

EM-Power Europe**Munich, June 14–16, 2023****EM-POWER EUROPE: START-UPS ARE DRIVING OUR FUTURE ENERGY SYSTEM**

Munich/Pforzheim, June 7, 2023 – The energy supply of the future is safe, climate-friendly and based on the efficient use of renewable energy. This requires the centralized and decentralized components of the energy system to work together seamlessly. With their new and creative ideas, start-ups are making an important contribution digitalizing our power system. They will be presenting their solutions and products at EM-Power Europe, the international exhibition for energy management and integrated energy solutions, which will take place alongside Intersolar Europe, ees Europe and Power2Drive Europe as part of The smarter E Europe in Munich from June 14 to 16, 2023.

While sunlight and wind are abundant, they are also volatile. For them to reliably cover our electricity, heat and mobility demands, it is not enough to simply build more solar and wind farms. Instead, it is much more important to store excess electricity and control the distribution and timing of our energy flows. For example, millions of electricity producers and consumers could play an active role in the energy system by integrating their decentralized power plants and flexible loads and storage devices. This swarm grid requires secure measurement and communications technologies as well as machine learning and artificial intelligence (AI) to function. Many of the new approaches were developed by start-ups and young companies, which will present themselves at EM-Power Europe 2023.

Entrix: Marketing the flexibility of large-scale batteries

Flexibility, i.e. the targeted discharging and feed in of energy amounts into the grid, will become its a product of its own in our new energy system. Entrix, a young company from Munich, is dedicated to marketing the flexibility of large-scale batteries as favorably as possible. Up until now, these batteries have often been used to provide transmission system operators with balancing power, but this is not always the most profitable option. "We've developed algorithms based on AI that market flexibility in real time. Providing balancing power is only one of many potential revenue streams. Batteries are increasingly used in electricity trading. The trick lies in finding the ideal combination of revenue streams each day," Steffen Schülzchen, founder and CEO of Entrix, explains.

decarbon1ze: Using solar power for heating instead of curtailing it

The start-up decarbon1ze focuses on converting solar and wind power into heat which would otherwise be curtailed to prevent grid congestions. In 2021, around six terawatt-hours of renewable energy were curtailed in Germany – while gas and oil-fired boilers continued to run. It will take a long the time for them all to be replaced with heat pumps or environment-friendly district heating systems, especially in urban multi-family dwellings. "Millions of households fall into this category," Knut Hechtfischer, CEO and co-founder of decarbon1ze, explains. His start-up intends to use these heating systems' hot water storage tanks as sustainable sources of energy, This can be achieved quickly and inexpensively by using electric heating elements and simple controllers – instantly saving large amounts of CO2.

BeChained: Marketing load shifting collectively

The primary goal of BeChained, a young Spanish company, is to market flexibility in commercial and industrial companies. A digital twin helps find the best way of lowering energy consumption without disturbing production flows. "Break-even is reached within less than a year. BeChained uses real-time data management to automatically adjust production schedules, which never interferes with the production processes," says founder and CEO Stefano Melchior. This can be achieved through load shifting and by adjusting the settings of individual machines, for instance. Once regulations allow it, BeChained also intends to act as a service provider and market the flexibility of its pool of clients locally – first in Spain and the UK, then in Germany and Finland. Their clients benefit from lower energy costs and receive additional income from marketing their flexibility.

EnExpert: Knowing where the power is really going

Small and medium enterprises not only require energy management, but also the appropriate measurement technology to record their energy flows. EnExpert from South Tyrol has developed wireless sensors that accurately record energy and substance flows in power lines and liquid pipes in intervals of seconds without interfering. The intuitive online platform provides an overview and enables users to reduce and shift their energy consumption individually. "In most cases, we can instantly achieve savings of twenty percent. As time goes on, we continue to work with our clients to optimize their energy flows," says Julian Sommovilla, co-founder of EnExpert. What's more: The energy audit required by the European Union (EU) every three years can largely be generated automatically with the data collected by EnExpert.

