

RE Grid Integration Week

4th E-Mobility Power System Integration Symposium

10th Solar & Storage Integration Workshop

19th Wind Integration Workshop

BACKGROUND INFORMATION

Ljubljana, Slovenia

9 - 13 November 2020



CONTACT

Thomas Ackermann & Katharina Fischer
t.ackermann@energynautics.com
k.fischer@energynautics.com

Energynautics GmbH, Germany
www.energynautics.com

www.mobilityintegrationsymposium.org
www.solarintegrationworkshop.org
www.windintegrationworkshop.org

Introduction

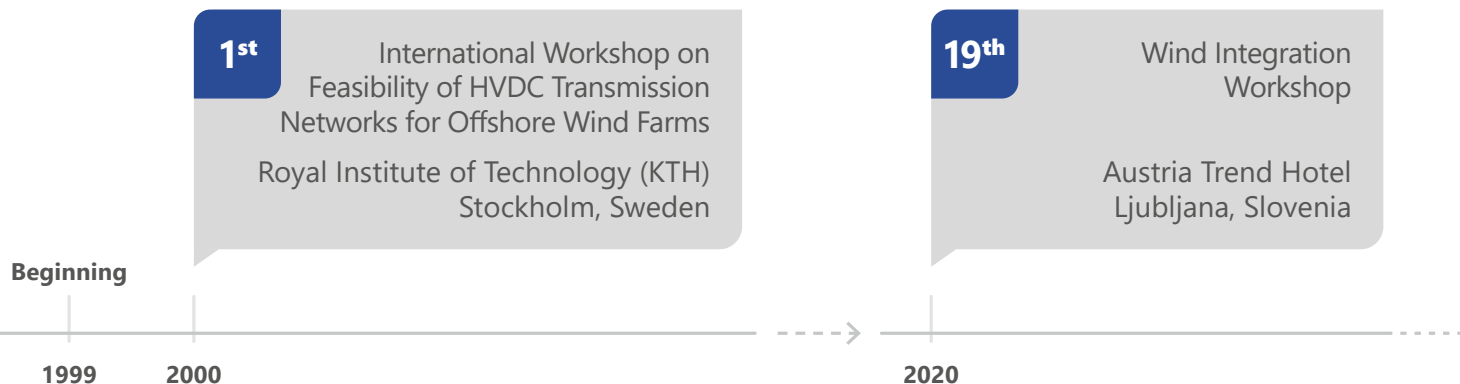
The "International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants" looks back to a year-long history. Its main objective is to stimulate interdisciplinary thinking between wind energy & power transmission industries as well as universities by providing a platform for discussion and for sharing ideas and knowledge regarding the key issues in the field of large-scale integration of wind power.

History

In the fall of 1999, two Ph.D. students who were working at the Department for Electric Power Systems of the Royal Institute of Technology, Stockholm, Sweden spent many hours discussing the integration of wind power into power systems and possible applications of HVDC technology for offshore wind farms.

It soon became clear that these topics would interest and require a wider audience including experts from the wind industry. The result was the International Workshop on Feasibility of HVDC Transmission Networks for Offshore wind Farms organized at the Royal Institute of Technology in spring 2000.

After having been organized for three consecutive years in Sweden, the workshop has since taken place in a different city each year, mostly in Europe but also in Canada in 2010. This year, the workshop week will take place in Ljubljana, Slovenia.

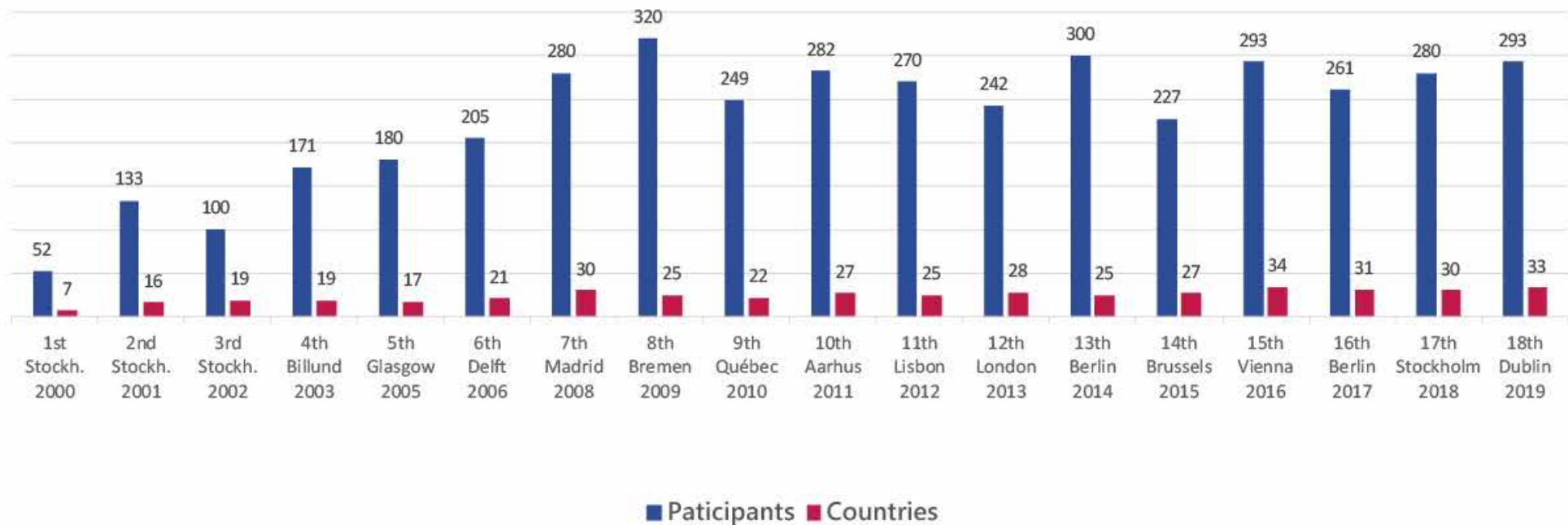
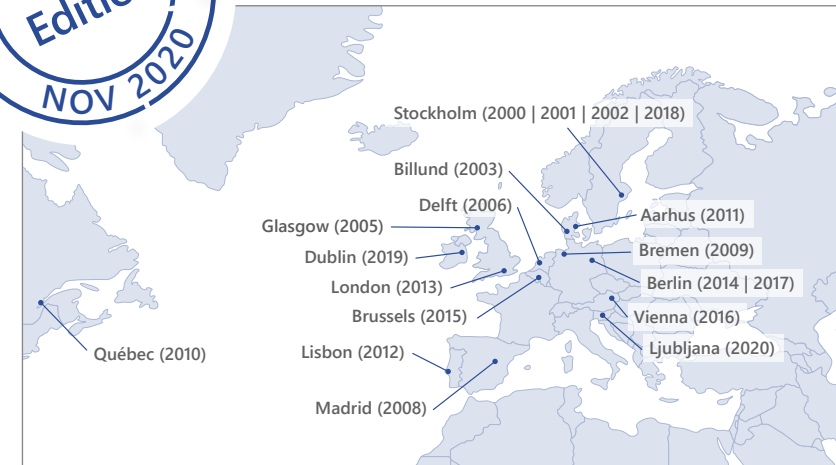


Development of the Wind Integration Workshop

19 years after its first edition, the Wind Integration Workshop has developed into one of the premier conferences in its field, providing an excellent platform for discussing the subject of grid integration of wind power into power systems.

It has been organized by Energynautics and its CEO, Thomas Ackermann, since 2006.

Having started with only 52 participants from 7 countries, the Wind Integration Workshops attracts nowadays between 230 and 300 participants each year from around 25 to 30 countries.



