

Strategic Behavior and Market Design in Regional Climate Policy

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U.S. electricity markets vary by region and imperfectly overlap with regional climate policies. Although emissions leakage across emissions-regulated and -unregulated areas may depend on regional market design, and the extent of trading between market designs, previous studies of leakage from regional climate policies have focused on market power and market efficiency within only a centralized region following market rules. I develop a theoretical model which considers a second-best problem where a climate policy to correct for a negative externality from carbon emissions can be distorted by another market failure from the market design itself. My model allows for several types of non-overlapping climate policies and electricity market designs, and generates leakage predictions for these combinations.

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