGI) – implementation of the roadmap Helfried Brunner, AIT Austrian Institute of Technology, Austria

#### 11:00 COFFEE BREAK

11:30 Approaches for further development of the institutional framework for Smart Grids Professor Gert Brunekreeft, Professor of Energy Economics, Jacobs University, Germany

Status of Smart Grids from a regulatory view Werner Friedl, Energie-Control Austria

## Future Energy Grid – Migration pathways towards the internet of energy

Professor Hans-Jürgen Appelrath, Carl-von-Ossietzky-University Oldenburg and OFFIS, Germany

#### 12:30 LUNCH

13:30 Intermediate results of E-Energy in the national and international context

Ludwig Karg, General Manager, B.A.U.M. Consulting, Germany

#### PV as driver for Smart Grids in Bavaria

Walter Albrecht, LEW Verteilernetz, Germany

#### SYMPOSIUM

#### Impact Assessment Smart Metering

Thorsten Staake, ETH Zürich und General Manager, Amphiro, Switzerland

#### Voltage control in distribution networks Alexander Schenk, Siemens AG Austria

#### 14:45 Panel discussion: "Trends and current drivers of the Smart Grids development"

Chair: Hubert Fechner, University of Applied Sciences Technikum Wien, Austria

 » Walter Albrecht, LEW Verteilernetz, Germany
 » Professor Hans Jürgen Appelrath, Carl-von-Ossietzky-University Oldenburg and OFFIS, Germany
 » Sebastian Beiglböck, OIR – Austrian Institute for Regional Studies and Spatial Planning, Austria
 » Professor Gert Brunekreeft, Jacobs University Bremen, Germany
 » Ludwig Karg, General Manager, B.A.U.M. Consulting,

Stromnetz, Austria

#### 15:30 COFFEE BREAK

Germany

#### DEMONSTRATION PROJECTS AND MODEL REGIONS – THE PATHWAY TO IMPLEMENTATION

» Peter Weinelt, General Manager, Wien Energie

16:00 EcoGrid EU, a prototype for a smart grid with more than 50% renewables

Maja Felicia Bendtsen, WP Leader, Østkraft, Denmark

#### **Pionier Region Upper Austria** Walter Tenschert, General Manager and Andreas Abart, Energie AG Oberösterreich Netz, Austria

Modell Region Salzburg

Michael Strebl, General Manager, Salzburg-Netz and Wolfgang Wagner, Deputy Mayor of Köstendorf, Austria

# Region Vorarlberg – Live demonstration of the new intelligent voltage control

Werner Friesenecker and Frank Herb, Vorarlberger Energienetze, Austria

#### 17:30 Discussion:

"Lessons learned so far - from the demo activities" Chair: Hubert Fechner, University of Applied Sciences Technikum Wien, Austria

#### 18:00 End of the first conference day

#### 19:00 RECEPTION UPON INVITATION OF THE GOVERNOR OF VORARLBERG

#### May 24<sup>th</sup>, 2012

#### Venue: Bregenz Festival House Language: German and English

Chair: Albrecht Reuter, Director Business Development Smart Grids, Fichtner, Germany

#### **SECURITY IN SMART GRID**

#### 09:00 Round Table: "Security in Smart Grid"

 » Klaus Bernhardt, FEEI – Association of the Austrian Electrical and Electronics Industries, Austria
 » Thomas Bleier, AIT Austrian Institute of Technology, Austria

- » Holm Diening, GAI NetConsult GmbH, Germany
- » Paul Karrer, Managing Director, Arrow ECS Internet Security, Austria
- » Konstantinos Moulinos, Technical Department of ENISA
- » Joachim Pyras, CEO, numetris, Germany

#### 10:30 COFFEE BREAK

#### FLEXIBILITY FOR SMART ENERGY SYSTEMS

**11:00** Controllable local transformer – a new approach Till Sybel, General Manager, A.Eberle GmbH & Co.KG, Germany

> The electric vehicle as part of the energy grid Professor Gernot Spiegelberg, Vice President, Director of Electromobility Concept Development, Siemens AG Corporate Technology, Germany

## Vehicle to grid – Communication with the vehicle in the project VLOTTE

Herbert Halamek, Key Project Manager eMobility Solutions, Continental, Interior Electronics Solutions, Germany

#### Possible scenarios for demand response

Friederich Kupzog, Vienna University of Technology, Austria

Change of user habits and load shifting effects by application of flexible tariffs and load-management in consumer systems; test results

Michael Fiedeldey, Managing Director, AllgäuNetz, Germany

#### Grid Integration of PV - EU Project ENDORSE: Development of a Solarpower forecast based on satellites for the network operators

Holger Ruf, Institute of Energy and Drive Technologies, Hochschule Ulm, Germany

#### 13:00 LUNCH

#### SYMPOSIUM

14:00 Methane from CO<sub>2</sub>: The integration of electric and gas grids

Hermann Pengg-Bührlen, Director Project Management e-fuels, AUDI AG, Germany

#### **Importance and possibilities for energy efficiency measures in the smart grid environment** Matthias Ochs, systemplan, Germany

# Distributed battery storage – Storage for the reserve power market?

Wolfgang Prüggler, Energy Economics Group (EEG), Vienna University of Technology, Austria

The integration of distributed generators at the regional electricity market place "eTelligence" Christof Wittwer, Head of Department "Smart Grids", Fraunhofer Institute for Solar Energy Systems ISE, Germany

#### 15:20 Panel discussion: "Flexibility"

Chair: Albrecht Reuter, Director Business Development Smart Grids, Fichtner, Germany » Christine Bergmann-Neubacher, T-Mobile Austria

 Professor Wolfgang Gawlik, Vienna University of Technology, Austria

» Christian Leichtfried, IBM Austria

**»** Bernd Liebscher, Manging Director, Telecom Austria Group M2M

» Robert Tesch, Divison Head Smart Grids, Siemens AG Austria

#### 16:15 COFFEE BREAK

## 16:45 Poster presentations with short presentations of the submitted posters

#### 17:30 "BMVIT-Smart Grids Awards 2012"

Michael Paula, Head of Division Energy and Environment Technologies, Federal Ministry for Transport, Innovation and Technology (bmvit), Austria

#### 18:00 End of the second conference day

#### 19:30 "COME TOGETHER" AT ILLWERKE VKW



#### May 25<sup>th</sup>, 2012

#### WORKING GROUPS

#### Venue: Krafthaus, illwerke vkw, Language: German

### Working groups within the framework of the technology platform Smart Grids Austria

Business models in Smart Grids as precondition for a sucessful market transfer: discussion of basics and conditions for possible business models

Chair: Kurt Schauer, Wallner & Schauer GmbH, Austria

#### 09:00 Welcome

Andreas Lugmaier, Coordinator of the NTP Smart Grids, Austria

#### 09:30 Smart Grid as business model

The definition of basics and possible business processes will be discussed in various workshops.