Involvement of TSOs

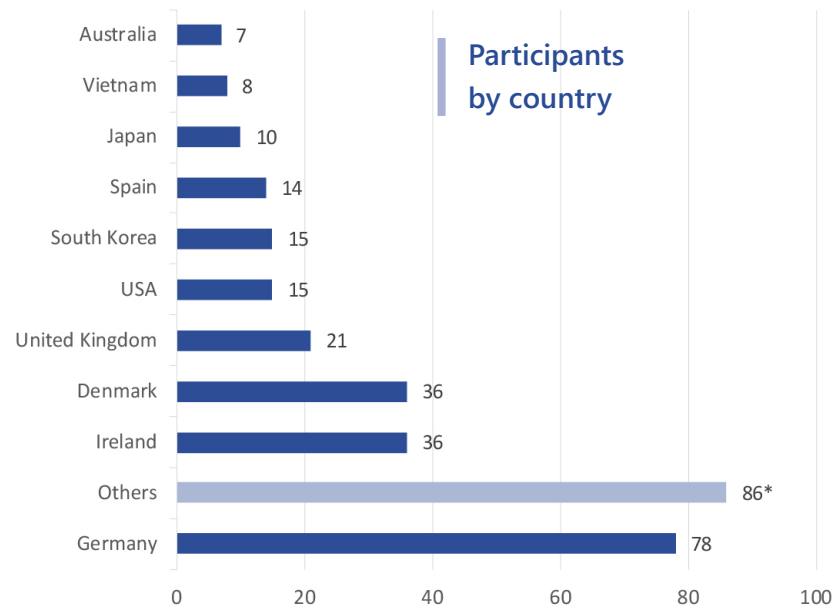
The following table provides an overview of the involvement of TSOs at past workshops:

Location, Year	Role of TSO	Number of Presentations by TSOs
Dublin 2019	EirGrid/SONI: Sponsor, Presenters, Partner in Opening Session, Study Trip Organizer	22 i.e. EirGrid, SONI, National Grid, Amprion, REE, Energinet.dk, ERCOT
Stockholm 2018	-	28 i.e. Vattenfall, TenneT, Eirgrid, Ercot
Berlin 2017	Tennet: Sponsor, Presenters and Partner in Opening Session	21 i.e. REE, Energinet.dk, ERCOT, HEDNO
Vienna 2016	Austrian Power Grid: Sponsor, Presenters, Study Trip Organizer	17 i.e. Nationalgrid, Hydro Québec, TRE France
Brussels 2015	Elia Group/50Hertz: Sponsor and Study Trip Organizer	10 i.e. Amprion, ENTSO-E, Elia
Berlin 2014	50Hertz: Sponsor, Presenter in Opening Session	11 i.e. FinGrid, Vattenfall, Amprion, TenneT
London 2013	National Grid: Sponsor, Presenters, Partner in Opening Session and dedicated National-Grid session	12 i.e. UK Power Networks, Enel Italy
Lisbon 2012	REN: Supporter, Presenters and Partner in Opening Session	19 i.e. Statnett, ONS Brazil, TenneT
Aarhus 2011	Energinet.dk: Supporter, Co-organizer for Field Trip, Presenter and Partner in Opening Session, Special Energynet.dk day	21 i.e. REE, EirGrid, Terna Italy, Alstom Grid

Wind Integration Workshop 2019, Dublin/Ireland

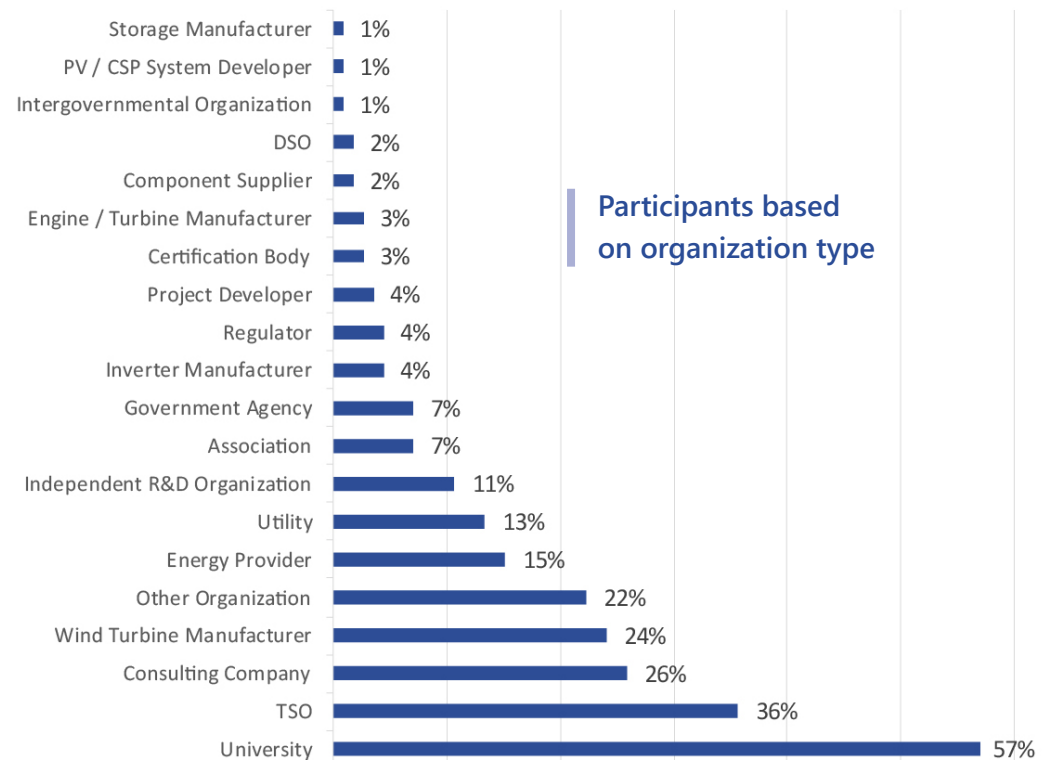
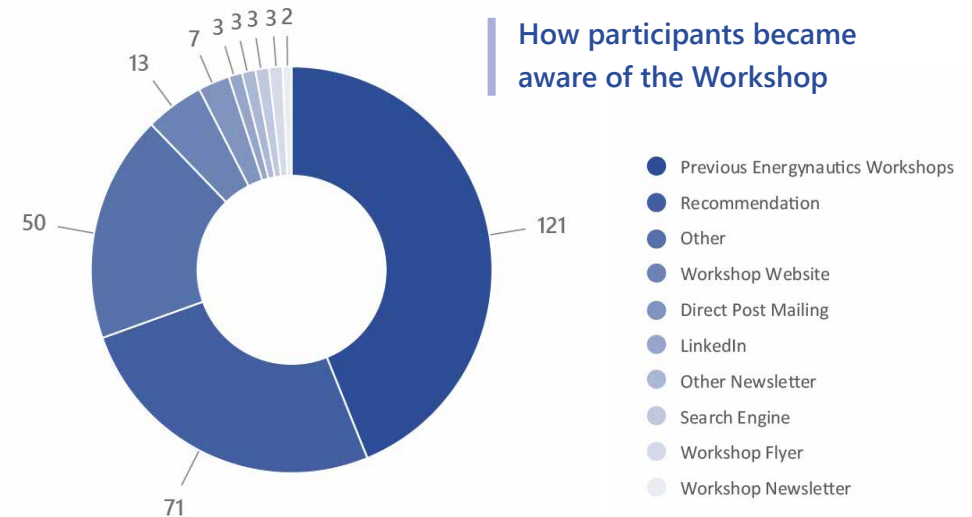
The following charts about our previous workshop show the origin of the participants regarding their country and the type of organization/company they work for.

Moreover we present the type of awareness to specify how they have found the way to our event. We are quite happy that half of all wind participants have attended the workshop more than once and that many of our new attendees came by recommendation.



