



Conference Report

MAY 15, 2025

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PLUG-IN SOLAR CONFERENCE

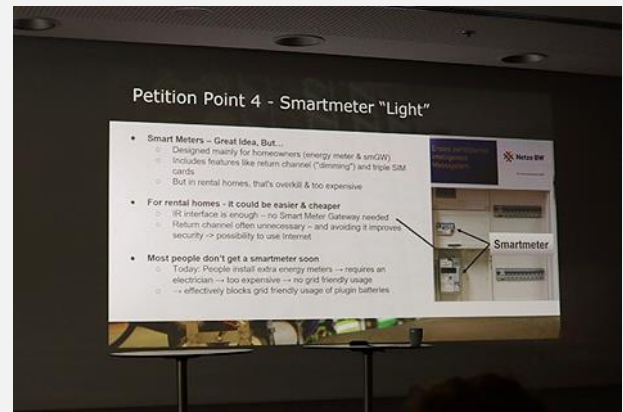
Conference Report 2025

Plug-in solar devices, also known as “balcony power plants,” have only become widely known to the public in Germany in recent years. Standardization and adapted regulation have led to the emergence of a dynamic and exciting market with millions of devices sold and installed. For the first time in history, virtually every household can generate its own sustainable electricity, reduce energy costs, and contribute to the energy transition.

This success soon led to interest in other countries including Austria, Lithuania, Belgium, France and parts of the US facilitating the use of plug-in solar kits. Companies in this young sector are demonstrating innovation, confidence, and a strong commitment to driving the energy transition - especially benefiting those who actively participate in it.

On **May 8, 2025**, the first ever **Plug-In Solar Conference** brought together international key players from the plug-in solar industry as well as from civil society, policy and academia for the first time in an exclusive setting. Participants exchanged ideas and explored current developments and future perspectives. Presentations from experts across various segments of the market offered valuable insights into market factors, best practices, and fresh inspiration for future business development. In addition, the conference’s dialogue-driven program offered numerous networking opportunities and encouraged active contributions to a collaborative and sustainable market evolution.

IMPRESSIONS



SPEAKERS

We were blessed to have been able to welcome a fantastic selection of speakers to this year's Plug-In Solar Conference. These experts gave a broad insight into a rapidly growing market, defined challenges and provided solutions and ideas for the success of plug-in solar in the EU and abroad.

DOUBLE KEYNOTE

The keynote was delivered by two of the most prominent figures of plug-in solar policy in Germany and the EU, **Sven Giegold** and **Michael Bloss**.



Current vice chairman of **Bündnis 90 / Die Grünen** and former undersecretary of the federal department of economy **Sven Giegold** can claim responsibility for the successful implementation of new plug-in solar legislation in Germany which made the current success of the technology there possible.



As a **member of the European Parliament Michael Bloss** is actively pushing for a bigger role of decentralized energy production and use, be it with plug-in solar technology or with energy communities or more.

Both addressed the progress that was made but also gave an outlook to things to come in the future.

INTERNATIONAL REGULATION



With insights from experience and from an extensive report on international plug-in solar regulations by Solar Power Europe, **Alexander Krennek** from micro inverter pioneer **Enphase** was able to grant the audience a deep-dive into the heterogeneous legislation for plug-in solar in Europe. He made clear that in order to create a free and fair market for plug-in solar technology, harmonisation of rules and regulations will be key.

SPEAKERS

THE GERMAN CASE



As director of the environmental and consumer protection **NGO Deutsche Umwelthilfe DUH e.V. Barbara Metz** has been so kind as to share her extensive first-hand experience on the success but also on the setbacks of plug-in solar legislation and regulation in Germany. She expertly made the case for clear wording in legislation by referring to the many open court cases that are currently fought over the right of tenants and apartment owners to install a plug-in solar kit.

A GLOBAL EFFORT



left to right: Dr. David Jacobs, Antonia Ginsberg-Klemmt, Robert Pabierowski, Barbara Metz, Erikas Dailide, Dr. Raymond Ward

The first panel discussion around the topic of international regulation was well equipped with experts from five countries with vastly different plug-in solar rules. While **Dr. David Jacobs from IET - International Energy Transition** reported from a new project to pitch plug-in solar in Vietnam, where it is currently not present at all, **Erikas Dailide from the Lithuanian Consumers Alliance** was able to promote the very progressive plug-in solar legislation which was only recently implemented in Lithuania. In contrast **Robert Pabierowski** from polish solar distributor **OneStep Solar** had to report that the polish government still has not realized the potential of plug-in solar and is currently not granting it the same support as rooftop solar and with current

SPEAKERS

regulation is even preventing it from being legally used. As a surprise guest, we were thrilled to welcome **Dr. Raymond Ward** to the stage, who as **representative in the State House of Utah** had only recently been able to get the first pro plug-in solar law in the US passed in his home state. He and **Antonia "Toni" Ginsberg-Klemmt** from the innovative startup **Gismo Power** shared their mixed experience with plug-in solar regulation and standardization in the United States but expressed high hopes for market development there as well.



