



## E-MOBILITY IN THE FAST LANE

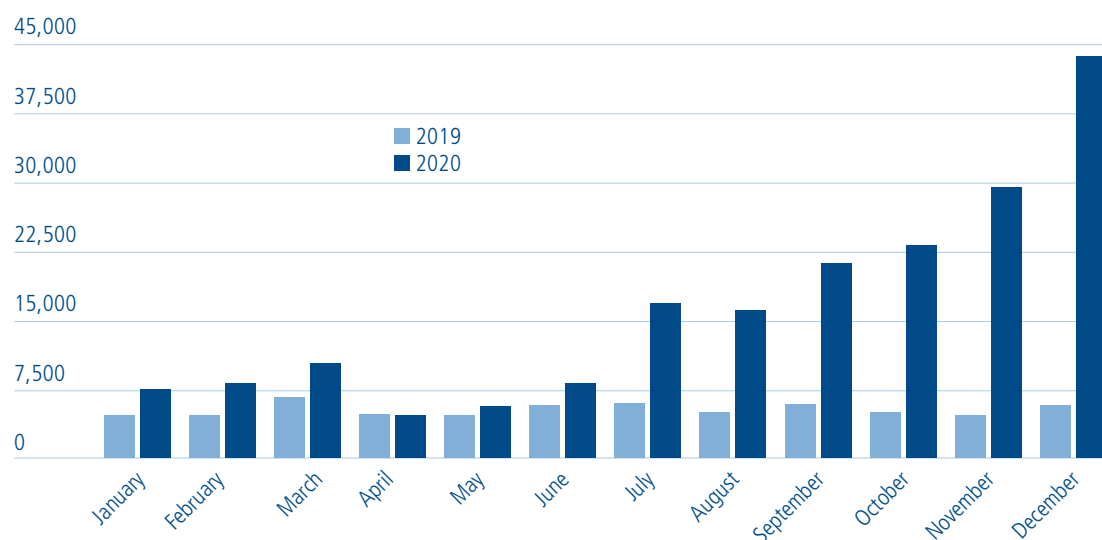
Electric vehicles and environmentally friendlier driving are gathering momentum all across Europe – especially in the largest mobility markets of Germany, Norway, the Netherlands and Sweden. Compared to last year, the number of newly registered electric passenger cars in the EU has gone up by more than half in 2020. PHEV and BEV achieved a market share of just over 12 percent of all new vehicle registrations – of which BEVs accounted for 55 percent (726,000). According to the German Federal Motor Transport Authority (KBA), a

record 43,671 electric vehicles were registered in the country in December 2020 alone. The European electric vehicle factbook 2019/2020 reports that every fourth car in Norway is electric. Progress is also being made in the expansion of charging infrastructure. Automobile manufacturers, municipal utilities, fuel station operators and other companies and stakeholders from various industries are all investing in charging stations for electric vehicles. If Europe wants to achieve the targets of its Environment Action Programme 2030,

it will need to successfully transition away from oil-based fuels. For this reason, and because more efficient e-mobility is increasingly becoming the norm, many municipal enterprises are electrifying their bus fleets, and companies and car sharing organizations are electrifying their vehicle fleets as well. You can learn everything you need to know about current developments, the latest ideas and the most important trends at Power2Drive Europe, the leading exhibition for e-mobility in the renewable energy system.

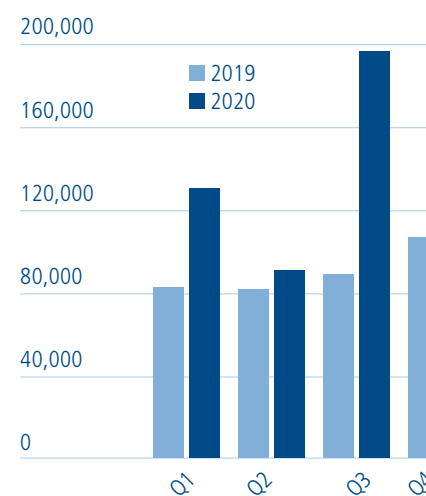
### NEW ELECTRIC VEHICLE REGISTRATIONS 2019–2020

