

Electric vehicles & smart grid integration

Smart Grid City demonstration

Qualcomm showcases how 3G cellular networks enable Smart Grid applications, particularly for the smart charging of Electric Vehicles (EVs) and their integration with renewable energy sources.

EVs like the Nissan Leaf and Chevy Volt are coming to market and promise to shake up the automotive sector in a big way. With a forecast from Pike Research of 4.7 million EV chargers sold in the U.S. by 2015, *EV smart charging* and *vehicle-to-grid (V2G)* have been described by experts as the 'killer apps' of the Smart Grid.

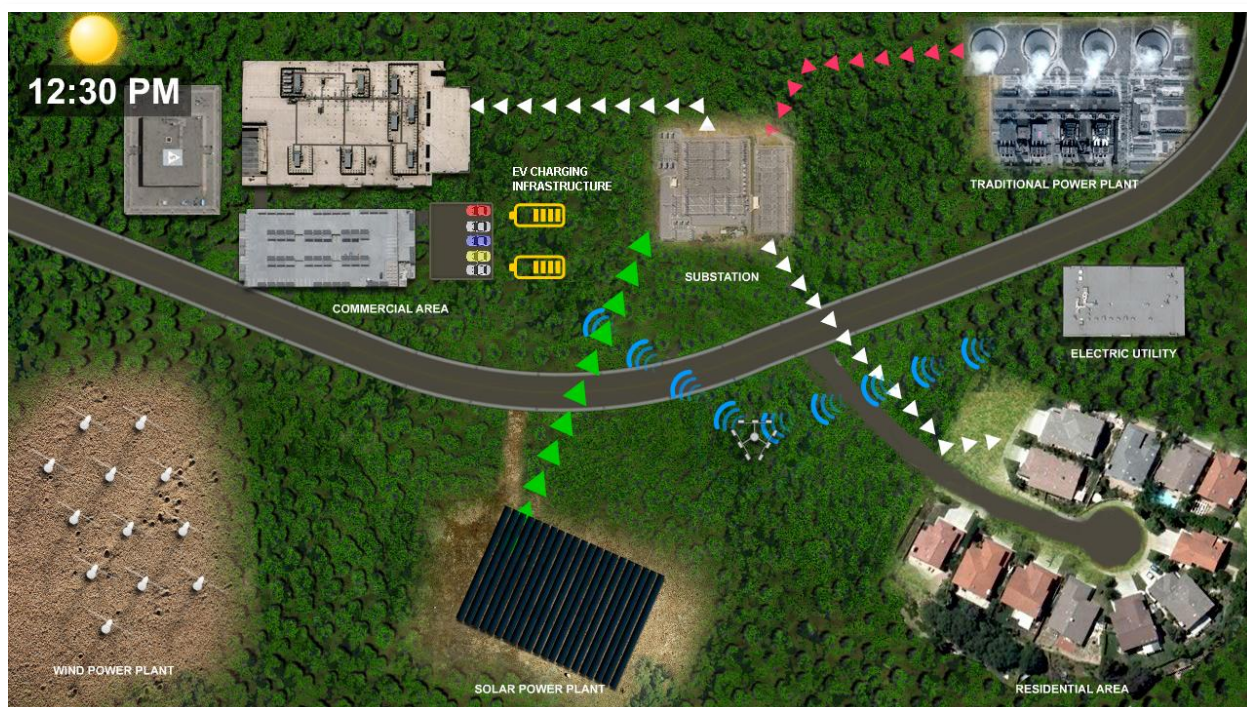
Cellular networks will provide the real-time wireless communications required by the EV ecosystem, facilitating consequent benefits such as a cleaner environment and reduced dependence on foreign oil.

Cellular-enabled charging station

Qualcomm Incorporated (NASDAQ: QCOM), the world leader in next-generation mobile technologies, and ECoTality, Incorporated (NASDAQ: ECTY), have entered into an agreement to implement cellular connectivity into charging stations.

The solution will allow ECoTality to use a commercial cellular network to manage charging station operations, transfer usage data, download firmware updates and publish availability to electric vehicle drivers in real time.

ECoTality will begin deploying cellular-enabled charging stations this year, as part of the EV Project for which the company received a \$99.8 million grant from the U.S. Department of Energy. Every charger used in the EV Project will use Qualcomm technology.



Commercial cellular networks enable integration of EV infrastructure with the Smart Grid. Advanced functions, such as synchronization of renewable energy generation and EV charging, are only feasible by using real-time communications.