#### Workshop 1

## Which influence do Smart Grid architecture and standardisation have on business models?

International standards versus national frameworks: where are the challenges, clear trends and existing markets? Based on that where can we find the need for action for Austria?

Chair:

Peter Caldera, Head AG standardisation of the NTP Smart Grids Austria and Lantiq Austria

Rudolf Pailer, Head AG data of the NTP Smart Grids Austria and IBM Austria

#### Workshop 2

## Flexible tariffs – a must for the implementation of smart grid solutions?

Are flexible tariffs a prerequisite for the implementation of smart grid solutions?

Chair:

Ursula Tauschek, chairperson of NTP Smart Grids Austria and Oesterreichs Energie

Herwig Struber, deputy head of the working group Use Cases – Business Models of NTP Smart Grids Austria and Salzburg Netz, Austria

#### Workshop 3

### Do business models for aggregators exist, which are profitable from financial or economic perspectives?

Which business models are suitable for aggregators? Which are the experiences and lessons learned so far? Where exists a need for more action?

Chair:

Angela Berger, head of working group Use Cases-Business Models of NTP Smart Grids Austria and Siemens AG Austria Natalie Prüggler, University of Applied Sciences Technikum Wien, Austria

11:15 BREAK

#### 11:30 Presentation of results and final plenary discussion

12:30 LUNCH

#### 13:30 End of conference

Organisation and preparation: NTP Smart Grids Austria, Contact: Margit Haiden, Public Relations of NTP Smart Grids Austria Phone: +43 1 588 39 86, E-Mail: haiden@feei.at, www.smartgrids.at

#### INFORMATION

#### Organiser:

Federal Ministry for Transport, Innovation and Technology (bmvit), Austria Contact: Michael Hübner, Phone:+ 43 1 71162-652922 E-Mail: Michael.HUEBNER@bmvit.gv.at

with illwerke vkw in cooperation with the Federal State of Vorarlberg, Austria Contact: Werner Friesenecker, Vorarlberger Energienetze GmbH Phone: +43 5574 9020-73700 E-Mail: werner.friesenecker@vkw-netz.at

#### Information and Registration:

SYMPOS Veranstaltungsmanagement GmbH Phone: +43 1 409 79 36-66, Fax: +43 1 409 79 36-69 E-Mail: gunhild.reuter@sympos.at

#### Scientific Director:

Hubert Fechner, University of Applied Sciences Technikum Wien Phone: +43 664 619 25 72 E-Mail: fechner@technikum-wien.at

#### **KRAFTHAUS BREGENZ**

#### illwerke vkw, Weidachstraße 6, 6900 Bregenz

The VKW visitor centre "KRAFTHAUS BREGENZ" has been set up in the oldest part of the VKW building in Bregenz: in the assembly hall and in the so-called "Old Leitungsturm" of Rieden power station which is over 100 years old.

The name "KRAFTHAUS BREGENZ" (Power House Bregenz) intentionally establishes connections to "electrical power" and "political power", to "energy" and "the use of energy". As a living event centre it unites the past, the present and the future.

Krafthaus Bregenz is, thus, predestined to serve as the setting for the evening reception after an Energy Day of fruitful discussions, and to provide the premises for the workshops at the Smart Grids Week Bregenz.



#### FESTIVAL AND CONGRESS HOUSE, BREGENZ

#### Platz der Wiener Symphoniker 1, 6900 Bregenz

The magic of the venue and the architecture of the house create a very special atmosphere for the Smart Grids Week Bregenz 2012.

The Festival and Congress House Bregenz offers a very special setting both for your intensive exchange of expert information as well as for networking and for personal discussions with many colleagues.

#### Seestudio

Elegant walnut woodwork and a glorious view across the lake. It can be sensed upon entering – its atmosphere is unique, intimate, and open at the same time.

#### Seefoyer

The glass facade of the Seefoyer affords a clear view of the impressive Seebühne stage, the Bay of Bregenz, the surrounding mountains and the island town of Lindau. You are sure to enjoy this splendid atmosphere at the reception to which you are invited by the State Governor of Vorarlberg on Wednesday evening.





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#### **ANDREAS ABART**

Energie AG Oberösterreich Netz, Austria

Biomedical engineering studies at Technical University Graz (Faculty of electrical engineering); Master thesis about electromagnetic fields caused by power systems and afterwards dissertation, research and teaching in the fields of EMC, Powerquality and e-learning.

Since 2003 employee at Energie AG Oberösterreich working on Power Quality, EMC and Smart Grids. Member ON TSK EMV EMF, CENELEC TC106x and several working groups.

Collaborator in several research projects for development of smart grid technologies in medium and low voltage distribution grids. One of these projects "DG Demonet Concept" was nominated for the Austrian national award for environmental technology 2010.



#### WALTER ALBRECHT

LEW Verteilernetz, Germany

Walter Albrecht started his career as technical manager from 2003 until 2004 with the Überlandwerk Krumbach.

From 2005 until 2009 he headed the department of quality management and regulation at LEW Netzservice GmbH Augsburg.

From 2010 onwards he has been manager of coordination at LEW Verteilnetz GmbH, Augsburg. His focus is the feed in and billing of renewable generation devices.



#### HANS-JÜRGEN APPELRATH

Professor of Practical Computer Science, Carl-von-Ossietzky-University Oldenburg and OFFIS, Germany

Professor Hans-Jürgen Appelrath is professor of practical computer science at the University of Oldenburg. He received his doctorate at the University of Dortmund and was assistant professor at ETH Zurich.

He is on the board of OFFIS, on the advisory board of various research institutes and member of the Supervisory Board of several companies.

In 2007 he was awarded the honorary doctorate from the TU Braunschweig.



#### **SEBASTIAN BEIGLBÖCK**

OIR – Austrian Institute for Regional Studies and Spatial Planning, Austria

Sebastian Beiglböck is a researcher and project manager the Austrian Institute for Regional Studies and Spatial Planning (ÖIR). He studied urban and regional planning at the Vienna University of Technology and the Universidad Politécnica of Madrid.

At ÖIR he works on urban and regional development, both on national and European levels. Recently he has been involved in the research project "INSPIRED Regions" of the Austrian Climate and Energy Fund on the effects of Smart Grid solutions on regional development. In the project, he was responsible for the economic analysis.



