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I EXHIBITION QUICK FACTS

Dates May 31–June 2, 2017

Opening hours Wednesday May 31, 2017 9:00am-6:00pm

Thursday June 1, 2017 9:00am—6:00pm Friday June 2, 2017 9:00am—5:00pm

Venue Messe München, Exhibition Ground, 81823 Munich, Germany

Halls A1-A4, B1-B3

Exhibitors 1,200 (expected, incl. ees Europe exhibitors)
Exhibition space 77,000 sqm (expected, incl. ees Europe)

Visitors 40,000+ (expected)

Prices Day ticket €32/three-day pass €50
Online tickets Day ticket €22/three-day pass €40

I CONFERENCE QUICK FACTS

Dates May 30–31, 2017

Opening hours Tuesday May 30, 2017 9:00am-6:00pm Wednesday May 31, 2017 9:00am-6:00pm

Venue ICM – Internationales Congress Center München

81823 Munich, Germany

Program View the current program at

Attendees & speakers Around 1,300 attendees (expected) and 200 speakers including at the official side events and ees Europe

ACCOMPANYING PROGRAM QUICK FACTS

Intersolar AWARD + ees AWARD

Award ceremony on May 31, 2017 Innovation and Application Forum Hall A4, booth A4.530, 5:00pm

Innovation and Application Forum

May 31-June 2, 2017, hall A4, booth A4.530

 \rightarrow www.intersolar.de/en \rightarrow Program \rightarrow Conference \rightarrow Program

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May 31-June 2, 2017, hall B2, booth B2.131

Smart Renewable Energy Forum

Smart Renewable Energy

From intelligent individual solutions to an integrated system Hall B2, booth B2.140

special exhibit

Joint Forces for Solar

June 1, 2017, Intelligence and Networking Forum Hall A4, booth A4.530, 10.30am—12.00pm

BSW-Solar

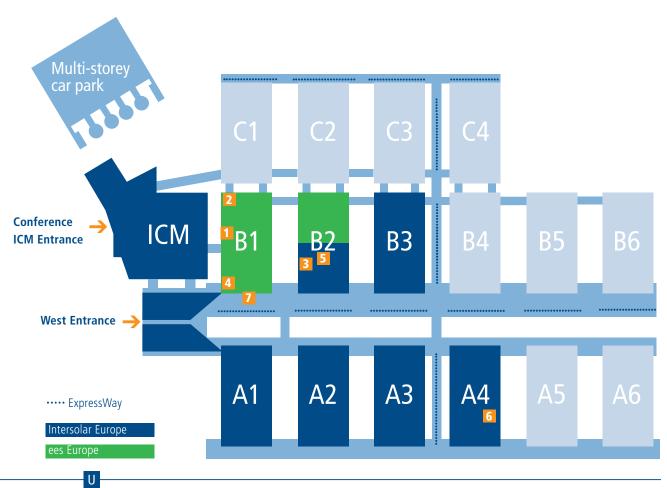
June 1, 2017, Tenant Power Opportunities from Solar Energy

ICM – Internationales Congress Center München

2:00pm-3:30pm



I INTERSOLAR AND EES EUROPE EXHIBITION HALLS



[&]quot;Messestadt West" Subway Stop

- 1 ees Forum
- 2 Special Exhibit E-Mobility & Renewable Energy
- 3 Smart Renewable Energy Forum
- 4 Meeting Point Exhibition Tours
- 5 Special Exhibit Smart Renewable Energy
- 6 Innovation & Application Forum
- 7 Exhibition Workshops

I EXHIBITION AREAS

EXHIBITION AREAS

- A1 PV Cell and Module Manufacturers
- **A2** PV Cell and Module Manufacturers PV Components and Accessories PV Production Technologies,
 - Materials and Accessories
- A3 PV Systems Providers
 - PV Distributors
 - PV Products, Services
 - Off-Grid Power
- A4 PV Mounting Systems
 - PV Tracking Systems
 - Renewable Heating
 - PV Systems Providers
 - PV Distributors
 - PV Products, Services

