

Qualcomm has focus on charging for electric vehicles

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(Tech Xplore)—What about that technology focused on charging electric vehicles while they are moving, not standing still?

Could real breakthroughs in dynamic charging make [electric vehicles](#) a more attractive option that drivers would be eager to try? Specifically, would it eliminate range anxiety?

Qualcomm thinks that is the way to go. They have demonstrated a dynamic electric [vehicle](#) charging (DEVC) system. Qualcomm Technologies announced the testing of the wireless DEVC system that involves charging from the road [surface](#).

Reuters reported Thursday that the dynamic charging test took place in France. Reuters said that the test involved two Renault Kangoo vehicles driving over embedded pads. A charge was transferred to the car batteries "at up to 20 kilowatts at highway [speeds](#)."

Qualcomm Technologies demonstrated simultaneous charging, in which two vehicles on the same track can charge dynamically at the same time. The vehicles can pick up charge in both directions along the track, and in reverse.

This was a 100-meter test track.

"This test road is modular," said *The Drive*, "with four power supplies—one for each 25-meter [section](#). Each length has 14 sub-modules which contain magnets and power conversion circuitry. The [test](#) vehicles were equipped with receivers in the underbody to magnetically pick up the charge and convert it to DC power."

Mike Kissin, director, engineering, Qualcomm New Zealand, said they have [technology](#) that speaks to the power conversion, magnetics, control and communications—and safety.

He said they split the project into three phases: concept design and prototyping in Auckland; the manufacturing in Munich; finally, installation and testing in France.

(Actually, Kissin is the presenter in a video titled Qualcomm Dynamic Electric Vehicle Charging (DEVC) where he discussed the system.)

In theory, the idea is quite attractive as it implies the vehicle could run indefinitely. In practice, *MIT Technology Review* raised questions about costs. Still, said the article, the idea might make sense in bus routes with standardized routes and it may make sense for "robotic taxi fleets," if they stick to well defined routes "and only deviate from charging [strips](#) for a mile or two at a time."

Lee Mathews in *Geek.com* also raised the consideration of costs. "One major hurdle that has to be overcome before we'll be taking advantage of an inductive [road](#). It's a tad on the expensive side right now." Mathews, however, said the picture could change. "Things in the EV world are changing at an incredibly rapid pace, though, and Korea actually did something similar for electric buses four years ago... so it could happen sooner than we think."

More information: www.qualcomm.com/news/releases...ric-vehicle-charging

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