#### MAJA FELICIA BENDTSEN

WP Leader, Østkraft, Denmark

Ms. Bendtsen is Project Manager at the Danish utility Østkraft, which is based on the island of Bornholm.

Ms. Bendtsen plays a leading role in both the EDISON Project and the Eco Grid EU project, among other programs, and is responsible for testing the actual project implementation in Bornholm. She served as a member of the Smart Grid Network guiding the Danish government on the national Smart Grid strategy.

Ms.Bendtsen holds a Master of Science degree in chemistry and a Six Sigma Green Belt certification. She was born and raised on the island of Bornholm in Denmark.



#### **CHRISTINE BERGMANN-NEUBACHER**

T-Mobile Austria

Christine Bergmann-Neubacher is responsible for Energy Management & Sustainability at T-Mobile Austria. This task comprises the national coordination of the Climate Change Program of the Deutsche Telekom.

Since 1997 Christine Bergmann-Neubacher held various positions local and on international base within DTAG group. Christine set up and managed various departments in the area of Networks, IT, System Engineering, Project- & Process-management within T-Mobile in Austria, formerly max.mobil. Her strong ICT background is the base to manage successfully the new challenges in the area of Energy Management and Sustainability in an ICT environment.

Christine Bergmann-Neubacher is holding various degrees in the areas automation (College of Automation in Graz), Industrial Engineering (Mittweida) and she completed the master's program for Sustainable Energy Systems at the University of Applied Sciences Pinkafeld.



#### **KLAUS BERNHARDT**

Director Research and Development (R&D), Energy FEEI – Association of the Austrian Electrical and Electronics Industries, Austria

Klaus Bernhardt studied technical physics at the Technical University of Vienna and holds a PhD in the fields of surface physics and process automation. In addition, he completed his postgraduate studies in Business Administration, Law and Economics.

Since 2004, Klaus Bernhardt directs the core areas of research and development and energy at the FEEI - The Association of the Austrian Electrical and Electronics Industries.

2002 to 2004 he headed the ICT unit of the Office International Research and Technology Cooperation (now FFG). Previously, he worked at Frequentis and at Ericsson Austria AG in project and product management.

At the FEEI, his thematic focus ranges from European research funding with special emphasis on small and medium-sized enterprises over improving the production site in Austria to technical framework for standards and testing.

In addition, Klaus Bernhardt is board member of ENIAC Austria, a member of Manufuture-AT, in the Electrical Engineering Advisory Board of the OVE and member of the coordination team of the National Technology Platform Smart Grids Austria.



#### **THOMAS BLEIER**

AIT Austrian Institute of Technology, Austria

Thomas Bleier, MSc joined AIT in 2005 and is currently the program manager for the research program "IT Security", focusing on applied research of security aspects in distributed systems and service-oriented architectures. Current research interests include secure system design and the security of critical infrastructures.

Before joining AIT Thomas Bleier was working in the industry for more than 10 years as a Systems Architect, Project Manager, Software Developer and Technical Consultant.

He holds a master's degree in Information Security Management from the Danube-University Krems, a master's degree in Technical Informatics from the Technical University of Vienna, and a degree in Computer Science and Business Administration from the Technical College HTL Wr. Neustadt, is a certified project manager (IPMA Level C) and Certified SCRUM Master, and also holds several technical certifications.

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>>> Der Fachverband der Elektro- und Elektronikindustrie (FEEI) vertritt in Österreich die Interessen von rund 300 Unternehmen mit knapp 59.000 Beschäftigten und einem Produktionswert von über 11,5 Milliarden Euro (Stand 2010). Gemeinsam mit seinen Netzwerkpartnern – dazu gehören unter anderem die Fachhochschule Technikum Wien, das Forum Mobilkommunikation (FMK), das UFH, das Umweltforum Starterbatterien (UFS), der Verband Alternativer Telekom-Netzbetreiber (VAT) und der Verband der Bahnindustrie (bahnindustrie.at) – ist es das oberstes Ziel des FEEI, die Position der österreichischen Elektro- und Elektronikindustrie im weltweit geführten Standortwettbewerb zu stärken.



Nähere Informationen finden Sie im Internet unter www.feei.at <<<



#### GERT BRUNEKREEFT

Professor of Energy Economics, Jacobs University Bremen and Director of Bremer Energie Institut, Germany

Gert Brunekreeft is professor of energy economics at Jacobs University Bremen in Germany and director of the Bremer Energie Institut. Before joining Jacobs University, he was senior economist for the energy company EnBW AG and held research positions in applied economics at Tilburg University, the University of Cambridge and at Freiburg University. He is associate researcher to a number of research centers and is associate editor for the Competition and Regulation in Network Industries.

Professor Brunekreeft's main research interests are in industrial economics, regulation theory and competition policy of network industries, especially electricity and gas markets. Current issues concern the economics of vertical unbundling and the relation between regulation and investment. He is the author of several books and published widely in academic journals, including Journal of Regulatory Economics, Utilities Policy, Oxford Review of Economic Policy and Energy Journal.

He holds a degree in economics from the University of Groningen and a PhD from Freiburg University, both in economics.



#### **HELFRIED BRUNNER**

AIT Austrian Institute of Technology, Austria

Studies of Electrical Engineering and Information Technology, specializing on Power Engineering at the University of Technology Graz and Innovation and Technology Management at the University for Applied Sciences Technikum Wien.

From 2004 to 2008 researcher and project manager at the Austrian Institute of Technology - AIT, Energy Department in the topic distributed generation integration in distribution networks. Since 2009 deputy head of business unit Electric Energy Systems. Responsible for the research field Smart Grids and related projects in this topic. Representative of AIT within the European Energy Research Alliance (EERA) Joint Programme Smart Grids and member of CIRED Session 4 Advisory Group.

Since 2008 operating agent of Annex II – DG System Integration in Distribution Networks – within the IEA Implementing Agreements ENARD (Electricity Networks Analysis, Research and Development) and member of board of the national technology platform Smart Grids Austria.

Lectures at the University for Applied Sciences Technikum Vienna, bachelor degree program Urban Renewable Energy Technologies and master degree program Renewable Urban Energy Systems, in the topics electricity network components and smart grids.



#### **RUSSEL CONKLIN**

#### Policy Analyst, U.S. Department of Energy, U.S.A.

Russ Conklin is a policy analyst with the Office of Policy and International Affairs at the U.S. Department of Energy (DOE). He currently serves as Vice Chair of the Executive Committee for the International Smart Grid Action Network (ISGAN), a Clean Energy Ministerial (CEM) initiative and IEA Implementing Agreement to accelerate the development and deployment of smarter electricity grids globally. In addition to coordinating U.S. government participation in ISGAN, Mr. Conklin supports the CEM Secretariat and several other CEM clean energy initiatives, among other responsibilities.

