

Charging an Electric Car at Home: Two Solutions for Multi-Unit Residential Buildings

More and more residents of multi-family buildings want to charge their electric cars right at their own parking spaces. With the [German federal government's current subsidies for charging infrastructure](#) (in German), this goal is within reach—but at the same time, legal requirements present practical challenges for many stakeholders.

(Berlin/Frankfurt am Main, July 15, 2026) For the first time, VDE FNN is presenting two solutions that enable the specific implementation of the requirements for so-called grid-oriented control under Section 14a of the Energy Economy Act (EnWG) in multi-unit residential buildings. This will allow even more tenants and homeowners to charge their electric cars at home. This results in significantly more charging points that can be integrated into the building's energy management system and used in compliance with the law. Section 14a of the EnWG requires grid operators, in rare cases of high grid load, to temporarily reduce the power consumption of high-power devices—such as wall boxes—in order to maintain grid stability even during congestion. Grid customers benefit from reduced grid fees and a grid that remains reliable.

The “Teamwork” model is the favorite

VDE FNN presents two solutions for controlling charging stations in multi-unit residential buildings and describes their implementation. VDE FNN offers a clear recommendation: In the “Teamwork” solution, all charging points are connected via an energy management system (EMS). The “Teamwork” solution offers more advantages for residents: The energy management system ensures optimal utilization of the shared grid connection. Residents can have the available power automatically managed according to their criteria, thereby making optimal use of it. New charging points or additional controllable devices can be easily added.

Alternatively, control based on the “everyone does their own thing” approach is possible. In this case, the operators of the respective wallboxes can manage their controllable consumption devices independently of one another. However, in the case of grid-oriented control measures, the available power cannot be freely allocated. Important: Very high power levels can be placed on the building’s service connection. Therefore, planners and installers must design the building’s electrical installation accordingly.

Contributing to the Energy Transition and a Reliable Power Supply

The VDE FNN guideline provides guidance for professionals, focusing on everyday life in multi-unit buildings and usage by residents. Heike Kerber, Managing Director of VDE FNN, explains: “The ‘Teamwork’ solution enables shared, optimal use of the grid connection in multi-unit buildings—exactly what many people are currently looking for. This ensures that the existing grid connection is used efficiently. The description of these two concepts makes it easier to plan and operate charging stations in multi-unit buildings.”

[The first version of the VDE FNN guideline focuses specifically on charging infrastructure and is available online](#) (in German).

About VDE FNN:

The Network Technology and Operation Forum within VDE (VDE FNN) develops the electricity grids with foresight. The aim is to ensure reliable system operation at all times with 100 percent renewable energies. VDE FNN makes innovative technologies practicable and provides answers to the grid technology challenges of tomorrow. Here, various specialist groups with different interests work together on solutions. Its members are over 500 manufacturers, grid operators, suppliers, system operators, authorities, and scientific institutions.

For more information, visit www.vde.com/fnn

About VDE:

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 130 years. VDE is the only organization in the world that combines science, standardization, testing, certification, and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for more than 100 years.

Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network more than 2,000 employees at over 60 locations worldwide, more than 100,000

honorary experts, and around 1,500 companies are dedicated to ensuring a future worth living:
networked, digital, electrical.

Shaping the e-dialistic future.

The VDE (VDE Association for Electrical, Electronic & Information Technologies) is
headquartered in Frankfurt am Main. For more information, visit www.vde.com

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