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## Impacts of renewables on electric vehicle demands

Xingwu Wang and Xiaomin Li  
Alfred University, USA

Electric vehicle demands have increased rapidly since 2010, and depend on renewables. Using panel data from fourteen countries between 2010 and 2015, we study impacts of seven factors in a multiple linear regression model. The factors include percentage of renewable energies in electricity generation, number of charging stations, education level, population density, gasoline price, GDP per capita and urbanization. The first four factors have apparent and positive impacts on the demands, and the last two factors don't. The gasoline price affects the demands for BEVs (battery electric vehicles) more than that for PHEVs (plug-in hybrid electric vehicles). One percent increase in renewables would lead to approximately 2-6% increase in EV demands. Based on the results, policy implications are discussed.

### Biography

Xingwu Wang is a Professor, Renewable Energy, Alfred University, Alfred, NY 14802, USA. He has published 90 papers and 45 US patents. His most recent research is on the renewable energy, electrical vehicles and sustainability. His current research interest is on: Ion assisted electron- beam deposition, RF plasma aerosol mist deposition of oxides

fwangx@alfred.edu

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