*Others:

France, Finland, Dominican Republic, Sweden, Netherlands, Belgium, Saudi Arabia, Italy, Canada, Taiwan, Switzerland, China, Bulgaria, Korea, Bangladesh, South Africa, Norway, Lithuania, Iceland, Estonia, Czechia





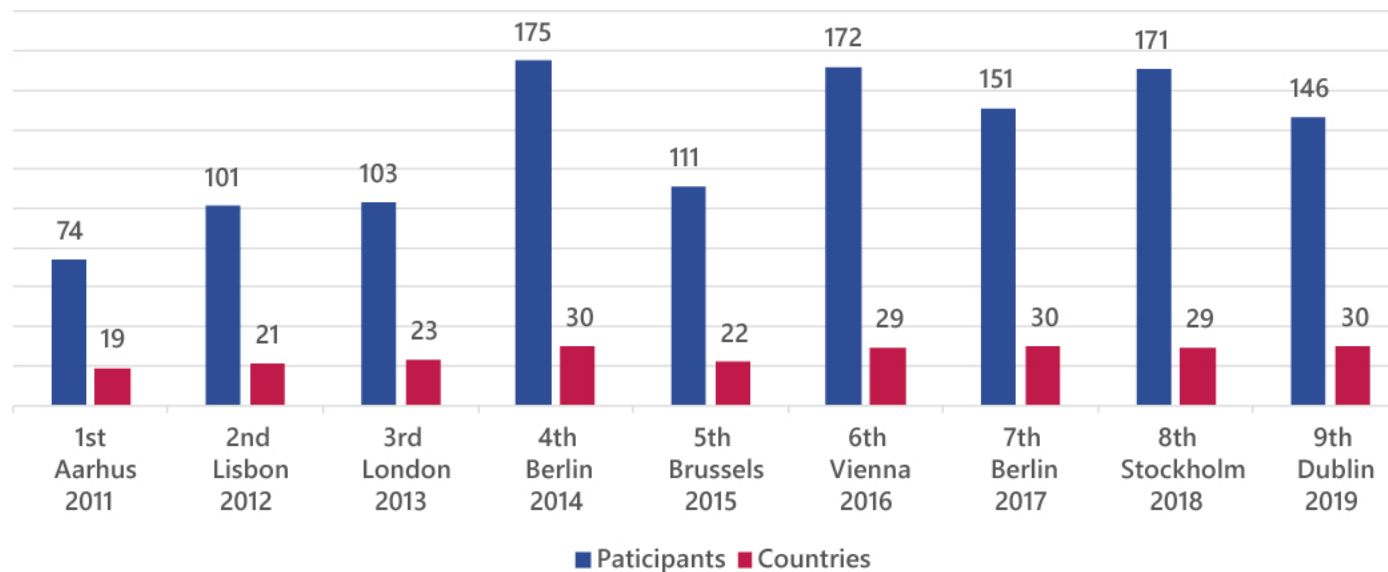
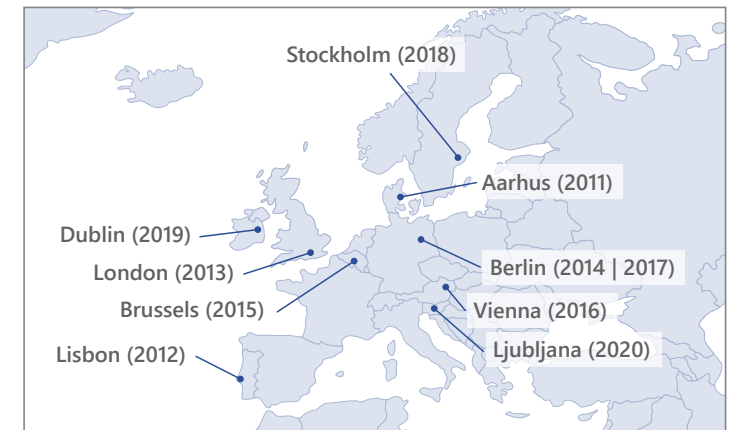
For the full list of topics:

www.solarintegrationworkshop.org
www.windintegrationworkshop.org

Solar Integration Workshop

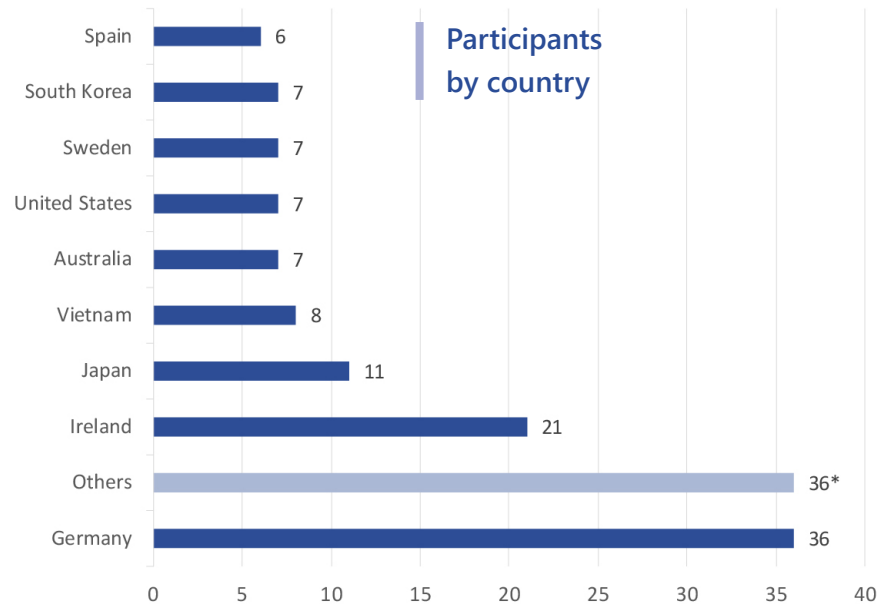
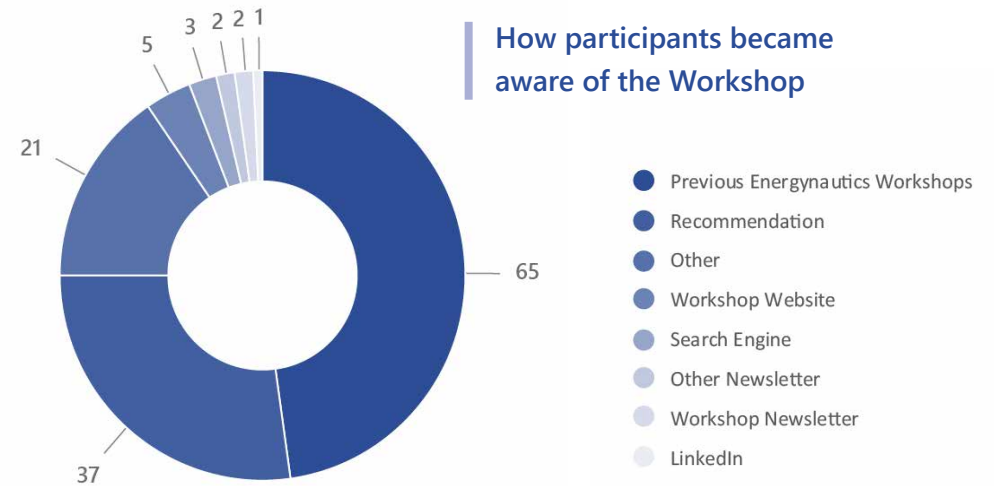
The increasing interest in solar integration issues motivated us to organize the first Solar Integration Workshop in Aarhus in 2011. Since the second edition, the number of participants has always reached more than 100, and even 175 in Berlin (2014), 172 in Vienna (2016) and 171 in Stockholm (2018).

The 2020 Solar Integration Workshop will be held in Ljubljana/Slovenia with a duration of 1.5 days, following the 3rd E-Mobility Power System Integration Symposium and preceding the 18th Wind Integration Workshop.



