

# Leapfrogging by Switching Lanes: Directed Technical Change in China's Transition to Electric Vehicles

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## Abstract

The past two decades have witnessed remarkable progress in China's electric vehicles (EVs). This paper first documents the dynamic evolution in China's EV industrial policies: from capability building to consumption stimulation and then to competition enhancement (3C's). We then develop a two-country-two-technology industry equilibrium model with directed and step-by-step innovation to formally theorize those industries policies and their impact in a global context. We quantify the welfare impact of each of the industrial policies by conducting counterfactual analyses based on our model.