Prior to coming to DOE, Mr. Conklin spent ten years in the motion picture industry working in portable power applications. He received his Master of Public Policy degree from the University of Maryland, College Park and a Bachelor of Arts degree with highest distinction and with honors from the Pennsylvania State University.



#### HOLM DIENING

GAI NetConsult GmbH, Germany

Initially Holm Diening worked as a free-lance IT security advisor. Since 2004 he has been employed by GAI NetConsult GmbH as a security consultant.

His main focus is on IT security management pursuant to ISO/IEC 27001 and on the basis of BSI IT-Grundschutz (IT baseline protection) on business continuity management as well as on the development of organizational and technical security guidelines, primarily for companies in the energy supply sector.



#### HUBERT FECHNER

#### University of Applied Sciences Technikum Wien, Austria

Hubert Fechner studied Electrical and Energy Engineering at the Vienna University of Technology. Two further postgraduate courses of study in the areas of Environmental Management and Organizational Development in Krems and Vienna respectively and in Zurich. From 1992 he worked for 16 years at arsenalresearch (now the Austrian Institute of Technology) and was responsible for the development and management of the Energy Department.

Since 2009 he has been Director of the Urban Renewable Energy Technologies M.Sc. programme at the University of Applied Sciences Technikum Wien, Vienna and Head of its Department of Renewable Energy. Internationally, he is currently the Deputy Head of the IEA Photovoltaics Power Systems Programme and is also involved in IEA-ISGAN (Int. Smart Grid Action Network) and in various EU activities.

Since 2001 he has acted in an advisory capacity for the Austrian Federal Ministry for Transport, Innovation and Technology. He has been the scientific director of "Smart Grids Week" and of the "Austrian Symposium on Photovoltaics" since their inception. In addition to this he lectures at various universities (Vienna University of Technology, the University of Innsbruck, Danube University Krems) and is a visiting lecturer at various foreign universities.



#### **MICHAEL FIEDELDEY**

Managing Director, AllgäuNetz, Germany

Michael Fiedeldey is CEO of the AllgäuNetz GmbH and Head of Technology of the Allgäuer Überlandwerk GmbH since 2007.

After studying at the University of Hannover, with the major courses in electrical supply and high voltage engineering, he started in the energy sector at RWE AG in 1997, where he worked on various locations and functions of the company.

In 2001 he moved to Stadtwerke Osnabrück AG. There he was responsible for the net management and the management and deployment of network sales as well as the asset management of the supply and disposal systems.



#### WERNER FRIEDL

#### **Energie-Control Austria**

After studying Electrical Engineering with an emphasis on energy technology and electrical installations at the Graz University of Technology, Werner Friedl worked as a research assistant at the Institute of Electrical Power Systems in the fields of network planning, plant and personal security, power quality, decentralized generation and EMC from 2004 to 2008.

He has been working in the Electricity Department (issues/responsibilities include quality of supply, smart grids, energy balancing and energy control) of the Austrian regulatory authority Energie-Control Austria since October 2008.

Since 2011 he has been Head of the European Regulators' (CEER) working group on "Electricity Quality of Supply and Smart Grids".



#### WERNER FRIESENECKER

Vorarlberger Energienetze, Austria

Werner Friesenecker studied Electrical Engineering from 1969 until 1975 at the Technical University of Graz with focus on electronics and communications engineering.

In 1976 he joined the VKW AG, where he took over the management of network planning and operation. From 1993 until 2000 he was Head of the Business Unit Transmission and Distribution. From 2000 until 2005, after outsourcing of the transmission network management tasks into the VKW-Übertragungsnetz AG, Werner Friesenecker became Director of the Division " distribution" and from 2006 onwards he has been head of the division " Distribution Grid" at VKW Netz AG.

His activities within Association "Austrian Energy" (VEÖ) are plentiful. From 1984 until 1999 he was member of the VEÖ Committee "low-voltage systems", from 1998 until 1999 he was member of the VEÖ Committee "energy transmission and construction", since 1993 he has been member of the VEÖ Committee "operating", now called "network technology and security of supply" and from 2007 Werner Friesenecker is Chairman of the Committee VEÖ network technology and security.

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#### **WOLFGANG GAWLIK**

Professor for Energy System Technology, Vienna University of Technology, Austria

Professor Wolfgang Gawlik (born 1971) graduated from Friedrich-Alexander-University (FAU) Erlangen-Nuremberg in Electrotechnics, focus on Energy Technology.

After finishing his studies, he worked as design engineer for turbo generators and as vice group leader novel construction at Siemens generator plant Erfurt for two years. From 1999 to 2004 he was research assistant and assistant professor at the chair of electrical energy supply of the FAU Erlangen-Nuremberg and finished his PhD studies in 2004.

Until his appointment as University Professor for Energy Systems Technology at the Vienna University of Technology in 2011 he was Senior Key Expert System Dynamics and Project Manager at Siemens Power Technologies International. His research interests are Supergrids, Smart Grid / Microgrids and Electromobility, Universal Grids and software for network analysis, planning and steady state and dynamic modeling.



#### **HERBERT HALAMEK**

Key Project Manager eMobility Solutions, Continental, Interior Electronics Solutions, Germany

In his position of Key Project Manager eMobility Solutions Herbert Halamek is responsible for the strategy and introduction of Continental's connected services-based solutions for electric mobility.

Halamek studied at the Technical University of Munich and finished as a graduate engineer (Dipl.-Ing.) of communication engineering.

He began his career in the R&D of Siemens AG mobile networks. Within the communication networks field of that company he held several business division management positions in R&D, product and business management. This included being CEO and President with full product and business responsibility, for a European Siemens subsidiary. In his next function of President Access Networks Halamek was responsible for the business with Access Networks Products and Solutions within the Communication Networks Group of Siemens AG (DSLAMs, ATM and Carrier Ethernet Switches). With Siemens VDO and subsequently Continental he held positions as Vice President, responsible for Automotive Connectivity products and solutions.



#### FRANK HERB

#### Vorarlberger Energienetze, Austria

Herb Frank was born in 1978 in Lindau. After graduating from the Technical School in Lindau he completed his education as a power electronics engineer, specializing in systems engineering. He studied electrical engineering at the HTWG Konstanz with focus on energy technology.

