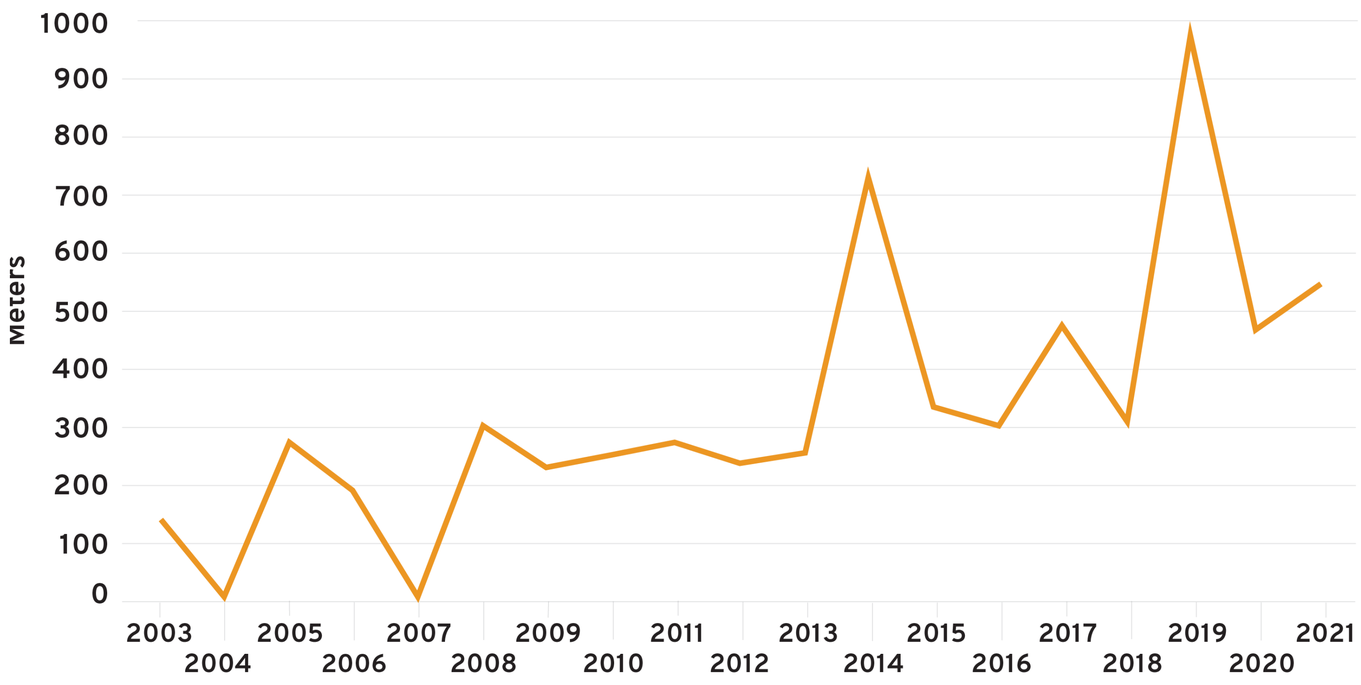
Local wind ordinances are highly **restrictive**, and restrictiveness is tenuously related to **wind potential.**

Local wind ordinances are getting more restrictive over time.

Average Setback Requirement of New Wind Power Ordinances



Source: R Street estimates using NREL wind ordinance database[1]

Intro

It is becoming more difficult to navigate the state and local permitting environment for wind turbines. The number of new ordinances per year increased 16-fold from 2003 to 2023, and the average setback requirement of ordinances increased by 304 percent over the same period.

When excluding outliers in the data (counties with more than 100 terawatt-hours of potential wind generation and setback restrictions greater than 1,000 meters), there was a statistically significant correlation between generation potential and the restrictiveness of setback ordinances.

Methods

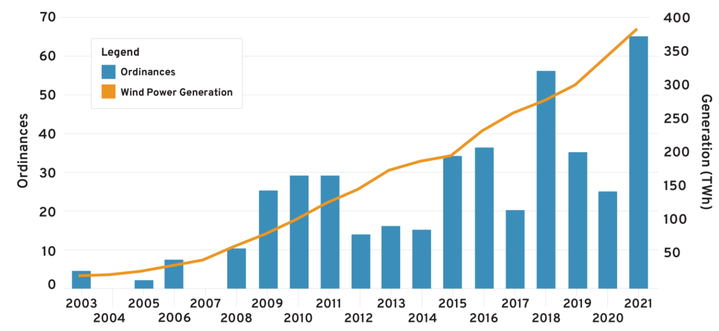
- Conclusions based on the National Renewable Energy Laboratory database for wind siting, which catalogues 1,833 county- and city-level ordinances, and 58 state-level ordinances restricting the placement of wind turbines.[2]

Results

- Around 13 percent of U.S. counties have at least one ordinance restricting the development of wind energy. If state-level ordinances are included, 1,008 counties—roughly 30 percent—are under some form of ordinance restricting wind power siting.

Tables, Figures & Graphs

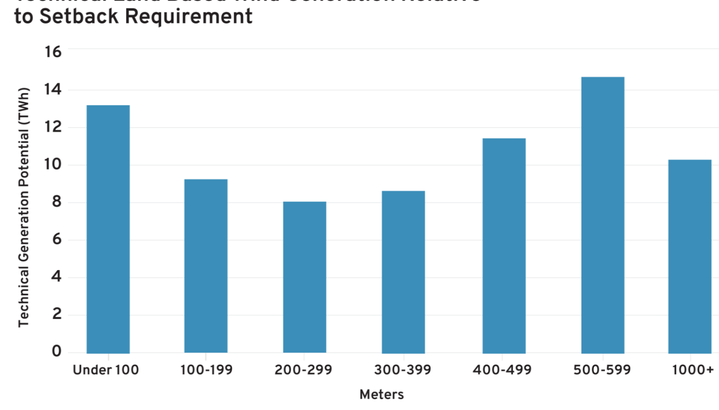
Number of New Ordinances vs. Wind Power Generation



Source: R Street estimates using NREL wind ordinance database[3] and EIA data[4]

	County-Level Restrictions on Wind from County Ordinances		County-Level Restrictions on Wind from Both County and State Ordinances	
	Number of Ordinances	Percentage of Ordinances	Number of Ordinances	Percentage of Ordinances
Less Restrictive	878	54%	1537	57%
Nominally Restrictive	451	28%	459	17%
More Restrictive	77	5%	260	10%
Highly Restrictive	171	10%	386	14%
Prohibition	54	3%	54	2%

Technical Land Based Wind Generation Relative to Setback Requirement



Source: R Street estimates using NREL wind ordinance database[5] and EIA data[6]

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References

1. https://data.openei.org/submissions/5733
2. Ibid.
3. Ibid.
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5. https://data.openei.org/submissions/5733
6. https://maps.nrel.gov/slope/data-viewer?filters=%5B%5D&layer=energy-generation.land-based-wind&year=2020&res=county

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