

# Dynamic Modeling of Diffusion Process of FCVs Taking into Account Convenience of Hydrogen Refueling

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For a rapid diffusion of Fuel Cell Vehicles (FCVs), a convenience of refueling hydrogen is one of the important factors as well as extensive cost reduction of FCV and hydrogen. Based on 1 km grid square statistics on population, buildings, etc., we develop a dynamic model of diffusion process of FCVs where total number of hydrogen stations around FCV users place is taken into account to incorporate the convenience of refueling FCVs. With the model, we discuss the effective location and variety of hydrogen stations, a strategy of subsidy scheme to FCVs and hydrogen stations, etc.

**Keywords:**

Fuel Cell Vehicles (FCVs), hydrogen, refueling stations