#### GERMANY



Source: Kraftfahrt-Bundesamt (KBA)  
As of 01/2021 | Graphic: ©Solar Promotion GmbH

#### EUROPE



Source: National Automobile Manufacturers' Associations  
As of Q3/2020 | Graphic: ©Solar Promotion GmbH





## SMART ADVANCEMENTS THROUGH E-MOBILITY

Across Europe, more and more electric cars are taking to the streets. In addition to overall sales numbers, the number of charging stations has also risen in 2020. This year, 213,367 charging stations were in operation, representing a 23 percent increase over the previous year (2019: 164,016). According to the European Alternative Fuels Observatory, every eighth car is an electric one. The German government's current stimulus package takes the expansion of charging infrastructure into account and should prove useful in promoting further growth in this area. In Norway, an existing stimulus package is actually being retracted since electric cars are so popular that it has become unnecessary.

The market's agility is also apparent in the market overview from Power2Drive Europe, which is published each spring. The overview shows which charging technology and intelligent technological solutions are available on the European e-mobility market and lists suppliers of AC and DC charging solutions and products, as well as solar carport suppliers. The range of IT products for managing commercial and (semi-)public charging grids has also been significantly expanded. And that's not all – the number of available high-speed charging stations is rising, too. The market overview is available for download free of charge.

Present your smart charging infrastructure concepts at Power2Drive Europe, the international exhibition for charging infrastructure and e-mobility, taking place in Munich from June 9 to 11, 2021.

## TEST DRIVES, PERSONAL CONNECTIONS AND PROFESSIONAL NETWORKING

Power2Drive Europe turns the mobility transition into an interactive experience. In addition to the latest electric vehicles, various opportunities to network with potential business partners and cutting-edge specialist presentations – at the Power2Drive Forum as well as the accompanying specialist conference – the exhibition will have plenty of innovations in e-mobility for you to get your hands on. For instance, you will have the chance to showcase your electric cars or light vehicles in one of the two test drives alongside renowned manufacturers such as Polestar and Volvo. Offer your visitors a free test drive in one of your vehicles and impress them with your e-mobility innovations.



## POWER2DRIVE EUROPE CONFERENCE 2021



Interactivity will be the name of the game when experts, key players and pioneers shaping the mobility of the future gather in Munich at the Power2Drive Europe Conference. International experts will rely on exciting discussion formats to illuminate trends, market analyses and effects of synergy within the world of e-mobility. Come and be a part of it to learn more about the mobility transition from industry insiders.

A single ticket gives you access to a whole wealth of expert knowledge at the other The Smarter E Europe Conferences: Intersolar Europe Conference, ees Europe Conference and EM-Power Europe Conference.

**Venue:** ICM – Internationales Congress Center München

**Date:** June 8–9, 2021

**Focus of day 1:** E-mobility: markets and synergy effects

**Focus of day 2:** Smart mobility: solutions in charging infrastructure and mobility services



## FLEETS, COMMERCIAL VEHICLES AND THE LAST MILE

E-mobility has already established itself in the area of passenger cars. Now, the time has come to turn to e-mobility for serially produced commercial vehicles. Many electric cargo vans and e-buses are currently entering the market. Flexible, efficient and environmentally friendly: Sporty electric cargo bikes are also in vogue, offering a new solution to the problem of the 'last mile.' Electric vehicles directly have a remarkably high torque, and they can store energy from braking in a high-voltage battery and reuse it as propulsion energy. They even get good mileage. Commercial vehicles with an electric drive can therefore be used in more areas, enhanced by the flexible use of e-trailers whose batteries can also be used on-site for other applications. In light of the stark growth seen in

online commerce, more and more new solutions have become necessary specifically for delivering goods and products the 'last mile' to the customer's front door. A study conducted by the consulting firm McKinsey found that the demand for last-mile services in city centers could rise by 78 percent worldwide by 2030. The focus lies on innovative solutions in the commercial vehicle sector which are redefining traffic patterns in both metropolitan and rural areas, with great customer benefits for consumers and in the transportation sector.

