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# Retrofit wallboxes, energy storage and heat pumps in multifamily buildings more easily

**A new VDE FNN note simplifies the implementation of multiple grid connections on one property. This makes it easier to connect several high-performance customer installations in apartment buildings.**

(Berlin/ Frankfurt am Main, 09.02.2023) Participating directly in the energy transition with photovoltaic systems, heat pumps, storage units and wallboxes can be a challenge for residents of apartment buildings: Here, a house connection is used jointly, via which around 25 to 30 kilowatts of power can be drawn or fed in. Charging one electric vehicle via a wallbox alone requires 11 to 22 kilowatts. If several vehicles are to be charged at the same time, the grid connection capacity must be expanded. Up to now, this has been done by reinforcing the existing house connection. In cases where this is not possible or only possible at great expense, there is now an alternative: an additional grid connection. The Network Technology and Operation Forum within VDE (VDE FNN) has now published what needs to be taken into account and what measures need to be taken to ensure that on-site safety is maintained.

VDE FNN Managing Director Heike Kerber emphasizes: "For the rapid ramp-up of heat pumps and charging facilities, smart solutions are required for the joint use of the existing power grid infrastructure. In apartment buildings, this primarily concerns the use of the shared grid connection. VDE FNN has now published a pragmatic implementation guide for this."

## Safe implementation of multiple grid connections on one property

Generating systems, storage units or charging devices are generally connected to the power grid via the existing grid connection of the respective customer installation. Particularly in the case of multi-party buildings, the connection of additional systems to an existing grid connection can be very costly. In these cases, the connection can be made via an additional grid connection. In a new note, VDE FNN describes the technical and organizational measures for



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setting up multiple grid connections in a building or on a property. The aim is to clearly define which areas of the customer are supplied via which grid connection. This is particularly important, for example, in emergencies or in the event of faults. For installers in particular, VDE FNN Note offers numerous implementation examples, such as for buildings with charging equipment and photovoltaic systems, properties with charging equipment but without buildings, and multiple grid connections for several buildings with a common grounding system. The implementation guide is available on the website (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 80 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 470 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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