

HALL B3
BOOTH B3.570

AWARD Ceremony
Wednesday, May 15, 2019
5:00pm



ALWAYS ONE STEP AHEAD – AND REAPING THE REWARDS!

They are awarded to companies displaying particular esprit in developing advanced industry solutions. Companies that are a step ahead of the rest also stand a good chance of winning, as do business partnerships with extraordinary ideas already shaping the energy supply of tomorrow today. We are talking about The Smarter E AWARD, Intersolar AWARD and ees AWARD innovation prizes.

In the categories of Outstanding Projects and Smart Renewable Energy, The Smarter E AWARD honors noteworthy achievements and innovations which intelligently interconnect electrical energy, heat and transportation using decentralized and renewable energies.

The Intersolar AWARD and the ees AWARD honor pioneering technologies and promising solutions in solar technology and energy storage technology. The awards reflect international trends, and also indicate the direction the future development of the energy industry is headed in.

Who does the panel of judges have its eye on this year? Join us on May 15, 2019 at the award ceremony as part of The Smarter E Forum to find out who will take home the prize.



→ www.TheSmarterE-award.com

THE SMARTER E EUROPE – THE BEST PLATFORM FOR START-UPS



Our energy world is changing. Digitalization and renewable energies are opening up new areas of business, offering young companies in particular the opportunity to use innovative ideas to gain a foothold in the market and play an active role in shaping the transition. Are you designing PV sales solutions for utility companies, developing high-speed charging solutions for electric vehicles or establishing trading portals for green power? There is no better place for the international energy industry to present its solutions than at The Smarter E Europe.

The international character of the event offers huge advantages for start-ups in particular. Not only is this where the decision makers of the new energy world come together, but cost-efficient exhibition space is also available at the Start-ups@The Smarter E Europe booth. It is open to companies which are no more than five years old, have fewer than 50 employees and generate an annual turnover of up to five million euros.

SMART CITY: EXPERIENCE THE NEW ENERGY WORLD

Renewable energies will make our living environment sustainable. The Smarter E Europe is the right place for anyone looking to experience the city of the future! With its focus on the utilization of energy, there is something for everyone at EM-Power; particularly for urban planners. Power2Drive Europe offers a wealth of information on mobility solutions, and you can find out everything you need to know about solar energy generation and storage at Intersolar Europe and ees Europe.

Decentralization, digitalization and sector coupling are transforming the energy industry. The falling cost of renewable energies around the world is driving markets forward. The sectors of mobility, electricity and heat are growing ever closer. A variety of neighborhood projects based on renewable energies and energy storage are already being put into action, often integrating e-mobility solutions and related charging infrastructure.

E-mobility is picking up speed. According to a study conducted by the Technical University of Munich, the number of electric vehicles on the road in Germany could climb from the current figure of roughly 130,000 to approximately eight million by 2030. The study also forecasts around 4.7 million charging stations by then, including 200,000 high-speed charging stations. By way of comparison, the charging point register from the German Association of Energy and Water Industries (BDEW) recorded 6,700 entries at the start of the year.

Renewable energies are more than just a cornerstone of sustainable mobility. They also make it possible to set up microgrids and virtualized power plants for an affordable power supply. Thousands of decentralized renewable energy plants, heat/power generation units, storage systems and industrial electrical devices are already networked in Europe. For example, home owners can work together via digital platforms and jointly sell the electricity they have generated from solar energy.

To reconcile sustainability, supply security and economic viability, these decentralized systems need to be intelligently controlled. Energy management systems help to enhance efficiency and save energy, to raise the self-consumption of self-generated energy, and to ease the burden on the power grids. Find out how exactly this works and how renewable energies are shaping the cities of the future at The Smarter E Europe.