- **B1** ees Europe
 - Energy Storage
- **B2** PV Inverters Smart Renewable Energy ees Europe
- **B3** PV Inverters PV Energy Management Smart Renewable Energy



I ABOUT INTERSOLAR

Intersolar Europe in Munich is the world's leading exhibition for the solar industry and its partners. It takes place annually at the Messe München exhibition center and focuses on the areas of photovoltaics, energy storage and renewable heating, as well as smart renewable energy. The accompanying Intersolar Europe Conference consolidates certain topics of the exhibition. Intersolar Europe is organized by Solar Promotion GmbH, Pforzheim, and Freiburg Wirtschaft Touristik und Messe GmbH & Co. KG (FWTM). With events spanning four continents, Intersolar is the world's leading exhibition series for the solar industry and its partners. It unites people and companies from around the world with the aim of increasing the share of solar power in our energy supply.

 \rightarrow www.intersolar.de

I THE NEW ENERGY WORLD

For a short window in May 2016, nearly all of Germany's power demand was met by renewable energy. The new energy world is certainly gaining traction, but major challenges remain.

Connecting Solar Business

The motto sets out the direction of this year's Intersolar Europe, which is dedicated entirely to the new energy world. The overall goal, now and in the future, is to make efficient and affordable use of electrical energy generated by fluctuating renewable sources, such as the sun and wind, while also guaranteeing necessary grid stability and supply safety.

One of this year's highlights is the special exhibit Smart Renewable Energy, which will feature a demonstration of the Energy Lab 2.0 by the Helmholtz Association in cooperation with the Karlsruhe Institute of Technology (KIT) and other partners. New approaches for integrating the most diverse technologies into the energy system will be tested and simulated. A special forum will then discuss the topics in more detail.

New business models in photovoltaics

Prices for self-generated solar power have fallen by a good 80% over the last ten years, and the sector is expecting double-digit percentage growth in 2017. It is no wonder then that Intersolar Europe is focusing more and more on new business models in photovoltaics (PV). These include tenant power, energy storage systems, large-scale PV power plants, the operation and maintenance of PV installations, and PV production technology.





TENDERING PROGRAM FOR SELF-SUPPLY

France is encouraging self-consumption of solar power

- Self-consumption of solar power is establishing itself in France.
- Tenders are covering the self-consumption of solar power.
- The French Energy Transition for Green Growth Act has set ambitious targets.

In December 2016, the first residential and office building to allow tenants to save energy costs by using power straight from the roof opened in Paris. As part of an energetic renovation of a historical building from the 19th Century, the landlord had a photovoltaic system installed. The project was made possible by a tendering program from the French government, which is making allowances for the self-consumption of solar power. At the end of July 2016, a new regulation — the first to govern the self-consumption of electricity generated on site — was published in the French law gazette. Prepared within the framework of the 2015 Energy Transition for Green Growth Act, the regulation provides for collective self-consumption, enabling the shared use of a photovoltaic installation in a multi-family dwelling, for example. Those involved must form a cooperative or an organization.

France is aiming for 40 % green power by 2030

In the past year, France has held three rounds of tenders for rooftop installations with a capacity of between 100 and 250 kilowatts (kW). In the third round, 353 projects were awarded contracts. The French Energy Transition for Green Growth Act sets ambitious targets for the expansion of renewable energy. France wants renewables to account for 23 % of its end energy consumption by 2020, and 32 % a decade later. For electricity generation, this figure is set at 40 %. The multi-year program plan sets the first intermediate targets for 2023. According to this, the portfolio of PV installations should more than triple by then to 20 gigawatts (GW), corresponding to an average deployment of around 1.5 GW per year.

Event tip

New Models for Self-Supply Using Solar Installations: Business Opportunities and Impacts on Power Grids.

The French-German Office for Energy Transition (DFBEW) is holding a presentation event with a panel discussion. Experts are set to discuss the pilot tendering program in France and tenant power in the German Renewable Energy Sources Act (EEG) 2017.

The event will also be interpreted simultaneously. Participation is free.

