**Wireless charging of electric vehicles**

**The world is going wireless. The Internet has become wireless, our phones became wireless, phone charging became wireless. So, why not electric vehicles charging become wireless.**

We assume electric cars have to be plugged in---its right in the name of the “plug-in” hybrid, after all— but if it weren’t for plugs and cables, EVs might face a brighter future, sooner. Here’s how wireless charging makes it happen.

Charging cars without wires works in a similar way to the wireless phone charger you might already own, just on a bigger scale. You might have noticed how you can lift your phone very slightly off its charger without stopping the flow of electricity - wireless car chargers work in the same way, but in a distance measured in inches instead of millimeters. Using a technology called inductive charging, electricity is transferred through an air gap from one magnetic coil in the charger to a second magnetic coil fitted to the car. All you have to do is park in the right place so the coils are aligned, and charging will begin.

Charging while driving is the holy grail of electric car technology; the ability to power a car as it drives over chargers embedded into the surface of the road.

As part of its development of the Halo system (working with wireless electric vehicle charging ), Qualcomm has already proved that charging while driving is possible, even while the vehicle is traveling at up to 70mph. The technology is called Dynamic Electric Vehicle Charging. Underneath the regular-looking road surface of its 100-meter test track, Qualcomm has installed a wireless charging system which sends power to a fleet of specially modified Renault Kangoo electric vans, each fitted with two 10kW charging pads.

After carefully analysing we can say that this technology has got a future opportunity based on the recent trend of the automotive industry moving towards autonomous cars with user comfort & safety as the top priority.In order to get this technology appreciated by the mass market, it has to overcome the cost and efficiency issues which needed further research and technology development.