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INTERSOLAR EUROPE NEWSPAPER | ISSUE 01 2019



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SUBSIDY-FREE SOLAR FUTURE

In Germany, smaller PV systems in particular will begin to lose their eligibility for EEG feed-in tariffs starting in 2021 after having received them for 20 years. New opportunities are now opening up. Experience has shown that the systems are astonishingly reliable. So, in most cases, it makes sense to keep running them even after the tariffs are no longer paid. The obvious approach is to maximize self-consumption of the power generated, to

reduce dependence on expensive conventionally sourced and purchased electricity. Installing a storage system can further increase self-consumption while also making it possible to charge electric vehicles with solar power or use electric heating elements for hot water production. One promising avenue for the future is the direct marketing of solar power via digital platforms. For larger installations, fixed-price power purchase agreements (PPAs) offer

new possibilities. Spain alone is currently planning solar PPA projects which will produce over two gigawatts of energy. A recently completed 175-megawatt PV park is the largest subsidy-free park of its kind to date. It is being financed by a 15-year PPA. Spain has also set a worthy example with the abolition of its controversial "sun tax" on self-produced solar power. High prices of electricity are expected to lead to a major increase in self-consumption.



VISITORS 50,000



COUNTRIES 160

THE SMARTER E EUROPE – A THOROUGHLY INTERNATIONAL EVENT

From 1,172 exhibitors to 1,300 within a year – The smarter E Europe is enjoying impressive growth in 2019. With ten halls and a total area of more than 100,000 sqm, The smarter E Europe is going a step further this year with two additional exhibition halls, reflecting the innovative power of the industry.

Established companies as well as new businesses and start-ups are behind this impressive expansion. They represent the whole spectrum of products, services and solutions for the new energy world and offer an opportunity to gain new perspectives and fresh inspiration – from the latest trends to technologies and innovative concepts.

The smarter E Europe, held every year, is an unmissable international meeting point for the energy industry. The innovative platform brings together four exhibitions: Intersolar Europe, the world's leading exhibition for the solar industry; ees Europe, Europe's largest exhibition for batteries and energy storage systems; Power2Drive Europe, the international exhibition for charging infrastructure and electromobility; and EM-Power, the exhibition for intelligent energy use in industry and buildings. It is the platform for discussing visions and pioneering concepts surrounding the modern energy industry. From utility companies to investors to planners, around 50,000 visitors are expected in 2019; 3,000 more than attended last year's event. One reason for this growth is the dynamic state of the industry, with renewable energies taking off worldwide and sector coupling and digitalization becoming increasingly established.

RENEWABLE HYBRID POWER PLANTS ON THE RISE WORLDWIDE

Renewable hybrid power plants are increasingly moving into the spotlight. They see photovoltaics, wind power and other renewable energies being paired with a storage system. As a starting point, existing diesel power plants can also be suitably retrofitted. Renewable hybrid power plants can secure the power supply to off-grid regions in stand-alone operation as well as feed power into the grid as evenly as possible and provide grid services. The world's largest PV/wind hybrid power plant is currently being developed in

India. In August 2018, the Solar Energy Corporation of India (SECI), a state initiative, announced the construction of a 160 megawatt (MW) installation in the state of Andhra Pradesh. Photovoltaics are expected to contribute 120 MW of energy, with wind power producing another 40 MW. The system is completed by a battery with a storage capacity of 40 MW. In Andhra Pradesh alone, combined PV/wind power plants with 3 gigawatts of capacity are to be built by 2022.



HALL C1 DEDICATED TO PRODUCTION TECHNOLOGIES



The solar market is thriving, and demand for batteries is also rising steadily. The industry's impressive growth is fueling a boom in production. Everything points to a continuing upward trend in the coming years – prompting Intersolar and ees Europe to focus more closely on production technologies. In 2019, the two energy exhibitions will dedicate a shared hall to this topic for the first time, giving it the platform it deserves.

This will allow the PV and storage industry to present its production solutions and innovative manufacturing technologies. A comprehensive accompanying program including the Production Technologies forum will consolidate the focus on these areas. This makes the new hall C1 for PV and battery production the ideal place to learn about the latest trends, meet new business partners and network with global market players, in particular from East Asia.

INTER SOLAR EUROPE CONFERENCE: YOUR TICKET TO THE KNOWLEDGE YOU NEED!