A hearty lunch with a variety of pan-European foods like Spätzle, Goulash and panna cotta also gave plenty of opportunity to network.



FOLLOW THE MONEY



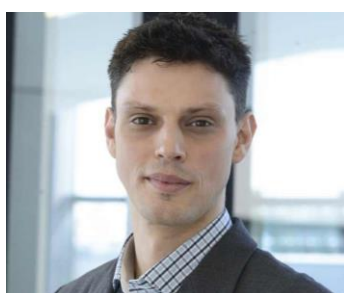
left to right: Christoph Grimmer, Nico Sorge, Mark Schammel, Stephan Scherer

The second panel discussion on value chains featured key innovators and tackled industry-wide topics like patents, plagiarism, manufacturing cost and quality. **Christoph Grimmer**, CEO of austrian plug-in battery pioneer **EET**, shared his experiences with switching manufacturing between China and Europe. **Nico Sorge**, founder of saxonian battery developer **Maxxisun**, added strategies for successful patenting and idea protection. **Mark Schammel**, inventor of the innovative **Solar-Hook** mounting systems, warned of plagiarism and quality issues which could endanger the market as a whole. **Stephan Scherer**, head of the Austro-Texan smart battery inventor **Craftstrom** shed light on the differences between the European and the US markets in that regard.

SPEAKERS

All panelists agreed that tariffs would not solve the challenges of the market. A more innovation-friendly investment strategy by banks and lenders as well as a reduced patent verification time, however, would go a long way.

MAXIMUM INPUT



With his presentation on dynamic load limitation, **Marcus Vietzke** from Berlin-based innovator **Indielux**, opened a new chapter in plug-in solar evolution. His "ready2plugin" system allows for a much higher power-input than the common 800 Watt limit which is currently in effect in most countries with plug-in solar. Thanks to smartly balancing the feed-in towards total household consumption, any overload can be prevented while allowing for up to 2,000 Watts AC of feed-in power. The technology has already been implemented in several products and more will surely follow.

BEAT THE CURVE



As the main petitioner of the German plug-in solar petition of 2023 which successfully demanded the new legislation that lead to almost four million plug-in solar kits being in use today, Andreas Schmitz a.k.a. "Akkudoktor", is a force to be reckoned with. Recently he has put forth a second petition which again passed the threshold and will be discussed in the German parliament. This one asks for the integration of plug-in batteries in the variable grid fee scheme, which is currently only available for heat pumps, ev chargers and other larger consumption devices. A success would open a whole new market for plug-in batteries, make them usable to flatten the solar peak and thus make them into a veritable pillar for grid stability and resilience – even without a single solar panel attached.

SPEAKERS

FIRE HAZARD?

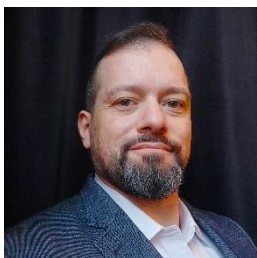


As a researcher at the renowned HTW Berlin, Josef Bergner has been looking into the development of the plug-in solar market as well as in the technical background for years. With his new study from 2025 he could prove that even with 2,000 Wp of modules attached to the inverter, the 800 W input from a plug-in solar kit does not raise the risk of an overload or a fire in the legacy wiring, even under the worst of conditions.

A2+ – imagined worst case, #Nightmare



A WORD FROM THE ORGANIZERS



With humble gratitude towards the many participants and sponsors, the German plug-in solar association (Bundesverband Steckersolar e.V. BVSS) through chairman Christian Ofenheusele (left) and head of international affairs Boris Hageney (right) ended the first ever PLUG-IN SOLAR CONFERENCE and added a plea for a continued international effort towards an open market for plug-in solar and the signing of a Joint Declaration to that regard.

Presentations and recordings from the event are partly available on demand. If you have a request, write us at conference@pluginsolarconference.com.



JOINT DECLARATION

In recognition of the fundamental impact that the rise of plug-in solar technology will undoubtedly have on the structure of energy production, the participants of the PLUG-IN SOLAR CONFERENCE 2025 have signed the following declaration.



Joint Declaration of the Plug-In Solar Conference 2025

Empowering Citizens for a Renewable Future

We, the undersigned stakeholders from business, academia, policy, and civil society representing diverse regions and backgrounds, convened at the Plug-In Solar Conference 2025 to address one of the most urgent challenges of our time: the full transition to renewable energy.

