

Estimates of the Environmental Benefits of Wind Generation

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Building on the methodology introduced by Cullen (2008), this work uses exogenous short run changes in wind energy to estimate the amount of pollution offset by electricity from wind turbines in Texas. Combining data on the hourly aggregate wind generation with hourly emissions data, I directly identify the reduction in the emissions of CO₂, NO_x, and SO₂. Comparing my results to the findings from Cullen's study, I find significantly lower levels of emissions avoided by wind generation.