If you owned an electric car and someone offered you the option to charge it using more renewable energy instead of the typical grid “mix” in an effort to decrease the carbon intensity of your miles traveled, would you? This is the concept and service offering that General Motors and OnStar demonstrated in partnership with PJM and Google at DistribuTECH, an electric utility trade show, in 2012.

OnStar, the pioneer in vehicle telematics systems, is testing whether there is a market for such advanced charging services amongst current Chevy Volt owners, future EV owners, and/or electric utilities.

**How it works:**
OnStar would offer customers the option to have their vehicles charged during times when renewable energy generation is greatest. This option could be set by the user on the dash of the vehicle or via a mobile application. OnStar would then process information about when the vehicle needs to drive next, the current state of charge, and how fast the vehicle can charge given the outlet it is plugged into, Level I (120V) or Level II (240V). OnStar would then optimize the charging to maximize the use of renewable energy using forecasted and real-time information about the percentage of renewables being used to serve customer demand.