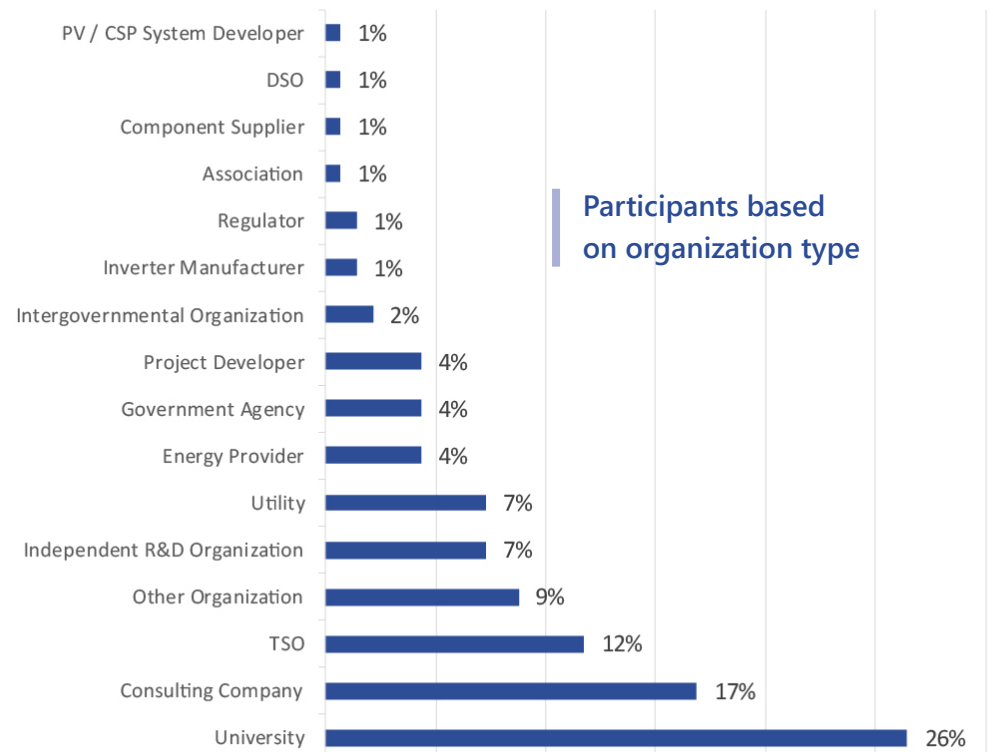
Solar Integration Workshop 2019, Dublin/Ireland

Have a look at the following charts providing facts and figures on the participants of the previous Solar Integration Workshop.



*Others:

France, Saudi Arabia, Denmark, United Kingdom, Taiwan, Finland, China, Canada, Bulgaria, Belgium, Bangladesh, South Africa, Singapore, Brazil, Portugal, Poland, Netherlands, Korea, Faroe Islands, Estonia, Cyprus



International Advisory Committees:

The Workshop Advisory Committees consist of currently 37 members for the Wind Integration Workshop and 21 for the Solar Integration Workshop. Besides giving general advice for content and topics of the workshop, and working as reviewers of submitted abstracts during the Call for Paper process, they are acting as multipliers for the workshop idea and date. All members receive the paper leaflets and support the workshop communication.

Wind

Thomas Ackermann | Energynautics, Germany
 Sigrid Bolik | ITPenergised, United Kingdom
 Peter W. Christensen | Atkins SNC-Lavalin, Denmark
 Jaap de Boer | Energy Watch, Netherlands
 Julian Eggleston | Australian Energy Market Commission, Australia
 Samer El Itani | Vestas Wind Systems, Denmark
 Ana Estanqueiro | LNEG, Portugal
 Jako Kilter | Tallinn University of Technology – TalTech, Estonia
 Alain Forcione | IREQ Hydro Québec, Canada
 Jens Fortmann | HTW Berlin – University of Applied Sciences, Germany
 Daniel Fraile | WindEurope, Belgium
 Michael Nørtoft Frydensbjerg | Vattenfall Vindkraft, Denmark
 Paul Gardner | DNV GL – Energy, United Kingdom
 Gregor Giebel | Risø DTU, Denmark
 Jutta Hanson | Technical University Darmstadt, Germany
 Bri-Mathias Hodge | NREL, USA
 Hannele Holttinen | recognis, Finland
 Reza Iravani | University of Toronto, Canada
 Lars Landberg | DNV GL, Denmark
 Debra Lew | Debra Lew LLC, USA
 Frank Martin | Siemens Gamesa, Denmark
 Julia Matevosyan | ERCOT, USA
 Nickie Menemenlis | Hydro Québec-IREQ, Canada
 Antje Orths | Energinet.dk, Denmark
 Eckard Quitmann | Enercon, Germany
 Hassan Qazi | EirGrid, Ireland
 Nigel Schofield | University of Huddersfield, United Kingdom
 J. Charles Smith | ESIG, USA
 Lennart Söder | KTH – Royal Institute of Technology, Sweden
 Poul Sørensen | DTU Wind Energy, Denmark
 Derek Stenclik | Telos Energy, USA

Marta Val Escudero | EirGrid, Ireland
 Jian Sun | Rensselaer Polytechnic Institute, USA
 Pieter Tielens | Engie Impact, Belgium
 Adrian Timbus | ABB, Switzerland
 Helge Urdal | Urdal Power Solutions, United Kingdom
 Patrick van de Rijt | TenneT TSO, Germany
 Yoh Yasuda | Kyoto University, Japan

Solar

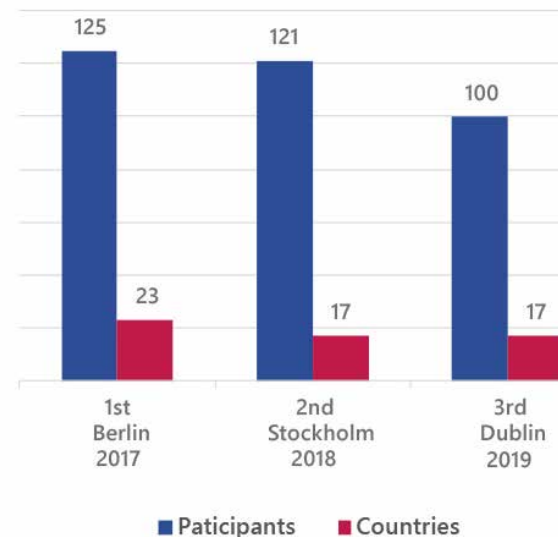
Thomas Ackermann | Energynautics, Germany
 Sigrid Bolik | ITPenergised, United Kingdom
 Roland Bründlinger | AIT Austrian Institute of Technology, Austria
 Edward Coster | Stedin, Netherlands
 Julian Eggleston | Australian Energy Market Commission, Australia
 Bernd Engel | SMA Solar Technology, Germany
 Bernhard Ernst | Bernhard Ernst Energy Consulting, Germany
 Bri-Mathias Hodge | NREL, USA
 Tomas A. Kåberger | Chalmers University of Technology, Sweden
 Lars Landberg | DNV GL, Denmark
 Debra Lew | Debra Lew LLC, USA
 Nickie Menemenlis | Hydro Québec-IREQ, Canada
 Lise Nielson | Linie P, Denmark
 Kazuhiko Ogimoto | The University of Tokyo, Japan
 Dezso Sera | Queensland University of Technology, Australia
 J. Charles Smith | ESIG, USA
 Lennart Söder | KTH – Royal Institute of Technology, Sweden
 Emanuele Taibi | IRENA, Germany
 Adrian Timbus | ABB, Switzerland
 Julio Usaola | Charles III University of Madrid, Spain
 Dirk Van Hertem | KU Leuven, Belgium

E-Mobility Power System Integration Symposium

To implement the ambitious goal outlined in the Paris Agreement to keep the increase in global average temperature below 2 °C, significant changes in the transport sector are required: Greenhouse emissions in the transport sector need to decrease substantially, which calls for an increase in the share of E-Mobility solutions in the transportation sector. It is equally important to ensure that these vehicles are being charged with energy from renewable energy sources. Otherwise, depending on the source of electricity used to recharge the batteries, emissions are only shifted to the location of the generation plants. The electricity used to recharge the batteries must be generated from renewable or clean sources such as wind, solar, or hydroelectric energy for Plug-in Electric Vehicles (PEVs) to have almost none or zero well-to-wheel emissions.

The purpose of the **E-Mobility Power System Integration Symposium** is to discuss the challenges that arise with increased power demand due to electric vehicle charging, and how they can be met by coordinating with renewable power production in the electrical system (hence the combination with the Solar & Wind Integration Workshop). The selection of topics also highlights the need for integrating the required electric vehicle charging infrastructure with the expansion of the distribution and transmission system.

The **Symposium** offers a prime opportunity to discuss the significant future impact of E-Mobility on power system design and operation. It aims to bring together experts on electric vehicles, charging infrastructure, power system operators, and stakeholders of the renewable energy industry as well as power system regulators and universities.

