

Wind turbines and municipality borders

Carsten Andersen, Assistant Professor, Department of Economics and Business Economics, Aarhus University

Peter Bjerre Mortensen, Professor, Department of Political Science, Aarhus University

Wind energy is a pivotal ingredient in the green transition, yet local opposition blocks many wind turbine projects before they even materialize. Neighbors complain about wind and noise pollution and home value losses, and point out that many wind turbines are located very close to municipal borders, allowing one municipality to reap the benefits in their carbon budget, while the negative externality partly affects the neighboring constituents. However, the mere presence of turbines at administrative borders does not imply strategic placement as these sites also typically feature low population density and other characteristics in itself well suited for wind turbine. In this paper we test to what extent overrepresentation near municipality borders can be explained by prevailing wind patterns, elevation, population density and distance to the coastline. Preliminary results indicate that turbines in fact are overrepresented near municipality borders even when adjusting for observable characteristics associated with suitability for turbine siting.