

German voters would prefer a more ambitious timeline to phase out coal

While a government commission recently proposed to phase out coal in Germany by 2038, voters would prefer a phase-out by 2025. Policymakers may underestimate public willingness to support an expedited transition away from high-carbon sources of energy.

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The policy problem

Coal-fired power generation is the single most important source of carbon dioxide emissions in many countries, including Germany. According to many modelling scenarios, achieving the goals of the Paris Climate Agreement is incompatible with operating coal-fired power plants globally after 2030. Several governments have started to design public policies for phasing out coal. In Germany, where 35.3 % of electricity generation came from coal in 2018, a government commission has recently proposed a phase-out by 2038. While some observers consider the proposed timeline a reasonable compromise between public acceptance and climate change mitigation, others have criticized the plan as not ambitious enough to deliver on Germany's climate policy targets. Citizen groups were underrepresented in the German government commission, and until recently little was known about voters' views on a coal phase-out.

The findings

We find that German voters prefer a coal phase-out by 2025, whereas policies aiming at a later date find less support. Voters would uphold their support for a phase-out by 2025 even in light of additional household costs, although every €10 increase in annual household cost decreases voter support by about seven percentage points. Voters in the two coal-producing regions affected by the phase-out (Rhineland and Lusatia) also prefer an earlier phase-out. Individuals who are aware of the broad scientific consensus that climate change is caused by humans have particularly strong preferences for an earlier phase-out. In contrast to the government commission's proposal, the more ambitious timeline preferred by voters would achieve the goals of the Paris Agreement in Germany. While our study suggests that policymakers may underestimate public willingness to support an expedited coal phase-out, we did not explicitly investigate the role of other stakeholders in the policy process. The study focused on Germany and as such does not allow generalization to other countries.

The study

Our study is based on a choice experiment with a representative sample of 2,161 Germans who are eligible to vote. In addition, 1,034 individuals living in the country's main coal regions, Rhineland and Lusatia, were surveyed. As part of the experiment, study participants had to evaluate a number of policy scenarios for a coal phase-out. These scenarios differed in terms of the timeline of the phase-out, costs, employment effects, and supporting measures for the transformation of the coal regions.

Messages for Policy

- A more ambitious timeline for phasing out coal would be better aligned with voters' preferences in Germany.
- Although voters are willing to incur additional costs for a phase-out by 2025, every €10 increase in annual household cost decreases voter support by about seven percentage points
- In coal-producing regions, creating new jobs in low-carbon industries is important to voters and can outweigh concerns about job losses.
- In the area of the energy transition, systematic incorporation of the views of the population into future government commission recommendations could lead to more publically acceptable policies.
- Raising awareness for the scientific consensus on climate change could foster public acceptance of ambitious climate policies.

Further Reading

Markard, J. The next phase of the energy transition and its implications for research and policy. *Nat. Energy* 3, 628–633 (2018). URL: <https://doi.org/10.1038/s41560-018-0171-7>

A transition studies perspective that sheds light on the phenomena of the ‘second phase’ of the energy transition, including the decline of established business models and technologies, intensified economic and political struggles of key actors, and challenges for the overall functioning of the electricity sector.

Montt, G. et al. Does climate action destroy jobs? An assessment of the employment implications of the 2-degree goal. *Int. Labour Rev.* 157, 519–556 (2018). URL: <https://doi.org/10.1111/ilr.12118>

A quantitative scenario analysis of the worldwide employment impact of an energy sector transformation in line with the 2°C-goal which finds that by 2030 most economies will experience net job creation and reallocation across industries.

Leipprand, A. & Flachsland, C. Regime destabilization in energy transitions: the German debate on the future of coal. *Energy Res. Soc. Sci.* 40, 190–204 (2018). URL: <https://doi.org/10.1016/j.erss.2018.02.004>

An investigation of stakeholders’ framing strategies and proposed policy solutions for phasing out coal in Germany.

Pfeiffer, A., Hepburn, C., Vogt-Schilb, A. & Caldecott, B. Committed emissions from existing and planned power plants and asset stranding required to meet the Paris Agreement. *Environ. Res. Lett.* 13, 054019 (2018). URL: <https://doi.org/10.1088/1748-9326/aabc5f>

An analysis that compares CO₂ emission commitments from power plants with the remaining carbon budget and derives the likely amount of stranded assets that would be required to meet the 1.5°C–2°C global warming goal.

Rinscheid, A. & Wüstenhagen, R. Divesting, Fast and Slow: Affective and Cognitive Drivers of Fading Voter Support for a Nuclear Phase-Out. *Ecol. Econ.* 152, 51–61 (2018). URL: <https://doi.org/10.1016/j.ecolecon.2018.05.015>

An analysis of cognitive and affective drivers of voters’ preferences in the context of the popular vote to phase-out nuclear power in Switzerland.

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Competing interests

The authors declare no competing interests.