In addition to innovative solutions for electric vehicles and charging infrastructure, Power2Drive Europe also plays host to many transportation sector products which promote the evolving mobility world, all found in hall B6.



## BEM AND AVERE SUPPORT POWER2DRIVE EUROPE



Power2Drive Europe, the international exhibition for charging infrastructure and e-mobility, and the German Federal Association for eMobility (BEM) are working together more intensely than ever before and intend to continue their cooperative efforts over the long term. Together, they are seeking to use renewable sources of energy to restructure the transportation sector in Germany and switch over to sustainable mobility. After having established a close partnership with the European Association for Electromobility AVERE in 2019, Power2Drive has now gained a new partner in the most important German association in e-mobility. The project partners are therefore well on their way, as proven by the current numbers of registered electric vehicles. Current developments are a source of good news all across Europe. The Electric Vehicle Outlook 2020 published by BloombergNEF predicts that by 2030 nearly a third of all vehicles with an electric drive sold worldwide could be on the roads in Europe – a market second only to China.

Power2Drive Europe is part of The smarter E Europe – the continent's largest platform for the energy industry – and enables the e-mobility industry to connect with other sectors of the renewable, decentralized and digital energy industry. "Power2Drive Europe covers topics that belong together, bringing the energy and mobility transitions together under one roof," says BEM president Kurt Sigl.

## „THERE IS ENORMOUS POTENTIAL FOR US IN TERMS OF CHARGING INFRASTRUCTURE“

### Expert interview with Markus Emmert, board member of the german federal association for Emobility (BEM).

E-mobility in Europe is booming. As a key location for economic activity, Germany is profiting from the expansion of charging infrastructure in the public and private sectors. Where does Germany currently stand compared to its European neighbors? Who can we learn from? And what new markets are on the rise at the moment?

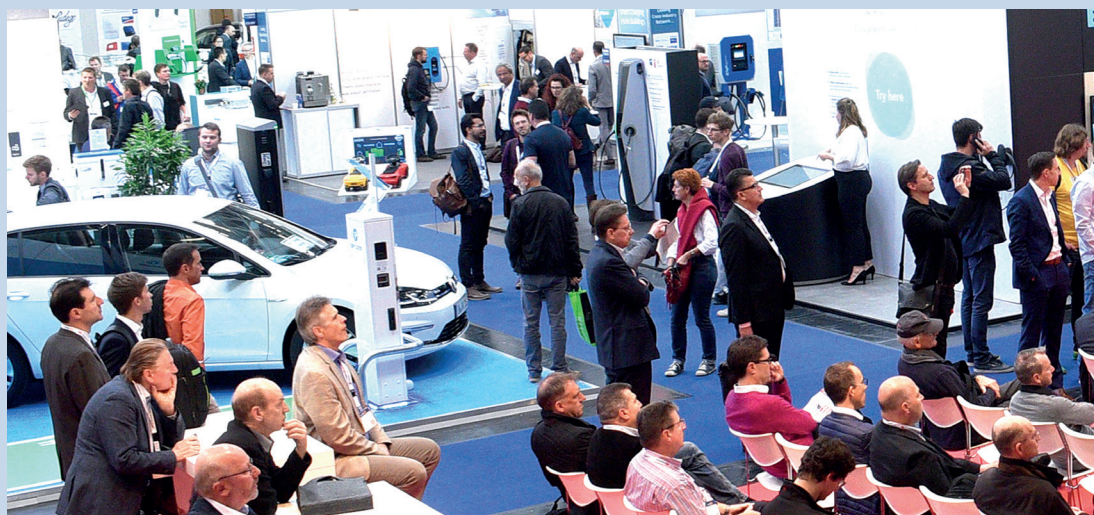
**Emmert:** Germany is finally on the right track after years of lagging behind. We are currently trying to jump on board before the metaphorical ship has sailed completely, and it has already gained a lot of speed. Compared with other European countries, Germany's progress and performance is average. But the good news is that there is enormous potential for us in terms of charging infrastructure if we go about things the right way. It is a matter of economy and a huge source of jobs. In 2019, we already published figures showing that charging infrastructure alone will produce more than 255,000 new jobs.