Date June 1, 2017, 12:30pm—3:30pm

Place Hall A4, booth A4.530, Innovation and Application Forum





SMART RENEWABLE ENERGY SPECIAL EXHIBIT

Discover the energy supply of tomorrow. Researchers from three Helmholtz centers — the Karlsruhe Institute of Technology (KIT), the German Aerospace Center (DLR) and the Forschungszentrum Jülich (FZJ) — are currently investigating what form this may take. Their Energy Lab 2.0 is a real-life laboratory that enables new approaches for integrating a wide range of technologies into the energy system to be put to the test. For the first time in Europe, the Energy Lab 2.0 is combining larger test facilities for power generation, energy storage and energy use to develop a smart, cellular overall system for supplying energy. This project also focuses on creating new information and communication technologies. The scientists are presenting their infrastructure platform at the Smart Renewable Energy special exhibit.

Entry to the special exhibit is included in the exhibition ticket.

 \rightarrow www.intersolar.de/en \rightarrow Tickets

Date May 31—June 2, 2017 Place Hall B2, booth B2.140 HELMHOLTZ ASSOCIATION

| WIND MEETS SOLAR AND STORAGE – WIND WORKSHOP

EEG and direct marketing from the perspective of the wind energy and solar industries

Since 2016, operators have had to directly market power from newly installed renewable energy installations with an output of over 100 kW. Operators of existing installations benefiting from a fixed feed-in tariff can easily make the move to direct marketing under the market premium model. By selling their green electricity at times of high demand, for a price over the average monthly market price, operators can reach a higher profitability than is possible with a fixed EEG remuneration model.

Since the market premium model was introduced, the proportion of plant operators marketing their energy in this way has grown considerably and consistently. Direct marketing through the market premium model plays an important role in the long-term and sustainable implementation of the energy transition in Germany. Step by step, it guides renewable energies away from dependence on a legal entitlement to remuneration, and into a market environment. The disadvantages of the market premium model lie in the risks associated with a market economy; however, the advantages are found in the opportunities which arise from price movements on the stock market. The exhibition workshop on the topic of the EEG and direct marketing will shine a light on different aspects of the EEG from the perspective of the wind and solar industries. The event is part of the area of focus on Wind meets Solar and Storage. Following the presentations, the organizers will be offering a special tour of Intersolar and ees Europe, which will showcase the topic of wind energy.

Date May 31, 2017, 10:30am-4:00pm

Place Hall B1, room B13





I A SMART, CONNECTED FUTURE

Renewable energy is having a lasting impact on supply structures worldwide. This presents a challenge because green energy production is harder to predict. Ensuring an uninterrupted flow of energy is the key task facing the energy world of the future. The best way of dealing with fluctuations in the supply of renewable energy is by means of intelligently connecting widely varying forms of power generation and reliable storage systems. Take steps today to prepare yourself for this challenge of tomorrow! Intersolar and ees Europe provide a wealth of information on the various opportunities afforded by sector coupling:

Smart Renewable Energy

at Intersolar and ees Europe

- Hall B2, booth B2.131, Smart Renewable Energy Forum
- Hall B2, booth B2.140, special exhibit Smart Renewable Energy
- Hall B2, booth B2.540, shared booth Wind meets Solar and Storage
- Hall B1, booth B1.170, special exhibit E-Mobility & Renewable Energy
- Exhibition workshops
- Exhibition tours
- ICM Internationales Congress Center München Smart renewable energy sessions at the Intersolar Europe Conference

I INTERSOLAR AWARD



Award for outstanding ideas

Intersolar AWARD honors exceptional achievements in the solar industry

For the past ten years, the Intersolar AWARD has accompanied and shaped developments in the industry. During this time, the innovation prize has established itself as the most important and most international prize in the global solar industry. Since 2008, a total of 908 submissions have been received from 45 different countries, and 97 products, services and projects have been awarded the prize to date. In 2017, innovative solutions will once again be honored in the categories of Photovoltaics and Outstanding Solar Projects. For the first time, companies are also invited to submit projects and intelligent solutions which analyze, optimize or integrate power generation and consumption, and thereby help to develop the smart management and storage of renewable energy — so that PV continues to flourish.