Recognizing the urgency of achieving 100% renewable energy systems globally, we jointly declare:

- 1. Citizen participation is essential**
The full transition towards renewable energy is only possible if citizens are empowered and enabled to actively participate in the generation, storage, and management of energy.
- 2. Accessibility and affordability are key**
To maximize the number of citizens involved, participation must be affordable and accessible, including through do-it-yourself (DIY) solutions that lower the threshold for engagement.
- 3. Plug-in technologies drive participation**
Plug-In Solar Kits and Plug-In Batteries have proven to be effective and scalable tools for democratizing energy production and consumption, allowing even renters and apartment owners to contribute directly to the renewable transition.
- 4. Towards a decentralized energy grid**
The widespread use of small-scale plug-in devices is fostering the emergence of decentralized energy grids that are more resilient, efficient, and cost-effective than traditional centralized systems.
- 5. Integrating small-scale solutions in grid management**
National and regional energy strategies must recognize and integrate small-scale production and storage in grid management. Doing so introduces critical flexibility, stabilizes supply, and accelerates the transition towards affordable and secure 100% renewable energy systems.
- 6. Call to lawmakers**
We urge lawmakers around the globe to swiftly remove regulatory barriers and establish strong incentives to promote the broad adoption of plug-in solar and storage technologies.
- 7. Energy democracy: the future is in the hands of citizens**
We affirm that the future of energy lies in decentralized citizen participation. By empowering individuals, families, and communities, we can ensure a faster, fairer, and more resilient energy transition.

SPONSORS

The first ever PLUG-IN SOLAR CONFERENCE was supported by the following Organizations:



GismoPower LLC

GismoPower from Sarasota, Florida, is making waves in renewables by putting balcony solar on steroids. Founder Antonia "Toni" Ginsberg-Klemmt is a mechanical engineer who graduated from UC Berkeley's Fung Institute. She patented the MEGA (Mobile Electricity Generating Appliance), a portable, powerful (6 kW), plug-in PV-EV charging carport designed to provide affordable and accessible solar energy without the high costs of permanent installations. Her invention has earned her the American Made Solar Prize and a SBIR DOE Phase II grant. She is recognized as one of the Top 25 Entrepreneurs Under 25 by the Tampa Bay Business Journal.



EcoFlow Technology Ltd.

EcoFlow is a leading innovator in portable and home energy solutions, founded in 2017. Widely recognized for its high-performance power stations such as the DELTA and RIVER series, EcoFlow has expanded its portfolio with cutting-edge technologies for off-grid living, emergency backup, and sustainable energy use. A key highlight was the introduction of the PowerStream product line - a modular, plug-and-play solar energy system designed for effortless integration into everyday homes. Now,

SPONSORS

EcoFlow has expanded its product lineup with the introduction of the STREAM Series, which has all the advantages of the PowerStream system. Building upon the success of its predecessor, the STREAM Series offers enhanced scalability up to 11,5 kWh, zero feed-in option, AI-powered app control with dynamic tariff options, a 1,200 W bidirectional inverter, 2,300 Watts via bypass-output and up to a whopping 12 kWp of solar input. With this enhanced functionality it offers maximum flexibility for residential energy needs.



Anker Innovations Ltd.

Anker, a trusted name in consumer electronics, and the leading supplier of plug-in solar batteries has set a new bar with the SOLIX Solarbank 3 - a smart, modular storage system designed for plug-and-play solar setups. Tailored especially for balcony power plants, the Solarbank 3 offers a base capacity of 2.7 kWh, expandable up to 16 kWh, and supports up to eight solar panels for maximum flexibility. With AI-driven Anker Intelligence™, the system optimizes energy use based on weather, consumption, and electricity prices.



Priwatt GmbH

Priwatt, a leading German provider of plug-in solar solutions, has been in the business of introducing innovative products to the market for years. In 2025 the company launched Orbit, an app-based energy management system. Orbit enables users to monitor and control their energy usage, integrating solar panels, batteries, and smart appliances and automating device operation based on solar production and dynamic electricity prices. The system is compatible with a wide range of devices and requires no additional hardware, making it accessible for users aiming to increase their solar self-consumption and achieve greater energy independence.



SPONSORS



Blackforest Solar Solutions GmbH

Blackforest Solar Solutions from Appenweier is a specialized provider of high-quality plug-in solar devices. The company is also the official distributor in southern Germany for Wattstone's plug-in solar mounting solutions,

which ensure a stable setup even under strong wind conditions. In addition, this versatile company offers larger PV systems, storage units, climate control technology, and solar carports.

Maxxisun

Maxxisun / Maxihandel GmbH

Maxxisun is a leading German developer in the field of plug-and-play battery storage systems. With its MAXXICHARGE systems, the

company is setting new standards. For example, they are the only patented products from a German manufacturer that meet the legal requirements for "zero feed-in control." In addition, starting in 2025, MAXXICHARGE will be equipped with the "Maxxicharge CCU V2" control unit, which features control technology that is already "Energy Sharing ready" — meaning it can take advantage of upcoming new usage models for small-scale storage systems.



Bright Saver, Inc.

FUSS e.V.

FUSS e.V. Schöna



JOIN US!

The movement is only just beginning!

The international effort to establish plug-in solar depends on a strong and reliable network to provide guidance, information and support. The German plug-in solar association Bundesverband Steckersolar e.V. (BVSS) will continue to breathe life into this network and to support initiatives for decentralized renewable energy production, storage and use in countries around the globe.

For this, we are relying strongly on our supporters. So if you would like to become a supporter, please consider a support membership. You can find the membership options in our membership form at

<https://bundesverband-steckersolar.de/mitglied-werden/>

or use this QR-code.