In 2007 he joined illwerke vkw in the network planning sector and since 2008 he is project manager for the Smart Grid project "DG DemoNetz". His responsibilities include network planning in MV and LV networks, network analysis, power quality, reliability and fault statistics calculations, project management of smart grid project Großes Walsertal.



#### **MICHAEL HÜBNER**

Topic Management Smart Grids Federal Ministry for Transport, Innovation and Technology (bmvit), Austria

Michael Hübner is educated in the field of communication engineering. In his studies at the Technical University of Vienna he additionally engaged with the topics sustainable development, environmental and societal aspects of technology as well as energy systems and renewable energy.

Since 1998 he works for the department of energy and environmental technology in the field of strategy development, program management and international cooperation with focus on "Energy systems of tomorrow".

Since 2006 he is building up the focus area "smart energy systems and networks" and works as an expert and Austrian representative in the governing team of the SET-Plan Initiative "European Electricity Grids Initiative (EEGI)", in the management board of the program network "ERA-Net Smart Grids" and in the executive committee of the "International Smart Grids Action Networks (ISGAN)" of the International Energy Agency (IEA).



#### **LUDWIG KARG**

General Manager, B.A.U.M. Consulting, Germany

Ludwig Karg, B.A.U.M. Consulting, studied Computer Science at the Munich University of Technology from 1975 until 1981 focussing on Business Administration. After working as a system developer he moved to Intel, where he worked in a managerial capacity on multimedia and network solutions until 1992.

He has been the Managing Director of B.A.U.M. Consult GmbH since 1994 and has been Chairman of the International Network of Environmental Management (INEM) since 2005. The main areas of his work include extensive lecturing and seminar activity as well as policy advisory work, strategic management related to the sustainable development of companies, municipalities and regions, the preparation of regional development concepts and the design of sustainable regional market systems as well as the management of national and international research and development projects in the fields of management, marketing and environmental and climate protection.

He is currently the head of the consortium for accompanying research related to the federal programmes E-Energy and IKT for Electromobility.



#### PAUL KARRER

#### Managing Director, Arrow ECS Internet Security, Austria

After his education Paul Karrer became CEO of Arrow ECS Internet Security AG since 2001. He is responsible for sales and technology in Austria, Germany, Switzerland, Hungary, Slovenia, Croatia and Serbia.

Since 2011 Mr. Karrer is chairman and spokesman of "Cybersecurity Austria" and head of the Working Group "ICT security in critical infrastructures" to formulate a national security policy at the Bundeskanzleramt.



#### FRIEDERICH KUPZOG

#### Vienna University of Technology, Austria

Friederich Kupzog was born in Cologne, Germany in 1979 and achieved the Diploma Engineer degree of electrical engineering and information technology at RWTH Aachen University of Technology in February 2006. The focus of his studies was on communication system optimisation on the basis of system-on-chip circuit design.

He joined the Institute of Computer Technology at Vienna Technical University, Austria, in March 2006 as a University Assistant. In 2008 he achieved his PhD Degree.

Mr. Kupzog is leading the research group "Energy & IT" at the Institute of Computer Technology, where he currently manages 10 running research projects on Smart Grids together with industry, power grid operators and other research partners. His special interest lies in smart power grids, load management and integration of renewables into distribution grids applying distributed voltage control concepts.



#### **CHRISTIAN LEICHTFRIED**

**IBM Austria** 

Christian Leichtfried was born in 1970 in Vienna. After his temporary employment abroad in Hamburg (2004 - 2005) and Stuttgart (2001 - 2002), Germany and Stockholm (2002 - 2003), Sweden Mr. Leichtfried works at IMB Austria.

His Professional experience is Business Development Executive Smarter Energy.

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#### **BERND LIEBSCHER**

#### Manging Director, Telecom Austria Group M2M

As Managing Director of Telekom Austria Group M2M GmbH Bernd Liebscher (38) is also responsible for financial matters at the newly established company. He has been working in the telecommunications sector for 12 years and has extensive know-how, especially in the field of B2B.

He began his career at Telekom Austria Group in 2000 as an assistant to the Management Board. Following that, he was Head of Mobile Business Solutions and Head of Business Marketing at A1 before he became an advisor to the management of the Macedonian subsidiary Vipoperator. In 2010 he coordinated the successful merger with A1.

Born in Styria, Liebscher studied Business Administration and Law at the University of Graz. He also spent several years studying at the University of Grenoble (France) and at United World College in Duino (Italy).



#### ANDREAS LUGMAIER

#### Coordinator Smart Grids Austria & SIEMENS AG Austria

Andreas Lugmaier was born 1974 in Haag am Hausruck, Upper Austria. He studied Electrical Engineering – Economics with emphasis on electrical energy management and renewable energy at the Technical University of Graz and the Technical University in Copenhagen.

From 2002 to 2007 he directed as group coordinator and project manager national and international R&D, technology and cooperation projects on "Innovative Grid integration of decentralized electrical energy" and "photovoltaic" at the Austrian Research and Test arsenal research.

By the end of 2007 Andreas Lugmaier moved to the Siemens AG Austria where he held various positions in the energy sector for external and internal R&D cooperation. Since April 2009 he is responsible for the R&D co-ordination of Siemens Corporate Technology Central Eastern Europe (CT CEE) in the domain Smart Grids and leads the Smart Grid CT R&D team.

Since 2008 Andreas Lugmaier is coordinator of the National Technology Platform Smart Grids Austria: As project coordinator, he was significantly involved in founding the platform and the publication of the roadmap, "Pathway to the future of electrical power grids".



#### **KONSTANTINOS MOULINOS**

#### **Technical Department of ENISA**

Konstantinos Moulinos is a seconded national expert at the Security Policies section of the Technical Department of ENISA. He is on detachment from Hellenic Data Protection Authority where he worked for ten years as an Information Systems' auditor.

He obtained his diploma in informatics (1994), holds an M.Sc. in Information Systems (1997) and obtained a Ph.D in Privacy Enhancing Technologies (2003). He has more than 20 peer reviewed publications covering areas such as Information and Network security, Data Protection and Privacy Enhancing Technologies.



#### **MATTHIAS OCHS**

systemplan, Germany

Matthias Ochs was born in 1967 in Karlsruhe and deals with the media performance of manufacturing enterprises in the D-A-CH for almost 20 years. Since 2010 he is a member of the MeRegio (minimum emission region) research team and is involved in the development of new strategies in the B2B area.

Since 2004, he has for clients of system plan gmbh (a company of Endress + Hauser group), worked on about 100 potential analyses in the field of energy in compressed air. Today he is area of responsibility deals mainly with the continuous evolution of energy analyses with the purpose to uncover hidden potentials and how to use these potentials.