What other measures can we expect in the coming years in the realm of e-mobility with respect to the EU Energy Performance of Buildings Directive (EPBD) for increasing the energy efficiency of residential and non-residential buildings?

**Emmert:** In view of buildings and "consumers" as an energy ecosystem, we must do a better job of tapping into existing potential. This would allow the potential offered by an electric vehicle – or rather, mobile energy storage device – to be better integrated in the overall energy flow architecture so that energy can be charged at a suitable time or fed back out when demand is high, for example. The various components are then all combined symbiotically to contribute to overall energy efficiency.

In order to be able to charge as many cars as possible at each charging point, each car would have to be unplugged immediately after each charge to make room for the next one. So will this be part of the "new normal of mobility," or what type of charge + park solutions do you think we can expect in the coming years?

**Emmert:** In particular, we need drive-through charging points at high-speed charging stations which can be started up quickly, regardless of which type of car they are charging (even cars with trailers hitched to them and commercial vehicles). This will allow the charging point to be made available again after each short charging session – which will only take a matter of minutes in the future. Normal charging points are a different situation. They are more responsible for long charging sessions (while the owner is shopping or in a meeting, or for charging overnight, etc.).





## HALL A4 BOOTH A4.530

AWARD Ceremony  
Wednesday, June 9, 2021  
at 4:30pm



## INNOVATION PRIZES FOR THE NEW ENERGY WORLD

The renewable energies market is booming – and for good reason. Numerous innovations are propelling the modernization of our energy infrastructure worldwide. Companies that demonstrate particular esprit in their work by developing advanced industry solutions have the opportunity to compete for one of the coveted industry innovation prizes from The smarter E: The smarter E AWARD, Intersolar AWARD and ees 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.

Electromobility plays a key role, there is a correspondingly large number of innovations in the context of sector coupling. The award, which is presented as part of The smarter E Europe, reflects international industry trends and thus sets the direction for the further development of the energy industry.

Innovations can be entered in each of the categories for consideration until March 31, 2021. As clearly proven by the results of the previous years, it is worth taking part. Besides major industry players, the finalists once again included many forward-looking SMEs and start-ups – including ZnR Batteries and Mondas.

Apply now! → [www.TheSmarterE-award.com](http://www.TheSmarterE-award.com)

## → E-MOBILITY, PHOTOVOLTAICS, STORAGE AND HEAT BUNDLED TOGETHER IN THE NEW TRANSPORTATION WORLD



Tomorrow's mobility will be powered by the sun. Private households and companies alike are investing in private PV installations for powering their own electric vehicles. This combination not only helps commercial businesses to charge their cars cost-effective, but also enables them to optimize their load profile and to avoid load peaks, thereby reducing costs. Bidirectional charging stations and intelligent charge management also prove useful.

In the future, electric vehicles will be much more than transportation machines – they will also serve as mobile storage systems. They will be able to feed their own electric power into the owners' homes (vehicle-to-home) when demand is high and, once regulations permit it, even into the public grid (vehicle-to-grid). Vehicle-to-grid makes economic sense, and prosumers as well as mobility providers, automobile manufacturers, grid operators and utility companies can all benefit from it. Sector coupling also has potential, e.g. to support the heat supply in the home or neighborhood from the e-car via heat pumps (Power2Heat).

## 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: → [www.TheSmarterE.com](http://www.TheSmarterE.com)