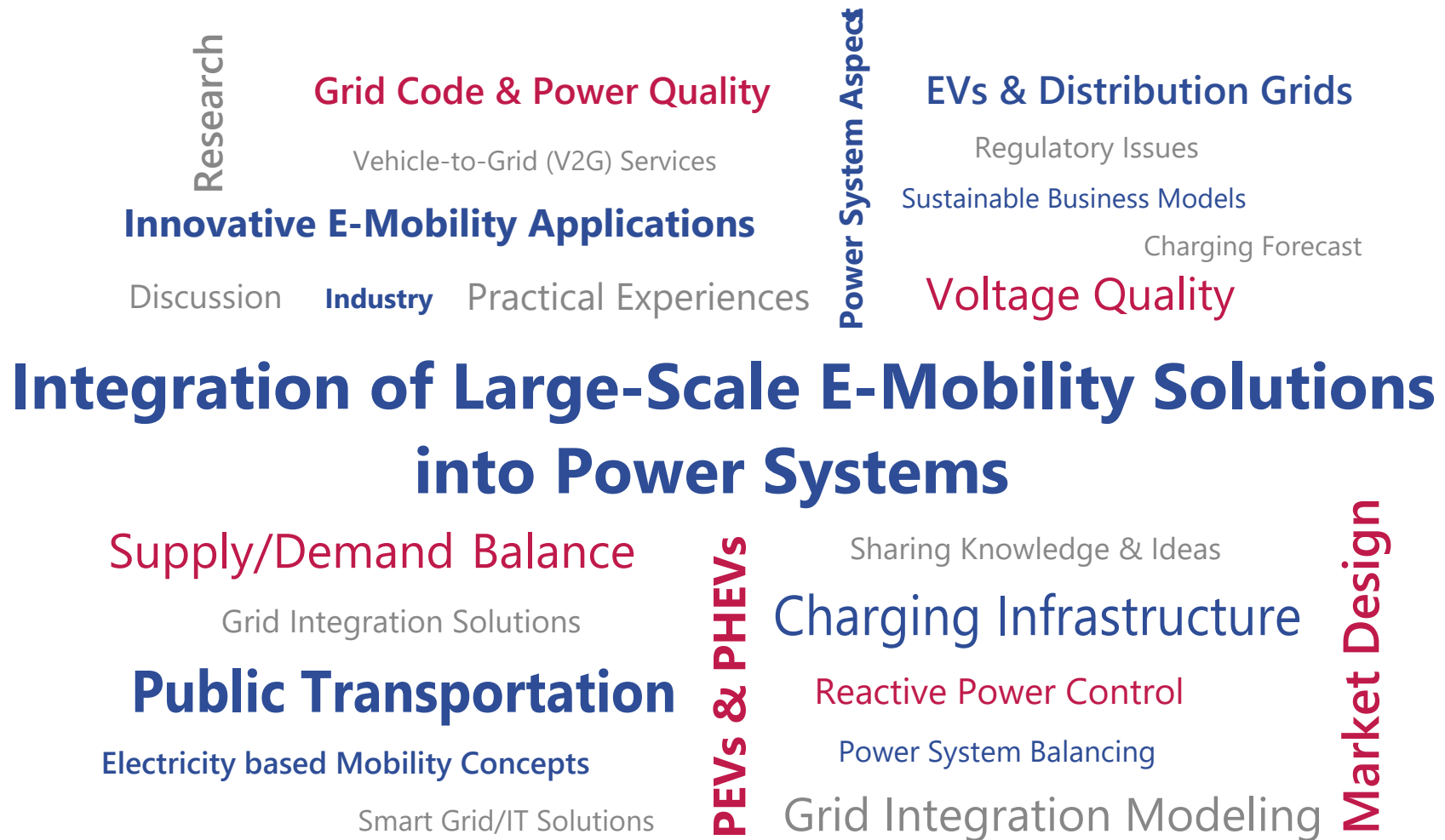


E-Mobility Power System Integration Symposium

International Advisory Committee

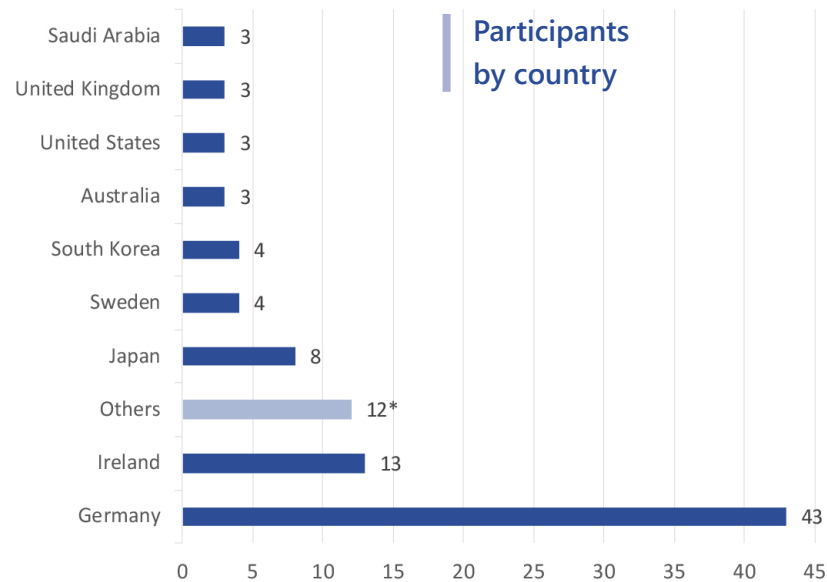
The Symposium Advisory Committee consists of currently 17 members. Besides giving general advice for content and topics of the symposium, and working as reviewers of submitted abstracts during the Call for Paper process, they are acting as multipliers for the symposium idea and date. All members receive the paper leaflets and support the symposium communication.

- Thomas Ackermann | Energynautics, Germany
- Sigrid Bolik | ITPenergised, United Kingdom
- Jann Binder | Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW), Germany
- Markus Dietmannsberger | Hamburger Hochbahn, Germany
- Bernd Engel | TU Braunschweig, Germany
- Robert Eriksson | Volvo Car Corporation, Sweden
- Elin Karlsson | KTH – Royal Institute of Technology, Sweden
- Sonja Klingert | University of Mannheim, Germany
- Tomas A. Kåberger | Chalmers University of Technology, Sweden
- Lars Nordström | KTH – Royal Institute of Technology, Sweden
- Maria Perez Ortega | Gfi, Belgium
- Nickie Menemenlis | Hydro Québec – IREQ, Canada
- Lennart Söder | KTH – Royal Institute of Technology, Sweden
- Felix Steck | National Aeronautics and Space Research Centre (DLR), Germany
- Emanuele Taibi | IRENA, Germany
- Oskar Wallmark | KTH – Royal Institute of Technology, Sweden

