

E-car sharing comes of age

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Credit: Fraunhofer IAO

Giving up your own car and sharing one with other people instead – car sharing is the hot trend of the moment. But if it's going to succeed with electric vehicles, charging times need to be shorter and booking processes simpler. That means a straightforward process for finding the electric car that best suits your needs as well as a wide-ranging charging infrastructure. At the eCarTec trade fair in Munich on October 22, six Fraunhofer Institutes will be demonstrating the technology that will make e car sharing a viable concept.

Every day, private motor transportation causes [traffic jams](#), pollution and a shortage of [parking spaces](#). The number one mode of transportation – the automobile – is one of the biggest burdens on urban spaces and their inhabitants. But does it have to be this way? Other

options have emerged that offer reliable, low-emission mobility in cities and the surrounding areas: not just electromobility, but digital networking and car sharing, too. In a project entitled "Shared use of e-mobility: vehicles, data and infrastructure" (GeMo for short), six Fraunhofer Institutes are combining these trends, which so far have been worked on virtually in isolation, and making them accessible.

The result: a comprehensive package of eight technological innovations that are making shared e-vehicles the true superheroes of the city. To better demonstrate these advances, the institutes have bundled them in a concept car. With access to a pioneering infrastructure featuring inductive charging stations and cloud-based charging management, charging the e-car becomes fast and straightforward. What's more, if it's a [car sharing vehicle](#), drivers can easily find it in the city and book it using a convenient app. An on-board unit enables the car to communicate with various cloud services, other e vehicles and the charging infrastructure. As a result, the [car](#) can provide data on its position, or how much charge its battery has remaining.

"To make shared mobility a reality, we have to link vehicles, data and infrastructure. That was the core of our project," says Florian Rothfuss, the person in charge of the GeMo project at consortium leader Fraunhofer IAO. "What we need are applicable information and communication solutions that are both very reliable and easy to use. However, everything depends on having a convenient charging [infrastructure](#) integrated within the city." The six Fraunhofer Institutes will reveal their solutions on October 22 at eCarTec in Munich (Booth 418). Naturally, visitors will have the chance to take a close look at the [concept car](#) and get information about the new technologies straight from the developers. Experts from automotive manufacturing as well as urban and project development will also be on hand to discuss the future of mobility.

Provided by Fraunhofer

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