The winners will be announced at the award ceremony, which begins on May 31, 2017 at 5:00pm at the Innovation and Application Forum (hall A4, booth A4.530).

ightarrow www.intersolarglobal.com/award





UTILITIES WITHIN THE ENERGY TRANSITION

Utilities within the Energy Transition Award

The energy transition is changing the face of the energy market and its stakeholders. For utilities, this process also means a restructuring that will affect all areas. The energy transition involves products and services in the energy efficiency, mobility, electricity and heat sectors. It therefore creates numerous opportunities for utilities to grow by coming up with innovative solutions, but it also brings many risks. Customer relationships are changing. Simple power delivery is being replaced by more complex prosumer relationships. The portfolio of utility companies now consists of products such as photovoltaic installations and electrical storage systems, as well as new services in the mobility sector.

Research shows that utilities are the most important point of contact and information platform for German customers when it comes to the energy transition. End customers expect information about both current developments and products and services. The Bonn-based market and economic research company EuPD Research has developed a quality model which allows products and services offered by utilities to be evaluated objectively. It shows which utilities are already setting an example with respect to the energy transition and acting in the interests of the customer. In early 2017, this model formed the basis of the first comprehensive study of all utilities in Germany. The results of this study and the award for the best utility company in Germany will be presented on June 1, 2017 at Intersolar Europe. Initiators of the project are the German CleanTech Institute (DCTI), EuPD Research and Intersolar Europe.

 $\rightarrow \text{www.energiewende-award.de}$

Utilities within the Energy Transition Award

Date June 1, 2017, 3:00pm-4:00pm

Place Hall B2, booth B2.131, Smart Renewable Energy Forum





INTERSOLAR EUROPE CONFERENCE 2017

Discover what drives the global solar industry

Find out about promising markets at the Intersolar Europe Conference

Solar is the word on everyone's lips – we are preparing the platform

There is a lot to discuss: The global solar markets are growing: Smart renewable energy and large-scale photovoltaic (PV) power plants are still on trend — and are on the lookout for financing opportunities. On May 30—31, 2017, the Intersolar Europe Conference will be turning its attention to the most pressing questions in the solar industry and shining a light on current trends and technologies. Come along to meet users and experts, and join the discussion! The conference is taking place in parallel with Intersolar Europe, the world's leading exhibition for the solar industry and its partners.

PV power plants – think big!

The PV industry is growing. Large-scale power plants in particular are currently driving forward the deployment of this technology on an international scale. Questions such as financing, management, operation and maintenance of the plants are becoming increasingly important — and for this reason, are a main area of focus at the Intersolar Europe Conference. The presentation series will summarize how weather and yield forecasts can be used for photovoltaics, and will reveal how drones and robots can assist with maintenance tasks. The speakers are set to discuss new concepts, such as constructing PV power plants on bodies of water, and will explain new service concepts in the area of operation and maintenance.

How are PV installations financed?

The key to successfully implementing PV installations is finding a financing model which is specifically geared towards the individual project. Discover which options are currently available on the market at the Intersolar Europe Conference sessions. The speakers will be shed light on new investment opportunities in the USA, Canada and Mexico, and address the role of rating agencies and insurance companies in financing.

What is happening on the global PV market?

In 2017, the Intersolar Europe Conference once again brings you a detailed overview of the developments in the global PV market. Against this backdrop, SolarPower Europe will be exclusively presenting the Global Market Outlook 2017–2021. In further sessions, the American, Asian and African markets will come under scrutiny, as the increasing electricity consumption in Africa is creating a positive market environment, especially in Nigeria, Ghana, Uganda and Kenya.

o www.intersolar.de/en o Program o Conference





I GEORG SALVAMOSER PRIZE 2017

Intersolar Europe is awarding the renowned Georg Salvamoser Prize for the first time

It is one of the most lucrative environmental prizes in Germany, and in 2017 it will be awarded at Intersolar Europe for the first time. The Georg Salvamoser Prize honors people and projects that have shown particular dedication to providing a 100% renewable energy supply. "Obstacles may slow us down but we cannot be stopped." With this motto, Georg Salvamoser expressed his belief that there is ultimately no alternative to a completely renewable energy supply. The solar entrepreneur from Freiburg, who passed away in 2009, is remembered by many as someone who successfully went ahead with projects that others had already given up on, and did so with a hands-on approach and a zest for life.