As a consultant he supports a project team of Energie Steiermark in the development of energy-related services in the light industry to reduce energy consumption.



#### MICHAEL PAULA

Head Energy and Environment Department, Federal Ministry for Transport, Innovation and Technology (bmvit), Austria

Michael Paula studied Mechanical Engineering at the Technical University of Vienna. He has been lector for Appropriate Technology at the Technical University of Vienna since 1985. Since 1986 he has been working for the ministry in the fields of energy research, environmental technologies and strategies for sustainable development.

Since 1996 he is head of the energy and environment department. Since 1999 he has been working on R&D strategies of technology related research for sustainable development. He initiated the "Austrian Program on Technologies for Sustainable Development" with its subprograms "Building of Tomorrow", "Factory of Tomorrow" and "Energy Systems of Tomorrow". 2005 he initiated the Strategy Process "ENERGY 2050" as well as the Austrian initiative "Smart Cities".

He was a lector for adapted technology at the Technical University of Vienna and has still lectorships at the University of Applied Sciences Pinkafeld and the University of Applied Sciences Technikum Wien.



#### **HERMANN PENGG-BÜHRLEN**

Head of Project Management e-fuels, Audi AG, Germany

Hermann Pengg-Bührlen is Head of Project Management e-fuels at Audi AG. One of his main responsibilities is the ramp-up of the world's first 6 MW Power-to-gas plant (AUDI e-gas-plant). Formerly, he held a position as CTO at Solarfuel GmbH, Stuttgart, responsible for patents and R&D. Before that, he co-founded a company operating in the biomass field and ramped up a solar technology department for a roof building company.

For more than 10 years, he worked in senior management positions in four multinational industrial and Management Consulting companies. He holds a Ph.D. in Economics and Social Sciences at Vienna University of Economics, a Master degree in Physics at ETH Zurich and a Postdoc M.Sc. at Vienna Technical University. He has published a book and several scientific papers.



#### WOLFGANG PRÜGGLER

#### Energy Economics Group (EEG), Vienna University of Technology, Austria

Wolfgang Prüggler is senior research assistant at Vienna University of Technology -Energy Economics Group (EEG). He holds a Ph.D in Energy Economics since 2010 addressing "Business models for active distribution grid management - development and economic impact analysis".

He joined EEG in 2006. During his Ph.D studies he's been involved in international and national research projects resulting in several publications at EEG as lead author. His major fields of research are Sustainable Energy Systems, Distributed Generation, Smart Grid business modelling and grid integration of Renewable Energy Sources.



#### **JOACHIM PYRAS**

#### CEO, numetris, Germany

Joachim Pyras, born in 1948, is Chief Executive Officer of numetris AG, Essen. The foundation stone for the establishment of the company in 1996 was laid when he developed the software for remote meter reading which has since undergone constant development to become the current software en|damo used for metering processes and energy data management.

The mathematical-technical assistant has over 40 years' experience as a systems analyst in the IT and energy industries, inter alia, at Ruhrgas AG. His many years of energy process know-how coupled with his profound expertise in IT systems analysis make Joachim Pyras a recognized dialogue partner in the energy industry.

His commitment to professional associations and organizations such as DVGW and EDNA in which he actively shapes processes and formats, for example in the DVGW project group "Data Exchange" as well as in the development of the BSI protection profile for smart meters is also proof thereof.



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# Nationale Technologieplattform Smart Grids Austria

Die Nationale Technologieplattform Smart Grids Austria vereint alle relevanten Akteure aus der E-Wirtschaft, Industrie und F&E Einrichtungen unter einem Dach. Sie verfolgt das Ziel, gemeinsame Kräfte für zukünftige intelligente – und damit effizientere Stromnetze – zu bündeln. Die Plattform schafft den Rahmen für eine koordinierte Abstimmung der österreichischen Akteure und damit eine einheitliche österreichische Perspektive zum Thema Smart Grids. Der Weg hin zu einer intelligenten Strominfrastruktur in Österreich beginnt heute – für eine effiziente, sichere und ökologische Stromversorgung von morgen.

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#### **ALBRECHT REUTER**

Director Business Development Smart Grids, Fichtner, Germany

Albrecht Reuter is managing director of Fichtner IT Consulting AG. Since February 2011 he is leading the business development of smart grids for the Fichtner group. He began his career at Brown, Boveri & Cie AG in Mannheim overseeing the construction works of power plants, before continuing as an international energy consultant at Lahmeyer International GmbH in Frankfurt.

From 1983 until 1995 he worked at the Institute for Energy Economics and the Rational Use of Energy (IER) of University Stuttgart, where he was awarded his doctor's degree under the supervision of Professor Alfred Voss.

Thereafter Mr. Reuter continued to become member of the Executive Board at Verbundplan GmbH in Austria. Before finally joining Fichtner IT Consulting AG in 2008, he was the general manager of IRM Consulting&Services GmbH in Vienna.

Albrecht Reuter is renowned throughout professional circles via his numerous publications and through his regular appearances at international conferences. He is the initiator as well as the scientific leader of the renowned Energy Talks Ossiach and is also a member of the Executive Board of the Global Forum for Sustainable Energy (GFSE) as well as of the Ludwig Bölkow Stiftung in Munich.



#### HOLGER RUF

Institute of Energy and Drive Technologies, Hochschule Ulm, Germany

Born on 24th February 1982 in Ulm. After having finished school he completed vocational training as an energy electronic technician in plant technology at Siemens AG. His first degree (Diplom-Ingenieur (FH)) was taken at the University of Applied Sciences in Ulm. During his postgraduate studies which led to a Master of Engineering degree at the University of Ulm he focused on line-bound interference in processing plants and high-frequency switching power supplies. While still a student he started to work as a free-lance engineer in the software development of control programmes for measuring devices in the fields of pharmacology and testing.

He is currently an academic member of Professor Gerd Heilscher's team at the University of Ulm working on the EU project ENDORSE. The aim of this project is to integrate satellite-based solar power predictions in the network management of transmission grids.

Furthermore, he is involved in the implementation of the "Smart Solar Grid" project. In addition, he also works as a free-lance project manager at the Steinbeis Transfer Centre for Decentralized Renewable Energy Systems on projects involving the integration of high shares of photo-voltaics in low-voltage grids, the communication connections of smart grids and high resolution data logging from transmission grids.



