

PRESS RELEASE

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Companies Save Costs and Emissions by Helping Employees to Charge their Cars at Home

- **Home chargers reduce emissions of plug-in hybrids by 38%**
- **The amount of electricity charged increases more than fourfold**
- **EPoS Economic Research Center analyzes corporate fleet of 1,263 cars in Germany**

Bonn, Mannheim, 12.03.2025 – **The decarbonization of Germany’s transport sector needs to pick up speed to reach national and international climate targets: In 2024, sales of Battery Electric Vehicles (BEV) slumped, according to official statistics. At the same time, research shows that Plug-in Hybrid Electric Vehicles (PHEV) use more fossil fuels than necessary. A new study provides evidence that corporate CO2 emissions and energy costs associated with plug-in hybrid company cars can be cut substantially by investing in home charging stations. These findings are published by the EPoS Economic Research Center at the Universities of Bonn and Mannheim in the discussion paper “No Place Like Home: Charging Infrastructure and the Environmental Advantage of Plug-in Hybrid Electric Vehicles”.**

“Our research provides causal evidence that access to home chargers substantially increases charging of plug-in hybrid company cars,” says Johannes Gessner of the EPoS Economic Research Center. “In our sample, the amount of electricity charged rose more than fourfold and fossil fuel consumption dropped by 38 percent.” CO2 emissions were cut by the same amount, because additional charging does not lead to incremental CO2 emissions under the cap set by the EU Emissions Trading System. “Since CO2 emitted by company fleets counts towards corporate emissions, these are strong arguments for a company in favor of corporate investments in home charging stations,” says Gessner.

Cost-effectiveness of investment

The study also highlights an additional advantage: Experience with charging at home increases the chances that drivers choose a fully electric model as their next company car. The likelihood rises by 28 percentage points. “The combined impact of these two effects implies that expanding home charging can cost-effectively accelerate the transition to cleaner transportation,” says Gessner. “Assuming that employees can order a new company car every four years, the investment in a home charger breaks even within eight years.” The sample analyzed comprises 856 employees of a large German company holding a PHEV and 407 employees with BEVs.

Convenience and time savings matter

Home charging stations reduce the inconvenience and time requirements of charging – two key deterrents for drivers of plug-in hybrids. The researchers highlight that these deterrents affect not only drivers of company cars but also drivers of privately held cars.

Recommendations to policymakers

“Government support for plug-in hybrids is justified only to the extent that cars are driven electrically, because this is how emissions of CO2 and other air pollutants are actually reduced,” says co-author Ulrich Wagner of EPoS. “However, the average driver in our sample makes good use of this feature only once they have a charging station installed at their home.” Gessner adds: “Purchase subsidies and tax benefits granted to plug-in hybrid vehicles do little to incentivize their electric usage. Our results imply that these support schemes would be more cost-effective when policymakers targeted them to drivers with access to charging at home.”

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The presented discussion paper is a publication without peer review of the Collaborative Research Center Transregio 224 EPoS. Access the full discussion paper: <https://www.crctr224.de/research/discussion-papers/archive/dp663>

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The Collaborative Research Center (CRC) Transregio 224 EPoS

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