Who will be the hero of the energy transition?

Regardless of whether the political and social conditions are currently in their favor, they are out there: people who fight tirelessly for the prospect of a fully renewable energy supply, in companies, municipalities and associations, or even alone. To seek out these people and put them in the spotlight is what the Georg Salvamoser Prize is all about. In addition to explaining how they contribute to the goal of 100% renewable energy, candidates must also demonstrate a high degree of innovation and the exemplary nature of their projects, as well as their determination in carrying them out.

On June 1, 2017, Maria Salvamoser and Freiburg's Mayor for the Environment, Gerda Stuchlik, will present the renowned Georg Salvamoser Prize at Intersolar Europe, with Dr. Franz Alt (host) and Hans-Josef Fell, President of the Energy Watch Group. The award ceremony will take place at the Innovation and Application Forum in hall A4, booth A4.530 from 4:30pm—6.00pm.

Latest information:

 $\rightarrow \text{www.georg-salvamoser-preis.de}$





IPV GUIDED TOURS

Guided tours for installers

Innovation is in the spotlight at Intersolar Europe in Munich. For this reason, photovoltaik, the b2b specialist information source, and the English-language website pv Europe are collaborating with Intersolar and ees Europe to offer architects, installers and planners guided tours of progressive new products for the solar energy transition. The guided tours will be held on all three exhibition days from May 31–June 2, 2017 in German and English, and last around two hours. Headsets are available for participants to use on the tours. The different tours will offer information about technical innovations in:

- Electrical storage systems for private applications (domestic storage systems)
- Electrical storage systems for commerce and industry
- Intelligent power electronics (inverter, charging technology for e-mobility)
- High-performance modules and smart solar modules (integrated AC or DC electronics)
- Mounting systems (flat-roof, slanting roof, ground-mounted installations)

A knowledgeable editor will lead the groups. At the exhibition booths of cooperating companies, engineers and marketing experts will be available to present innovations and answer any questions participants may have.

The tours begin at the photovoltaik exhibition booth in hall B1, booth B1.209. Spaces are limited so participants must register in advance. Participation is free of charge. A day ticket to Intersolar and ees Europe is included in the registration.

Register at

→ www.photovoltaik.eu/GuidedTours







I PARALLEL EVENT

I EES EUROPE

ees Europe is the continent's largest exhibition with the greatest number of visitors for the battery and energy storage industry. It serves as an industry platform, bringing together manufacturers, distributors, users and suppliers of stationary and mobile electricity storage systems, and will take place in conjunction with Intersolar Europe, the world's leading exhibition for the solar industry and its partners, from May 31–June 2, 2017 at Messe München.

ees Europe can look back over an impressive history: It began in 2014 with 48 exhibitors and 2,100 sqm of exhibition space. In 2016, a whopping 212 exhibitors presented their innovations across 12,500 sqm — a growth rate of almost 500%! This rapid development is due in part to falling storage system prices. By the second half of 2016, for example, lithium ion storage devices were 15% cheaper than they had been at the beginning of 2015. Thus the success of ees Europe continues unabated: In 2017, the exhibition space will grow to 17,500 sqm and the organizers are expecting 270 companies from around the globe. Around 400 of the roughly 1,200 exhibitors at ees and Intersolar Europe will present energy storage technology.

This year, the event will focus on the topics of on-site consumption in residential and commercial buildings, large-scale storage systems and grid integration as well as e-mobility, battery safety and global storage markets. The automotive industry has a prominent place on the agenda of the ees Europe Conference, which will take place on May 30 and 31 and feature discussions of batteries and system integration of electric vehicles as well as the latest stationary storage technologies.