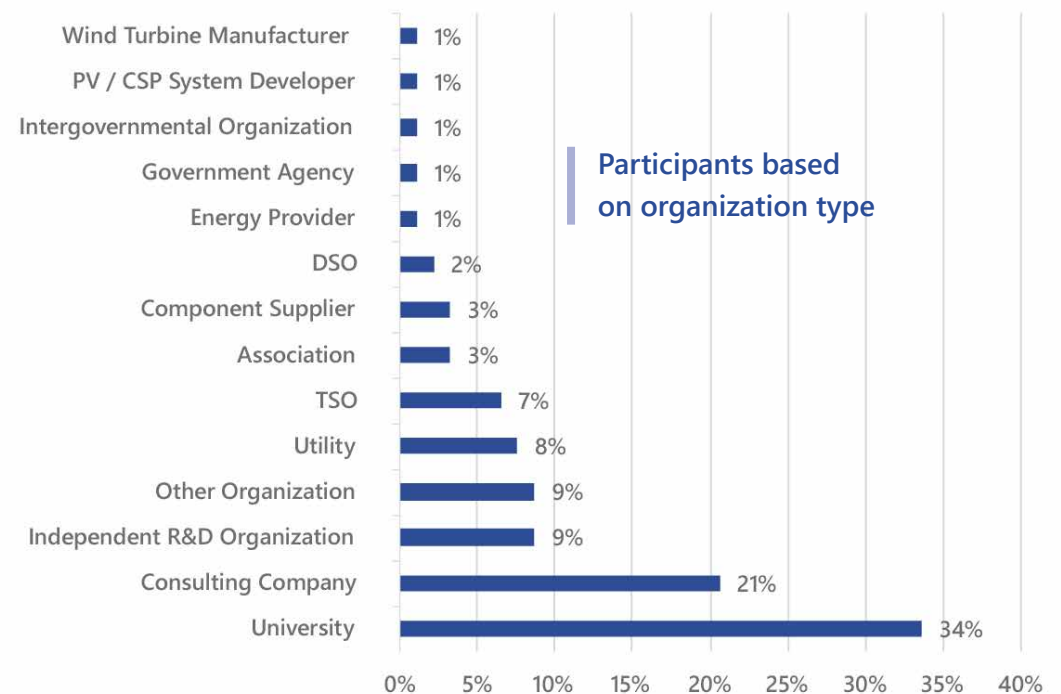
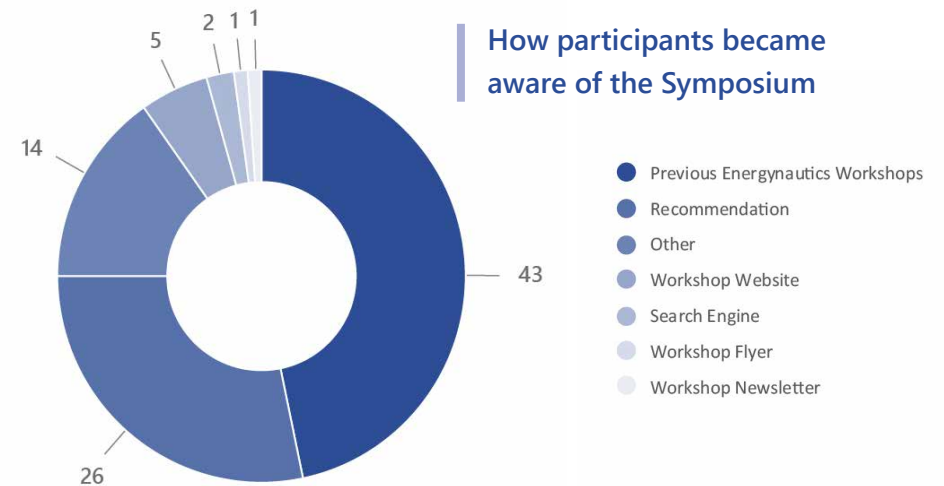


E-Mobility Integration Symposium 2019, Dublin/Ireland

Learn about the 3rd E-Mobility Symposium and its participants with the help of the following charts.



*Others: Slovenia, Bangladesh, Canada, France, Netherlands, Portugal, Taiwan & Spain



Grid Integration Week 2019

The Grid Integration Week will start with the E-Mobility Power System Integration Symposium, followed by the Solar Integration Workshop and the Wind Integration Workshop.

Date & Location: 9 - 13 November 2020 in Ljubljana, Slovenia

Expected participants: >120 E-Mobility / >150 Solar / >250 Wind

Preliminary Timetable:

Day	Schedule
Monday	E-Mobility Symposium Evening: E-Mobility Poster Reception & Networking
Tuesday	Solar Workshop – Day 1 Evening: Solar Poster Reception & Networking
Wednesday	Until Noon: Solar Workshop – Day 2 Afternoon: Wind Workshop – Day 1 Evening: Solar & Wind Dinner
Thursday	Wind Workshop – Day 2 Evening: Wind Poster Reception & Networking
Friday	Wind Workshop – Day 3

Workshops of 2020



For further details visit:

www.mobilityintegrationsymposium.org

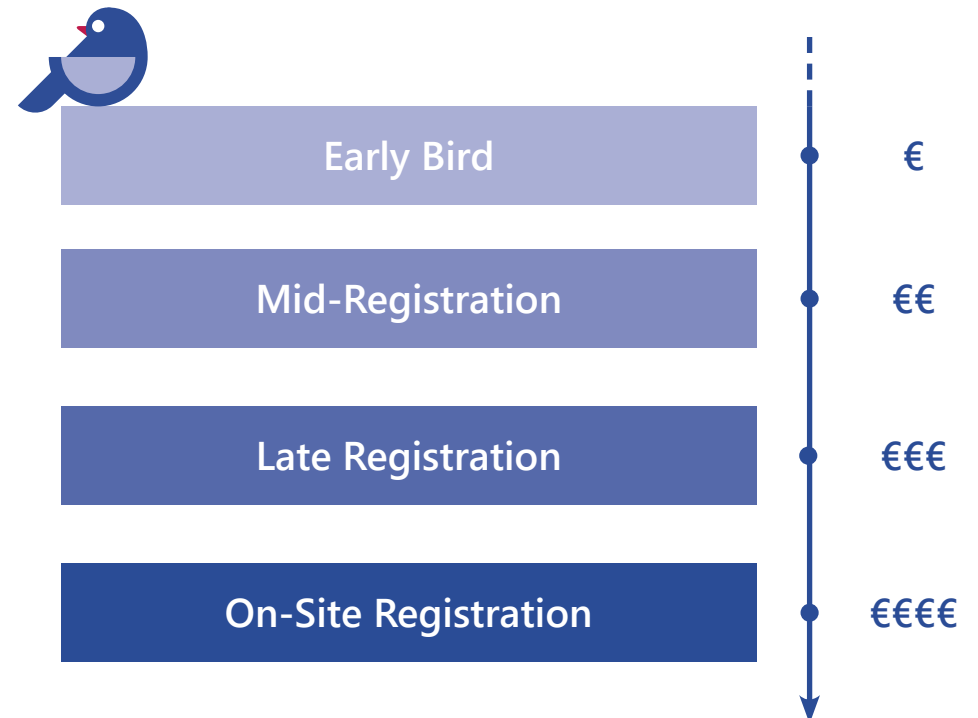
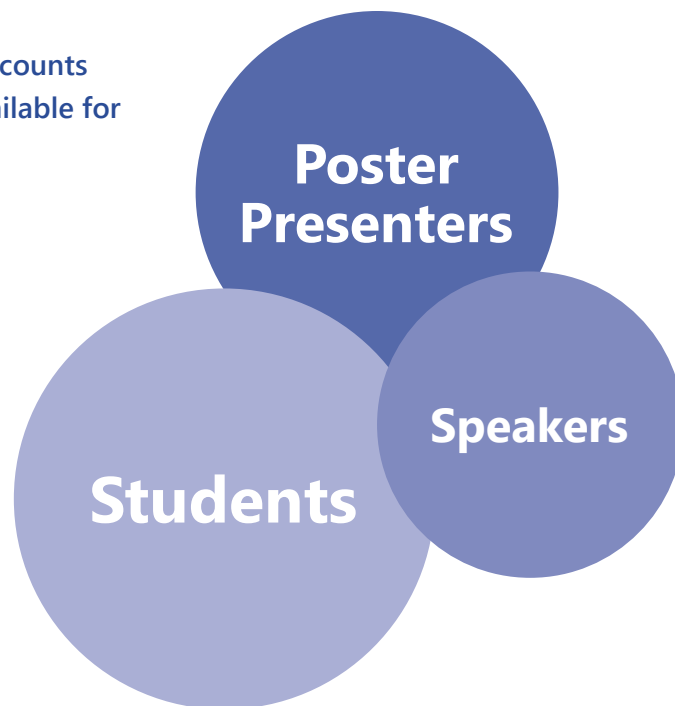
www.solarintegrationworkshop.org

www.windintegrationworkshop.org

Structure of Registration Fees

In order to win participants of every target group to form the inspiring mixture of [speakers](#), [poster presenters](#) and [regular visitors](#) from different research sectors and institutions the registration fees are based on a mixed calculation to address the needs of every target group specifically: [students](#), [university staff](#), [associations](#), [N.G.O.s](#), [public institutions](#), [companies](#). Students may register for the highest discount as well as speakers and poster presenters. Regular participants are offered three different time schemes – early bird, regular registration, late registration. For last minute participants we also offer on-site registration.

Discounts
available for



Communicating the Workshops

Although a large portion of our participants from previous workshops are “repeaters” (40-50 %) or came by recommendation (25-30 %), we constantly strive for gaining new participants. Therefore, the workshop communication makes use of different communication channels:

Cooperations with Universities:

In order to maintain our goal of providing a platform not only for industry professionals but also for university members, we have cooperate with several local academic institutions. This will also give other participants the opportunity to learn more about results from ongoing research. For sponsors this is a great way to network with young professionals who have a strong academic background.

