

Key element of the energy transition: EcoG presents, together with Infineon, scalable solution for bi-directional charging

- Munich-based tech company EcoG presents, together with cooperation partner Infineon, standard-compliant technology for bi-directional charging for the first time at the Power2Drive industry trade fair.
- Bi-directional charging enables the integration of vehicle batteries into the grid and thus
 effective use of batteries in e-cars for more grid stability. ISO standard to enable
 scaling of bi-directional charging.

MUNICH, 31st of May, 2023: Vehicle-to-grid (V2G) solutions are a game changer in charging infrastructure. Wheeled energy storage devices on the move can become part of the grid infrastructure and, for example, temporarily store surplus solar energy and power the domestic heat pump during peak loads in the grid. The Munich-based company EcoG has now shown that this is technically possible. In addition, EcoG has developed an ISO standard together with the automotive and charging infrastructure industry that makes the technology suitable for mass production. At the Power2Drive trade show, the company is presenting the technology that follows the new ISO standard for the first time.

The growing popularity of heat pumps and electric cars poses new challenges for the power grid. But the growing number of electric cars in conjunction with their batteries offers the potential to ensure grid stability and increase the share of renewable energies in the power grid. One million electric vehicles are on the road today, and that number is expected to reach 15 million by 2030. These vehicles are crucial to the energy transition. Already, the battery storage in electric cars is larger than all German pumped storage power plants combined. The challenge is to make their battery storage effectively usable.

Bi-directional charging plays a decisive role here. For a long time, widespread introduction failed to achieve uniform implementation because there was little compatibility between wallboxes and car manufacturers. Munich-based tech company EcoG is the first to offer a solution tested with vehicle manufacturers in accordance with the new ISO 15118-20 BPT standard, which ensures that all vehicles can be charged bidirectionally in accordance with this standard. Technical agreements between charging stations and car manufacturers in the development phase become redundant. The software is designed so that all vehicle-to-grid-capable vehicles will work with it – including vehicles that are still being developed. EcoG also handles the complicated interoperability tests together with the vehicle manufacturers.

Standardization creates basis for scalability

As a core member of the industry association CharlN, EcoG worked for months to develop the application description for the ISO standard. This standardization makes the technology scalable for the first time. In recent tests with a prototype based on the standard, EcoG was able



to demonstrate the interoperability of its technology. EcoG founder and CTO Johannes Hund says: "The fact that bi-directional charging actually works according to ISO 15118-20 BPT is a big step forward. This allows the technology to be applied to the mass market in the future, as customers can now be sure that their wallbox can communicate with any V2G-enabled vehicle in the field." Co-Founder and CEO Jörg Heuer adds, "This is essential for electric vehicles' contribution to the energy transition: On the one hand, I increasingly have the option to charge wherever I am, and on the other hand, it can also stabilize the power grid in the short term – A win-win situation."

EcoG will present its solution for the first time at the <u>Power2Drive</u> trade fair, which will take place between June 14 and 16 at the Munich exhibition center. In addition to charge controllers, the technology company will present a pre-integrated reference design for bi-directional charging. Together with the cooperation partner Infineon, market leader in power semiconductors, EcoG develops a starter kit with integrated 22 kW inverter and EcoG controller. The current status will be on display at the booth (Hall B5, Booth 573). The cooperation is seen as a starting point to bring bi-directional charging into the field with the automotive supplier industry.

The EcoG team will be available for a personal meeting at Power2Drive in Munich (Hall B5, Booth 573). Advance registration is requested.

About EcoG

EcoG is a global IP and tech company working on the rapid expansion of sustainable charging infrastructure for electric vehicles. With its charge controllers, reference designs and software, it enables companies to get products & services to market quickly and scale profitably.

EcoG is already the market leader in Europe with more than 15% market share and a strong footprint in the Indian and North American markets. Overall, EcoG grew four times faster than the market last year. Industrial giants such as Siemens or one of the world's largest service station equipment suppliers are among its customers. The company continues to grow in 2024 and as a next step invests 14,4M\$ in its North American HQ in the USA.

Press Contact EcoG:

Mirjam Laubenbacher, Head of Communications mirjam@ecog.io +49 151 28209346