 $\rightarrow \mathsf{www.ees\text{-}europe.com}$







I SERVICES AT INTERSOLAR EUROPE

INTERSOLAR AND EES EUROPE ON YOUR SMARTPHONE AND TABLET



I NEWS AKTUELL PRESS RELEASE SERVICE

INTERSOLAR EUROPE'S MOVING IMAGES SERVICE

The global app gives you an overview of all Intersolar and ees events worldwide and will help you plan your visit – both in advance and once you have arrived.

The app includes the following features for Intersolar Europe:

- a detailed exhibitor list
- interactive floor plans
- information on interesting forums, workshops and presentations
- programs for the Intersolar Europe Conference, the ees Europe Conference, the Innovation and Application Forum, and the Smart Renewable Energy Forum, including the list of speakers
- business matchmaking for registered conference participants
- the latest tweets and social media updates
- current bus and subway times
- information on tickets, hours, travel services and places to eat, as well as lots more useful information on visiting the exhibition.

dpa and its subsidiary, news aktuell press release service, are the service partners of Intersolar Europe. An exhibition ticker in German and English is displayed in the press portal \rightarrow www.presseportal.de and in the press service area of the Intersolar Europe website \rightarrow www.intersolar.de/en, featuring the latest exhibitor news. You can find up-to-date press information on Intersolar Europe during the event at the Press Center West in Messe München and in the press service area of the Intersolar Europe website. \rightarrow www.intersolar.de/en \rightarrow News & Press

In 2017, Intersolar Europe is once again providing an extensive moving images service for television journalists and TV broadcasters. In addition to Intersolar Europe 2017 footage, up-to-date material in all the standard formats is available for download several times a day during the exhibition from May 31, 2017. If you have any questions regarding this service, please ask our staff at the Press Center West during the exhibition, or our agency fischerAppelt, relations:

Robert Schwarzenböck Tel.: +49 89 747466-23 rs@fischerappelt.de





I INTERSOLAR EUROPE PICTURE DATABASE

On our website under \rightarrow www.intersolar.de/en \rightarrow News & Press \rightarrow Download Resources \rightarrow Picture Database, you can access new photographic material and Intersolar Europe logos as well as extensive market charts.

All images, graphics and banners are protected by copyright and intellectual property rights. Use of these images, graphics and banners is only permitted for journalistic news coverage of Intersolar and ees Europe, unless the organizers have explicitly granted the user permission to use these for other purposes. All other use, in particular transfer to a third party, whether for free or against payment, is strictly forbidden.

I INTERSOLAR EUROPE PRESS RELEASES

We regularly publish press releases on the latest topics related to Intersolar Europe. Please find a list of the most recent press articles below:

- Large-scale power stations, financing and intelligent networks: The hot topics at the Intersolar Europe Conference 2017
- Intersolar Europe 2017:New technologies and efficiency concepts in PV production technologies
- Intersolar Europe and ees Europe benefit from worldwide boom in solar power and energy storage
- Close collaboration between France and Germany at Intersolar Europe 2017
- Pioneering innovations: Intersolar Award celebrates its tenth anniversary

All press releases can be found at:

ightarrow www.intersolar.de/en ightarrow News & Press ightarrow News ightarrow Press Releases

I INTERSOLAR EUROPE MARKET TRENDS 2017

Each year, Intersolar Europe shines the spotlight on current market trends and the latest developments in the solar industry. Please find a list of this year's market trends below:

- SMART RENEWABLE ENERGY
 Smart renewable energy at Intersolar Europe 2017
- NEW BUSINESS MODELS
 New business models and tenant power as building blocks in the expansion of photovoltaics
- ENERGY STORAGE SYSTEMS
 Making photovoltaics and energy storage systems more attractive for commercial enterprises from 2017 onwards
- PV POWER PLANTS

 Large-scale photovoltaic power plants are booming worldwide |

 Electricity production costs experience a sharp fall
- 0&M

Photovoltaic installations: safety and yield maximization grow in importance

 PV PRODUCTION TECHNOLOGIES
 Cutting costs through economies of scale and new photovoltaic production technologies

For further information on market trends, please visit

o www.intersolar.de/en o News & Press o Press Material o Market Trends