

# Gone with the Wind: Renewable Energy Infrastructure, Welfare, and Redistribution

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PSE-CEPR Policy Forum 2024

*The New York Times*

## *The U.S. Will Need Thousands of Wind Farms. Will Small Towns Go Along?*

In the fight against climate change, national goals are facing local resistance. One county scheduled 19 nights of meetings to debate one wind farm.

US, New York Times 2022

## Solar power's NIMBY problem

The farms are getting bigger, and the objections louder



UK, Economist 2021

**Wind + solar energy are key** for climate change mitigation but **residents delay expansion**

*The New York Times*

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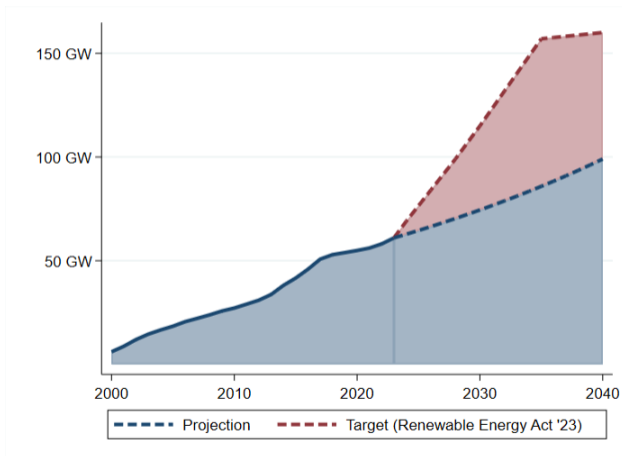
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*"98% of Freckenham's residents are against the plan. They do not deny that climate change is a problem, but **dislike [solar] projects that will take up so much land.**" - Suffolk, UK*

**Empirical context:** Wind energy at land in Germany, 2000-2030

**Falls short of 2030 goal by 35%**

**Barriers:** Residents, minimum distance rules, regulatory hurdles



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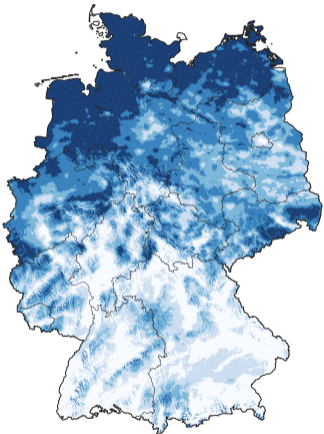
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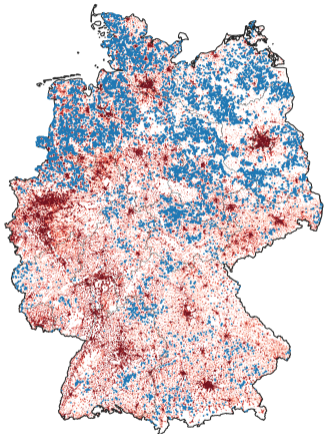
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- Take 2030 target, find optimal turbine distribution, and estimate compensatory transfers

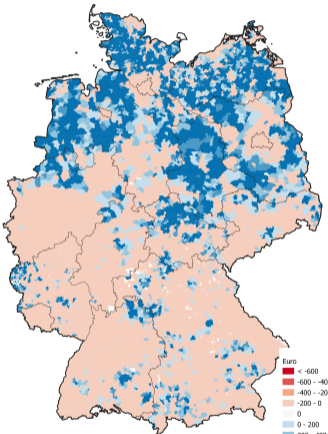
# Wind Turbine Scenario for 2030



Wind Speeds



Wind turbines + Population



Compensatory transfers