#### **INGOLF SCHÄDLER**

Deputy Director General, Federal Ministry for Transport, Innovation and Technology (bmvit), Austria

Since March 2003, Ingolf Schaedler is serving as Deputy Director General for Innovation at the Austrian Ministry for Transport, Innovation and Technology. In this function he is responsible for the development and implementation of the Ministry's technology policy, its strategic technology programmes and the related R & D infrastructure. On the level of the European Union Ingolf Schaedler is representing Austria in various high level committees related to Research and Technology Policy, Satellite Navigation and Space Policy.

In December 2010 Ingolf Schaedler has been elected as chairman of the governing board of the EU-Joint Programming Initiative "Urban Europe" and since recently he is representing the Ministry for Transport, Innovation and Technology as the national host of the forthcoming World Congress on "Intelligent Transport Systems" (ITS), to be held in Vienna in October 2012.

Ingolf Schaedler studied Economics at the University Vienna and International Law and Politics at Johns Hopkins University, Paul Nitze School of Advanced International Studies, Bologna, Italy.



#### **KURT SCHAUER**

Wallner & Schauer GmbH, Austria

Kurt Schauer was born in 1967, is married with one child and studied chemical engineering at the Technical University of Vienna. His thesis is on "Sustainable energy supply for Austria".

Kurt Schauer is entrepreneur since 2001 and as such he is working as management consultant and systemic organizational consultant, Certified Management Consultant (CMC). Kurt Schauer is Managing Director and Partner of Wallner & Schauer GmbH, Graz and Vienna.

He is a consultant, trainer, coach, speaker and spokesman for CSR Experts Group Styria. In his work as an organizational consultant, he works with companies and organizations in complex change and development processes. In his attitude, he is an indestructible optimist who believes that change can be designed in such a way, that a maximum can be achieved if issues of justice and fairness are observed.



#### **ALEXANDER SCHENK**

#### Siemens AG Austria

Alexander Schenk studied Industrial Electronics at the Technical University of Vienna. He graduated in 1986 and started his career as scientific assistant at the institute for power electronics at the same university.

In 1988 he changed to the company VA TECH SAT where he set up successfully the business with integrated communication solutions for the automation of widely spread processes and niches of the telecom market.

In 2002 he took over the management of the Center of Competence for automation solutions for transport and distribution grids and started the development of the Automated Metering and Information System AMIS. After the acquisition of VA TECH SAT through Siemens in 2005 he was appointed to lead the business segment AMIS.

The foundation of the Sector Infrastructure and Cities was followed by a reorganization, where the metering, communication and services business was integrated in one business unit. Therefore Mr. Schenk changed to the Division Smart Grid / area Technology and Innovation in 2012.



#### **GERNOT SPIEGELBERG**

Vice President, Director of Electromobility Concept Development, Siemens AG Corporate Technology, Germany

Since May 2008, Gernot Spiegelberg (born 1959) has headed Siemens AG's Lighthouse Project ECar in the company's central research. Previously, in his role as Executive Vice President, Spiegelberg bore global responsibility for group Strategy/Technology at Siemens VDO Automotive AG.

Spiegelberg holds a doctorate in engineering and an honorary professorship and teaching position at the Technical University of Budapest.

He has held a variety of management positions in industry, including 18 years at Daimler-Chrysler where he was responsible for global advance development in mechatronics.

Gernot Spiegelberg has been a Rudolf-Diesel-Industry Senior Fellow at the Technical University of Munich since July 2010. In this capacity, he will examine electromobility issues together with TUM researchers.



#### **THORSTEN STAAKE**

#### ETH Zürich und General Manager, Amphiro, Switzerland

Thorsten is lecturer at ETH Zurich and director of the Bits to Energy Lab, a joint research initiative of ETH and the University of St. Gallen. His work is dedicated to bringing together Ubiquitous Computing (UbiComp) technologies with insights from behavioral science to build products that motivate and help consumers to conserve energy. Primary fields of application include end-user oriented Smart Metering systems and related feedback technologies.

Prior to joining ETH, Thorsten worked at the Auto-ID Labs at the Massachusetts Institute of Technology, Infineon Technologies, and Clariant. He holds a PhD in business administration from the University of St. Gallen and a diploma in electrical engineering and information technology from TU Darmstadt.

Thorsten is also co-founder of Amphiro AG, a high-tech startup that engineers miniaturized generators and self-powered smart water meters for the faucet and fittings industry, and of BEN Energy AG, which develops smart grid software for utility companies.



#### MICHAEL STREBL

General Manager, Salzburg-Netz, Austria

Michael Strebl was born in 1964 in Salzburg, Austria. Starting from 1984, he studied Technical Physics and Business Economics at the Technical University of Graz, the Technical University of Vienna and the University of Linz and graduated 1994. After joining Salzburg AG (former SAFE) in 1994 he started his career as assistant to the commercial board executive.

In 2000 he was appointed Business Area Manager of Sales and Marketing. From 2001 to 2006 he further was responsible for the alternative electricity provider "My Electric", initially as Managing Director and later as member of the advisory board.

In 2005 Mr. Strebl headed the project "Netz-neu" including restructuring of the business area "Grids" regarding the legal unbundling specifications as well as the optimization of efficiency of the field. In 2006 he was appointed to be head of the business area "Grids" including electricity grids, natural gas and district heating grids, water and telecom nets, load distribution, grid sales and distribution, grid controlling and regulation management.

In August 2007 he was appointed Managing Director of Salzburg Netz GmbH. During 2008 and 2009 he additionally was responsible for the set-up of the new business area e-mobility, initially as project manager, then as Managing Director of the subsidiary-company "ElectroDrive" as well as company signatory of "The Mobility House".



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#### **TILL SYBEL**

CEO, A.Eberle GmbH & Co. KG , Germany

Till Sybel (Diploma in Electrical Engineering), born on 16.02.1964 in Munich. After his education with baccalaureate degrees in Schwerte an der Ruhr (Nordrhein Westfalen), Till Sybel completed his military service. In the period from 1984 to 1991 he studied at the University of Dortmund, where he acquired his degree in engineering (focus on electrical engineering).

He started his professional career in 1991 in Dusseldorf. Till Sybel worked until 1994 as a sales engineer for the company ABB Ltd. Metrawatt later GOSSEN METRAWATT Camille Bauer GmbH. He then moved as a key account manager to the company's headquarters in Nürnberg, where he was responsible for selected major clients.

In 1997 Till Sybel changed to the company A. Eberle GmbH in Nürnberg, where he worked as sales manager for Germany. In this position he held a power of attorney. In the period from 2000 to 2003 he also took over the worldwide sales responsibility and became a member of the board and shareholder of A. Eberle GmbH & Co. KG. Since October 2008, Mr. Sybel became CEO of A. Eberle GmbH & Co. KG, with a focus on sales and marketing.



