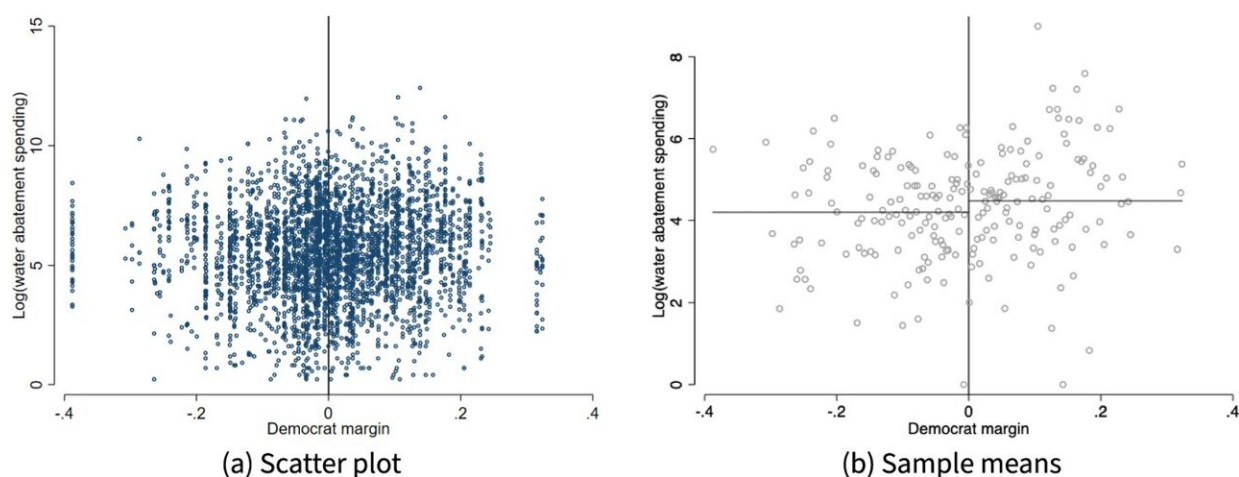


Political 'color' affects pollution control spending in the US, new study finds

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Plots of (the log of) water pollution abatement spending by steam electric power plants, against the democrat vote margin (1985–2015). Credit: *Environmental and Resource Economics* (2024). DOI: 10.1007/s10640-024-00859-w

A new study led by the University of East Anglia (UEA) shows how firms in the United States behave differently depending on the political party in charge—even if they do not change policies.

The researchers, from UEA in the UK and Colorado School of Mines in the US, investigated the implications of changes in energy companies' behavior in response to the outcome of gubernatorial elections, which take place to elect state governors.

Using elections where the outcome was very close to see how unpredictable changes in the ruling party affected things, the team focused on the behavior of steam [electric power plants](#) (SEPPs) in reducing pollution under the Clean Water Act. They found evidence that firms respond to the political "color" of the governor in the state they operate, even when neither the stringency nor the enforcement of the regulations depends on it.

Specifically, power plants located in states governed by a Republican governor spend substantially more on water pollution control than their counterparts in Democratic states.

The resulting adjustments in pollution abatement spending have significant impacts on the release of pollutants. Even changes to political color that do not imply a shift in policy are therefore shown to have real—if unintended—[environmental consequences](#) and welfare implications.

The findings are [published](#) in the journal *Environmental and Resource Economics*.

Lead author Corrado Di Maria, Professor of Environmental and Natural Resource Economics at UEA, said, "This unexpected behavior has real-world consequences and leads to significant differences in pollution levels. We show that firms behave differently when operating under Republicans and Democrats, which one would expect in general.

"What is new in our work is that this difference emerges even when there is no obvious change in policy or in enforcement. This, in turn, has effects on the environment. Companies react to the zeitgeist, which means that electoral outcomes have significant consequences even in areas where potentially voters would not expect them."

The researchers say the findings are important given the large environmental footprint of power generation—the [electricity sector](#) withdraws more freshwater than any other sector in the US economy.

"Our work provides evidence that the political environment matters greatly to the behavior of firms," said co-author Dr. Emiliya Lazarova, of UEA's School of Economics. "More than that, we show that the role played by the political environment is subtler and more pervasive than one would expect.

"The main takeaway from our paper is the realization of the importance of elections and electoral outcomes for a whole range of economic and [social issues](#), well beyond those discussed in electoral manifestos and pledges, and even beyond the intentions of the political agents. Overall, it provides a stark reminder of the voters' responsibility in taking a comprehensive view of the possible consequences of their electoral choices."

More information: Corrado Di Maria et al, Political 'Colour' and Firm Behaviour: Evidence from U.S. Power Plants' Pollution Abatement, *Environmental and Resource Economics* (2024). [DOI: 10.1007/s10640-024-00859-w](#)

Provided by University of East Anglia

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