Websites:

The basis for all information regarding the symposium and the workshops are the event websites (see below): They compile information about the workshop’s history, past programs, proceedings and the information about the current program, venue, and accommodation opportunities.

During the last **3 months** before the event the websites are viewed by:

	Unique visitors per month
www.mobilityintegrationsymposium.org	550 - 700
www.solarintegrationworkshop.org	600 - 850
www.windintegrationworkshop.org	900 - 1,200

Newsletters:

The main means of communication to disseminate the workshop are workshop newsletters, sent monthly/fortnightly. It contains the current basic information linking to the workshop website for more detailed information.

Social Media:

Different aspects of the workshops are communicated on several social media platforms (and their groups) such as:

LinkedIn <https://www.linkedin.com/groups/4813626/>
Twitter <https://twitter.com/REGridIntegrWS>
Xing Postings in different groups on renewable energy

Online & Print Media:

The workshop date is listed on several renewable energy event lists and calendars on- and offline. Furthermore, advertisements get published regularly to promote the workshop.

Leaflets:

Paper leaflets/flyers are produced for distribution among interested institutions and participants.

Direct Mailing:

Previous workshop participants will receive information about the Call for Papers and later on about the program via mail.



Quality Control & Feedback

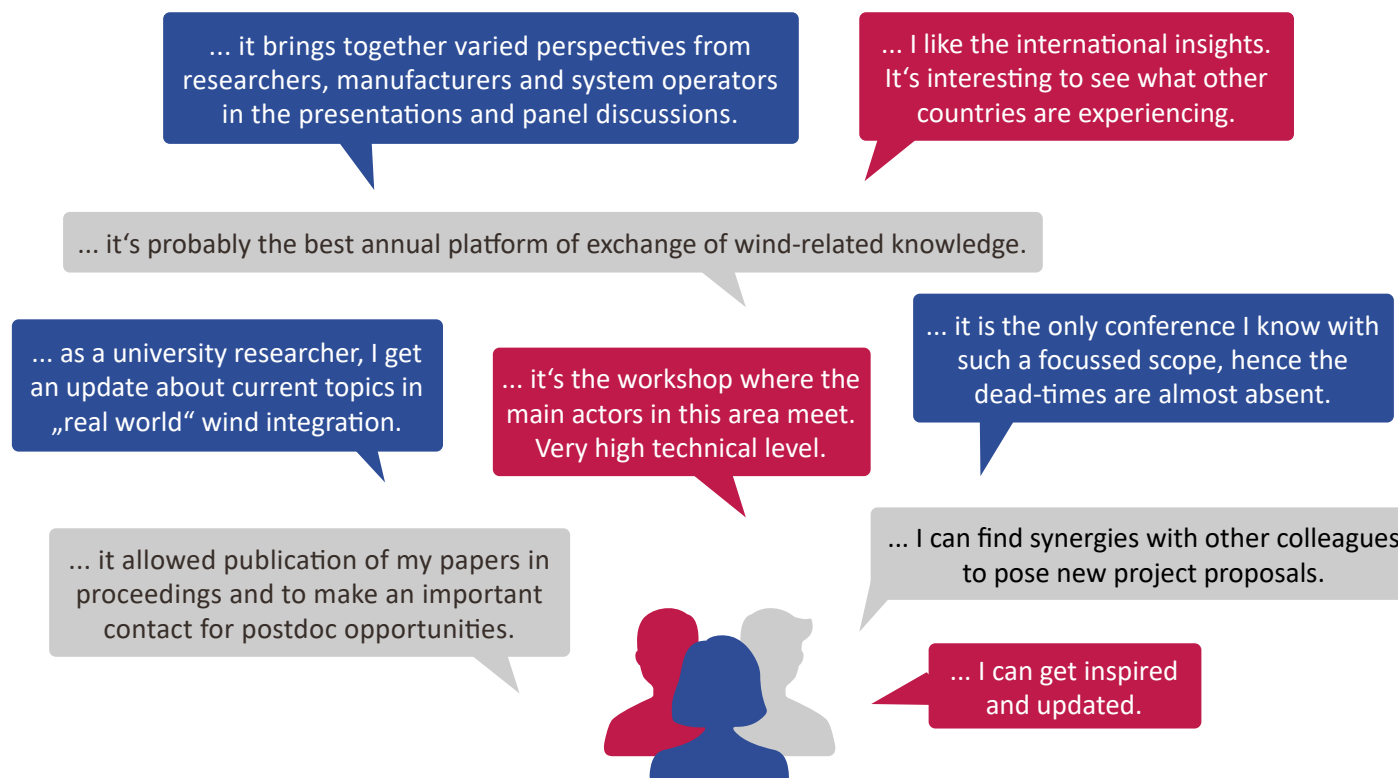
The participants of every workshop receive the opportunity to give their feedback after the event answering a number of questions regarding the quality of the workshop program, venue, location and organization.

The workshop team evaluates the answers thoroughly and initiates changes wherever applicable. Many new ideas are making its way to us this way.

Selected answers from previous participants:

The Wind Integration Workshop is important for me because...

Feedback Examples "Wind"
[surveymonkey.com](https://surveyMonkey.com)



Your Benefits as Sponsor

Being sponsor of the Solar & Wind Integration Workshops and/or the E-Mobility Integration Symposium not only raises awareness for your company among participants but also gives you the following two main advantages:

Meet your future employees & partners



- Find highly qualified students & professionals among participants
- Network with potential candidates at your company roundtable
 - Display your job announcements in our workshop material & on rollups
 - Meet potential partners for new projects

Capacity Building for your team



- Train your employees on specific topics about the integration of RE
 - Share & receive fresh ideas about current issues
- Find solutions for your ongoing projects in industry & academia
 - Have serious discussions with worldwide experts

Sponsor Packages “Wind Integration Workshop”

- **Small** company logo on Wind Workshop website, newsletters, flyers, proceedings, rollups etc.
- **One** participant of the sponsor can join the Wind Workshop (incl. solar & wind dinner/excl. tutorials)
- One page advertisement **in colour** in the digital proceedings
- One company rollup during the workshop
- Distribution of leaflets during the workshop

Sponsorship Fee: Contact us!

Mega Sponsor

- **Large** company logo on Wind Workshop website, newsletters, flyers, proceedings, rollups etc.
- **Three** participants of the sponsor can join the Wind Workshop (incl. solar & wind dinner/excl. tutorials)
- One page advertisement **in colour** in the digital proceedings
- **One** rollup during the workshop
- Distribution of leaflets **in delegate bags**

Sponsorship Fee: Contact us!

Giga Sponsor

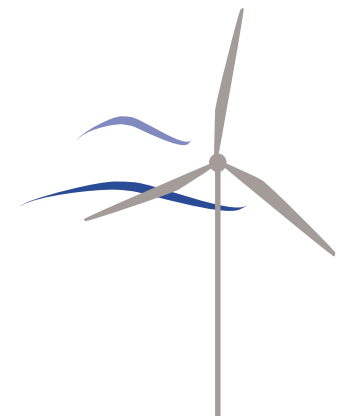
- **Large** company logo on Wind Workshop website, newsletters, flyers, proceedings, rollups etc.
- **One special additional logo arrangement** (see page 23 for all options)
- **Five** participants of the sponsor can join the Wind Workshop (incl. solar & wind dinner/excl. tutorials)
- **Corporate roundtable** for technical discussions, networking & recruiting during breaks and poster session
- One page advertisement **in colour** in the digital proceedings
- Up to **two** rollups or **one** display during the workshop
- Distribution of leaflets and inserts in **delegate bags**
- **Content box** in one workshop newsletter issue in September or October 2020

Sponsorship Fee: Contact us!

Tera Sponsor



<<< Example Packages
Contact us for your customized
sponsorship package!



Sponsor Packages "Solar & Storage Integration Workshop"

- **Small** company logo on Solar & Storage Workshop website, newsletters, flyers, proceedings, rollups etc.
- **One** participants of the sponsor can join the Solar & Storage Workshop (incl. solar & wind dinner/excl. tutorials)
- One page advertisement **in colour** in the digital proceedings
- One rollup during the workshop
- Distribution of leaflets during the workshop

Sponsorship Fee: Contact us!

