

# Delaying the Coal Twilight

## Local Interests, Regulatory Distortions and the Energy Transition in the US\*

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Regulation is essential to address market failures. Still, regulators subject to particular interests may deviate from welfare maximizing decisions. This paper studies regulatory distortions due to local interests, in the context of the US energy transition. In the last decade, natural gas has emerged as a cleaner and cheaper alternative for electricity production, yet state regulators have approved significant investments to extend the lifetime of coal power plants. Through a causal inference exercise, I find that regulators are more likely to upgrade those plants that procure from state mines. This exercise features two control groups: regulated plants from states with no mines and non-regulated plants, which are not subject to state regulators at all. I account for the equilibrium effects by introducing a dynamic discrete-choice model on coal plant upgrades and closures. The structural estimation of the aforementioned model allows me to quantify the extent to which protecting local coal motivated regulators to approve plant upgrades. Absent this channel, the counterfactual estimates find that 10% of the currently open US coal power plants would have already closed.

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