The Intersolar Europe Conference boasts a vast pool of expert PV knowledge for you to draw from. And visitors can enjoy four events for the price of one. With just one ticket, you can visit four conferences at the innovation hub The smarter E Europe on May 14–15, 2019, and learn about all the aspects of a renewable, decentralized and digital power supply.

You can learn everything there is to know about markets, technologies and financing for PV projects at the Intersolar Europe Conference. Aside from market developments in Europe, the spotlight will also be on Africa and the MENA region. PV power plants will be another central topic. And other sessions will provide you with details on the opportunities created by digitalization for the operational control of PV installations.

Several sessions will be dedicated to the interplay between PV and energy storage. Experts will explain how these systems can be planned, assembled and optimized. The Conference will also feature discussions on both operational control and business models. You can also learn about new PV applications at the Intersolar Europe Conference, including systems integrated into buildings or installed on agricultural land or water. The buzzwords are building-integrated PV, agricultural PV and floating solar farms.

For more information, please visit
→ www.intersolar.de → Program

EUROPE IN THE SPOTLIGHT: WHERE IS THE PV MARKET HEADED?



The PV market in Europe is undergoing a transformation. Subsidy-free solar projects are on the rise, for example in Italy and Spain. They are being put into action with the help of power purchase agreements (PPAs) – long-term contracts for buying power at fixed prices. Industry experts agree that PV and wind power projects financed through PPAs will make up a significant segment of industry turnover in Europe in the coming years. Find out how far this development has progressed in Italy and Spain at the session titled "The Future of Photovoltaics in the European Market" at the Intersolar Europe Conference on May 14, 2019. You'll also get the latest on current developments in the German market. Germany shows how affordable PV has become. Experts anticipate that in the future, increasing numbers of PV installations that take part in tenders will manage without the sliding market premium. Staying on top of the complex and constantly changing national and international regulations in Europe is no mean feat. Unless, of course, you come to Intersolar Europe and take advantage of the conference program, where you can discover which new business models offer highly promising new opportunities. The session on the European PV markets also explores various financing programs.

INTER SOLAR EUROPE 2019 SHOWCASES THE LATEST TRENDS

95 percent already booked

Intersolar Europe in Munich is starting 2019 with a bang. Three months before the world's leading exhibition for the solar industry next takes place, 95 percent of the 63,000 square meter exhibition space has already been booked. The current booking status reflects the development of the PV industry. In June 2018, the total worldwide capacity of solar and wind energy installations reached the one terawatt mark (1,000 gigawatts) – a milestone for the new energy world. From May 15–17, visitors can explore the newest trends and technologies in the solar industry. In 2019, for the second time, Intersolar Europe will take place together with three other energy exhibitions under the umbrella of The smarter E Europe – the innovation hub for empowering new energy solutions. Trade visitors and exhibitors from over 160 countries are expected to attend.

Further price reductions for solar modules

Renewable energies are contributing more and more to the clean provision of energy. In fact, according to a recent Deloitte study, PV and wind energy have even evolved from established to preferred energy sources. In addition, the sinking prices of solar modules are playing a major role in the PV industry. IHS Markit predicts that European module prices for solar systems alone will sink by 30 percent – as a result, demand on the continent is expected to increase by 40 percent in 2019.

New aspects added to the agenda

One reason for this trend is the expiration of the minimum import prices for PV products imported to Europe from China, Taiwan and Malaysia. Another driving force behind this development is the reintroduction of government incentives, which countries including Italy and Spain have adopted this year to stimulate the purchasing of private PV installations together with storage systems. There's a sunny outlook for market development and Intersolar

Europe 2019. The industry's robust growth is also fueling a boom in production technologies, which will be showcased in a dedicated hall – hall C1 – for the first time. The Intersolar Europe Conference will shine a light on new aspects alongside the more established focus areas. This means that PV power plants and electrical energy storage systems will be at the forefront. Business models and current projects will be presented, amongst other developments in these areas. PV-powered vehicles will also be discussed.