Mega Sponsor

- **Large** company logo on Solar & Storage Workshop website, newsletters, flyers, proceedings, rollups etc.
- **Three** participants of the sponsor can join the Solar & Storage Workshop (incl. solar & wind dinner/excl. tutorials)
- One page advertisement **in colour** in the digital proceedings
- **One** rollup during the workshop
- Distribution of leaflets **in delegate bags**

Sponsorship Fee: Contact us!

Giga Sponsor

- **Large** company logo on Solar & Storage Workshop website, newsletters, flyers, proceedings, rollups etc.
- **One special additional logo arrangement** (see page 23 for all options)
- **Five** participants of the sponsor can join the Solar & Storage Workshop (incl. solar & wind dinner/excl. tutorials)
- **Corporate roundtable** for technical discussions, networking & recruiting during breaks and poster session
- One page advertisement **in colour** in the digital proceedings
- Up to **two** rollups or **one** display during the workshop
- Distribution of leaflets and inserts in **delegate bags**
- **Content box** in one workshop newsletter issue in September or October 2020

Sponsorship Fee: Contact us!

Tera Sponsor



<<< **Example Packages**
Contact us for your customized
sponsorship package!

Sponsor Packages "E-Mobility Power System Integration Symposium"



- **Small** company logo on Symposium website, newsletters, flyers, rollups etc.
- **One** participant of the sponsor can join the Symposium (excl. tutorials)
- **One** page advertisement **in colour** in the digital proceedings
- **One** rollup during the workshop
- Distribution of leaflets during the workshop

Sponsorship Fee: Contact us!

Mega Sponsor

-
- **Large** company logo on Symposium website, newsletters, flyers, rollups etc.
 - **Three** participants of the sponsor can join the Symposium (excl. tutorials)
 - One page advertisement **in colour** in the digital proceedings
 - **One** rollup during the workshop
 - Distribution of leaflets **in delegate bags**

Sponsorship Fee: Contact us!

Giga Sponsor

-
- **Large** company logo on Symposium website, newsletters, flyers, rollups etc.
 - **One special additional logo arrangement** (see page 23 for all options)
 - **Five** participants of the sponsor can join the Symposium (excl. tutorials)
 - **Corporate roundtable** for technical discussions, networking & recruiting during breaks
 - One page advertisement **in colour** in the digital proceedings
 - Up to **two** rollups or **one** display during the workshop
 - Distribution of leaflets and inserts in **delegate bags**
 - **Content box** in one workshop newsletter issue in September or October 2020

Sponsorship Fee: Contact us!

Tera Sponsor

<<< Example Packages
Contact us for your customized
sponsorship package!

E-Mobility, Solar & Wind Options for the “Tera Sponsor” Package

Use this opportunity to get a higher visibility at our workshops in Ljubljana by choosing **one** of the following options to be included in your “Tera Sponsor” package. Further options can be booked for an additional charge. Please contact us for a quote.



Options

Logo on displays during dinner	“Dinner Sponsor”
Logo on coffee table displays	“Coffee Break Sponsor”
Logo & wording in event app	“App Sponsor”
Advertisement in the workshop guide	
Distribution of labelled pads & pens	

Sponsoring Discount

Sponsoring the Solar **and** the Wind Integration Workshop events will result in a **10% discount** in the total sponsoring fee for both workshops.

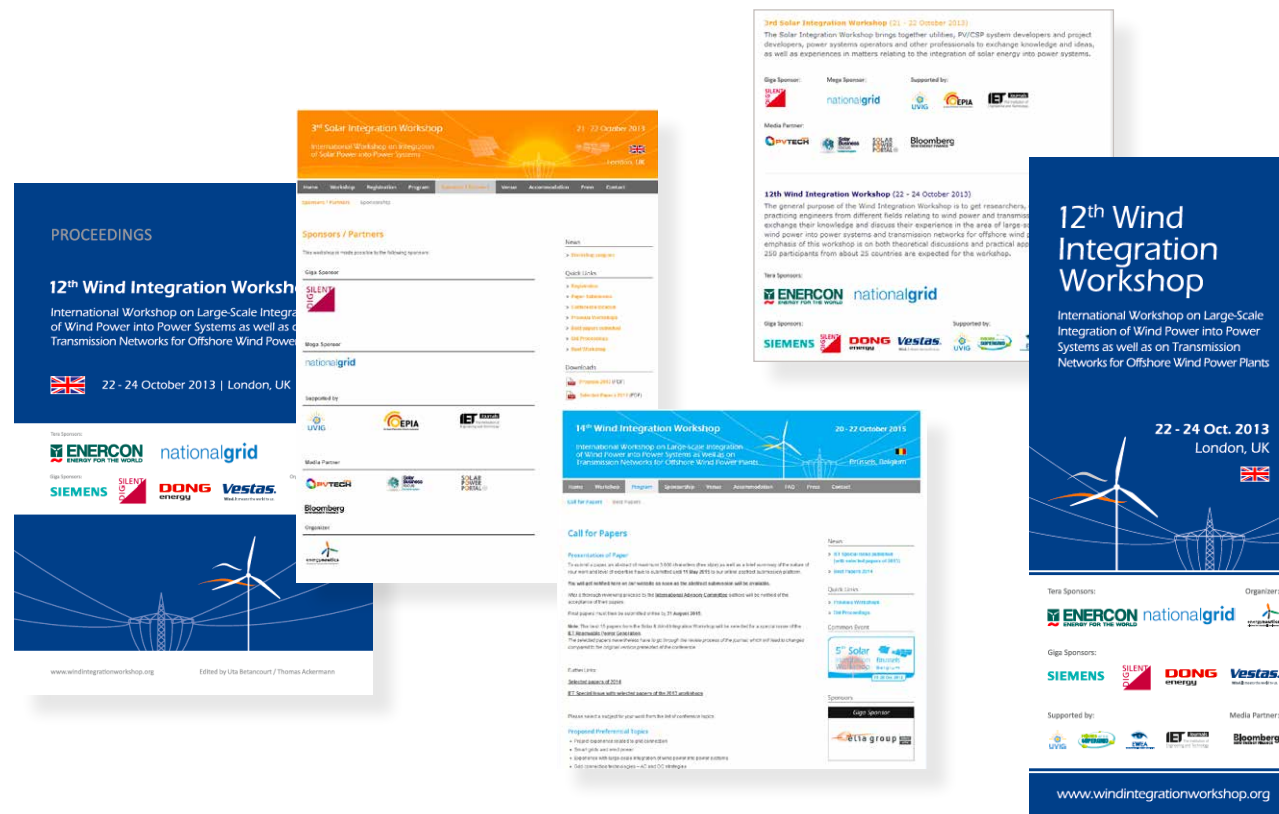
A **12% discount** will be given for sponsoring **all three events**.

Embedding your Logotype















































































See here some examples from previous workshops on where your logotype could be positioned.






Examples from left to right:
Proceedings Cover
Website "Sponsors"
Website "Call for Papers"
Newsletter
Rollup





























Sponsors “Wind Integration Workshop”

	Tera Sponsors	Giga Sponsors	Mega Sponsors	Workshop Ambassadors
Dublin 2019	    	  		          
Stockholm 2018	 	   		      
Berlin 2017		    		      
Vienna 2016		   	 	     
Brussels 2015		    		       
Berlin 2014	 	     		  
London 2013	 	   		   
Lisbon 2012	 	   		     

Sponsors “Solar Integration Workshop”

	Tera Sponsors	Giga Sponsors	Mega Sponsors	Workshop Ambassadors
Dublin 2019	 	 		        
Stockholm 2018				     
Berlin 2017		 		     
Vienna 2016				      
Brussels 2015		  		        
Berlin 2014		   		   
London 2013				  

Sponsors "E-Mobility Integration Symposium"

	Tera Sponsors	Giga Sponsors	Mega Sponsors	Workshop Ambassadors
Dublin 2019	 			        
Stockholm 2018				    
Berlin 2017				      

See you in Ljubljana

Thomas Ackermann
energynautics-Founder & CEO

Energynautics GmbH
Robert-Bosch-Straße 7
64293 Darmstadt
Deutschland

Phone: +49 (0)151 22 66 19 55
Email: t.ackermann@energynautics.com
Web: www.energynautics.com/en



Contact

