

# The World's Leading Exhibition for the Solar Industry MESSE MÜNCHEN, GERMANY







# SEE YOU IN JUNE 2021

Good news – 75 percent of the exhibition space at Intersolar Europe 2021 has already been booked. For this, we are extremely thankful to you. The event's remarkable popularity also goes to show that even after 30 years of Intersolar's existence, personal interactions and networking remain as valuable as ever. In times of uncertainty and restrictions, we would like to find a new rhythm which combines the recently created digital formats with in-person events in order to drive our industry forward. We are working with great enthusiasm every day to bring you the best possible event experience – both online and on-site.

The solar power sector is certainly on track, and Europe's PV market is booming. In some regions, solar energy has already become the most affordable form of energy production. The price of solar power has fallen as low as 1 until 2 euro cent per kilowatt hour in numerous public tenders. In spite of the coronavirus crisis, the prospects for photovoltaics in Europe continue to look promising. SolarPower Europe expects annual new deployment of at least 30 gigawatts over the next three years.

Horst Dufner Head of The smarter E Europe Solar Promotion GmbH Stefanie Eichler Project Leader Freiburg Wirtschaft Touristik und Messe GmbH & Co. KG







# THE LATEST TREND – FLOATING PV

More and more floating solar parks are being installed around the world, primarily as a solution for land shortages and land-use conflicts with the agricultural sector. According to figures published by the World Bank, floating PV installations with a total capacity of around 2 gigawatts were in place at the end of 2019, located primarily in Asia. Floating PV on artificial bodies of water inland is gaining popularity in Europe as well, particularly in the Netherlands, while the first projects are also underway in Germany.

With 27.4 megawatts of capacity, the largest floating PV installation outside China was completed in just seven weeks on an artificial lake near Zwolle in the Netherlands. It began operation in June 2020. In addition to solving land-use conflicts and making efficient use of available space (1.33 MW/hectare), floating solar plants are easier to install than free-standing systems. They also produce higher yields due to the cooling effect of the water and generate lower operating costs.

In some cases, existing grid infrastructure can be utilized, such as for the construction of floating PV installations on pit lakes in former lignite mines, which offer a potential capacity of 2.74 gigawatts in Germany alone. Floating PV installations are still marginally more expensive than land-based solar parks, but a considerable reduction in cost is expected. Floating PV is also topic of the Intersolar South America Digital Xperience, which will take place online on December 1, 2020.

## **|** FOUR TIMES THE EXPERTISE

Do you need the latest PV sales figures for Europe to help you assess the market situation? Are you looking for detailed information to help you make sense of technological developments? Would you like some advice on financing a PV project? Then you should attend the Intersolar Europe Conference on June 8–9, 2021, where you can learn everything you need to know about markets and technologies for PV projects. In addition to the latest developments in Europe and other emerging markets, there is a growing focus on PV power plants, as well as management and maintenance for photovoltaic installations.

With just one ticket, you can visit all four events for the energy world of the future: The Intersolar Europe Conference, ees Europe Conference and Power2Drive Europe Conference as well as the EM-Power Europe Conference. The smarter E Europe shows you just how electricity, heat and transportation will be interconnected in the future and the role sector coupling will play in the energy supply of tomorrow. You also have the opportunity to make new business contacts in other sectors.

## ON-GRID PV MARKETS ON THE RISE IN AFRICA



Until now, the prospects for photovoltaics in Africa have usually been discussed with rural electrification projects in mind. But countries on the continent are increasingly investing in large-scale photovoltaic power plants which feed their solar power into the grid. In Namibia, for example, a 20 megawatts photovoltaic power plant developed by the national utility company NamPower is scheduled to go online this year and a call for tenders for the next phase of the project is expected soon. Meanwhile, planning is currently underway for Togo's first large-scale solar farm with a capacity of 30 megawatts. The governments of Botswana and Namibia have also announced plans to implement solar projects with an installed capacity of 5 gigawatts within the next two decades.

At the specialist conferences, the thematic focus is on generating solar power, storing it in batteries and hydrogen and distributing it via microgrids and smart grids. Other topics of discussion include how solar power can be used in e-mobility and how smart charging works. There is a good reason for these commitments. In the most recent public tenders for on-grid power supply, PV projects offer the cheapest form of electricity. As Africa also offers ideal geographic and climatic conditions for the utilization of solar energy, experts expect rapid growth in demand. SOLARIZE Africa, the market analysis by the German Solar Association, lays out the developments in different countries. Download the SOLARIZE Africa study free of charge at  $\rightarrow$  www.intersolar.de  $\rightarrow$  News & Press  $\rightarrow$  Download Resources  $\rightarrow$  Publications

## THE PV MARKET: DYNAMIC GROWTH DESPITE CORONAVIRUS

By the end of the year, the installed photovoltaic In 2021, annual new installations around the world capacity in Europe is expected to increase to around 168 gigawatts (GW), up from 139.1 GW at the end of 2019. This forecast is published in the annual Global Market Outlook 2020-2024 from the industry association SolarPower Europe. While growth in photovoltaics is slightly lower than expected due to the economic impact of the coronavirus pandemic, deployment continues to increase dynamically.

are expected to increase by as much as 34 percent to 150 GW, potentially supported by government programs promoting sustainability such as the European Green Deal and the EU Recovery Package. On-site consumption solutions are important drivers of market growth which, according to estimations by analysts from EuPD Research, will enable photovoltaic deployment in countries such as Germany to rise to around 5 GW this year.

