

Commentary

Wind energy development in the United States

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The influence of political party and policy on wind energy development in the United States is examined in this article. The determinants of wind energy development at the state level are assessed using panel data from 2000 to 2016. This time span contains the great majority of all wind energy installations in the United States' history. We build a dependent wind energy variable that adjusts for resource potential to make the model more sensitive to the influence of political factors. The empirical findings show that while political party is not a key driver of wind energy growth in the legislative branch, Democrat Governors have a favourable and substantial link with wind energy development in the executive branch.

Key words: Pre-modern state formation, government, democracy, collective action, traditional social evolutionary theory

INTRODUCTION

Since the turn of the century, the growth of wind energy in the United States has accelerated. From 2472 MW in 2000 to 74,421 MW at the start of 2016, total installed capacity has expanded by 3011 percent. Although the country as a whole has grown significantly, progress has been unequal between states. This is due to the fact that wind energy is mostly influenced by state-level issues. The potential of wind energy as a resource is one driver of expansion, but it does not fully explain the disparities in installed capacity. Existing research on the political and policy influence is unclear or contradictory, with numerous studies revealing equivocal or contradictory findings. Our research employs empirical methodology to determine if political party and policy play a significant role in wind energy development.

Wind energy's growth in the United States has coincided with a global focus on climate change problems. Representatives from all around the world gathered in Kyoto, Japan, on December 11, 1997, to sign the Kyoto Protocol. The United Nations' plan for combating climate change by regulating CO₂ emissions was launched with this accord. Despite the fact that the agreement was reached in 1997, it was not implemented until 2005. As a result of the increased emphasis on climate change, an international focus on reducing CO₂ emissions from energy production has emerged. A main technique of lowering Greenhouse Gas (GHG) emissions is to shift power generation

away from traditional fossil fuels and toward renewable energy. Until recently, the United States was the world's top energy user; however China just overtook the US in terms of consumption. Because of the volume and worldwide effect of US energy use, as well as parallels in political influence on energy policy, the findings of this research are of international relevance.

Despite the fact that the US government began supporting wind energy in 1978, the majority of the increase in wind energy has occurred in the twenty-first century. Only four years between 2000 and 2016 had annual capacity increases of less than 10%, while from 2005 and 2009, wind generating capacity in the United States rose at a 39 percent annual pace. Individual states do not have direct influence over natural circumstances or federal policies. Our study focuses on variables that are under the control of the government, such as policy and political clout.

CONCLUSION

The favourable and substantial association between Democrat control of the executive branch and the growth of wind energy at the state level is quantified in this article. Although the executive branch does not develop energy policy, it does have veto authority over measures passed by the legislature. Wind energy has a good association with Democratic governors, and RPS programmes are the method by which this benefit is implemented.

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