#### WALTER TENSCHERT

General Manager, Energie AG Oberösterreich Netz GmbH, Austria

Mr. Tenschert started his career with Brown Boveri & Cie in Vienna (1980-1986), after having completed his studies of energy engineering and his Ph. D. at the Technical University in Vienna. His focus at BBC were grid studies, power flow analysis, short circuit, dynamic simulation.

Since 1986 he has been working for Oberösterreichische Kraftwerke AG (OKA), today Energie AG Oberösterreich. His tasks were grid and power station protection, grid planning and several special task forces (such as reorganization, market opening, financial transactions).

He has been asked to head grid operations for Steyr and became division manager "grid". Since 2006 Mr. Tenschert is managing director of Energie AG Oberösterreich Netz GmbH.



#### **ROBERT TESCH**

#### Divison Head Smart Grids, Siemens AG Austria

Robert Tesch, DWT, heads the Siemens division Smart Grid for the Cluster Central and Eastern Europe since 2011. Following his degree in electrical engineering with a specialization in automation and control at the Technical University Vienna, he completed his postgraduate studies of business administration, law and economics – also at the Technical University Vienna – and a Master's degree in general management at the Danube University Krems.

When he joined Siemens in 1994 Robert Tesch started as a software developer and then worked for several years in commissioning and plant design for Siemens industry sector. He completed a Siemens trainee program with assignments in telecommunications healthcare and at an e-business subsidiary, followed by assignment as assistant to the board. After his 2001 transfer to the IT branch, Robert Tesch assumed responsibility for business development in Eastern Europe and was responsible for the IT business with public authorities in Central and Eastern Europe from 2007 onward. From 2010 he headed the business units Energy Automation and Smart Grid Applications.

The division Smart Grid deals with classic, high-tech topics like protection, substation automation and control systems for distribution and transmission grids, as well as with one of the most fascinating current topics in the energy field: smart metering and smart grid applications.



#### THERESIA VOGEL

Managing Director, Klima- und Energiefonds, Austria

Since 15.3.2010, Theresia Vogel – together with Ingmar Höbarth – works as managing director for the Austrian Climate- and Energy Fund.

Before, Theresia Vogel managed the department for structural programs at FFG where a team of 40 experts manages specific scholarships with a focus on the elimination of structural barriers for industrial research and technology development.

Theresia Vogel completed a degree at the Technical University Vienna. At that time, she worked as a research fellow for research and development at the university. Later in her career, Theresia Vogel invented the area of "sustainability and environmental management" at the FH Wiener Neustadt and developed research in this areas.

## SMART GRIDS WEEK BREGENZ 2012



#### WOLFGANG WAGNER

#### Deputy Mayor, Köstendorf, Austria

Wolfgang Wagner was born in 1961 in Salzburg. After his apprenticeship as an electrician (1976 - 1980) he worked since 1986 as an electrical engineer at the Salzburg AG (formerly known as SAFE) in the area of planning. From 2002 - 2003 Mr. Wagner graduated as a plumbing technician (gas, water) and in 2003 he passed the concession audit gas and sanitary engineers. Since 2004, Mr. Wagner is also a lecturer at WIFI in the course of gas and sanitary engineers. He is also a member of the municipal council of Köstendorf since 2009 and deputy mayor in Köstendorf (Infrastructure and Building Committee).

The theme to design "energy in all forms" is one of the key assets throughout his professional career. Sustainability, energy efficiency, E5, LA 21, are just some of the issues important to him. To share visions together with the population and to shape it (eg. energy transition with smart grids) is seen as a challenge by him.



#### PETER WEINELT

#### General Manager, Wien Energie Stromnetz, Austria

Peter Weinelt was born in 1966 in Waidhofen an der Thaya. After completion of high school in Waidhofen an der Thaya in 1984, Mr. Weinelt studied Power Engineering at the Vienna University of Technology from October 1984 to June 1991. In addition he took part in business administration classes. His diploma thesis was entitled "Impact of atmospheric conditions on the impulse with stand level of high voltage insulators and bushings" and was elaborated during a research contract.

For over 20 years, Mr. Weinelt has been working in the energy industry. He held positions in network construction, construction of wind turbines and in various management positions.

From 1.2.2006 to 03.01.2011 he was Managing Director of Wienstrom GmbH and since 01.03.2011 Peter Weinelt is Managing Director of Wien Energie Stromnetz GmbH, the largest distribution network operator in Austria. He is responsible for network services, business management, personnel management as well as safety engineering and occupational medicine.



#### **CHRISTOF WITTWER**

#### Head of Department "Smart Grids", Fraunhofer Institute for Solar Energy Systems ISE, Germany

Christof Wittwer was born in 1967 and studied electrical engineering at the University Kaiserslautern.

He has been working at the Fraunhofer Institute for Solar Energy Systems ISE since 1992 and concentrated his activities on thermal simulation and control in various R&D projects in the beginning of his research activities.

Between 1996 and 1999 he worked as a research assistant in the fields of building services engineering and systems control receiving his promotion in 1999 at the University of Karlsruhe. His research activities focused on the development of a dynamic system simulator which is used for the control deployment of thermal energy systems.

Since 1999 Christof Wittwer has been working as a project manager at Fraunhofer ISE concentrating on research and development of networked control systems for decentralised power generation systems.

Since 2003 he is leading the group "Control Devices BSR" at Fraunhofer ISE, since 2010 he is head of the Department "Smart Grids". He his lecturer at University Freiburg.





# **In Worten:** Jeder 4. Österreicher ist unser Kunde.

Das Wien Energie Stromnetz ist mit rund 22.500.000 km Gesamtlänge das größte Netz Österreichs und unsere Kunden sind in Wien, Teilen Niederösterreichs und des Burgenlands zu Hause. Egal, ob sie in einem hübschen Einfamilienhaus, in einer netten Stadtwohnung oder in einer chaotischen Studenten-WG wohnen, sie alle vertrauen uns. Warum? Weil wir ihnen mit einer Versorgungsqualität von 99,99% jeden Tag beweisen, dass sie es können. Weitere Informationen auf www.wienenergie-stromnetz.at

46 Smart Grids Week | Bregenz 2012



## ENERGIE 2050 - An Initiative by the BMVIT

Austrian Ministry for Transport, Innovation and Technology BMVIT Division of Energy- and Environmental Technologies A-1010 Vienna, Austria, Renngasse 5 Head of Division: DI Michael Paula

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