#### Annual Installed Solar Power Capacity Worldwide



Historical Data Medium Scenario

©Solar Promotion GmbH Source: SolarPower Europe -Global Market Outlook 2020–2024

## **PRODUCTION TECHNOLOGIES IN THE SPOTLIGHT – HALL A3**



#### The solar market in Europe is booming

This will allow the PV industry to present its production solutions and learn about the latest trends, meet new business partners and network

## INTERSOLAR INNOVATION DAY IS WELL RECEIVED – LATEST TRENDS IN THE SPOTLIGHT

The two-day online event celebrated a successful premiere in July 2020, with strong interactive participation. It became clear how steep the learning curve is within such a dynamically innovative industry, as well as how consistently it is moving toward system solutions, new applications, evolutionary technological development and further improvements in efficiency – be it with e-mobility or water treatment, smart inverters, optimized mounting systems or high-performance cells and modules.

Over 30 well-known companies attended the first virtual Intersolar Innovation Day and presented their products and latest developments. There were keynote speeches by Michael Schmela from SolarPower Europe and David Wedepohl from the German Solar Association, who also engaged in discussions with participants from all over the globe.

#### Potential applications for PV and water

Grid-smart photovoltaics holds enormous potential for innovation. It is primarily possible thanks to the latest generation of inverters, which feature, for example, reactive power compensation for operation at night. On-site consumption can be optimized when this technology is used in combination with high-output batteries, smart charging solutions and energy management systems. For example, the latest EV chargers offer users the option to charge

electric cars using only their own solar power. New potential applications are also emerging in building-integrated photovoltaics (BIPV), floating PV, agrivoltaics and wide-ranging applications related to water desalination and treatment as well as irrigation. For example, high hopes are pinned on more sustainable shrimp farms in which water pumps and water processing systems are powered by photovoltaics and the local population is supplied with excess solar power.



### Greater power per unit of surface area

Heterojunction technology (HJT) is the latest trend for cells and modules. Heterojunction cells achieve high efficiencies and are considered to be particularly durable, while their temperature coefficient is particularly favorable, i.e. they lose less power as the temperature rises than conventional crystalline cells. Heterojunction technology combines the advantages of crystalline silicon solar cells with those of thin-film technologies. As a result, HJT solar cells achieve the highest efficiencies while simultaneously reducing production costs.

# I INNOVATION PRIZES FOR THE NEW ENERGY WORLD

# HALL A4 BOOTH A4.530

AWARD Ceremony Wednesday, June 9, 2021 at 4:30pm The renewable energies market is booming – and for good reason. Numerous innovations are propelling the modernization of our energy industry worldwide. Companies that demonstrate particular esprit in their work to find advanced industry solutions have the opportunity to compete for one of the coveted industry innovation prizes from The smarter E: The smarter E AWARD and Intersolar AWARD.

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 pays tribute to pioneering technologies and promising solutions in solar technology. The awards conferred as part of The smarter E Europe reflect international trends, and also indicate the direction in which the energy industry is headed.

Innovations can be submitted for consideration until March 31, 2021. As clearly proven by the results of the previous year, it is worth taking part. Besides major industry players, the finalists once again included many forward-looking SMEs and start-ups – many of which went on to rank among the winners!

Apply now! → www.intersolar-award.com

2021

## EES EUROPE PRESENTS THE HYDROGEN ECONOMY



Hydrogen is increasingly being mentioned as the last missing link in the carbon neutral economic system. Hydrogen helps with decarbonization and enables a round-the-clock supply. A lot of people see huge potential especially in the industry and transport sector. ees Europe showcases the necessary Power-to-X technologies and the enormous commercial potential for manufacturers of electrolyzers and fuel cells.

The industry enjoys support from the political sphere – the European Commission regards hydrogen as one of the key enabling technologies in its strategy for reducing greenhouse gas emissions. A number of EU member states including Austria and Germany are experiencing a hydrogen boom, as can be seen in the initiation of national hydrogen strategies. At ees Europe, you can meet the leaders of the industry. Make the most of this opportunity to expand your business models and make new contacts. For detailed insights and interesting background information, the parallel Power-to-X Conference on June 10, 2021, is the place for you.

## THE SMARTER E EUROPE – THERE FOR YOU 24/7, 365 DAYS A YEAR

The smarter E Europe, the continent's largest platform for the energy industry, unites four energy exhibitions under one roof. All the important topics concerning the energy transition, including the renewable energies, batteries and energy storage systems, e-mobility and the intelligent use of energy in industry and buildings, are on the agenda of the four exhibitions – Intersolar Europe, ees Europe, Power2Drive Europe and EM-Power Europe – and the accompanying conferences.

The vision is a new energy world, in which electricity and heat are generated from 100 percent renewable sources and supplied safely and reliably around the clock without causing any damage to the environment or climate. The smarter E covers the whole spectrum of the industry, offering visitors a comprehensive overview of trends, technologies and innovative concepts for the new energy world. As a platform for the new energy world, The smarter E concentrates on sharing information on energy industry topics



and providing a networking opportunity for global industry players – now with a number of additional digital formats. The innovative platform The smarter E Europe and its four energy exhibitions are not just an in-person event.

The wide range of The smarter E Europe topics is turning into a (live) digital experience. Gain insights into the latest industry trends, market data, research results and product information from Intersolar, ees, Power2Drive and EM-Power Europe and make valuable contacts.

Regular webinars with industry experts offer a deep understanding of market developments and the latest trends in the new energy world. The smarter E Podcast entertains and informs, giving a voice to the players of the new energy world. You can also participate in our digital conferences, seminars, Innovation Days and many other online events for sharing knowledge, presenting brand new market solutions and forging new contacts using interactive networking tools.

Find out more at:  $\rightarrow$  www.TheSmarterE.com

www.intersolar.de