EnergyFamily: Sharing sustainable electricity

It is not only businesses that can benefit from the digital and decentralized energy world, but also private individuals and municipalities. An EU policy allows regional energy communities to jointly produce and consume sustainable electricity. The EnergyFamily platform helps manage the whole process – from establishing the energy community to invoicing consumption. Members of the community can also gift each other electricity or use it to charge electric cars on the road, for example. At present, EnergyFamily is designed to fulfill Austria's specifications, but it will soon become available in Italy and Spain as well. Once Germany has implemented the EU policy, it is set to follow. "Generation, storage and consumption of energy are set to become resource-conserving, transparent and a collaborative affair. Energy communities are the key to this. EnergyFamily helps make their implementation as simple as possible. This is how we can come together to create something good and make an important contribution to the energy transition," Lukas Prenner, founder of the Austrian start-up, explains.

A breath of fresh air at EM-Power Europe 2023

The power grid of the future needs to be digital, flexible, smart and integrated if it is going to guarantee a reliable supply of renewable energy around the clock. EM-Power Europe 2023 will focus on the modernization of the power grid to become a flexible smart grid, the integration of prosumers, e-mobility and power-to-heat concepts into a holistic, renewable energy system, and the efficient use of renewable sources of energy. Start-ups, young companies and established businesses alike will be gathering at this year's EM-Power Europe from June 14 to 16, 2023 to showcase new digital solutions, technologies and products. You'll be able to find all the start-ups mentioned above at their own booths as well as at the Start-ups@The smarter E Europe or "Innovation made in Germany" joint booths in hall B5, the latter being promoted by the Federal Ministry for Economic Affairs and Climate Action (BMWK). What's more, founders who are

paving the way towards a sustainable energy supply with their products and solutions will hold ten-minute presentations at the EM-Power Forum (hall B5, booth B5.630), giving trade visitors insights into their visions.

EM-Power Europe and the parallel events ees Europe, Intersolar Europe and Power2Drive Europe will all take place as part of Europe's largest platform for the energy industry, The smarter E Europe, at Messe München from June 14–16, 2023.

For more information, please visit:

www.em-power.eu

www.TheSmarterE.de

EM-Power Europe

EM-Power Europe is the international exhibition for energy management and integrated energy solutions. It is focused on modernizing and digitalizing the power grid into a flexible smart grid, integrating prosumers, e-mobility and power-to-heat concepts into a holistic, renewable energy system, and the efficient use of renewable sources of energy. It showcases innovative technologies and solutions for a 24/7 climate-neutral energy supply to grid operators, utility companies, project developers, service providers and decision makers from industry, commerce and real estate.

EM-Power Europe will take place from June 14–16, 2023, at Messe München as part of Europe's largest platform for the energy industry, The smarter E Europe. The exhibition will be accompanied by the EM-Power Europe Conference that presents the perfect opportunity to discuss the smart integration of decentralized energy installations, grid management and flexibilities into the energy system of the future with international experts.

Three other energy exhibitions – Intersolar Europe, ees Europe and Power2Drive Europe – will take place in parallel to EM-Power Europe, providing the framework for exchange between the solar, storage and e-mobility sectors.

EM-Power Europe is organized by Solar Promotion GmbH, Pforzheim, and Freiburg Wirtschaft Touristik und Messe GmbH & Co. KG (FWTM).

For more information on EM-Power Europe, please visit: www.em-power.eu.

Contact:

Solar Promotion GmbH | P.O. Box 100 170 | 75101 Pforzheim, Germany

Barbara Pilz | Tel.: +49 7231 58598-214 | Fax: +49 7231 58598-28

pilz@solarpromotion.com

Press contact:

Solar Promotion GmbH | P.O. Box 100 170 | 75101 Pforzheim, Germany

Peggy Zilay | Tel.: +49 7231 58598-240

zilay@solarpromotion.de

fischerAppelt, relations | Otl-Aicher-Str. 64 | 80807 Munich, Germany

Juliane Heermeier

juliane.heermeier@fischerappelt.de